FINANSE i PRAWO FINANSOWE

JOURNAL of FINANCE and FINANCIAL LAW

ISSN 2353-5601

vol. 2(42)

CZERWIEC/JUNE 2024

KWARTALNIK

WYDZIAŁ EKONOMICZNO-SOCJOLOGICZNY
Uniwersytet Łódzki

UNIWERSYTET ŁÓDZKI

FINANSE i PRAWO FINANSOWE

JOURNAL of FINANCE and FINANCIAL LAW

ISSN 2353-5601 vol. 2(42)

CZERWIEC/JUNE 2024

KWARTALNIK

ISSN 2353-5601 (wersja elektroniczna) ISSN 2391-6478 (wersja drukowana)

https://czasopisma.uni.lodz.pl/fipf/index
e-mail: joffl@uni.lodz.pl

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• F I N A N S E I P R A W O F I N A N S O W E •
• Journal of Finance and Financial Law •

czerwiec/June 2024 • vol. 2(42): 7–39

THE IMPACT OF MENTAL MODELS ON THE TRANSITION FROM COMMUNISM TO CAPITALISM. THE COMPARATIVE CASE STUDY OF AZERBAIJAN AND POLAND

Nurlan Pashazade*

https://doi.org/10.18778/2391-6478.2.42.01

THE IMPACT OF MENTAL MODELS ON THE TRANSITION FROM COMMUNISM TO CAPITALISM. THE COMPARATIVE CASE STUDY OF AZERBAIJAN AND POLAND

ABSTRACT

The purpose of the article. The breakdown of the so-called Eastern Bloc, the disintegration of the Soviet Union, and the demise of communism fueled transition processes in Central and Eastern Europe, Western Asia, and Central Asia. The great majority of transformation difficulties across different areas demonstrate that when pursuing the process of a structural change, it is important to take into account diverse sets of formal and informal institutions preserved in each country. Each country has a unique set of formal and informal institutions. These differences are easily observed between Poland and Azerbaijan. The aim of this paper is to compare and contrast the outcomes of Poland and Azerbaijan's transitions from communism to capitalism and to identify the primary factors driving these two different transformations.

Methodology. The paper presents two complementary methods to compare the transitions from communism to capitalism in Poland and Azerbaijan. The first method involves secondary analysis, where existing data from reputable sources such as the European Bank for Reconstruction and Development (EBRD) database, the Bertelsmann Transformation Index (BTI), and country reports are compiled to provide insights into economic, political, and social indicators. Additionally, a comparative case study approach is employed, using Geert Hofstede's six cultural dimensions framework to explore the cultural influences on transition outcomes. By integrating these

* PhD Student, Faculty of Business, Management and Economics, Field of studies: Economics and Business, University of Latvia, e-mail: nurlanpashazade20@gmail.com, https://orcid.org/0000-0003-2689-2871

methods, the study aims to offer a comprehensive analysis of the transformation processes in Poland and Azerbaijan.

Results of the research. The results of the analysis presented in the paper support the hypothesis that the historically-shaped differences in mental models and strong ties to international protectors determined the paths of transformations in Poland and Azerbaijan. The primary similarities and contrasts in the mindset are justified by the colonial or imperial history of the nations.

Keywords: transformation, communism, capitalism, formal and informal institutions, inclusive and extractive institutions, mentality, Azerbaijan, Poland.

JEL Class: E02, E70, O43.

INTRODUCTION

The collapse of the so-called Eastern Bloc, the disintegration of the USSR and the fall of communism drove the transition processes in Central and Eastern Europe, Western Asia, and Central Asia. The vast majority of transformation problems throughout the different regions show that while following the process of structural transformation, it is important to take into consideration various sets of formal and informal institutions preexisting in the analyzed countries.

Each country has an exclusive set of formal and informal institutions. These differences are easily observed between the Central European countries and the Western Asian countries. A comparison between Azerbaijan and Poland is very interesting from many perspectives[1]: both Azerbaijan and Poland are the countries where the historical "Silk Road" passes through and stemming from it, these countries have minor impacts on each other from cultural, educational and even political points of view; both nations once experienced communism; and these countries are bordered by a country which is able to spread its political and economic impact all over the neighboring regions, i.e., Russia. Other than the above-mentioned facts, some noticeable cultural and historical differences exist which seem to make countries transform their political and economic structures differently. The aim of this article is to investigate the importance of cultural factors which take form throughout the years in the context of transition in Azerbaijan and Poland.

To test the aforementioned hypothesis, the paper will start with the literature review. What will be touched upon next is the analysis of paths of Azerbaijan and Poland from communism to capitalism. The subsequent chapter presents the assessment of the political and economic international environments in Azerbaijan and Poland using the European Bank for Reconstruction and Development data, Bertelsmann Transformation Index and the country reports. What is covered next is the comparison of the mentality of Azerbaijani and Polish people according to Geert Hofstede's six cultural dimensions. The final chapter summarizes the conclusions.

The main focus in this research is the internal determinants of institutional change. The significance of external factors will also be addressed. As most of countries are not closed to the international environment, they are easily influenced on some levels. While a few countries are both strong and influential that they can dictate their culture and formal institutions on others, countries like

[1] The transition in Ukraine and Poland was compared by Christopher A. Hartwell (Hartwell, 2016). His analysis is more exclusive than presented in this thesis and goes even beyond the institutions which have been mentioned so far. As there are several fundamental differences between Azerbaijani and Polish systems, this paper focused on striking differences in the transformation of these two countries.

Poland and Azerbaijan are more or less affected by these stronger centers in different spheres of influence. Dominant centers tend to be bordered by countries with similar political and economic systems, which, in fact, express certain values. Therefore, they are willing to impose an institutional order in the countries of their surroundings that have a similar institutional order.

The existence of "external protectors" is necessary for institutional change in a country. If the process of institutional change in a country goes in a different direction than the system of the external protector, it will impede the evolution. Therefore, it is not only internal factors that play an important role. External determinants also influence the above-mentioned evolution in countries, and the case of Poland and Azerbaijan also demonstrates it.

Considering the uniqueness of the topic, two methods will be used in the paper. These are:

1) The secondary analysis method which involves compiling existing data from reputable sources such as the European Bank for Reconstruction and Development (EBRD) database, the Bertelsmann Transformation Index (BTI), and country reports are compiled to provide insights into economic, political, and social indicators.
2) A comparative case study approach is employed, utilizing Geert Hofstede's six cultural dimensions framework to explore the cultural influences on transformation outcomes.

1. LITERATURE REVIEW

According to North (1990), the performance of economies is influenced by institutions and as the institutions evolve over time, the differential performance of economies is also observed. He defined institutions as the humanly created constraints under which human interaction occurs or simply, as the rules of the game in a society. Mental models and institutions also play an essential role (North, 1990). North defined mental models as a key driver of the society (North, 2005). For Denzau and North (1994), mental models or beliefs are induced by reality, which subsequently induces institutions to shape the society, which in turn alters the policies in action, which in the end, change the reality and revise the beliefs (or mental models). While examining institutional inertia, Rosenbaum (2021) mentions that institutions are represented in mental models and reproduced through social interaction shaped by such models. Lawson (1994) emphasizes that it is important for individuals to be aware of a rule, so that they can choose whether or not they will follow the rule. Moreover, as long as actions are repeated frequently, the rule following may turn to be a rule (Dequech, 2013). Alongside economic institutions, political institutions are also necessary, however, economic institutions are fundamental (Acemoglu and Robinson, 2013). According to

Boettke (2003), political institutions have to be put into force when the size of the market goes beyond the realm where reputation can be an effective vehicle to limit human behavior.

The term "institution" is defined in several ways. Norms, values and accepted ways of doing things make up informal institutions, no matter if they are political, economic or social ones. However, formal institutions are formed by binding laws, regulations and so on. According to Pejovich (1999), informal institutions include customs, traditions, religious beliefs and moral values. He hypothesizes that these norms of behavior have passed the test of time. North (1990, 1991) mentions that formal institutions comprise contracts, constitutions and forms of government. Generally, the interaction of formal and informal institutions influences the direction of the economic, political and social system (Rosenbaum, 2021). When defining informal institutions, Porter (2010), Lee (2007) and Steer (2010) emphasize their socio-cultural orientation, endogeneity, personhood and flexibility as their most essential features, while informal institutions are defined by Knight (1992) as automatic embedded structures functioning outside formal channels.

Generally, two approaches to defining informal institutions can be distinguished:

1) People's patterns of behavior are determined by informal institutions as mental models.
2) People's interactions with one another are accompanied by cultural patterns of behavior (Pieczewski and Sidarava, 2022).

Contrary to Cubitt and Sugden (2003) and Sugden (2015), who argue that mental models do not have to represent institutions as rules, Rosenbaum (2021) mentions that in order to efficiently influence the human behavior, institutions must be represented mentally. According to Searle (2005) actors can follow or unfollow a particular rule only if they have awareness about it. At some point, a conscious way of following a rule may turn into a habit which, of course, will immediately be abandoned if it hinders a pre-existing positive trend (Rosenbaum, 2021).

Mental models help us gain insights into their perceptions of the purpose and function of rules which make up institutions (Rosenbaum, 2021). To be more precise, reasoning and decision making of individuals and their behavior, to some extent, are shaped by mental models which are also introduced by Denzau and North's (1994) work into institutional analysis (Jones et al., 2021). Being the product of social interactions, negotiations and agreements, mental models are regarded as the key representations of institutions. On a large scale, social relations (rather than physical relations) order different factors in the sense that the representations are constructed. For instance, it is a social causality that a decline in crime rates is achieved as a result of harsher punishments. This is

value added by Rosenbaum (2021) to the concept of mental models that the facts represented by them include assumed (casual) relationships between objects and subjects, presumed effects of our own actions and the actions of others in a particular context. Basically, Pieczewski and Sidarava's (2022) first definition of informal institutions is based on the above-mentioned arguments.

Prioritizing the second approach, the works of Acemoglu and Robinson (2008, 2013) prove extremely useful. In their works the authors develop a framework to integrate economic institutions and political institutions. They mention that all economic institutions are created by the society, while political institutions are chosen by the society to achieve the economic prosperity of a nation, some people or elites. North Korea is a good example in this context, as in the 1940s, the communists imposed today's economic institutions of North Korea on its citizens and the appropriate political institutions surround its economic institutions to make huge fortunes of the elite of the Communist Party. Economic institutions determine the choices of society, which will have economic consequences. However, there might be a conflict among different groups in order to distribute scarce resources. In this case, political power, which originates from political institutions, becomes the ultimate arbiter (Acemoglu and Robinson, 2012).

Acemoglu and Robinson (2012) outline the importance of differentiating inclusive and extractive political and economic institutions. Inclusive economic institutions allow people to participate in economic activities. They include secure private property, public services and the freedom to exchange goods, which encourages investment and economic development. However, extractive economic institutions give power to a small elite and this is likely to discourage investment and economic development (Acemoglu and Robinson, 2012).

Acemoglu and Robinson (2012) also emphasize the strong synergy between extractive economic and political institutions. They explain that extractive political institutions concentrate power in the hands of a narrow elite who also structures economic institutions to extract resources from the rest of the society. This, once again, proves the fact that economic institutions naturally accompany corresponding political institutions (Acemoglu and Robinson, 2012).

The authors' perception on the synergistic relationship between extractive economic and political institutions goes far beyond a few sentences. They mention that there is a strong feedback loop which covers the fact that political institutions enable the group of people controlling political power to opt for economic institutions with few constrains or opposing forces (Acemoglu and Robinson, 2012). To be more precise, small elites design future political institutions and their evolution, which in turn, enriches the same elites at the expense of the rest of society. Acemoglu and Robinson (2012) underline the reality that the resources,

these economic institutions generate, enable these elites to build armies and security forces to defend their absolutist monopoly of political power.

What the authors mean by absolutist political institutions is the narrowness of the distribution of political power. Under absolutist political institutions, those who wield political power are able to construct economic institutions to become rich. In contrast, political institutions that distribute power widely in the society and subject it to constraints are pluralistic. Rather than being vested in a single individual or a narrow group, political power rests with a broad coalition or a plurality of groups (Acemoglu and Robinson, 2012).

Considering the aforementioned facts, it is obvious that there is a close relationship between pluralism and inclusive economic institutions. However, what makes South Korea and the United States boast about their inclusive economic institutions is not only their pluralistic political institutions, but also their sufficiently centralized and powerful states (Acemoglu and Robinson, 2012). What is usually experienced, when there is a broad distribution of political power in a country, is not the existence of inclusive institutions, but chaos and antagonism. Thus, states should achieve pluralism and political centralization in order to structure inclusive political institutions. When either of these conditions fails, then institutions are referred to as extractive political institutions (Acemoglu and Robinson, 2012).

Economic institutions, which are the choice of society, can be inclusive and encourage economic growth. Yet, they can be extractive and hamper economic growth (Acemoglu and Robinson, 2012). However, economic institutions do not only determine aggregate economic growth, but also determine the way this pie is divided among individuals. Normally, all individuals might not agree with the piece they take away from the pie and, as a result, there might be a conflict of interests among individuals over the choice of economic institutions (Acemoglu and Robinson, 2006). In this case, political institutions play a significant role and the set of economic institutions an individual or a group with more political power prefers, will prevail. While inclusive political institutions encourage great mass of people to participate in the governing processes, exclusive political institutions exclude the majority of society from these processes.

Throughout history, institutions have been devised by human beings to reduce uncertainty in exchange. Together with the standard constraints of economics, they determine transaction and production costs and therefore, the profitability of economic activity. Institutions evolve and they connect the past with the present and the future; history in consequence is largely a story of institutional evolution in which the historical performance of economies can only be understood as a part of a sequential story. As the structure of an economy provided by institutions evolves, the direction of economic change could be shifted from growth to stagnation or decline (North, 1991).

North (1991) explains the evolution of institutions by trade which expanded referring to economic history over time. He starts with a small scale village trade constrained by only informal institutions which leads to very low transaction costs. As trade expands beyond a single village and the size of the market grows, transaction costs increase significantly. What is ideally needed to cut the costs of transacting is to dedicate resources to enforcement and measurement, but in the absence of a state that enforced contracts, religious precepts usually imposed standards of conduct on the players. Contract negotiation and enforcement raise their heads as major problems as long-distance trades develop. These problems were solved by notaries, consuls and merchant law courts, but the expansion of the market entailed more specialized producers, which in turn requires accelerating percentages of the resources to be engaged in transaction (North, 1991).

Although there is no necessary reason to trigger the evolution of institutions in a society, referring to the above-mentioned facts, it is natural that institutions can evolve over time (North, 1991). The current institutional development of Azerbaijan and Poland is determined by formal and informal institutions.

2. POLISH AND AZERBAIJANI PATHS OF TRANSFORMATION FROM COMMUNISM TO CAPITALISM

2.1. Poland's Transition from Communism to Capitalism

In Poland, the transformation of formal institutions began in the political sphere in 1989 (Kojder, 1988). Encouraged by Gorbachev's reforms in the Soviet Union, in 1988 the Polish communist authorities began negotiations with the democratic opposition (Hackett et al., 1999). From February 6 to April 5, 1989, official negotiations between the authorities of People's Republic of Poland, the democratic opposition and the Church resulted in the first partially democratic parliamentary elections since the Second World War in June 1989 (Smoczynski, 2019).

As a result of these elections, Poland became the first Eastern Bloc country where members of the democratic opposition gained real clout in power (Pachocinski, 1989; Pieczewski and Sidarava, 2022). These elections are seen as a breakthrough in the process of political changes in Poland and herald a decisive acceleration of political and economic transformation. Fully free parliamentary elections were not held in Poland until October 1991. Therefore, this time, Poland became the last post-communist state to hold completely free elections (Pieczewski and Sidarava, 2022). In 1992 the Polish parliament passed the so-called mini-constitution and on April 2, 1997, a new constitution which is the second longest in Europe in terms of a number of articles, was adopted by the

National Assembly of Poland, approved by a national referendum on May 25, 1997, promulgated by the President of the Republic on July 16, 1997, and came into effect on October 17, 1997 (Banaszak, 2005).

Poland became a democratic country as a result of the transformations of the late 1980s (Szczepanski and Śliz, 2010). Polish democracy has gained strength and experience over time. Pieczewski and Sidarava (2022) consider the Polish political system and its official institutions as inclusive political institutions. For them, regarding informal political institutions, the situation is worse, considering its instability. There are many flaws here, especially when it comes to building a civil society. According to Pieczewski and Sidarava (2022), Poles consider themselves lovers of democracy and freedom, but at the same time, they still have little experience of functioning in such a system.

Socialism left an imprint on the Polish mindset. Looking further back, the authoritarian rule of the interwar political movement Sanacja played a significant role (Kowalski, 2014; Hartwell, 2018). Previously, during the partitions, most Polish lands were under the influence of Russian dictatorship, which impacted the Polish political culture (Davies, 2005). For historical reasons, Polish society has developed harmful habits of thought in the political sphere, including a lack of common sense, political radicalism and easy succumb to populism. According to Pieczewski and Sidarava (2022), all these problems stem from the long-term lack of an open and free political life and the lack of civil society and political experience. Nonetheless, Polish democracy is developing and maturing, and by 2015, Poland was gradually rising in the institutional indicators of democracy (Pieczewski and Sidarava, 2022).

The political reforms in Poland led to a rapid deconstruction of the foundations of a centrally planned economy, which was supported by an American economist, Jeffrey Sachs and monitored by the IMF (Sachs, 1999). After only ten days of work, the Polish parliament passed a package of bills that formed the basis for the transformation of the Polish economy (Balcerowicz, 1992). The program was called the Balcerowicz Plan, after its creator, a Polish economist Leszek Balcerowicz.

The goal of the program was to create a macroeconomic system that would function smoothly and efficiently, based on private property, free competition, an open economy, strong money, and limited state intervention (Skodlarski, 2012). Although Poland's stable development was the immediate objective, privatization of more than 8,400 state-owned enterprises was seen as a key to the country's transition to a market economy (Rondinelli and Yurkiewicz, 1996). This was a challenging task, but it was accomplished in the early 1990s.

While Poland's macroeconomic reforms had been successful, they had not been implemented without overcoming legal obstacles. The economy was restructured in order to create a market-oriented business climate, legal and

institutional system was built in response to the social needs (Rondinelli and Yurkiewicz, 1996). In the early years of transformation, deindustrialization occurred, but it did not follow the characteristics of modernization (Pieczewski and Sidarava, 2022). Industrial production fell by 22% while unemployment rose to 12,98% and national income fell by 13% (IMF, 1993; MacroTrends, 2024). There was a talk of a transformational crisis. Between 1990 and 1991, investment growth dropped by 10%, inflation reached an annual rate of 585% and consumption decreased by 9%, the lowest decrease of all post-communist countries (Prasad et al., 1992; Pieczewski and Sidarava, 2022). The social costs of the reforms contributed to the preservation of the Balcerowicz Plan (Skodlarski, 2012).

Since 1995, the phenomena observed in the structure of the Polish economy can be assessed positively. Under the influence of market impulses, the development of areas producing consumer goods and infrastructure accelerated, mirroring trends in Western Europe in the 1960s, while the technological backlog was starting to come down (Kaliński, 2009). From 1993 to 2004 (with the exception of 2001), the dynamics of Polish GDP were higher than the EU average, and the growth of GDP was accompanied by a change in the structure of how it is created (Pieczewski and Sidarava, 2022). The share of industry and agriculture decreased, while the share of services grew, and the Polish economy developed and modernized (Blazyca and Rapacki, 2001; Lipowski, 1999). The vast majority of formal economic institutions established in Poland after 1990 should be considered inclusive (Pieczewski and Sidarava, 2022).

Poland had always had a clear goal of joining the European Union and NATO, which became apparent after the fall of the Soviet Union and the weakening of Russia. Most Polish politicians agreed that this was the best way to protect Poland from future threats. This goal was pursued by all subsequent government teams.

Poland's choice to have this "external protector" was aimed at ensuring its economic development, political stability, and international security. It should be emphasized that this had enormous public support. In December 1991, Poland signed an Association Agreement with the European Communities. In the following years, Poland showed remarkable consistency in proclaiming its European credo, which consisted of three main theses: in terms of its identity, Poland is a European country par excellence and has a "natural right" to be a member of the most important European institution; EU membership is of vital interest to Poland; Warsaw would make a constructive contribution to strengthening the EU (Pieczewski and Sidarava, 2022). Parallel to the talks on EU membership, Polish diplomats were negotiating accession to NATO, which was finalized in March 1999. Poland became a full member of the EU in May 2004 (Kuźniar, 2008).

Painful economic reforms and setting a course towards the European Union and NATO did not come from a vacuum. It stemmed from historically shaped cultural preferences and mental models. According to Pieczewski and Sidarava (2022), here are those from the recent past that preceded the transformation: (1) It is necessary to take into account the fact that the economy of the Polish People's Republic was not "purely communist". Polish agriculture remained largely private, resisting collectivization at the turn of the 1940s and 1950s. Over 80% of its farmland was privately owned and owned by a capitalist family. This reminded us of the advantages of private ownership of the means of production and must have had a profound impact on the thinking of society as a whole. (2) The Solidarity Movement of the 1980s reminded society of freedom, democratic values, and the benefits of civil society. The martial law introduced in 1981 reinforced the belief that the socialist order was alien to Polish culture and that it was maintained only thanks to the strength of the Moscow hegemony. (3) A large portion of the Polish population declared themselves practicing Catholics. Independent and at odds with the communist authorities, the church had its own information policy and greatly influenced Polish thinking. The church was a defender of Western values, albeit more conservative. (4) The emigration of Poles to the West (temporarily or permanently) contributed to the creation of an "ideal type" of political and economic system in the Polish consciousness. For most Poles, despite communist propaganda, it was to be found in the West. (5) Many intellectuals and academics (economists, lawyers, political scientists, and even civil servants) did not forget the benefits of democracy and the market economy. Many of them had direct exposure to Western science through scholarships and internships. Once opposition parties were formed, they provided their expertise to solidarity leaders, thereby shaping their political and economic views. During the transformation they were ready to join the ministries as professionals.

2.2. Azerbaijan's Transition from Communism to Capitalism

In the political sphere, the transition of formal institutions started in the late 1980s in Azerbaijan. During Gorbachev's era there was increasing unrest in the whole USSR, especially in the Caucasus (de Waal, 2003). There was an ethnic conflict in Nagorno-Karabakh which accelerated the dissolution of the USSR, while some think that this was a classic Russian strategy, which had been developed to influence the region even after the breakup of the union, which was probable (Cornell, 2007). Furthermore, in 1987, *Perestroika*, which means "reconstruction" was implemented within the Communist Party in an attempt to end the Era of Stagnation of the USSR (Rempel, 1996). *Glasnost* was another policy aimed at leading to maximum openness in the activities of state institutions and freedom of

information (McForan, 1988). As a result, some independent publications and political organizations started appearing in Azerbaijan as well as other Eastern Bloc countries (Hunt, 2015). One of the most prominent political organizations in Azerbaijan was the Popular Front of Azerbaijan, which was founded in July 1989 and gained more support in the fall of 1989. The movement's main objective was to gain independence from the USSR (Öztürk, 2013).

One of the biggest steps towards democracy in Azerbaijan was taken on May 21, 1990. The first democratic republic of the East, which was Azerbaijan Democratic Republic that declared its independence in 1918, became memorable according to the relevant presidential decree.

Finally, on August 30, 1991, the declaration on "Restoring the state independence of the Republic of Azerbaijan" was adopted at the extraordinary session of the Supreme Soviet (which was a parliament) after intensive discussions (de Waal, 2003). The document emphasized that the Republic of Azerbaijan is the successor of the Democratic Republic that existed during 1918–1920 (King, 2006). At the same time, the parliament adopted a decision on the preparation of one more law – the Constitutional Act to create the constitutional foundations of Azerbaijan's state independence. However, on November 12, 1995 the first Constitution of independent Azerbaijan was adopted by the popular referendum (United Nations in Azerbaijan, 2003). On September 8, 1991, the first presidential elections were held in Azerbaijan. Ayaz Mutallibov, the first secretary of the Central Committee of the Communist Party of Azerbaijan, was elected as a president in the elections, which were boycotted by most of the political forces in the country, including the Popular Front of Azerbaijan (Nohlen et al., 2001). The democratic wing had to wait a little longer for the power as they had also lost the first multi-party elections to Azerbaijan Communist Party in 1990 (The CIA's – The World Factbook, 1995).

On June 7, 1992, the Popular Front of Azerbaijan came to power and the members of the democratic opposition gained influence (Nordsieck, 2010). These elections are regarded as a turning point in the process of political changes in Azerbaijan, triggering economic and political transformation as the Popular Front of Azerbaijan adopted the laws on freedom of the press, education and prioritized a liberal economic course (Nordsieck, 2010).

As a result of the transitions of the late 1980s and of the beginning of the 1990s, Azerbaijan turned out to be a democratic country (Bolukbasi, 2011). Over time Azerbaijani democracy experienced ups and downs, but one can claim that the political system had comprised different parts of both inclusive and exclusive political institutions. Considering its consistency and stability, the situation concerning informal political institutions are even better. Going back to the beginning of the 20th century, when the first democratic republic survived for 23 months and to the one-year rule of the Popular Front whose members regarded

themselves as the successors of Mahammad Amin Rasulzade who was the President of Azerbaijani National Council during the first Azerbaijani Democratic Republic, it is realistic to consider Azerbaijanis as the lovers of democracy, but they still have little experience of living within the system (Bakiler, 2009).

In spite of the seventy-one years of tragic communist experience, Azerbaijani political culture was not exposed to serious disorder (Cornell, 2011). By the February Revolution, Azerbaijani lands had been under the control of the Russian authoritarian regime for almost a century, but in 1918, sacrificing some of its lands, Azerbaijan managed to declare its independence and the government's reforms became successful on the path to democracy (Swietochowski, 1985). In 1991, Azerbaijan became independent for the second time in the middle of economic and political crises and the relevant steps towards democracy were taken, which had already been restarted by 1988, in response to the society's d emand. Considering the aforementioned facts, political radicalism and giving in to populism are not widespread in Azerbaijan (King, 2006).

When it comes to economic reforms initiated in the 1990s, gradualism was chosen in Azerbaijan, rather than a radical deconstruction of a centrally planned economy which took place in the Eastern European countries, such as Poland (Popov, 2013). As an oil agreement was signed with eleven prominent oil companies on September 20, 1994, there was a basis for the transformation of Azerbaijani economy (Woodward, 1998).

The main idea was to create a system based on:

a) privatization of the state-owned properties;
b) free competition;
c) monitoring the financial sector;
d) an open economy;
e) improving conditions for entrepreneurs (www5).

As a result, for the first time in the Commonwealth of Independent States Azerbaijan's lands, which had been owned by the state within the communist system, were privatized. Significant amount of foreign investment flowed in to the economy during the initial years. What is more important is that an effective fiscal policy was implemented in Azerbaijan which led to gradual decreases in the budget deficit (Aliyev and Gasimov, 2018).

As the structure of the centrally planned economy did not meet the needs of the new economic system, a more effective legal and institutional system was built. However, in the first years of its economic independence, a terrible transformational crisis was endured in Azerbaijan. GDP fell sharply by 94% between 1991 and 1992 (World Bank Open Data, 2021). During these years production dropped dramatically by 93%, from $1.46 billion to $0.10 billion (World Bank Open Data, 2021).

Only after 1999, a positive trend was observed in Azerbaijani economy. In 2000, food production index exceeded 50 for the first time after 1992 (World Bank, 2020). In 2005, Azerbaijan's GDP surpassed the Pre-Soviet GDP and reached $13.25 billion (World Bank Open Data, 2021).

The priorities of Azerbaijan's foreign policy concerning a direction that had been taken towards Turkey and indirectly NATO became obvious as the international situation changed (Ministry of the Republic of Azerbaijan, 2013). By the beginning of the 21st century, Azerbaijan had preferred a balanced policy in the chaotic Caucasus. However, in the 21st century, Azerbaijan took advantage of several crises in both Iran and Russia, and strengthened its ties with Turkey and NATO (Öztarsu, 2011). Considering last energy agreements with several European countries and the European Commission, it must be mentioned that partnership with the EU is one of the main goals of Azerbaijan (EC – European Commission, 2022).

Opting for Turkey as an "external protector" was important, because it ensured Azerbaijan's international security and political stability (Hale, 2000). It is worth to outline that close relations with Turkey were highly appreciated also in the society. What is more, in 2010, the Agreement on Strategic Partnership and Mutual Support between Azerbaijan and Turkey for strategic partnership and security co-operation was signed (Abbasov, 2011). The Agreement consists of 23 articles and five chapters: "Military-political and security issues", "Military and military-technical cooperation", "Humanitarian issues", "Economic cooperation", and "Common and final provisions" (Akhundov, 2011).

The 21st century was critical in the history of Azerbaijan, when strategic choices were made in the directions of development and strategic partners of the state. There were many reasons for choosing Turkey as a strategic "external protector": (1) The role of Turkey in the history of "independent" Azerbaijan. Turkey was one of the first countries to recognize Azerbaijan's independence on June 4, 1918 (Treaty of Batum) and the first to recognize Azerbaijan's restoration of independence from the Soviet Union in 1991. Since then, Turkey has been a staunch supporter of Azerbaijan in its efforts to consolidate its independence, preserve its territorial integrity and realize its economic potential (Hille, 2010); (2) Changes in the direction of Turkish foreign policy. Although the "East" policy had already been Turkey's main priority by the 21st century, Turkish politicians started to take serious steps to integrate especially Turkic nations after its accession negotiations with the EU came to a standstill in 2016. In this context, Azerbaijan was a key factor, because it was physically impossible for Turkey to establish relations with other Turkic nations in the Central Asia without fostering cooperation with Azerbaijan (Gokalp, 1968; Arin, 2013); (3) Azerbaijani students who had graduated from Turkey's top universities, contributed to the partnership of Azerbaijan and Turkey. For the first time in 1920, several students were sent to

Turkey by the Ministry of Education of Azerbaijan Democratic Republic to study and to return to the country as they were required to work for four years on government assignments after graduation (Jafarov, 1998; Aghamaliyeva, 1998). After Azerbaijan restored its independence in 1991, governments increased their efforts to allow more Azerbaijani students to study in Turkey through different scholarships. Additionally, Turkey has taken some initiatives to open several schools in Azerbaijan which function according to the Turkish education system.

3. THE ASSESSMENT OF POLISH AND AZERBAIJANI TRANSFORMATIONS

3.1. Brief Overview of Azerbaijani and Polish Transformations

After 30 years of Azerbaijani and Polish transformations, these countries have noticeably different results. The Azerbaijani Gross National Income (GNI) amounted to USD 54 billion in 2021, while it was only USD 6,69 billion in 1991. The Polish GNI experienced a more significant increase throughout these years: in 1991, GNI in Poland was USD 81 billion, while it amounted to USD 647 billion in 2021 (United Nations Statistics Division, 2023). According to the World Bank Data, GNI per capita, PPP in Poland reached USD 36,330, while it was USD 6,310 in 1993. The Azerbaijani GNI per capita, PPP rose from USD 3,230 to USD 15,520 between 1993 and 2021 (Chart 1). Azerbaijan's Human Development Index (HDI) value for 2021 was 0,745 – which put the country in the High human development category – positioning it at 91 out of 191 countries and territories (Chart 2). The HDI value for Poland in 2021 was 0,876 – which put the country in the Very High human development category – positioning it the 34th Human Development Index (Chart 3). In 2021, Poland's life expectancy at birth became 76,5 years, while this figure for Azerbaijan was 69,4 years. The mean years of schooling for 2021 was 10,5 years in Azerbaijan, while the mean years of 13,2 were observed in Poland in 2021 (Human Development Reports, 2022).

3.2. The Assessment of Polish Transformation

The year 1989 was the turning point in Poland's transition from communism to democracy (Bertelsmann Transformation Index, 2022). At the beginning of the reforms, democratic and market-economy reforms did not proceed at the same pace. The economic transformation took place quicker than the political one. Despite this, the results of the beginning of the transformation were characterized as positive (Pieczewski and Sidarava, 2022). In June 1989, a semi-free parliamentary election took place in which 35% of seats were freely contested and won by Solidarity. One of its activists, Tadeusz Mazowiecki, was able to seize this opportunity to form a coalition government committed to further democratic

changes. Constitutional amendments were subsequently introduced, including a new electoral law and the removal of the communist party's role (Bertelsmann Transformation Index, 2022). In general, since the system change in 1989 and the changes to the Constitution, the political system has fulfilled the criteria for a rule-of-law democracy (Pieczewski and Sidarava, 2022).

Since the beginning of the 21st century, the Polish party system has been institutionalized after some major realignments. Disputes between the former communists and the heirs of the Solidarity movement are no longer visible. Instead, the latter has been able to dominate politics today by splitting into two movements (Bertelsmann Transformation Index, 2022). The country was able to build a democratic state successfully by 2020. Nevertheless, nowadays, as the ruling coalition of right-wing parties has the office of the President, the government and a parliamentary majority, a deterioration of democracy is observed (Pieczewski and Sidarava, 2022). The ruling party has started to jeopardize liberalism and pluralism and place some limitations on media and judiciary mechanisms. However, the government is now confronted with serious criticism from the European Union (Bertelsmann Transformation Index, 2022).

As with many other countries, Poland endured two waves of COVID-19 in 2020 and a third wave in early 2021, which strained the economy (Table 1). On March 15, 2020 Poland closed the borders to neighboring countries and passed several shields to support various economic sectors, employees, schools and universities. Poland's policy responses to the pandemic included tax relief for companies, short-term labor, and additional subsidies for families suffering from a loss in employment. The cost of the interventions added up to about 13% of GDP, and around 60 legal acts were created or changed due to the pandemic (Bertelsmann Transformation Index, 2022).

Poland's recovery and resilience plan is based on €23,9 billion in grants and €12,1 billion in loans. In addition to the green and digital transition, which aims to reduce coal's share of energy generation and to provide 500,000 households and 1,400 schools with high-speed internet by fiber-to-the-home infrastructure in five less populated regions respectively, it foresees strengthening health-sector capacity and supporting businesses in their post-COVID-19 pandemic recovery (EBRD, 2021).

3.3. The Assessment of Azerbaijani Transformation

Azerbaijan's transformation went in a different direction to Poland's. During Gorbachev's perestroika, the Armenian invasion of Azerbaijan's territories reunited the Azerbaijani people and fueled the nationalist movement led by the People's Front (de Waal, 2003; Bertelsmann Transformation Index, 2022). This movement positioned itself as a political alternative to the Soviet leadership of the

country and overthrew the last communist leader, Ayaz Mutallibov few years after Azerbaijan's independence on October 18, 1991 (Bertelsmann Transformation Index, 2022). The leader of the People's Front, Abulfaz Elchibey, who was elected president of Azerbaijan on June 17, 1992, is considered the most democratic president in recent history of the country (Nordsieck, 2010; Bertelsmann Transformation Index, 2022). One of the most important steps which he took was to push Soviet troops out of Azerbaijan, but this cost him his office. Elchibey was overthrown in a military coup backed by Russian security forces, and a civil war was likely to happen. In the state of chaos, Heydar Aliyev took power and managed to bring stability to Azerbaijan. Aliyev's most significant achievement was to sign the "contract of the century" with Western companies to develop Azerbaijan's oil industry (Woodward, 1998; Bertelsmann Transformation Index, 2022). This strategic move helped Europe diversify its energy supplies away from Russia. Nowadays, what puts Azerbaijan in a fragile position is the arrival of Russian "peacekeepers" who keep provoking both sides after the Second Karabakh War in 2020. In addition, the economy which is mainly dependent on oil and natural gas, remains vulnerable (Bertelsmann Transformation Index, 2022). In 2014, the oil price plummeted by 59,2% in seven months. On June 20, 2014, the oil price peaked at $107,95 a barrel, but by June, prices plunged to $44,08 (Ismayilzada, 2021). Due to falling oil prices, the economic downturn accelerated again in the spring of 2020. From April to May, four banks lost their licenses (Bertelsmann Transformation Index, 2022). The government had projected 3% growth that year, but the Asian Development Bank cut its growth forecast for Azerbaijan to 0,5% in 2020 from its previous projection of 2,4% (Bagirova and Antidze, 2020; ADP, 2018).

The discontent grew after a strict lockdown was introduced by the government due to the coronavirus outbreak (Bertelsmann Transformation Index, 2022). However, Azerbaijan was quick to react to the pandemic. In March 2020, a Presidential Decree outlining the emergency response package of measures was signed, and the Cabinet of Ministers agreed on the COVID-19 Response Action Plan in April. According to the government's scaled-up support program, they provided a support package of AZN 3,3 billion (around 4,8 per cent of GDP), later increased it to include additional tax benefits and a one-off extension of social assistance. The package included social protection measures such as direct cash transfers and an expansion of unemployment insurance to support the unemployed and informal workers, social assistance to support low-income households and vulnerable groups and so on. The main interventions to support businesses were cash payments to employers and entrepreneurs in COVID-19-affected areas (EBRD, 2021).

4. AZERBAIJANI VS. POLISH CULTURE ACCORDING TO HOFSTEDE'S 6-D MODEL

4.1. Theoretical Background of Hofstede's Cultural Dimensions

Being the main element of Oliver Williamson's Four Levels of Social Analysis (2000), it is useful to take into account the social embeddedness level, which is made up of norms, traditions, customs, mores and so on. Religion is another important part of this level. However, there are only a few people who have examined the aforementioned top level, such as Robert Putnam, Victor Nee, Robert Leonardi and Raffaella Nanetti, while most institutional economists take it as given. Analyzing that throughout the centuries, institutions experience changes very slowly at this level, North (1991) queries, "What is it about informal constraints that exerts such a profound influence over the long-run character of economies", although neither North, nor Williamson answers this query (Williamson, 2000).

According to Williamson (2000), it can be assumed that many of the informal institutions have spontaneous origins – which is to say that the deliberative choice of a calculative kind is minimally implicated. As some of these institutions function with conventions or have symbolic values within the small group of true believers, they are adopted and become quite stable. To sum up, the history of the development of countries shows that institutions have a long-lasting permeation on the way a society conducts itself (Williamson, 2000).

After three decades of transition, it is interesting to see what informal institutions look like in Poland and Azerbaijan. The assessment of Azerbaijani and Polish cultures has been covered using Hofstede's 6-D Model.

4.2. Hofstede's Model Applied: Azerbaijan vs. Poland

In 2001, Hofstede proposed a popular classification. A four-dimensional model, which comprises power distance, individualism, masculinity and uncertainty avoidance, was presented in Hofstede's early research (Hofstede, 2001). Long-term orientation and indulgence were also added to the model during later studies (Lee et al., 2022; Heydari et al., 2021). Hofstede's model has long been accepted by many researchers as a reliable tool to describe not only national cultures but also organizational cultures (Siemiński et al., 2022). A cultural dimension, according to Hofstede (2011), is a measurable aspect of culture that enables it to be positioned in relation to other cultures.

People's attitudes toward inequality between citizens are shown by the power distance, i.e., it indicates the extent to which less powerful members of the society (deprived of power) accept an unequal distribution of power or simply, an inequality. In cultures with high power distance, arising from the nature of life,

authoritarianism and hierarchical order, in which everyone has a place, are accepted by the society. The society with a low distance from authority endeavors to equalize the distribution of power. Specifically, countries with low power distance are considered more democratic and pluralistic (Hofstede, 2001)

With an exceptionally high score of 85, Azerbaijan is a country where power holders are extremely far off in the public eye. Although Azerbaijan is considered a country located geographically in Europe, its high score is closer to Asian than European countries (www6). In this society, everyone accepts a hierarchical structure with no further justification and where everyone finds their place (Pukin, 2020: 167; Pieczewski and Sidarava, 2022). Hierarchy is seen as a reflection of inherent inequality, and the fact that power is distributed differently justifies the fact that those in positions of power enjoy greater advantages than those in less powerful positions, such as wealth, prestige and superiority (Siemiński et al., 2022). Status symbols play a significant role because of the disparity between those with less power and those with more power.

At a score of 68, Poland is less than Azerbaijan, but still a hierarchical society compared to the rest of the EU. This indicates that, like Azerbaijan, people accept a hierarchical order in society as something natural (Pieczewski and Sidarava, 2022). Centralization is popular, subordinates expect to be told what to do, and the leader is a benevolent autocrat. In both countries, religion is a key contributor to the high power distance index, as Catholic and Islamic countries are characterized by a greater distance to power (Pieczewski and Sidarava, 2022; Al Asmi and Caldwell, 2018).

In social sciences, the concepts of individualism and collectivism have been discussed in numerous contexts. For instance, closely related concepts can be tracked down in the fields of values, social systems, morality, governmental issues, religion, mental differentiation, philosophy, economic development, innovation, the construction of constitutions and cultural patterns. Predictions of behavioral patterns from these structures have been quite successful (Triandis and Gelfand, 1998: 118). In our context, individualism characterizes the extent to which the links between people in society are loose or integrated into society (Hofstede, 2001). In individualistic societies, accompanied by a loosely-knit social framework, individuals look after themselves and their immediate families and they sometimes prioritize their own interests at the expense of the society (Andrijauskienė and Dumčiuvienė, 2017; Pukin, 2020; Siemiński et al., 2022). Collectivism, in contrast, refers to societies based on loyalty and relationships (Andrijauskienė and Dumčiuvienė, 2017). In collective cultures, individuals see themselves as firmly associated with their society, will quite often embrace the standards and obligations predominant in the society as rules, and join a lot of significant worth to their associations with different individuals from the society (Siemiński et al., 2022). It is posited that highly individualistic cultures encourage

a high level of invention and innovation (Andrijauskienė and Dumčiuvienė, 2017). Moreover, there is a positive relationship between the wealth of a country and the degree of individualism in a society. A higher degree of individualism is characteristic of rich nations, while collectivism is the prevailing aspect of underdeveloped nations (Pieczewski and Sidarava, 2022).

Azerbaijan has a collectivist culture, scoring a low 22. This is obvious in the early coordination and close, long-haul obligation to a solid, durable 'in group'. Strong relationships are fostered in these societies, where members of the group take care of and protect one another (Pieczewski and Sidarava, 2022). The importance of loyalty outweighs the majority of other societal norms. Offense results in humiliation and loss of face in these societies.

With a score of 60, Poland's society is more individualistic than Azerbaijan's society. This indicates that a loosely-knit social structure in which individuals are expected to take care of themselves and their closest social surroundings is preferable (Pieczewski and Sidarava, 2022). Anger leads to feelings of guilt and low self-esteem; the boss/worker relationship is an agreement in view of common benefit, employing and promotion choices should be founded on merit only, while management is the administration of people. Hence, one cannot expect extraordinary loyalty of workers to their group. If a worker sees a better opportunity, they will take advantage of it (Siemiński et al., 2022). Polish culture sits at the intersection of eastern and western traditions. The Polish person need a hierarchy in spite of their individualism. In this culture, the combination of a lower power distance score than Azerbaijan and a higher individualism score creates a distinct “tension” that makes the social relationship delicate yet intense. As a result, people in Polish culture are advised to establish a second “level” of communication, making personal contact with everyone in the structure and giving the impression that everyone is important, even if they are not treated equally (Pieczewski and Sidarava, 2022).

The masculinity versus femininity dimension, the most criticized part of the 6-D model, investigates whether a society exhibits more feminine characteristics, such as focusing on quality of life, relations, modesty and concern for others, or more masculine characteristics, such as assertiveness, accumulation of wealth, ambition and competitiveness. The difference in values between men and women is greater when a society places a greater emphasis on masculinity (Su, 2022: 58; Pieczewski and Sidarava, 2022; Pukin, 2020). Employees are not actively engaged in management due to frequent job changes and a lack of identification with the organization in masculine cultures, where major decisions are typically made at the top of an organization. Cultures that place a greater emphasis on feminine values have labor policies that are more family-friendly and maintain a balance between professional and family responsibilities (Sun et al., 2022). Promoting cooperation, a warm, non-conflictive environment and socio-emotional

encouragement assist workers with adapting to the vulnerability connected with new ideas (Kaasa, 2013). According to Dimitrov's research (2014: 32), the below results are quite important:

- feminine values are less influenced by society than men's values;
- on the one hand, men's values can be very assertive, competitive, and totally different from those of women to modest, caring, and similar to those of women on the other;
- ladies in female nations have similar humble, caring qualities as the men, while in masculine nations they are more decisive and more aggressive, yet not so much as the men.

The masculinity index for Poland is high (64). As a result, it is expected that society is driven by competition and that the winner determines success. Despite the fact that breaking the law is common and legal nihilism is widespread, everything that is not allowed in society is forbidden and illegal. As it is a masculine culture (similar to English-speaking countries, for example), Polish people live to work, and fighting is used to resolve conflicts (Pieczewski and Sidarava, 2022; et al., 2022).

With an intermediate score of 50, Azerbaijan has a little bit of everything. Masculine in some areas and feminine in others, but there is no discernible cultural value that is predominant. As Azerbaijan is a country where there are more Islamic individuals, promoting and enforcing justice are considered the main responsibility, remembering The Qur'an (4:58) requires that "When ye judge between people that ye judge with justice" (Al Asmi and Caldwell, 2018). This masculine accentuation on equity is balanced by the Azerbaijani cultural commitment to open hospitality and ubiquitous profound familial love – distinctly feminine moral virtues consistent with the Ethic of Care (Held, 2006).

Everyday life involves some degree of uncertainty. Every culture tries to control uncertainty through technology, beliefs, rules, and rituals. Over time, different mechanisms of coping with uncertainty emerged (Siemiński et al., 2022). The degree to which a country is subject to uncertain events, unconventional environmental threats or the society feels threatened by ambiguous situations and the degree to which it tries to avoid these situations or to minimize risks by adopting strict codes of behavior, believing in absolute truths, establishing formal rules, and being intolerant toward deviant ideas and actions is what is meant by the term "uncertainty avoidance" (Hofstede, 2001). Countries that avoid uncertainty the most place a higher value on authority, status, seniority, age, etc. Their people try to stay out of these kinds of situations by providing job security, not tolerating radical behaviors, and trusting only their own knowledge and judgment (Su, 2022: 58). By enforcing strict laws, such as "there is only one truth" as well as safety and security measures, these cultures attempt to reduce the likelihood of such situations. These people tend to stay with their current employer

for longer and are more emotional and motivated by inner nervous energy (Dimitrov, 2014: 32). Countries with low uncertainty avoidance have fewer rules and regulations and are more tolerant of deviant behavior and opinions as well as religions and philosophies (Dimitrov, 2014: 32). Their people frequently permit the coexistence of diverse ideas; representatives will more often than not work independently and autonomously (Su, 2022: 58). According to Andrijauskienė and Dumčiuvienė (2007), innovation performance suffers as a result of uncertainty avoidance. Arguments are made to emphasize that societies that accept uncertainty achieve higher innovation levels, while cultures with strong uncertainty avoidance may be more resistant to innovations (Andrijauskienė and Dumčiuvienė, 2007).

The way that members of a given culture deal with anxiety, future unpredictability and something away from the status quo is connected to the uncertainty avoidance dimension (Hofstede, 2011). Poland (93) and Azerbaijan (88) both have very high scores on this dimension, indicating that they adhere to strict moral and ethical norms. Societies with a high score on uncertainty avoidance value reliability and security, and may oppose innovation (Siemiński, et al., 2022). Both of these societies prefer pragmatic approaches, so individuals are encouraged to prepare for the future (Andrijauskienė and Dumčiuvienė, 2007). Even if the rules do not work, there is an emotional need to follow them in both countries. Security is essential for individual motivation. According to the research, a person's fear of going bankrupt or losing their job or position in an organization is a significant barrier to starting the process of implementation of changes (Siemiński et al., 2022).

Changes are related to short-term and long-term orientations (Hofstede, 2011). The distinction between the short-term and long-term dimensions refers to how accustomed members of a culture are to delaying the fulfilment of their material, emotional, and social requirements (Su, 2022: 58). Long-term orientation depicts the manner by which the general public keeps up with relations with the past while at the same time confronting difficulties of the present and future time (Siemiński et al., 2022). Furthermore, long-term orientation portrays how individuals foster abilities and skills for future advantages (Pieczewski and Sidarava, 2022). Prudence, stamina, perseverance and attempts to build a market share are all things that cultures with a long-term orientation tend to value. However, respect for tradition, the exercise of social responsibility and preserving the honor of others in the industry are believed by individuals with short-term orientation (Pukin, 2020: 168). It is generally accepted that focusing on the long term is beneficial to innovation performance. Some research found that societies with a focus with a long-term orientation have better innovation capabilities. In addition, it is suggested that innovative nations place a strong emphasis on achievement and long-term planning – pragmatism (Andrijauskienė and

Dumčiuvienė, 2007). Scholars believe that a long-term orientation was one of the main reasons for the rapid economic growth in East Asia in the late 20th century (Su, 2022: 58).

Poles are more normative than pragmatic, as evidenced by their low score of 38 in this dimension – which is comparable to that of Western nations. They must discover the "absolute truth" and think in a way that is typical. They show a lot of respect for traditions, do not save much for the future, and are focused on getting results quickly that they can boast about in front of the rest of society (Pieczewski and Sidarava, 2022). This index's identified value proves that Poles demonstrate a strong preference for consumption rather than accumulation (Siemiński et al., 2022). Azerbaijan's culture, which received a relatively high score of 61, is more pragmatic than normative. People in societies with a pragmatic orientation, which is a typical Eastern model, believe that the truth varies greatly depending on the circumstances, context, and time. They demonstrate a propensity to save and invest, thriftiness, perseverance, and the ability to easily adapt traditions to changing conditions (Pieczewski and Sidarava, 2022).

The sixth dimension, the latest added to the 6-D Model, is indulgence (Hofstede, 2011). Indulgence versus restraint alludes to how much a society allows its people to address essential issues and enjoy their longing to appreciate life and delight. A culture of indulgence permits individuals to appreciate life somewhat unreservedly and urges them to fulfil fundamental, regular human cravings (Su, 2022: 59). A culture of restraint holds that people should not be self-indulgent, but should have a greater sense of purpose and responsibility, and that desires should be controlled by strict social norms (Siemiński et al., 2022). People choose between indulgence and restraint based on three important value dimensions: the degree of need for happiness, the value placed on the manageability of life, and the value placed on contentment (Su, 2022: 59).

Azerbaijan's low score of 22 on this dimension demonstrates a culture of restraint. Societies with restraint tend to be pessimistic and cynical. Additionally, they control their desire fulfilment and place little value on leisure activities. In this kind of cultures, people believe that the actions they take are constrained by social norms, and they think it is wrong to indulge (Pieczewski and Sidarava, 2022). Poland's score of 29 is still low, although higher than that of Azerbaijan, so it can also be categorized as restrained (www7).

5. DISCUSSION

Cultural types and the consequent differences convert into political and economic inclinations and behavior. They are the very foundation of how members of society see the world, what they find attractive, what they are willing to accept, and what they reject because it goes against their beliefs. In this way, the

particularity of culture regularly decides on the state of the institutional matrix (Pieczewski and Sidarava, 2022).

The greatest contrasts between Azerbaijani people and Poles are observed in the following indicators: long-term versus short-term orientation, individualism versus collectivism, and masculinity versus femininity. On the other hand, they are almost identical when it comes to uncertainty avoidance and indulgence. The West and the East have had an impact on both countries. They are the result of these nations' recent and ancient histories. Poland has always been part of Latin culture, while Azerbaijan is in the circle of Islamic culture. Azerbaijan has a huge Muslim population, while Poles adhere to Roman Catholicism. The Republic of Poland began its expansion to the east in the 16th century; as a result, the Polish kingdom gained control of the majority of the present-day neighboring nations (Pieczewski and Sidarava, 2022). In the same century, the Safavid Empire, which was founded by pro-Shia Turks, managed to unite North Azerbaijan (the Republic of Azerbaijan) and South Azerbaijan (which is a region situated in Iran with a Turkic-speaking majority) as well as spread its influence all over the Middle East and Anatolia (Efendiyev, 2007)

Poland lost its statehood in the 18th century. The majority of its territories was ruled by tsarist Russia, while the rest fell under the rule of Prussia and Austria-Hungary (Pieczewski and Sidarava, 2022). What is now Azerbaijan was included in the Russian empire. Except for a period of Khanates, when most of present-day Azerbaijan was ruled by Khans of Turkic (Azerbaijani) origin, the rest of the 19th century and most of the 20th century saw it within Tsarist Russia, then the Soviet Union (Swietochowski, 1985).

CONCLUSION

Poland and Azerbaijan began their transformations almost simultaneously. During the vital early period, different factors drove these nations to take various directions of progress. The political elites and the majority of Polish society chose to establish democracy and a market economy and sought a protector in the West (Pieczewski and Sidarava, 2022). For Azerbaijan, picking the way of change was "unintendedly" dramatic. Towards the collapse of the USSR, an ethnic conflict in Karakbakh, which was fueled by Russia, was opposed by a democratic movement (Cornell, 2007; de Waal, 2003). Supporters of democracy and a market economy, who considered Turkey to be their natural protector and followed a pro-Western policy, and supporters of authoritarianism could not come to an agreement to combine their powers to overcome separatism. As a result, the democratic government was overthrown in a military coup backed by Russian security forces (Bertelsmann Transformation Index, 2022).

Explaining the reasons behind two ways of institutional change, the focus was firstly on historically shaped mental models. The "Solidarity" movement, the influence of the Catholic Church, the numerous private contacts between Poles and the West, and the Polish intellectual elite's contact with the West, all contributed to the choice made by Poles during the final decade of the socialist era.

The main reasons for the Azerbaijani path of transition are made up by the conservatism of society, which mainly stems from Islamic norms. Azerbaijani people's low level of national awareness after seventy-one years of Russian authoritarian regime, made it impossible to define and prioritize goals and political instability caused by separatism and subsequent military coups.

Institutional change can be powerful just when it is upheld by appropriate mental attitudes that are exemplified in informal institutions. Despite the existence of the necessary informal institutions in society, political and social consensus was not achieved immediately after the collapse of the Soviet Union, which was the main obstacle to Azerbaijan's transformation into a stable economic growth.

Secondly, it was crucial to choose a strategic external protector. In addition to the significant issue of economic dependence, these choices had a more in-depth cultural background. For a long time, Poland had been all the more firmly connected with Latin culture, and in the midst of communism, the Western model was the ideal they looked for (Pieczewski and Sidarava, 2022). By Perestroika, which had an impact on the political and economic attitudes of all post-Soviet nations, Azerbaijani people did not know as much about life in the West as Poles did, and they were more associated with Islamic norms (Rempel, 1996). The fixing of Poland's binds with the EU constrained it to embrace the formal institutions of the West and sped up institutional changes. However, without Western support, Azerbaijan's formal institutions were unable to function.

Wealth and quality of life indicators, as well as institutional indicators, demonstrate that the Polish transformation is widely regarded as a success. According to the respective indicators, Azerbaijan has not been able to diversify its economy away from hydrocarbon reserves. As a result, the Azerbaijani economy is unable to experience a steady growth, and the indicators are significantly behind those of Poland (Bertelsmann Transformation Index, 2022).

Differences in mentality are still evident today. Poles place a high value on individualism and masculinity, and their power distance indicator is lower than that of Azerbaijan. Universalist values, in contrast to Azerbaijan's, predominate, highlighting the necessity of objective laws that apply to all members of society (Pieczewski and Sidarava, 2022; Siemiński et al., 2022). Azerbaijan has a high power distance indicator, a sign of a clear hierarchy and unequal power distribution in society. Additionally, there is a low level of individualism. Azerbaijan is a mix of both masculinity and femininity: there is no discernible

cultural value that is preeminent, despite the fact that some areas are more masculine than others and others more feminine, which are obviously balanced by the harmony of Islamic values and Azerbaijani culture (Al Asmi and Caldwell, 2018). The need for control and support from the state is reflected in the high level of particularism, which is associated with traditionalism.

While the study aimed to shed light on the impact of mental models on the transformation from communism to capitalism in Poland and Azerbaijan, it is important to acknowledge one main limitation. In order to explore cultural differences between these two countries. Geert Hofstede's cultural dimensions were used, but it is vital to mention that this framework may not comprehensively reflect the entirety of mental models. Mental models are shaped by a range of factors beyond Hofstede's dimension, such as social interactions. While it is important to involve Geert Hofstede's six cultural dimensions into the research, it must be noted that further studies including social interactions in a society are needed.

Considering Bertelsmann Transformation Index (2022), Azerbaijan and Poland have different results in terms of political, economic and governance indexes. According to Poland's respective scores, most Polish political and economic formal institutions can be considered inclusive institutions, although the informal institutions continue to considerably deviate from Western standards, particularly in politics (Pieczewski and Sidarava, 2022). Meanwhile, economic and political institutions in Azerbaijan include different elements of inclusive and exclusive institutions. However, some changes are predicted to happen in both political and economic life of Azerbaijan's society, as political and economic cataclysms are likely to occur in both Russia and Iran.

A major policy implication for Azerbaijan is to foster cooperation with Western institutions like the EU and NATO, which is necessary for promoting political stability, democracy and economic diversification. Considering the wrong reaction of the 1980's society to the regional uncertainties, national awareness and cultural understanding should be fostered through investments in education and awareness campaigns. Anticipating geopolitical shifts is paramount for the government to maintain stability and advancing development agendas.

When it comes to Poland, strengthening relations with the EU can bolster socio-economic progress and institutional frameworks. In order to sustain democratic values, disparities between formal and informal institutions should be addressed. Vigilance, evidence-based policymaking, and robust monitoring mechanisms are indispensable for navigating future challenges and maximizing Poland's potential.

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(www1) https://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD?end=2021&locations=AZ-PL&start=1990&view=chart [Accessed: 12.04.2023].
(www2) https://hdr.undp.org/data-center/specific-country-data#/countries/AZE [Accessed: 12.04.2023].
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(www4) https://www.ebrd.com/sites/Satellite?c=Content&cid=1395289863371&d=&pagename=EBRD%2FContent%2FDownloadDocument [Accessed: 14.04.2023].
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APPENDIX

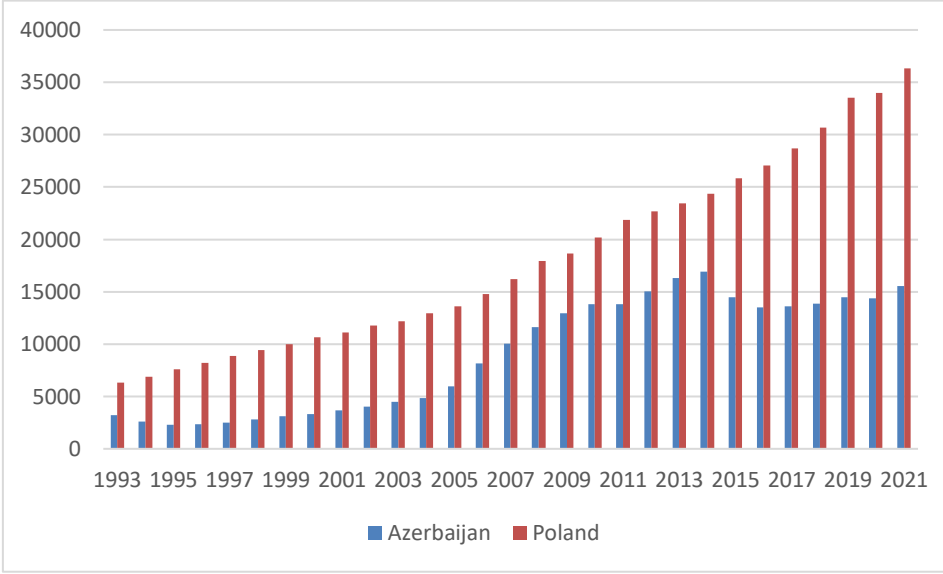


Chart 1. Azerbaijan vs. Poland. GNI per capita, PPP
(current international $) in 1993–2021

Source: (www1).

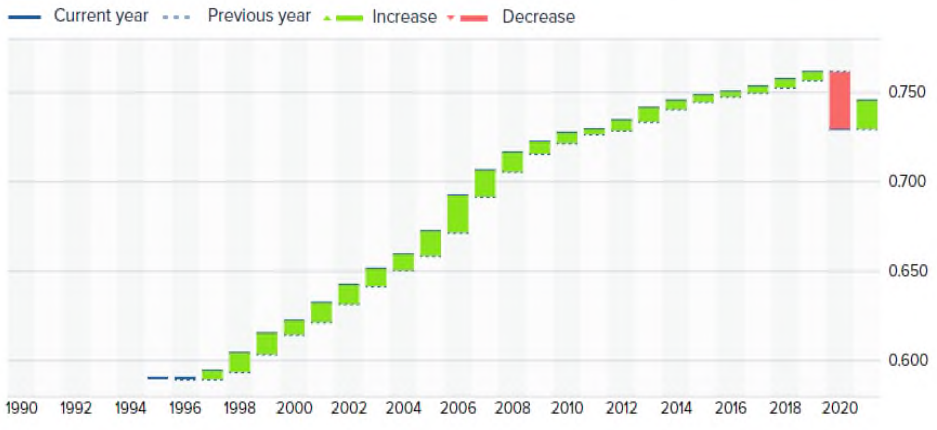


Chart 2. Human Development Index in Azerbaijan in 1990–2021

Source: (www2).

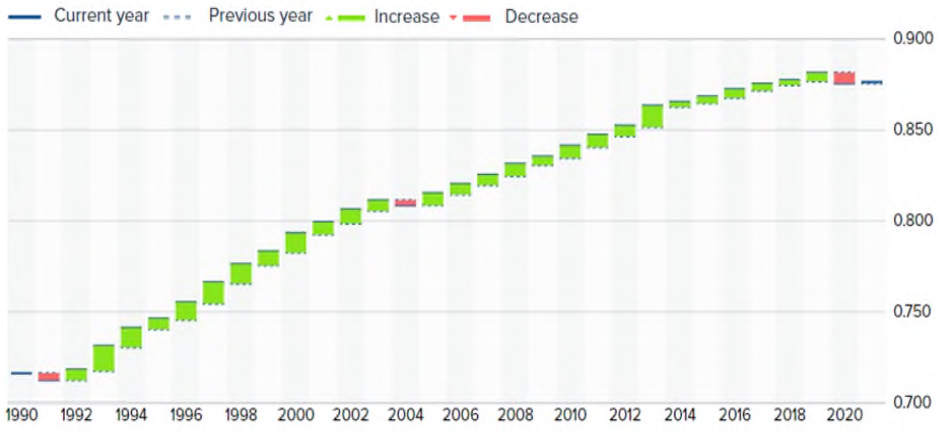


Chart 3. Human Development Index in Poland in 1990–2021

Source: (www3).

Table 1. Macroeconomic indicators in Poland in 2018–2020 (in %)

	2018	2019	2020
GDP growth	5.4	4.7	-2.5
Annual inflation (year end)	0.9	3.0	3.4
Government balance/GDP	-0.2	-0.7	-7.1
Current-account balance/GDP	-1.3	0.5	2.9
Net FDI/GDP	-2.6	-2.0	-2.1
Public debt/GDP (year end)	48.8	45.6	57.4
Unemployment rate (year end)	3.8	2.9	3.3

Source: (www4).

Zakończenie recenzji/ End of review: 06.05.2024
Przyjęto/Accepted: 04.06.2024
Opublikowano/Published: 11.06.2024

• F I N A N S E I P R A W O F I N A N S O W E •
• Journal of Finance and Financial Law •

czerwiec/June 2024 • vol. 2(42): 41–56

ROZWÓJ PLACÓWEK BEZGOTÓWKOWYCH W POLSCE

Zbigniew Witczak*

https://doi.org/10.18778/2391-6478.2.42.02

DEVELOPMENT OF CASH-FREE BRANCHES IN POLAND

ABSTRACT

The purpose of the article. The aim of the article is to analyze the Polish banking market from the perspective of the development of non-cash branches in correlation with the growing popularity of non-cash transactions. Evaluation of development opportunities in this area in the context of a decrease in the number of branches and an increase in the standard of modern technology.

Methodology. The work uses the method of analysis, critical analysis, descriptive and comparative analysis of literature and reports of the banking sector.

Results of the research. The Polish banking market is focusing more and more attention on the promotion of transactions by customers. The traditional model of a bank branch or contact center is no longer effective and competitive and requires changes. New solutions and focus on customer needs are needed to improve the operations of banking sector institutions. New technologies, the use of AI, support automation and a new approach to service, such as the growing network of non-cash branches, offer a chance to be a leader on the Polish banking market for servicing individual customers.

Keywords: banks, cashless payments, cashless branches, transformation of banks.

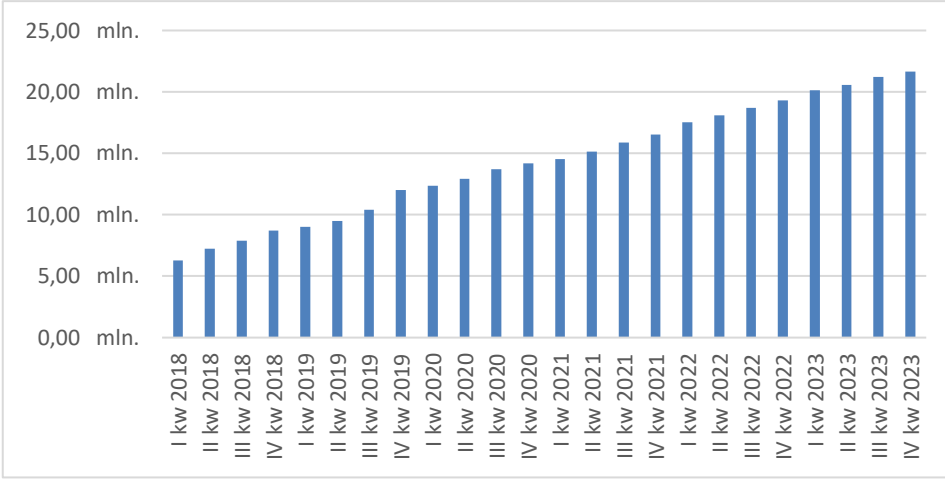
JEL Class: G20, G21, G29.

* Dr, Wydział Ekonomiczny Uniwersytet Opolski, e-mail: zbigniew.witczak@uni.opole.pl., http://orcid.org/0000-0002-8290-3259

WPROWADZENIE

Ewolucja środków płatniczych i pieniądza jest znakomitym przykładem na poszukiwanie przez ludzkość uproszczeń w codziennym życiu (Morawski, 2002; Borcuch, 2007; Dylewski, 2011; Kubiczek, 2015). Wraz ze zmianą sposobów dokonywania płatności zmieniało się również podejście społeczeństw do pieniądza, bogactwa oraz źródeł jego pozyskania. Słynne *pecunia non olet* cesarza Wespazjana rządzącego Rzymem w drugiej połowie I wieku jest tego doskonałym przykładem (Klinkowski, 2007: 60). Jeszcze wiele wieków później, także współcześnie, dostrzec można, że posiadanie majątku obarczone było ryzykiem nałożenia na siebie społecznego ostracyzmu (Le Goff, 2011). W średniowieczu dotyczyło to zwłaszcza tych osób i instytucji, które czerpały swoje zyski z działalności kredytowej, nazywanej pejoratywnie lichwą (Le Goff, 1995 i 2005: 82–88, 116–119). Podejście to diametralnie zaczęło zmieniać się wraz z rozwojem gospodarczym oraz wzrostem roli pieniądza w codziennym życiu, co możemy współcześnie obserwować w kontekście rozwoju rynku kryptowalut (Poskart, 2018 i 2022; Maciejasz i Poskart, 2022). Z czasem ewolucja ta doprowadziła do powstania rozbudowanego systemu bankowego (Zaleska, 2007). Dzisiaj trudno wyobrazić sobie świat bez rozwiniętego systemu finansowego, zarówno w kontekście miliardowych operacji finansowych, prowadzonych przez państwa czy korporacje, jak i skromniejszych transakcji, które pozwalają zaspakajać codzienne potrzeby obywateli, między innymi potrzeby kredytowe, depozytowe czy transakcyjne. Bankowość z perspektywy klienta uległa na przestrzeni kilkunastu lat ogromnej transformacji, która nadal trwa i nie zwalnia (Ziemba, 2023). Potrzeby dotyczące usług bankowych uległy zmianie. Tempo życia, potrzeba szybkiej realizacji zadań i natychmiastowego działania, troska o naszą osobistą wygodę, komfort i bezpieczeństwo oraz konkurencja na rynku bankowym doprowadziły do przemiany tradycyjnego modelu banku kojarzonego z okienkiem i kolejkami. Spora część społeczeństwa nadal korzysta z instytucji finansowych w sposób „tradycyjny", czyli udając się do punktu obsługi lub dzwoniąc na infolinię/*call center*. Digitalizacja życia doprowadziła jednak do dynamicznego rozwoju bankowości elektronicznej, (Chmielarz, 2005; Bajor, 2011; Cołoś, 2014; Rzepka, 2017; Krzysztoszek, 2017; Grzywińska-Rąpca i Grzybowska-Brzezińska, 2018; Zarańska i Zborowski, 2019) zwłaszcza internetowej (Zalewska-Bochenko, 2014: 183–192; Wojtacka-Pawlak, 2015: 153–161) oraz mobilnej (Bolibo i Matras-Bolibok, 2014: 7–22; Zaleska-Bochenko, 2021: 20–28), które dają możliwość korzystania z rozwiązań bankowych dwadzieścia cztery godziny na dobę przez siedem dni w tygodniu (Starzyńska i Kowańska, 2022). Szybko rosnąca liczba aplikacji mobilnych dostępnych w bankach i korzystających z nich klientów są doskonałymi dowodami na to, że jest to kierunek oczekiwany przez klientów.

Prezentowany artykuł ma na celu analizę polskiego rynku bankowego z perspektywy jego potencjału do rozwoju w obszarze oddziałów bezgotówkowych. Zadanie to jest zasadne, zwłaszcza jeżeli spojrzymy na rosnącą popularność transakcji bezgotówkowych i znaczenie nowoczesnych technologii wśród konsumentów oraz zmniejszającą się liczbę oddziałów tradycyjnych. Warto postawić pytanie, czy malejąca liczba placówek bankowych o tradycyjnym profilu i rosnąca popularność samodzielnych kanałów obsługi przez klientów banków otwiera dla sektora przestrzeń do rozwoju bezgotówkowych oddziałów?

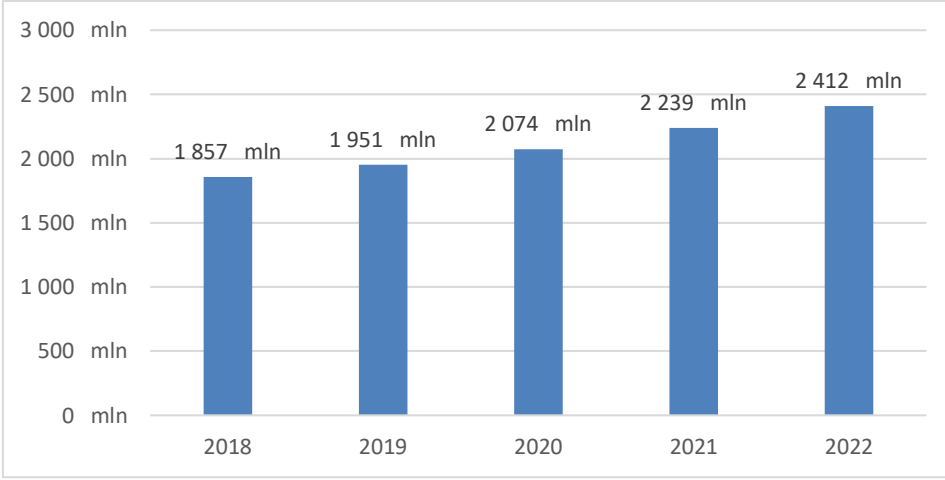


Wykres 1. Liczba klientów korzystających aktywnie z bankowych aplikacji mobilnych w Polsce (w mln)

Źródło: opracowanie własne na podstawie kwartalnych raportów NetB@nk dla Związku Banków Polskich za okres od I kwartału 2018 r. do IV kwartału 2023 r. (www16).

Z informacji zamieszczonych na wykresie 1 wynika, że rozwój tego kanału dystrybucji stale postępuje (w 2023 r. zarejestrowano ponad 21 milionów aktywnych użytkowników). Co więcej, oferowane w aplikacjach mobilnych rozwiązania zaczęły wykraczać poza sprawy *stricte* związane z bankowością. Możliwość płacenia telefonem bez wątpienia wprowadziła rynek płatności i bankowości na nowy poziom (Han i Wang, 2021). W aplikacji bankowej istnieje możliwość zamówienia nowego dowodu osobistego, uzyskania kodów rabatowych do sklepów, kupienia biletów parkingowych, komunikacji miejskiej czy do teatru (www3). Coraz popularniejsze jest umożliwianie klientom zakładania konta czy kupna rozwiązań kredytowych za pomocą aplikacji mobilnej, bez fizycznego udziału pracowników banku w tym procesie. Powyższe udogodnienia mają z jednej strony

ułatwić konsumentom transakcje dokonywane za pośrednictwem banku, a z drugiej strony jeszcze silniej utożsamić klienta z bankiem, co buduje jego przywiązanie do marki. Biorąc pod uwagę wygodę klientów oprócz przeniesienia *daily bankingu* do świata internetowego, ogromne znaczenie odgrywają transakcje bezgotówkowe (www8). Wykres 2 przedstawia zmianę liczby transakcji dokonywanych w systemie Elixir i Express Elixir w Polsce w latach 2018–2022.

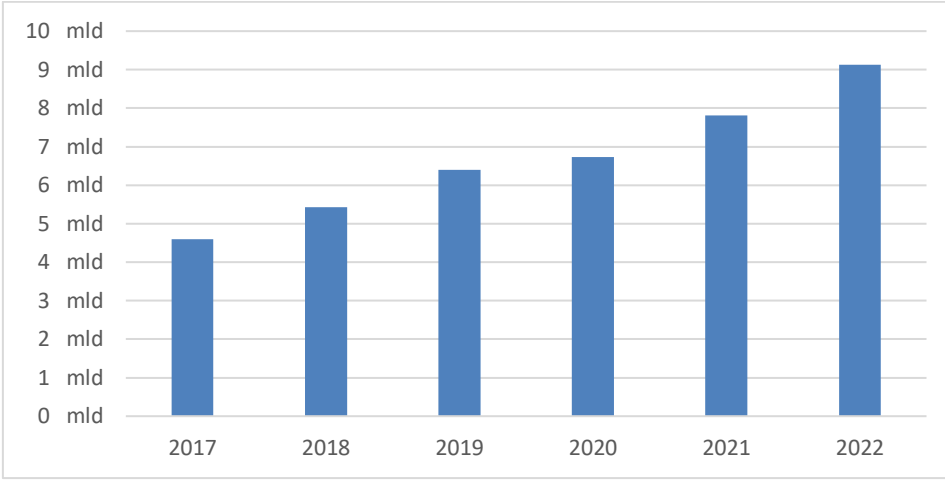


Wykres 2. Liczba operacji bezgotówkowych w Polsce w latach 2018–2022

Źródło: opracowanie własne na podstawie raportów kwartalnych NetB@nk dla Związku Banków Polskich za okres od I kwartału 2018 r. do IV kwartału 2022 r. (www16).

Rosnąca liczba transakcji tego typu, zwłaszcza przelewów ekspresowych, których liczba wzrosła od I kwartału 2018 r. do IV kwartału 2022 r. aż o 29,89%, wynika z wielu czynników. Zaliczyć do nich należy między innymi coraz lepsze, wydajniejsze systemy dostarczane przez banki, szerszy dostęp społeczeństwa do sieci internetowej, wzrost świadomości konsumentów, zmiany w polityce banków, które jako miejsce dokonywania przez klientów operacji bankowych, zwłaszcza tak prostych jak przelewy, promują systemy samoobsługowe.

Oprócz przelewów w systemach bankowości internetowej i mobilnej wykorzystywane są także inne sposoby realizacji transakcji bezgotówkowych. Wykres 3 prezentuje liczbę transakcji kartami płatniczymi w ujęciu kwartalnym w latach 2017-2022.



Wykres 3. Transakcje kartami płatniczymi wykonane w Polsce w latach 2017-2022

Źródło: opracowanie własne na podstawie (www17).

Klienci banków płacą kartami płatniczymi głównie zbliżeniowo, ale także za pomocą rodzimego rozwiązania jakim są transakcje BLIK (www9). W II kwartale 2023 r. przy użyciu kodów BLIK wykonano 32,5 mln transakcji, co oznacza dwukrotny wzrost w porównaniu do II kwartału 2022 r. (www13). Korzystając z bezgotówkowych operacji bankowych używamy m.in. smartfonów, smartwatchów, kart plastikowych, terminali POS (Firlej, 2018: 55–65; Maison, 2022). Ważną rolę w przyśpieszeniu obrotu bezgotówkowego w Polsce ma zapewne program *„Polska bezgotówkowa”,* którego celem jest upowszechnienie i promocja tego typu transakcji (www4).

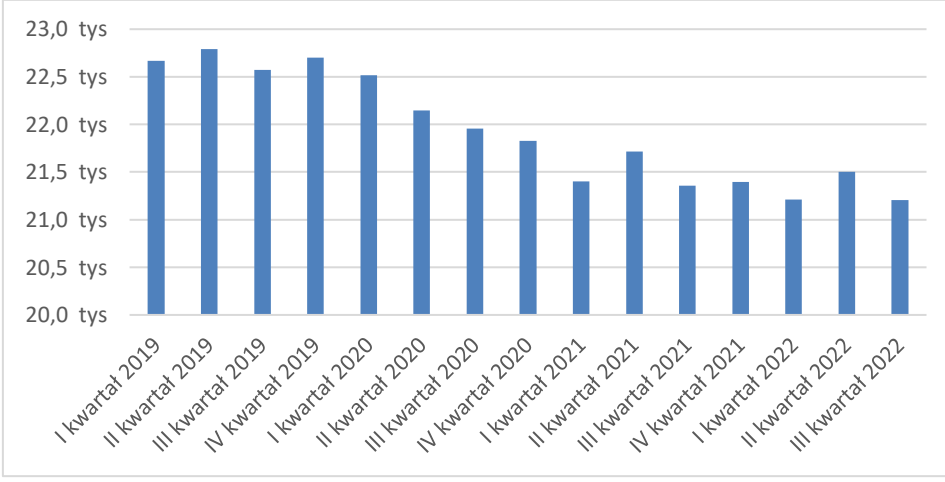
Jak w polskim systemie, który daje coraz więcej możliwości niekorzystania z gotówki, a nawet gdy zachodzi taka potrzeba to często pobierana jest ona z bankomatu lub wpłacana we wpłatomatach bez udziału pracowników banku, odnajdują się placówki bankowe? Czy tradycyjny model banku z okienkiem „kasa”, skarbcem i potwierdzeniem za dokonanie płatności nieuchronnie zaniknie? Czy proces ten już się rozpoczął? W niniejszym artykule dokonano analizy zmian w liczbie placówek bezgotówkowych na polskim rynku bankowym oraz prześledzono deklarowane przez banki kierunki rozwoju dla tej gałęzi gospodarki. Celem artykułu jest również ocena szans i zagrożeń, jakie niesie ze sobą wzrost liczby placówek typu *cashless* i zmniejszenie się liczby oddziałów posiadających w swoich zasobach gotówkę. Analiza obejmować będzie perspektywę zarówno banków, jak i klientów detalicznych.

W celu dokonania oceny, czy rozwój placówek bezgotówkowych jest czasowym trendem, czy też jest to szansa na zwiększenie efektywności działań banków

komercyjnych i sposób na zwiększenie zadowolenia klientów indywidualnych, wykorzystano metodę przeglądu i analizy krytycznej, opisowej i porównawczej literatury oraz raportów związanych z rozwojem bankowości bezgotówkowej.

1. ROZWÓJ SIECI PLACÓWEK BEZGOTÓWKOWYCH W POLSCE

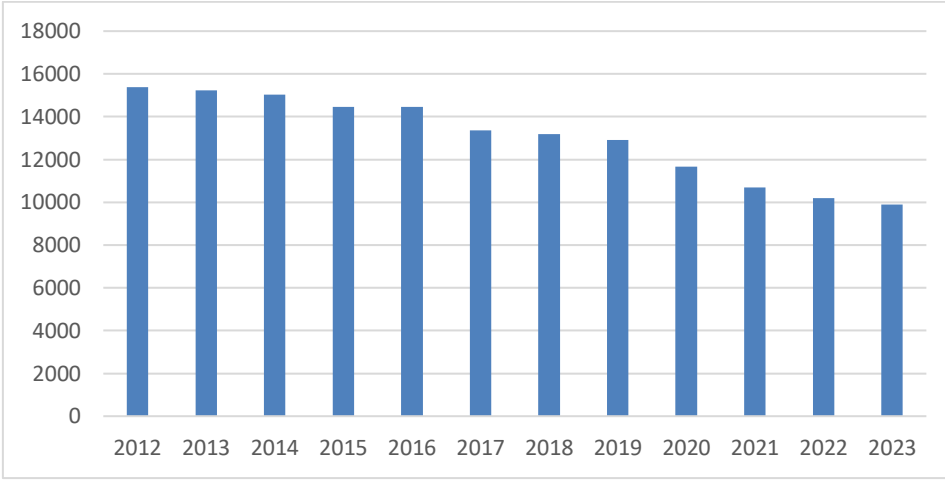
W tradycyjnym modelu obsługi klientów, w placówkach bankowych dokonywano większości lub nawet wszystkich operacji związanych z posiadanymi przez klientów rozwiązaniami/produktami bankowymi. W katalogu tym znajduje się bardzo dużo czynności, które w dobie dostępu do sieci internetowej i urządzeń mobilnych nie wymagają specjalistycznej wiedzy. Zaliczyć do tego katalogu należy między innymi przelewy na rachunkach osobistych, wpłaty i wypłaty gotówkowe, sprawdzenie salda i historii rachunku, utworzenie zleceń stałych, założenie lokaty czy rachunku oszczędnościowego, przekazanie informacji o ofercie. Korzystając z aplikacji mobilnej czy laptopa można mieć dostęp do banku cały czas. Nawet wpłaty i wypłaty gotówki dokonywane są bez wizyty w placówce bankowej dzięki możliwości korzystania z bankomatów i wpłatomatów, których liczba systematycznie maleje, jednak nadal utrzymuje się na poziomie swobodnie umożliwiającym powszechny dostęp do tych urządzeń co pokazuje wykres 4.



Wykres 4. Liczba bankomatów na terenie Polski w 2019–2022 w ujęciu kwartalnym

Źródło: opracowanie własne na podstawie (www17).

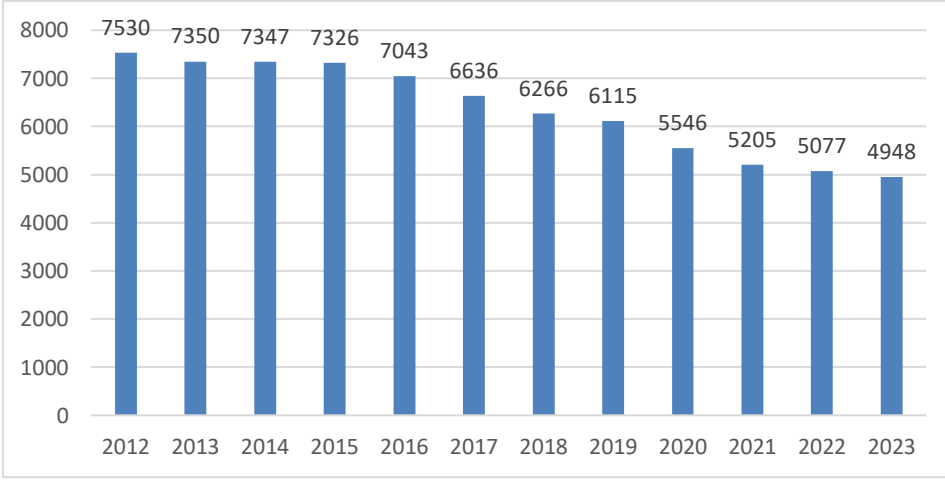
Na spadek liczby bankomatów wpływ może mieć zmniejszająca się liczba punktów bankowych, przy których często tego typu urządzenia funkcjonują. Trend ten zaprezentowany został na wykresie 5.



Wykres 5. Liczba placówek bankowych (oddziały, przedstawicielstwa, filie, ekspozytury) w Polsce w latach 2012-2023

Źródło: opracowanie własne na podstawie KNF (2017, 2024).

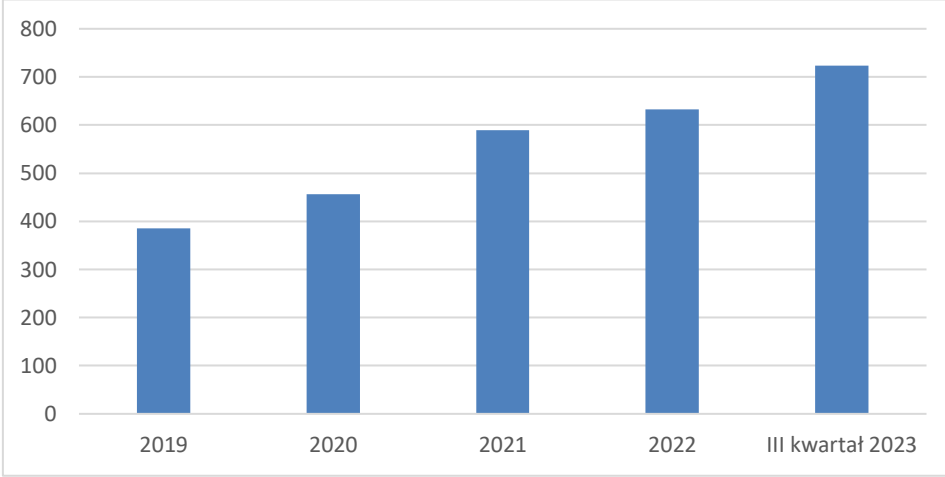
Proces kurczenia się stacjonarnych punktów dotyczy także oddziałów banków w Polsce w latach 2012-2023, co zostało przedstawione na wykresie 6.



Wykres 6. Liczba oddziałów bankowych, placówki własne, w Polsce w latach 2012–2023

Źródło: opracowanie własne na podstawie KNF (2017, 2024).

Wpływ na taki kierunek zmian ma kilka czynników, do których należy zaliczyć: poszukiwanie oszczędności przez banki, konsolidację sektora bankowego oraz postępującą cyfryzację banków, która umożliwia klientom wykonywanie wielu operacji, w tym zakupu oferowanych rozwiązań w trybie online. Z trendu tego wyłamują się jednak placówki bezgotówkowe, których liczba systematycznie wzrasta. Tendencje tę przedstawia wykres 7.



Wykres 7. Liczba placówek bezgotówkowych na terenie Polski w latach 2019–2023 (stan na 30.09.2023 r.)

Źródło: opracowanie własne na podstawie (www15).

W 2019 r. jedynie 6,06% z ogólnej liczby placówek, funkcjonując jako oddziały własne na rynku polskim, było placówkami nieposiadającymi gotówki. W kolejnym roku było to 8,21%, a w 2021 r. przekroczono próg 10% placówek bezgotówkowych (11,30%). Rok 2022 pokazał, że trend spadku liczby placówek bankowych przy jednoczesnym wzroście liczby placówek *cashless* utrzymał się i osiągnął poziom 14,17% oddziałów nowego typu w stosunku do oddziałów własnych na koniec 2022 r. W III kwartale 2023 r. było to już 14,65%. Porównując liczbę placówek, oddziałów, filii i ekspozytur bankowych, które prezentowane były na wykresie 5 z liczbą placówek typu *cashless* widać znacząca zmianę udziału tych drugich (z 3,10% w 2019 r. do 6,61% w roku 2022). Na koniec III kwartału 2023 r. w Polsce funkcjonowały już 724 placówki bezgotówkowe, a procent oddziału tego typu w ogólnej liczbie placówek, filii i ekspozytur wynosił już 7,24%.

W 2022 r. z ponad 600 placówek bezgotówkowych działających na rynku polskim, aż 202 funkcjonują pod marką Banku BNP Paribas (www7), co stanowi

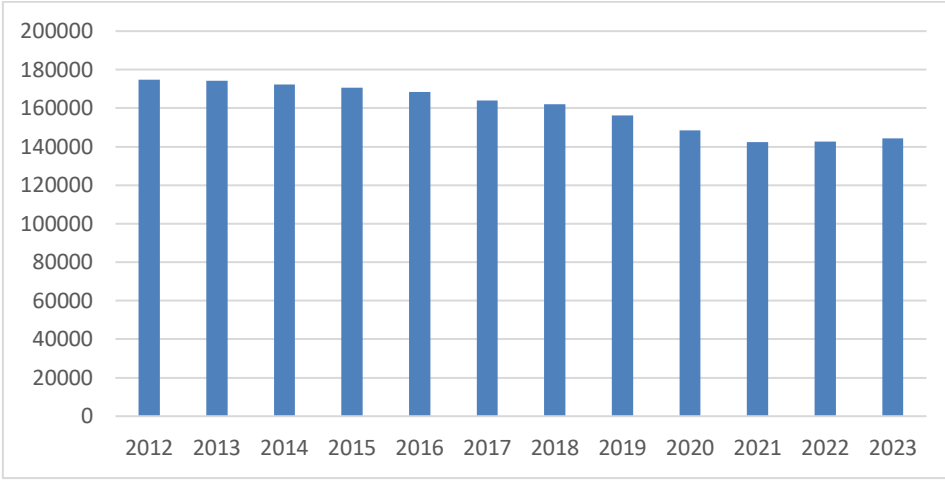
prawie 50% ogólnej liczby placówek własnych tej instytucji (www2). Drugi w zestawieniu – Bank ING proponował swoim klientom dostęp do 173 placówek bezgotówkowych (www7). Ten kierunek transformacji sieci oddziałów bankowych zapewne utrzyma się nadal, a jako przykład instytucji podążającej w tym kierunku podać można Bank Credit Agricole, który miał w styczniu 2023 r. 60 placówek bezgotówkowych, planując jednocześnie do końca 2023 r. dysponować 150 oddziałami tego typu (na koniec III kwartału 2023 r. bank ten dysponował 118 oddziałami (www10; www14).

2. SZANSE I ZAGROŻENIA ROZWOJU PLACÓWEK BEZGOTÓWKOWYCH

Do zalet transformacji oddziałów z punktu widzenia banków zaliczyć można między innymi aspekty wizerunkowe. Takie banki mogą być postrzegane przez klientów jako nowoczesne instytucje, które nadają rytm i kierunek rozwoju sektora. W połączeniu z polityką zmniejszania liczby papierowych dokumentów, digitalizacją procesów, kreowaniu przyjaznych dla klientów procedur, wykorzystaniem do wystroju placówki materiałów przyjaznych dla środowiska, kampaniami podkreślającymi troskę instytucji o społeczeństwo, reklamami, w których główną rolę odgrywają znane i lubiane osoby ze świata show-biznesu, banki mogą kreować obraz firmy przyjaznej klientowi, która wychodzi ze strefy obracającej się wyłącznie wokół finansów, a bliskiej każdemu z nas. Połączenie nowoczesnych trendów z klientocentrycznością ma pokazać konsumentom, że bank jest miejscem przyjaznym, który dba o jego potrzeby, szanuje wartości klienta oraz poszukuje rozwiązań najkorzystniejszych dla niego. Nie można zapomnieć o kosztach związanych z przetrzymywaniem w placówce gotówki, np. czasu, jaki pracownicy oddziałów muszą przeznaczyć na obsługę wpłatomatów, sortowanie pieniędzy, liczenie i raportowanie stanów kasowych. Do kosztów zaliczyć należy również obsługę operacji prostych np. przelewów, wpłat i wypłat gotówki, sprawdzenia historii rachunku, odblokowania dostępów do kanałów zdalnych. Te operacje z powodzeniem mogą samodzielnie wykonać klienci w aplikacji mobilnej czy serwisie internetowym. Jest to jeden z najważniejszych plusów, jaki klientom daje transformacja sektora bankowego, na którą składa się również powstawanie placówek bezgotówkowych. Możliwość dokonania wielu operacji z poziomu swojego telefonu czy laptopa pozwala na oszczędzenie klientom czasu, pieniędzy i umożliwia wygodne korzystanie z usług bankowych. Kontakt osobisty z doradcą ogranicza się wówczas tylko do spraw zawiłych. Jednak nawet w takich sytuacjach można skorzystać z placówki bezgotówkowej bez przychodzenia do niej, łącząc się z doradcą za pomocą chatu lub wideorozmowy.

Minusem zmian dokonywanych w sieci oddziałów banków dla nich samych może być bez wątpienia czasochłonność tego procesu oraz związane z nim koszty.

Nowy układ placówki, zapewnienie sprawnych urządzeń, szkolenie pracowników, zmiany w procedurach i regulaminach, zadbanie przez menadżerów o transformację nie tylko pomieszczeń, ale także zmiana przyzwyczajeń i rozwój kompetencji pracowników to niewątpliwie tylko niektóre z czynników mogących spowalniać ten proces. Brak klientów dokonujących wpłat i wypłat gotówkowych przy udziale doradcy ogranicza szanse sprzedażowe pracownikom placówek. Rezygnacja z klientów dokonujących transakcji kasowych czasami może zmniejszyć strumień osób przychodzących do placówki regularnie, a więc rozluźnić więzy z bankiem. Budowanie lojalności klientów w oparciu o systematyczny kontakt z opiekunem bankowym jest jednym ze sposobów na rozwój portfela klientów banku oraz utrzymania ich aktywności. Także dla części klientów, zwłaszcza osób o ograniczonym dostępie do sieci internetowej, mniejszej skłonności czy umiejętności korzystania z urządzeń mobilnych, kart płatniczych, transakcji BLIK porzucenie tradycyjnego modelu obsługi może być trudne i skłaniać ich do zmiany banku. Dodatkowo należy pamiętać o potrzebie zapewnienia bezpieczeństwa w operacjach dokonywanych przez klientów samodzielnie (Bandera i Grzywacz, 2016; Szewczyk-Jarocka, 2017; Zakonnik i Dembowski, 2018). Z drugiej strony, jeżeli większość instytucji sektora bankowego podąży drogą cyfryzacji i automatyzacji procesów to klienci będą zachęcani, albo wręcz naciskani na to, aby korzystać z tych rozwiązań, które ograniczają kontakt osobisty z pracownikami banków oraz z wykorzystania gotówki. Wydaje się, że presja banków na klientów będzie rosła, co związane jest między innymi z rosnącymi wydatkami na automatyzację procesów bankowych (Głogowski i Jagiełło, 2020) w tym na rozwój i wykorzystanie sztucznej inteligencji (ZBP, 2020; Zygierewicz i in., 2022). Innowacje te mają na celu między innymi zmniejszenie kosztów działalności i poprawę doświadczeń klientów (Korenik, 2017). Są one jednym z kluczowych elementów konkurencyjności (Klimontowicz, 2013; Druszcz, 2017). Prowadzić to może jednak do wykluczenia finansowego części społeczeństwa będącego konsekwencją wykluczenia cyfrowego (Iwaszczyk i Jarzęcka, 2017). Zmniejszająca się liczba placówek może oznaczać ograniczenie dostępu do obsługi. Warto w tym miejscu zasygnalizować, że efektem cyfryzacji i automatyzacji jest zmiana struktury zatrudnienia w sektorze bankowym (Reczulski, 2019). Od kilku lat widoczna jest wyraźna tendencja spadkowa liczby zatrudnionych w sektorze bankowym, co zostało przedstawione na wykresie 8.



Wykres 8. Zmiany w zatrudnieniu w sektorze bankowych w latach 2012–2023

Źródło: opracowanie własne na podstawie: KNF (2017, 2024).

PODSUMOWANIE

Celem artykułu była odpowiedź na pytanie: Czy malejąca liczba placówek bankowych o tradycyjnym profilu i rosnąca popularność samodzielnych kanałów obsługi przez klientów banków otwiera dla sektora przestrzeń do rozwoju bezgotówkowych oddziałów? Przedstawione dane wskazują, że na polskim rynku bankowym jest przestrzeń do poszerzania tego typu kanałów kontaktu z klientem. Proste operacje coraz chętniej wykonujemy samodzielnie, korzystamy z bezgotówkowych form rozliczeń. Poszukiwanie oszczędności przez banki prowadzi do optymalizacji liczby oddziałów bankowych i przekształcania ich w bezgotówkowe placówki, w których pracownicy mają więcej czasu na rozmowę, sprzedaż rozwiązań oferowanych przez te instytucje oraz nawiązywanie relacji z klientem. Z kolei odpowiadając na pytanie: Czy placówki bezgotówkowe zdominują rynek bankowy czy są czasowym trendem? należy wskazać, że trudno jest określić czy jest to stały trend czy forma przejściowa prowadząca docelowo do stworzenia systemu pełnej bezosobowej obsługi. Na pewno widoczne jest przywiązanie Polaków do płatności bezgotówkowych (Oleńkiewicz, 2015: 215–223; Świder, 2021: 79–91). Biorąc pod uwagę liczbę placówek, w których gotówka nadal funkcjonuje, daleko Polsce jeszcze do takiego poziomu bezgotówkowej obsługi w placówkach jak np. w krajach skandynawskich (www6; www11; www13), czy w Kanadzie (Engert i Fung, 2019; www12). Placówek typu bezgotówkowego przybywa, co jest trendem obserwowanym nie tylko w Polsce (www1), jednak nie można jesz-

cze mówić o całkowitym odejściu od oddziałów tradycyjnych i gotówki na rodzimym rynku. Dla polskiego sektora bankowego jest to niewątpliwie trend, który powinien być obserwowany, a na jego rozwój będą miały wpływ działania edukacyjne podejmowane przez banki i różne instytucje oraz zmniejszanie się wykluczenia mieszkańców z korzystania z sieci internetowej i urządzeń mobilnych. Im więcej osób będzie korzystało przy prostych operacjach z aplikacji mobilnej czy bankowości internetowej tym mniejsze będzie zapotrzebowanie na tradycyjny model obsługi. Podobnie z poszukiwaniem informacji. Jeżeli klienci szukając odpowiedzi na proste pytania będą posługiwać się stroną internetową banku, *chatbotami, telebotami* lub innymi kanałami zdalnymi, do których nie będą wykorzystywać osobistej lub telefonicznej rozmowy z pracownikiem banku, to redukcja liczby placówek i rozmiarów oddziałów *call center* będzie postępowała. Przynajmniej w tym tradycyjnym modelu. Jednostki te przekształcone mogą być w centra doradcze oraz edukacyjne dla klientów, w których będą mogli oni porozmawiać na bardziej skomplikowane tematy związane z finansami. Może część oddziałów stanie się punktem łączącym w sobie różne banki i jeden pracownik będzie obsługiwał kilka instytucji finansowych? Może w jednym miejscu będzie można porozmawiać z reprezentantami różnych banków (www5)? Sposób funkcjonowania oddziałów bankowych jaki znamy z początku XXI wieku ulega nieustannej transformacji i już dzisiaj wygląda on zupełnie inaczej niż np. 20 lat temu. Uwzględnić przy tym należy zmieniające się podejście do bankowości młodych osób (Krzeszowska, 2017; Berraies i in., 2017; Kaczmarek, 2019, 2022, 2023) oraz rewolucję, jaką niesie ze sobą dynamiczny rozwój sztucznej inteligencji, która znajduje swoje miejsce w zarządzaniu ryzykiem, ocenianiu zdolności kredytowej klientów, wspieraniu przeciwdziałanie terroryzmowi, praniu pieniędzy oraz innym oszustwom. Wprowadzenie AI może pociągnąć za sobą zmniejszenie kosztów, czasochłonności oraz niższe prawdopodobieństwo popełnienia błędu. Banki wykorzystujące nowe technologie połączoną z promocją jej wśród klientów i ich edukacją mogą skorzystać na zmieniającym się otoczeniu, do którego zaliczyć należy wzrastająca rolę bezgotówkowych operacji i gotówki w codziennym obrocie.

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ROZWÓJ PLACÓWEK BEZGOTÓWKOWYCH W POLSCE

Cel artykułu. Celem artykułu jest analiza polskiego rynku bankowego z perspektywy jego rozwoju w obszarze oddziałów bezgotówkowych w korelacji do rosnącej popularności transakcji bezgotówkowych. Ocena potencjału do rozwoju tego obszaru w kontekście zmniejszającej się liczby oddziałów tradycyjnych i rosnącym znaczeniu nowoczesnych technologii.

Metoda badawcza. Analizując rozwój oddziałów bezgotówkowych wykorzystano metodę przeglądu i analizy krytycznej, opisowej, i porównawczej literatury oraz raportów sektora bankowego.

Wyniki badań. Polski rynek usług bankowych coraz większą uwagę przywiązuje do promocji samodzielnego wykonywania transakcji przez klientów. Tradycyjny model oddziału bankowego, czy *contact center* jest już mało atrakcyjny i konkurencyjny oraz wymaga zmiany. Potrzebne są nowe rozwiązania i koncentracja na potrzeby klientów, aby zwiększyć efektywność działań instytucji sektor bankowego. Nowe technologie, wykorzystanie AI, automatyzacja procesów i nowe podejście do obsługi, jak na przykład rosnąca sieć oddziałów bezgotówkowych to szansa na to, aby być liderem na polskim rynku bankowym obsługującym klientów indywidualnych.

Słowa kluczowe: banki, płatności bezgotówkowe, oddziały bezgotówkowe, transformacja banków.

JEL Class: G20, G21, G29.

Zakończenie recenzji/ End of review: 17.03.2024
Przyjęto/Accepted: 04.06.2024
Opublikowano/Published: 11.06.2024

• F I N A N S E I P R A W O F I N A N S O W E •
• Journal of Finance and Financial Law •

czerwiec/June 2024 • vol. 2(42): 57–69

UTILIZATION SCHEMES OF THE PRE-SETTLEMENT RISK LIMITS

Piotr Wybieralski*

https://doi.org/10.18778/2391-6478.2.42.03

UTILIZATION SCHEMES OF THE PRE-SETTLEMENT RISK LIMITS

ABSTRACT

The purpose of the article is to investigate the selected method employed to manage the counterparty credit risk, namely the application of various risk limits. The aim is to recognize utilization schemes of the pre-settlement risk limits in the Polish OTC derivatives market in the relationship between a financial institution and a non-financial counterparty. They are used not only to cover the credit exposure but also to support and enhance the entire market risk management process and day-to-day operations in the financial institutions.

Methodology. The research method comprises the analysis of recommendations of the Polish Financial Supervision Authority as well as reports, documents and market risk management principles of selected financial institutions (WSE listed banks).

Results of the research. The study indicates two utilization schemes of the pre-settlement limit setup applicable both for daily and credit-related transactions. The first one assumes that the risk requirements remain unchanged during the contract lifetime, the second one considers variable risk requirements over time. Practical implications are discussed (in relation to a notional trade size, risk exposure and margining policy).

Keywords: counterparty credit risk, financial risk management, pre-settlement risk limits, credit limits, VaR limits, OTC derivatives market.

JEL Class: F31, F37, G15, G32.

* Dr, Instytut Gospodarki Międzynarodowej, Uniwersytet Ekonomiczny w Poznaniu, e-mail: Piotr.Wybieralski@ue.poznan.pl, https://orcid.org/0000-0001-8280-8465

INTRODUCTION

High market volatility caused by unexpected events, such as the 2008/2009 Financial Crisis, the COVID-19 pandemic outbreak in 2020, or the Russian invasion of Ukraine in February 2022, results in increased interest in the counterparty credit risk (CCR) management.[1] There are many approaches to mitigate the CCR, for instance, the trade novation with central counterparty (CCP), credit valuation adjustment (CVA) and application of various risk limits.

The main objective of this paper is to analyze the selected method used to manage the CCR in the Polish OTC derivatives market in the relationship between a financial institution and a non-financial counterparty. The focus of this paper is mainly on the unsecure pre-settlement risk limits[2,3] which are used not only to cover the credit exposure but also to support and enhance the entire market risk management process and day-to-day operations in the financial institutions.

The study puts forward s a hypothesis on the existence of a relationship between the pre-settlement limit utilization scheme and the customer category. It is assumed that in the case of a non-financial counterparty the treasury limit utilizes variable risk requirements until contract maturity.

The study is empirically verified. The research method comprises the analysis of recommendations of the Polish Financial Supervision Authority as well as reports, documents, and market risk management principles of selected financial institutions (WSE listed banks).

The paper contributes to the literature on finance, especially market risk management. The study`s findings may be interesting for business practice, both financial institutions that are formally obliged to apply counterparty risk monitoring systems in the form of risk limits, as well as end users, primarily non-financial counterparties, who may gain additional insight as well as expand knowledge and competences in the risk management. The topic is also important for academic researchers who analyze the given areas and propose original solutions.

[1] CCR defined as a failure to fulfil obligations resulting from concluded (derivative) instruments (Regulation EU No. 648/2012; KNF, 2010). CCR includes both pre-settlement and settlement risks (based on occurrence period: KNF, 2010). The pre-settlement risk relates to the potential loss on the concluded transaction because of market fluctuations in the period starting from deal date until the final settlement date due to, for instance, the counterparty's insolvency (default). Settlement risk is the potential loss that occurs at the contract maturity should the counterparty fail to deliver the agreed amount.

[2] No initial margin required at transaction inception.

[3] The study concentrates on the pre-settlement risk, the settlement risk is omitted, since in the relationship between financial institution and non-financial institution it is not a particular challenge. A general "Delivery versus Payment" (DvP) rule applies which enforces the counterparty`s payments in the first place. Bank may also grant a settlement limit as well.

The study is structured as follows. The first section reviews the latest literature on the pre-settlement risk key components, i.e., market risk estimation and transaction valuation, the second section describes pre-settlement limit utilization schemes with fixed and variable risk requirements. The last part contains discussion on investigated issues and indicates some challenges regarding the application of the risk limit-based approach in practice. The paper concludes with final remarks that indicate further possible research paths.

1. LITERATURE REVIEW

Out of many CCR mitigation techniques there are a few worth particularly referring to, namely trade novation with central counterparty (CCP), credit valuation adjustment (CVA) and application of various risk limits.

When clearing transactions centrally, the CCP becomes the buyer to the original seller and the seller to the original buyer (Duffie and Zhu, 2011; Norman, 2011; Rehlon and Nixon, 2013; Widz, 2017; Berndsen, 2021). The counterparty risk is mitigated by multilateral netting and collaterals posting. Contract settlements are secured by default management procedures and funds allocated for this purpose. Apart from benefits of centralized clearing some researchers stress the systemic incentives to generate moral hazard (Koeppl, 2013), others show that the trade novation may lead to a higher systemic risk (Pirrong, 2012) when allowing mutualization of the idiosyncratic risk of individual institutions (Biais et al., 2012; Menkveld, 2015; Gregory, 2010). The CVA approach adjusts the contractual price by appropriate risk spread when entering a transaction (Brigo et al., 2013) and thus collecting additional revenues creating an internal default fund. The CVA should incorporate counterparty-specific master netting agreements and margin terms. However, under this framework an institution estimates the risk premium for each trading counterparty separately, which may be very challenging in practice (Gregory, 2010; Cesari et al., 2010; Barucca et al., 2020; Banerjee and Feinstein, 2021). Application of risk limits to manage CCR allows to set the maximum exposure that an institution faces from derivatives trading with any other counterparty (Gould et al., 2017a and 2017b; Gregory, 2010). In the Polish literature there are also works on various risk limits, especially in the inter-bank market (Zając, 2002; Konopczak et al., 2011; Mrzygłód and Szmelter, 2014; Samborski, 2015) but still there is no comprehensive view on this topic from the perspective of the relationship between a financial institution and a non-financial counterparty.

Analyzing the pre-settlement risk that financial institutions face from derivatives trading it is necessary to take into account basically two issues, namely market risk estimation and derivatives portfolio valuation. Hence the pre-settlement risk considers two key components: (1) the value of potential future

exposure (PFE) and (2) the current exposure (CE). Market risk estimation is associated very often with the VaR approach (Best, 2000) and different calculation methods (e.g., Monte Carole simulation, historical simulation, variance-covariance method). The PFE is calculated usually using the same ways (however, the amount is positive from a bank`s perspective and it deals with longer time frames). The valuation of transaction portfolio is based on the current market conditions. Usually, one of the following methods is used, namely (1) net present value (NPV) of all outstanding contracts, or (2) the value of reverse transactions to close a given position.

Since the BCBS-IOSCO released its guidance on margining for non-centrally cleared derivatives in March 2015, some recent works regarding the pre-settlement risk concentrate mainly on contracts collateral, especially different initial margin models[4]. Gregory (2016) analyzes the impact of initial margin and discusses the mechanics of initial margin calculations as well as some of the likely implications and potential problems associated with increased initial margin posting. Anfuso et al. (2017) present a complete framework to develop and backtest dynamic initial margin models, they have shown how to obtain the forward looking IMs from the simulated exposure paths using simple aggregation methods. Caspers et al. (2017) review selected regression-based initial margin models and compare their output against the actual margin requirements measured by the ISDA SIMM methodology. They observe that the models generally perform well for single trades but show some degradation for single option products and larger diversified portfolios. They investigate potential extensions and improvements. McWalter et al. (2018) also provide estimation of a dynamic initial margin model with three approaches: Nested Monte Carlo, Gaussian Least-Squares Monte Carlo, and the Johnson Least-Squares Monte Carlo (JLSMC) Algorithm. Caspers et al. (2018) describe initial margin forecast methodology for Bermuda swaption. As a result of bilateral initial margining some authors analyze their impact on derivatives pricing. Vierkoetter (2019) focuses on how initial margin effects counterparty credit exposures, capital requirements and funding costs. The author stresses that besides risk-neutral valuation principles, these components should be included when pricing derivatives through so-called valuation adjustments (xVAs).

[4] Initial margin protects the transacting parties from the potential future exposure that could arise from future changes in the mark-to-market value and variation margin protects the parties from the current exposure that has already been incurred by one of the parties from changes in the mark-to-market value of the contract after the transaction has been executed. The amount of variation margin reflects the size of this current exposure (BIS Bank, 2015: 12)

2. RESULTS

In accordance with Recommendation A (KNF, 2010 and 2022) a financial institution should set a pre-settlement limit[5] for its counterparty before concluding a derivative contract. The treasury limit determines the maximum credit exposure that a bank can accept. The treasury limit includes both the PFE and the CE amounts (set respectively by Add-ONs and positive from a bank`s perspective MtM). The risk requirements for contracts are time dependent (see Chart 1).

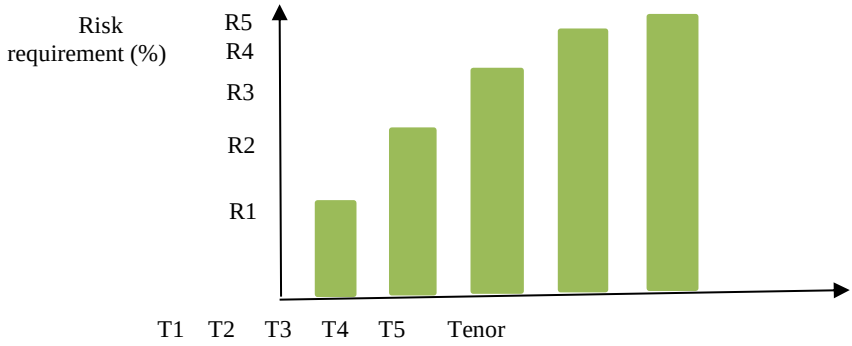

Chart 1. Risk requirement depending on contract's tenor

Source: own elaboration.

The longer transaction, the greater risk requirements assuming that the volatility in longer time frames should be higher than in the shorter ones. Considering a free amount of treasury limit and appropriate risk requirement, the maximum exposure can be set in a derivative contract. Once the transaction is concluded, the contract's net present value is constantly updated (MtM). Hence, the PFE and the CE jointly determine the value of pre-settlement risk and they both are usually reflected in the treasury limit utilization. This study research problem concerns mainly the size of the PFE component, which may be constant, maintaining original value over the contract lifetime. The PFE amount may vary either being fixed until maturity in the first scheme or gradually reducing over time, applying shorter risk requirements in the second one. Charts 2A-C and 2D-F provide respectively an illustration of both concepts.

[5] Used in practice under different terms, such as "credit lines", "pre-settlement treasury limits", "counterparty limits", "transaction limit", "counterparty risk exposure limits", etc. In this research the pre-settlement limit is defined in accordance with (KNF, 2010: 18 (1.6.4.a)).

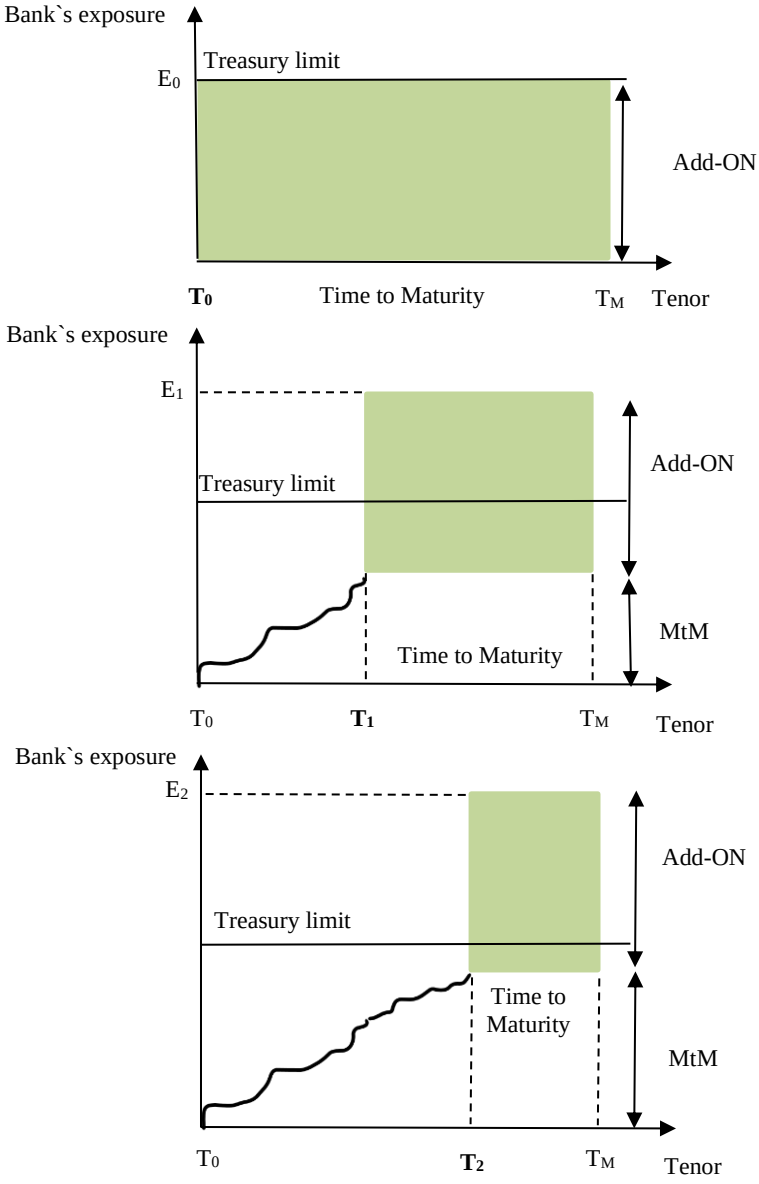

Chart 2A-C. The treasury limit utilization with fixed (original) risk requirements. Exposures (E_0, E_1, E_2) at valuation dates (respectively T_0, T_1 and T_2)

Source: own elaboration.

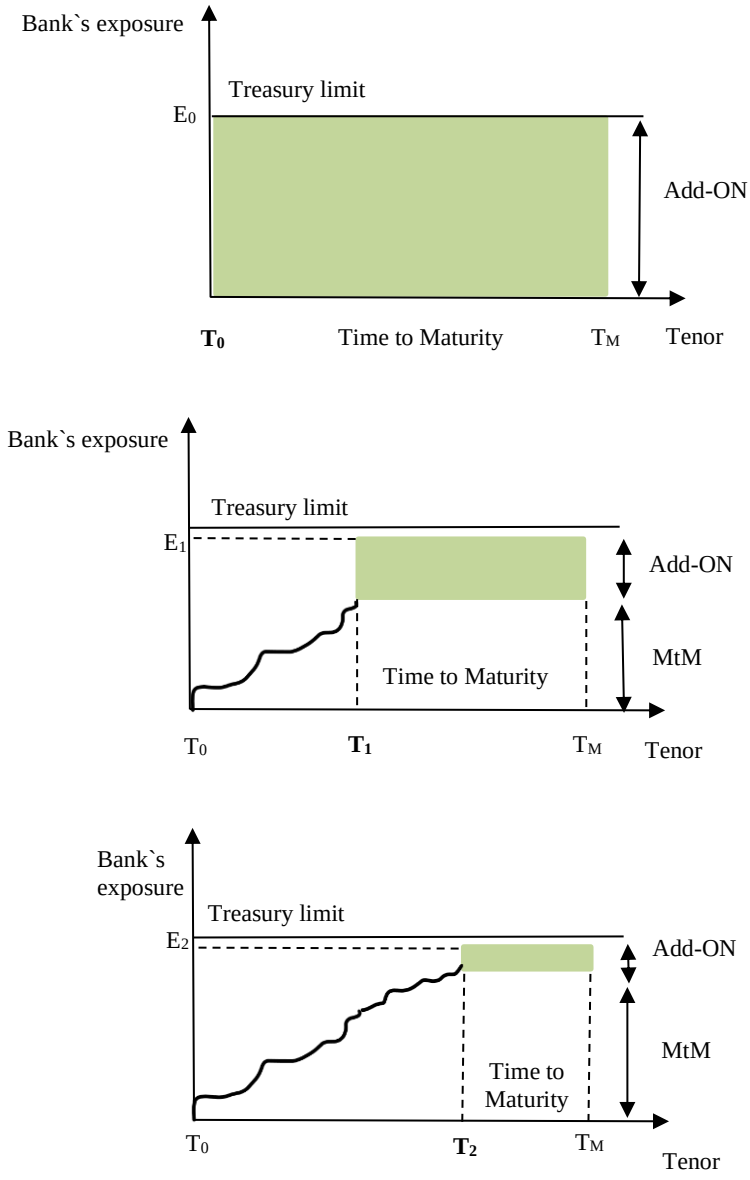

Chart 2D-F. The treasury limit utilization with variable risk requirements. Exposures (E_0, E_1, E_2) at valuation dates (respectively T_0, T_1 and T_2)

Source: own elaboration.

At a contract inception (date T_0) the PFE is estimated in both schemes at the same level applying an appropriate risk requirement until a maturity (date T_M, see charts 2A and 2D). Trades are assumed to fully utilize a treasury limit. After conclusion under the first scheme (charts 2A-C) the PFE remains unchanged until the contract maturity and under the second scheme (charts 2D-F), the PFE decreases over time (applying shorter and thus lower Add-ONs with time decay). The size of current exposure (MtM) is identical in both schemes (at valuation dates T_1 and T_2, see charts 2B-C and 2E-F). Considering the fixed amount of the treasury limit during the contract lifetime, its utilization differs in both scenarios (the limit amount is marked with a horizontal line). At the very beginning the treasury limit is assumed to be fully utilized in both schemes. As time goes by, the second scheme releases some space in terms of treasury limit amount (due to a shorter risk requirement applied) allowing for additional exposure which is not available under the first scheme (risk requirement remains unchanged and as a result the treasury limit utilization exceeds 100%). It can be noticed the first approach treats the estimated market risk level conservatively (the PFE maintains original value), the latter applies lower, however, more realistic risk factors (current Add-ONs are used).

As part of the empirical study, the CCR rules and hedging policies for selected banks (WSE listed) are analyzed in terms of the treasury limit utilization schemes for a non-financial counterparty. The dominant pattern for daily business and one-off transactions within pre-settlement risk limits applies variable risk requirements (switch from higher to lower risk weights as time passes until the contract maturity).[6]

3. DISCUSSION

Considering the relationship between a financial institution and a non-financial enterprise, the application of selected treasury limit utilization scheme has practical implications (on market risk management policy). First, the treasury limit is usually prepared for a specific period of time and the amount usually remains unchanged.[7] It is determined after the analysis of counterparty needs (indicated exposures, cash flows estimate, transaction tenors and types, asset classes, underlying instruments as well as knowledge and experience assessed under MiFID regulations etc.), financial standing (client`s creditworthiness), type

[6] There are interesting market practices noticed in case of the contract lifetime longer than the limit tenor (expiration date). Then, the renewal and computation of the treasury limit is based on the current risk requirements in some banks, which results in the limit renewal with a changed amount. There are also banks that renew the limit amount unchanged, maintaining its original value.

[7] All events of default are usually indicated in a master agreement or related regulations. If breached, a financial institution is entitled to unilaterally close-out all open positions. Hence it is recommended to clarify them well in advance in order to avoid any misunderstanding in the future.

of limit collateral and current bank`s credit policy. Some financial institutions determine the maximum amount of treasury limit in relation to the company's turnover (e.g., no more than 10–20% of annual turnover), others in relation to EBITDA (e.g., no more than 50% of the last year EBITDA), others in relation to equity value (e.g., no more than 50%). It is difficult to capture general rules since derivatives are tailor-made instruments and they often require an individual approach. It may happen that the same counterparty will not be granted a treasury limit within one institution but it will gain a limit somewhere else (e.g., because of exceeded industry credit limits, or operating in not supported industry, not belonging to coverage group where the risk can be shared, etc.). Treasury limit is granted for a specified tenor (e.g., 1–2 years for daily transactions and longer for credit-related ones). Second, the Add-ONs assigned to the same trade tenors vary across institutions. This is because of different methods applied for risk measuring, considering different time series, different confidence level or reference markets, etc. The risk requirements may also differ across a counterparty type within the same institution, for instance, reduced ones for professional (or eligible counterparty) or standard for retail counterparties. There may be also increased Add-Ons for limits without a margin call rule.

Both analyzed treasury utilization schemes treat differently the pre-settlement risk related to derivatives trading and affect: (1) contracts notional size; (2) risk exposure, and finally (3) margining policy. The Add-Ons directly determine the notional size of the contract, the lower risk weight the greater trade size can be opened when trading within the same amount of a treasury limit. Although the PFE at contract`s inception (in the analyzed example) is the same for both schemes[8], the latter applies lower (shorter) Add-Ons as time goes by and consequently, allows for additional trades (limit utilization falls under 100%, see charts 2E-F). This may lead to extensive risk taking. Under a fixed treasury limit amount that covers indicated exposure, the pace of its utilization increases/speeds up with a greater contract size (the dynamics of limit utilization is different). Ultimately all this may impact a counterparty margining policy. Under a condition that the whole pre-settlement risk should be covered, the margin call should be issued once the total amount of both the PFE and the CE exceeds the amount of treasury limit granted. This scenario materializes much faster in the first scheme than in the second one. However, there are many approaches regarding a margining policy across financial institutions in Poland. Some maintain a conservative strategy expecting additional collateral posting once the total amount of the PFE and the CE exceeds the treasury limit amount, others require additional collateral when the CE is nearly matching the limit amount. There are also banks expecting margin once the CE exceeds the treasury limit amount

[8] If treasury limit is fully utilized, the counterparty is not allowed to open any additional positions that may increase exposure (only closing is allowed in that case).

together with a minimal transfer amount. The margining policy depends on an individual bank`s attitude in this regard.

CONCLUSION

The study analyzes one of the methods used to mitigate CCR in the Polish OTC derivatives market in the relationship between a financial institution and non-financial entrepreneurs, namely treasury limits employed to manage pre-settlement risk. On the one hand, their application results directly from an applicable law, on the other hand, they play a crucial role in a day-to-day treasury operations. They allow to manage the risk exposure that a bank faces when trading derivatives with a specified counterparty. The free treasury limit amount directly determines the size of the position opened and treasury limit utilization indicates when additional collateral should be posted. The implemented treasury limit utilization scheme, risk factors and margining policy may be also regarded in the context of a competitive advantage that financial institutions may gain and thus more attract derivatives business.

The study indicates two utilization schemes of the pre-settlement limit setup applicable both for daily and credit-related transactions for a non-financial counterparty. The first one assumes that the original risk requirements remain unchanged during the contract lifetime, the second one considers variable risk requirements over time (first applying longer risk weights then the shorter ones with time decay). Practical implications of a selected model exist. The first scheme has a conservative nature, the latter one is more likely to be liberal.

The empirical study shows that in the case of daily and credit-related transactions concluded with a non-financial counterparty within pre-settlement limits, selected institutions rely on variable risk requirements.

Risk management approach based on the pre-settlement limits has many advantages, however, there are some concerns as well. Market risk assessment (reflected in Add-ONs) remains still an important practical challenge. Risk factors rely to some extent on historical data assuming repetition in the future. That becomes very problematic under crisis conditions when volatility is much higher and the pre-settlement risk may not be properly valued. The issue is quite well recognized in the literature on the financial risk, but it is challenging especially in times of market turbulence. This situation is particularly difficult if allocated treasury limit is fully utilized on the deal date (especially in the long term non-flexible instruments (Wybieralski, 2021a). This is certainly a research area that needs to be further investigated. Margining policy is another important research topic. Some institutions require additional collateral once the treasury limit utilization is approaching a certain threshold (for instance, 90–95%), on the other hand there are also institutions that collect a margin when only current exposure

exceeds the amount of treasury limit granted together with a minimal transfer amount. It should be analyzed whether financial institutions apply the same confidence level to market risk estimation models. This study concentrates on unsecure pre-settlement limits, which do not require an initial margin. It does not necessary mean that there is no legal collateral involved. A non-cash form of limit collateral is usually used (there are many, such as a promissory note). There are dedicated institutions that may also provide a collateral, such as a regional guarantee fund (Wybieralski, 2021b). The problem regarding which collateral forms are used and which forms dominate in practice is another research question to verify. The practical issue considers also whether there should be a separate treasury limit for a specific market risk or a treasury limit setup with some internal sublimits – including different determinants, such as underlying markets, counterparty type, instruments available, collateral type, etc. (Wybieralski, 2023). This area is usually handled in financial institution in many ways. The question which setup meets the needs more accurately also requires further research and investigation.

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SCHEMATY WYKORZYSTANIA LIMITÓW RYZYKA PRZEDROZLICZENIOWEGO

Celem artykułu jest rozpoznanie schematów wykorzystania limitów przedrozliczeniowych służących do zarządzania ryzykiem kredytowym kontrahenta na polskim rynku pozagiełdowych instrumentów pochodnych w relacji instytucja finansowa i przedsiębiorstwo niefinansowe. Zastosowanie przedrozliczeniowych limitów skarbowych wynikające z obowiązujących w Polsce regulacji prawnych ma również na celu usprawnienie i wsparcie codziennych działań operacyjnych w ramach procesu zarządzania ryzykiem rynkowym w instytucji finansowej.

Metodyka uwzględnia analizę wybranych regulacji oraz obowiązujących przepisów prawnych, m.in. nadzorcy rynkowego oraz zasad zarządzania ryzykiem kredytowym kontrahenta instytucji finansowych. W szczególności analizie poddano zapisy Rekomendacji A Komisji Nadzoru Finansowego dotyczące zarządzania przez banki ryzykiem związanym z działalnością na instrumentach pochodnych oraz politykę ryzyka kredytowego kontrahenta wybranych banków notowanych na GPW.

Rezultatem badania jest identyfikacja schematów utylizacji przedrozliczeniowych limitów skarbowych, zakładających w zakresie wielkości komponentu dotyczącego szacowania ryzyka rynkowego stały oraz zmienny jego poziom w trakcie funkcjonowania transakcji. Zastosowanie danego schematu w praktyce może mieć wpływ m.in. na wielkość nominalnej pozycji w kontrakcie, ekspozycji ryzyka oraz w konsekwencji na politykę w zakresie ustanawiania zabezpieczenia wymaganego kontraktu.

Słowa kluczowe: ryzyko kredytowe kontrahenta, zarządzanie ryzykiem finansowym, limity przedrozliczeniowe, rynek pozagiełdowych instrumentów pochodnych.

JEL Class: F31, F37, G15, G32.

Zakończenie recenzji/ End of review: 08.05.2024
Przyjęto/Accepted: 04.06.2024
Opublikowano/Published: 11.06.2024

• F I N A N S E I P R A W O F I N A N S O W E •
• Journal of Finance and Financial Law •

czerwiec/June 2024 • vol. 2(42): 71–86

SECURITY INSTRUMENTS GOVERNED BY THE POLISH LAW IN INTERNATIONAL FINANCING TRANSACTIONS

Marcin Lorenc*

https://doi.org/10.18778/2391-6478.2.42.04

SECURITY INSTRUMENTS GOVERNED BY THE POLISH LAW IN INTERNATIONAL FINANCING TRANSACTIONS

ABSTRACT

The purpose of the article. As noted recently, an increased number of financing transactions through financing documents with international elements has been reported. We are referring in particular to facility agreements prepared under the LMA standard governed by the English law and the objects of potential providers of facility security located in multiple jurisdictions, e.g., 'subsidiaries' acting as guarantors or additional debtors, but sometimes also as borrowers. The multiplicity of jurisdictions poses a challenge to the lender's advisers, but also to the principal borrower, as to which security instruments to use in each jurisdiction depending on where the security interest is located. This article aims to provide an overview of the most commonly used types of security under the Polish law to secure loan agreements in jurisdictions other than the Polish one. In addition, the author has made an assessment that may be helpful to non-Polish practitioners in selecting the appropriate security for a debt. The main objective was to acquaint those unfamiliar ones with the Polish law with the standards of the Polish debt security law. The main hypothesis is that the Polish security provides certainty to foreign institutions granting facilities where a Polish entity is involved as a security provider.

Methodology. The article provides a comprehensive review of the literature on Polish legal security for facility receivables granted under a foreign law (including legal acts). The applied methods include the hermeneutic method, the comparative method and the method of analysis and synthesis.

* MA, Faculty of Law, Kozminski University in Warsaw, e-mail: marcin.piotr.lorenc@wp.pl, https://orcid.org/0009-0009-4849-8382

The article reflects only the authors' personal views and does not represent the official position of any entity with which the author is affiliated or cooperates.

Results of the research. On the basis of the conducted research it was found that Polish collateral documents are sufficient to secure receivables arising from facilities governed by a foreign law. The main hypothesis appears to have been proven. In addition, on the basis of the research it was proved that Polish security documents, due to their legal significance, should constitute an incentive for foreign financial institutions to take up in Poland. The conclusion is that the Polish security law is wealthy in terms of instruments allowing for certainty of trading between international institutions.

Keywords: facility agreement, security, financing, LMA, parallel debt, registered pledge, financial pledge, assignment agreement, subordination agreement, project support agreement, submission to enforcement.

JEL Class: K12.

INTRODUCTION

The purpose of the article is to analyse and present the available, as well as the most frequently applicable security documents (sensu stricto) governed by the Polish law, which are intended to secure a receivable under financing documents governed by a foreign law (other than the Polish one). In Poland, legal security of receivables is usually divided into personal security and material security. In financing transactions, in rem securities are used as the basis for application, and they will largely be analysed in this paper. It is undisputed that in multilateral transactions where several or more jurisdictions are involved, the issue is how to adequately secure the claims of the financiers. Using the definition of security described in the LMA model "security means a mortgage, charge, pledge, lien or other security interest securing any obligation of any person or any other agreement or arrangement having a similar effect", which confirms that the parties to a facility agreement created under the LMA standard are free to shape the security. The main purpose of this article is to provide an overview of the simplicity, for those outside the Polish legal circle, of the security documents existing in Poland that may be used in financing transactions for credit agreements (and not only). Under the Polish law, when several lenders are present, it is possible for receivables to be secured for the benefit of the security administrator by syndicates. From a practical point of view, it should be highlighted that receivables in international transactions with an element of a company under the Polish law may be secured by several security interests simultaneously.

Furthermore, it should be noted that this article is intended to explain the Polish security market to advisors to financing entities in international transactions, and to convince them that these securities provide a solid basis for encouraging financing of the Polish market.

The main research hypothesis is to examine the complexity of security documents within the Polish legal framework, which can be utilized in financial transactions related to credit agreements (and beyond), especially for those unfamiliar with the Polish legal environment.

1. BACKGROUND

The purpose of this article is to analyse and present the available, as well as the most frequently applicable security documents (*sensu stricto*) governed by the Polish law, which are intended to secure a receivable under financing documents governed by a foreign law (other than the Polish one). In Poland, legal security of receivables is usually divided into personal security and material security. In financing transactions, in rem securities are used as the basis for application, and

they will largely be analysed in this article. It is undisputed that in multilateral transactions where several or more jurisdictions are involved, the issue is how to adequately secure the claims of the financiers. Using the definition of security described in the LMA model "*security means a mortgage, charge, pledge, lien or other security interest securing any obligation of any person or any other agreement or arrangement having a similar effect*"[1], which confirms that the parties to a facility agreement created under the LMA standard are free to shape the security. The main purpose of this article is to provide an overview of the simplicity, for those outside the Polish legal circle, of the security documents existing in Poland that may be used in financing transactions for credit agreements (and not only). Under the Polish law, when several lenders are present, it is possible for receivables to be secured for the benefit of the security administrator by syndicates. From a practical point of view, it should be highlighted that receivables in international transactions with an element of a company under the Polish law may be secured by several security interests simultaneously[2].

Furthermore, it should be noted that this article is intended to explain the Polish security market to advisors to financing entities in international transactions, and to convince them that these securities provide a solid basis for encouraging financing of the Polish market.

2. SECURED CLAIM

Transaction providers around the world confront the problems of securing their claims in multiple jurisdictions. The continued growth in the number of international secured lending transactions, the development of the syndicated loan market and its syndication in continental Europe have increased the importance of effective security over the receivables of the institution providing financing in many countries. There is no definition of a parallel debt in the Polish law, but in facility agreements governed by a foreign law, security interests governed by the Polish law most often secure parallel debt claims, and it must be noted that in such a construction an important role is played by a security agent, who is not the creditor but has a technical and organisational role to assist the actual creditor/lender in the future enforcement of the claim. The introduction of an abstract parallel debt of an institution created in accordance with the principles of respect for the law should, in the author's opinion, be viewed positively, since a parallel debt is intended to prevent controversial debt security operations in multilateral finance in Europe. Such a creation was originally generated from the doctrine of the German law, but has been adopted in international transactions usually governed by the English law. Parallel debt consists in the fact that an

[1] (www1).
[2] Judgment of the SA in Poznań of 11.07.1995, I ACr 78/95, OSA 1996/7-8, item 32.

abstractly recognised debt, i.e., in an amount equal to the entire lender's claims against the borrower under the facility agreement, which may be secured by means of a specific security established in favour of a security agent. It must be emphasised that this agent is not normally a creditor (although this is not excluded) under the facility agreement (Griffiths, 2006: 340). All creditors are jointly and severally entitled to the parallel debt claim but, for the purpose of a more efficient enforcement of the security, the security agent is the only entity, which is concerned with this process. The enforced part of the debt reduces the amount of the financial liability under the parallel debt (Gilmore, 1999). The construction of a parallel debt used in international transactions with a Polish element is intended to structure the establishment of security interests in claims to which multiple creditors (including from different jurisdictions) are entitled. Parallel debt is a single independent financial obligation of each of the borrower-debtors to each of the creditor-creditors, with the security agent as the specific administrator (Malarewicz-Jakubów and Kułak, 2020). Particular attention should be paid to the accessory nature of the Polish security, i.e., the secured claims will exist as long as the debt exists (principle of accessoriality). In the case of a plurality of entities on the part of the borrower-debtor, any satisfaction of the claim under the parallel debt by any of the debtors releases the other debtors from their obligation. At this point, it should be indicated that the Polish jurisprudence is poor in discussing this topic, the Supreme Court[3] established that parallel debt arises at the time of signature of the documents creating it, i.e., the facility agreement or, alternatively, in some cases, the intercreditor agreement, irrespective of whether the original claims of the creditors de facto financing the project have arisen (i.e., the loan funds have been disbursed to the borrowers). In addition, the Supreme Court stated that in order to prevent the possible ineffectiveness of the security interests in light of Article 127(3) of the Bankruptcy Law[4], the security interests in the parallel debt must be created at the latest at the time the documents creating the parallel debt are signed, because if the parallel debt claim has arisen before, the security interests are created (according to the Supreme Court's interpretation, the loan agreement creating the parallel debt has been signed), such security interests may be declared ineffective (Malarewicz-Jakubów and Kułak, 2020). Another advantage of parallel debt is the establishment of security in rem due to the collateralization of a different number of receivables by individual security instruments, which may, however, be controversial in the opinion of practitioners in Poland. The practice of using a parallel debt in financing transactions with international elements, despite the poor Polish case law, should be assessed positively and proposed as a preferential

[3] Judgment of the Supreme Court of 9.10.2009, IV CSK 145/09, LEX No 558608.

[4] Act of 28 February 2003. Bankruptcy Law (Journal of Laws 2015, item 233, as amended).

aspect over other forms of security in international transactions with Polish elements. Drawing attention to Article 93 of the Banking Law: "In order to secure the receivables that arise from banking activities, the bank may demand the security provided for in the Civil Code and the Law on Bills of Exchange, as well as the customs accepted in domestic and foreign trade"[5]. The use of the security below based on parallel debt should be viewed positively and as an attempt to encourage its use.

3. MORTGAGE

The Polish legal system as a basic security in rem on real estate and certain rights arising therefrom is the mortgage. The important status of mortgages in business transactions is determined primarily by the value and characteristics of their subject matter, which predestine mortgages to secure monetary debts of significant amounts and long payment terms – especially debts under long-term credit (Czech, 2022). A mortgage is a limited right in rem belonging to the broad category of pledge rights. A mortgage is described in the Land and Mortgage Register Act[6]. A mortgage may be established to secure a specific claim arising from a specific legal relationship. The mortgage entitles the creditor's claim to have the priority over the debtor's personal creditors. A mortgage is public and is recorded in the land and mortgage register, and in order for it to come into existence it is necessary to have the debtor's statement on establishing a mortgage and for the mortgage to be entered in the land and mortgage register, which in the Polish legal system may take up to twelve months. The obligatory elements of a mortgage include:

a) designation of the creditor;
b) designation of the maximum amount of security (in the practice of the Polish law it is 150% of the secured claim);
c) designation of the legal relationship from which the secured claim arises.

A mortgage should be established in a notarial deed. Enforcement of a foreclosure due to the momentousness of the deed is greatly simplified and allows the creditor to positively enforce the mortgage claims (however, the process is complex and formalised). A mortgage may be established in favour of a security agent or lender, which could be an entity established under a law other than the Polish law. It should be noted that a mortgage is one of the most important Polish methods of securing claims.

[5] Act of 29 August 1997. Banking Law (Journal of Laws 2023, item 2488).
[6] Act of 6 July 1982 on land and mortgage registers (Journal of Laws 2023, item 1984).

4. REGISTERED PLEDGE

One of the key securities for receivables in financing transactions (alongside the mortgage) is the registered pledge regulated by the Act on Registered Pledge and Pledge Register (Polish Pledge Act[7]), regulation of the Minister of Justice of 15 October 1997 on the detailed organisation and method of keeping the pledge register[8] and, as indicated in Article 1(2) of the Polish Pledge Act, the provisions of the Civil Code shall apply in matters not regulated herein. A registered pledge is a limited right in rem and is one of the basic securities on movables and transferable property rights (Osajda, 2022). The registered pledge is an accessory right (non-subordinate, dependent) to the secured claim. The registered pledge may be used to secure existing and future claims denominated in PLN or foreign currencies and of a known or unknown amount, and may also be used to secure incidental receivables, i.e., capital interest, interest on arrears or commissions and fees. In addition, the Polish law introduces a peculiar rule of specificity for a registered pledge regarding the secured receivables and the pledged object. For the purposes of this article, it should be noted that a registered pledge is created exclusively in the moment of the obligatory enter to the pledge count register, which can be done only on the basis of the pledge contract concluded between the pledgor (borrower) and the security agent (Mojak and Widło, 2020). Therefore, in financing transactions where there is a multitude of jurisdictions, special attention should be paid to the fact that in the Polish jurisdiction it is important to submit the relevant applications to the pledge registry for the registration of the registered pledge[9]. It should also be pointed out at this point that the beneficiary (pledgee) under a registered pledge could be aby entity established and operating under non-Polish law or for the benefit of a security agent (which may have tangible benefits in the case of the exercise of rights and enforcement under a registered pledge (Czech, 2007: 35–42)).

Moving on to the determination of the object of the registered pledge, it may be movables and transferable property rights:

a) things marked as to identity – one or more movables may be pledged if they are adequately individually described in the pledge agreement, e.g., multiple wind turbines may be secured by a single pledge agreement provided that each is adequately described;

[7] Act of 6 December 1996 on the registered pledge and the pledge register (Journal of Laws 2018, item 2017).

[8] Regulation of the Minister of Justice of 15 October 1997 on the detailed organisation and manner of keeping the pledge register (Journal of Laws No. 134, item 892, as amended).

[9] The registration of the registered pledge is done on a special form, paying the relevant fee of PLN 200 (aproximetly EUR 45), and the waiting time for the registration of the registered pledge depends on the registration court and can last from two weeks even up to three-four months.

b) things designated by species – e.g., stocks in a production company, it is important to quantify them in a way that is distinguishable from the same species;
c) mechanical movable objects – e.g., machinery or vehicles;
d) future goods and rights which do not yet exist at the time when the pledge contract is concluded or which the pledgor will own in the future;
e) a collection of goods and rights constituting an economic whole even if its composition is variable, e.g., the pledgor's (i.e., usually the borrower's/guarantor's) business. This is similar to a floating charge (Renfert and Bayirbas, 2022); however, there are many differences in Polish law regarding a floating charge (Bryl, 2003; Harvey et al., 1994: 201);
f) rights in assets, e.g., a trademark;
g) pledge over receivables, e.g., pledge over receivables from the pledger's bank accounts;
h) pledge over shares or stocks.

The purpose of this article is not the sole process of enforcement of the registered pledges described herein but, for the practical purposes of this discussion, the Polish Pledge Act provides several modes of enforcement of a registered pledge, which the agreement may provide for the satisfaction of the pledgee (a) by taking possession of the pledged property; (b) by sale of the pledged property by public tender; (c) by collecting the income generated by the pledged property or by the rent of the leased pledged property.

5. FINANCIAL PLEDGE

Another important debt security in international financing transactions with a factor providing security from a Polish entity is the financial pledge. A financial pledge is also a limited right in rem belonging to the group of pledge rights. The financial pledge is regulated in the Act on Certain Financial Collaterals[10]. This is a specific type of pledge right referred to in Article 2(1)(a) of Directive 2002/47/EC[11] for personal and material reasons. The particularity of this security derives from certain categories of objects that can be its subject, such as assets, which include cash, credit claims, financial instruments, money market instruments, securities (including shares), financial instruments that are not securities or shares in companies. The distinguishing factor of the financial pledge

[10] Act of 2 April 2004 on certain financial securities (Journal of Laws 2022, item 133, as amended).

[11] Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on financial collateral arrangements (OJ EU. L. 2002 No. 168, p. 43 as amended).

results from the entities which may act as pledgee and the beneficiary in particular, central banks, international banks and financial institutions, investment firms, open-ended investment funds and investment fund company managing such funds, banks and other financial institutions within the meaning of the Banking Law, entities participating in the settlement of payments and securities, insurance or reinsurance undertakings, as well as certain public authorities in Poland and other Member States (Makowski, 2020). Accordingly, before establishing a financial pledge, particular caution must be exercised and it must be verified whether the security agent fulfils the aforementioned prerequisites. In financing transactions, financial pledges most frequently occur alongside registered pledges on shares and registered pledges on account receivables. A financial pledge does not need to be registered in the public register, but in order for it to be valid, it is necessary to conclude a pledge agreement and to make the appropriate notification to, for example, the company whose shares are the subject of the financial pledge or the bank keeping the bank accounts.

6. CIVIL PLEDGE

The civil pledge is derived from the Polish Civil Code, and its main advantage is that no registration is required to establish it (it constitutes an intermediate security, which the existence starting from the conclusion of the civil and registered pledge agreement until the registration of the registered pledge, the pledgee, including a security agent acting under non-Polish law, may be able to enforce its claims against the pledgor's property subject to the pledge, which couldn't be possible through the registered pledge before its registration). A civil pledge may only be established to secure a claim that is specifically designated, usually a pecuniary claim, but also it may be established on rights on movable property. As in the case of the above-mentioned rights in rem the pledgee has priority over the pledgee's personal creditors. A civil pledge is an accessory right – this means that it is closely linked to the claim against which it is pledged and does not exist without it – it arises and expires with it (similar to a registered pledge). The source of a civil pledge is a contract between the owner of the property (the pledgor) and the pledgee (Balwicka-Szczyrba, 2023), and its moment of origin is the conclusion of the pledge agreement, and an mandatory obligation, e.g., when establishing a pledge on shares, is to notify the company of the pledged shares. In addition, the pledgee must ensure that the pledge is reflected in the book of shares and in the list of shareholders of the company (similar to a registered pledge). The civil pledge is this peculiar security for the security agent's claims for the moment of uncertainty, which begins from the conclusion

of the registered pledge agreement to the moment of registration in the pledge register, but it may also serve as an independent security.

7. POWERS OF ATTORNEY

In financing transactions under a foreign law, with the participation of a Polish entity, it is possible to secure the secured receivables of the lender or security agent, which is an entity incorporated under non-Polish law, by granting the borrower or guarantor in an international transaction a power of attorney for a particular legal action. A power of attorney for a specific legal action (special power of attorney) may relate to a specific action within the scope of ordinary management or exceeding ordinary management. However, when granting a special power of attorney, the type of legal transaction must be specified (Balwicka-Szczyrba, 2023). Such a power of attorney is based on the main principles of the Polish Civil Code.

The most common powers of attorney are:

a) power of attorney over bank accounts – to withdraw the amount of the outstanding debt from the bank accounts of a Polish company;
b) power of attorney to block funds from the bank account of a Polish company;
c) power of attorney to exercise rights under other agreements, e.g., pledge agreements, which the pledgee has not performed but is required to perform under the pledge agreement;
d) power of attorney to lease the enterprise;
e) power of attorney to exercise voting rights at shareholders' meetings;
f) power of attorney to conclude a pledge agreement on new assets that may be pledged.

Powers of attorney are a very solid subject of debt security in international transactions and the role of such an attorney may be performed by a security agent. Naturally, a power of attorney must comply with the law, the rules of comity and not exceed its scope, which is why the attorney must act in accordance with the design of the power of attorney and comply with the code rules for the exercise of its rights. A generic power of attorney may also exist as an alternative power of attorney whereby the principal leaves it to the attorney to choose a specific legal act from among those listed in the power of attorney (Nazaruk, 2023).

8. SUBMISSION TO ENFORCEMENT

Important security for receivables in international financing transactions are the notarial deeds described in Article 777 of the Polish Code of Civil Procedure[12]. It is a quasi-security because only after an enforcement title has been granted to the notarial deed it can be enforced before a court. Enforcement may be carried out against both the personal debtor and the debtor in rem, e.g., against pledged shares. These become enforceable titles after the court has issued an enforcement clause. The order granting an enforceability clause to an enforcement title, such as a notarial deed, declares that the title is enforceable, that enforcement against the debtor on its basis is permissible and that the enforcement authorities should enforce it (most commonly in Poland the bailiffs). The granting of the clause results in the enforcement title becoming an enforceable title and therefore a document which constitutes the basis for enforcement. The enforcement order is subject to compulsory execution (Jaceczko, 2023). An obligatory element of the notarial deed as an enforcement title is the concretisation of the creditor for whose benefit enforcement is to be carried out (Sieńko, 2022). It is undisputed that such entities may be those having their registered office outside Poland and those which have been established under laws other than the Polish law. The notarial deed should contain an obligation to pay a sum of money up to an amount expressly specified in the deed (in accordance with the Polish practice, this is 150% of the secured claim), an indication of the event on which performance of the obligation depends, or the date by which the creditor may request that the deed to be declared enforceable (Heropolitańska, 2023), usually in practice there is a security period of three years after the final payment of the claim, but this is not an obligatory condition under the Article 118 of the Polish Civil Code[13].

9. EXERCISE OF THE PLEDGEE'S VOTING RIGHTS IN A LIMITED LIABILITY COMPANY

The exercise of voting rights does not strictly constitute a security interest, but it may take the form of a security interest, and therefore, due to the importance of the subject, it is necessary to at least briefly mention the importance of this legal institution here. When shares in a company that is a Polish borrower or guarantor in an international financing transaction are pledged as collateral, the security agent usually receives a security with great power in the form of the pledgor's

[12] Act of 17 November 1964 Code of Civil Procedure (Journal of Laws 2023, item 1550, as amended.

[13] "Unless otherwise provided by a special law, the period of limitation shall be six years, and for claims for periodic benefits and claims relating to the conduct of business, three years. However, the end of the limitation period shall fall on the last day of a calendar year, unless the limitation period is less than two years (Act of 23 April 1964 Civil Code (Journal of Laws 2023, item 1610, as amended).

power of attorney to exercise the voting rights of the pledged shares. Article 187 § 2 of the Commercial Companies Code indicates that the articles of association may provide for the exercise of voting rights by the pledgee, this being a power separate from the power of attorney to exercise voting rights at shareholders' meetings. If the articles of association provide for the possibility to exercise the voting right, the exercise of this right is only possible from the moment of effective notification to the company of such a decision (Kidyba, 2023). This is a tremendous power held by the security agent allowing a degree of control over the pledged entity. It is a situation in which the current shareholder and the pledgee have similar powers, which makes the attractiveness of the registered pledge to secure a receivable even greater.

10. ASSIGNMENT OF RECEIVABLES

Security for receivables in international financing transactions with a Polish entity element may also include an obligation to transfer receivables under specific agreements in favour of the creditor. The assignment agreement of receivables is dispositional in nature; therefore, the transfer causes the receivable to exit the assets of the assignor and enter the assets of the assignee (Sikorski, 2023). The purchaser of the claim transfers all rights relating to the nature of the transferred claim, such as: the right of priority, the right to rescind the agreement, the rules on termination of the agreement, the right to collect legal benefits from the claim, the right to demand payment of a contractual penalty, the right to ordinary and default interest, legal security for the claim[14]. An agreement between the assignor and the assignee is necessary for an assignment to take place.

The subject of a receivables assignment may be existing receivables as well as future receivables. In practice, claims from sale contracts, insurance agreements and supply contracts are usually assigned as security for the main credit claim, but these aspects depend on the type of transaction. Aspects concerning notification of the relevant debtors should also be analysed at the time of creation of the security, as under the Polish law in occurrence of any assignment, the purchaser of the claim is obliged to inform the debtor. In case of failure to inform the debtor, the debtor may relieve himself of their debt by performing to the original creditor (in such case the purchaser will only have a claim towards the original creditor on the grounds of unjust enrichment) and a silent assignment.

[14] Judgment of the WSA in Warsaw of 6.09.2021, III SA/Wa 2418/20, LEX nr 3264977.

11. SUBORDINATION AGREEMENT

Another security occurring in international transactions with a Polish aspect is the subordination agreement of receivables which is an unnamed agreement (according to the provisions of the Polish Civil Code). Under the Polish law, however, it can be treated as a personal security agreement based on the principle of freedom of contract. A subordination agreement is a type of commitment agreement in which, in addition to the security agent/lender and the borrower (a Polish entity), there are other parties providing financing to the Polish obligor. In a subordination agreement, the debtor undertakes to its creditors that it will not pay the subordinated claim before the senior claim has been paid in full. In addition, there are obligations on the subordinated creditor not to seek satisfaction from the debtor until the senior claim has been paid. It should be pointed out that there are clauses in the subordination agreement in which the subordinated creditor undertakes to transfer funds to the senior creditor if it receives any payment of the subordinated claim (Zdzieborski, 2004). From a practical point of view, the subordination agreement provides a guarantee that the senior claims will have priority over the repayment of other obligations of the Polish entity.

12. PROJECT SUPPORT AGREEMENT

Another unnamed agreement based on the freedom of contract principle of the Polish Civil Code having the characteristics of a project security is the project support agreement. When a security agent or lender wants to secure itself in a project finance that a Polish entity, the borrower, will carry out, for example the construction of a wind farm, an agreement is concluded in which the sponsor, who is sometimes an indirect or direct partner, undertakes to fulfil certain pecuniary or nonpecuniary obligations (Vinter, 2006). It is a security and an institution with the purpose of eliminating the risk of discontinuation or failure to finish the project. In project support agreements, a distinction is made as follows:

a) a commitment to contribute to the project;
b) guarantees or sureties for the completion of a project;
c) a commitment to contribute funds to cover outstanding commitments and fees, or a commitment to provide funds to maintain adequate financial ratios (Rutkowski, 2023).

It should be pointed out that under the principle of freedom of contract, the form of the sponsor's support may be arbitrary, so that the purpose of securing the execution of the project is preserved, i.e., to assure the financing party of the certainty of the project's execution.

CONCLUSION

In conclusion, it should be noted that Polish legislation has a very wide range of security documents that can be used in international transactions with a Polish entity as the collateral provider. The model use of security interests by means of a parallel debt, which has been adopted by practice and the custom of the Polish legal culture, should be viewed positively. In the author's opinion, the security documents (sensu stricto) cited in this article may serve as an incentive to popularise the Polish market as a market where international entities may carry out financing transactions without worrying about the collateral instruments of their obligations.

At this point, it should also be pointed out that submissions to enforcement and statements on the creation of a mortgage require the form of a notarial deed, which further indicates the importance of these forms of security, which also provides an indirect guarantee for subsequent enforcement. Reference should also be made to the requirement to register certain securities such as the registered pledges and the mortgages, which in order to be established need the entry in the register kept by the relevant courts. Attention should also be paid to the relevant notifications, inter alia, notifying the company in the case of a pledge on shares in a limited liability company, relevant notifications to the shareholders' register in the case of a registered pledge on shares in a joint stock company, notifications to the patent office in the case of a pledge on patents or trademarks, notification to account banks to record financial pledges and registered pledges, notification to debtors of the transfer of receivables under certain contracts, or updates to the share register or the list of shareholders; the requirements are numerous but are intended to guarantee to both the parties to the transaction the transparency of trading and the observance of the rules of social intercourse.

It should be stressed that the Polish legislator, as well as the practice and the doctrine have developed appropriate ways of securing claims arising from facility agreements governed by a foreign law.

In the author's opinion, the above mentioned securities should be positively perceived by international financing providers and the straightforwardness of the securities and its certainty in economic dealings may be an invitation to invest in Poland.

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INSTRUMENTY ZABEZPIECZEŃ RZĄDZONE PRAWEM POLSKIM W MIĘDZYNARODOWYCH TRANSAKCJACH FINANSOWANIA

Cel artykułu. Nastąpił wzrost liczby transakcji finansowych za pośrednictwem dokumentów finansowych z międzynarodowymi elementami. W szczególności artykuł odnosi się do umów kredytowych sporządzonych zgodnie ze standardami LMA, podlegających angielskiemu prawu, oraz do potencjalnych dostawców zabezpieczeń kredytowych działających w wielu jurysdykcjach, np. "spółek zależnych" pełniących rolę poręczycieli lub dodatkowych dłużników, a czasem także kredytobiorców. Wielość jurysdykcji stawia przed doradcami kredytowymi oraz głównym dłużnikiem wyzwanie dotyczące wyboru instrumentów zabezpieczenia w każdej jurysdykcji, w zależności od lokalizacji przedmiotu zabezpieczenia. Artykuł ma na celu przedstawienie przeglądu najczęściej stosowanych rodzajów zabezpieczeń w polskim prawie, służących zabezpieczeniu umów kredytowych w jurysdykcjach innych niż polska. Autor dokonał również oceny, która może być pomocna dla praktyków spoza Polski w doborze odpowiedniego zabezpieczenia dla długu. Głównym celem jest zapoznanie osób nieobeznanych z polskim prawem ze standardami prawa polskiego dotyczącego zabezpieczeń kredytowych, a główna hipoteza zakłada, że polskie zabezpieczenia zapewniają pewność instytucjom zagranicznym udzielającym kredytów, w których uczestniczy polski podmiot jako dostawca zabezpieczenia.

Metoda badawcza. Artykuł stanowi kompleksową recenzję literatury dotyczącej polskiego zabezpieczenia prawnego dla należności z umów kredytowych udzielonych na mocy prawa obcego (włączając w to akty prawne). Zastosowane metody obejmują metodę hermeneutyczną, metodę porównawczą oraz metodę analizy i syntezy.

Wyniki badań. Na podstawie przeprowadzonych badań stwierdzono, że polskie dokumenty zabezpieczenia są wystarczające do zabezpieczenia należności wynikających z umów kredytowych regulowanych przez prawo obce. Główna hipoteza wydaje się, że została udowodniona. Ponadto na podstawie badań udowodniono, że polskie dokumenty zabezpieczenia, ze względu na ich znaczenie prawne, powinny stanowić zachętę dla zagranicznych instytucji finansowych do działania na terenie Polski. Wnioskiem jest, że polskie prawo zabezpieczeń jest bogate w narzędzia pozwalające na pewność obrotu międzynarodowego instytucji.

Słowa kluczowe: umowa kredytowa, zabezpieczenie, finansowanie, LMA (ang. Loan Market Association - Stowarzyszenie Rynku Kredytowego), dług równoległy, zastaw rejestrowy, zastaw finansowy, umowa cesji, umowa podporządkowania, umowa wsparcia projektu, oświadczenie o poddaniu się egzekucji.

JEL Class: K12.

Zakończenie recenzji/ End of review: 29.04.2024
Przyjęto/Accepted: 04.06.2024
Opublikowano/Published: 11.06.2024

• F I N A N S E I P R A W O F I N A N S O W E •
• Journal of Finance and Financial Law •

czerwiec/June 2024 • vol. 2(42): 87–108

THE IMPACT OF ESG REGULATIONS AND TAXONOMY ON THE CREDIT PROCESS IN COMMERCIAL BANKS

Aneta Kosztowniak*

https://doi.org/10.18778/2391-6478.2.42.05

THE IMPACT OF ESG REGULATIONS AND TAXONOMY ON THE CREDIT PROCESS IN COMMERCIAL BANKS

ABSTRACT

The purpose of the article is to present the impact of legal regulations in the field of sustainable development (ESG) and taxonomies on the course of credit processes in commercial banks.

Methodology refers to studies of legal regulations, comparative analysis of cases (case study) and inference.

Results of the research show that the implementation of ESG regulations and taxonomies and the adaptation of credit processes in commercial banks will result in structural changes in loan portfolios in the near future while moving away from financing dirty industries towards the green ones. As a result, the financing stream for green assets and those supporting sustainable development will be increased, while the financing of dirty assets will be significantly reduced due to the increase in risks and accompanying costs for customers and banks. It is expected that even if some banks grant loans to finance dirty assets, they will only be short-term loans and will require high servicing costs (commission, margin, legal security, and insurance). This is due to the fact that the portfolio with credit exposures in the so-called dirty industries (mining, construction, trade) will escalate the increase in ESG risk. Such a portfolio with dirty exposures will require banks to secure additional reserve capital to maintain higher general and sector systemic risk buffers. Some banks will completely stop financing assets from dirty industries, which will mean that some of them will be abandoned due to the lack or high costs of their modernization, intensifying the negative socio-economic consequences. The ongoing process of redirecting the financing stream to green assets in banks means that enterprises and households need to take earlier adaptation

* Assoc. Prof., Collegium of Management and Finance, SGH Warsaw School of Economics, e-mail: aneta.kosztowniak@sgh.waw.pl, https://orcid.org/0000-0001-6088-1899

actions. These include actions against financing constraints in dirty sectors and likely future losses in infrastructure and assets related to them.

Keywords: ESG, taxonomy, banks, procedures, credit processes.

JEL Class: G15, G18, G20, Q54.

INTRODUCTION

Under the influence of regulatory and supervisory requirements as well as market pressure, banks undertake intensive implementation activities in the field of broadly understood sustainable development. EU regulations in the field of environment, social policy and corporate governance (Environmental, Social, Corporate Governance, ESG) together with reporting provisions cover a wide range of applicable regulations. Banks are one of the first groups of financial entities to quickly take up implementation challenges, even though the ESG legislative process is still ongoing and is expected to last several years. Nevertheless, banks' adaptation of various areas of their activities, including the pillar of their activity, i.e., lending policy, is crucial. The implementation process is important both for banks (their own competitiveness, profitability) and many entities with which they conduct business (borrowers, investors, cooperators, etc.).

The presentation of ESG regulations, the tools for their implementation by banks and the further impact on entities in the EU economies allow us to indicate the requirements currently and in the perspective of 2050. Understanding the mechanisms of the impact of ESG regulations on the activities of commercial banks is crucial due to the numerous spillover effects manifesting themselves in the economies of EU countries. These effects have financial and socio-economic dimensions. The adaptation process to ESG regulations and taxonomies is a difficult challenge for many entities. The efficiency of its implementation determines the use of opportunities, which has already been noticed by many banks and is treated as a tool for both adaptation and improvement of competitiveness.

The indicated premises constitute the basis for defining the purpose of the article and formulating the research hypothesis. The aim of the article is to present the impact of EU legal regulations in the field of sustainable development (ESG) and taxonomies on the credit processes of commercial banks. An attempt was made to verify the following research hypothesis: *The result of implementing ESG regulations and taxonomies and adapting credit processes in commercial banks will be structural changes in loan portfolios in the near future while moving away from financing dirty industries towards the green ones. As a result, the financing stream for green assets and those supporting sustainable development will be increased, whereas the financing of dirty assets will be significantly reduced due to the increase in risks and accompanying costs for customers and banks.*

1. REVIEW OF LEGAL REGULATIONS AND LITERATURE

ESG regulations constitute a broad set of regulations issued in the form of directives, regulations and implementing acts. These regulations are characterized by a wide subjective and objective scope and numerous references to other industry regulations, e.g., the real estate market, or numerous activities in the green (renewable energy sources) and dirty (mining, extraction, trade) sectors.

There are key regulations included in five basics documents i.e., Sustainable Finance Disclosure Regulation (SFDR), taxonomy on reporting: Nonfinancial Disclosure Reporting Directive (NFRD), Corporate Sustainability Reporting Directive (CSRD), European Sustainability Reporting Standard (ESRS), Corporate Sustainability Due Diligence Directive (CSDD) and guidelines of Task Force on Climate – Realized Financial Disclosures (TCFD). The above-mentioned main group of regulations is supplemented by, among others, disclosure of ESG risk in accordance with the requirements of the third pillar of the CRR and climate risk management or the European Green Bond Standard.

As of May 2020, the European Central Bank (ECB) guidelines on disclosures related to climate risk have been in force. The SFDR Directive on the disclosure of information on sustainable investments by financial market participants (Regulation 2019/2088) aims to increase market transparency and prevent the so-called greenwashing. It covers two groups of entities: financial market participants offering financial products defined in the SFDR (Article 2) and financial advisors providing insurance and investment advisory services. The SFDR Directive entered into force in March 2021 (replacing the previously existing NFRD) requires financial market participants to present how ESG risks are integrated in the investment process.

The NFRD Directive (Directive 2014/95/EU) defined the basis for non-financial reporting. This directive was an amendment to earlier Directive (2013/34/EU) on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings. The initial personal scope of the directive included the so-called public interest entities[1]. These entities, in accordance with the NFRD directive, were obliged to include additional statements on non-financial ESG information in their activity reports. While the NFRD did not impose a specific form of disclosure by reporting entities and it was difficult to compare non-financial reports of different entities, the

[1] Public trust entities in accordance with Art. 2 of Directive 2013/34/EU implemented through Art. 2 of the Act of 11 May 2017 on statutory auditors, audit firms and public supervision (Journal of Laws, item 1089, as amended) are: domestic banks, branches of foreign credit institutions, branches of foreign banks, pension funds, securities issuers securities, investment funds, insurance and reinsurance companies, cooperative savings and credit unions.

CSRD guidelines already standardized the rules and requirements for non-financial reporting.

The changes introduced in connection with the implementation of Basel IV in the EU countries obliged banks to deal with climate risk (ESG) in the risk management system, in terms of: assessing, limiting and monitoring exposures sensitive to this risk.

From June 30, 2021 banks and other financial institutions have guidelines for granting and monitoring loans (EBA/GL/2020/06, 2020). From June 2022, disclosures regarding ESG risk are part of the so-called Pillar III under the capital requirements of CRR 2 (Capital Requirements Regulation).

The CSRD Directive (Directive, 2022) is part of a comprehensive package of legislative changes for the sustainable financing of economic growth aimed at achieving climate neutrality by the EU by 2050. The CSRD is Directive of the European Parliament and of the Council of December 14, 2022 and one of the most important EU legal acts specifying which entities and from what year are subject to the ESG reporting obligation.

The CSRD introduced changes to four legal acts:

- EU Regulation No. 537/2014 on specific requirements for statutory audits of the financial statements of public-interest entities (2013/34/EU);
- Directive 2004/109/EC on the harmonization of transparency requirements for information about issuers whose securities are admitted to trading on a regulated market;
- Directive 2006/43/EC on statutory audits of annual accounts and consolidated financial statements;
- Directive 2013/34/EU on the annual accounts, consolidated financial statements and related reports of certain types of undertakings.

The uniform non-financial reporting framework was prepared in accordance with ESRS standards (ESRS, 2023) as mandatory and common reporting standards in the field of sustainable development. The unified reporting standards are intended to ensure the comparability and reliability of disclosed data, which will be subject to mandatory verification by statutory auditors and, depending on the arrangements in individual Member States, by other certified assurance service providers.

The ESRS includes three principles for disclosing material information:

- three layers (sector-independent, sector-specific, entity-specific);
- three reporting areas (strategy, implementation, effect measurement);
- three topics (environment, society, corporate governance).

In terms of ESRS materiality analysis (2023), the principle of double materiality has been introduced, i.e.:

- impact on the environment or only on the financial consequences for the company;
- or meeting both criteria.

From 2024, the CSDD corporate due diligence directive will apply. The directive highlights companies' obligations to identify actual and potential harmful impacts on human rights and the environment and establishes liability for breaches of these obligations. The scope of the CSDD directive covers companies' own activities, activities of subsidiaries, and entities in the value chain with which the company has regulated business relationships – direct or indirect.

The literature review in the field of sustainable development covers numerous topics in the field of environment, management, and social policy. Generally, ESG risk in financial institutions, including the banking sector, is understood as the risk of negative financial effects resulting from the impact of ESG factors on customers and contractors or banks' balance sheet positions. The aim of ESG risk management is to support sustainable development and build the bank's long-term value through integrated management of the impact of ESG factors.

The key scope of sustainable development is the area of the environment and related climate risks, which can affect the financial system and the real economy through two risk channels (IMF, 2022; Battiston and Monastero, 2019; ESRB, 2016):

- *physical risk* covers the economic costs and financial losses resulting from the increasing severity and frequency of extreme weather events caused by climate change;
- *transition risk* is related to the costs generated by the need to adapt the economy to a more sustainable and low-emission development path, will materialize before a significant part of the physical risk materializes.

With respect to financial institutions, including banks, multidimensional ESG risk is mainly associated with climate, financial and financial stability risk (Table 1).

Table 1. Key areas of ESG risk analyses

ESG risk versus	Literature item
Climate risk (general)	Adrian et al., (2022); Kosztowniak (2023a); EBA (2021); Oswald and Nowakowski (2020); Xu et al., (2018); IPCC (2018); Nordhaus (2017); IPCC (2014).
Physical risk	IMF (2022); Bank of England (2021); Kalkuhl and Wenz (2020); Monastelo (2020); NGFS (2019); Hsiang et al., (2017); OECD (2017).
Transformation risk	Battiston and Monasterolo (2019); ESRB (2016).
Relevant sectors for climate policy (CPRS)	Battiston et al., (2017); Monasterolo (2020); Monasterolo and Battiston (2020); Kosztowniak (2023b).
Stress tests, analysis scenarios	Battiston et. al. (2017); Gross and Población (2017).
Financial risk: investment, portfolio	Aligishiev et al., (2022); OECD (2017); Kelly and Reynolds (2015).
Financial stability	ECB (2022); ESRB (2020); Giuzio et al., (2019); ECB (2019).
Monetary policy and financial supervision	EBA (2021); NGFS (2020a); NGFS (2020b); NGFS (2020c).

Source: own study.

In research on estimating exposure to climate risk, banks mostly use two identification approaches: entities emitting carbon dioxide (CO2) and high-emission industries (NACE activity code). The initial stage in assessing the level of ESG risk are often surveys addressed to financial institutions and their clients.

Banks' loan portfolios of companies operating in high-emission industries, i.e., those emitting greenhouse gases (GHG), are directly exposed to ESG risk. Climate transition risk is the risk that arises when, during the transition to a low-carbon economy, adjustments to the value of financial assets occur that investors do not fully anticipate or hedge against. There are several reasons why this may be the case (OECD, 2017; Monasterolo and Battiston, 2020), e.g., if the transition is late and sudden ESRB (2016) and therefore "disorderly" (NGFS, 2019).

Since granting loans to companies operating in dirty industries will increase ESG risks (including climate risks), banks will have to absorb them by increasing capital requirements. These requirements, in accordance with the regulations of macroprudential policy, mean a need to maintain general and sector systemic risk buffers at a reduced level (Kosztowniak, 2023c).

2. NON-FINANCIAL REPORTING GUIDELINES

The CSRD Directive provides for the mandatory use of EU reporting standards, i.e., ESRS (European Sustainability Reporting Standards), which include the obligation to report indicators, among others, in the spheres of:

- environmental protection: climate change, drought and water scarcity, biodiversity, land use, raw materials management, pollution and waste;
- impact on society: employee issues, occupational health and safety, human rights, relations with the environment and product safety;
- corporate governance: ethical standards, counteracting corruption and bribery, privacy protection and data security.

Pursuant to CSRD regulations, reporting entities are obliged to include and demonstrate the impact of ESG factors on business decisions and energy and climate transformation programs. These requirements impose an obligation to confirm a need for a company to conduct a reliable analysis of the financial and business impact of ESG factors on its value and strategy. This means it is necessary to include non-financial factors in operational processes. Thus, while ensuring the value of the company in business models, banks are forced to consider ESG assumptions in their long-term management and business strategies.

In accordance with the evolution of reporting requirements for public trust entities, the CSRD Directive provides for subsequent reporting years 2024–2028, for groups of entities depending on whether they meet two of three criteria, i.e., balance sheet total, net sales revenues, and a number of employees (Table 2).

Table 2. Non-financial reporting obligations under CSRD

<table>
<tr><th>Fiscal year</th><th>Report submission deadline</th><th>Entities</th><th>Balance sheet total (EUR million)</th><th>Net sales revenues (EUR million)</th><th>Number of employees</th></tr>
<tr><td>2024</td><td>2025</td><td colspan="3">Large entities and those with the status of public interest entities</td><td>>500</td></tr>
<tr><td>2025</td><td>2026</td><td>Other large enterprises</td><td>≥ 20</td><td>≥ 40</td><td>≥250</td></tr>
<tr><td rowspan="2">2026</td><td rowspan="2">2027</td><td rowspan="2">Medium and small enterprises with issuer status*</td><td>< 20</td><td>< 40</td><td><250</td></tr>
<tr><td>< 4</td><td>< 8</td><td><50</td></tr>
<tr><td>2028</td><td>2029</td><td>Companies from outside the EU</td><td colspan="3">Turnover > 150</td></tr>
</table>

*The number of medium and small enterprises throughout the EU is over 50,000 and in Poland there is a total of 3,500 companies (as of June 30, 2022).

Source: CSRD (2023).

According to the CSRD, there is a two-stage measurement of environmental load:

1. classification of the financing granted: loan, purchase of securities or other debt, etc. in the context of sustainable development;
2. walking through the supply chain and reporting how many exposures (how many financing agreements) are attributable to the credit risk of the credited entity (subject to reporting) and meet the classification requirements for green investments.

When reporting, the categories of environmental burdens of an entity/ investment include, for example, the following information:

- type of building, object of production and what environmental emissions it generates;
- what the borrower buys – what fuels and type of energy is purchased;
- what is the supply chain and all connections, indirect emissions of environmental burdens from suppliers, producers – from the borrower through the borrower to the last contractor of the borrower in the supply chain;
- carbon footprint and the emission of air and water (soil) pollutants, which constitute the basis for determining the degree of greenness (sustainable development).

In banking activities, the entire reporting process (in accordance with the concept of supply chain) covers the following entities with environmental reporting:

- providing financing for the purpose (project);
- using financing for a given purpose (project);
- related to the entity benefiting from the financing of a given investment process or project.

This means that:

- a loan granted to a mine for the modernization of a sewage treatment plant – is classified only in the context of the sewage treatment plant project;
- a loan granted for current operations – is classified in the context of the entire operation of the mine as an entity, taking into account individual investments related to the operation of the mine;
- a lending bank – is classified in the context of the quantity and quality of granular exposures in the portfolio to given entities and/or specific projects.

Such a reporting process means a wide range of collected individual data, not only between the lender and the borrower, but also, more broadly, between cooperators. This means that all entities become "interdependent" and the result may be limited cooperation with entities with a low degree of ESG transformation.

The benefits of introducing reporting will be felt directly by entities obtaining financing, such as borrowers, issuers of securities and entities providing financing. For example, it will be an energy company (covered by the reporting obligation in 2026) with mines in its structure, thanks to which:

- on the one hand, it obtains the fuel necessary to generate electricity;
- on the other hand, it is perceived as an entity emitting negative externalities to be opened (e.g., open-pit lignite mine).

Such a plant will be able to obtain financing for its projects to produce the so-called green energy (e.g., soil and/or groundwater treatment installations). The bank financing the project in question will be able to offer "cheaper money" due to the possibility of using more favorable risk weights and a lower burden on the capital adequacy of the bank financing or purchasing debt securities.

Reported ESG indicators, the so-called greenness, in accordance with the EFRAG group guidelines (EFRAG, 2023), include two cross-sectional standards and three thematic standards, which were adopted on October 23, 2023 (Table 3).

Table 3. ESG indicators in accordance with CSRD cross-sectional and thematic standards, according to EFRAG nomenclature

Standards	ESRS	
Cross-sectional	General	1 General requirements
		2 General Disclosures
Thematic	Environmental	E1 Climate change E2 Pollution E3 Water and marine resources E4 Biodiversity and ecosystems E5 Resources and the circular economy
	Social	S1 Own working range S2 Employees in the value chain S3 Affected Communities S4 Customers and end users
	Governance	G1 Internal governance, risk management and internal control G2 Business Conduct

Source: EFRAG (2022).

It should be taken into account that the purpose of non-financial reporting is to obtain information by entities obtaining financing (borrowers, issuers of debt securities) and entities providing financing. This means that banks will be able to more precisely analyze the risks associated with a given borrower (financed venture), i.e., determine risk weights and capital adequacy more precisely. However, those purchasing securities, e.g., green bonds, will have more detailed knowledge about the use of funds from these bonds for investment purposes.

The presented ESG regulations and taxonomies confirm a need for banks to conduct a wide range of analyzes and disclosures of ESG risks, including in their key activity, i.e., lending. The presented premises lead to the formulation of the following research hypothesis: *The result of implementing ESG regulations and taxonomies and adapting credit processes in commercial banks will be structural changes in loan portfolios in the near future. It will translate into moving away from financing dirty industries towards the green ones. As a result, the financing stream for green assets and those supporting sustainable development will be increased, with a significant reduction in financing for dirty assets due to the increase in risks and costs for customers and banks*.

3. SCOPE OF ESG RISK ASSESSMENT IN THE CREDIT PROCESS

ESG and taxonomy regulations have become an integral element of banks' lending procedures. These regulations affect both the assessment of the potential borrower (partner's ESG risk) and the investment expected to be financed (ESG financing risk). Credit processes include:

- stage I – data acquisition and ESG assessment;
- stage II – ESG risk calculation;
- stage III – results of ESG risk assessment and decision making by the bank's Credit Committee (ESG).

The first stage of data acquisition and ESG assessment is performed on the basis of collected data from the ESG survey and indicators – enabling the determination and monitoring of the risk level of partners and financing in relation to exposure to ESG factors. The result of these activities is the aggregated data collected for the disclosures specified in the delegated act to Article 8 of the EU Taxonomy and ESG risk management disclosures under Pillar III. Conducting detailed analyzes for the most exposed financing allows for effective ESG risk management in the bank.

The ESG survey is a source of information:

- determining the level of advancement of the business partner in terms of implemented ESG activities;
- regarding the activities and investments of business partners in the area of sustainable development;
- for the purposes of analyzing compliance with the uniform classification system for sustainable activities and ESG risk management disclosures under Pillar III.

Banks send surveys to all their customers, although they are not mandatory for now, more and more customers agree to complete them. Data collected in this way

from enterprises is stored in a data warehouse to be able to analyze and report on various occasions, not only in the case of ESG risk.

The questions addressed to customers in the surveys primarily take into account ESG risk factors, such as:

- emission of pollutants into the atmosphere (e.g., direct and indirect activities introducing pollutants and dust into the air);
- waste management (for waste-generating industries);
- consumption of natural resources (use and exploitation of natural resources, with particular emphasis on non-renewable resources);
- respect for human rights (across the entire value chain);
- impact on the local community, including issues of use and change of land owners;
- protection of cultural heritage;
- certificates and management systems held;
- compliance with legal regulations.

Example questions in an ESG survey include, among others, questions regarding emissions and the impact of the borrower (project) on the environment. These questions often depend on the clients' main type of activity, i.e., by sector/type of activity – NACE (Table 4).

Table 4. Examples of banks' questions addressed to customers in ESG surveys

	Scope of questions
1	Has your organization calculated its carbon footprint for the last calendar year? If YES, please provide the amount of emissions.
2	Will water consumption increase (compared to the current level) as a result of the implementation of the project? If YES, please provide the expected increase.
3	Do you have procedures in place to ensure that the contractors employed to carry out the project will respect labor rights and human rights towards employees?
4	Was the project preceded by public consultations or was/is there any other form of dialogue with the social environment/stakeholders?
5	Have you implemented an environmental management system compliant with PN-EN-ISO 14001 or the European Eco-Management and Audit System (EMAS) and do you have current certificates?

Source: own study based on BGK (2023a).

The data collected from customers is then the basis for calculating ESG indicators important in subsequent stages of a credit process, including indicators: GAR, BTAR or portfolio carbon footprint (Table 5).

Table 5. ESG indicators calculated by banks, important in further stages of a credit process

	Indicator	Specification
1	Green Asset Ratio (GAR)	- exposures to companies that are subject to non-financial disclosure requirements under Directive 2014/95/EU
2	Banking Book Taxonomy Alignment Ratio (BTAR)	- exposures to companies that are not subject to disclosure obligations under the NFRD
3	Exposures exposed to physical risk	- the part of the banking portfolio that is exposed to physical risk, divided into acute factors (heat waves, droughts, floods) and chronic factors (water deficit, changes in wind circulation)
4	Carbon footprint of the wallet	- the level of financing of emissions from "Scope 1", "Scope 2" and "Scope 3" of Partners expressed in tones of CO2 equivalent

Source: own study based on BGK (2023a).

ESG risk assessment concerns two dimensions of risk, i.e., partner (entity – borrower) and financing (investment project).

Partner's ESG risk:

- is a measure of the maturity of the existing or new Partner bank in matters related to ESG factors;
- is perceived through the prism of conducted activities and compliance with applicable (and planned to be implemented) environmental regulations, including climate, social and organizational management;
- is the result of analyzes of compliance with regulations and best practices in ESG aspects among organizations with similar activities;
- its assessment is performed annually,
- the assessment consists of the result of the analysis of data provided via the ESG Survey, previous customer discovery processes and, if any, the reputational risk assessment process (Figure 1).

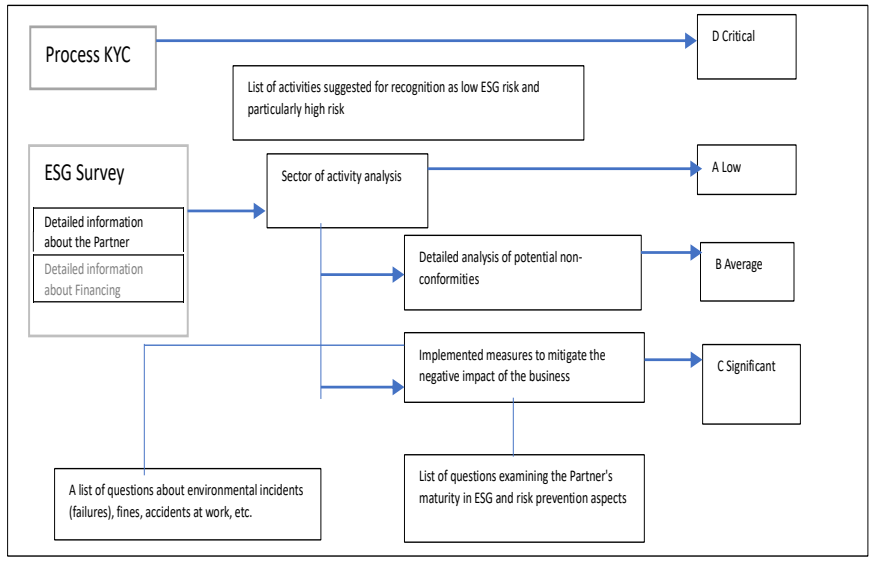

Figure 1. Simplified process of classifying projects in terms of the Partner's ESG risk

Source: own study based on BGK (2023b).

ESG risk of financing:

- is related to the financing purpose and analyzed in terms of the classification of activities that fit into the framework of sustainable development, considering all required stages of analysis;
- the project's impact on the natural environment, climate, social environment and corporate governance is taken into account;
- is performed on the basis of ESG Survey analyses, the detailed purpose of financing and additional documents confirming the scope of financing;
- in the case of financing other than "targeted", the general activity of the Partner is analyzed (Figure 2).

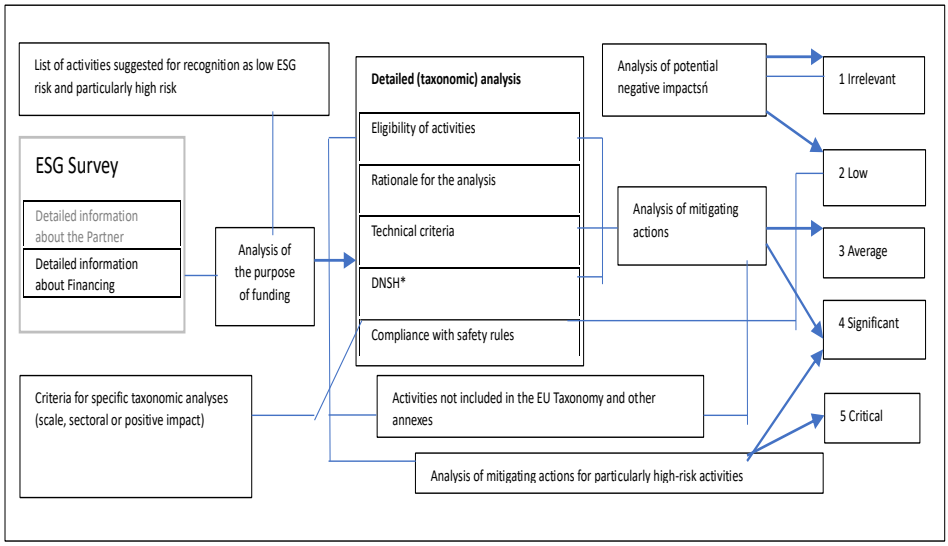

Figure 2. Simplified process of classifying projects in terms of ESG financing risk

*DNSH - the principle of not causing serious damage to the environment (do no significant harm).
Source: own study based on BGK (2023b).

As part of the second stage, ESG risk calculation and its analysis are carried out in a matrix as a component of two analysis results, on the partner's side and on the financing side:

- the effect of the analysis is to determine the level of ESG risk to support the process of making a credit decision, where it will be an additional factor determining the non-financial impact of the decision;
- the result of a matrix combination of two assessments is a simplified "rating" assessment that helps define the level of ESG risk;
- the final assessment of the partner's ESG risk is determined on a four-point scale: low, medium, significant, critical, and ESG risks in financing: immaterial, low, medium, significant and critical;
- the result, together with the specification of the assessment components (rating) and the justification for the assessment or what criterion resulted in a given choice, is transferred to the decision-making process (Table 6).

Table 6. Example of ESG risk calculation as part of loan application processing processes in banks

Partner ESG Risk (AC)	Critical					
	C Significant	C1	C2	C3	C4	C5
	B Medium	B1	B2	B3	B4	B5
	A Low	A1	A2	A3	A4	A5
		1 not relevant	2 low	3 medium	4 significant	5 critical
	ESG risk of financing (1-5)					

Source: own study based on BGK (2023b).

It is worth adding that many banks "cross-verify" information, i.e., they compare information collected from companies and their contractors. This method of verification confirms the bank that the collected data is correct. In case of differences in the data provided by companies or their contractors, they should be explained.

The following steps are taken in the risk calculation process:

- partner identification;
- initial verification of the partner and financing;
- partner and financing assessment;
- opinion of the credit risk department.

The third stage concerns the compilation of the results of the ESG risk assessment and decision making by the bank's Credit Committee (ESG). As part of detailed analyzes in the partner assessment process, a positive opinion is issued if the assessment concerns acceptable levels of ESG risks (AC) and a negative decision (on lack of cooperation) is issued in the case of a critical ESG risk (D). Similarly, in the financing assessment process, a positive opinion is issued if the assessment concerns acceptable ESG risk levels (1–4), and a negative decision (no financing) is issued if the ESG risk level is critical (5). Then, the partner and financing ratings are combined, and the bank's Credit Committee (ESG) issues a final positive or negative decision.

To manage ESG risk and constantly monitor it, many banks have established *ESG Committees, ESG risk offices and ESG risk disclosure teams* in their organizational structures.

The management structure of *the ESG Committee* includes, for example:

- Head of ESG;
- Environmental Protection Inspector;
- social inspector; corporate governance specialist;
- representatives of key areas of the bank.

The purpose of *ESG Committees* is to supervise:

- effectiveness of ESG risk management;
- maintaining ESG risk related to lending and investment activities at an acceptable level;
- effectiveness of the ESG reporting system, including ESG risk;
- ESG risk limit level;
- disclosures regarding ESG risk management (3rd pillar) prepared by ESG risk disclosure teams.

In turn, the *ESG Risk Office* is responsible for:

- monitoring the size and profile of ESG risk in the lending and investment process;
- ESG risk assessment in the lending process;
- reviews of financing granted in terms of ESG risk;
- coordinating the process of collecting ESG data in the credit process;
- conducting training in the field of ESG risk management.

The activities of *the ESG Risk Disclosure Team* include the preparation of disclosures regarding ESG risk management in the bank (3rd pillar).

When indicating the place of ESG risk assessment in the credit process, it is worth emphasizing that the assessment results constitute information needed to: decide to grant financing, measure the bank's portfolio and, in the future, be used in the ESG rating. The acquired data is used to calculate indicators for individual industries (as part of the financing granted) or exposure to climate change, to obtain the results of the analysis of compliance with the system of uniform classification of sustainable activities, as well as for the preparation of an integrated report.

CONCLUSION

Banks are nowadays adapting their lending procedures to ESG regulations and non-financial reporting. It is evidenced by the activities implemented at every stage of the lending process, from data acquisition, through ESG risk calculation, to assessment results and making a lending decision. The accepted level of ESG risk and creditworthiness assessment are important factors determining the issuance of positive or negative credit decisions. Because the entire transaction chain is analyzed in the credit assessment process (lender – borrower – cooperators), the decision to grant a loan is extended to include a new element, i.e., ESG assessment. In practice, this means that the result of the credit process assessment may determine both the decision issued by the bank's Credit Committee (ESG), but also affect the selection of cooperators or the amount of loan servicing costs.

The presented results of the review of legal regulations and implementation practices of banks prove the correctness of the formulated hypothesis. The implementation of ESG regulations and taxonomies and the adaptation of lending processes in commercial banks will result in structural changes in loan portfolios in the near future while moving away from financing dirty industries towards the green ones. As a result, the financing stream for green assets and those supporting sustainable development will be increased, whereas the financing of dirty assets will be significantly reduced due to the increase in risks and accompanying costs for customers and banks.

It is expected that even if some banks grant loans to finance dirty assets, they will only be short-term loans and will require high servicing costs (commission, margin, legal security, and insurance). This is due to the fact that the portfolio with credit exposures in the so-called dirty industries (mining, construction, trade) will escalate the increase in ESG risk (Adrian et al., 2022; Monasterolo, 2020; Battiston and Monasterolo, 2019). Such a portfolio with dirty exposures will, to secure it, require additional reserve capital from banks to maintain higher buffers of general and sector systemic risk (ECB, 2022; ESRB, 2020; Giuzio et. al., 2019). Some banks will completely stop financing assets from dirty industries, which will mean that some of them will be abandoned due to the lack, or high costs of their modernization, intensifying the negative socio-economic consequences (Zamid et al., 2022; Xu et al., 2018).

To sum up, the ongoing process of redirecting the financing stream to green assets in banks means that enterprises and households need to take earlier adaptation actions. These include actions against financing constraints in dirty sectors and likely future losses in infrastructure and assets related to them.

FINANCE

SGH Warsaw School of Economics – research project on: Transformation processes of sustainable banking in the EU under ESG, climate policy and macroprudential policy changes, KZiF/ S24:1.31.

DECLARATION BY THE AUTHORS

The author declares no conflict of interest.

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WPŁYW REGULACJI ESG I TAKSONOMII NA PROCES KREDYTOWY W BANKACH KOMERCYJNYCH

Celem artykułu jest przedstawienie wpływu regulacji prawnych z zakresu zrównoważonego rozwoju (ESG) oraz taksonomii na przebieg procesów kredytowych w bankach komercyjnych.

Metoda badawcza odnosi się do badań regulacji prawnych, wykorzystano analizę porównawczą przypadków (case study) oraz wnioskowanie.

Wyniki badań pokazują, że rezultatem wdrażania regulacji ESG i taksonomii oraz dostosowania do nich procesów kredytowych w bankach komercyjnych będą w najbliższej przyszłości zmiany strukturalne portfeli kredytowych. Odchodzenie od finansowania branż brudnych na rzecz zielonych. W efekcie zwiększony zostanie strumień finansowania aktywów zielonych i wspierających zrównoważony rozwój, przy znacznym ograniczeniu finansowania aktywów brudnych, z powodu wzrostu ryzyk i towarzyszących im kosztów po stronie klientów oraz banków.

Przewiduje się, że jeśli nawet część banków będzie udzielać kredytów na finansowanie aktywów brudnych, to będą to wyłącznie kredyty krótkoterminowe i z wysokim kosztem ich obsługi (prowizji, marży, zabezpieczenia prawnego i ubezpieczenia). Wynika to z faktu, że portfel z ekspozycjami kredytowymi w tzw. brudnych branżach (górnictwo, budownictwo, handel) będzie eskalował wzrost ryzyka ESG. Taki portfel z ekspozycjami brudnymi będzie wymagał od banków w celu jego zabezpieczenia dodatkowych kapitałów rezerwowych, dla utrzymania wyższych buforów ogólnego i sektorowego bufora ryzyka systemowego. Część banków zaprzestanie finansowania całkowicie aktyw z branż brudnych, co oznaczać będzie, że część z nich zostanie porzucana, ze względu na brak czy wysokie koszty ich modernizacji, potęgując negatywne konsekwencje społeczno-gospodarcze. Postępujący w bankach proces przekierowania strumienia finansowania do aktywów zielonych oznacza konieczność podejmowania wcześniejszych działań adaptacyjnych przez przedsiębiorstwa i gospodarstwa domowe. Działań przed wystąpieniem ograniczeń w finansowania w sektorach brudnych oraz prawdopodobnych strat na infrastrukturze oraz majątku związanych z nimi w przyszłości.

Słowa kluczowe: ESG, taksonomia, banki, procedury, procesy kredytowe.

JEL Class: G15, G18, G20, Q54.

Zakończenie recenzji/ End of review: 06.05.2024
Przyjęto/Accepted: 10.06.2024
Opublikowano/Published: 17.06.2024

• F I N A N S E I P R A W O F I N A N S O W E •
• Journal of Finance and Financial Law •

czerwiec/June 2024 • vol. 2(42): 109–125

NON-PRICE CRITERIA FOR EVALUATING OFFERS IN POLAND AND THE EUROPEAN UNION

Jarosław Szymański*

https://doi.org/10.18778/2391-6478.2.42.06

NON-PRICE CRITERIA FOR EVALUATING OFFERS IN POLAND AND THE EUROPEAN UNION

ABSTRACT

The purpose of the article. An important element that influences the effectiveness of public procurement is the multi-criteria offer evaluation model. Moving away from comparing offers only in terms of their price, a single-criteria model, allows you to choose a more expensive solution, which may turn out to be a cheaper one after many years of use. The impact of non-price criteria also goes beyond quantifiable economic effects and may stimulate pro-ecological and pro-social behavior of entities applying for public procurement. Due to legislative changes in the application of non-price criteria, a study was carried out to determine the preferences of contracting entities from the European Union member states in this respect. The study was extended to identify the types of non-price criteria used by domestic contracting entities.

Methodology. Due to the functionality limitations of the European database of tender announcements, part of the work used data from a random sample. Basic statistical measures, estimation and the parametric Student's t-test were used for the analysis.

Results of the research. Changes in the structure of the offer evaluation models used were identified and the preferences for using the multi-criteria model were compared between the EU member states whose accession date was before 2004 and others. Statistically significant differences were found in the use of non-price criteria in countries that were incorporated into the EU structures before 2004 and in other countries. The analysis shows that a longer presence in the EU structures increases the use of non-price criteria only in the area of supplies and services. On the domestic market, the change in legislation that took place in 2021 did not eliminate the system pathology consisting in the introduction of dead non-price criteria by contracting entities.

Keywords: public procurement, efficiency, offer evaluation criteria, competitiveness.
JEL Class: K49, G18, H12, H57.

* PhD, Faculty of Economics and Sociology, University of Lodz, e-mail: jaroslaw.szymanski@uni.lodz.pl, https://orcid.org/0000-0003-2166-145X

INTRODUCTION

The European public procurement market is regulated by implementing the guidelines contained in the EU Directives into the laws of member states. Due to the nature of the provisions introduced therein, there is a great variation in the solutions of individual member states introducing these regulations. These differences come down not only to differences in the legal framework covering one or many legal acts, but also concern specific solutions, e.g., diversity in the approach to the use of non-price criteria and the definition of procurement procedures. While a number of restrictions have been set in terms of determining tender procedures, especially in the case of a possibility of using closed competition modes, in terms of offer evaluation criteria, Member States have been left with wide opportunities to create internal legal regulations. Art. 67 section 2 of Directive 2014/24/EU of the European Parliament and of the Council provides that "*Member States may provide that contracting authorities may not use price alone or cost alone as the sole award criterion*". A wording identical in content is introduced into the EU legal order by Directive 2014/25/EU of the European Parliament and of the Council in Art. 82 section 2. This decision-making freedom also translates into the possibility of any approach to the use of non-price criteria under national legislation.

The aim of the work is to identify preferences in the use of non-price criteria for the evaluation of offers, both by domestic and EU contracting entities, with particular emphasis on the period of operation of the new Public Procurement Law.

1. EFFICIENCY IN PUBLIC PROCUREMENT

The administrative rules for spending public funds are based on the principles of equal treatment of contractors, fair competition, proportionality, efficiency, transparency and impartiality (Andała-Stępkowska and Bereszko, 2018: 44). Their introduction results from the reduced concentration of public entities on how to spend financial resources, which may lead to "*waste of resources*" (Brzozowska, 2011: 20). In practice, these principles can be reduced to just one, efficiency. Procurement restricting competition that violates the principles of fair competition and proportionality, as well as those that violate the principles of transparency and impartiality and lead to the intentional selection of a contractor will not be effective. The importance of efficiency in public procurement has been recognized by the EU and national legislator from the beginning of introducing administrative rules for spending public funds.

In each amendment to the applicable rules for spending public funds, attempts are made to improve efficiency. The legislator's difficulty in improving the effectiveness of public procurement is the lack of objective tools that can measure this effectiveness, which is partly due to the lack of widespread use of quantitative methods in the analysis of the public procurement system (Starzyńska, 2016: 456). The first element on the way to improving efficiency is to limit quasi-competitive modes or modes that completely exclude competition. It is indisputable that awarding a contract to a contractor who did not have to prepare an offer taking into account the proposals of market competition is a suboptimal solution, which may include an additional so-called "corruption margin" (Burguet and Yeon-Koo, 2004: 55). Additionally, such a solution may lead to market destruction by eliminating contractors who have been excluded from participating in public procurement. This type of behavior may also result in increased social costs, both by selecting a more expensive contractor and by partially extinguishing the activities of contractors excluded from the public procurement market. For this reason, both in the EU Directives and in national legislation, the possibility of applying competition-restricting procedures is strictly established. Reducing closed modes has a direct impact on the efficiency of public procurement.

The second issue related to efficiency is the contractor of the public procurement, who should be reliable and able to complete the order with the quality indicated by the Ordering Party. An unreliable contractor may not complete the order on time, the implementation may have defects and the final investment completion date may be extended by even many years. Depending on the type of investment, failure to complete the investment on time may result in additional social costs. In case of large public investments, public interest is more focused on the investment implementation time than on the costs. An example may be the withdrawal from the contract with the General Directorate for National Roads and Motorways of the Chinese company COVEC, which delayed the construction of part of the A2 motorway, or the withdrawal from the construction of the city stadium in Wrocław (in connection with the UEFA-EURO 2012 European Football Championship tournament) by Mostostal Warszawa. In each of the above-mentioned cases, in order to complete the investment, the Ordering Party was forced to conclude a new contract in a closed manner. As a consequence, the unreliability of the contractors resulted in the need to repeat the award of the contract due to the deadlines, in a closed mode, additional costs and delays in the execution of the contract. For this reason, the choice of a contractor who guarantees timely completion of the investment is very important. At the same time, the subjective criteria established by the Ordering Party should enable access to the contract for a wide range of contractors. Legislative practice shows that as the national public procurement system operates

over time, the legislator expands access to the public procurement market, enabling the participation of contractors who, in the original version of the Public Procurement Law, hereinafter referred to as „PZP", (Journal of Laws 2004 No. 19 item 177), would not have met the subjective conditions for participation in public procurement proceedings. Introduction in art. 118 of the new Public Procurement Law of 2019, hereinafter referred to as „NPZP", (Journal of Laws 2023, item 1605), the possibility for the contractor applying for the contract to rely on the resources of other entities, regardless of the legal nature of the legal relations between them, in terms of meeting the conditions regarding: technical and professional abilities, financial situation or economic, in practice, it allows access to contracts for contractors who, under the previous legal status, would have been considered unreliable and would have been excluded from participating in the contract. This change was transferred from the repealed Public Procurement Law, in which the amendment act of June 22, 2016 (Journal of Laws 2016, item 1020) introduced Art. 22a. The amendment resulted from the need to implement the provisions of Art. 63 Directive 2014/24/EU. Since the regulations contained in the applicable Directives have not changed, the possibility of using the resources of other entities not directly participating in the order remains. It follows from the above that, according to the EU legislator, expanding the circle of contractors, even to those who do not meet the conditions for participation in the tender procedure, has a greater impact on efficiency than limiting the number of contractors to those whose technical and financial potential meets the requirements of the contracting authority.

The third element affecting efficiency, rarely raised, is related to the time the Ordering Party sets for preparing the offer. Due to the diversity of the subject of public procurement and the related degree of complexity of the order, the time to prepare the offer is difficult to standardize. However, due to the need to specify in the legal regulation the minimum time between the publication of the contract notice and the opening of offers, the legislator was forced to standardize it. It should be noted, however, that our own research conducted in this area from a sample of 500 procedures (simple sampling) in 2022 did not reveal any procedure in which the Contractor anticipated a longer time to prepare the offer than would result from the NPZP. In practice, in the sample examined, approximately 2% of procedures had an extended time for submitting an offer, which resulted solely from procedural necessity, i.e., modification of the tender documentation. The process of preparing an offer will not be the same for an entity participating in the tender on its own, for a consortium, for a Contractor intending to use the resources of another Contractor or for a Contractor using subcontractors. It is also important that the Ordering Party has a specialized unit preparing the offer. In practice, the contractor's lack of time comfort when preparing a complex

offer limits the group of contractors interested in the order, reducing competitiveness in the procedure.

To a limited extent, it is possible to quantify economic efficiency. Efficiency is determined based on savings in public funds spent. The measure is the ratio of the offer price to the estimated value of the order, which determines the so-called loss rate. The loss index is an intensity indicator resistant to changes in the dynamics of the examined phenomenon, which for economical orders is less than 1 and for non-economical orders greater than 1 and is expressed by the formula:

$$W_{st} = \frac{WN}{WZ}$$

where:
W_{st} – loss index,
WN – price of the selected offer (order value),
WZ – estimated value of the order (gross).

The presented indicator has certain limitations. It works very well in proceedings in which one criterion for evaluating offers, the price, is specified. In the case of a multi-criteria model, the difficulty in determining the loss indicator is the need to recalculate non-price criteria each time in order to determine their value. The task is feasible but requires access to the procurement procedure documentation and is very time-consuming.

The offer evaluation criteria are a very important element influencing the effectiveness of public procurement, and their application, apart from financial efficiency, can stimulate economic efficiency and, in special situations, also the quality of contract execution and implementation (Koch, 2020: 91). At the same time, the use of a multi-criteria offer evaluation model requires special attention from the Ordering Party.

2. OFFER EVALUATION CRITERIA

In the national public procurement system, which began functioning with the entry into force of the Public Procurement Act in 1995 (Journal of Laws 1994, No. 76, item 344), the importance of non-price criteria for evaluating offers was not appreciated. We can even point to examples of disciplining contracting authorities who tried to differentiate offers by pointing to non-price criteria. A major role in limiting the tendency to introduce non-price criteria was played by the judgments of the Appellate Institution operating within the public procurement system, which is the National Chamber of Appeal (KIO), established in place of the Arbitration Teams operating under the President of the Public Procurement

Office. It should be noted that the very initiation of the appeal procedure by the Contractor was and still is associated, depending on the content of the issued judgment, with the extension of the contract award deadline, invalidation of the procedure and initiation of a new one, delegation of the Ordering Party's representatives to the headquarters of the National Chamber of Appeal in Warsaw, and possible costs related to legal representation. To sum up the above, the Ordering Party, wishing to award an order effectively and on time, should formulate the tender documentation in a way that limits the possibility of potential contractors raising objections. The jurisprudence of the National Appeals Chamber has largely influenced the reluctance of contracting authorities to apply post-price criteria. For example, the judgment states that "*(...)Therefore, although the contracting authority has far-reaching freedom in the selection of criteria, it cannot use arbitrary and unjustified tender evaluation criteria that are not justified by the specificity of the contract and shape their meaning at an inappropriate level, which results in a preference for specific performers (...)*" (KIO 966/12). The provision gives a lot of freedom of interpretation and it is difficult to answer the question whether the offer of a contractor who obtained additional points due to, for example, the weight of a portable device will be the preference of specific contractors. With most criteria, such doubts may arise. In another case, it was stated that "*(...)the Ordering Party is the host of the procedure and has the right to create offer evaluation criteria in accordance with its intentions, and in accordance with Art. 91 section 2 of the Public Procurement Law, the mandatory criterion is the price criterion and other criteria which, although not mandatory, may be the subject of a reasoned decision of the Ordering Party (...)*" (KIO 376/1). Pursuant to this ruling, the Ordering Party is obliged to document an additional activity, which is the justification of the decision to select a criterion, and implicitly also its importance. In the event of the contractor's reservations regarding the determination of non-price criteria, the validity of their determination by the Ordering Party can only be determined in the appeal procedure.

Most internal and external conditions encouraged the Ordering Party to avoid using a criterion for evaluating offers other than price. Apart from the negative incentives to use non-price criteria, in practice there are no positive incentives to use non-price criteria. The ordering party is responsible for the implementation of its investment plan, the key element of which is deadlines, and supervisory institutions control compliance with the budget discipline. Spending too much or too little in a given financial year is equally reprehensible. Such a situation favors the Ordering Party to use the simplest possible solutions in this evaluation model, which is one criterion, price.

As a result of system analyzes conducted by the Public Procurement Office and other centers, there was a need to make changes to the Ordering Parties' accounts.

In analyzes regarding the public procurement system, the concept of efficiency is recognized in two dimensions: financial and efficiency of the procedure (Nowicki, 2013: 10). By synthesizing them, it can be concluded that effective public procurement is one in which we receive the maximum of primary and secondary benefits for a given amount, or we receive a given benefit for the lowest possible market price (Szymański, 2016: 513). A positive answer to the question whether obtaining an order for the lowest zinc price is effective is possible if it is stated that the remaining, more expensive offers presented identical features in terms of quality, cost-effectiveness, durability, timeliness, etc. Since the subject of the order meeting the above conditions is an exception, not a rule, the legislator noticed the need to introduce systemic changes. This was the result of analyzes conducted since 2010 and focused on the so-called a new approach to public procurement, one of the conclusions of which was the statement that "*the use of price as the only criterion for selecting an offer is a factor that largely discourages contractors from participating in public procurement. This type of orders is always or often rejected by 32% of entrepreneurs active on the procurement market*" (Kowalewska and Szut, 2012: 8). The research confirmed the negative impact of the single-criteria offer evaluation model.

Through publications and training, attempts were made to change the preferences of contracting authorities without introducing any mechanisms encouraging a change in the use of multi-criteria offer evaluation models. As a consequence, in the procurement system the practice of using only one criterion, namely price, has been consolidated (Borowicz, 2011: 19–21). In order to counteract this unfavorable phenomenon, after ten years of operation of the Public Procurement Law, the simplest administrative method was used. The amendment to the Public Procurement Law, which entered into force on October 19, 2014 (Journal of Laws 2014, item 1232), introduced the mandatory formulation of non-price criteria, with minor exceptions.

The comparative analyzes carried out showed that after the introduction of statutory changes in 2015, there was a sharp increase in the share of the multi-criteria offer evaluation model in national public procurement. However, an in-depth analysis showed that the confrontation of administrative orders and habits of contracting entities resulted in the emergence of "*dead non-price criteria*" (Szymański, 2015: 318) which, while fulfilling statutory instructions, do not take any practical part in selecting the most advantageous offer. This practice was also confirmed by the Public Procurement Office, which issued the "Report on offer evaluation criteria" in May 2017 (www4).

Dead criteria include "*warranty*", "*completion date*" and "*payment date*", which, due to the way they are assessed, have a maximum scored value close to the non-scored value. In practice, all contractors declare a maximum warranty period, payment deadline or minimum delivery time. Such a conservative position of the Ordering Parties is partly due to the lack of reliability of some Contractors, who often offered unrealistic conditions for the execution of the order. An example is the offer of several dozen-year warranty periods, which made customers aware of this issue (UZP/ZO/0-3026/06). With the statutory indication of the weight of non-price criteria at the level of 40% or more, pathological phenomena appeared in the public procurement system resulting from the lack of due diligence in determining non-price criteria and their weights. In the case of some orders, the price was disproportionately increased due to, for example, the possibility of shortening the delivery time. It should be added that in the above cases, the introduction of a non-price criterion was solely due to the need to comply with the statutory instruction without conducting a price simulation, taking into account the impact of non-price criteria. The problem was noticed and presented in public procurement magazines (Iwaniec, 2020: 11).

An attempt to limit pathological phenomena resulting from incorrectly used non-price criteria and their weights was the change liberalizing the current position of the legislator introduced in the NPZP of 2019, lowering the obligatory weights of non-price criteria. The new regulations entered the legal order on January 1, 2021.

3. ANALYSIS OF CONTRACTING AUTHORITIES' PREFERENCES REGARDING THE APPLICATION OF OFFER EVALUATION CRITERIA

The work was based solely on direct access to data contained in public procurement notices published in the European Ted database, abandoning other sources that do not provide information about the origin of the data, the methodology of obtaining it and possible measurement error.

Data for the analysis was downloaded from the Ted database (tenders electronic daily), which is the electronic version of the Supplement to the Official Journal of the European Union maintained on the European Commission website (www1). The period covered by the study was 2019–2023. Due to the impossibility of using data from the entire year 2023, this year exceptionally covered nine months from January to September. In order to compare the public procurement markets of Community countries, a number of analyzes were carried out in order to present:

- comparison of European countries in the use of non-price criteria in 2019–2023;

- comparison of European countries in the use of non-price criteria, divided into types of procurement, during the period of validity of the NPZP in Poland in 2021–2023;
- determining preferences for the selection of non-price criteria by domestic contracting entities during the period of validity of the NPZP in 2021–2023.

In order to establish structure indicators describing the share of non-price criteria in European Union countries, documents covering all contracts awarded in the European Union carried out in the years 2019–2023 were used (2023 covers the first nine months).

In order to establish structure indicators describing the share of non-price criteria in European Union countries, divided into types of contracts, documents covering all contracts awarded in the European Union carried out in 2021–2023 were used.

In order to determine the national preferences of contracting authorities, a random sample (simple drawing) was drawn from all contracts awarded by these entities during the period of validity of the NPZP, from January 2021 to the end of September 2023.

Published tender documents downloaded from the Ted database have repeatedly contained errors in which contractors provided contradictory information. Automatic analysis of such documents gives a false picture of the phenomenon under study. This includes, among others: any inconsistency between the field of the EU announcement II.2.5. *Award criteria* and other data contained in the announcement or the Terms of Reference. An example may be a procedure in which only the price is given as a contract award criterion, with information in field II.2.14 that the criteria will be based on a multi-criteria model – price, warranty, completion date (www2). In order to make a precise assessment, the data was verified.

Chart 1 shows the percentage of orders in which the multi-criteria offer evaluation model was used in all EU countries. In the case of Poland, there is a sharp decline in the use of post-price criteria from 2022, which is related to the liberalization of national legal regulations. In 2019–2021, the share fluctuated between 56–55% and in 2023 it decreased to 48%. The analysis indicates that there is a statistically significant difference (p-value <0.001) in the use of single- and multi-criteria models between European countries whose accession date is earlier than 2004 and countries that joined the EU in 2004 and later. The analysis was carried out using the IBM SPSS program. The entered data met the condition for conducting a parametric Student's t-test, which is the normality of the distribution of the variable in the studied subpopulations and equality of variances. The average share of the multi-criteria offer evaluation model for countries with accession before 2004 was 54% and for countries with later accession 34%.

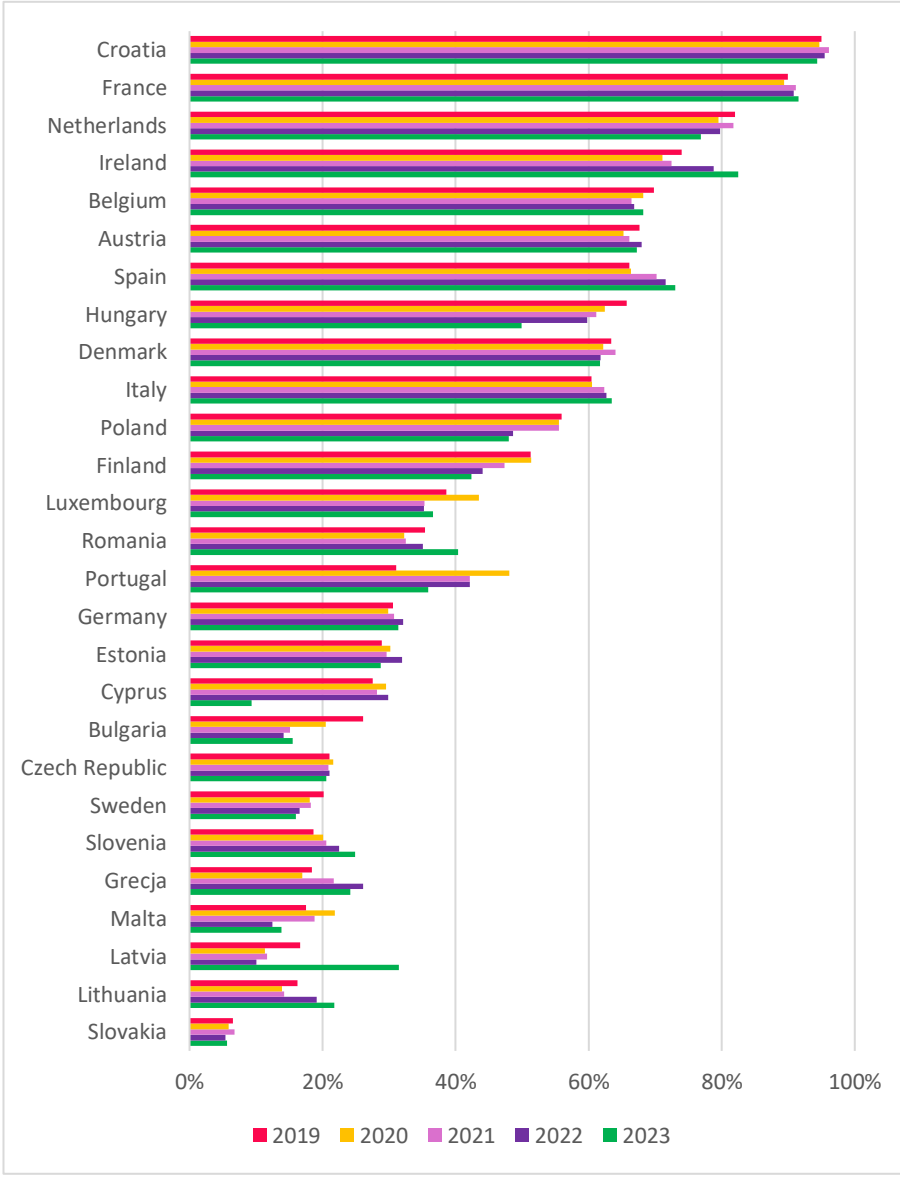

Chart 1. Share of non-price criteria in public procurement in EU countries [in %]

Source: own research.

This allows us to conclude that in the countries that joined the EU structures before 2004, the use of non-price criteria is more widespread than in other Member States.

By narrowing down the research area to the period of validity of the NPZP in the country, the share of non-price criteria was determined for each member state, divided into types of procurement. The first data analysis, presented in Chart 2, shows the use of the multi-criteria model in construction works.

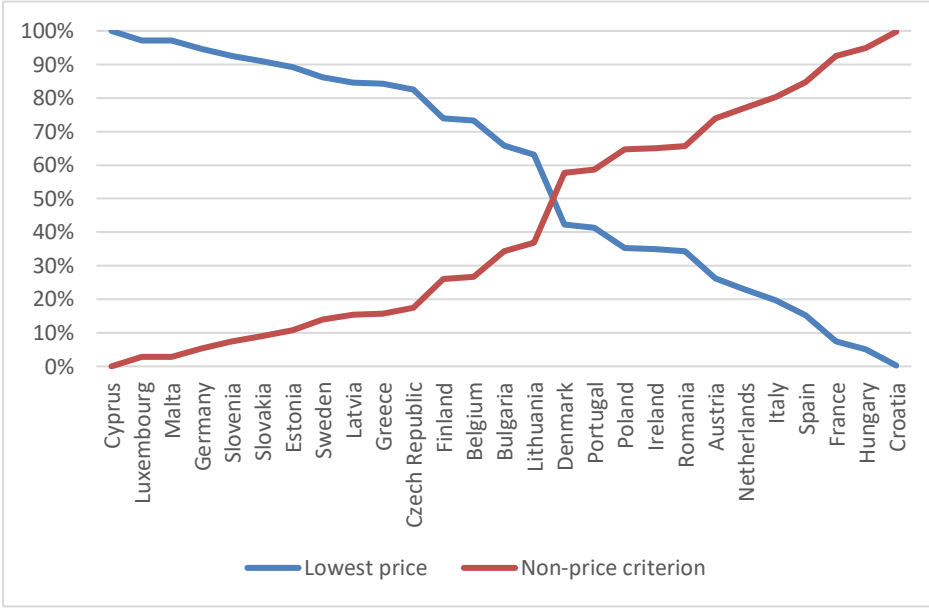

Chart 2. Model for selecting the most advantageous offer for construction works in EU countries in 2021-2023 [in %]

Source: own research.

The average value of the use of non-price criteria in construction works contracts in the examined period was 42%. For countries with accession before 2004, the average share of the multi-criteria model was 45% and for the remaining countries it was 38%. The parametric Student's t-test did not confirm that there is a statistically significant difference (p-value=0.594) between countries with long and shorter membership in the EU. In the field of construction works, there is no differentiation in the preferences of contracting authorities regarding the use of a multi-criteria model of offer evaluation.

A similar analysis of data for services was carried out, presenting the results in Chart 3. A statistical analysis was also carried out, determining the average value of the use of the multi-criteria model, which for services was 51%. For

countries with accession before 2004, the average share of the multi-criteria model was 62% and for the remaining countries it was 40%. The parametric Student's t-test confirmed that there is a statistically significant difference (p-value = 0.007) between countries with long and shorter membership in the EU.

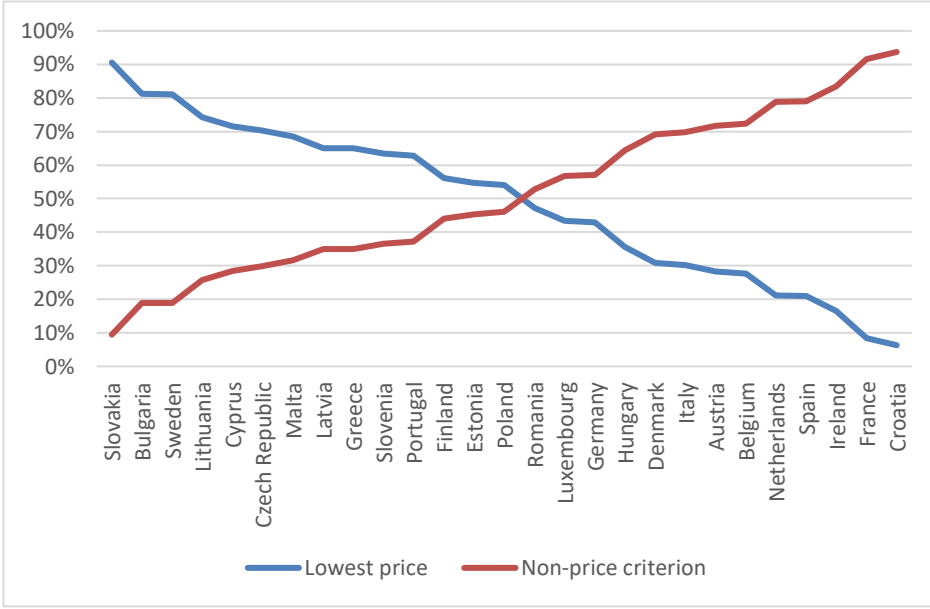

Chart 3. Model for selecting the best offer for services in EU countries in 2021-2023 [in %]

Source: Own research.

Data analysis for deliveries was also performed, presenting the results in Chart 4. The average value of the use of non-price criteria in supply orders in the examined period was 39%. For countries with accession before 2004, the average share of the multi-criteria model was 52% and for the remaining countries it was 25%. The parametric Student's t-test confirmed that there is a statistically significant difference (p-value=0.004) between countries with long and shorter membership in the EU.

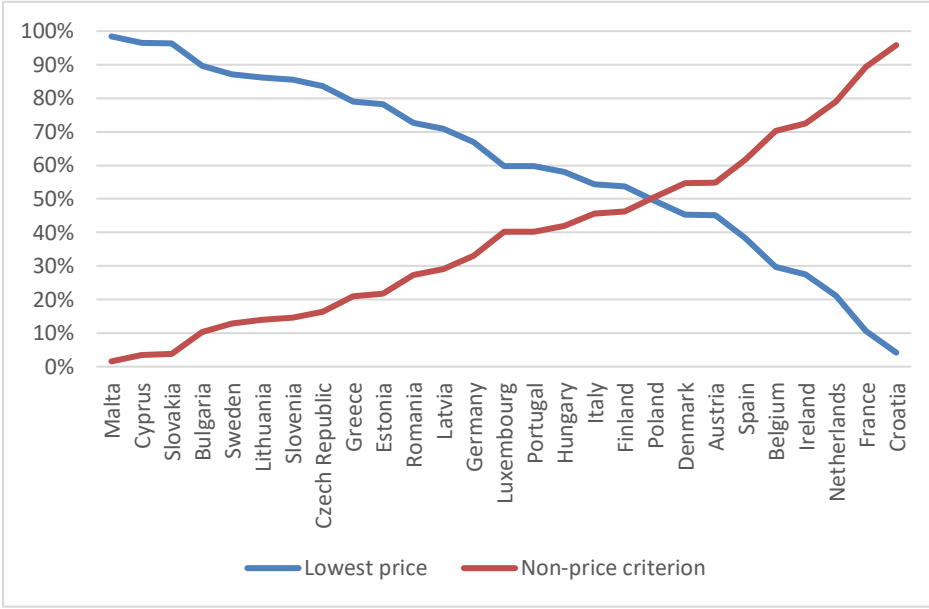

Chart 4. Model for selecting the best offer for supplies in EU countries in 2021-2023 [in %]

Source: own research.

A study was also carried out, based on a 500-item simple sample, that aimed at identifying the types of non-price criteria used during the period when the NPZP was in force. The identification of "dead" non-price criteria was carried out. An example of disclosing proceedings with such a criterion could be an order worth PLN 377 million, in which the only non-price criterion was a warranty with a criterion weight of 40% (www3). In the proceedings, eleven contractors declared the maximum scored warranty period of seven years. The lack of additional points for extending the warranty (from five to seven years) would make it possible to win the tender with an amount lower than PLN 126 million, which would result in a financial loss instead of a profit. This means that the criterion used had only apparent significance. The structure of the selected sample is presented in Chart 5. Data for 2023 covers the first nine months from January to September.

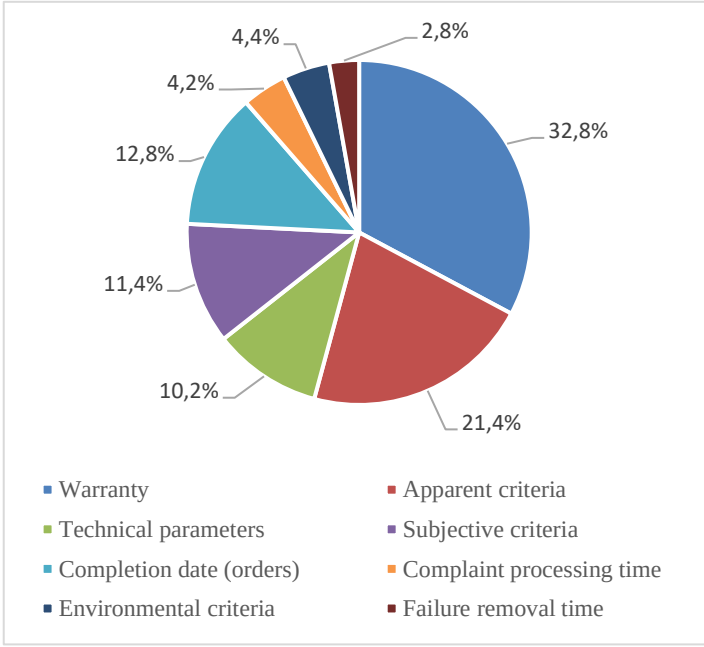

Chart 5. Structure of non-price criteria used by domestic contracting entities in 2021-2023

Source: own research.

Assuming a confidence level of 95%, the confidence intervals for individual criteria are as follows:

- warranty (29%; 37%);
- apparent criteria (18%; 26%);
- technical parameters (7%; 13%);
- subjective criteria (8%; 14%);
- completion date (orders) (10%; 16%);
- complaint processing time (2.2%; 5.7%);
- environmental criteria (2.2%; 5.7%);
- failure removal time (1.5%; 4.5%).

CONCLUSION

The use of non-price criteria is intended to enable an objective comparison of offers, which, due to the subject of the contract, should not be differentiated by the price itself. This is due to the diversity of the ordered product within the same subject matter of the contract, which, in accordance with the EU legislation, is described using the Common Procurement Vocabulary (CPV). In the light of applicable legal regulations, the use of one criterion for evaluating offers, i.e.,

price, is only possible if the description of the subject of the contract specifies quality requirements regarding its main elements, ensuring qualitative comparability of the solutions offered by contracting entities. This is a very broad formulation and each time the ordering party must define what is the main element of the order, specifying its features. Practically, apart from ordering products which, due to their characteristics, guarantee that the submitted offers will include identical products, such as motor third party liability insurance, the scope of which is defined by law, the need to specify the order description will always arise. However, it should be noted that specifying the description of the subject of the contract more precisely may lead to limiting the group of contractors, which may result in an appeal to the National Chamber of Appeal and the extension of the procedure. Moreover, specifying the description of the subject of the contract in an inflexible manner, compared to non-price criteria, enables the assessment of a product with different, e.g. technical parameters. Typically, in such a case, the ordering party sets the minimum technical parameters accepted by him, which automatically eliminates offers from contractors proposing a more expensive but technically better solution. In each case, the ordering party is obliged to decide whether to clarify the description of the contract or to differentiate offers using non-price criteria. The use of non-price criteria, according to research, is a solution that improves efficiency in public procurement, as opposed to the practice of using one criterion, which is price.

The administrative tools with which the national legislator tried to popularize the use of the multi-criteria model did not bring the intended results. Strong emphasis on the use of non-price criteria resulted in the emergence of pathologies in the public procurement system, which prompted the legislator to liberalize regulations imposing the obligation to use non-price criteria with a minimum share of 40%. There is a visible reduction in the share of contracts with a multi-criteria model after the introduction of the new Public Procurement Law. An analysis of the non-price criteria used indicates that apparent offer evaluation criteria are still used, and the most popular criterion is the warranty. It is positive that the criterion of technical parameters has approximately a 10% share in all non-price criteria. This proves the professionalism of the contracting authorities, as does the application of other criteria, especially those taking into account environmental and subjective criteria.

The reluctance to use non-price criteria is not exclusively a feature of domestic contracting entities. Research shows that the practice of using non-price criteria has a significant statistical correlation with the duration of operation of the public procurement system within European structures. A statistically significant relationship was revealed between the use of non-price criteria and membership in the group of countries with accession before 2004 and others. The study shows that although it is possible to increase the order rate with a multi-criteria model

through administrative orders, pathological phenomena may appear instead of an increase in efficiency. Observations of the European system show that it takes time to reduce the share of orders in which the only criteria for evaluating offers is price. This time is needed to create a contracting authority-friendly environment that promotes not only effectiveness in awarding contracts, but also their effectiveness by changing the mentality of people responsible for awarding public contracts.

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POZACENOWE KRYTERIA OCENY OFERT W POLSCE I UNII EUROPEJSKIEJ

Cel artykułu. Celem pracy jest identyfikacja preferencji, w zakresie stosowania pozacenowych kryteriów oceny ofert, zarówno zamawiających krajowych, jak i unijnych, ze szczególnym uwzględnieniem okresu funkcjonowania nowej ustawy Prawo Zamówień Publicznych. Badanie poszerzono o identyfikację rodzajów kryteriów pozacenowych stosowanych przez krajowych zamawiających.

Metoda badawcza. W badaniach wykorzystano dane pochodzące z europejskiej bazy Ted za lata 2019–2023. W celu wyznaczenia wskaźników struktury opisujących udział kryteriów pozacenowych w krajach Unii Europejskiej z podziałem na rodzaje zamówień wykorzystano dokumenty obejmujące wszystkie udzielone w Unii Europejskiej zamówienia przeprowadzone w latach 2021–2023. Preferencje krajowych zamawiających określono na podstawie próby losowej (losowanie proste) pobranej ze wszystkich udzielonych przez te podmioty zamówień w okresie, od stycznia 2021 r. do końca września 2023 r. W analizach wykorzystano metody statystyki opisowej oraz statystyki matematycznej (parametryczne i nieparametryczne testy istotności).

Wyniki badań. Zidentyfikowano zmiany w strukturze stosowanych modeli oceny ofert oraz dokonano porównania preferencji stosowania modelu wielokryteriowego pomiędzy krajami członkowskimi UE, których data akcesji była sprzed roku 2004 i pozostałych. Wykazano statystycznie istotne zróżnicowanie w zakresie stosowania kryteriów pozacenowych, w państwach, które włączono do struktur UE przed 2004 r. i pozostałych. Z przeprowadzonej analizy wynika, że dłuższa obecność w strukturach UE wpływa na zwiększenie wykorzystania kryteriów pozacenowych wyłącznie w obszarze dostaw i usług. Na rynku krajowym zmiana prawodawstwa, która miała miejsce w roku 2021 nie wyeliminowała patologii systemu polegającej na wprowadzaniu przez zamawiających martwych kryteriów pozacenowych.

Słowa kluczowe: zamówienia publiczne, efektywność, kryteria oceny ofert, konkurencyjność.

JEL Class: K49, G18, H12, H57.

Zakończenie recenzji/ End of review: 03.06.2024
Przyjęto/Accepted: 13.06.2024
Opublikowano/Published: 20.06.2024

• F I N A N S E I P R A W O F I N A N S O W E •
• Journal of Finance and Financial Law •

czerwiec/June 2024 • vol. 2(42): 127–152

INSTRUMENTY TYPU ETC JAKO NOWE INSTRUMENTY FINANSOWE NA GPW W WARSZAWIE – WYZWANIA REGULACYJNE W ASPEKCIE PORÓWNAWCZYM

Marcin Opoka*

https://doi.org/10.18778/2391-6478.2.42.07

EXCHANGE-TRADED COMMODITIES AS NEW FINANCIAL INSTRUMENTS ON THE WARSAW STOCK EXCHANGE – REGULATORY CHALLENGES FROM A COMPARATIVE PERSPECTIVE

ABSTRACT

The purpose of the article. This article examines Exchange-Traded Commodities (ETCs), prompted by the introduction of the first ETC on the Warsaw Stock Exchange (GPW) in August 2023, a significant milestone in the evolution of Poland's capital market. The analysis focuses on the regulations introduced by the GPW in Warsaw, evaluating the adequacy of measures aimed at protecting ETC purchasers. The study also incorporates a European perspective, offering a comparative analysis of national solutions. The structure of the instrument, regulatory framework, origins, and principles of ETC operation are examined, distinguishing these instruments from more popular ETFs. Despite some similarities, ETCs differ significantly in structure and legal character from ETFs, particularly due to the lack of harmonisation at the European level, which impacts investor protection. This disparity raises questions about the effectiveness of existing regulations in ensuring investor safety and trading certainty, not only in Poland.

Methodology. To answer these questions the research utilizes a mixed-method approach, incorporating literature reviews, legal acts analyses, and market data examination. It employs a comparative analysis to explore the functionalities, structures, and regulatory settings of ETCs versus ETFs, with a particular focus on mechanisms for investor protection. Additionally, the study evaluates and contrasts the trading regulations applicable to ETCs across major European exchanges in relation to the regulatory frameworks and investor protections implemented by the Warsaw Stock Exchange.

* Autor jest doktorantem wdrożeniowym na Uniwersytecie Wrocławskim oraz pracownikiem Giełdy Papierów Wartościowych w Warszawie S.A., e-mail: marcin.opoka@uwr.edu.pl, https://orcid.org/0000-0002-4929-6952

Results of the research. The analysis concludes that the lack of harmonised regulations for ETCs poses a significant challenge for investors. In practice, investors are often protected in key aspects at a level similar to that of ETF investors. However, these are not universal or guaranteed regulatory standards that investors can rely on. Therefore, it is recommended to standardise the terminology of passive investment instruments (including ETCs), leading to the harmonisation of basic principles for the construction and trading of these instruments. Regarding ETCs on the Warsaw Stock Exchange, the introduced solutions provide a higher level of investor protection compared to some other EU markets. Nonetheless, further regulatory changes are proposed to support the continued development of the ETC market in Poland.

Keywords: ETC, ETF, Exchange Traded Commodities, passive investing, index investing.

JEL Class: K20, G15, G32.

WPROWADZENIE

W dniu 30.08.2023 r. na warszawskiej Giełdzie Papierów Wartościowych zadebiutował pierwszy instrument typu ETC (ang. *Exchange-Traded Commodity*), umożliwiający inwestorom uzyskanie ekspozycji na złoto w formie w pełni fizycznie zabezpieczonej. Debiut tego instrumentu poprzedziło wprowadzenie stosownych zmian zarówno w Regulaminie Giełdy (2022), jak i Szczegółowych Zasadach Obrotu Giełdowego (2024). Instrumenty typu ETC, choć na rodzimej giełdzie pojawiły się dopiero teraz, nie są produktami zupełnie nowymi. To popularne w ostatnim czasie instrumenty giełdowe, które zasadami działania przypominają w dużej mierze szerzej znane fundusze inwestycyjne typu ETF oraz często są obok tych funduszy zaliczane do tej samej grupy produktów finansowych, służących najczęściej inwestowaniu pasywnemu (Frączek, 2012: 155–166). Warto jednak zauważyć, że pod względem formy prawnej, konstrukcji instrumentu czy też niektórych zasad obrotu zorganizowanego, instrumenty typu ETC różnią się od ETF-ów, będących funduszami inwestycyjnymi, funkcjonującymi w sposób dalece zharmonizowany w całej Unii Europejskiej.

Brak harmonizacji instrumentów typu ETC na poziomie unijnym pozostawia wiele pytań dotyczących ich miejsca na silnie regulowanym europejskim rynku finansowym. Pytania te są istotne, gdyż dotyczą m.in. bezpieczeństwa inwestorów. O ile bowiem można mówić o wykształceniu się pewnego standardu konstrukcji i obrotu tymi instrumentami, to istnienie tego standardu rynkowego nie zostało jeszcze usankcjonowane unijnymi wymogami prawnymi. Kwestie te są istotne zarówno z perspektywy lokalnej, jak i europejskiej. Instrumenty typu ETC są bowiem coraz bardziej popularne, a ich obroty na największych rynkach porównywalne są do obrotów największymi funduszami typu ETF[1]. Na istotność ww. kwestii zwracają też uwagę przedstawiciele organizacji branżowych, wskazując na zagrożenia wynikające z braku przejrzystości w prezentowaniu różnic pomiędzy funduszami typu ETF i innymi podobnymi instrumentami oraz negatywne konsekwencje wynikające z tego dla inwestorów (EFAMA, 2020b).

Sytuacja taka pozwala na postawienie pytania badawczego: Czy wobec braku harmonizacji na poziomie unijnym, istniejące na rynku rozwiązania regulacyjne dotyczące instrumentów typu ETC (obecne głównie w regulacjach krajowych, regulaminach giełd czy też instrumentach prawnych o charakterze *soft law*) zapewniają dostateczny poziom ochrony inwestorów i bezpieczeństwa obrotu, w szczególności w porównaniu do zharmonizowanych i szczegółowo uregulowanych ETF-ów? Na podstawie dotychczasowych doświadczeń rynkowych i popularności tych instrumentów można postawić hipotezę, że o ile istniejące rozwiązania

[1] Przykładowo, na Deutsche Börse Xetra jeden z instrumentów typu ETC – Xetra Gold, znalazł się we wrześniu 2023 r. w 10 najpopularniejszych pod względem obrotów instrumentów z kategorii ETP.

praktyczne w dużym zakresie chronią inwestorów instrumentów typu ETC, to oczekiwana jest dalsza harmonizacja tych instrumentów – choćby pod względem pojęciowym – gdyż obecnie stosowana terminologia rynkowa i brak jednoznacznych regulacji może wprowadzać w błąd.

W celu odpowiedzi na pytanie badawcze oraz weryfikacji postawionej hipotezy, w pierwszej części artykułu porównano zasady funkcjonowania instrumentów typu ETC oraz innych, podobnych instrumentów (w szczególności ETF-ów) z perspektywy ich konstrukcji, regulacji oraz funkcji w obrocie. Następnie przeanalizowano, jak instrumenty ekonomicznie klasyfikowane jako ETC są definiowane w prawodawstwie Unii Europejskiej i jaki jest wpływ takiej klasyfikacji na bezpieczeństwo inwestorów. Również i ta analiza dokonana została w porównaniu do „siostrzanych" ETF-ów. Wobec braku jasnych przepisów europejskich definiujących zasady ochrony inwestorów instrumentów typu ETC, porównano rozwiązania obecne w tym zakresie na kluczowych europejskich giełdach i stosowane przez emitentów tych instrumentów celem weryfikacji czy zapewniają one standard podobny do obecnego dla innych instrumentów w przepisach unijnych. Z tej perspektywy dokonano także oceny zasad dotyczących bezpieczeństwa inwestorów oraz obrotu mających zastosowanie do instrumentów typu ETC na Giełdzie Papierów Wartościowych w Warszawie. Zwrócono też uwagę na obecne w praktyce rynkowej przypadki, w których nawet podmiotom profesjonalnym brak konsekwencji terminologicznej w komunikacji z inwestorami dotyczącej instrumentów typu ETC i podobnych.

O ile literatura dotycząca funkcjonowania funduszy typu ETF jest obszerna, zarówno na gruncie krajowym, jak i międzynarodowym, w literaturze przedmiotu mniej jest opracowań dotyczących produktów ETC, w szczególności z perspektywy regulacyjnej. Na poziomie międzynarodowym wskazać można zasadniczo tylko jedno takie opracowanie (Cugia, 2015: 2118–2127), które powstało w 2015 r. i nie uwzględnia zmian regulacyjnych, które weszły w życie od tego czasu, ani też produktów, które po tej dacie pojawiły się na rynku. Najbardziej kompleksową pozycją w zakresie analizy instrumentów typu ETC jest z pewnością opublikowana niedawno monografia dotycząca instrumentów ETC i ETN (Miziołek, 2024), której autor skupia się przede wszystkim na kwestiach ekonomicznych, dla których uzupełnieniem są aspekty regulacyjne. Istnieje co prawda szereg wcześniejszych opracowań dotyczących produktów ETC. W części dotyczą one jednak rynku amerykańskiego, a jako takie nie znajdą bezpośredniego zastosowania do sytuacji w Unii Europejskiej. W zakresie opracowań odnoszących się do produktów europejskich, dostępne publikacje skupiają się na kwestiach związanych z aktywami bazowymi (Fassas, 2012: 127–140), omawiają konkretne rynki (Marszk, 2018: 643–665), analizują kwestie związane z wyceną tych produktów (Dorfleitner i in., 2018; 255–284) bądź przedstawiają te produkty na tle innych innowacji finansowych (Marszk, 2017: 14–21). Opracowania te nie

zawierają szerszych rozważań o charakterze regulacyjnym, a dodatkowo w większości powstały w okresie poprzedzającym skokowy wzrost zainteresowania produktami typu ETC notowanymi na największych europejskich giełdach, który przypada na ostatnie lata (EFAMA, 2020a).

Obrót instrumentami typu ETC jest realizowany na rynkach finansowych w różnych regionach świata, jednak niniejszy artykuł koncentruje się przede wszystkim na rynku instrumentów typu ETC w Unii Europejskiej z dwóch powodów. Po pierwsze, artykuł ten przedstawia perspektywę regulacyjną, a istotne kwestie regulacyjne miały znaczący wpływ na to, że konstrukcja instrumentów ETC oraz ich rynek w Unii Europejskiej są unikalne i różnią się od rynków w innych częściach świata. Po drugie, regulacje mające zastosowanie do obrotu niedawno wprowadzonym na warszawską giełdę instrumentem typu ETC są pochodną regulacji i praktyki unijnej. Unijna perspektywa regulacyjna jest więc kluczowa dla analizy zasad konstrukcji, emisji, obrotu instrumentami typu ETC oraz ich wpływu na zapewnienie bezpieczeństwa inwestorów.

1. CZYM SĄ INSTRUMENTY TYPU ETC

W literaturze podkreśla się, że brak jest konsensusu w zakresie definicji instrumentów typu ETC (Marszk, 2017: 14–21). Najbardziej ogólne definicje spotykane w literaturze wskazują, że są to otwarte, pasywne instrumenty pochodne, notowane na giełdzie, którymi obrót odbywa się na zasadach takich jak obrót akcjami (Dorfleitner i in., 2018: 255–284). Definicja taka wydaje się być jednak dość ogólna, a przez to mało przydatna – istnieje wiele instrumentów (np. strukturyzowanych), które mogłyby ją spełniać. Bardziej rozbudowaną, choć nadal niewystarczająco odróżniającą instrumenty typu ETC od innych produktów inwestycyjnych definicję zaproponował Fassas, według którego instrumenty typu ETC to produkty finansowe podobne do funduszy typu ETF, których ceny odzwierciedlają ceny śledzonego towaru, są klasyfikowane jako instrumenty dłużne i w pełni zabezpieczone (Fassas, 2012: 127–140).

Szeroką analizę sposobów definiowania instrumentów typu ETC przeprowadził w ostatniej monografii na ten temat Tomasz Miziołek, zwracając uwagę na kluczowe wyróżniki konstrukcyjne i definicyjne tych instrumentów obecnych w obrocie w krajach Unii Europejskiej. Proponuje on przyjąć, że instrumenty typu ETC są dłużnymi papierami wartościowymi, nieposiadającymi terminu zapadalności, emitowanymi przez różne podmioty, które mogą być przedmiotem obrotu giełdowego i pozagiełdowego, a ich zasadniczym celem jest odwzorowywanie ceny towaru w sposób bezpośredni lub przy wykorzystaniu dźwigni (Miziołek, 2024: 96). Wydaje się, że ta definicja najtrafniej oddaje istotę instrumentów typu ETC uwzględniając kluczowe cechy charakteryzujące instrumenty typu ETC

i odróżniające je od innych produktów finansowych, tj. charakter prawny, zasady obrotu i cel inwestycyjny.

Przedstawione definicje dostarczają ogólnego wglądu w naturę instrumentu finansowego oraz jego funkcji z ekonomicznego punktu widzenia. Same w sobie nie są jednak wystarczające na potrzeby klasyfikacji instrumentów typu ETC w kontekście prawno-regulacyjnym, zwłaszcza w obrębie siatki pojęciowej intensywnie regulowanego rynku finansowego Unii Europejskiej. Unijne regulacje nie oferują bowiem odrębnej, uniwersalnie akceptowanej definicji instrumentów ETC, odmiennej od innych produktów finansowych. W związku z tym istotne jest zbadanie, jak instrumenty ekonomicznie, klasyfikowane jako ETC, są definiowane w prawodawstwie Unii Europejskiej i jaki jest wpływ takiej klasyfikacji na bezpieczeństwo inwestorów, szczególnie w odniesieniu do innych instrumentów o podobnym przeznaczeniu i charakterystyce. Umożliwi to ocenę zasad dotyczących bezpieczeństwa inwestorów oraz obrotu, mających zastosowanie do instrumentów typu ETC na Giełdzie Papierów Wartościowych w Warszawie.

Przed dokonaniem formalnoprawnej klasyfikacji instrumentów typu ETC warto uwzględnić ich konstrukcję, genezę oraz funkcje, które pełnią w obrocie. W tym kontekście przyda się analiza podobnych instrumentów w celu zrozumienia kluczowych podobieństw i różnic. Z tego punktu widzenia, w literaturze podkreśla się, że instrumenty ETC są częścią szerszej kategorii podobnie funkcjonujących produktów, określanej mianem ETP (ang. *Exchange-Traded Products*) (Frączek, 2012: 155–166; Dorfleitner i in., 2018: 255–284) i skupiającej zasadniczo giełdowe instrumenty pasywnego inwestowania (Fassas, 2012: 127–140). Również na największych giełdach europejskich instrumenty typu ETC prezentowane są zazwyczaj w jednej grupie produktowej (choć nie zawsze określanej mianem ETP) obok innych instrumentów pasywnego inwestowania[2], z uwagi na pewne podobieństwa w konstrukcji oraz zbliżoną funkcję w obrocie. W literaturze i praktyce rynkowej instrumenty ETP dzielą się na kilka podkategorii (Miziołek i in., 2020: 69). Podział ten obejmuje najczęściej: (i) fundusze inwestycyjne typu ETF, (ii) instrumenty typu ETN (ang. *Exchange-Traded Notes*) oraz (ii) instrumenty typu ETC (ang. *Exchange-Traded Commodities*). Niektórzy zaliczają do tej kategorii również instrumenty typu ETV (ang. *Exchange-Traded Vehicles*), czy też ETI (ang. *Exchange-Traded Instrument*) (Orlando, 2013). Przy czym ostatnie dwie kategorie charakterystyczne są dla rynków pozaeuropejskich, ich obecność w Europie jest znikoma, w Polsce nie występują zaś w ogóle.

[2] www1 oraz www2.

2. OD FUNDUSZY ETF DO INSTRUMENTÓW TYPU ETC – GENEZA, PODOBIEŃSTWA, RÓŻNICE

2.1. Fundusze typu ETF jako pierwowzór instrumentów typu ETC

Opisując instrumenty tradycyjnie zaliczane do grupy ETP, warto skupić się na najdłużej istniejących i najbardziej popularnych z nich, czyli funduszach inwestycyjnych typu ETF. W literaturze podkreśla się, że fundusze te, obok funduszy indeksowych, są obecnie zdecydowanie najpopularniejszymi sposobami inwestowania indeksowego, któremu to celowi służą najczęściej produkty z grupy ETP (Miziołek, 2024: 33). Fundusze typu ETF stanowią również największą grupę wśród instrumentów typu ETP na europejskich giełdach, zarówno pod względem liczby, obrotów, jak i aktywów pod zarządzaniem[3]. W kontekście analizy regulacyjnej kluczowe jest, że fundusze typu ETF są instrumentami zharmonizowanymi, co obejmuje zarówno proces ich tworzenia, dystrybucji, jak i obrotu na giełdzie. Na gruncie prawa europejskiego można odwołać się do dyrektywy MIFiD II (2014)[4], definiującej fundusz ETF jako fundusz inwestycyjny, którego co najmniej jedna jednostka jest przedmiotem obrotu przez cały dzień w co najmniej jednym systemie obrotu i z udziałem co najmniej jednego animatora rynku, który podejmuje działania w celu zapewnienia, aby wartość jednostek lub akcji w danym systemie obrotu nie różniła się istotnie od ich wartości aktywów netto. Ta definicja wywiedziona z przepisów unijnych odpowiada zasadniczo definicjom formułowanym w literaturze i praktyce obrotu (Antoniewicz i Heinrichs, 2014: 1–40). Poziom szczegółowości tej definicji determinuje konstrukcję funduszu oraz jego funkcjonowanie w obrocie. Natomiast w zakresie tworzenia i zasad funkcjonowania funduszy typu ETF zastosowanie znajdą zharmonizowane w szerokim zakresie przepisy dyrektywy UCITS (2009) i powiązanych z nią aktów prawnych, również gwarantujące daleko posuniętą ochronę inwestorów.

2.2. Ograniczenia w funkcjonowaniu europejskich funduszy typu ETF a rozwój instrumentów typu ETC

Daleko idąca harmonizacja europejskich funduszy typu ETF, funkcjonujących w ww. formule UCITS, przyczyniła się do rozwoju unijnego rynku tych funduszy oraz zapewniła wysoki poziom ochrony inwestorów. Ogranicza ona jednak zakres instrumentów i aktywów bazowych, w które może inwestować fundusz UCITS. Po pierwsze, art. 50 dyrektywy UCITS zawiera zamknięty katalog instrumentów, które mogą być przedmiotem inwestycji funduszu. Katalog ten nie przewiduje

[3] Tak np. na Deutsche Börse Xetra według danych na dzień 1 maja 2024 r., szczegółowe i comiesięcznie aktualizowane dane (www3).

[4] Art. 4 ust. 1 pkt 46 dyrektywy.

w ogóle towarów jako przedmiotu inwestycji, a w przypadku derywatów towarowych również wprowadza daleko idące ograniczenia. Ponadto, ten sam przepis w art. 50 ust. 2 ww. dyrektywy przewiduje wprost zakaz nabywania przez fundusz metali szlachetnych oraz świadectw odnoszących się do metali szlachetnych. Po drugie, kluczową rolę pełnią tutaj zasady dywersyfikacji ryzyka, a w ich ramach limity inwestycyjne oraz ich modyfikacja dla funduszy indeksowych. W literaturze często spotkać można skrótowe określenie zasad dotyczących dywersyfikacji ryzyka przewidzianych w art. 52 dyrektywy UCITS jako „zasady 5/10/40" (Rogala, 2016: 31). W pewnym uproszczeniu zasada ta sprowadza się do tego, że wprowadza nakaz rozproszenia aktywów funduszu: do 40% całości aktywów – wśród pojedynczych emitentów z maksymalnie 10% zaangażowaniem w aktywa jednego emitenta, natomiast w odniesieniu do pozostającej części aktywów – z maksymalnym zaangażowaniem do 5% aktywów w instrumenty jednego emitenta[5].

W literaturze wskazuje się, że tak sformułowane wymogi dywersyfikacji uniemożliwiają w praktyce bezpośrednią inwestycję funduszu w fizyczne towary bądź kruszce, a w przypadku inwestycji w instrumenty mogące taką ekspozycję zapewnić, wymagają dywersyfikacji emitentów (Cugia, 2015: 2118–2127). Ograniczenia te oznaczają w praktyce, że ETF oparty na indeksie towarowym musi mieć w Unii Europejskiej charakter syntetyczny, tj. taki, w którym ekspozycja na aktywo bazowe dokonywana jest nie przez bezpośrednią inwestycję w dany towar, ale z wykorzystaniem instrumentów pochodnych (Busch i Ferrarini, 2017: 708). Nie jest bowiem możliwe utworzenie funduszu typu ETF w formule UCITS, który śledziłby np. niezdywersyfikowane indeksy surowcowe lub byłby zabezpieczony złotem fizycznym.

Z uwagi na potrzebę zapewnienia ekspozycji na tę (i inne) klasy aktywów taka sytuacja prawna stała się swoistym impulsem dla rozwoju europejskich instrumentów typu ETC, czyli dodatkowych (w stosunku do funduszy typu ETF) instrumentów pasywnego inwestowania. Inwestorzy mieli bowiem dostęp do licznych funduszy typu ETF oferujących ekspozycję na indeksy akcji i obligacji. W zakresie natomiast metali szlachetnych czy indeksów towarowych, brak było podobnych instrumentów, które pozwalałyby w łatwy sposób uzupełnić zbudowany z funduszy typu ETF portfel inwestycyjny o te (i inne) klasy aktywów. Można byłoby wykorzystać do tego w pewnym zakresie instrumenty strukturyzowane. Ich sposób funkcjonowania czy przeznaczenie znacząco jednak różnią się od ETF-ów, nie tylko z uwagi na konstrukcję prawną, ale i funkcje w obrocie. Poza tym, instrumenty strukturyzowane zasadniczo nie są fizycznie zabezpieczone, a odwzorowując indeksy towarowe korzystają zazwyczaj z kontraktów ter-

[5] Takie uproszczenie wynika z pierwotnego tekstu dyrektywy UCITS I. Obecnie stosowne przepisy są znacząco rozbudowane.

minowych, co rodzi istotne konsekwencje, np. w postaci istotnych błędów odwzorowania (Blümke, 2009: 194). Paleta dostępnych instrumentów giełdowych nie zapewniała więc odpowiedników funduszy ETF, które oferowałyby ekspozycję na aktywa takie jak np. złoto, na podobnych do tych funduszy zasadach.

2.3. Fundusze typu ETF oraz instrumenty typu ETC – kluczowe podobieństwa i różnice

Podobieństwo funduszy typu ETF i instrumentów typu ETC nie ogranicza się jednak jedynie do wskazanego wyżej celu inwestycyjnego. Inne wspólne cechy, na które można zwrócić uwagę w opracowaniach branżowych (WisdomTree, 2023) i praktyce obrotu obejmują najczęściej: (i) pasywny charakter – podążanie za wynikami danego indeksu towarowego, (ii) oddzielenia aktywów emitenta od aktywów inwestycyjnych oraz występowanie „depozytariusza", (iii) zazwyczaj pełne zabezpieczenie fizyczne instrumentu (w odróżnieniu np. od instrumentów strukturyzowanych), (iv) otwarty charakter – możliwość codziennej kreacji i umarzania certyfikatów/jednostek (podobnie jak w ETF-ach), (v) udział animatora rynku, (vi) oferowanie instrumentów inwestorom i możliwość obrotu giełdowego tymi instrumentami na zasadach podobnych np. do akcji. Pomimo tych podobieństw, mechanizmy używane w funduszach ETF i instrumentach ETC nie są identyczne, a instrumentów tych nie można utożsamiać z uwagi na istotne różnice konstrukcyjne i regulacyjne (Dorfleitner i in., 2018; 255–284).

Najistotniejsze z perspektywy regulacyjnej rozróżnienie, które rodzi istotne konsekwencje praktyczne, polega na tym, że fundusze typu ETF są tytułami uczestnictwa w zharmonizowanych funduszach inwestycyjnych, podczas gdy instrumenty ETC mają charakter tworzonych na podstawie prawa kraju emisji instrumentów dłużnych (Cugia, 2015: 2118–2127). W prawie europejskim nie istnieje bowiem jednolita definicja normatywna dla instrumentów typu ETC ani spójny reżim prawny wspierający ich harmonizację i rozwój na równi z UCITS. Aby ocenić wpływ takiego stanu rzeczy na bezpieczeństwo inwestorów, kluczowe jest właściwe zaklasyfikowanie instrumentów typu ETC w świetle prawa unijnego, w szczególności z perspektywy regulacji produktowych. Samo określenie „instrument dłużny" nie pozwala bowiem precyzyjnie umiejscowić instrumentów typu ETC w regulacyjnej siatce rynku finansowego Unii Europejskiej.

3. INSTRUMENTY TYPU ETC W SIATCE POJĘCIOWEJ UNIJNYCH REGULACJI PRODUKTOWYCH RYNKU FINANSOWEGO

3.1. Definicja instrumentów typu ETC na poziomie regulacyjnych standardów technicznych i zakres jej zastosowania

Emisja oraz funkcjonowanie w obrocie instrumentów typu ETC jako instrumentów dłużnych nie są odrębnie uregulowane na szczeblu unijnym na poziomie dyrektyw czy rozporządzeń. Istnieją co prawda inicjatywy rynkowe postulujące harmonizację w zakresie regulacji produktów typu ETP (EFAMA, 2020a), do tej pory jednak inicjatywy te nie doczekały się realizacji w postaci normatywnej. W związku z brakiem jednolitego systemu regulacyjnego, szczegółowe zasady dotyczące emisji instrumentów ETC w dużej mierze zależą od krajowych przepisów obowiązujących emitenta oraz wymogów co do konstrukcji instrumentu, stawianych przez giełdy papierów wartościowych, na których odbywa się obrót. Szczątkową regulację instrumentów typu ETC zaobserwować można na poziomie unijnych aktów prawnych dotyczących obrotu instrumentami finansowymi, w szczególności w zakresie pakietu MiFID II[6]. Definicja instrumentów typu ETC zawarta jest w Rozporządzeniu delegowanym Komisji (2016), przyjętym jako regulacyjny standard techniczny, określany na rynku jako „RTS 2". Regulacyjne standardy techniczne mają jednak diametralnie różną charakterystykę prawną w porównaniu do dyrektyw, co jest istotne, by zrozumieć rolę, jaką pełni definicja danego instrumentu sformułowana w takim akcie prawnym w porównaniu do roli dyrektywy (gdzie zawarto definicję funduszu ETF).

Regulacyjne standardy techniczne to akty prawne tzw. „poziomu drugiego", w strukturze unijnych aktów prawa są to zatem akty delegowane. Przygotowywane są w formie wstępnej przez odpowiednie organy nadzoru (w przypadku RTS-ów dotyczących pakietu MiFID II organem właściwy jest ESMA). RTS-y są wydawane na podstawie art. 290 ust. 1 TFUE (2009), który stanowi, że akt ustawodawczy pierwszego poziomu może przekazywać Komisji uprawnienia do przyjęcia aktów o charakterze nieustawodawczym o zasięgu ogólnym, które uzupełniają lub zmieniają niektóre, inne niż istotne, elementy aktu ustawodawczego. Biorąc pod uwagę, że RTS 2 koncentruje się głównie na wymogach przejrzystości, definicja instrumentów typu ETC zawarta w tym akcie prawnym ma ograniczone zastosowanie i trudno uznać tak sformułowaną definicję za efektywną harmonizację na poziomie ogólnym. Z takiego sposobu regulacji nie wynika bowiem konieczność stosowania ww. definicji na potrzeby inne niż przejrzystości transak-

[6] Pakiet MiFID II stanowią na potrzeby niniejszego artykułu: MIFiD II (2014), Rozporządzenie (2014) oraz akty wykonawcze i delegowane wydane na ich podstawie.

cyjnej zawarte w RTS 2. Jest to zatem zdecydowanie inny poziom i zakres regulacji, niż ten odnoszący się do funduszy ETF, których tworzenie i funkcjonowanie w obrocie regulowane jest na podstawie rozporządzeń i dyrektyw.

Pomimo nakreślonych wyżej zastrzeżeń co do zakresu ich zastosowania, przywołane definicje instrumentów typu ETC z RTS 2 nie pozostawiają wątpliwości co do charakteru tych produktów jako instrumentów dłużnych. Podkreślono to również w motywie 6 zdanie pierwsze MiFIR (2014), gdzie stwierdzono wprost, że instrumenty typu ETC należy uznać za instrumenty dłużne ze względu na ich strukturę prawną. Konsekwentnie więc w RTS-ie 2 pojawia się sformułowanie „*obligacje, z wyjątkiem instrumentów typu ETC i ETN*" (np. art. 13 ust. 1 lit. b, art. 18 ust. 3). Taki zabieg, tj. zaliczenie instrumentów typu ETC do instrumentów dłużnych przy jednoczesnym wyłączeniu z kategorii tradycyjnie rozumianych i definiowanych obligacji jest uzasadniony m.in. praktyką obrotu. W szczególności w przypadku notowania obligacji cena tradycyjnie podawana jest w procentach wartości nominalnej (cena czysta). Natomiast instrumenty typu ETC, jako zerokuponowe i oferowane bez dyskonta, notowane są w wartości rynkowej, która to wartość powinna zasadniczo odzwierciedlać wartość aktywa bazowego.

3.2. Instrumenty ETC a produkty strukturyzowane i derywaty towarowe – objaśnienia ESMA

Opisane powyżej przepisy unijne definiujące instrumenty typu ETC, jakkolwiek ograniczone w zastosowaniu, przyczyniły się do sformułowania pewnego standardu rynkowego oraz były podstawą dla unijnych organów nadzoru do sformułowania wskazówek pomocnych przy właściwej klasyfikacji i rozróżnieniu pomiędzy instrumentami ETC a innymi instrumentami giełdowymi, również funkcjonującymi jako instrumenty dłużne. W piśmiennictwie pojawiały się bowiem stanowiska, że instrumenty typu ETC należałoby zaliczyć do kategorii „*securitized derivatives*", z uwagi na podobieństwa z niektórymi instrumentami pochodnymi (Cugia, 2015: 2118–2127). Podobnie, z uwagi na fakt, że część instrumentów typu ETC umożliwia inwestorom wystąpienie do emitenta o wydanie aktywa bazowego[7], istniała potrzeba rozstrzygnięcia, czy na gruncie regulacyjnym nie ma do instrumentów typu ETC zastosowania reżim dotyczący derywatów towarowych.

Powyższe kwestie nie były jasne m.in. dlatego, że opisany we wcześniejszym punkcie RTS 2 odnosi się zasadniczo do instrumentów innych niż instrumenty typu ETC, a w szczególności do tzw. *securitised derivatives* (błędnie przetłuma-

[7] W praktyce ma to miejsce w przypadku niektórych fizycznie zabezpieczonych instrumentów zapewniających ekspozycję na złoto.

czonych w polskiej wersji rozporządzenia jako sekurytyzowane instrumenty pochodne, gdyż w polskiej praktyce instrumenty te odpowiadałyby raczej instrumentom strukturyzowanym) zdefiniowanych w Rozporządzeniu delegowanym Komisji (2016)[8]. Głębsza analiza prowadzi jednak do wniosku, że z przepisów RTS 2 wynika dość wyraźnie, że pomimo niektórych cech wspólnych z *securitised derivatives* instrumenty typu ETC do instrumentów pochodnych się nie zaliczają. Taki podział klasyfikacyjny papierów wartościowych potwierdzała ESMA (2022), która wyjaśniła różnicę pomiędzy instrumentami typu ETC a *securitised derivatives*, stwierdzając jednoznacznie, że instrumenty typu ETC to odrębna kategoria, która nie jest objęta definicją towarowych instrumentów pochodnych. ESMA zajęła jednoznaczne stanowisko, zgodnie z którym instrumenty ETC należy bowiem zakwalifikować jako zbywalne papiery wartościowe, takie jak obligacje i inne formy sekurytyzowanych wierzytelności (*bonds or other forms of securitised debt*) w rozumieniu przepisu art. 4 ust. 1 pkt 44 lit. b MiFID II. W ocenie ESMA kwalifikacji tej nie zmienia powiązanie wartości instrumentu typu ETC z wartością aktywa bazowego ani to, że instrument ten pasywnie naśladuje dany indeks towarowy. To stanowisko ESMA, wyjaśnia pewne wątpliwości interpretacyjne i kwalifikacyjne w kontekście instrumentów typu ETC. Dzięki temu łatwiej jest harmonizować obrót tymi instrumentami, choć oczywiście w pewnym ograniczonym zakresie.

Podsumowując, instrumenty typu ETC należy traktować na gruncie pakietu MiFID II jako instrumenty dłużne, inne jednak od klasycznych obligacji, instrumentów strukturyzowanych czy też derywatów towarowych. Taka interpretacja, potwierdzona przez ESMA, znajduje również odzwierciedlenie w praktyce obrotu. Największe giełdy europejskie wyraźnie rozróżniają instrumenty pochodne (w tym towarowe) oraz instrumenty typu ETC, zaliczając te ostatnie do odrębnej kategorii[9].

4. OCHRONA INWESTORÓW PRZED RYZYKIEM INWESTOWANIA W INSTRUMENTY TYPU ETC

4.1. Ryzyko inwestowania w instrument typu ETC w porównaniu do funduszy ETF

W literaturze podkreśla się, że ryzyko inwestowania w instrumenty finansowe typu ETC jest pochodną kilku aspektów związanych z: ich formą prawną, celem inwestycyjnym, zasadami obrotu oraz ekspozycją inwestycyjną (Miziołek, 2024: 102). Z uwagi na to, że emitenci wprowadzanych do obrotu w Unii Europejskiej

[8] W załączniku nr III i tabeli 4.1.

[9] Takie rozróżnienie znajduje się zarówno na poziomie regulaminów, jak i prezentacji poszczególnych grup instrumentów m.in. na Deutsche Börse Xetra, Borsa Italiana czy giełdach grupy Euronext.

instrumentów typu ETC zobowiązani są do sporządzania prospektów emisyjnych zgodnie z Rozporządzeniem (2017), w dokumentach tych znaleźć można obszerne informacje o ryzykach związanych z inwestowaniem w tego typu instrumenty. W przypadku ryzyka związanego ściśle z inwestowaniem w dany instrument bazowy, które jest specyficzne dla inwestycji na rynku towarowym, ma charakter ekonomiczny i została już szeroko opisana w literaturze przedmiotu (Fassas, 2012: 127–140).

Z perspektywy regulacyjnej warto natomiast przyjrzeć się ryzyku emitenta, na które to ryzyko, jako kluczowe w przypadku instrumentów typu ETC, zwracają uwagę przedstawiciele organizacji branżowych (EFAMA, 2020b). W przypadku funduszy inwestycyjnych, w której to formie prawnej funkcjonują fundusze typu ETF, ryzyko takie jest ograniczone (a w praktyce niejednokrotnie wyłączone) poprzez szereg mechanizmów i wymogów dotyczących funkcjonowania funduszy inwestycyjnych określonych w unijnych aktach prawnych regulujących zasady funkcjonowania UCITS. Ograniczeniu tego ryzyka służy przede wszystkim wykorzystanie instytucji depozytariusza, któremu na podstawie art. 22 ust. 1 dyrektywy UCITS (2009) powierza się do przechowania aktywa funduszu. Zadania spoczywające na depozytariuszu zostały szczegółowo uregulowane na gruncie przepisów dyrektywy UCITS (2009), która nakłada na ten podmiot szereg obowiązków, służących w szczególności zwiększeniu bezpieczeństwa inwestorów nabywających tytuły uczestnictwa w danym funduszu inwestycyjnym. W literaturze znaleźć można szczegółowe omówienie zasad obowiązujących depozytariuszy i ich ewolucje (Miziołek, 2022: 27–42). Również europejskie organy nadzoru wydały szereg instrumentów prawnych dotyczących obowiązków i roli depozytariusza (ESMA, 2023). Całość unijnych regulacji w tym zakresie zapewnia stosunkowo wysoki standard ochrony inwestora przed ryzykiem niewypłacalności emitenta. Aktywa inwestycyjne funduszu są bowiem powierzone osobnemu podmiotowi, niezależnemu od emitenta, na którym to podmiocie spoczywa szereg dodatkowych obowiązków zwiększających bezpieczeństwo inwestycji.

Obowiązki te dotyczą m.in. ograniczenia narażenia na ryzyko kontrahenta samego funduszu UCITS typu ETF, co ma równie istotne znaczenie z perspektywy inwestorów, tj. nabywców tytułów uczestnictwa w danym funduszu (Grill i in., 2018). Na poziomie dyrektywy UCITS (2009) określono m.in. w jakie instrumenty może inwestować fundusz UCITS i w jakich proporcjach może tego dokonywać. Wymogi te rozwinięto w dyrektywie Komisji (2010), w której wprowadzono szereg mechanizmów służących temu, by mierzyć i ograniczać ryzyka kontrahenta funduszu. Rozwiązania te zawarte są w rozdziale VI dyrektywy i należą do nich w szczególności ustanowienie i pomiar limitów ogólnego narażenia na ryzyko kontrahenta, obowiązek wdrożenia i utrzymywania odpowiedniej polityki zarządzania ryzykiem oraz jej ocenę, monitorowanie i przegląd. W zakresie natomiast inwestowania przez fundusz UCITS typu ETF w instrumenty pochodne –

wykorzystywane do syntetycznej replikacji wskaźników bazowych – wprowadzono w tym zakresie dodatkowe wymogi ostrożnościowe.

Inwestorzy funduszy UCITS typu ETF mogą więc liczyć na to, że opisany wyżej poziom ochrony będzie miał zastosowanie do każdego instrumentu tego typu, niezależnie od emitenta, kraju emisji czy też regulacji danego systemu obrotu. Tak wysoki standard ochrony inwestorów nie ma odzwierciedlenia regulacyjnego na poziomie unijnym w odniesieniu do instrumentów typu ETC, choć instrumenty te niejednokrotnie pełnią podobną do funduszy ETF rolę i często są z tymi funduszami błędnie utożsamiane, również przez profesjonalistów. Dla przykładu niektóre z polskich biur maklerskich swoją ofertę zagranicznych funduszy typu ETF oraz instrumentów typu ETC nazywają zbiorczo „listą funduszy ETF" (www4) lub „ofertą instrumentów ETF" (www5), co wydaje się uproszczeniem zbyt daleko idącym, mając na uwadze opisane wyżej różnice. Przedstawiciele organizacji branżowych zwracają uwagę na brak przejrzystości w prezentowaniu różnic pomiędzy funduszami typu ETF i instrumentami ETP oraz negatywne konsekwencje wynikające z tego dla inwestorów (EFAMA, 2020b).

Brak zharmonizowanych regulacji zapewniających inwestorom, którzy nabywają instrumenty typu ETC ochronę, podobną do funduszy UCITS typu ETF, nie oznacza, że inwestorzy ci pozbawieni są zupełnie rozwiązań zabezpieczających choćby przed ryzykiem kontrahenta. Realizowane jest to jednak na poziomie konstrukcji instrumentu, w ramach stosownych postanowień umownych i w dużej mierze zależy od decyzji emitenta, ewentualnych wymogów prawa krajowego oraz regulacji systemu obrotu, gdzie dokonywany jest obrót danym instrumentem typu ETC. Istotną rolę pełnią też organizacje branżowe, dostarczając informacji o specyfice produktów i ryzykach z tym związanych (EFAMA, 2020a).

4.2. Rozwiązania przyjęte przez emitentów

Emitenci instrumentów ETC, reagując na potrzebę ochrony inwestorów i czerpiąc inspiracje z mechanizmów funduszy ETF, wprowadzili pewien minimalny standard rynkowy dotyczący ograniczania ryzyka emitenta dla tych instrumentów. Służy temu kilka mechanizmów. Zastosowanie tych mechanizmów oraz zakres ich funkcjonowania czy też poziom transparentności w informowaniu o nich zależą przede wszystkim od emitenta, ewentualnie od postanowień regulaminowych danego systemu obrotu. O ile zatem można mówić o istnieniu swoistego nieskodyfikowanego standardu rynkowego, o tyle praktyczne aspekty zastosowania tego standardu różnią się w poszczególnych produktach. Aby porównać dostępne na rynku rozwiązania, wybrano na potrzeby dalszej analizy trzy instrumenty typu ETC, dostępne w obrocie na największym rynku instrumentów

typu ETP w Unii Europejskiej[10] i zapewniające ekspozycję na złoto, będące najpopularniejszym z aktywów bazowych tego typu instrumentów[11]. Po pierwsze, Robal Mint Responsibly Sourced Physical Gold ETC (dalej: RMAU), jako jedyny instrument typu ETC dostępny również (na zasadzie *dual listing*) dla polskich inwestorów na lokalnej giełdzie. Po drugie, XETRA Gold ETC (dalej: Xetra Gold), jako najpopularniejszy i najbardziej płynny instrument tego typu na Deutsche Börse Xetra[12]. Po trzecie, iShares Physical Gold ETC (dalej: SGLN), jako instrument od największego na świecie dostawcy produktów inwestycyjnych tego typu.

O ile w przypadku każdego z tych produktów można mówić o wydzieleniu aktywów inwestycyjnych, istnieniu swoistego depozytariusza czy fizycznym zabezpieczeniu inwestycji, o tyle szczegóły mechanizmów, na podstawie których to jest dokonywane, znacząco się różnią. Dla przykładu, w przypadku RMAU i SGLN możemy mówić o pełnym fizycznym wydzieleniu aktywów, a aktywa te kontrolowane są przez niezależny od emitenta podmiot. Sprawozdania z tych audytów publikowane są natomiast na stronach internetowych emitentów[13]. W przypadku Xetra Gold nie ma informacji o takich audytach, choć emitent publikuje informacje o przechowywanych zasobach złota na swojej stronie internetowej[14]. Inny przykład to instytucja pełniąca funkcję swoistego depozytariusza. Z uwagi na brak zharmonizowanych wymogów dotyczących podmiotu, który mógłby taką funkcję pełnić, emitenci ww. instrumentów przyjmują różne podejście do tej kwestii. W przypadku Royal Mint Responsibly Sourced Physical Gold ETC rolę tę pełni brytyjska mennica państwowa, a emitent podkreśla, że przechowywanie złota w takim podmiocie oraz poza systemem bankowym zwiększa w jego ocenie bezpieczeństwo inwestycji. W przypadku SGLN jest to londyński oddział JPMorgan Chase Bank N.A., a w przypadku Xetra Gold – Clearstream AG, czyli spółka z grupy kapitałowej emitenta. Z uwagi na brak harmonizacji na poziomie europejskim, istotną rolę w zabezpieczeniu inwestorów pełnić może prawo właściwe kraju emisji. Również i w tym wypadku występują pomiędzy ww. instrumentami różnice. SGLN oraz RMAU emitowane są na bazie lokalnych regulacji w Irlandii, podczas gdy Xetra Gold podlega regulacjom niemieckim.

Celem ww. analizy nie jest ocena, które z tych rozwiązań najlepiej zabezpiecza interesy inwestora, ale pokazanie, że brak jednolitego standardu może mieć istotny wpływ na poziom tej ochrony, a rozwiązania w tym zakresie są różne

[10] Na niemieckiej giełdzie w obrocie znajduje się ponad 191 instrumentów typu ETC, ponad 2200 ETF-ów oraz 261 instrumentów typu ETN (dane na dzień 31 marca 2024 r.). Drugim co do wielkości rynkiem europejskim jest LSE, a trzecim SIX Swiss Exchange, przy czym dwie ostatnie giełdy są w krajach pozaunijnych.

[11] Instrumenty typu ETC na złoto są najliczniejsze i najpopularniejsze pod względem obrotów na DB Xetra.

[12] Największe obroty według danych z dnia 31 marca 2024 r. (www6).

[13] Przykładowo (www7).

[14] www8.

i zależą w dużej mierze od decyzji emitenta. Wydaje się zatem, że inwestycja w ETC może wymagać od inwestora stosunkowo większego zaangażowania w analizę szczegółów dotyczących produktu, jego konstrukcji i mechanizmów zastosowanych celem wyłączenia lub zminimalizowania ryzyka emitenta, niż w przypadku funduszy typu ETF, gdzie kwestie te są zasadniczo zharmonizowane.

4.3. Rozwiązania kluczowych giełd europejskich

Ze względu na różnice w konstrukcji instrumentów typu ETC, mimo istnienia minimalnych standardów rynkowych, główne giełdy europejskie różnią się w podejściu do wymogów wprowadzenia tych instrumentów do obrotu. Niektóre giełdy wprowadzają dodatkowe wymogi, aby chronić inwestorów, którzy mogą nie posiadać odpowiednich umiejętności do analizy dokumentacji instrumentu. W artykule opisano zasady obowiązujące na największych giełdach europejskich dla instrumentów typu ETC.

Na głównej europejskiej giełdzie instrumentów typu ETC, Deutsche Börse Xetra, wewnętrzne regulacje obrotu nie przewidują specjalnych wymogów dla tych instrumentów. W regulaminie giełdy instrumenty ETC klasyfikowane są jako część szerszej kategorii ETP, która obejmuje zasadniczo obligacje odzwierciedlające indeksy bazowe (Xetra, 2024). W dodatkowych wytycznych dla segmentu ETF/ETP zdefiniowano natomiast instrumenty typu ETC i ETN, określając klasy aktywów i indeksy bazowe, które reprezentują (Xetra, 2014). Brak jest jednak dodatkowych wymogów dotyczących tego rodzaju instrumentów, a w szczególności nie jest wymagane, by instrumenty te były zabezpieczone bądź by istniały mechanizmy kontroli wydzielenia aktywów inwestycyjnych od aktywów emitenta.

Na rynkach operowanych przez giełdy z grupy Euronext, które przyciągają wielu inwestorów dzięki częściowej harmonizacji wymogów w różnych krajach (m.in. w Amsterdamie, Brukseli, Paryżu i Mediolanie), istnieją specyficzne regulacje dla produktów typu ETC. Zgodnie ze zharmonizowanym regulaminem stosowanym przez większość platform tej grupy, wprowadzone są definicje dla instrumentów ETN, ETV i ETF, ale nie używają one zbiorczej kategorii ETP ani nie definiują odrębnie instrumentów typu ETC (Euronext, 2020). Instrumenty typu ETN muszą być emitowane przez instytucje kredytowe lub firmy inwestycyjne, podczas gdy ETV mogą być emitowane przez spółki specjalnego przeznaczenia. Wspólnym wymogiem dla obu jest gwarantowanie ekspozycji na wskaźnik referencyjny aktualizowany codziennie oraz umożliwienie regularnej kreacji i umarzania instrumentów. Z uwagi na znaczący udział wielostronnych platform obrotu (tj. platform typu MTF, w Polsce funkcjonujących jako Alternatywne Systemy Obrotu), w obrocie instrumentami ETP, grupa Euronext wprowadziła specyficzne wymogi dla obrotu tymi instrumentami na takich platformach, zwłaszcza dla plat-

formy Euronext MTF Paris. Te wymogi odbiegają od standardów zharmonizowanych, przede wszystkim w zakresie definicji produktów. Regulamin platformy MTF w Paryżu zawiera dedykowany rozdział dla instrumentów typu ETC (i ETN), gdzie instrumenty te umieszczono razem z funduszami typu ETF w jednej kategorii produktowej (Euronext, 2022). Definiując instrumenty typu ETC, odwołano się natomiast do definicji z pakietu MiFID II (a zatem do RTS 2, wspomnianego we wcześniejszej części artykułu). W przypadku tego rynku instrumenty typu ETC wprowadzane są do obrotu na zasadzie *dual listing*, nie ma zatem dodatkowych wymogów, skupiono się na tym, aby były to instrumenty już dostępne w obrocie na innych rynkach.

W kontekście europejskich giełd obrotu produktami ETP, oprócz wcześniej wymienionych giełd Unii Europejskiej, warto uwzględnić giełdę w Zurychu – SIX Swiss Exchange, na której notowane jest ponad 1700 takich instrumentów. Zasady dotyczące wprowadzenia instrumentów typu ETP do obrotu określa dedykowany dokument z 2020 r., aktualizowany w 2024 r. (SIX, 2024). Ciekawostką jest brak odrębnej definicji instrumentów typu ETC na SIX Swiss Exchange, natomiast odróżnia się tam fundusze typu ETF od instrumentów typu ETP. W kategorii ETP notowane są m.in. instrumenty typu ETC, często w ramach *dual listing*[15]. Wprowadzone tam wymogi dotyczą uzależnienia wyników instrumentu od wskaźnika referencyjnego oraz zabezpieczania instrumentów ETC. Niemniej jednak nie ma wymogu udostępniania informacji o ewentualnej ocenie mechanizmów zabezpieczeń przez niezależnego audytora. W rezultacie na giełdzie szwajcarskiej instrumenty ETC uwzględnione są w szerszej kategorii ETP, kategoria ta jednak nie obejmuje funduszy typu ETF.

Powyższe przykłady podkreślają zróżnicowane podejście europejskich giełd do klasyfikacji i definicji instrumentów ETC, co skutkuje wyraźnymi rozbieżnościami. Mimo istnienia pewnych wspólnych cech w podejściu tych giełd, nie można nie zauważyć istniejących różnic. Różnice te stają się szczególnie widoczne na przykładzie instrumentu Invesco Physical Gold ETC, który jest największym europejskim instrumentem ETC pod względem aktywów pod zarządzaniem. Na Borsa Italiana jest on klasyfikowany w kategorii „ETCs and ETNs". Tymczasem na SIX Swiss Exchange zalicza się go do instrumentów typu ETP, ponieważ specyficzna kategoria dla instrumentów ETC tam nie istnieje. Natomiast na Deutsche Boerse Xetra, Invesco Physical Gold ETC jest przedstawiany jako instrument ETC, spełniający wymogi dedykowanej definicji dla takich instrumentów w ramach szerszej kategorii instrumentów ETP.

Analizując klasyfikację instrumentów typu ETC na europejskich giełdach, ważne jest zrozumienie konsekwencji tych rozbieżności dla ochrony inwestorów. Widać różne podejścia w zakresie wymogów dotyczących konstrukcji produktów.

[15] Np. Invesco Physical Gold ETC, który notowany jest również na Deutsche Börse Xetra.

Głównie można wyróżnić dwa modele: pierwszy wymaga od emitenta wydzielenia i pełnego zabezpieczenia aktywów inwestycyjnych, drugi nie kładzie nacisku na tę kwestię na poziomie regulacyjnym. W praktyce każdy system obrotu korzysta z animatora rynku, co gwarantuje płynność tych instrumentów i zbliżenie ich ceny do wartości odpowiadających im aktywów.

5. INSTRUMENTY ETC NA RYNKU POLSKIM

5.1. Wymogi w zakresie dopuszczenia instrumentów ETC do obrotu

Mając na uwadze przedstawione powyżej zasady obrotu instrumentami typu ETC na największych europejskich giełdach, można przejść do analizy rozwiązań krajowych, zawartych w regulacjach Giełdy Papierów Wartościowych w Warszawie. Warto jedynie nadmienić, że obecnie rozwiązania te znajdą zastosowanie wyłącznie do instrumentów zagranicznych, wprowadzonych w Polsce do obrotu na zasadzie *dual listing*. Nie powstały bowiem dotychczas instrumenty typu ETC wyemitowane lokalnie.

W zakresie zatem zagranicznych (i w przyszłości potencjalnie również krajowych) instrumentów ETC wprowadzanych o obrotu na GPW przede wszystkim wprowadzono wymóg, by instrumenty te spełniały wymienioną wcześniej definicję z RTSu 2. Instrumenty typu ETC będące w obrocie na warszawskiej giełdzie będą zatem zawsze instrumentami pasywnymi, gdyż definicja ta wymaga, aby cena instrumentu typu ETC związana była z wynikami instrumentu bazowego oraz pasywnie podążała za wynikami towaru lub indeksami towarów, do których się odnosi. Chociaż nie wprowadzono wymogu fizycznego zabezpieczenia instrumentów ETC, zastosowano inne rozwiązanie. Wprowadzono szereg wymogów o charakterze informacyjnym, które zawarto w §17b Regulaminu Giełdy. Wymogi te rozszerzono w Szczegółowych Zasadach Obrotu Giełdowego (dalej: SZOG), w szczególności w §7a, gdzie określono, jakie informacje (stanowiące realizację wymogów z Regulaminu Giełdy) powinny być zawarte we wniosku emitenta o dopuszczenie instrumentów typu ETC do obrotu. Informacje, które emitent zobowiązany jest podać do wiadomości, dotyczą istotnych z perspektywy bezpieczeństwa inwestora kwestii. W szczególności chodzi o informacje pozwalające inwestorom na ocenę aktywów emitenta, jego sytuacji finansowej oraz praw związanych z instrumentami ETC. Dodatkowo, co w przypadku tych instrumentów wydaje się kluczowe, emitent zobowiązany jest udostępnić informacje o tym czy, a jeżeli tak, to w jakim zakresie stosowane są przez niego mechanizmy zapewniające w szczególności pasywny charakter instrumentu (powiązanie ceny z aktywem bazowym), wydzielenie aktywów inwestycyjnych czy przeznaczenie środków pozyskanych z emisji wyłącznie na nabycie aktywów bazowych.

Ponadto, Zarząd Giełdy, podejmując decyzje o dopuszczeniu instrumentów ETC do obrotu, stosuje standardowe kryteria określone w §10 Regulaminu Giełdy, które dotyczą wszystkich instrumentów finansowych i w dużej mierze odnoszą się do sytuacji emitenta. W szczególności konieczne jest uwzględnienie sytuacji finansowej emitenta, jego perspektyw rozwojowych oraz doświadczenia i kwalifikacji członków organów zarządzających. Taki wymóg może przyczynić się do zwiększenia bezpieczeństwa obrotu, ponieważ wymaga on dodatkowej oceny emitenta. Z drugiej jednak strony, w przypadku emitentów instrumentów ETC, podmioty te są zazwyczaj spółkami prawa handlowego (Cugia, 2015: 2118–2127), niejednokrotnie nieposiadającymi dłuższej historii czy też statusu dużych instytucji finansowych (lub spółek należących do ich grupy kapitałowej), jak ma to miejsce w przypadku emitentów instrumentów strukturyzowanych (emitowanych często przez banki). Również sytuacja finansowa emitentów instrumentów typu ETC, którzy zazwyczaj prowadzą działalność skupiającą się wyłącznie na emitowaniu tego typu produktów, istotnie odbiega od sytuacji finansowej instytucji finansowych emitujących instrumenty strukturyzowane. W takiej sytuacji może nie wydawać się celowe skupianie się na analizie sytuacji finansowej emitenta przy podejmowaniu decyzji o wprowadzeniu danego instrumentu do obrotu, bo może to zawęzić paletę instrumentów do tych emitowanych przez największe instytucje finansowe. Możliwe, że bardziej odpowiednie i wystarczające byłoby skoncentrowanie się na konstrukcji samego instrumentu i zaimplementowanych w nim mechanizmach ochrony inwestorów.

Podsumowując powyższe rozwiązania regulaminowe związane z zapewnieniem bezpieczeństwa inwestorów, można zauważyć, że GPW posłużyła się w dużej mierze rozwiązaniem autorskim. Z jednej strony nie wprowadzono wprost wymogu fizycznego zabezpieczenia instrumentu, jak ma to miejsce na niektórych zagranicznych rynkach, pozostawiając (potencjalną przynajmniej) możliwość wprowadzenia instrumentów, które tak nie funkcjonują. W praktyce wydaje się wątpliwe, by dopuszczono do obrotu instrumenty ETC, które nie są pasywne lub fizycznie zabezpieczone, choćby z tego powodu, że na rynku europejskim są one mało popularne. Z drugiej strony – niezależnie od specyfiki instrumentu i praktyki dotyczącej emitentów, GPW ocenia – przynajmniej w regulaminowym zakresie – sytuację finansową i biznesową emitenta. Z pewnością zwiększa to w pewnym zakresie bezpieczeństwo inwestorów. Z drugiej jednak strony – może w praktyce uniemożliwić wprowadzenie do obrotu niektórych interesujących instrumentów typu ETC, w przypadku których emitenci to nowo utworzone spółki celowe z krótką historią działalności. Ma to znaczenie szczególnie w sytuacji, gdy za emisję danego instrumentu odpowiada np. międzynarodowy fundusz inwestycyjny o długiej historii i uznanej renomie, którego sytuacja finansowa – jak grupy kapitałowej – nie budzi zastrzeżeń. Natomiast na potrzeby emisji danego instrumentu ETC, opartego o konkretne aktywa, fundusz ten powołuje odrębną spółkę celową.

Pozytywnie ocenić należy wprowadzenie dodatkowych wymogów informacyjnych. Ma to znaczenie w szczególności z perspektywy inwestorów indywidualnych, dla których analiza prospektu emisyjnego czy też licznych innych dokumentów źródłowych celem identyfikacji kluczowych aspektów bezpieczeństwa mogłaby być utrudniona. Prospekty informacyjne są obszerne i zredagowane w specyficzny sposób, a stosowane mechanizmy funkcjonują na bazie prawa obcego, co tym bardziej utrudnia ocenę ryzyka z nimi związanych.

5.2. Wymogi w zakresie dopuszczenia instrumentów ETC do obrotu

Warto też zwrócić uwagę na zasady, na jakich odbywać się będzie obrót instrumentami typu ETC na warszawskiej giełdzie. Z tej perspektywy kierowano się zasadniczo praktyką innych rynków i zasady obrotu upodobniono do zasad określających obrót funduszami typu ETF. W szczególności, o ile instrumenty typu ETC są instrumentami dłużnymi, wyłączono je na potrzeby obrotu z kategorii obligacji. Sytuacja taka ma uzasadnienie praktyczne – obligacje notowane są bowiem na innych zasadach. Podkreślono również odrębność, z perspektywy obrotu, instrumentów typu ETC od instrumentów strukturyzowanych, których obrót organizowany jest w tzw. Systemie Animatora Rynku.

Obrót instrumentami ETC odbywa się na podstawie §82a SZOG w systemie notowań ciągłych, a warunki tego obrotu są zbliżone do tych mających zastosowanie do ETF-ów[16]. Podobnie do innych giełd europejskich, obrót ten odbywa się przy udziale animatora rynku, a zasady działalności animatora określono zasadniczo identycznie, jak w przypadku ETF-ów, w szczególności, jeśli chodzi o obowiązki w zakresie obecności animatora w arkuszu zleceń (co najmniej 80% sesji) oraz maksymalne *spready*, które animator zobowiązany jest utrzymywać (tj. nie większe niż 1,5%)[17].

Z perspektywy systemu obrotu sytuacja podobna jest do funduszy typu ETF, gdyż obrót instrumentami ETC możliwy jest wyłącznie na rynku regulowanym. Nie przewidziano możliwości obrotu instrumentami ETC w alternatywnych systemach obrotu. W szczególności zastanawiać może brak możliwości wprowadzania do obrotu instrumentów typu ETC na GlobalConnect, która to platforma służy zasadniczo obrotowi instrumentami zagranicznymi, gdzie z wykorzystaniem animatora rynku można wprowadzić do obrotu instrumenty bez zgody emitenta. Rozwiązanie, w którym instrumenty typu ETC wprowadzane są do obrotu w alternatywnym systemie obrotu bez zgody emitenta, funkcjonuje na rynkach zagranicznych. Dla przykładu można wymienić BSE w Bułgarii, gdzie notowane są liczne

[16] Porównaj §79 SZOG.
[17] Załącznik nr 11 i 12 SZOG.

fundusze typu ETF oraz kilka instrumentów typu ETC[18]. Obecne brzmienie regulaminu GlobalConnect wyraźnie ogranicza jednak do akcji spółek posiadających status „*blue chip*".

PODSUMOWANIE

Instrumenty typu ETC do niedawna jeszcze traktowane były w literaturze przedmiotu jako innowacje finansowe (Marszk, 2017). Rozwój popularności produktów pasywnego inwestowania połączony z ograniczeniami wynikającymi z unijnych przepisów dotyczących funkcjonowania funduszy inwestycyjnych (a zatem i funduszy typu ETF) spowodował istotny wzrost zarówno liczby instrumentów ETC pozostających w obrocie na giełdach Unii Europejskiej, jak i aktywów zainwestowanych w te instrumenty (EFAMA, 2020a). Z perspektywy regulacyjnej, chociaż instrumenty typu ETC funkcjonują w obrocie na zasadach podobnych do funduszy typu ETF i pełnią podobne funkcje, są jednak zasadniczo różne pod względem formy prawnej, a co za tym idzie, w pewnym zakresie różnią się też ryzykiem inwestycyjnym (w szczególności w zakresie ryzyka emitenta). W przeciwieństwie do ETF-ów, nie istnieją zharmonizowane przepisy określające zasady tworzenia, funkcjonowania czy obrotu instrumentami typu ETC.

Dokonana w artykule analiza regulacyjna oraz porównawcza wykazała, że taki stan rzeczy skutkuje sytuacją, w której podobne instrumenty charakteryzują się potencjalnie różnym poziomem ryzyka, co ma znaczenie w szczególności z perspektywy ryzyka niewypłacalności emitenta. Sytuacja ta nie jest bez znaczenia dla bezpieczeństwa inwestorów, którzy – co podkreślają organizacje branżowe – niejednokrotnie nie potrafią dostrzec doniosłości różnic pomiędzy konstrukcją funduszu inwestycyjnego (ETF) a zerokuponowej, zabezpieczonej obligacji (ETC). Odnosząc to do postawionej we wstępie hipotezy o potrzebie dalszej harmonizacji instrumentów typu ETC, wydaje się, że hipoteza taka jest jak najbardziej uzasadniona.

Kluczowy jest jednak ewentualny zakres przyszłej regulacji i harmonizacji. Po przeanalizowaniu bowiem mechanizmów stosowanych przez emitentów oraz platformy obrotu, na których dostępne są instrumenty typu ETC nie wydaje się uprawnione twierdzenie, że z uwagi na niezharmonizowany charakter instrumenty ETC są instrumentami o wysokim ryzyku inwestycyjnym, gdyż na rynku wykształciły się pewne standardy konstrukcji instrumentu i mechanizmy istotnie ograniczające to ryzyko. Rozwiązania te sprawiają, że inwestorzy nabywający instrumenty typu ETC w praktyce są niejednokrotnie w kluczowych aspektach chronieni na poziomie zbliżonym do inwestorów w ETF-y. Nie są to jednak uniwer-

[18] Tak funkcjonuje np. platforma MTF BSE International, prowadzona przez Bulgarian Stock Exchange (www9).

salne i zagwarantowane regulacyjnie standardy, na których mogliby polegać inwestorzy. Istnienie jednak tych mechanizmów i zakres ich funkcjonowania pozostaje w gestii emitentów oraz poszczególnych giełd i nie ma w tym zakresie całkowitej spójności.

Przeprowadzona na potrzeby niniejszego artykułu analiza potwierdza słuszność rekomendacji formułowanej przez organizacje branżowe w zakresie ujednolicenia terminologicznego instrumentów pasywnego inwestowania. Jak bowiem pokazuje przeprowadzona analiza, rozbieżności w tym zakresie mogą wprowadzać w błąd zarówno inwestorów indywidualnych, jak i nawet profesjonalistów. Tym bardziej zasadne jest – na co wskazano w postawionej hipotezie badawczej – rozważenie dalszej harmonizacji instrumentów ETC oraz innych wchodzących w skład grupy instrumentów typu ETF. Takie działanie regulacyjne powinno pociągać za sobą harmonizację podstawowych zasad konstrukcji danych instrumentów i ich obrotu, co ułatwiłoby inwestorom podejmowanie świadomych decyzji inwestycyjnych. Formułując takie postulaty warto jednak mieć na uwadze, że o ile harmonizacja nazewnictwa wydaje się pożądana, o tyle w zakresie konstrukcji instrumentów czy zasad obrotu może być ona trudna do osiągnięcia w takim stopniu, jak w przypadku funduszy inwestycyjnych typu ETF. Te ostatnie ze względów regulacyjnych umożliwiają ekspozycję zasadniczo na dwie klasy aktywów: akcje i obligacje. W przypadku instrumentów typu ETC paleta aktywów jest dużo szersza, a poszczególne klasy aktywów istotnie się różnią. Dla przykładu można zwrócić uwagę na zupełną odmienność zasad, na jakich odbywa się fizyczne zabezpieczenie instrumentu dla złota i uprawnień do emisji CO_2[19]. Sformułowanie zatem szczegółowych wytycznych na poziomie europejskim, które objęłyby w sposób kompleksowy wszystkie potencjalne aktywa bazowe nie wydaje się realne.

Oceniając rozwiązania przyjęte w zakresie obrotu instrumentami typu ETC przez GPW w Warszawie, warto zwrócić uwagę, że w wprowadzone regulaminowo wymogi zdają się chronić inwestorów w nieco szerszym zakresie niż niektóre giełdy krajów unijnych, co zasługuje na aprobatę. Konieczność szczegółowej analizy i oceny sytuacji emitenta może jednak ograniczać wprowadzanie do obrotu nowych instrumentów ETC, których emitenci (pomimo bycia nieraz częścią większej grupy kapitałowej) to nowo utworzone spółki celowe, powstałe celem emisji danego instrumentu. Pojawia się zatem pytanie, czy tak sformułowane regulacje nie są nadmiarowe. Ocena będzie jednak możliwa dopiero w dłuższej perspektywie, na razie bowiem dopuszczono do obrotu jeden instrument, który cieszy się sporym, na tle innych podobnych produktów, zainteresowaniem inwestorów (Paćkowski, 2023). Istotnym ograniczeniem rozwoju instrumentów ETC w Polsce może też okazać się brak możliwości notowania instrumentów typu ETC

[19] Ekspozycję na tę klasę aktywów oferuje m.in. SparkChange Physical Carbon EUA ETC (www10).

w alternatywnym systemie obrotu. Rekomendowane byłoby zatem umożliwienie obrotu instrumentami typu ETC również np. GlobalConnect, gdzie – podobnie do akcji spółek zagranicznych i wzorem innych giełd regionu – można byłoby wprowadzać do obrotu więcej takich instrumentów bez zgody ich emitentów, powiększając tym samym ofertę dla polskich inwestorów.

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INSTRUMENTY TYPU ETC JAKO NOWE INSTRUMENTY FINANSOWE NA GPW – WYZWANIA REGULACYJNE W ASPEKCIE PORÓWNAWCZYM

Cel artykułu. W niniejszym artykule podjęto tematykę instrumentów finansowych typu ETC (ang. *Exchange-Traded Commodities*). Przyczynkiem do tej analizy było wprowadzenie pierwszego takiego instrumentu do obrotu na Giełdzie Papierów Wartościowych w Warszawie w sierpniu 2023 r., co stanowiło znaczący krok w ewolucji rynku kapitałowego w Polsce. Koncentrując się na regulacjach wprowadzonych przez GPW w Warszawie, przeanalizowano adekwatność środków mających na celu ochronę nabywców instrumentów typu ETC. Analiza ta objęła również perspektywę i rynek europejski, dostarczając porównawczego spojrzenia na krajowe rozwiązania. Przeanalizowano konstrukcję instrumentu, ramy regulacyjne, genezę oraz zasady działania ETC, rozróżniając te instrumenty od funduszy typu ETF. Pomimo podobieństw, instrumenty typu ETC różnią się bowiem znacznie pod względem struktury i charakteru prawnego od funduszy typu ETF. W szczególności nie są one zharmonizowane na poziomie europejskim, co wpływa na ochronę inwestorów. Ta różnica skłania do postawienia pytań dotyczących skuteczności istniejących

regulacji dla zapewnienia bezpieczeństwa inwestorów i pewności obrotu, nie tylko na gruncie Polski.

Metoda badawcza. Aby odpowiedzieć na te pytania, w podjętej analizie dokonano przeglądu literatury, analizy aktów prawnych oraz danych rynkowych. Zastosowano analizę porównawczą, aby zbadać funkcję w obrocie, konstrukcję oraz aspekty regulacyjne funkcjonowania instrumentów typu ETC w porównaniu do ETF-ów, ze szczególnym uwzględnieniem mechanizmów ochrony inwestorów. Dodatkowo, porównano regulacje obowiązujące w zakresie instrumentów typu ETC na kluczowych giełdach europejskich w odniesieniu do rozwiązań wdrożonych przez Giełdę Papierów Wartościowych w Warszawie.

Wyniki badań. Przeprowadzona analiza prowadzi do wniosku, że brak zharmonizowanych regulacji dla instrumentów typu ETC stanowi istotne wyzwanie dla inwestorów. W praktyce są oni, niejednokrotnie w kluczowych aspektach, chronieni na poziomie zbliżonym do inwestorów w ETF-y. Nie są to jednak uniwersalne i zagwarantowane regulacyjnie standardy, na których inwestorzy mogliby polegać. Rekomendowane jest zatem ujednolicenie terminologiczne instrumentów pasywnego inwestowania, które powinno pociągać za sobą harmonizację podstawowych zasad konstrukcji danych instrumentów i ich obrotu. W odniesieniu do instrumentów typu ETC na GPW w Warszawie, wprowadzone rozwiązania przewyższają pod względem ochrony inwestorów odpowiedniki obserwowane na niektórych innych rynkach UE. Niemniej jednak, postulowane są dalsze zmiany regulaminowe, który mogłaby przyczynić się do dalszego rozwoju rynku instrumentów typu ETC w Polsce.

Słowa kluczowe: ETC, ETF, Exchange Traded Commodities, inwestowanie pasywne, inwestowanie indeksowe.

JEL Class: K20, G15, G32.

Zakończenie recenzji/ End of review: 07.06.2024
Przyjęto/Accepted: 13.06.2024
Opublikowano/Published: 20.06.2024

• F I N A N S E I P R A W O F I N A N S O W E •
• Journal of Finance and Financial Law •

czerwiec/June 2024 ● vol. 2(42): 153–169

DEVELOPMENT OF FACTORING SERVICES IN POLAND IN THE YEARS 2011-2022

Sandra Walkusz[*], **Krzysztof Dziadek**[**]

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https://doi.org/10.18778/2391-6478.2.42.08

DEVELOPMENT OF FACTORING SERVICES IN POLAND IN THE YEARS 2011-2022

ABSTRACT

The purpose of the article. The aim of the article is to analyze the market of factoring services in Poland in the years 2011-2022 and to evaluate the impact of selected macro- and microeconomic factors on the development of factoring in Poland during this period. For the purposes of the study the adopted hypothesis regraded the existence of a positive correlation between the value of factoring turnovers and the gross domestic product; revenues from the sale of products, goods, and services; liabilities arising from deliveries and services; and short-term liabilities from loans and borrowings.
Methodology. The sources of data on the factoring services market were statistical data from the Polish Factors Association (PFA) and the Central Statistical Office (CSO). Pearson correlation coefficients were used to measure dependencies. Meanwhile, to examine the significance of the obtained results, the t-Student test statistic was employed.
Results of the research. The study results confirm the growing popularity of factoring as a source of financing for economic activities. In the period 2011-2022, the number of financed invoices and the value of receivables purchased by factors increased fourfold. The conducted analysis of correlation coefficients revealed a very strong dependence between the value of factoring receivables and all analyzed economic factors (all coefficients had a value above 0.9). The results of the t-Student test suggest that all these dependencies were statistically significant.
Keywords: factoring, factoring services, determinants of factoring, GDP (Gross Domestic Product), revenues, trade receivables, credits and loans.
JEL Class: G23, G32.

[*] Student, Wydział Nauk Ekonomicznych, Politechnika Koszalińska, e-mail: sander69124@gmail.com
[**] PhD, Wydział Nauk Ekonomicznych, Politechnika Koszalińska, e-mail: krzysztof.dziadek@tu.koszalin.pl, https://orcid.org/0000-0002-1305-8960

INTRODUCTION

Factoring emerged in Europe in the 1960s and quickly gained popularity. Currently, as much as 65% of all receivables worldwide are serviced by banks and factoring companies in Europe (www1). According to FCI (Factors Chain International) data, the turnover of factoring in Europe in 2022 amounted to 3.659 billion euros. It is estimated that over the past twenty years, the volume of factoring services has been increasing annually by 8.68% (www2).

Factoring is more popular in countries with higher levels of economic development and well-established credit information bureaus. This form of short-term financing can also be beneficial in countries with imperfect debt enforcement mechanisms because, in certain cases, factoring assumes the risk of non-payment by customers (Klapper, 2006).

In the literature, it is often pointed out that factoring is frequently directed towards small and medium-sized enterprises (SMEs) because it allows for the immediate receipt of cash without the need for collateralizing a loan or increasing the company's debt burden (Summers and Wilson, 2000). This form of financing is also attractive to rapidly growing businesses planning to make significant capital investments (Asselbergh, 2002).

Many suppliers use factoring to mitigate the effects of trade credit (Tian et al., 2020). Previous research confirms that a company with limited cash resources can improve its cash flows, profitability, and financial liquidity by using factoring (Banerjee, 2003). The benefits of factoring are noticeable not only for the company utilizing factoring but also for all participants in the supply chain (Tian et al., 2020).

There are numerous criteria that businesses consider when choosing sources of financing for their economic activities. The primary factors influencing the choice of capital include the overall attractiveness, which encompasses factors like availability, flexibility, and cost. In times of crisis, as witnessed during the COVID-19 pandemic, alternative sources of financing gain more popularity because the entire economy, including businesses in general, faces financial challenges. Consequently, there is a need to explore alternative sources of financing, among which factoring undoubtedly plays a significant role.

The objective of the article is to analyze the market of factoring services in Poland from 2011 to 2022 and to assess the impact of selected macro- and microeconomic factors on the development of factoring in Poland during this period. The theoretical considerations introduce the essence and basic types of factoring, outline advantages and disadvantages of factoring, and present the factors determining the utilization of factoring. The research section provides an analysis on the influence of selected economic factors on the turnover of factoring in Poland.

1. THE ESSENCE OF FACTORING

The concept of factoring is related to receivables arising from the sale of products. Factoring itself can be defined as an intermediary activity involving the resale of receivables before their due date (Popović, 2018). A factoring receivable should be undisputed, free from third-party claims, and have a short maturity period – from 14 to 210 days (Zawadzka and Paluch, 2011).

Factoring in Poland is treated as a service in which the factor (bank or factoring institution) acquires undisputed and short-term receivables from the factorant (supplier or creditor) before their due date, minus a fee for this service, either without assuming the risk of non-payment or with the assumption of such risk (Wejer-Kudełko and Ogrodnik, 2019). Factoring is, therefore, a form of short-term receivables management. The course of the factoring process is presented in Figure 1.

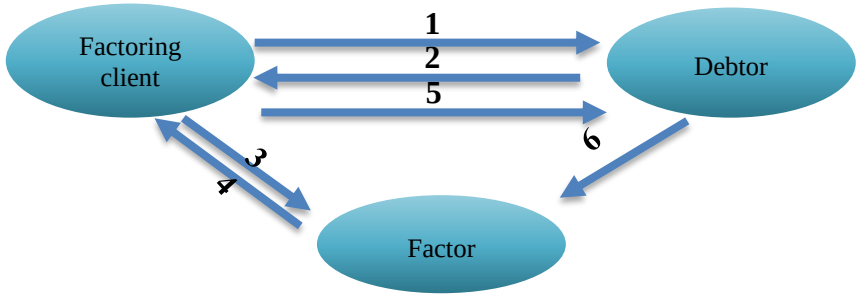


Figure 1. The course of factoring process

Source: Popović (2018).

The entrepreneur sells goods to the customer and issues an invoice with a deferred payment term (1). Subsequently, the customer is obligated to settle the invoice after a specified number of days (2). The entrepreneur sells their receivable to the factor (3), and the factor pays the amount of the receivable, reduced by its fee (4). The entrepreneur (seller) is required to inform their customer about the change of the creditor (5). The final stage of the factoring process is the payment made by the customer for the purchased goods to the factoring institution or the bank after a specified number of days (6) (Popović, 2018).

The process of choosing a factor should be accompanied by a thorough analysis of information about the factoring company. There is a wide variety of factoring contract offers in the market. Businesses must grapple with the decision

of whom to entrust their receivables to: a factoring company or a bank (Jando, 2016).

2. TYPES OF FACTORING AND THE RISK OF DEBTOR NON-PAYMENT

Factoring can be classified based on various criteria (Rogacka-Łukasik, 2011).

The primary criterion is the classification based on the allocation of risk: non-recourse factoring, recourse factoring, and mixed factoring.

Non-recourse factoring entails that the risk of the buyer's non-payment of goods will be fully borne by the factor. Simultaneously, in the event of non-payment of the receivable, the factor is deprived of the possibility of recovering the funds transferred to the client.

Recourse factoring gives the factoring company the right to seek payment from the client if the buyer of the goods fails to fulfill the obligation to pay for the invoice (Soufani, 2002). Recourse factoring is dedicated to businesses that are well-acquainted with their customers and can assume the risk themselves (Wejer-Kudełko and Ogrodnik, 2019).

Mixed factoring combines characteristics of both recourse and non-recourse factoring. In this case, the risk of debtor non-payment is shared between the factor and the client (factorant), with the factor being responsible for this risk only up to a specified value.

Klapper's research (2006) indicates that non-recourse factoring is more common in economically developed countries. On the other hand, Kouvelis and Xu (2021) argue that the benefits of factoring depend, among other things, on the credit rating assessment of the supplier and the buyer. Recourse factoring is chosen when the supplier has a high credit rating, while non-recourse factoring is preferred when the supplier's credit rating falls within a certain range (low but above a threshold). Additionally, when the buyer has a higher credit rating, non-recourse factoring is more frequently selected.

3. ADVANTAGES AND DISADVANTAGES OF FACTORING

At present, there is no specific legal concept of a factoring agreement in the Polish law, and therefore it is referred to as an unnamed agreement. Consequently, there are no uniform regulations that standardize the relationships involved in the factoring process. The permissibility of entering into such agreements arises from the general principle of contracting agreements.

Factoring is often compared to sales agreements and loan agreements. Kouvelis and Xu (2021) classify non-recourse factoring as the sale of receivables, while recourse factoring is considered a loan agreement, as the recovery of receivables represents a potential liability to the supplier. Such classifications may

not be recognized in the Polish law because the subject matter of a loan agreement and a sales agreement cannot be receivables.

The primary advantage of factoring is the ability to manage receivables. One of the positive outcomes of using factoring in businesses is the elimination of payment delays, increased cash flow turnover, and improved financial liquidity (Wejer-Kudełko and Ogrodnik, 2019). The use of factoring also enables businesses to provide their customers with more favorable payment terms for deliveries and services (Nowak and Przybylski, 2017).

The ability to manage receivables is closely related to the financial function, which involves increasing cash in the business without a simultaneous increase in debt. As a result, the client (factorant) can allocate available funds for various purposes and improve their credit rating (Marcysiak and Marcysiak, 2015).

Another function of factoring is the administrative function. This function primarily involves managing the settlements of transferred receivables or paid obligations of the client (factorant). Factoring also allows for the minimization of the risk associated with granting trade credit and the risk of dealing with unreliable suppliers (Kreczmańska-Gigol, 2013).

Transferring the risk to the financial institution that occurs during the conclusion of factoring agreements is associated with a protective function. In addition to assuming the risk of debtor non-payment, the protective function may involve assessing the creditworthiness of debtors and establishing limits on the value of trade credit (Kreczmańska-Gigol, 2013).

Factoring agreements can also include additional services (the service function of factoring). These services may include: managing settlements with the debtor of the client, sending reminders to customers who are delaying payment of trade credit, financial and accounting advisory, tax advisory, industry analysis, and more (Kreczmańska-Gigol, 2013).

The use of factoring comes with certain negative consequences, which include high administrative service costs (interest, commission, margin). Another issue relates to a change in the way settlements are made with customers, which can potentially weaken business relationships. Additional challenges may include the need to train employees involved in factoring-related transactions and the necessity to alter document processing procedures (Wejer-Kudełko and Ogrodnik, 2019; Rutkowski, 2016).

4. FACTORS DETERMINING THE UTILIZATION OF FACTORING

Various authors point to factors that influence an increase or decrease in interest in factoring. Kubiak (2008) states that the attractiveness of factoring is influenced, among other things, by the availability of this source of financing. The author emphasizes that factoring is characterized by greater accessibility than trade credit

due to the lack of a need for restrictive collateral. Factoring companies do not analyze the creditworthiness of the company, and a blank promissory note is sufficient as security for the factoring agreement. Furthermore, the reduction of turnover thresholds for which factoring services are provided has made factoring more accessible to small businesses.

According to Popović (2018), factors influencing the development of the factoring industry include greater availability of factoring compared to bank loans and the growing awareness of businesses about the benefits of factoring. The author also notes that increased interest in factoring occurs during economic crises when entrepreneurs are forced to seek new sources of financing.

Kreczmańska-Gigol (2015) presents factors conditioning the development of factoring for the small and medium-sized enterprises (SMEs) sector. The author divided the factors into two groups: (1) factors conditioning the supply of factoring services and (2) factors shaping the demand for factoring services. Among the factors conditioning the supply of factoring services, the author mentions, among other things, the types and scope of offered factoring services and ancillary services (e.g., economic information, receivables insurance), the competencies of employees employed in the factoring industry, legal regulations governing factoring activities, and the entities offering factoring services (number, scope of operations, financial situation of factoring companies).

Klapper (2006) also investigated the determinants of factoring in 49 countries. The author found that greater utilization of factoring is influenced by economic development, GDP growth rate, access to credit information, as well as weak debt enforcement.

Baresa et al. (2017), based on the literature reviews, list two main determinants that have a decisive impact on the level of factoring activity in a country's economy. These are:

a) the overall level of economic development in the country;
b) the availability of financial information about businesses.

Sinha (2020) examined the impact of socio-economic factors on factoring services in 49 countries. Among the key determinants, the author mentions trade openness, exchange rates, credit interest rates, the level of financial services, credit to the domestic private sector, gross domestic savings, and GDP per capita.

5. DATA SOURCES AND METHODOLOGY

The research objective was to analyze the factoring services market in Poland in the years 2011–2022, as well as to assess selected macro- and microeconomic factors influencing the development of factoring during this period. The empirical part focused on the existence of a correlation between the value of factoring receivables purchased during the year by factors (Y_0) and:

a) the Gross Domestic Product (X_1);
b) net revenues from the sale of products, goods, and materials (X_2);
c) short-term trade receivables (X_3);
d) short-term liabilities from loans and borrowings (X_4).

Previous research results show a correlation between economic growth and the popularity of factoring services among businesses (Klapper, 2006; Baresa et al., 2017; Sinha, 2020). To examine the existence of this relationship, the nominal value of the Gross Domestic Product in national currency (in PLN) was adopted for the analysis (X_1). The analysis assumes that interest in factoring will be greater the higher the value of goods and services produced in the economy of a given country.

Another factor analyzed is the value of revenues from sales of products, goods, and materials in the business sector in PLN (X_2). This factor is related to GDP because with higher economic growth, the activity of businesses in terms of production and sales of offered products will increase. As a result, there should be an increase in the value of revenues from sales in the business sector.

The next selected factor subjected to analysis is the value of short-term receivables from deliveries and services in PLN (X_3). This factor is correlated with revenues from sales of products, goods, and materials because an increase in sales revenue may encourage entities to offer better sales terms and extend invoice payment deadlines. As a result, there should be greater interest in factoring among businesses.

The last of the factors used in the analysis is the value of short-term liabilities from loans and borrowings in PLN (X_4). This factor is not related to the variables described earlier but pertains to the capital structure of the company. It can be assumed that an increase in debt by businesses will lead entities to accelerate cash flow turnover through factoring (Wejer-Kudełko and Ogrodnik, 2019).

The literature mentions factors shaping the demand for factoring services. Among them are, for example, revenues from sales and the value of receivables of businesses. The value of business receivables can increase when sales revenues grow. This situation typically occurs during a good economic climate (Kreczmańska-Gigol, 2015). In such times, both businesses and the factoring market can develop more rapidly.

It should be emphasized that both trade receivables and trade liabilities are the most significant items in the balance sheets of most companies in terms of value. Their level will determine whether a company will continue to grow, remain stagnant, or be forced to declare bankruptcy (Dąbrowski, 2023).

During an economic crisis, companies face greater challenges with payment backlogs, financial liquidity, and even solvency. The cause of this situation is market uncertainty, rising interest rates, and restricted access to cash (Baresa et al., 2017). By employing factoring, companies can improve the appearance of

their balance sheets, thereby enhancing financial liquidity ratios and providing greater flexibility of working capital (Czerwińska-Kayzer and Bieniasz, 2008).

Pearson correlation coefficients were used to measure dependencies. Meanwhile, to examine the significance of the obtained result, the t-Student test statistic was employed:

$$t_n = \frac{r}{\sqrt{1-r^2}}\sqrt{n-2\,;}$$

where:
n denotes the sample size,
r represents the correlation coefficients.

The calculated statistic was compared to the values in the t-Student distribution table, assuming a significance level of $\alpha = 0.05$.

For the purposes of the study the adopted hypothesis stipulated the existence of a positive correlation between the turnover of factoring and the variables X_1, X_2, X_3, X_4. The economic growth of a country is assumed to lead to increased demand for external capital by businesses, which should also result in a greater utilization of factoring. Furthermore, an increase in sales revenues and trade receivables is expected to contribute to a higher interest in trading receivables and factoring services.

Finally, the increase in short-term indebtedness from loans and borrowings confirms the growing demand for external financing, which presents an opportunity for the development of the factoring market.

To verify the hypothesis, data from the Polish Factors Association (PFA) and the Central Statistical Office (CSO) were used.

The proposed research method allows, based on publicly available quantitative data, to confirm the influence of selected factors described in the literature on the factoring market in Poland. The analysis adopted selected factors shaping the demand for factoring services (X_1, X_2, X_3) as well as a factor related to the capital structure (X_4).

6. FACTORING SERVICES MARKET IN POLAND FROM 2011 TO 2022 (FACTORING CLIENTS' PERSPECTIVE)

The analysis of the factoring services market shows that factoring is gaining significant popularity among Polish entrepreneurs. Figure 2 illustrates the number of factorants from 2011 to 2022.

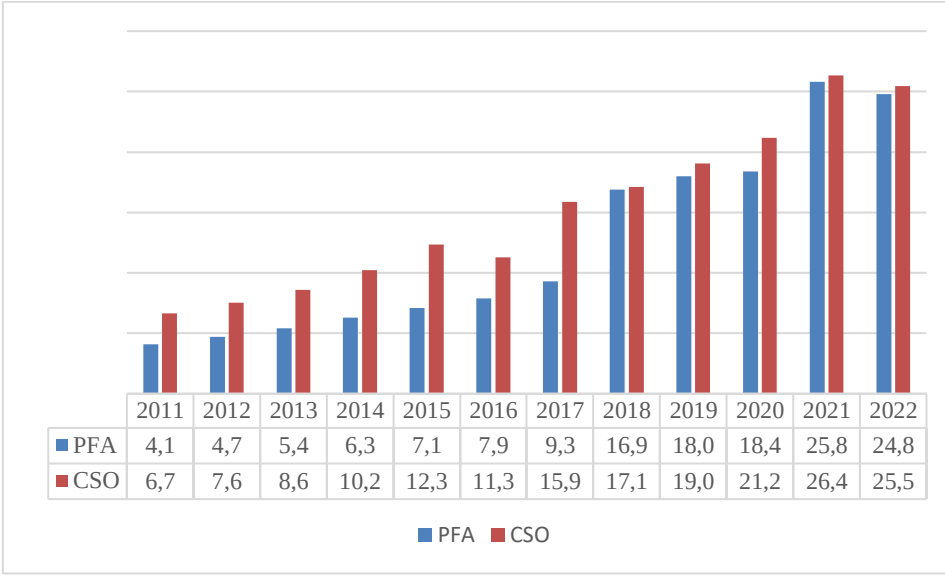


Figure 2. The number of factorants in Poland from 2011 to 2022 (in thousands)

Source: own study based on *Działalność faktoringowa* …, (www3) and (www4).

According to data from the CSO, during the analyzed period, the number of factorants increased from 6.7 thousand in 2011 (4.1 thousand according to the PFA data) to 25.5 thousand in 2022 (24.8 thousand according to PFA data). This means that there was a 280.6% growth in the number of factoring service clients during the study period (504.9% according to the PFA clients).

The increase in the number of factoring service clients is associated with the growth in the number of financed invoices, as presented in Figure 3.

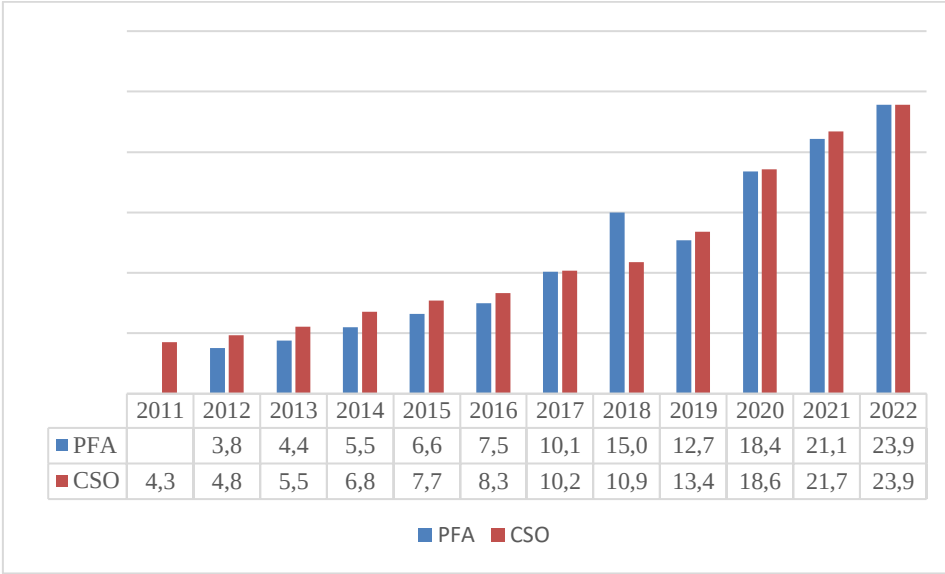


Figure 3. The number of financed invoices by factors in Poland from 2011 to 2022 (in million PLN)

Source: own study based on *Działalność faktoringowa* …, (www3) and (www4).

According to the CSO data, from 2011 to 2022, the number of financed invoices by factors increased from 4.3 million to 23.9 million, representing a growth of 455.8%. Even greater growth in the number of invoices was recorded by the PFA, which saw a 528.9% increase from 2012 onward[1].

The above data should be related to the value of factoring receivables purchased by factors from 2011 to 2022. This data is presented in Figure 4.

Data published by the CSO also shows a significant increase in the value of receivables serviced by factoring companies. As can be observed, in 2011, the turnover of factorants amounted to PLN 94.9 billion, while in 2022, these turnovers reached PLN 476.9 billion, representing a growth of 402.5% in the value of serviced receivables. For factoring companies affiliated with the PFA, the growth during the same period was even greater, amounting to 586.4%.

[1] The Polish Factors Association (PFA) does not have data for the year 2011.

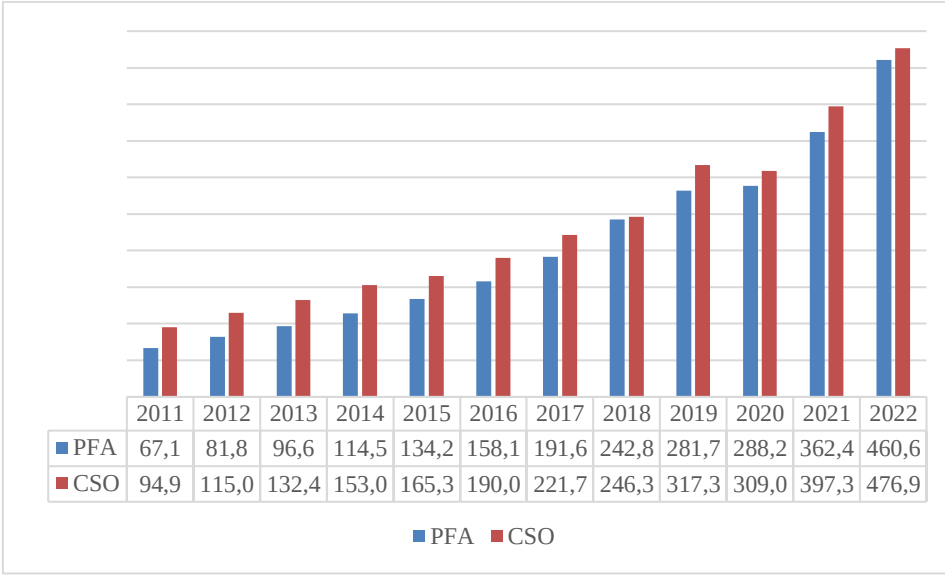
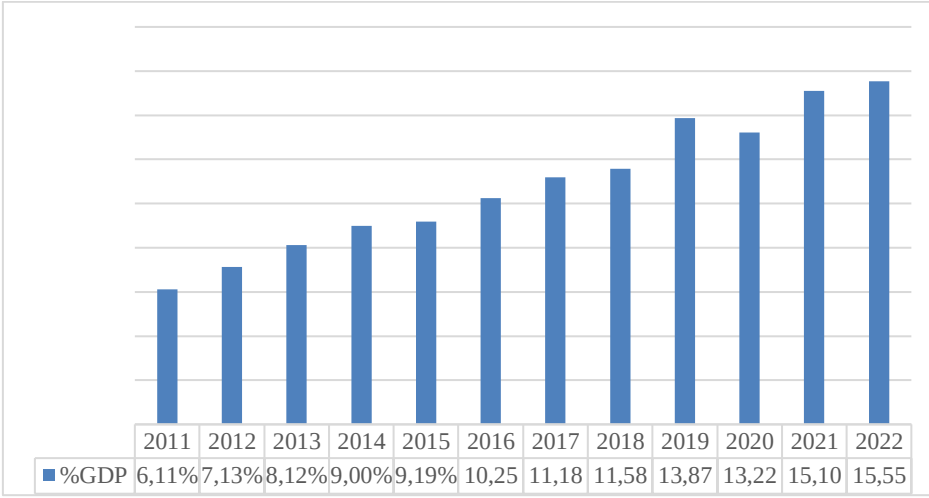


Figure 4. The value of receivables purchased by factoring companies in Poland in the years 2011-2022 (in billion PLN)

Source: own study based on *Działalność faktoringowa* …, (www3) and (www4).

To illustrate how the market of factoring services in Poland developed in the years 2011–2022, it is valuable to compare the share of factoring receivables in relation to the GDP (Figure 5).



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
%GDP	6,11%	7,13%	8,12%	9,00%	9,19%	10,25	11,18	11,58	13,87	13,22	15,10	15,55

Figure 5. The percentage share of factoring receivables purchased during the year by factors in the Gross Domestic Product (GDP) from 2011 to 2022 (in %)

Source: own study based on (*Działalność faktoringowa* …).

In 2011, the share of factoring receivables in relation to the Gross Domestic Product (GDP) was 6.11%, and this share steadily increased to a level of 15.55% in 2022. This indicates that the market of factoring services during the examined period increased its share in relation to the GDP by as much as 9.44 percentage points.

7. EVALUATION OF SELECTED MACRO- AND MICROE-CONOMIC FACTORS INFLUENCING THE DEVELOP-MENT OF FACTORING IN POLAND IN THE YEARS 2011-2022

In the years 2011–2022, there was a dynamic growth in factoring services in Poland. To examine which economic factors influenced the development of factoring services in Poland, four explanatory variables were selected for the analysis:

a) Gross Domestic Product (X_1);
b) net revenues from the sale of products, goods, and materials (X_2);
c) short-term trade receivables (X_3);
d) short-term liabilities from loans and borrowings (X_4).

The explained variable was the value of factoring receivables purchased during the year by factors (Y_0). The calculated correlation coefficients are presented in Table 1.

Table 1. The Pearson correlation coefficients and critical values of the t-Student test results for the variables under investigation

Specification	GDP (X_1)	Net revenues from the sale of products, goods, and materials (X_2)	Short-term trade receivables (X_3)	Short-term liabilities from loans and borrowings (X_4)
The correlation coefficients of variable Y_0 with variables X_1-X_4.	0.995	0.955	0.965	0.906
Test t-Statistic	32.80	10.20	11.58	6.75
Critical value for α=0.05.	2.228	2.228	2.228	2.228

Source: own compilation based on the CSO (Central Statistical Office) data and own calculations.

The analysis of correlation coefficients indicates the existence of a very strong positive correlation between factoring turnovers and all the variables under investigation (X_1–X_4). The strongest relationship was observed between the Gross Domestic Product (X_1) and the value of factoring receivables purchased by factors during the year (Y_0) – the Pearson correlation coefficient was 0.995.

In order to examine whether the obtained correlation coefficients were statistically significant, a t-Student test was conducted. The analysis of Table 1 indicates that for each variable, the t-test statistic was higher than the critical value for α=0.05, meaning that the obtained results were statistically significant at the p=0.05 level.

8. DISCUSSION

Factoring emerged in Poland in the years 1993–1994. Initially, factoring did not gain much interest among entrepreneurs and developed very slowly due to a lack of experience and trained personnel. Since 2007, there has been a dynamic increase in turnover of factored receivables (Sobol, 2020), and in 2022, their share in relation to GDP was 15.55%, allowing Poland to rank 6th among European Union countries (Ciechomska-Barczak, 2023).

Factoring is indeed an attractive source of financing for businesses. One of its greatest advantages is the variety of factoring transaction forms, which provide an individualized approach to the situation and requirements of the business. Factoring also allows for the quick acquisition of funds in the foreseeable future, eliminates the problem of delays in settling receivables, and insolvency of

customers, and improves the financial liquidity of the enterprise. More detailed analyses, however, indicate a lack of direct impact of using factoring services on improving the profitability indicators of the company (Kubiak, 2008).

The analysis of statistical data clearly indicates that the factoring services market is growing dynamically. According to the CSO data, from 2011 to 2022, there was an increase in:

- the number of factoring clients by 280.6%;
- the number of financed invoices by 455.8%;
- the value of receivables purchased by factors by 402.5%

Conducted correlation analyses between the turnover of factoring and the nominal GDP, sales revenue, receivables from deliveries and services, as well as short-term liabilities from loans and borrowings, confirm a very strong relationship between the factoring market and the business activity of enterprises, along with the level of socio-economic development. These results align with findings from the other authors. Mol-Gómez-Vázquez et al. (2018) confirmed that the size of the factoring industry is larger in countries with higher economic growth rates. Therefore, a positive relationship between GDP and the likelihood of using factoring can be expected.

Similar conclusions are reached by Koišová and Ivanová (2015). The stronger and more developed the economy, the more frequently alternative methods of financing for businesses are utilized.

Alayemi et al. (2015) also indicate that the economic situation in a country and the level of development of the financial market have a significant impact on the level of factoring activity. In the case of emerging markets, the conditions are unfavorable for the development of factoring services. A significant barrier to the development of factoring in these countries is a weak legal system, issues with debt enforcement, and a lack of access to financial information about businesses.

This relationship has also been demonstrated by Sinha (2020), who substantiated a positive correlation between GDP per capita and factoring worldwide. According to the authors' estimates, a 1% increase in GDP per capita leads to a 0.27% increase in the value of factoring services globally.

CONCLUSION

This article focuses on the analysis of the factoring services market in Poland from 2011 to 2022. The results of this analysis confirm that Poland is a leader in the utilization of factoring in Central and Eastern Europe. In 2022, the value of factoring turnovers reached PLN 476.9 billion.

The significant impact on the development of the factoring services market in Poland was the increase in the competitiveness of the Polish economy. The heightened economic activity of businesses results in companies expressing

additional demand for external financing, contributing to increased activity by banks and financial institutions in terms of providing loans and borrowings, as well as alternative sources of financing, including factoring.

The paper presents how the market of factoring services developed in Poland during the studied period and explores the macro- and microeconomic factors that may influence the development of factoring. Future studies could focus on analyzing the development of factoring services in Poland compared to the European Union and selected EU member states (Włodarczyk and Ostrowska, 2017), as well as on the analysis of selected determinants of factoring development in the Visegrád Group countries (Čulková et al., 2018).

DECLARATION BY THE AUTHORS

The author declares no conflict of interest.

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ROZWÓJ USŁUG FAKTORINGOWYCH W POLSCE W LATACH 2011-2022

Cel artykułu. Celem artykułu jest analiza rynku usług faktoringowych w Polsce w latach 2011–2022 oraz ocena wpływu wybranych czynników makro- i mikroekonomicznych na rozwój faktoringu w Polsce w tym okresie. Na potrzeby badania przyjęto hipotezę o istnieniu dodatniej zależności między wartością obrotów faktoringowych a produktem krajowym brutto; przychodami ze sprzedaży produktów, towarów i usług; należnościami z tytułu dostaw i usług oraz zobowiązaniami krótkoterminowymi z tytułu kredytów i pożyczek.

Metoda badawcza. Źródłami danych na temat rynku usług faktoringowych były dane statystyczne z Polskiego Związku Faktorów (PZF) oraz Głównego Urzędu Statystycznego (GUS). Do pomiaru zależności wykorzystano współczynniki korelacji Pearsona. Natomiast w celu zbadania istotności uzyskanego wyniku wykorzystano statystykę testową t-Studenta.

Wyniki badań. Wyniki badania potwierdzają wzrost popularności faktoringu jako źródła finansowania działalności gospodarczej. W latach 2011–2022 czterokrotnie zwiększyła się liczba finansowanych faktur oraz wartość wierzytelności wykupionych przez faktorantów. Przeprowadzona analiza współczynników korelacji wykazała bardzo silną zależność między wartością wierzytelności faktoringowych a wszystkimi czynnikami ekonomicznymi poddanymi analizie (wszystkie współczynniki miały wartość powyżej 0,9). Wyniki testu t-Studenta sugerują, że wszystkie te zależności były istotne statystycznie.

Słowa kluczowe: faktoring, usługi faktoringowe, determinanty faktoringu, PKB, przychody, należności handlowe, kredyty i pożyczki.

JEL Class: G23, G32.

Zakończenie recenzji/ End of review: 13.06.2024
Przyjęto/Accepted: 19.06.2024
Opublikowano/Published: 26.06.2024

• F I N A N S E I P R A W O F I N A N S O W E •
• Journal of Finance and Financial Law •

miesiąc czerwiec/June 2024 • vol. 2(42): 171–190

THE EUROPEAN GREEN DEAL AND THE OPPORTUNITIES AND RISKS OF ORGANIC FARMING IN POLAND

Dagmara Hajdys*

C O P E Member since 2021 JM15102

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https://doi.org/10.18778/2391-6478.2.42.09

THE EUROPEAN GREEN DEAL AND THE OPPORTUNITIES AND RISKS OF ORGANIC FARMING IN POLAND

ABSTRACT

The purpose of the article. The aim of the study is to identify the key assumptions of the European Green Deal strategy with regard to organic farming. Special attention was paid to the opportunities and risks of the transition to "green" agriculture in Poland. It is assumed that the transition to organic farming in Poland will require a change in the architecture of agriculture with the development of a compromise between environmental and sectoral needs.

Methodology. The article is a review and the following research methods were used to achieve the intended purpose: a review of the literature on the subject, EU regulations and statistical data on agriculture, including organic agriculture in Poland, the descriptive and inductive method.

Results of the research. The European Green Deal is an ambitious strategy for the European Union to meet today's economic, social and, above all, environmental challenges. The main objectives of the document are to achieve zero greenhouse gas emissions by 2050, to decouple economic growth from the overexploitation of natural resources, to move towards a clean circular economy, to combat biodiversity loss and to reduce pollutant emissions. All of these goals are directly or indirectly related to the agricultural sector. Two strategies are particularly relevant to this sector: "From Field to Fork" and the EU Biodiversity Strategy 2030. Agriculture in Poland is changing. Despite the gradual transition from conventional to organic farming, the dynamics of the transformation are unsatisfactory. A characteristic feature of organic farms is their commodity nature, with a predominance of crop production. Farms specialising in livestock or mixed farming are a small percentage. The European Green Deal brings both opportunities and threats for Polish

* dr hab., prof. UŁ, Katedra Bankowości Centralnej i Pośrednictwa Finansowego, Wydział Ekonomiczno-Socjologiczny, e-mail: dagmara.hajdys@uni.lodz.pl, https://orcid.org/0000-0001-6371-5423.

organic farming. The reduction of greenhouse gas emissions and healthy food for consumers are undoubtedly benefits of the proposed changes. There are also dangers of an economic nature. Those in power have a huge responsibility to adopt solutions that reconcile environmental and social interests.

Keywords: European Green Deal, agriculture, organic farming.

JEL Class: Q01, Q55, R11, Z13.

INTRODUCTION

In recent weeks, pictures of protesting farmers from almost every country in the European Union have circulated around the world. The reason? Disagreement with the solutions adopted in the European Green Deal (EGL). What is the European Green Deal and why does it evoke such strong emotions?

The European Green Deal is a very broad and multifaceted environmental-economic-social strategy. The concept of the Green Deal was being developed before the COVID-19 pandemic, at the end of 2019, but it is only from 2023 onwards that action on climate transformation has accelerated. Some of the regulations included in the Green Deal have already been adopted – this includes, for example: Fit for 55, a package of directives and regulations on energy and the move towards climate neutrality. In 2021, the European Climate Law was also adopted – a landmark regulation (Regulation, 2021) assuming the neutrality of the entire Union by 2050 and setting an interim target: a 55% reduction in greenhouse gas emissions by 2030 compared to 1990. The Green Deal covers all sectors of the economy, including agriculture although the assumptions regarding agricultural policy have not yet been turned into final regulations. The proposals contained in the GMO with regard to the agricultural economy concern its reconstruction in an environmentally friendly direction.

The environmental problems, dynamic changes and climatic anomalies observed in recent years give rise to the need for continuous adaptation of the economy to change, including agriculture, which in Poland accounts on average for 8.4% of total greenhouse gas emissions.

The aim of the study is to identify the key assumptions of the European Green Strategy with regard to organic farming. Particular attention is paid to the opportunities and threats arising from the need to switch to "green" agriculture in Poland.

It was assumed that the transition to organic farming in Poland would require a change in the architecture of agriculture with the development of a compromise between environmental and sectoral needs. Two time periods were chosen for the study: 2010 and 2020, in order to show changes over the decade.

The article is a review, and the following research methods were used to achieve the intended purpose: a review of the literature on the subject, EU regulations and statistical data on agriculture, including organic agriculture in Poland, the descriptive and inductive method.

1. THE EUROPEAN GREEN DEAL

In December 2019 the European Commission adopted a document called the European Green Deal. This is a new strategy for growth that aims to transform the

European Union (EU) into a fair and prosperous society living in a modern, resource-efficient and competitive economy that achieves zero net greenhouse gas emissions by 2050 and decouples economic growth from the use of natural resources (European Commission, 2019).

At the heart of the environmental transition was the conviction that net greenhouse gas emissions in the EU must be reduced by at least 55% by 2030, and that so-called climate neutrality must be achieved by 2050 at the latest. In addition to reducing greenhouse gas emissions, restoring Europe's biodiversity was seen as an urgent necessity to realise the vision that by 2050 the EU society should be resilient to climate change and fully adapted to its unavoidable impacts (Guzal-Dec, 2022: 424).

The strategy aims to protect, conserve and enhance the EU's natural capital and to protect the health and well-being of citizens from environmental risks and negative impacts. The document is an integral part of the Commission's strategy to implement the UN 2030 Agenda for Sustainable Development and the Sustainable Development Goals (European Commission, 2019).

The European Green Deal (EGD) is a set of policy initiatives and strategies for deep transformation across all sectors of the economy. It identifies eight closely interlinked and complementary areas for action (Figure 1), the implementation of which requires particular attention to potential trade-offs between economic, environmental and social objectives. Implementing the assumptions of the EGD will require the use of all policy instruments, i.e., regulation and standardisation, investment and innovation, national reforms, dialogue with social partners and international cooperation. To ensure that everyone is included, the European Pillar of Social Rights will guide the direction of action (European Commission, 2019).

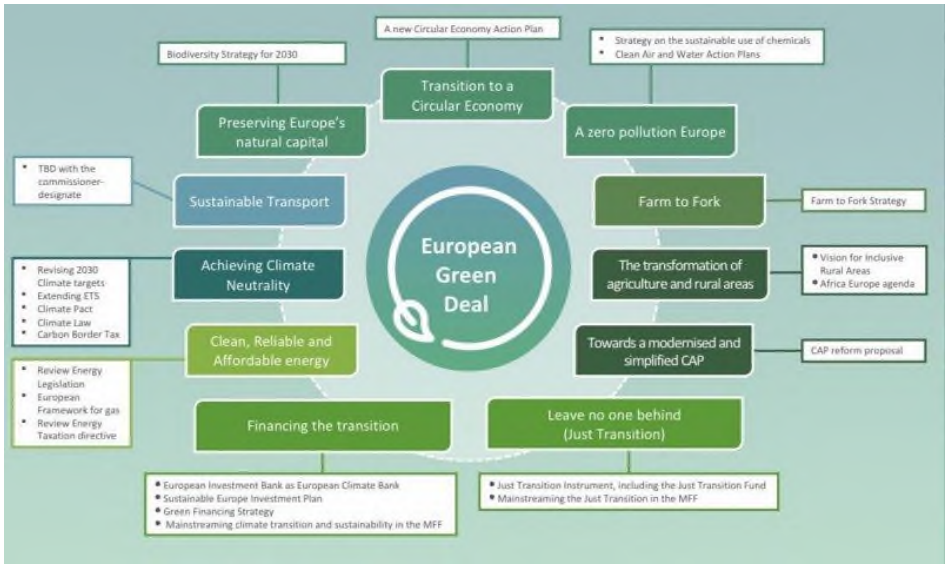

Figure 1. European Green Deal

Source: European Commission (2019).

Almost all of the assumptions included in the EGD are directly or indirectly related to agriculture through agricultural production, processing, efficient food management, ecosystem services or greenhouse gas sequestration from land use activities. The implementation of two strategies will be particularly important for the agricultural sector:

- "farm to fork" strategy for a fair, healthy and environmentally friendly food system;
- protecting and restoring ecosystems and biodiversity.

The "farm to fork" strategy is a key element of the Green Deal. It comprehensively addresses the challenges of sustainable food systems and recognises the inextricable links between healthy people, healthy societies and a healthy planet (European Commission, 2020a: 2).

European food is already the global standard for food that is safe, wholesome, of high quality and available in sufficient quantities. This is the result of years of EU policies to protect human, animal and plant health, and the efforts of our farmers, fishermen and aquaculture producers. European food should also become the global standard for sustainability. This strategy aims to reward those farmers, fishermen and other actors in the food chain who have already made the transition to sustainable practices, to enable others to do so and to create additional business opportunities for them (European Commission, 2020a: 3).

For the agricultural sector, the following objectives have been adopted in the strategy (Michalak and Rydz-Zbikowska, 2022: 265):

- reduce the use of chemical pesticides and associated risks by 50%;
- reduce nutrient losses by at least 50%, while ensuring that soil fertility is not compromised;
- a reduction of at least 20% in the use of fertilisers by 2030 through the application of balanced fertilisation and nutrient management and improved nitrogen and phosphorus management throughout the life cycle of crops;
- a 50% reduction in the use of antimicrobials in livestock and aquaculture, and used in aquaculture;
- the promotion of organic farming, with 25% of agricultural land to be farmed according to organic principles.

Therefore, although the EU's transition towards sustainable food systems has begun in many areas, food systems remain one of the main drivers of climate change and environmental degradation. There is therefore an urgent need to reduce dependence on pesticides and antimicrobials, reduce over-fertilisation, strengthen organic farming, improve animal welfare and reverse biodiversity loss (European Commission, 2020a: 3).

Implementing the “farm to fork” strategy is the first factor in making the 'circular economy' a viable option. In addition to the challenges faced by farmers, other links in the food chain should be involved in improving the environment, including the food processing and retail sectors, by addressing transport, storage, packaging and food waste. Encouraging the public to consume sustainably produced food at affordable prices and with nutritional and health benefits is also part of the strategy (Wrzaszcz and Prandecki, 2020: 162). Agricultural practices should combat climate change, protect the natural environment and not reduce biodiversity (Boell, 2020). Innovation, especially technological innovation, should play an important role in promoting environmentally and climate-friendly agriculture.

In May 2020, as part of the European Green Deal, the EU adopted the EU Biodiversity Strategy 2030 (ESB) entitled 'Bringing nature back into our lives'.

The document sets out a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems. The ESB 2030 promises to restore Europe's biodiversity for the benefit of people, the climate and the planet, and sets out concrete actions and commitments for member countries to meet by 2030.

Biodiversity is also key to ensuring food security in the EU and globally. Its loss threatens food systems and puts our food security and food policies at risk. Biodiversity also promotes healthy and nutritious diets, contributes to improved

rural livelihoods and increases agricultural productivity (European Commission, 2020b: 2).

The above strategy differs little from the "farm to fork" strategy. Both include a very similar set of actions to reduce and restore biodiversity. In addition, the Biodiversity Strategy includes a number of objectives that directly or indirectly address the protection of agricultural soils, including (European Commission 2020b: 17; Smerczak et al., 2021: 14–15):

- establishing protected areas on at least 30% of Europe's land and 30% of its marine territory;
- restoring degraded ecosystems on land and at sea by increasing production in organic farming systems and increasing the number of nature-friendly elements in the agricultural landscape;
- reversing the decline of pollinating insects;
- reduce pesticide use and risks by 50% by 2030;
- planting three billion new trees in full respect of ecological principles.

The strategy also sets other objectives, including: buffer zones, whether subject to crop rotation or not, fallow land, hedgerows, non-productive trees, terrace walls, ponds. Their significant value is mainly manifested in carbon sequestration, prevention of soil erosion and depletion, filtration of air and water, and support of climate change adaptation processes (Polityka Insight, 2021: 35).

To strengthen action on biodiversity conservation, in May 2021 the European Commission adopted the EU Action Plan for Reducing Air, Water and Soil Pollution entitled 'A pathway to a healthy planet for all. An EU Action Plan for the elimination of water, air and soil pollution'. The vision set out in this plan by the EU is to reduce pollution by 2050 by reducing the levels of toxic substances in, inter alia, soils to levels considered harmless to human health and the proper functioning of natural ecosystems (European Commission, 2021).

The European Green Deal is a plan to transform the European Union's economy to minimise the use of natural resources while maintaining its international competitiveness. The plan has implications for both the agricultural sector and consumers. Among the measures proposed are restrictions on the use of plant protection products, fertilisers and antimicrobials. The development of organic farming, the protection and restoration of ecosystems and the enhancement of the biodiversity of natural resources will be promoted (Guzal-Dec, 2022: 424).

Poland is obliged to implement both the 2030 Agenda and the European Green Deal, which poses additional difficulties as one of the few countries trying to prolong the use of coal as an energy source and postpone the phase-out of the coal economy. Legislative work is currently underway on an agricultural code that will enable the implementation of EGD solutions (Tobaszewski, 2021: 154). The wave of farmer protests sweeping through European countries, including Poland, calls

for a second look at the assumptions of the strategy under discussion. There is already a debate about the need for a revision of assumptions and softening of some of the demands. The final solutions will have to wait for the new term of the EU authorities, which will determine the final, probably new shape of the European Green Deal. The direction of the solutions will largely depend on the agreements reached with the protesting farmers.

2. POLISH ORGANIC FARMING AND THE CHALLENGES OF THE EUROPEAN GREEN DEAL

Europe as a continent is characterised by a temperate climate, good quality soils and a predominance of flat land, which is conducive to agricultural development. Poland is one of the larger EU countries, with an average level of forest cover and urbanisation, in a lowland environment, with a small area of water and wasteland. Most of the country's territory is therefore occupied by agricultural land. This large area means that Polish agriculture has one of the highest agricultural production potentials among EU countries, despite soil and climate quality that is moderately favourable for agriculture by European standards. Poland has more than 14.5 million hectares of agricultural land owned by farms, which after Brexit puts our country in the fourth place in the EU, after France, Spain and Germany (Polityka Insight, 2021: 38).

According to the 2020 agricultural census, the total number of farms in Poland was 1,317 thousand, covering 14,682 thousand hectares of agricultural land and providing employment for 9.40% of the total labour force. Compared to a decade earlier, the number of farms decreased by about 192 thousand (-12.7%). However, by far more than half (52.1%) are the smallest farms, with up to 5 ha of agricultural area. This is due to a decrease in the number of holdings in the agricultural area groups of 1 to 20 ha of agricultural area. The largest decreases were in the 1–2 ha group (by more than ¼) and the 5–10 ha group (by more than 16%). The smallest decrease was in the group of 2–3 ha of agricultural area. At the same time, the number of holdings in the group of 20 ha and more of agricultural area increased. The largest number of agricultural holdings increased by more than 50% in the group of 50 ha and more – Table 1 (GUS, 2022: 32–33). The total area of agricultural land is 14,953 million ha in 2020, an increase of only 1% (14,860 million ha) compared to 2010 (GUS, 2022: 68).

Table 1. Number of agricultural holdings in 2010 and 2020

Years	Total	Agricultural holdings with the area of agricultural land in ha								
		≤ 1	1-2	2-3	3-5	5-10	10-15	15-20	20-50	≥ 50
Total in thousands										
2010	1 509,1	24,9	300,6	213,3	276,5	346,3	151,5	72,0	97,0	27,0
2020	1 317,4	25,3	220,3	199,5	240,5	289,0	130,6	65,0	106,6	40,7
2010=100										
2020	87,3	101,6	73,3	93,5	87,0	83,4	86,2	90,2	109,9	150,5

Source: own elaboration based on GUS (2022).

As in 2010, in 2020 the largest number of farms was recorded in the following provinces: Mazowieckie (15.8% of the total number of farms in the country), Lubelskie (12.3%) and Małopolskie (9.6%), and the smallest in the following provinces: Lubuskie (1.5%), Opolskie (1.9%) and Zachodniopomorskie (2.2%) (GUS, 2022: 34).

Organic farming is an agricultural production system that ensures food production under environmentally friendly conditions. Elimination of synthetic means of production, care for soil fertility, high level of biodiversity, respect for the environment, preservation of the natural landscape, as well as reliance on plant and animal species present in a given ecosystem are conducive to the production of food with special health values (Jaroszczyk, 2014).

In 2010, the number of organic farms was 20,582 and increased steadily until 2013, reaching 26,598. From 2014 onwards, a systematic decrease is observed, with the number of organic holdings falling to 18,575 (9.8%) in 2020. In 2010, the total agricultural area under organic production was 519,068.43 ha, of which 212,983.68 ha was agricultural area under conversion (conversion from conventional to organic) and 308,094.75 ha was agricultural area after the conversion period. Similarly, in 2020, the total organic area was 509,291.27 ha, of which 76.9% was post-conversion area and 23.1% was conversion area. Organic area accounted for almost 3% of the total agricultural area in Poland. However, it should be clearly noted that there was a systematic decrease in the area of organic farmland in the period 2014–2020. The largest area of organic farmland was found in the Warminsko-Mazurskie (107 507.3 ha) and Zachodniopomorskie (101 638.6 ha) provinces, which accounted for 41.2% of the organic area in Poland.

This begs the question: what are the reasons for the decline in the number of organic farms? With reference to the opinions of recognised organic farmers Zbigniew Babalski, Robert Kuryluk and Peter Stratenwerth (Ziętara and Mirkowska, 2021: 35; Bańkowska and Jasiński, 2020: 36), the following reasons

can be identified: changes in the rules of support for organic farms (mainly orchards – walnut orchards) and the associated control system (documentation), lack of labour (despite theoretically large resources), occurrence of droughts, animal welfare requirements (especially difficult to implement on small farms where users also work outside the farm), low soil productivity. This last factor means that restoring the desired level of soil fertility (mainly organic matter) takes longer and requires more effort and resources.

Organic production is an extensive activity that requires a larger area and more labour than conventional production to achieve the same economic objectives. Data from the reports of the Agricultural and Food Quality Inspection Service (AFQIS) shows that organic farming is shifting towards an increase in area (Table 2).

Table 2. Structure of the organic agricultural area in Poland in 2010 and 2020

Years	Structure of the area under organic farming (%)					
	in 5 ha	5-10 ha	10-20 ha	20-50 ha	over 50 ha	Total
2010	25,1	24,9	20,5	15,9	13,6	100
2020	20,0	17,4	24,8	23,6	14,2	100

Source: own elaboration based on AFQIS (2011, 2021).

The data shows that the decline in the number of organic holdings has also been accompanied by a decline in the organic agricultural area. On the positive side, there has been a change in the structure of the farms, with a decrease in the number of small farms and an increase in the number of farms of 10 ha or more.

In 2010, meadows and pastures accounted for the largest share of organic agricultural area (42.3%). Fodder crops came second with 20.6%, and cereals accounted for 19.6% of the organic area. The other crop groups together accounted for 17.5% of the organic area. Farms engaged in crop production only accounted for 69.6%, and 30.4% operated mixed crop and livestock farms (AFQIS, 2011: 23). A decade later, of all organic agricultural producers, 78.2% operated farms were involved only in crop production, and 21.8% were involved in both crop and livestock production – Figure 2 (AFQIS, 2021: 25).

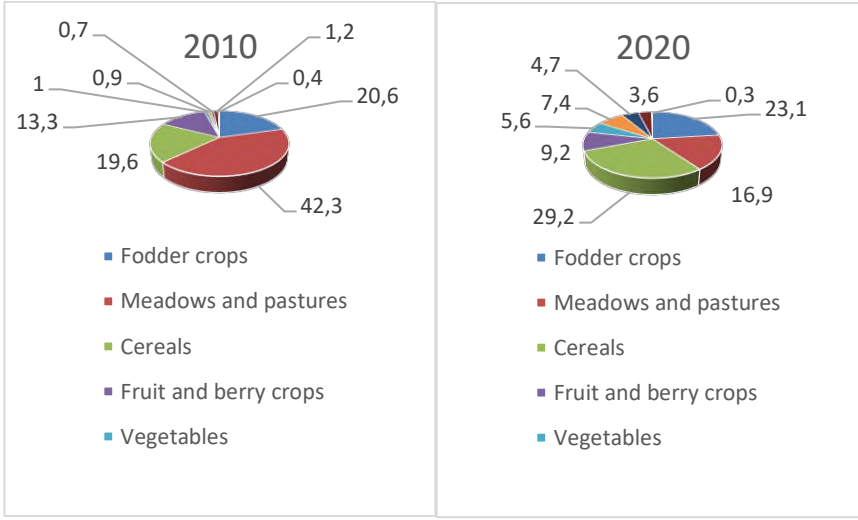

Figure 2. The structure of the area under organic farming in 2010 and 2020

Source: own elaboration based on AFQIS (2011, 2021).

The data presented in Figure 2 shows that the structure of organic agricultural land in Poland has changed. In 2010, meadows and pastures dominated (42.3%), followed by forage crops (20.6%), cereals (19.6%) and fruit and berry crops (13.3%). In 2020, the largest areas of organic farmland will be devoted to cereals (29.2%), forage crops (23.1%) and pastures and meadows (16.9%), and the smallest area to potatoes (0.3%).

In addition to crop production, livestock production plays an important role in the organic system. The scale of livestock production on organic holdings should be considered as a niche (Table 3). In terms of the number of physical animals kept in the organic system, poultry dominates, followed by cattle, sheep and goats, while the pig population is the smallest. In the case of cattle, dairy cows predominate.

Table 3. Ecological inventory 2015–2020 (in units)

Animal production	YEARS					
	2015	2016	2017	2018	2019	2020
Cattle for meat	9 144	8 433	8 096	7 486	8 320	8 341
Dairy cows	11 106	11 864	11 377	10 983	10 983	12 061
Other cattle	bd	bd	bd	bd	10 883	10 700
Pigs	6 309	4 449	3 893	3 221	4 189	3 253
Sheep	25 754	19 474	19 595	16 243	15 092	15 803

Goats	3 268	3 519	3 147	3 145	5 270	3 645
Poultry	171 107	216 101	222 540	316 064	481 153	696 153

Source: Zieliński (2022: 37).

The poultry population quadrupled between 2015 and 2020. The opposite trend was observed for the other livestock categories, although the intensity of the change varied between them when comparing the extreme years of the chosen study period. However, 2018 was a special year for livestock production, as the population of the other animal categories reached its lowest level, with the exception of poultry. In the case of cattle for meat, the stock decreased by 9% over the whole period, although it has been gradually increasing since 2018, compared to the previous year. In contrast, the statistics for the dairy cow population show a much more favourable dynamic of change. Despite periodic decreases throughout the period, the dairy cow population increased by 9%. In the case of the goat population, there were changes in each year, with increases alternating with decreases. During the period described, the goat population increased by 12%, with the most favourable year for this direction of production being 2019 (Zieliński, 2022: 37).

The results of the 2020 Agricultural Census show that in the period from June 2, 2019 to June 1, 2020 956 000 holdings (72.6%) applied mineral or lime fertilisers. Of the total number of farms, the proportion of farms using mineral fertilisers was 71.4% and the proportion using lime fertilisers was 21.3% – Table 4 (GUS, 2021:31).

Table 4. Mineral and lime fertiliser consumption in 2010 and 2020

Years	Pure component fertiliser				
	Mineral				Calcium
	Total	Nitrogen	Phosphorus	Potassium	
in thousand tonnes					
2010	1 771	1 024	352	396	951
2020	1 951	1 034	359	559	1 340
2010=100					
2020	110,2	101,0	102,0	141,2	226,8
per ha of agricultural land in good condition					
2010	1 226,6	70,9	24,3	27,4	40,9
2020	134,7	71,4	24,8	38,6	92,5

Source: GUS (2021).

Consumption of mineral fertilisers, including nitrogen, phosphorus and potassium (NPK), in the period under review was 10.2% higher than in 2010 and amounted to 1951,000 tonnes. In 2020, an average of 132.9 kg of NPK was used per hectare of agricultural land, including 129.1 kg of NPK on individual farms. Compared to 2010, the consumption of potassium fertilisers increased to the greatest extent – by 41.2% and amounted to 38.6 kg/ha. In addition, 71.4 kg/ha of nitrogen fertilisers and 24.8 kg/ha of phosphate fertilisers were applied to crops, i.e., more than in 2010, by 2.0% and 41.2% respectively. The consumption of calcium fertilisers more than doubled compared to 2010 and amounted to 1340,000 tonnes (951,000 tonnes in 2010). The increase in the consumption of these fertilisers was influenced, among other things, by the introduction of the 2019 National Programme for environmental regeneration of soils through their liming and the related funding for the implementation of projects resulting in the improvement of environmental quality provided under *de minimis* aid (Ministry of Development, 2007).

In 2020, treatments with plant protection products were applied by around 70% of farms with agricultural land. The largest number of treatments were carried out to protect cereals (1595,000), followed by treatments in orchards and plantations of other permanent crops (730,000), which in turn was related to the higher frequency and diversity of pathogen incidence than in other crops. During the growing season, on average, nine treatments were carried out on the farm in orchards and permanent crops, two treatments in cereals and three in vegetables (Nowak et al., 2023: 47–48).

Organic farming in Poland is evidence not only of growing environmental awareness, but also of the country's growing economic potential in this area. It is a sector that not only responds to changing market needs, but also contributes to the protection of the environment and the promotion of sustainable development, as evidenced by changes in the structure of arable land, crops and livestock. The challenges posed by the European Green Deal in terms of promoting healthy, organic food, reducing fertiliser use and improving livestock welfare are a major challenge for small farms. The owners of large farms also point to many solutions that are not in line with the current possibilities of agriculture, which is reflected in numerous protests from representatives of this sector.

3. OPPORTUNITIES AND THREATS FOR THE POLISH AGRICULTURAL SECTOR ARISING FROM THE EUROPEAN GREEN DEAL

The European Green Deal imposes a number of obligations on the agricultural sector, the fulfilment of which will require a huge effort on the part of European farmers, including the Polish ones. It is assumed that the objectives set out in the strategy will be achieved by 2030. They mainly concern: changing agricultural

practices, reducing the use of pesticides by 50%, reducing the use of fertilisers by 20%, implementing modern technologies of precision agriculture, reducing the sale of antimicrobial agents intended for farm animals and aquaculture by 50%.

Polish agriculture is not fully prepared for the full implementation of the European Green Deal. This is due, among other things, to low farm productivity as a result of agricultural fragmentation, poor soil quality with low organic matter content and drying, and a shorter growing season than in Western Europe.

Threats can be seen in the deterioration of competitiveness or the displacement from the market of smaller farms for which the application of precision farming techniques is unprofitable and difficult to implement. It seems that it will not be possible to achieve all the assumed goals of the Green Deal, even if only those related to the allocation of 25% of agricultural land to organic farming (Nowak et al., 2023: 45).

One of the main obstacles depends on natural and agro-technical conditions. The main one is the growing season, which in Poland is shorter and more variable (195–223 days) than in Western Europe. Average air temperatures are also lower, with greater fluctuations in summer. Precipitation is unevenly distributed throughout the growing season. There is often a shortage of rainfall in May and June, while there is usually an excess of rainfall in July. In recent years, the winter period has also been characterised by anomalies, i.e., low snowfall, leading to the freezing of rape and winter barley crops (Kowalska and Bieniek, 2022: 616).

Polish organic farming is also currently facing organisational and production problems. One of the most important is the problem of selling ready-made batches of products that meet all the required criteria and, above all, the insufficient quantity of products collected in one place. It is the result of a weak system of self-organisation, i.e., the association of farmers, for whom such a strategy would facilitate favourable negotiations and the sale of the agricultural products produced. This problem is a direct consequence of the wide dispersion of farms and their relatively small size. On the one hand, grouping farmers into large producer associations would strengthen their position on the market as partners of the large retail chains, but on the other hand it raises many concerns and uncertainties. The retail chains expect continuous and large deliveries and at the same time make demands that are difficult to meet, e.g., delivery of products at a specific time and place, deferred payment, use of specific packaging. Such requirements can only be met by large associations of producers; small producers, due to their specificity, are pushed out of the system of such cooperation (Nowogródzka, 2012: 60).

Implementing the European Green Deal will require Polish agriculture to increase investment in the development of small family farms, significantly reduce the use of artificial fertilisers and pesticides, reduce production and consumption, shorten supply chains and reduce land concentration.

Adopting the target in the EGD of allocating 25% of the European Union's agricultural area to organic farming may be a difficult hurdle for Poland to overcome, where this indicator fluctuates around 5%. According to the information presented in the previous section, the share of organic farms in the total agricultural area shows a decreasing trend in the period 2010–2020, which will require even more efforts at all legal, organisational and financial levels to reach this target. In order to achieve the expected effects, two solutions are adopted. The first involves a comprehensive system of incentives for farmers so that this production is profitable for them and offers competitive prices on the market. The second, which is quite drastic, assumes administrative intervention in the agricultural production process and, as it were, through a system of various obligations, 'forces' the conversion of the agricultural activity carried out into organic crops (Prutis, 2013: 53–54). This, of course, will not go unchallenged by farmers.

The European Green Deal points out that organically farmed land has about 30% more biodiversity than conventionally farmed land. Organic farmers are advised not to use chemical pesticides and synthetic fertilisers, and to leave part of their land fallow. The use of GMOs and ionising radiation is prohibited, and the use of antibiotics should be severely restricted. These organic practices are intended to contribute to increasing genetic biodiversity and crop yields (Niewiadomski, 2021: 289; Zapała, 2016: 112–113).

The biggest challenge, however, will undoubtedly be the EPC's stated goal of reducing greenhouse gas emissions. Agriculture is responsible for 10.3% of the EU's greenhouse gas emissions, and almost 70% of these emissions come from the livestock sector. These emissions consist of greenhouse gases other than CO2 (methane and nitrous oxide). Research to date indicates that more than half of total agricultural emissions in Poland are related to livestock farming, with 41.2% coming from enteric fermentation and 18.7% from animal excreta. Another important source is the use of agricultural soils (40.1%), in particular direct emissions from the cultivation of organic soils and the use of mineral fertilisers, as well as indirect emissions from the leaching of nitrogen compounds from the soil. A small proportion of total emissions from agricultural sources comes from the burning of crop residues (0.02%) (Wiśniewski, 2018: 1813–1820). The agricultural sector faces a major challenge in reducing greenhouse gas emissions.

Achieving carbon neutrality will require harnessing the potential of agricultural and forestry land to increase carbon sequestration in biomass and soils, adding organic matter to soils while reducing losses, optimising systems for storing, transporting and spreading livestock manure on fields and managing it appropriately, the extensive use of agricultural activities and agri-food processing in the development of renewable energy (including the production of biogas and biofuels), as well as a significant improvement in energy efficiency and an

increase in the share of renewable energy in plant and animal production (Wiśniewski and Marks-Bielska, 2022: 124). It should not be forgotten that until now, coal has been the primary heat source in agriculture, used to heat domestic and farm buildings. And this is where the next challenge of switching to renewable energy sources (RES) comes in.

This brings us back to the recent images of farmers protesting in Europe. Polish farmers have also taken to the streets in the cities, blocking the country's main roads. What are their concerns and demands?

Polish farmers have been protesting since February 9, 2024. One of the main reasons is the European Green Deal and its principles. This is followed by the influx of goods from Ukraine and the decline in the profitability of agricultural production. The European Green Deal is a very broad and multifaceted environmental, economic and social strategy. Although part of the strategy relates to the agricultural sector, it has not yet been formally legislated. One reason for the delay is the protests that are taking place in the run-up to the European Parliament elections.

In their protests, farmers are calling for a move away from what they see as restrictive legislation to reduce the high carbon emissions from farming, a 20% reduction in the use of fertilisers and antibiotics, the use of more land for non-agricultural purposes and an increase in the amount of land used for organic production.

Polish farmers are also protesting against the influx of Ukrainian food. At the end of June 2024, grain stocks in Europe will be around 28 million tonnes. Nine million tonnes of this is in Poland. Poland produces about 35–36 million tonnes of grain, so 25% will be in storage. This grain has to be disposed of in some way so that there are free warehouses, free granaries for the new harvest. Farmers are asking: how can this be done?

Another problem is the decline in the profitability of agricultural production. Inflation, the increase in production costs, has led to very low profitability. Farmers in the field-to-fork chain are the weakest link because they have no control over the prices of inputs, fertilisers, pesticides and energy. They also have no control over the prices of the products they produce and sell. This situation is also due to the fact that two years ago, the Ukrainian crisis caused prices to soar, both for agricultural inputs and for products sold on the farm. Now the markets have returned to normal and to pre-crisis prices. This has largely happened in the market for agricultural products, but not for inputs. The prices of fertilisers, pesticides and energy are still higher, i.e., they have not returned to their previous levels, as is noted by Professor Wawrzyniec Czubak of the Poznań University of Life Sciences (PAP, 2024).

What direction will changes and regulations take? This is a difficult question to answer at the moment. It will depend on the European Parliament elections, the

hostilities in Ukraine and this year's harvest. However, it is already clear from the statements made by the Polish government and the European Commission that the provisions of the EGD will be modified and loosened.

CONCLUSIONS

The European Green Deal is an ambitious strategy for the European Union to address today's economic, social and, above all, environmental challenges. The main objectives of the document are to achieve zero greenhouse gas emissions by 2050, to decouple economic growth from the overexploitation of natural resources, to move towards a clean circular economy, to combat biodiversity loss and to reduce pollutant emissions. All of these goals are directly or indirectly related to the agricultural sector.

For this sector, two strategies are of paramount importance: "With regard to agriculture, they impose a number of requirements aimed at improving the environment, including halting adverse natural and climatic changes". Although these strategies have not yet been formally adopted by EU member states, they have already generated a number of controversies and disputes.

Agriculture in Poland is changing. Despite the gradual transition from conventional to organic farming, the dynamics of the transformation are unsatisfactory. Organic farms are characterised by their commodity nature, with a predominance of crop production. There is a small percentage of farms specialising in animal husbandry or mixed farming. It is therefore necessary to change the "green architecture of agriculture" towards a modification of regulations, procedures, including certification procedures, and financing, which will facilitate a smooth transition of farmers to organic production. It should not be forgotten that the development of organic production is strongly dependent on the demand for organic products and thus the acceptance of higher prices for them compared to conventionally grown products. In the current situation, organic production should be considered as a niche product, dedicated to consumers with a higher level of affluence.

The European Green Deal presents both opportunities and risks for Polish organic farming. The reduction of greenhouse gas emissions and healthy food for consumers are undoubtedly benefits of the proposed changes. There are also dangers of an economic nature. Those in power have a huge responsibility to find solutions that reconcile the environmental (nature and climate protection) and social interests of farmers. And how will these interests be reconciled? We will be witnesses and participants in this evolution.

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EUROPEJSKI ZIELONY ŁAD A SZANSE I ZAGROŻENIA ROLNICTWA EKOLOGICZNEGO W POLSCE

Cel artykułu. Celem opracowania jest wskazanie kluczowych założeń strategii Europejskiego Zielonego Ładu w odniesieniu do rolnictwa ekologicznego. Szczególną uwagę zwrócono na szanse i zagrożenia wynikające z konieczności przejścia na „zielone" rolnictwo w Polsce. Założono, że przejście na ekologiczne rolnictwo w Polsce będzie wymagało zmiany architektury rolnictwa przy wypracowaniu kompromisu pomiędzy potrzebami środowiskowymi a sektorowymi.

Metoda badawcza. Artykuł ma charakter przeglądowy, a do osiągnięcia zamierzonego celu wykorzystano następujące metody badawcze: przegląd literatury przedmiotu, regulacji unijnych oraz danych statystycznych dotyczących rolnictwa, w tym ekologicznego w Polsce, metodę opisową i indukcyjną.

Wyniki badań. Europejski Zielony Ład to ambitna strategia dla Unii Europejskiej na współczesne wyzwania gospodarcze, społeczne, a przede wszystkim środowiskowe. Głównym celem dokumentu jest osiągnięcie do 2050 r. zerowego poziomu emisji gazów cieplarnianych, oddzielenie wzrostu gospodarczego od nadmiernego korzystania z zasobów naturalnych, przejście na czystą gospodarkę o obiegu zamkniętym, przeciwdziałanie utracie różnorodności biologicznej i obniżenie poziomu emisji zanieczyszczeń. Wszystkie wymienione cele bezpośrednio lub pośrednio powiązane są z sektorem rolniczym. Dla tego sektora najważniejsze znaczenie mają dwie strategie: „od pola do stołu" oraz unijna strategia na rzecz bioróżnorodności 2030. Rolnictwo w Polsce przechodzi przeobrażenia. Pomimo stopniowego przechodzenia z rolnictwa konwencjonalnego na rolnictwo ekologiczne, dynamika przemian jest niezadawalająca. Cechą charakterystyczną gospodarstw ekologicznych jest ich towarowy charakter, z przewagą produkcji roślinnej. Gospodarstw specjalizujących się w chowie zwierząt lub mieszanych jest niewielki odsetek. Europejski Zielony Ład niesie dla polskiego rolnictwa ekologicznego zarówno szanse, jak i zagrożenia. Ograniczenie emisji gazów cieplarnianych, zdrowa żywność dla konsumentów to niewątpliwie zalety postulowanych zmian. Są także zagrożenia, których podłoże ma charakter ekonomiczny. Na rządzących ciąży ogromna odpowiedzialność przyjęcia takich rozwiązań, które pogodzą interes środowiskowy i społeczny.

Słowa kluczowe: Europejski Zielony Ład, gospodarka rolna, rolnictwo ekologiczne.

JEL Class: Q01, Q55, R11, Z13.

Zakończenie recenzji/ End of review: 10.06.2024
Przyjęto/Accepted: 19.06.2024
Opublikowano/Published: 26.06.2024