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Poland's financial sector development in terms of global financial transformations

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ABSTRACT
The paper deals with the study of global financial transformations impact on the financial sector in Poland. Two types of tendencies of the global financial space development that create new conditions for national financial systems are defined, including: trends that lead to qualitative shifts in countries' financial systems and do not necessarily imply a negative impact on the national financial systems; threatening challenges that shatter financial markets and restrain their sustainable development. The current positions of Poland's financial sector in the world and regional financial systems are evaluated. The shifts in the national financial sector in terms of global financial transformations are found out. It is stated that while integrating into the global financial space, Poland will increasingly feel the impact of global transformations that will determine further scenarios for the domestic financial sector development. Exogenous factors that can aggravate challenges threatening the stability of Poland's financial sector in the near future are identified.

Keywords: global financial transformations, financial sector, financial market, financial assets, financial depth, international reserves.

1. Introduction

The impact of globalisation is increasingly felt by the global financial system as a whole and by countries' financial sectors. Previously, the functioning of national financial systems, as well as their efficiency and stability were determined mainly by the internal conditions of the countries' financial and economic development, as well as their monetary and currency policy. Today, as a result of shaping a global financial market, a growing scale and speed of financial capital flows, financial integration deepening, linkages between national financial systems are intensifying. Consequently, the countries' financial sectors are becoming increasingly dependent on the exogenous factors of the impact, and the ability of monetary authorities to influence national financial systems is becoming rather limited.

The financial sector in Poland, like the financial systems of other Central and Eastern European countries, is characterised by contradictory features and trends. On the one hand, Poland's economy and, accordingly, its financial market, have already gone through times of structural transformation and deep reform, reaching the level of a market economy. On the other hand, in terms of the indicators of financial development, statistical databases of some international economic organizations (in particular, the Bank of International Settlements) consider the national financial market as an emerging one, which is characterised by less depth, transparency and, at the same time, greater volatility and risks. However, in 2018, the FTSE Russell and STOXX index agencies reclassified the Polish capital market to Develop Market Status. Given the mixed nature and sufficiently high vulnerability of Poland's financial sector, its response to the global challenges of the financial environment can prove to be rather ambiguous and vague. Therefore, there is an increasing necessity to find out the peculiarities of the impact of current patterns of global financial environment development on the financial system in Poland and identify the changes occurring in the national financial sector in terms of global financial transformations.

2. Literature review

Research papers devoted to the study of Poland's financial system and financial market are quite numerous and diverse. A great part of these studies focuses on the analysis of the current state, problems and trends of development of the financial sector of Central and Eastern European countries, including Poland.

N. Cevik, S. Dibooglu, and A. Kutan have presented a paper aimed at systematising and generalising scientific achievements in the field of study of the CEE countries' financial sector. They note that the global financial crisis of 2007-2009 drew the researchers' attention to the effect of the financial markets "contagion" and caused an increase in the number of studies on the financial market linkages and the spread of financial shocks in terms of financial integration. The authors note that many studies of CEE banking systems show that, as a rule, banks with foreign capital perform better than domestic banks; at the same time, the presence of foreign banks in the financial system can be accompanied by increased risks of volatility transmission from leading financial markets (Cevik, Dibooglu and Kutan, 2016).

Studying the reforms, through which the CEE financial sectors and markets have gone during the transition period, M. Balling, F. Lierman and A. Mullineux identify the impact of the size and efficiency of domestic financial markets on economic growth in transition countries of the region. A large part of the study is devoted to the efficiency of banking systems in CEE. It is stated that "Central and Eastern European countries' banking sectors are aspiring to the processes of consolidating into a single European market and their successful convergence can both be influenced by and have an influence on the enhancement of European integration in the financial services industry" (Balling, Lierman and Mullineux, 2004).

R. Matousek et al., while assessing the development of financial markets in CEE countries and the impact of the global crisis on national financial sectors, highlight the main obstacles to the full integration of countries' financial markets in EU market (Matousek, 2010). M. Redo states that Central and Eastern European countries are strongly linked to the international economic and financial systems, which results in their dependence on foreign capital and on the upturn in the global markets (Redo, 2018).

Taking into consideration the results of the examination of capital markets in EU members of the CEE region, R. Silvestri indicates that their equity and bond markets are relatively small compared to those in the EU's Western European countries. To solve the problems of capital markets in the countries of the region, the author proposes to diversify the sources of economy financing, to provide small and medium-sized businesses with better access to financing, to improve the financial supervision systems in order to increase investor confidence (Silvestri, 2019).

O. Orylski identifies factors that have a positive impact on the development of the capital market in the CEE region. In his paper the positions of some cities of the region, in particular Warsaw, in the ranking of global financial centres are analysed. Based on the analysis of the capitalisation and the average rate of return, the study of the stock exchanges functioning (in particular, the Warsaw Stock Exchange), the assessment of mergers and acquisitions in the capital market, the author offers a scenario for the development of capital markets in Central and Eastern Europe and determines the prospects for capital market further consolidation (Orylski, 2009).

B. Egert and E. Kočenda focus on studying the linkages between the European financial markets. They analyse intraday comovements among three developed (France, Germany, and the United Kingdom) and three emerging (the Czech Republic, Hungary, and Poland) European stock markets. The authors point out that very little systematic positive correlation during a trading day can be defined between the developed and emerging stock markets, or within the emerging group itself. Hungary demonstrates higher correlation with the emerging markets and its dynamics show an increasing trend; Poland and the Czech Republic show less clear-cut results (Egert and Kochenda, 2011).

J. Barunik and L. Vacha, contributing to studies on international stock market comovements and contagion, apply wavelet tools to high-frequency financial market data, which allows them to understand the relationship between stock markets in a time-frequency domain. They apply techniques to uncover specific dynamics of correlations between the Central and Eastern European stock markets and the German DAX. As the data for the analysis, they use 5-minute high-frequency data of the Czech, Hungarian and Polish stock indices with a benchmark of the German stock index. The researchers argue that there was significantly lower contagion between the CEE markets and the German DAX after the stock market crash in 2008 (Barunik & Vacha, 2013).

S. Gardó and R. Martin analyse the impact of the global economic and financial crisis on the financial markets of Central, Eastern and Southeastern European countries, focusing on the countries that are the EU members but are not members of the Eurozone (including Poland). The authors concluded that the crisis had a strong impact on exchange rates in the countries studied; their stock markets piled up huge losses and bond spreads increased to elevated levels, while becoming more volatile. Alongside, researchers note that the impact of the global crisis on the financial sectors of the CEE countries was rather heterogeneous; the countries having the greatest economic imbalances have suffered most (Gardó and Martin, 2010).

M. Bukowski, A. Śniegocki and Z. Wetmańska dwell on the specific features of sustainable finance and ESG (environmental and social governance) integration in Poland. They concentrate on three segments of the Polish financial sector (pension funds, insurance sector, asset management) and study current state of sustainable finance in Poland (Bukowski, Śniegocki and Wetmańska, 2019).

Thus, the current scientific achievements in the field of research mainly focus on the issues of financial market segments functioning in CEE countries, including Poland. Today, Poland seeks to fully integrate its financial system into the global financial space. It should be taken into consideration that further integration will be accompanied by an increasing dependence of the national financial market on global financial trends and challenges. This requires intensified studies on the permanent monitoring and systematic assessment of the country's financial sector development under the influence of global financial transformations.

3. Methodology

This study is aimed at determining the peculiarities of the impact of the global financial environment development on Poland's financial system, identifying current positions of the national financial sector in the global and regional financial systems and reasoning the shifts occurring in the country's financial sector in terms of global financial transformations. In the context of this study, the global financial transformations are considered to be the global trends that reflect qualitative changes and quantitative shifts in the architecture of the global financial system, in the structure, terms and tendencies of the financial markets development in the process of their evolution under the impact of globalisation.

While determining the trends of the global financial space development, which create new conditions for the national financial systems, and reasoning exogenous factors that can aggravate challenges threatening the stability of Poland's financial sector, historical and logical methods, methods of systematic analysis, generalisation and abstraction were used. To estimate the indicators of the national financial sector of Poland, to identify its positions in the global and regional financial systems and to reason the changes occurring in Poland's financial sector in terms of global financial transformations, methods of analysis and synthesis, comparative and structural analysis, statistical and economic and mathematical methods were applied. By means of econometric tools application, parameters of the regression models that reflect the financial assets impact on real economy in Poland and CEE countries were calculated.

As absolute indicators characterising the financialisation of the economy and international liquidity, data on the size of financial assets (according to the IMF methodology, they include stock market capitalisation, debt securities and bank assets) and official international reserves were used. Relative assessments are presented by the following financial depth indicators: general (calculated as the ratio of total financial assets to nominal GDP) and sectoral (banking sector depth, stock market depth, debt securities depth) indexes.

For the purpose of a comprehensive assessment of the financial sector, integrated indicators are analysed including: the WEF Financial Market Development Index and the IMF Financial Development Index. According to the World Economic Forum methodology, the Financial Market Development Index is a component of the Global Competitiveness Index. Until 2018, the calculation of the Financial Market Development Index was based on an assessment of indicators of performance (availability and affordability of financial services, financing through local equity market, ease of access to loans, venture capital availability) and confidence (soundness of banks, regulation of securities exchanges, legal rights index). Starting from 2018, the "Financial System" sub-index of the Global Competitiveness Index includes the indicators of depth (domestic credit to private sector, financing of SMEs, venture capital availability, market capitalisation, insurance premiums) and stability (soundness of banks, non-performing loans, credit gap, banks' regulatory capital ratio). The Financial Development Index, developed by the IMF, summarises how developed financial institutions and financial markets are in terms of their depth (size and liquidity), access (ability of individuals and companies to access financial services), and efficiency (ability of institutions to provide financial services at low costs and with sustainable revenues and the level of activity of capital markets).

The statistical base of the survey is represented by the official reports and statistical databases of the International Monetary Fund, the Bank for International Settlements, the World Economic Forum, UNCTAD, the National Bank of Poland.

4. Results

The national financial systems have always functioned under the influence of a large number of factors that have been shaping the outlines of the financial markets and the conditions of the financial environment. Globalisation has appeared to be the catalyst for many processes that are qualitatively changing the world and national financial systems, creating new conditions for their functioning or directly threatening their stability. These processes have started relatively recently, but they are rapidly getting a persistent long-term nature and taking a shape of global financial transformations. Global financial transformations do not necessarily imply a negative impact on the national finances, but rather lead to qualitative shifts in the countries' financial systems. These are global trends and patterns such as increasing level of financial depth of the economy; formation of new centres of global financial influence; regionalisation of the global financial space; increasing influence of transnational banks on financial markets; permanent redistribution of financial assets between different segments of the financial market. Alongside it, a number of global trends have the character of real challenges, shaking up financial markets and restraining their stable development, including:

- periodic aggravation of financial crises, the growth of their global scales;
- the continued uncertainty and volatility of the global financial environment;
- aggravation of competition for financial resources, corresponding increase in unevenness of their spatial distribution;
- overall increase in countries' debt, including the external one;
- inadequate size of countries' international reserves;
- increasing predisposition of economies to the effect of financial "contagion";
- activation of cybercrime in the financial sector, etc.

Assessing the current state of Poland's financial system, IMF experts identify the reduction of risks in the long term and note that a stable macroeconomic situation is the basis for the country's financial market sound development. Lending is moderately increasing, although its greater share goes to more risky segments. The banks financial soundness, with some exceptions, is generally improving. The financial sector is characterised by the presence of many small cooperative banks and credit unions. The insurance sector is small compared to most EU markets, while the stock market is a well-developed segment of the capital market (International Monetary Fund, 2019). At the same time, in terms of financial depth, the level of Polish economy financialisation is significantly behind world indicators: the financial depth of the national economy does not exceed 173%, being on average at the level of 152% for the period of 2007-2018 (Table 1).

During the analysed period, the average level of the world economy financial depth was 405%, peaking in 2017, when financialisation reached 460%. However, by the same indicator, Poland is ahead of the level of the CEE countries' financial depth, which averaged 138% for the region during 2007-2018. Therefore, the level of financial depth of the Polish economy is moderate. This indirectly indicates that the country's financial sector is not too inflated and has not lost a linkage with the real sector. The calculation of the coefficients of correlation be-

Table 1: General and sectoral indicators of the Polish economy financial depth, 2007-2018, % of GDP

Indicator	2007	2009	2011	2013	2015	2017	2018
Financial depth of economy	146.90	150.36	138.53	170.89	153.43	173.36	153.26
Banking sector depth	44.86	60.73	62.12	63.77	67.81	70.11	73.40
Stock market depth	49.32	34.33	26.14	39.02	28.85	38.27	27.40
Debt securities depth	52.72	55.30	50.27	68.10	56.77	64.98	52.46

Source: author's calculations based on BIS Debt securities statistics, CEIC Data, IMF World Economic Outlook Database, The Global Economy, UNCTADstat.

tween financial assets and nominal GDP also shows that the relationship between the financial and real sectors of the economy in Poland remains sufficiently noticeable: a correlation coefficient amounts to 0.58, that is slightly higher than the average coefficient of 0.53 for the CEE countries (for comparison: in Croatia, the coefficient is 0.1; in Slovenia – 0.2; in Hungary – 0.4).

The data presented in Table 1 show that the banking sector in Poland is the most profound segment of financial system, which financialisation index increased by 28.5% from 2007 to 2018. The smallest amount of financial assets is concentrated in the stock market, which financial depth has decreased by almost 22% over the same period. On the whole, the indicators characterising the financial depth of the Polish economy by the degree of its saturation with equity and debt securities differ from the similar indicator of bank assets in terms of considerable volatility. This is a sign that the domestic securities market to some extent serves as speculative mechanism for attracting short-term capital, which movement is rather volatile.

For additional verification of the relationship between the size of financial assets and GDP, as well as for the quantitative assessment of the financial assets impact on the real sector of the Polish and CEE countries' economies, regression models are offered. The parameters of the regressions, calculated by means of econometric tools application, are presented in Table 2.

Table 2: Regression models of financial assets impact on real economy in Poland and CEE countries

Country	**Regression model**	**R2**
	Financial Assets in Total	
CEE countries	GDP = 0.206 FA + 1007.773	0.5001
Poland	GDP = 0.245 FA + 316.076	0.3329
	Financial Assets by Types of Assets	
CEE countries	GDP = 0.938 BA + 0.130 SMC – 0.200 DS + 658.455	0.7681
Poland	GDP = 0.769 BA + 0.068 SMC – 0.215 DS + 307.098	0.7231

* GDP – Gross Domestic Product, FA – Financial Assets, BA – Bank Assets, SMC – Stock Market Capitalization, DS – Debt Securities.
Source: author's calculations.

According to the regression models, financial assets do not have a significant impact on the nominal GDP in Poland, which is confirmed by the regression parameters and the low value of the R2 coefficient. Alongside, the parameters of the regression models by types of financial assets demonstrate that the greatest impact on the real sector of Poland and CEE countries in general is made by the indicator of bank assets. The impact of stock market capitalisation on GDP is rather insignificant, and the growth of the debt securities indicator makes a negative impact on nominal GDP. Thus, the regression analysis confirms the previously stated fact that the securities markets of the CEE countries still have speculative features and do not efficiently perform their function of the real sector support.

In terms of the role of Poland's financial sector in the financial system of Central and Eastern Europe, until recently the country was the undisputed leader of the region by the concentration of financial resources: in 2017, almost 43% of financial assets and over 28% of international reserves of the region were concentrated in Poland (financial assets and international reserves of the region are calculated as the sum of the corresponding indicators in 12 CEE countries – Albania, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia). In 2018, there was a redistribution of financial assets between the countries of the region, resulting in reduction of Poland's share of financial assets to nearly 29% (Table 3).

Table 3: Poland's positions in the CEE countries' financial system in terms of share in financial assets and international reserves of the region, 2007-2018, %

Indicator	2007	2009	2011	2013	2015	2017	2018
Financial assets	37.79	37.79	39.76	42.74	42.42	42.77	28.78
Bank assets	30.22	31.73	34.23	35.84	39.71	40.54	40.59
Stock market capitalization	40.12	44.91	47.63	55.57	49.57	52.51	12.72
Debt securities	44.93	42.54	44.84	44.88	42.75	40.74	38.40
International reserves	27.99	29.91	34.02	33.45	33.80	28.43	29.05

Source: author's calculations based on BIS Debt securities statistics, CEIC Data, IMF World Economic Outlook Database, The Global Economy, UNCTADstat.

It should be noted that this reduction was the consequence of an impact of both endogenous and exogenous factors. On the one hand, in 2018, Poland saw a decrease in the stock market capitalisation (by 20% compared to 2017) and the volume of debt securities (by 10%). Taking into account the continued increase in the size of bank assets by 16%, the total size of financial assets of the country decreased by 2%, which is a relatively insignificant cutback. On the other hand, in 2018, the Czech Republic experienced an unprecedented increase in the stock market capitalisation, which has increased by 18 times, reaching 399% of the country's GDP. This was a key factor that caused a decline in the share of Poland's financial assets in the region.

The data, presented in Table 3, demonstrate that Poland keeps its position as a regional leader in terms of bank assets, accounting for almost 40% of CEE's bank assets in recent years. According to the National Bank of Poland, despite the fact that some medium-sized banks still look weak, the banking system in the aggregate demonstrates resilience to adverse shocks due to accumulated capital and low leverage (Narodowy Bank Polski, 2019). The improvement of the domestic banking system is clearly shown by the main indicators of its stability and efficiency. In particular, bank credit to the private sector is increasing: the ratio of bank loans to the private sector to GDP has ranged from 52% to 54% in recent years (in the pre-crisis period it was at the level of 13-37%). The share of non-performing loans in the total amount of bank loans declined from 5.2% in 2012 to 3.85% in 2018 (this indicator was 2.82% in 2008 and grew rapidly during the first post-crisis years).

The overall level of financial sector development is reflected by integrated indicators, in particular the WEF Financial Market Development Index and the IMF Financial Development Index. Given the experience of the occurrence and development of the global financial crisis in the context of its impact on banking systems, and the growing importance of bank lending in economies' financing (in 2018, the share of bank assets in global financial assets reached 51%), the stability of the banking sector is recognised by the WEF as the basis for the stability of the financial system. This has been reflected in a revision of the indicators used for calculation of the "Financial System" sub-index of the Global Competitiveness Index in 2018. According to the Financial Market Development Index, Poland's financial sector got the highest rating in 2010, ranking 32nd out of 139 countries (Table 4).

According to the data, provided by Table 4, later, the WEF Financial Market Development Index began to deteriorate, which was accompanied by Poland's move to the 55th position in 2018. At the same time, the country's financial sector positions in terms of the IMF Financial Development Index, which was in the range of 0.47-0.49 during the period of study, are relatively stable.

Given the global tendency to periodic aggravation of financial crises, the countries' financial markets should be able to recover rapidly from financial turmoil. Figure 1 presents a map of the CEE countries' financial sectors positioning by the criteria of financial depth and Financial Market Development Index in 2008 and 2018.

Analysis of the states of Poland's financial sector in crisis and current periods shows a significant improvement in its position compared to other countries in the region. In 2018, in terms of financial depth and Financial Market Development Index mapping, Poland ran second, giving way only to the Czech Republic.

Among the global financial transformations that threaten the stability of financial markets there are the increasing volatility of the global financial environment and the overall increase in the external debt burden in terms of growth in lending globally. Given these trends, there is an increasing need in availability of sufficient international reserve assets in countries. The availability of international reserves is not a

Table 3: Poland's positions in the CEE countries' financial system in terms of share in financial assets and international reserves of the region, 2007-2018, %

Indicator	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Financial Market Development (WEF score)	4.3	4.6	4.7	4.6	4.6	4.5	4.6	4.3	4.2	4.2	63.4*
Financial Market Development (WEF rank)	68	44	32	34	37	38	35	43	46	53	55
Financial Development Index (IMF)	0.48	0.47	0.47	0.49	0.48	0.48	0.47	0.48	0.47	0.47	n/a

* The Financial Market Development score for 2018 is presented according to a new methodology that assumes a maximum value of 100, unlike the previous one, where the index ranked from 1 to 7.

Source: IMF Financial Development Index, WEF Global Competitiveness Reports.

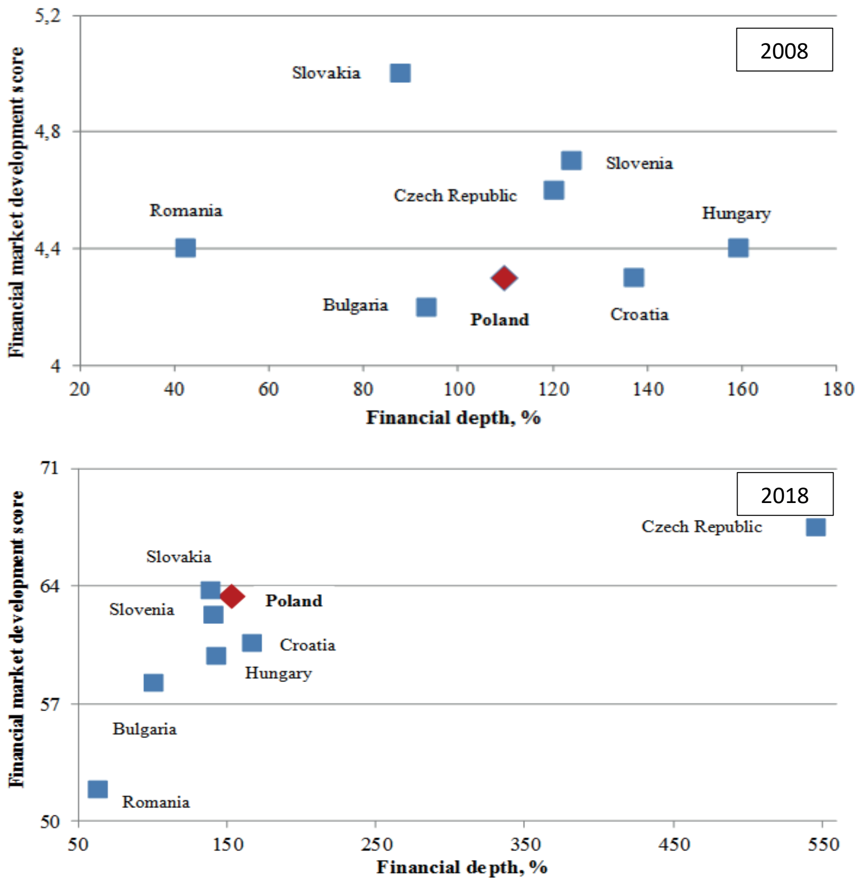

Figure 1. Map of the CEE financial sectors positioning by the criteria of financial depth and financial market development in 2008 and 2018

Source: WEF Global Competitiveness Reports and author's calculations based on BIS Debt securities statistics, CEIC Data, The Global Economy, UNCTADstat

direct indicator of the financial sector state. However, the primary purpose of international reserves is to provide the central bank with the ability to directly regulate the balance of payments deficit or to indirectly influence the volume of such a deficit. Therefore, by affecting the balance of payments, the exchange rate and characterising the country's ability to meet external obligations, international reserves are an important factor of the national economy and financial sector stability.

Poland holds the second largest official reserves among the CEE countries, accounting for 29% of the region's reserves while the share of the Czech Republic is 35% (see Table 3). In 2018, Poland's official reserves, including gold, amounted to the historical maximum of 116.96 USD billion and increased by 78% compared to 2007. In the same period, international reserves covered 4.6 months of Polish imports of goods and services, demonstrating their adequate size and sufficiency to ensure the stable functioning of the economy and, in particular, the financial system.

Taking into consideration the current state of global transformations, exogenous challenges can aggravate in the near future, threatening the stability of Poland's financial sector. The general economic risk factor is the deterioration of the global economic environment and the slowdown in economic growth expected in all countries. These trends will lead to shaping harder and more volatile conditions of the global financial environment, which can entail a decline in credit supply, worsening banks' profitability and increasing their risk of default. A global recession can increase credit and market risks and deteriorate asset quality. The need for more restrictive regulation for banks will increase, negatively affecting their already low profitability. Some banks searching for income-raising possibilities can take up excessive short-term risks in terms of increased financial environment volatility.

The projected decline in European banks' profitability against the backdrop of strained bank balance sheets can provoke systemic problems in the banking system, even with possible knock-on effects, in particular sell-off in stock markets, which will have a corresponding negative effect on the capital markets in general. The imbalance of the national financial sector can occur due to financial market stress arising from politically driven deglobalisation initiatives in Europe and the USA. Policy divergence can lead to deeper global imbalances and entail an increase in exchange rate and capital flow volatility, which can cause exhaustion of countries' international reserves. Increasing uncertainty will affect financial market sentiment in Poland, leading to a loss of confidence and a decline in private consumption and investment.

5. Conclusions and discussion

Under the influence of globalisation, a number of new trends arise in the development of the global financial space, which are divided into two types:

1) trends that lead to qualitative shifts in countries' financial systems and do not necessarily imply a negative impact on them (increasing level of financial depth; appearance of new centres of global financial influence; regionalisation of the global financial space, etc.);
2) threatening challenges, shattering financial markets and restraining their sound development (aggravation of global financial crises; increasing uncertainty and volatility of the global financial environment; tougher competition for financial resources; increase in countries' external debt).

Global financial transformations create new conditions for national financial systems, exacerbate their instability, and lead to increase in volatility of financial assets dynamics, their uncontrolled redistribution between countries and financial market segments.

Poland's financial sector is still of a mixed type, demonstrating the features of both developed and emerging markets. Poland's financial system is characterised by a gradual reduction of long-term risks, a moderate increase in lending, and an improvement in banks' financial soundness. At the same time, in terms of financial depth, the level of financialisation of Polish economy is far behind the global indicators, yet outperforming the average level of financial depth of CEE countries. The moderate level of financial depth of the Polish economy, as well as the calculated coefficient of correlation between financial assets and nominal GDP, show that the country's financial sector has not lost linkage with the real sector.

Poland's banking sector demonstrates the highest depth, concentrating a large proportion of the country's financial assets. The stock and debt market segments and the corresponding sectoral financial depth indicators are characterised by significant volatility and wavy dynamics. The Polish and Czech financial sectors are leaders among the CEE countries in terms of financial resources concentration, and in terms of bank assets, Poland's banking system is the biggest in the region. The stability of the domestic banking system is achieved by accumulated capital, low leverage, decreasing share of non-performing loans.

According to the dynamics of the WEF Financial Market Development Index, the general level of the Poland's financial sector development showed the best result in 2010, but over the time this indicator deteriorated, which was accompanied by worsening of Poland's positions in the corresponding country ranking. The financial sector's position on the IMF Financial Development Index is relatively stable. Based on the map demonstrating the positioning of the financial sectors of CEE countries by the criteria of financial depth and Financial Market Development Index in 2008 and 2018, a comparison of the Polish financial sector state in the crisis and current periods has been provided. The results of the analysis show a significant improvement in Poland's financial sector position (which in 2018 ran second giving way only to the Czech Republic) compared to other countries in the region.

In terms of growing openness of financial markets, availability of international reserve assets is essential for the stability of the countries' financial sectors. Poland holds the second largest official reserves among CEE countries, which was sufficient to cover more than 4 months of imports of goods and services in 2018. Therefore, the size of the international reserves is adequate to resolve external imbalances that can threaten the stability of the financial system.

While integrating into the global financial space, Poland will increasingly feel the impact of global financial transformations that will determine further scenarios for the domestic financial sector development. The key exogenous challenges that will threaten the stability of Poland's financial sector in the near future include:

- the deterioration of the global economic environment, the slowdown in economic growth in all countries;
- tougher and more volatile conditions of the global financial environment;
- politically driven deglobalisation initiatives in

Europe and the USA, increasing global imbalances as a result of deepening policy divergence.

The effects of these processes for Poland's financial sector could appear in a loss of confidence and a decline in private consumption and investment due to increased financial uncertainty; increasing exchange rate and capital flows volatility, corresponding exhaustion of international reserves; curtailment of lending, banks' profitability deterioration and increased risk of their default; implementation of restrictive regulation for the banking system; transmission of banking system problems to other financial sectors, in particular, to the stock market. Predictive identification and assessment of the occurrence probability and the extent of the consequences of these and other problems of the national financial sector, which can be generated by global transformations, should be considered as an important component of policy for their efficient prevention and elimination.

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