

Financial and Banking Services Market

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**WORLD BANKING SYSTEM:
POST-CRISIS RECOVERY?**

Abstract

The article studies the state of the world banking system recovery after the global crisis. It is stated that by the indicators of financial depth, capital adequacy and profitability of the biggest banks the world banking system is nowadays the most stable and profitable for the entire post-crisis period of its development. It is noted that the structure of the modern world banking system corresponds to the spatial structure of the world economy, which consists of different taxonomic levels of regions and where the role and importance of global regions is being enhanced against the background of the globalization processes deepening. Based on the study of changes in the distribution of bank assets and banks' profits between global regions, the rankings of the biggest banks in the world, indicators of return on assets and return on equity of banks from different regions, regional peculiarities of mergers and acquisitions in the banking sector, progress in the implementation of the requirements of the Basel Committee on Banking Supervision, regional features of the post-crisis recovery of the world banking industry are identified. It is proved that there is an increasing degree of unevenness in distribution of bank assets between global regions, and a tendency of increasing bank assets concentration in three main regions – Asia Pacific, American and

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European regions – is found out. On the basis of assessment of the transformational shifts in the regional structure of the world banking industry changes of the global regions role in the world banking system in the process of its post-crisis recovery are identified.

Key words:

Bank assets, financial depth, global financial crisis, global regions, post-crisis recovery, and world banking system.

JEL: G15, G21.

Introduction

World banking system is an integral part of the global financial system and the corresponding mechanism for redistribution of financial resources in the world economy, while the banks are the main intermediaries in the financial markets. The world banking system of nowadays is a complex multilevel entity with its own hierarchical structure that includes transnational and multinational banks, national banking systems, international and regional financial institutions. Alongside it, the construction of the world banking system corresponds to the spatial structure of the world economy, the main taxonomic levels of which cover the relevant types of regions. At the same time, the deepening of the globalization processes has objectively led to the strengthening of the role of global regions as influential actors of international economic relations.

In recent years, the banking sectors of the countries as organic elements of the world banking system have evolved under the growing influence of such exogenous factors as the global financial crisis, post-crisis transformations of the market environment, changes in the institutional and regulatory framework of national and international banking. Responding to the new business environment, banks around the world were forced to re-evaluate and adjust their business strategies, change the ratio of internal and cross-border transactions, and solve the problems of reducing the profitability of banking (Bank for International Settlements, 2018). During the decade since the financial crisis, the global banking industry and regulatory institutions were taking joint actions to bring the world

banking system back into the financial stability and security frames. The world's average ratio of Tier 1 capital to total risk-weighted assets (a key indicator of the bank's financial strength according to the Basel III) has increased from 9.8% in 2007 to 31.2% in 2017. Since 2012, the average ROE of banks has been in the range of 8-9% (Mckinsey Company, 2018). The total assets of the 1000 biggest banks in the world in 2018 reached 124 USD trillion, and their average ROA was 0.9% (Deloitte Center for Financial Services, 2019). The total profit of the 1000 biggest banks in 2018 increased by 15.6% compared to the previous year, reaching 1.1 USD trillion, which is almost 10 times higher than in crisis year of 2009. These facts indicate not only that the world banking system today is bigger in size and more profitable, but also that it has achieved a state of relative stability.

At the same time, the processes of post-crisis recovery and adaptation to the new regulatory policy requirements proceeded differently in countries and regions of the world. The global crisis has accelerated those regional shifts in the construction of the world banking system that had outlined even before the crisis, causing changes in the distribution of bank assets and banks' profits between global regions, the rankings of the world's biggest banks, the rates of return on assets and return on equity of banks from different regions, regional peculiarities of mergers and acquisitions in the banking sector.

Analysis of the recent research and publications

Theoretical issues and practical aspects of the world banking system development and the impact of the global crisis on the global financial environment are rather widely and multidimensionally covered in actual scientific studies. V. Kurylyak has reasoned the general financial and economic problems of civilizational development of the world economy, in particular in the dimensions of the global financial crisis, and has indicated the events that will shape the financial state of civilization of the future (Kurylyak, 2010). Based on the study of problems of a new financial order formation in the global financial markets after the global economic crisis of 2008–2009, O. Sokhatska has systematized the factors that hinder the reform of the financial system in order to achieve a higher degree of its transparency and restore market participants' confidence (Sokhatska, 2010).

Considering the results of the study of forms and factors of bank consolidation, dynamics of bank mergers and acquisitions, N. Tsyhanova has identified patterns of their development against the background of financial globalization (Tsyhanova, 2013), and V. Kozyuk has distinguished and revealed the nature of the global financial consolidation effects in the context of financial stability (Kozyuk, 2009). Furthermore, domestic scholars focus on the evolutionary trends

of the world banking system; in particular, A. Pavliuk identifies changes that are taking place in bank management and bank technologies (Pavliuk, 2014). Having analyzed the indicators of countries' banking systems worldwide, L. Sus points out the general tendencies of banking activity (universalization, consolidation, globalization, internationalization, transnationalization) (Sus, 2018), and S. Yehorycheva proves the nature of the globalization impact on the development of world banking (Yehorycheva, 2015).

Regulatory frameworks of the world banking system functioning as objects of actual study are of particular importance. S. Fischer argues that regulatory changes occurring in current national financial systems have a positive effect on their stability, and the benefits of this positive impact can outweigh the potential costs of a possible reduction in banks and other financial institutions liquidity (Fischer, 2016). N. Stukalo and M. Lytvyn, reasoning the peculiarities of the implementation of international standards of banking under current conditions, argue that the implementation of the Basel Committee requirements has positive and negative effects for the national banking system (Stukalo and Lytvyn, 2011). O. Mozgovyj and O. Pavliuk, emphasizing that the main factors of financial destabilization in times of economic crises are concentrated in the banking sector, point out that adherence to the Basel Committee's recommendations by the national banking regulation systems is rather complicated and costly process, but improving risk management and measurement techniques provides a more competitive environment for banks and enhances the role of market discipline (Mozgovyj and Pavliuk, 2017). S. Naumenkova, examining the development of the Basel Committee on Banking Supervision requirements, identifies obstacles to the implementation of Basel III bank capital requirements and provides propositions towards increasing the efficiency of prudential activities to recover the stability of the national banking sector (Naumenkova, 2015).

A thorough analysis of the development of national banking systems and global banking is presented in the official materials and analytical reports of the Bank for International Settlements, the Basel Committee on Banking Supervision, the International Monetary Fund, the international consulting companies Deloitte Center for Financial Services and McKinsey, specialized edition *The Banker*, etc.

A relatively new area of studies covers issues of reasoning new conceptual approaches to identifying regions; studying new qualitative features of regionalization in the context of globalization related to the formation of global regions in the world economy. A. Scott (Scott and Storper, 2003) and M. Storper (Storper, 2000) draw attention to the growing role of regions in current international economic relations and the transformation of regions into independent actors, whose significance is increasing, in particular, in the global financial market.

Formulation of the problem

The study is aimed at reasoning the features of the world banking industry and its regional components recovery after the global financial crisis and on this basis determining the nature of post-crisis shifts in the world banking system.

Main material

The place and weight of the banking system in the global financial system are characterized primarily by an indicator of the size of bank assets. In the early twentieth century, bank assets accounted for more than a half of the world's total financial assets. Alongside it, changes in the priority sources of economies' financing, increasing interest in financing through stock market instruments and the corresponding transformations of the global financial market cause changes in the share of bank assets in the structure of global financial assets and shifts in the overall role of the banking sector as a part of the financial infrastructure. In 2003–2007, the share of bank assets was in the range of 34–40%, reaching 47% at the beginning of the global crisis (Fig. 1).

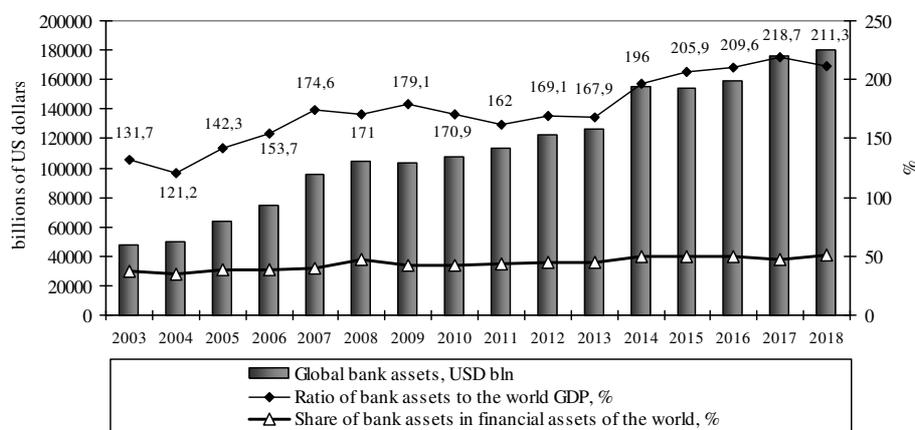
During the crisis years of 2008–2009, many transnational banks sold some of their foreign assets to cover losses. At the same time, there was a collapse of credit operations both in the domestic markets and the euromarkets, which also caused a decline in the share of bank assets, which decreased from 47% in 2008 to 42% in 2010. Since 2011, a gradual recovery of the world banking system has been observed, which is reflected in the growth of the bank assets share in global financial assets up to 51% in 2018. Simultaneously, there is a redistribution of bank assets between different social and economic groups of countries. The share of bank assets of developed countries decreased from 84.0% in 2003 to 70.4% in 2017, while the share of bank assets of developing countries increased from 16.0% to 29.6% in the corresponding period.

Over time, the financial depth of the global economy is growing in terms of bank assets. On the eve of the global crisis, the financialization indicator of the world economy, calculated on the basis of the ratio of bank assets to world GDP, increased: in 2007 it amounted to 174.6%, compared to 131.7% in 2003 and 153.7% in 2006 (see Fig. 1). In the first post-crisis years there is a slight decrease in this indicator, which in 2011–2013 was in the range of 162–169%. However, since 2014, there has been an increase in the level of banking financialization, which reached its peak level in 2017 (281.7%). Situation of the kind can be interpreted in two ways. On the one hand, the growth of bank assets marks an increase in level of the world economy financing. However, taking into

consideration that today the size of bank assets is twice as big as the size of world GDP, increase in the level of banking financialization actually means deepening the gap between the real economy and the scale of banking operations, which can trigger the next stage of the financial crisis.

Figure 1

Share of bank assets in the world's financial assets and financial depth of the world economy by indicators of global bank assets in 2003–2018

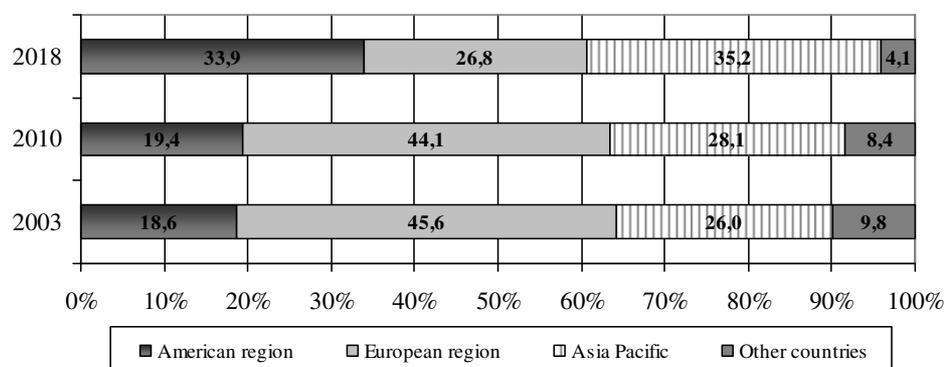


Note. Authors' calculations based on sources (Bank for International Settlements Statistics; IMF, 2003–2019)

In some sense, the global crisis has become a catalyst for transformations in the world banking system related to the regional redistribution of bank assets and the changing role of global regions in the banking sector. Before the global crisis the European region was the undisputed leader in terms of bank assets, accounting for 45.6% of bank assets of the world (Fig. 2). Among the three main global regions, the American region accounted for the least share of bank assets in the pre-crisis period, since the countries of the region relied more on stock market model of financing rather than on banking one.

Figure 2

Regional distribution of the world's bank assets in 2003–2018, %



Note. Authors' calculations based on sources (Bank for International Settlements Statistics; IMF, 2003–2019)

10 years after the crisis, the regional structure of the world banking system has taken on a brand new look: Asia Pacific region now runs the first in terms of bank assets accumulation having the share which exceeds 35%. The second position is occupied by the American region having the share of about 34%, which is not much lower than in the Asia Pacific. Overall, nowadays about 96% of the world's bank assets are concentrated in the American, European and Asia Pacific regions (for comparison: in 2003 their share was 90%). Actually, the tendency of increasing unevenness in bank assets distribution between global regions is observed appearing in assets growing concentration in the three main regions mentioned above, despite the steady economic growth demonstrated by some emerging markets in other regions of the world (including Africa and the Middle East).

The growing role of the American region in the world banking system primarily owed to the improvement of the US banks strength and resilience. The Federal Reserve System's aggressive post-crisis intervention in bank strategies and the introduction of strict rules of banking regulations have contributed to faster recovery of banks in the United States. In addition, the US banking sector has recently developed on the background of favorable GDP growth, tax cuts and rising interest rates. Return on equity (ROE) in the banking sector of the country is the highest in the post-crisis period (11.83%). Moreover, according to Deloitte experts' assessments, the state of such indicators as nonperforming

loans and number of failed institutions testifies the reliability of the US banking industry (Deloitte Center for Financial Services, 2019).

The declining share of the European region in the structure of the world's bank assets is based on the deterioration of the European Union's banking industry. While the EU accounted for 46.7% of the world's bank assets in 2003 and 50.6% in the pre-crisis 2007, then in 2017 the EU's share of bank assets declined to 24.6%. European banks are still experiencing problems related to profitability due to structural deficiencies, low interest rates, and the absence of a pan-European banking regulator. Many EU banks have become smaller in size due to some reduction of operations in international markets and exiting former profitable businesses and sectors. For instance, five major European banks' profits fell from 60.0 USD billion in 2007 to 17.5 USD billion in 2017. At the same time, the return on equity of EU banks, ranked among the 1000 biggest banks in the world, increased to 8.6% in 2017 compared to 5.5% in 2016 (Deloitte Center for Financial Services 2019).

The advancement of the banking sector in the Asia Pacific was related to the rapid development of China's banking system over the past 10 years. In 2018, the top four banks in the world ranking of biggest banks come from China (for comparison: no Chinese bank was represented in the same ranking in 2003; in 2010 there was one Chinese bank in rating, namely Industrial & Commercial Bank of China ranked the 10th (Table 1).

Chinese banks also show high enough profitability rates: the average ROE of the country's biggest banks in 2017 was 15.3% (Deloitte Center for Financial Services, 2019). Nevertheless, prospects of China's banking system further development are a matter of concern taking into account slowdown in economic growth (from 14.2% in 2007 to 6.6% in 2018) and foreign trade wars with the United States.

On the background of the breakthrough of Chinese banks in the ranking of biggest banks, a reduced presence of Western European banks among the biggest banking institutions in the world is observed. In this respect, the following data are illustrative: if in 2010 among the top 10 world's biggest banking institutions by size of total assets 6 European, 2 American and 2 Asian banks were represented, in the corresponding ranking of 2018 there are 6 Asian, 2 American and 2 European banks. The list of 1000 biggest banks in 2018 includes 218 Western European banks (similar to 2017), 175 North American banks (four less than 2017) and 135 Chinese banks (nine more than in 2017). Similar changes occur in the regional distribution of banking profits: Asia Pacific banks today account for more than 43% of the total profits of the 1000 biggest banks in the world, whereas in pre-crisis 2007 this share was only 18.5% (Fig. 3).

Table 1

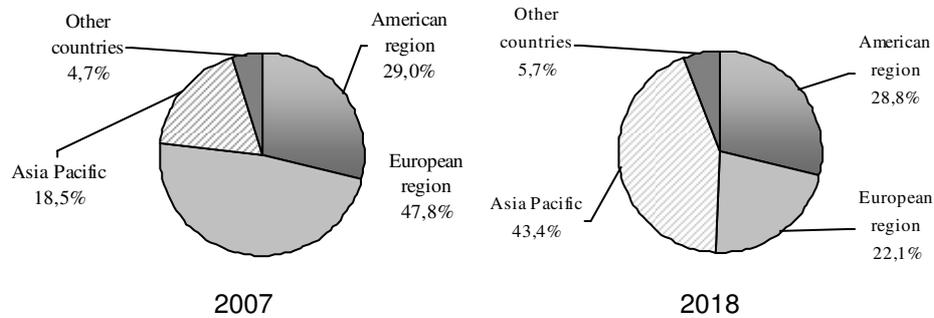
Top 10 biggest banks in the world by total assets in 2003–2018

| Rank | 2003 | | 2010 | | 2018 | |
|------|-------------------------------------|----------------|---------------------------------------|----------------|---|----------------|
| | Bank | Country | Bank | Country | Bank | Country |
| 1 | Citigroup | USA | BNP Paribas | France | Industrial and Commercial Bank of China | China |
| 2 | Mizuho Holdings | Japan | Deutsche Bank | Germany | China Construction Bank | China |
| 3 | UBS | Switzerland | HSBC Holdings | United Kingdom | Agricultural Bank of China | China |
| 4 | Sumitomo Mitsui Banking Corporation | Japan | Barclays PLC | United Kingdom | Bank of China | China |
| 5 | Deutsche Bank | Germany | Royal Bank of Scotland Group | United Kingdom | Mitsubishi UFJ Financial Group | Japan |
| 6 | Mitsubishi Tokyo Financial Group | Japan | Bank of America | USA | J.P. Morgan Chase | USA |
| 7 | JP Morgan Chase | USA | Mitsubishi UFJ Financial Group | Japan | HSBC Holdings | United Kingdom |
| 8 | ING Group | Netherlands | JPMorgan Chase | USA | China Development Bank | China |
| 9 | HSBC Holdings | United Kingdom | Credit Agricole SA | France | BNP Paribas | France |
| 10 | BNP Paribas | France | Industrial & Commercial Bank of China | China | Bank of America | USA |

Note. Comprised based on sources (Keeler, 2003; Sanders, 2018; Top Banks in the World 2010).

Figure 3

Regional distribution of profits of the 1000 biggest banks in the world in 2007 and 2018



Note. Comprised based on source (Myles, 2018)

In the post-crisis years, EU banks to some extent have lost their role as reliable intermediaries in global financial markets as a result of the decline in financial stability and the bank assets liquidity crisis. The shifts in ranks of the biggest banks in the world, which were reflected in the improvement of the position of banks from developing countries, primarily from China, took place due to several factors. First, some banks from developing countries were objectively less likely to be affected by the crisis because they were not as integrated into the global financial system as banks from developed country. Second, the deterioration of the competitive positions of EU banks in the global banking market has been related not only to the impact of the global crisis on banks' liquidity and financial stability, but also to the negative effects of the European debt crisis.

In recent years, the global financial system operates in conditions favorable for mergers and acquisitions in the banking industry. The development of technological infrastructure, regulatory divergences, rising interest rates and competition for deposits between banks are likely to lead to a new wave of mergers and acquisitions in the banking sector. However, the motives, the specific features and the prospects for further development of these processes differ by region. In the American region, US banks M&A activity is expected to increase, in particular as a response of medium-sized banks (having assets of 10-50 US billion) to raising the SIFI (Systemically Important Financial Institutions) threshold up to 250 US billion. Increase in the number of agreements on merging community banks with growth-oriented credit unions can be also observed. In addition, major US banks, constrained by domestic demand for financial services, can

seek opportunities to expand abroad by participating in cross-border mergers. Besides, taking into consideration the increasing competition in the financial sector due to the Fintech industry, some US banks can spend money to acquire Fintech startups (Deloitte Center for Financial Services, 2019).

In Western European countries, whose banking systems are more slowly recovering after the crisis than the banking sectors of most American and Asia Pacific countries, mergers and acquisitions in the banking sector are often an urgent need and the only opportunity for banks to stay on the market. Many European banks are facing a competitive threat from the bigger and more financially sound Asian and American banks, which have occupied a large proportion of the most important segments of banking operations – the investment market and corporate banking. Under these conditions, and considering the internal problems of the European banking system (persistent profitability problems, low interest rates, lack of a consistent EU monetary policy, etc.), mergers and acquisitions become strategically important tools of banks survival (Deloitte Center Financial Services 2019).

The origins of the mergers and acquisitions intensification in the Asia Pacific banking sector are crucially different. Due to increased competition in the domestic banking market, Asian banks are pursuing an aggressive policy of expanding their foreign operations through cross-border merger agreements. The most favorable conditions for this are in the region of Southeast Asia, where governments and central banks provide support to foreign banks (Deloitte Center for Financial Services, 2019).

The post-crisis recovery of the world banking system is largely based on the implementation of Basel III (the updated banking regulation requirements developed by the Basel Committee on Banking Supervision), which is aimed at enhancing the financial strength of banking institutions and preventing banks from taking excessive risks. Initially, it was anticipated that in most countries the adoption of the requirements of the previous document (Basel II) would continue until 2015, when all its constituents will be fully implemented. However, the global financial crisis of 2008-2009 has forced the world community to seek new ways to increase the resilience of banks and national banking systems. As a result, in 2010-2011, the Basel Committee adopted a new standard – Basel III, which provides the following directions for reforming the standards of regulation of the stability of banking institutions: improving the quality, transparency and the structure of bank capital (Basel III offers modification of the categories of Tier 1 and Tier 2 capital and abandons the concept of Tier 3 capital); enhancing the coverage of risks by capital; introduction of leverage ratio for banks; stimulating measures to create capital reserves and reducing the procyclicality; introducing a minimum liquidity ratio for transnational banks.

More profound reform of the banking regulation system provided by Basel III was achieved through the introduction of new standards:

1) improving capital structure through the formation of a capital conservation buffer of 2.5% (which is composed of Common Equity Tier 1 capital) and a countercyclical buffer (at the rate of 0–2.5% of risk weighted assets) to protect banks from the effects of financial shocks and systemic banking risks;

2) introducing a 3% leverage ratio as an indicator of the bank's leverage;

3) developing standards for regulating the liquidity of banking institutions and introducing two liquidity ratios – liquidity coverage ratio and net stable funding ratio;

4) introducing the methodology for identifying systemically important banks (both for the world economy and for the national economy) on the basis of evaluation of such criteria as: size and scale of bank operations, complex nature, relationships of the bank, availability of substitute banking services, bank's global activity.

In 2017, the Basel Committee published an updated summary of Basel III standards «Basel III: Finalizing post-crisis reforms». The terms of the Basel III requirements adoption by countries have been revised several times and now the deadline for its implementation is 2022.

According to the Bank for International Settlements data, at the end of March 2019, the 27 Basel Committee member states have already implemented capital adequacy ratios, liquidity coverage ratios and capital conservation buffer (Bank for International Settlements, 2019). However, progress in implementing other Basel III requirements varies across the countries and regions of the world.

The developed countries in the European region have made the most noticeable progress in the development and adoption of national standards of banking regulation according to the Basel requirements: among 19 standards relating to capital adequacy and structure, leverage and liquidity ratios, the definition of systemically important banks, which had to be implemented by January 2019, regulations are adopted for 63% of requirements, and the remaining standards (37%) are in the process of adoption, as it is presented in Table 2 (the corresponding shares are calculated as the average shares of standards adopted / not adopted / in the process of adoption in the countries of the region).

The progress rates of the Basel Committee requirements implementation in the American and Asia Pacific regions are lower: on the average 21% of standards have not yet been reflected in the relevant documents regulating the national banking systems. At the same time, significant intraregional heterogeneity of Basel III requirements adoption in countries of all global regions has been found out.

Table 2

**State of implementation of Basel III requirements
by Basel Committee member countries in regional context (March 2019)**

| Region | Share of standards in the total number of regulations to be implemented by January 2019 | | | |
|-----------------|--|------------------------|-------------------------|-------------------|
| | adopted | adoption in process | adoption not started | not applicable |
| American | 63 | 11 | 21 | 5 |
| European | 63 | 37 | – | – |
| Asia Pacific | 58 | 16 | 21 | 5 |
| Other countries | 53 | 25 | 11 | 11 |

Note. Authors' calculations based on source (Bank for International Settlements, 2019).

The greatest progress among the countries in the American region is demonstrated by Brazil, which has already adopted 18 (95%) of the 19 standards into national regulations; the worst progress is shown by Mexico, which has developed only three standards (16%). Similarly, in the European region, Switzerland, where 95% of standards are adopted, shows much better performance than EU countries (32% of standards are adopted, 68% are in the process of adoption). Among the Asia Pacific countries, Hong Kong and Singapore implemented 84% of Basel standards, while China – only 32%. Other member states of the Basel Committee (mainly the countries of the Middle East and Africa) also show differentiated state of Basel III standards implementation. In particular, Saudi Arabia, ahead of some developed countries, has developed and adopted 95% of standards; while in South Africa, only 37% of standards are adopted and 21% are in the process of development and implementation.

Banks from some countries that are not the Basel Committee members try to follow Basel III regulations too. Among approximately 110 countries where Basel requirements are being actively implemented, more than 90 countries have already adopted Basel II standards and have implemented or are in the process of implementing Basel III requirements into the national banking regulation standards.

Despite a rather optimistic assessment of the post-crisis recovery of the world banking system, the prospects for its further development remain rather uncertain. Although, the gap between the financial and real sectors of the economy becomes wider over time, the size of bank assets most closely correlates with the performance of the real economy, compared to other types of global financial assets. In particular, the correlation coefficients between global financial assets by their types and world's nominal GDP, presented in Table 3, show a strong direct relationship between GDP and bank assets.

Table 3

Correlation coefficients between the world's nominal GDP and different types of global financial assets

| Type of assets | 2003–2009 | 2010–2018 | 2003–2018 |
|-----------------------------|-----------|-----------|-----------|
| Bank assets | 0,9860 | 0,8983 | 0,9689 |
| Stock market capitalization | 0,3801 | 0,7191 | 0,7867 |
| Debt securities | 0,9607 | 0,3262 | 0,9114 |

Note. Authors' calculations based on sources (Bank for International Settlements Statistics; IMF, 2003–2019).

According to the experts' forecasts, real GDP growth is expected to slow down in all regions of the world, including Asia Pacific, in the coming years (IMF, 2003–2019; Deloitte Center for Financial Services, 2019). Taking into consideration the strong direct correlation between the indicators of economic growth and global bank assets, some decline in the scope of banking can be potentially observed in all countries and regions of the world economy.

Conclusions

Within 10 years of the global crisis, the post-crisis recovery was the main task of the world banking system development. Based on the assessment of the saturation of the world banking industry by the relevant assets, the average indicators of return on assets and return on capital of the biggest banking institutions, the key indicators of capital adequacy in accordance with Basel III requirements, it is found out that the world banking system is more stable and profitable today than in the first post-crisis years. However, the importance of bank financing for global economic development and the corresponding role of the banking sector in the global financial system are characterized by volatile positions, which is reflected in the permanent fluctuations in the share of bank assets in the structure of global financial assets. Such fluctuations are related to changes in the priority sources of economies' financing, as well as increased competition in the financial sector due to non-banking institutions, in particular the Fintech industry. It is stated that the banking system now accounts for more than half of global financial assets. At the same time, there is a redistribution of bank assets between different social and economic groups of countries; namely, the share of developing countries has increased from 16% to nearly 30%.

Alongside it, the processes of post-crisis recovery proceeded differentially in regions of the world, which has led to shifts in the regional structure of the

global banking and has caused changes in the role of global regions in the world banking system. Based on the study of changes in the distribution of bank assets and banks' profits between global regions, the ranking of the biggest banks in the world, indicators of return on assets and return on equity of banks from different regions, regional peculiarities of mergers and acquisitions in the banking sector, progress in the implementation of the requirements of the Basel Committee on Banking Supervision by region, it is proved that the regional structure of the world banking system has significantly changed in the post-crisis period.

While before the global crisis the European region was the undisputed leader in terms of bank assets and profits of banking institutions, in the post-crisis period Asia Pacific and American regions took first and second positions in terms of bank assets. The tendency of increasing unevenness in bank assets distribution between global regions is identified appearing in assets growing concentration in three main regions, which have accumulated about 96% of the bank assets of the world. At the same time, a brand new look is a characteristic feature of post-crisis rankings of the biggest banking institutions in the world, where in 2018 the first five ranks are occupied by Asian banks (four banks from China, one bank from Japan), while the presence of Western European and American banks among the biggest banking institutions in the world is decreasing.

Against the background of the generally favorable conditions for the development of mergers and acquisitions in the global banking industry, the motives and prospects for the further development of these processes also have regional specificity. The involvement of American and Asian banks in domestic and cross-border M&A agreements is one of the instruments of spatial diversification of banking activities and foreign markets expansion. For Western European banks, given the overall deterioration of their positions in world rankings and the internal problems of the European banking system, participation in capital consolidation agreements is often a forced measure and a matter of survival.

The recovery of the world banking system in the post-crisis period largely relied on the updated Basel III requirements for banking regulation aimed at enhancing the financial strength of banking institutions worldwide and preventing banks from taking excessive risks. The developed countries in the European region have made the most noticeable progress in the development and adoption of national standards of banking regulation according to the Basel requirements. The least progress is made by countries outside the three major global regions. However, significant intraregional heterogeneity of Basel III requirements adoption in countries of all global regions has been identified.

Prospects for the development of the world banking system and its regional components in the near future remain rather ambiguous and indistinct. On the one hand, by 2022, Basel Committee member states have to finally implement Basel III requirements, which are expected to strengthen the national banking sectors. On the other hand, given the strong direct correlation between global GDP and size of bank assets, the expected worldwide slowdown in real GDP growth can trigger some decline in the scope of banking in all global regions.

References

1. Bank for International Settlements Statistics: Credit to the non-financial sector [Electronic resource]. – Access mode: <https://www.bis.org/statistics/tot-credit.htm>
2. Bank for International Settlements. (2018, January). Structural changes in banking after the crisis (No. 60). Committee on the Global Financial System Papers [Electronic resource]. – Access mode: <https://www.bis.org/publ/cgfs60.htm>
3. Bank for International Settlements. (2019, May). Sixteenth progress report on adoption of the Basel regulatory framework. Basel Committee on Banking Supervision Report, pp. 6-76 [Electronic resource]. – Access mode: <https://www.bis.org/bcbs/publ/d464.pdf>
4. Deloitte Center for Financial Services. (2019). 2019 Banking and Capital Markets Outlook: Reimagining transformation, 40 p. [Electronic resource]. – Access mode: <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Financial-Services/gx-fsi-dcfs-2019-banking-cap-markets-outlook.pdf>
5. Deloitte Center for Financial Services. (2019). 2019 Banking and Capital Markets M&A Outlook: An open door for deal making [Electronic resource]. – Access mode: <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/financial-services/us-banking-cm-ma-outlook-report.pdf>
6. Fischer, S. (2016, November). Is there a liquidity problem post-crisis? At «Do We Have a Liquidity Problem Post-Crisis?» Conference, the Initiative on Business and Public Policy at the Brookings Institution, Washington, D. C. [Electronic resource]. – Access mode: <https://www.federalreserve.gov/newsevents/speech/fischer20161115a.htm>
7. IMF. (2003-2019). Global Financial Stability Report. Washington, IMF– Access mode: <https://www.imf.org/en/Publications/GFSR>
8. Keeler, D. (2003, October). Features: The World's Biggest Banks 2003. Global Finance– Access mode: <https://www.gfmag.com/magazine/october-2003/features-the-worlds-biggest-banks-2003>
9. Kozyuk, V. (2009). Global financial consolidation: consequences for the formation of a global-centric model of financial stability. Halytskyi ekonomichnyi visnyk, 1, 3–10 (in Ukrainian).
10. Kurylyak, V. (2010). Financial and economic aspects of the formation of the global civilizational landscape of the world economy: the driving forces and theories. Svit finansiv, 3, 158-168 (in Ukrainian).
11. Mckinsey Company. (2018, November). New rules for an old game: Banks in the changing world of financial intermediation. McKinsey Global Banking An-

- nual Review– Access mode: <https://www.mckinsey.com/industries/financial-services/our-insights/banks-in-the-changing-world-of-financial-intermediation>
12. Mozgovyj, O., Pavliuk, O. (2017). The regulatory environment of the world banking system development. *Mizhnarodna ekonomichna polityka*, 1, 28–45 (in Ukrainian).
 13. Myles, D. (2018, July). Top 1000 World Banks 2018. *The Banker*– Access mode: <https://www.thebanker.com/Top-1000-World-Banks/Top-1000-World-Banks-2018?ct=true>
 14. Naumenkova, S. (2015). Basel I, II, III: the development of approaches for strengthening of prudential framework. *Visnyk Kyivskoho natsionalnoho universytetu imeni Tarasa Shevchenka*, 12(177), 39-48 (in Ukrainian).
 15. Pavliuk, O. (2014). Modern trends in global banking. *Naukovyi visnyk Kher-sonskoho derzhavnoho universytetu. Serii: Ekonomichni nauky*, 9 (4), 22–25 (in Ukrainian).
 16. Sanders, D. (2018, November). Biggest banks in the world 2018. *Global Finance* – Access mode: <https://www.gfmag.com/magazine/november-2018/biggest-banks-world-2018>
 17. Scott, A. J., Storper, M. (2003). Regions, globalization, development. *Regional Studies*, 37 (6–7), 579–593.
 18. Sokhatska, O. (2010). New order in the global financial market: post-crisis projects and realities. *Zhurnal yevropeiskoi ekonomiky*, 1 (9), 93-107 (in Ukrainian).
 19. Storper, M. (2000). Globalization, localization and trade. In: *The Oxford Handbook of Economic Geography*. Oxford (U. K.), Oxford University Press.
 20. Stukalo, N. V., Lytvyn, M. V. (2011). Ukrainian banking system development in the context of the Basel Committee’s recommendations. *Finansy Ukrainy*, 7, 62-72 (in Ukrainian).
 21. Sus, L. V. (2018). Current trends in world banking. *Efektivna ekonomika*, 4– Access mode: <http://www.economy.nayka.com.ua/index.php?op=1&z=6231> (in Ukrainian).
 22. Top Banks in the World 2010 – Access mode: <https://www.relbanks.com/worlds-top-banks/assets-2010>
 23. Tsyhanova, N.V. (2013). Trends in bank capital consolidation in terms of financial globalization. *Aktualni problemy mizhnarodnykh vidnosyn*, 117 (2), 193–202 (in Ukrainian).
 24. Yehorycheva, S. (2015). Modern trends in global banking. In: *The Economy of Bulgaria and European Union – Contemporary Challenges and Solution Approaches*. Sofia, University of National and World Economy, pp. 38-44.