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FINANCIAL STABILITY OF THE BANKING SYSTEM OF THE EUROPEAN UNION: PRACTICAL ASPECTS AND STRATEGIC PARADIGMS

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Abstract. *In modern conditions, globalization changes and transformational transformations are of particular importance to reproduce effective tools to ensure the financial stability of the banking system. Consequently, the countries of the European Union are effectively implementing various mechanisms for assessing the financial stability of banking systems and ensuring their strategic prerequisites for sustainable development. The problem of using effective tools and methodological postulates for assessing the financial stability of the banking systems of the countries of the European Union is the driving force for the implementation of economic transformations of other states, which leads to a vector to strategically balanced management decisions, which leads to the relevance of this issue. When conducting scientific research, methods of generalization and grouping, methods of analysis and synthesis, cognition were used. Current studies of our time require the peculiarities of changes in instruments and measures to determine the financial stability of the banking system of the European Union.*

The article reflects the priority aspects of the formation of financial stability of the banking systems of the European Union countries, focuses on modern methods of assessing the financial stability of the banking system of the European Union.

A feature of this study is the compilation of the synergy effect of innovation to ensure the assessment of the financial stability of banking systems of the European Union, which determines the paradigm of innovative management decisions in this area.

Keywords: *banking system, financial stability, liquidity, financial risks, financial stability*.

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Introduction

The assessment of financial sustainability is a key aspect of banking regulation in all countries of the world. It is important to note that the financial stability of the banking system has an impact on the overall economic stability of any country in the world. This is especially true for European countries, where the issue of stability of financial institutions is of considerable interest from both governments and investors. In Europe, the financial stability of banking systems is assessed through various methods, mechanisms and instruments. For example, stress tests are used to analyse how banks will cope with adverse economic conditions. In addition, the public authorities are taking a number of measures aimed at improving the level of financial stability of the banking system. Given this, the comparative analysis of the financial stability of banking systems of different countries of the European Union (EU) becomes extremely important. Such a study allows not only to identify the strengths and weaknesses of national banking systems, but also to develop recommendations for their further improvement. In particular, in the context of globalization and the integration of markets, it is important that countries take into account international experience in the field of financial regulation. Thus, the comparison of financial stability is not only theoretical, but also an almost important direction for ensuring the economic security of the countries of the EU.

Methods for assessing the financial stability of the banking systems of the EU countries are diverse and depend on the specifics of the economic development of each individual country. For example, in advanced economies, complex models can be used, taking into account a large number of factors such as inflation, interest rates, and international financial performance. At the same time, developing countries can rely on simpler methods, often based on liquidity, capitalization and credit risk data. These differences in evaluation methods may lead to the fact that some indicators are not universal. The inconsistency of the methods and tools of evaluation causes difficulties in comparison with the financial stability of the banking systems of the EU. This complicates not only internal analysis, but also international cooperation in the field of finance. To successfully assess the monetary stability of the banking system, it is necessary to adapt the methods to specific conditions. This will allow for more accurate results and provide a better framework for informed management decisions. Thus, it is important not only to understand the existing approaches, but also to be able to adapt them in accordance with the specifics of each of the countries of the EU.

Literature Review

The problem of analysis of banking of the countries of the EU is determined in the works of many scientists (Bedayo et al., 2020; Billings et al., 2021).

For example, the scientists conducted a thorough analysis of the productivity factors of the banking sector of the EU (Castro & Galan, 2019; Figueiras et al., 2021), were engaged in the study of the impact of the international financial crisis on ensuring the financial stability of banking institutions of the EU (García & Vázquez, 2019; Royo, 2013; Kilimnik & Pavlovski, 2014).

The review of literature in the context of the financial stability category is certainly an important stage in the formation of a holistic vision of this phenomenon. Systematic resistance to internal and external challenges is a key aspect, because it allows the banking system to quickly adapt to financial shocks. It is important to note that in the event of the implementation of such shocks, the stable banking system has the opportunity to return to the balance. This is achieved through the use of own resources, which emphasizes the importance of the monetary independence of institutions.

The analysis confirms that financial stability is not a static characteristic. This is particularly important to consider in a rapidly changing economic environment where external factors such as globalization can have a significant impact on the financial system. Therefore, it is necessary to assess the financial stability of the banking system in dynamics. This will provide a comprehensive vision of its state, and will also contribute to the formulation of adequate proposals to maintain stability in a variety of challenges.

In addition, the researchers analysed the range of international banking sector activities (Joaquin & de Guevara, 2008; Lane, 2019; Sibanda et al., 2020).

A systematic approach to monitoring financial stability, according to modern economic realities, is important for the formation of strategies that will contribute not only to survival but also to the development of the banking system. Understanding that financial stability is a complex and multi-faceted phenomenon makes it possible to better prepare for possible risks and maximize the effectiveness of financial institutions. Thus, it is important not only to study certain aspects of financial stability, but also to consider it in the context of a broad system of economic relations.

Giving tribute to the authors, whose work is devoted to the study of the issues of ensuring the financial stability of banking institutions, it should be noted that the use of modern tools of indicators of financial stability as analytical support of the range of research of the competitive advantages of banks of the countries of the EU remain insufficiently investigated.

Methods

The basis of the proposed methodological approach is a dynamic analysis of the financial stability of the banking system of the EU countries. For this purpose, stable financial indicators (FSI) are used, which allow us to assess the current state and trends in the development of the banking sector. These indicators include various aspects such as liquidity, capitalization, credit risk, and profitability.

It is also important to note that the taxonomic indicator developed on the basis of dynamic analysis allows the grouping of banks of the countries of the EU in terms of their financial stability. This allows us to identify the weaknesses and strengths of the banking system, as well as to identify priority areas for reproducing promising strategic paradigms.

Thus, a dynamic analysis methodological approach is an important tool for developing effective financial sustainability strategies for banking institutions. It can be useful not only for banks, but also for regulatory authorities responsible for monitoring and maintaining the stability of the financial system and in general. The application of this approach contributes to the transparency and predictability of the banking system of the EU countries.

Results

European standards related to the transparency of reporting of banking activities have become an important factor in the formation of a stable financial environment of any EU country. These requirements contribute to creating better conditions for interaction with investors and depositors, because the openness of information allows customers to better assess the risks associated with their financial investments. As a result, this increases the level of confidence in the banking system, which is critical in modern conditions of rapid changes in environmental factors.

In general, compliance with the standards of the countries of the EU has a long-term positive impact on the financial system of any state of the world, since it allows attracting additional investment capital, strengthening the economy and ensuring sustainability in the context of globalization. High standards of reporting and data protection not only improve the image of banks, but create a more favourable environment for business development.

Accordingly, the priority aspects of the formation of the financial stability of the banking systems of the EU countries can be considered in the context of such priority areas of the financial and economic policy of the state (Fig. 1).

The analysis of financial stability indicators of banks of the EU is the most important task for politicians, regulators, investors and all stakeholders. This process is a necessary element of monitoring financial stability, directly affecting the general state of the economic system of any state. In the context of globalization and rapid changes in financial markets, timely and detailed assessment of financial indicators is critical.

In particular, it is important to take into account that the financial stability of banks is determined not only by their liquidity and capitalization, but also by the ability to adapt to changes in the external economic environment, such as economic crises or changes in legislation. Regulators should have a clear understanding of the risks that may arise as a result of fluctuations in the market in order to take the necessary measures in time. In addition, compliance with regulatory requirements is a key aspect of supporting the stability of the banking sector. Capital, liquidity and other indicators provide the basis for the reliability of financial institutions. There are many international standards that govern these issues.

It should be noted that financial stability affects not only banking activities, but also the sustainable development of the economy as a whole. Investors, analysing the financial indicators of banks, receive important information for making decisions about the feasibility of implementing a range of investment projects and programs. Thus, the analysis of indicators of the financial stability of banks is a multifaceting task. It needs an integrated approach and interdisciplinary cooperation. Therefore, conducting a detailed study of the financial indicators of banking institutions is mandatory to ensure the growth of the economy, the stability of financial systems and protect the interests of all market participants. This issue remains relevant and requires constant monitoring and adaptation of methods of analysis of new challenges.

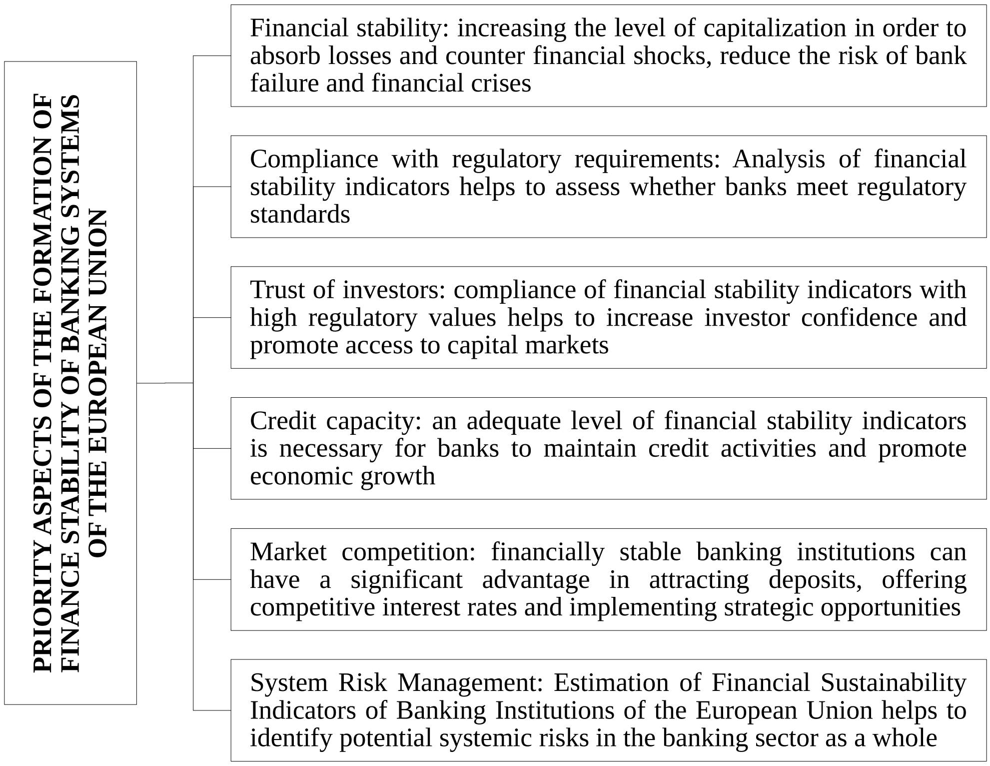

Figure 1. Priorities of the formation of financial stability of the banking systems of the EU
Source: Development of the author

In 2024, the banking system of the EU demonstrates a striking financial stability, which is the result of efforts aimed at strengthening its foundations. This stability allows banks to serve both the economy and the population, which is a key factor in maintaining confidence in financial institutions. It is important to note that banks remain capitalized, which means that they have a sufficient supply of capital to cover potential risks. This, in turn, indicates a high level of their profitability. Therefore, according to the new EU standards, banks have successfully moved to a new capital structure. This structure not only meets the requirements of regulators, but also provides flexibility in doing business. The liquidity of the banking system remains at a high level, allowing financial institutions to respond quickly to customer needs. The solvency is also an important aspect, as it ensures the ability of banks to meet their financial obligations, which in turn maintains economic stability. The operating stability of the banking system does not cause any concern. This means that banks are able to effectively manage risks and resume after possible financial shocks.

Modern technologies, including digital platforms and risk management systems, contribute to the sustainability of the banking institutions of the EU. Thus, the banking system of the countries of the EU in 2024. is an example of successful integration of financial practices and regulatory standards that ensures the stable development of the region's economy as a whole. The financial stability of banking institutions in the EU is critical for the overall economic health of the region. This stability is provided by various comprehensive measures, including regulation, supervision, as well as support from central banks and institutions of the EU.

One of the main elements of this system is risk management. Banks are required to introduce effective mechanisms to identify, assess and manage financial risks, such as credit, market and operational risks. This reduces the likelihood of bankruptcy of financial institutions and ensures their stability in crisis situations when environmental conditions change. Moreover, the provision of a sufficient level of capital is an important aspect. Regulatory requirements, such as Basel III, set minimum capital standards that banks should support. This means that financial institutions must have sufficient reserves to cover potential damage, which in turn increases the confidence of investors and depositors.

Liquidity also plays a crucial role in financial sustainability. Banking institutions should have the potential to quickly turn assets into cash to meet their liabilities. Consequently, regulators closely monitor the liquid reserves of banks in order to avoid situations when financial institutions are not able to fulfil their obligations.

Effective observation is another important principle. National regulators and the European Central Bank monitor the activities of banking institutions to identify potential risks and deficiencies in management. This makes it possible to take timely measures to prevent financial crises.

In general, an integrated approach to regulation, risk management, capital and liquidity, as well as effective supervision, ensure the financial stability and sustainability of banking institutions in the EU. This, in turn, contributes to economic development, the growth of investor confidence and the stability of financial markets.

In 2025, researchers and practitioners are dispersing several models used in practice in assessing the financial stability of the banking system. Therefore, in the practice of studying the financial stability of the banking system of the countries of the EU, the following methods are used (Fig. 2).

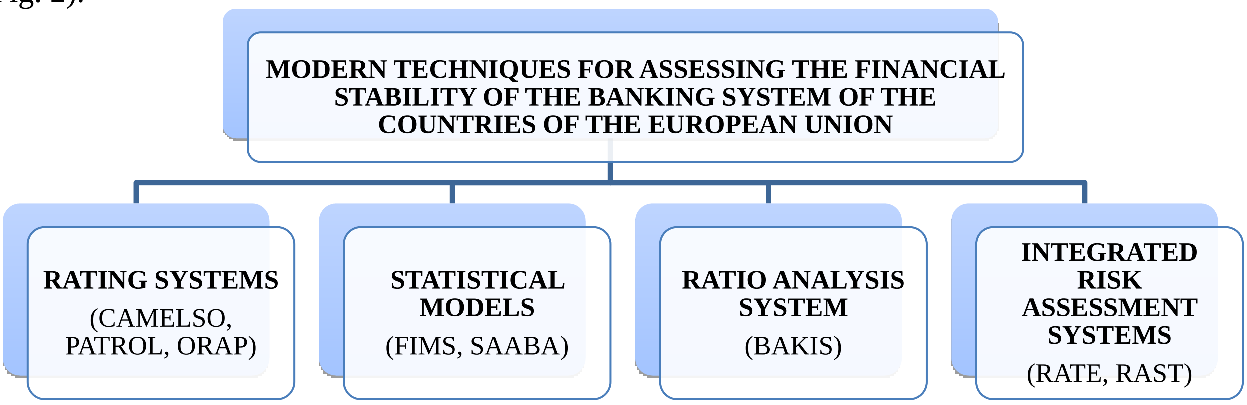

Figure 2. Modern methods for assessating the financial stability of the banking system of the European Union

Source: analysed and grouped by the author

Analysing Figure 2 can be described in more detail on modern methods of assessing the financial stability of the banking system of the EU, namely:

1. Rating systems (example, CAMELSO, PATROL, ORAP) – are characterized by a complex nature of evaluation, but have a subjective component and the possibility of rating only in real time;

2. Statistical models (example, FIMS, SAABA) – involve various databases and influence factors in the analysis, but due to this they are high in cost;

3. Ratio analysis system (example, BAKIS) – provides the allocation of general trends, but requires a large-scale and versatile study;

4. Integrated risk assessment systems (example, RATE, RAST) – take into account in the assessment of diverse factors of influence, but do not publish the results of general application.

One of the most significant aggregated indices assessing the financial stability of the banking system is the Bank Z-Score indicator. This index is an important analysis tool that allows investors and regulators to assess the risk level of the bank's alleged bankruptcy. This calculation allows you to take into account not only the capital base of the bank, but also the stability of its profitability. The main idea on which the Bank Z-Score approach is based is that the banking system will be considered stable if the probability of losses does not exceed the equity of a financial institution.

This approach is important for assessing the risks associated with the activities of banks. For example, if Bank Z-Score is high, this indicates that the bank has sufficient capital compared to its assets and generates stable profits, which reduces the risk of bankruptcy. On the other hand, low Z-Score can signal potential problems with liquidity or insufficiency of capital, which increases the likelihood of financial difficulties.

Thus, Bank Z-Score is a critical tool for analysing the financial sustainability of banking institutions. It not only allows you to identify vulnerable banks, but also serves as the basis for making decisions on investments, lending and regulatory policies. The use of this indicator on the platform of banking institutions of the countries of the EU can help to take timely measures to prevent financial crises, which is especially important in modern conditions of increased risks in the financial system.

Table 1 presents the main characteristics of the banking sector activities of the EU member states (EBF, 2022).

Table 1. Key performance indicators of the banking sector of the EU countries in the 2018-2022

Indicator name	2017	2018	2019	2020	2021
Number of employees in credit institutions of the EU countries, persons	2371483	2296454	2265274	2219044	2149178
Total deposits in banks of the EU as a share of total banking assets. %	56.2	57.2	57.1	59.3	61.0
Outstanding loans in banks of the EU countries from the total volume, %	6.3	6.5	6.8	8.3	9.9
Total assets held by banking institutions in the European Union, € trillion	30.4	30.9	32.4	35.2	36.7
Return on equity in the European Union, %	3.0	6.0	5.0	2.0	6.0

Source: compiled by the authors based on EBF, 2022

An analysis of the data presented in Table 1 allows us to draw the following conclusions:

1) As of the end of 2021, just over 2.1 million people were employed in banking institutions in the EU. This is about 70 thousand fewer than in 2020. The countries with the largest number of jobs in this sector continue to be the countries with the largest financial centrers of the EU: Germany, France, Italy and Spain. In 2021, the number of employees increased in Hungary, Ireland, Lithuania, Malta, the Netherlands and Sweden.

2) Deposit liabilities at EU banking institutions increased by 7% to around €25 trillion, mainly due to the growth of deposits in the eurozone. The distribution of total deposits by country shows that the lowest levels recorded in 2021 were in Denmark and Ireland, where domestic deposits accounted for around a third of assets: 31.1% and 31.7%, respectively. The countries with the largest share of deposits funding banking sector assets were Lithuania, Slovenia and Greece, with deposits accounting for 80% or more of total assets. The share of non-bank deposits in total assets was also highest in Lithuania (79.8%) and lowest in Denmark (18.9%), respectively.

3) The total value of outstanding loans from international financial institutions to EU banking institutions rose by 13% in 2021 to around €26 trillion, the highest level since 2012. The increase was mainly due to an increase in loans from international financial institutions to the eurozone.

4) An analysis of the conceptual framework for the distribution of these resources between countries showed that the largest percentage point increases were observed in Hungary (14.3%) and Slovakia (14%). Among the four largest EU economies, France, Germany, Spain and Italy recorded positive results in terms of asset stocks, which were equal to or below 5%.

5) Return on equity (ROE) in EU countries has varied significantly since 2007, indicating increasing fragmentation, particularly in the eurozone. After peaking in 2013 (26.3%), the dispersion around the average ROE has narrowed considerably.

The problem of assessing the financial stability of the banking system of the EU countries has become especially relevant in the context of modern economic realities. They are characterized by constant changes and new challenges that require rapid adaptation financial institutions. The banking system, being critical for the economic system of the EU, is extremely vulnerable to external factors such as economic crises, political instability or global financial fluctuations. These factors cause a significant impact on its functioning, and, unfortunately, the banking system is not able to control their influence.

Therefore, the timely selection of a relevant method of assessing financial stability becomes a key task for analysts, regulators and banking institutions of the EU. The definition of weaknesses in the structure of the banking system, as well as the analysis of trends in its dynamics, allows you to take measures to minimize risks. This, in turn, contributes to the greater stability of banks in front of external challenges, which is critical to ensuring the stability of the economy as a whole.

Discussion

The problem of assessing the financial stability of the banking system has become especially relevant in the context of modern economic realities. They are characterized by constant changes and new challenges that require financial institutions of the EU countries to adapt quickly. The banking system, being critical for the country’s economy, is extremely vulnerable to external factors, such as economic crises, political instability, or global financial fluctuations. These factors can have a significant impact on its functioning, and, unfortunately, the banking system is not able to control their influence.

Therefore, the timely selection of a relevant method of assessing financial stability becomes a key task for analysts, regulators and banks themselves. The definition of weaknesses in the structure of the banking system, as well as the analysis of trends in its dynamics, allows you to take measures to minimize risks. This, in turn, contributes to the greater stability of banks in front of external challenges, which is critical to ensuring the stability of the economy as a whole.

Despite the fact that the scientific literature presents a number of author's approaches to assessing financial stability, most of them have some drawbacks. For example, the complexity of certain calculations can lead to errors or misinterpretation of results, the subjective component of the assessment may raise doubts about the objectivity of the results. Therefore, it is important to develop a transparent, easy-in-use and objective methodology that will better assess the financial stability of the banking institutions of the world. This will be the key to increasing the level of risk management and increasing the overall stability of the banking system.

Conclusion

The active introduction of information technologies in the work of banking institutions actualizes the problem of protecting the system from cyber attacks, ensuring the security of customer data and their operations. Accordingly, we believe that further research should be focused on finding effective tools for the protection of personal data and confidential information on the indicators of the financial stability of banking institutions of the EU.

The article formulates answers to the presented tasks, in particular: a systematic approach to monitoring financial stability is used, which is important for the formation of a long-term financial stability strategy of a banking institution, the conceptual paradigm for the study of the use of modern tools of financial stability indicators is used, as an analytical support for the spectrum of research of competitive advantages of banking institutions in the performance of the banking sector of the EU for 2014-2024, which indicates a high level of banking management.

Further research will be related to the analysis of the impact of the spectrum of other external and internal factors on the level of strategic development of the banking system of the EU countries, which were not disclosed in this study, in particular, such as macroeconomic factors - interest rates, inflation rate, as well as effective asset management, capital adequacy, etc. This method is effective and allows you to influence the profitability of banks, thereby contributing to the financial stability of the European economic system as a whole.

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