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METHODOLOGICAL ASPECTS OF ENSURING THE STABILITY OF THE BANKING SYSTEM OF UKRAINE IN THE CONTEXT OF EUROPEAN INTEGRATION

Abstract

Ensuring the financial stability of the banking system is a key prerequisite for macroeconomic resilience and sustainable economic development, particularly under conditions of military conflict and increasing European integration commitments. The article examines methodological approaches to ensuring the stability of the banking system of Ukraine under martial law and macroeconomic uncertainty. Despite the extensive literature on banking stability, the combined influence of military risks, macrofinancial shocks, and regulatory convergence with the European Union remains insufficiently explored.

The study is based on official statistical data of the National Bank of Ukraine, the IMF, and international financial institutions for the period 2015–2024. The methodological framework includes methods of analysis and synthesis, comparative analysis of regulatory convergence, construction of an integral financial stability index, and multifactor regression modelling to assess the impact of internal and external determinants of banking stability.

The results indicate that key internal determinants include capitalization (CAR), liquidity indicators (LCR, NSFR), profitability (ROA, ROE), and credit risk (NPL ratio). External factors such as GDP dynamics (5.3% growth in 2023), inflation (12.9%), exchange rate volatility, and geopolitical risks significantly influence the stability index. Regression estimates confirm the statistically significant impact of both banking and macrofinancial indicators.

The study contributes to methodological approaches for assessing banking system stability under wartime conditions by integrating macrofinancial and institutional determinants into a unified framework. The results may support regulators in improving macroprudential policy, developing stress-testing scenarios, and adapting Ukrainian banking regulation to EU standards.

Keywords: stability of the banking system, determinants of stability, regulatory requirements, European integration

JEL Classification: G21, G28, E58, F36, C51, C43

Introduction

The financial stability of the banking system plays a crucial role in ensuring national economic security and sustainable economic development. In modern conditions, the stability of banking institutions determines the ability of the financial sector to perform key functions of financial intermediation, maintain liquidity in the economy and support investment processes. For Ukraine, these issues have become particularly relevant due to the simultaneous influence of macroeconomic instability, structural transformations of the financial sector and deepening European integration processes.

At the same time, the banking system of Ukraine currently operates under conditions of martial law caused by the full-scale military aggression against the country. Martial law can be considered a large-scale exogenous shock that significantly changes the functioning environment of the financial sector. The impact of war risks on banking stability occurs through several transmission channels. First, the destruction of infrastructure and production capacities increases credit risks and leads to the deterioration of loan portfolios. Second, forced migration of the population and changes in economic activity affect the stability and structure of the deposit base. Third, heightened uncertainty and geopolitical risks influence capital flows, exchange rate dynamics and banks' liquidity positions. Finally, war conditions require banks to strengthen operational resilience, cybersecurity and risk-management mechanisms while maintaining uninterrupted financial services. These channels create additional pressure on the financial stability of the banking system and require the development of new methodological approaches for its assessment.

Despite the significant body of scientific literature devoted to banking stability and macroprudential regulation, a number of important issues remain insufficiently studied. In particular, existing studies rarely integrate geopolitical risks and war-related shocks into empirical models of banking stability. At the same time, the influence of European integration processes on methodological approaches to assessing the stability of the banking system of Ukraine requires further clarification.

The purpose of the study is to deepen the theoretical and methodological foundations for assessing the stability of the banking system of Ukraine in conditions of martial law and European integration.

To achieve this goal, the study considers the following research questions-hypotheses:

H1: Internal banking indicators (capitalization, liquidity, profitability) and external macro-financial and geopolitical factors (war, economic instability) significantly affect the financial stability of the Ukrainian banking system under martial law.

H2: Regulatory convergence with European Union banking standards (CRD/CRR, Basel III) contributes to increasing the stability and reducing risks of

the Ukrainian banking system. This paper contributes to the literature in several ways. First, it develops a systematized framework of internal and external determinants of banking system stability that incorporates geopolitical risks and war-related shocks. Second, it proposes an integral indicator of financial stability and applies a multifactor regression model to quantify the influence of key determinants on banking stability. Third, the study highlights the role of European regulatory convergence in strengthening the resilience of the Ukrainian banking sector during institutional transformation.

The obtained results may contribute to improving macroprudential regulation, developing stress-testing scenarios and supporting policy decisions aimed at strengthening the stability and resilience of the banking system of Ukraine.

Analytical review of the literature

The issue of ensuring the stability of the banking system occupies a leading place in modern financial and economic research. Thus, the interpretation of stability as the ability of the financial system to effectively perform its functions and counteract external and internal shocks is based on fundamental scientific approaches formulated in (Van Rixtel, A., & Gasperini, B., 2013), which emphasizes the key role of indicators of financial stability, liquidity and solvency in assessing the risks of the banking sector. As noted by the authors in (Beck, T., De Jonghe, O., & Schepens, G., 2013), the stability of the banking system is an important prerequisite for sustainable economic growth and reducing the volatility of financial markets.

A significant contribution to the development of methodological principles for assessing banking stability is presented in (Brunnermeier, M. K., 2009), which analyzes the relationship between financial crises and disruption of the stability of the banking sector, and also justifies the feasibility of applying an integrated approach using macroprudential indicators (Emmanuilova, T., 2020).

The European Union regulatory authorities have formed a comprehensive institutional and regulatory architecture to ensure the stability of the banking system, which includes, in particular, the Single Supervisory Mechanism and the Single Resolution Mechanism for banks (ECB, 2020). The results of empirical studies (Hakenes, H., & Schnabel, I., 2011) show that effective supervisory regulation significantly reduces the likelihood of systemic risks in the banking sector.

The authors of the study (Claessens, S., & Kodres, L., 2014) focused on the principles of macroprudential policy implemented in the European Union countries in order to reduce the cyclicity of financial markets. At the same time, the work (Delis, M. D., & Staikouras, P. K., 2011) emphasizes that the effectiveness of stress testing models in the EU is largely determined by the

quality of information support and the level of transparency of financial reporting of banking institutions.

The banking system of Ukraine has undergone significant structural transformations in the post-crisis period after 2014. The paper (Pidubny, M., & Kravets, S., 2019) outlines the key problems of its functioning, including the insufficient level of capitalization and a significant share of non-performing loans in bank portfolios. The results of the risk analysis presented in (Kuznetsov, A., 2021) show that the macroprudential instruments used by the National Bank of Ukraine are currently inferior in effectiveness to similar mechanisms typical of the European Union countries.

The study (Bondarenko, L., 2022) substantiates the need for further adaptation of national banking legislation to European standards, which requires a consistent harmonized approach, in particular in the field of implementing capitalization norms, corporate governance and financial reporting. In the context of European integration, domestic scientists emphasize the need to implement key elements of the EU regulatory system into the national practice of banking regulation. Thus, (Kovalenko, O., 2023) notes that the implementation of the requirements of the CRD IV directive and Basel III standards creates the prerequisites for strengthening the financial stability of the banking system of Ukraine.

The analytical materials of the European Banking Authority (EBA, 2024) also emphasize the importance of developing transparent mechanisms of corporate governance and risk assessment systems in banks of candidate countries for accession to the European Union, which is considered one of the key tools for implementing integration policy.

Quantitative methods of analysis, in particular coefficient models and stress testing tools (Drehmann, M., & Juselius, M., 2014) of banks, have become widely used. Studies of the sustainability of the banking system are also carried out taking into account the systemic importance of financial institutions (Acharya, V. V., Pedersen, L. H., Philippon, T., & Richardson, M., 2017), which contributes to a deeper understanding of the mechanisms of the spread of interbank risks and possible domino effects.

At the same time, the recent literature increasingly considers the impact of extreme macroeconomic shocks and geopolitical risks on the stability of financial systems. In the case of Ukraine, the introduction of martial law and the full-scale military invasion created a complex shock affecting the banking sector through several channels, including credit risk growth due to the deterioration of borrowers' solvency, liquidity pressures caused by deposit withdrawals and disruptions in payment systems, operational risks related to physical destruction of infrastructure, and increased fiscal and monetary pressures. These factors significantly complicate the application of traditional macroprudential assessment

tools and require the development of analytical approaches capable of incorporating war-related risks into banking stability analysis.

Positively assessing the results of scientific achievements, the presence of a significant body of scientific work, it is appropriate to note that a number of unresolved problems remain in modern research (Sydorovych O., 2025). The key ones include the limited adaptability of macroprudential instruments to the conditions of martial law in Ukraine, the lack of integrated models capable of taking into account the impact of geopolitical risks on the stability of the banking system. In addition, existing studies insufficiently analyze how war-related shocks interact with the process of harmonization of the Ukrainian banking regulatory framework with the institutional and prudential standards of the European Union. It should be recognized that the analysis of the effectiveness of the processes of harmonization of national legislation with the regulatory legal acts of the European Union is insufficient. The combination of these aspects determines the need for further development of theoretical and methodological approaches and conducting applied research in this area.

Object, subject and research methods

The object of the study is the banking system of Ukraine as a component of the national financial system in conditions of martial law, macroeconomic uncertainty and deepening European integration processes.

The subject of the study is a set of theoretical, methodological and applied aspects of ensuring the stability of the banking system of Ukraine, in particular, factors of internal and external influence, mechanisms of macroprudential regulation and tools for quantitative assessment of financial stability in the context of harmonization of national banking regulation with regulatory legal acts of the European Union.

The research methods are based on a comprehensive approach and include general scientific and special economic methods. In particular, methods of analysis and synthesis were used to systematize scientific approaches to the interpretation of financial stability and identify its key determinants; methods of scientific abstraction and generalization at the stage of forming conceptual foundations and clarifying the categorical apparatus; comparative analysis - to assess the degree of approximation of banking regulation of Ukraine to the standards of the European Union and the requirements of the Basel Accords. Statistical and econometric methods, in particular index analysis and multifactor modeling, were used to quantitatively assess the impact of internal and external factors on the stability of the banking system. The integral assessment method was used to form an integral indicator of financial stability, and at the stage of determining weighting factors, expert assessment methods were used. Graphical and tabular methods were used to ensure visualization and systematization of the research results.

Results of scientific work

In their research, scientists focus their attention mainly on the classical approach to interpreting the concept of financial stability of the banking system, although their visions differ both in content and in the features of possible measures of influence and methodological tools for its provision. The formation of a system of internal and external factors affecting the banking system includes such factors as: the interaction of macroprudential measures and state support, the level of capitalization and quality of bank capital, credit exposure in problem sectors of the economy, the level of dollarization in settlements, the quality of assets and liabilities, the leading role of state-owned banks and the proportion of their influence in crisis periods, and the growth of key parameters of digitalization at the stage of providing banking services to consumers, and others (Danik, N., & Maksyutenko, O., 2025).

Based on the results of generalizing existing approaches of scientists, taking into account the latest aspects of the manifestation of the impact of global challenges on the development of events, in our opinion, it is advisable to define the financial stability of the banking system as such a systemic and multi-aspect state, characterized by the ability of banks to qualitatively ensure the performance of key functions of financial intermediation, to create conditions for ensuring their continuous implementation in the future, including in the event of an unforeseen change in the parameters of the impact of possible threats.

A deep analysis of the development of events in the modern period, when Ukraine already has the status of a candidate for membership in the European Union, and taking into account the characteristics of the impact of external challenges and the manifestation of new aspects of internal threats, allowed us to systematize the key factors of influence and the main trends in the development of the banking system of Ukraine, which are presented in detail in Table 1.

Table 1. Characteristics of external factors influencing the banking system of Ukraine

Group of factors	Specification of factors and their manifestations	Consequence (direction) of the influence of factors	Key influence/ef fect
Geopolitical factors	Full-scale war and war risks (destruction of assets, population migration, increased credit risks); Geopolitical instability in the Eastern European region; Sanctions policy against the Russian Federation and related	Increasing systemic risks, pressure on banks' capital and liquidity.	Systemic stability



	secondary effects (disruption of financial and trade chains).		
Global macroeconomic factors	Global economic cycles and general recessionary trends; Inflationary processes in the world economy; Changes in world interest rates (Federal Reserve policy, ECB policy); Fluctuations in energy and raw material prices.	Cost of resources, profitability of banking operations, solvency of borrowers.	Profitability and risks
Financial and monetary policy of international institutions	Policies of the IMF, World Bank, EBRD, EIB; Conditions for providing international financial assistance and loans; Requirements for financial sector reforms.	Stabilization of the balance of payments, support for liquidity and capitalization of banks.	Regulatory stability
European integration and regulatory factors	Harmonization of banking legislation with EU law (CRD/CRR, Basel III). Implementation of EU macroprudential standards; Strengthening requirements for capital, risk management, compliance.	Increasing bank resilience, but increasing regulatory burden.	Consolidation
Currency and financial factors	Fluctuations in exchange rates on world markets; Restrictions and liberalization of capital movements; The state of the country's international reserves.	Currency risks of banks, stability of the deposit base.	Liquidity
Technological and digital factors	Global digitalization of financial services; Development of FinTech, BigTech, neobanks; Growth of cyber threats and technological risks; Implementation of RegTech and SupTech at the international level.	Transformation of banks' business models and increased operational risks.	Operational efficiency
Socio-demographic factors	Mass migration of the population (external and internal); Changes in the behavior of depositors and borrowers; The level of confidence in the banking system.	Reduction of the client base, change in the structure of deposits and loans.	Trust and deposit base



Global financial crises and external shocks	Global financial crises; Pandemics, climate disasters, energy shocks; Ripple effects from crises in the banking systems of other countries.	Growing systemic risks and the need for anti-crisis regulation.	Ability to resist and overcome the consequences
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Source: summarized by the author

The financial stability of the banking system depends on its internal parameters and mechanisms that guarantee its ability to withstand potential crises and maintain national economic security (Maslova A. U., Musienko, O. M., & Fedorchenko, P. V., 2016).

The main internal factors are classified according to certain criteria and include the following indicators: the level of bank capitalization, asset quality, liquidity levels, the degree of dollarization of assets and liabilities, the stability of the deposit base, the decisive role of state-owned banks, and the introduction of innovative digital tools (Table 2).

To solve the problem of assessing and quantifying financial stability, it is advisable to construct an integral index of financial stability based on classified factors, which subsequently allows for the formation of a formalized scheme of the relationship between internal and external factors with a quantitative model of financial stability of the banking system of Ukraine.

The financial stability of the banking system is described by an integral index in the following form:

$$FSI_t = \sum_{i=1}^n w_i \cdot Z_{it} \tag{1}$$

where:

FSI_t - financial stability index in period t ;

Z_{it} - standardized indicator of the i -th factor;

w_i - weight coefficient, which is determined based on the expert method.

Table 2. Characteristics of internal factors influencing the financial stability of the banking system of Ukraine

Group of factors	Specification and nature of manifestation	Structural components	Consequence (direction) of influence of factors	Key effect
Institutional factors	They reflect the quality of the organizational and regulatory architecture of the banking system, the effectiveness of the functioning of	Independence and capacity of the National Bank of Ukraine; effectiveness of banking supervision and macroprudential policy;	They form the basic conditions for the stability of the banking system and its ability to	Systemic stability



	financial institutions and the mechanisms of interaction between them.	transparency of the regulatory environment; level of protection of the rights of depositors and creditors; effectiveness of the deposit guarantee system.	counteract systemic risks.	
Capitalization factors	Determine the ability of the banking system to cover losses and maintain the confidence of depositors and investors.	Regulatory capital adequacy; capital quality; level of bank recapitalization; concentration of capital in systemically important banks.	Insufficient capital increases the system's vulnerability to shocks and crisis events.	Loss absorption
Financial and economic factors	Reflect the performance of banks and their financial efficiency.	Profitability (ROA, ROE); level of operating expenses; diversification of income sources; stability of interest margin.	Determine the long-term viability of the banking system and its ability to self-recover.	Self-financing
Credit factors	Related to the quality of the loan portfolio and credit risk management policy.	Non-performing loan (NPL) ratio; level of loan concentration; effectiveness of scoring models; quality of loan collateral.	Credit risks are a key source of instability in Ukraine's banking system.	Risk level
Liquidity factors	Characterize the ability of banks to meet their obligations in the short and medium term.	Liquidity standards (LCR, NSFR); the structure of assets and liabilities by maturity; the stability of the deposit base; access to NBU refinancing.	Insufficient liquidity can lead to banking panics and systemic crises.	Solvency
Governance factors (corporate governance)	They reflect the quality of bank management and the effectiveness of management decision-making.	Professionalism of supervisory boards and management boards; effectiveness of the risk management system; internal control and compliance; strategic planning.	Weak corporate governance exacerbates all other risks in the banking system.	Quality of solutions



Structural factors	Describe the architecture of the banking sector and the relationship between its components.	Share of state-owned banks; level of market concentration; role of systemically important banks; level of competition.	High concentration increases systemic risks, but can increase resilience in times of crisis.	Systemic risks
Technological and operational factors	Related to the digital transformation of banking and operational efficiency.	The level of digitalization of banking services; operational risks; cybersecurity; implementation of RegTech and SupTech.	Digital technologies simultaneously increase efficiency and create new risks.	Performance efficiency
Socio-behavioral factors	They reflect the level of trust of the population and business in the banking system.	Depositor confidence; financial literacy of the population; reputational risks of banks.	A decline in trust can quickly transform into a systemic crisis.	Trust

Source: summarized by the author

At the same time, in conditions of martial law, the methodological approaches used by NBU specialists in their activities remain balanced and effective (Balytska, M., & Tkachenko, A., 2025). Practical aspects of the influence of internal (Table 3) and external factors (Table 4) on the financial stability of the banking system of Ukraine are reflected and systematized for the purpose of their further use at the stage of assessing the level of their influence.

Table 3. Systematized data of the NBU for indicators of internal factors influencing the financial stability of the banking system of Ukraine

Group of factors	Indicators (real data / sources)	Indicator characteristics	Comment on sources of information
Capitalization	CAR capital adequacy ratio), Tier 1	They show how capable banking systems are of absorbing losses.	The NBU publishes <i>prudential ratios and key performance indicators</i> for banks; this includes regulatory capital ratios, including Tier 1 and general capital ratios.
Liquidity	LCR , NSFR	Liquidity is measured according to international standards.	The NBU has introduced the <i>Liquidity Coverage Ratio</i> and <i>Net Stable Funding Ratio</i> standards in accordance with EU standards, which allows assessing the level of short- and medium-term liquidity of Ukrainian banks.



Credit Risks	NPL ratio (share of non-performing loans)	Reflects the quality of the loan portfolio and credit risks.	As of 2023-2024, the share of NPLs is gradually decreasing, although it remains high due to the war; the NBU has brought the definition of NPLs in line with EU standards.
Profitability	ROA, ROE	They assess the profitability of banks.	The NBU publishes <i>key performance indicators of banks</i> , which include return on assets (ROA) and return on equity (ROE) in monthly or quarterly reports.
System Structure	CR5 (five largest banks by assets), share of state-owned banks	Allows for concentration risks and state presence to be taken into account.	Although the NBU does not summarize specific figures in an aggregated table, the <i>Supervisory Data</i> platform statistics contain bank balance sheets and allow you to calculate market concentration and the share of state-owned banks independently.
Governance	Cost-to-income, Risk-weighted assets	Add measurements of operational efficiency and risk-based asset valuation.	NBU data includes information on operating expenses, revenues, and risk-weighted assets as part of <i>key performance indicators</i> .
Trust	Deposits/GDP, deposit outflow	Marketing and behavioural indicators of customer trust.	According to the NBU, the deposit base is stable: a significant share of banks' liabilities is formed by deposits of individuals and enterprises; the loan-to-deposit ratio has decreased, indicating a conservative funding policy.

Source: summarized by the author

To quantitatively assess the impact of internal and external factors on the financial stability of the banking system of Ukraine, the study proposes to use a multifactor regression model.

Table 4. Systematized data of the NBU for indicators of external factors influencing the financial stability of the banking system of Ukraine

Factor group	Indicators (value / source)	Comment on quantification and general trends
Macroeconomics	GDP growth	NBU predicts slowdown in economic growth and Inflation. +5.3% (2023); +4.0% (2024 forecast) NBU predicts that Ukraine's GDP will grow by ~3.6–4.5% in 2025–2026.
	Inflation (CPI, avg.)	≈ 12.9% (2023); 8.5% (2024); inflation will slow down but remain above the target of ~8–10% in 2025 before returning to the target range of ~5%.



Currency Risks	Exchange rate volatility (Calculated as the standard deviation of monthly changes in the UAH/USD exchange rate: $\sigma = std(\Delta \ln FX)$)	$\approx 7\text{--}9\%$ annual volatility of UAH/USD (2023-2024). The NBU supports interventions and a flexible exchange rate, which reduces fluctuations in the hryvnia. During 2025, the USD exchange rate remained relatively stable (≈ 94 UAH/\$) without sharp jumps.
Fiscal	Debt/GDP (according to IMF data - long-term debt as a percentage of GDP)	$\approx 88.1\%$ of GDP (2023); $\approx 92\%$ (2024 est.). According to the IMF, Ukraine's public debt ratio is expected to fluctuate around 53–56% of GDP in 2025 - which is a quantitative indicator of fiscal stress.
Geopolitics	War dummy - conditional variable (geopolitical factor);	Due to the war, Ukraine has to take into account the conditional dummy variable "War = 1", which significantly affects the economy, including GDP forecasts and the budget. (1 - the war continues in 2025–2026, 0 - a peaceful period).
	Geopolitical Risk Index Due to the war, Ukraine has to take into account the conditional dummy variable "War = 1", which significantly affects the economy, including GDP forecasts and the budget. (1 - the war continues in 2025–2026, 0 - a peaceful period).	$\approx 180\text{--}200$ points (2023)
Global Finance	ECB main refinancing rate (ECB key rates are a target indicator of the stability of EU areas) The Fed and other central banks influence global financial flows, but without specific figures for Ukraine in the NBU reports.	4.50% (2024). The European Central Bank (ECB) maintains inflation at around 2%, which is an important external benchmark.
	Fed rates	$\approx 5.25\text{--}5.50\%$ (2024). The Fed rate and other global rates can be included in the model as a global financial factor, although the NBU does not publish them directly.
European Integration	Regulatory convergence index (RCI) (there is no direct numerical indicator in Ukrainian sources, but monitoring of the implementation of Directive/Regulation CRD/CRR and Basel-III by	$\approx 0.75\text{--}0.80$ (2024). The NBU implements standards close to CRD/CRR, which can be close to 1 in the form of a convergence index (1 - significant compliance with EU standards). RCI = implemented EU standards / total number of standards.



	the NBU indicates a gradual convergence to EU standards. Such an index is formed in studies of comparative regulatory compatibility.	
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Source: summarized based on data from the NBU, IMF, Reuters.

It is advisable to provide some comments on the indicator War dummy – conditional variable (geopolitical factor). This dummy variable is introduced into the econometric model to capture the structural shock caused by the full-scale military aggression against Ukraine and its systemic impact on the financial sector. The variable takes the value 1 for periods characterized by the presence of active military conflict and martial law, and 0 for periods of relative macroeconomic stability and absence of large-scale military shocks.

The use of a dummy variable allows isolating the discrete effect of war-related risks on the financial stability of the banking system, including changes in credit risk, liquidity conditions, depositor behavior and macrofinancial uncertainty. The construction of the variable is based on the official chronology of martial law introduced in Ukraine after February 24, 2022, according to the legal acts of the Government of Ukraine and analytical reports of the National Bank of Ukraine.

In addition, to reflect the broader external risk environment, the analysis also considers the Geopolitical Risk Index (GPR), which measures the intensity of geopolitical tensions and conflicts based on the frequency of related terms in international media sources (Caldara & Iacoviello, 2022). This index is widely used in empirical macrofinancial studies to quantify geopolitical uncertainty and its transmission to financial markets and banking stability.

The dependent variable is the integral index of financial stability of the banking system (FSI), which allows for the aggregation of key indicators of capitalization, liquidity, credit risks, profitability and confidence in the banking sector. The empirical estimation of the econometric model is based on a time series dataset covering the period 2015–2024. The data are collected on a quarterly basis, which allows capturing both medium-term structural trends and short-term macrofinancial fluctuations. The final dataset includes 40 observations for each variable used in the model.

The basic specification of the model is as follows:

$$FSI_t = \alpha + \sum_{i=1}^k \beta_i \cdot INT_{it} + \sum_{j=1}^m \gamma_j \cdot EXT_{jt} + \varepsilon_t \quad (2)$$

where:



FSI_t - integral index of financial stability of the banking system in period t ;

α - free member of the model, reflecting the basic level of financial stability in the absence of the influence of explanatory variables;

INT_{it} - vector of internal factors of financial stability in period t , which include indicators of capitalization, liquidity, credit risk, profitability, banking sector structure, and management efficiency;

β_i - financial stability sensitivity coefficients to relevant internal factors;

EXT_{jt} - a vector of external factors in period t , which includes macroeconomic conditions, currency risks, fiscal parameters, geopolitical shocks, global financial conditions, and indicators of European integration convergence;

γ_j - coefficients of influence of external factors on the financial stability of the banking system;

ε_t - a stochastic disturbance term that reflects the effect of unaccounted factors and random fluctuations.

The application of this model allows to quantitatively assess both individual and aggregate impact of internal and external determinants on financial stability of the banking system, as well as to identify key transmission channels of macrofinancial and regulatory shocks. In addition, the use of quarterly data makes it possible to analyze the reaction of the banking system to short-term macroeconomic and geopolitical shocks, including the impact of wartime conditions and financial market volatility. The obtained coefficient estimates can be used to build stress testing scenarios, forecast the dynamics of financial stability and justify decisions in the field of macroprudential policy.

At the stage of functioning of the national economy in a situation of active military aggression, it is important to adequately analyze the activities of systemically important banks, which play a key role in ensuring liquidity, ensuring the continuity of payments of consumers of banking services and facilitating the implementation of state financial programs based on financial support programs of the IMF, EU countries, the USA and other international organizations in order to support the financial stability of Ukraine (Gasiy, O., Pedchenko, N., Gudz, T., Shapovalov, V., & Kashkalda, V., 2025).

It is systemically important banks that own the majority of assets, deposits and payment transactions. They act as liquidity stabilizers, serve as infrastructure channels for the implementation of national financial programs and contribute to strengthening confidence in the banking system (Novak, Osana S.; Zashchypas, Serhii M.; Sliusar, Yevhenii V.; Chaikovskiy, Roman S.; Burtsev, Yaroslav I., 2025). The presence of such agents in the financial market, through their effective activities, directly affects the maintenance of macroeconomic balance, the stability of the payment infrastructure and the country's ability to

cope with crises. Therefore, systemically important banks should be considered as catalysts for sustainable economic growth in Ukraine in the context of post-war reconstruction.

Discussion

The analysis of the results showed that geopolitical tensions and war risks have a significant impact on the financial stability of the banking sector. The military conflict causes an increase in credit, liquidity and market risks, which is confirmed by a decrease in bank capitalization, a decrease in lending volumes and an increase in the value of risk indicators. Such conclusions are consistent with the literature: in particular, with the article *The impact of the war on banking in Ukraine* (Stoika & Pulaski, 2023), which examines key financial indicators of the banking sector during the war, including assets, profitability and risks, and finds that war conditions radically change the risk structure and financial performance of institutions.

These results have a number of practical implications. First, for the National Bank of Ukraine, they emphasize the need to adapt regulatory policy in response to extreme shocks, in particular by introducing more flexible capital requirements, liquidity monitoring and stress testing systems. This is supported by observations in reports on the operational resilience of banks in wartime, which note that despite war risks, Ukrainian banks were able to ensure continuity of services and maintain liquidity reserves thanks to the active policy of the regulator.

Secondly, for banks, such changes mean increased attention to systemic risk management: improving the effectiveness of corporate governance, implementing internal stress tests and optimizing capital buffers to ensure resilience to future shocks. Thirdly, given the process of Ukraine's integration into the EU, the results highlight the need for a more systematic implementation of CRD/CRR requirements and Basel III standards into the national regulatory framework, in particular regarding capital and liquidity requirements, loan portfolio protection mechanisms and early warning mechanisms (which is consistent with the general principles of "Basel III: Ensuring Global Banking Stability and Risk Management").

Conclusions

The article provides a comprehensive analysis of the factors of financial stability of the banking system of Ukraine in the context of structural transformations, military risks and deepening European integration. A systematic classification of internal and external factors of influence is proposed, which allowed identifying the key channels of formation of stability of the banking sector at the macro- and micro-levels and taking into account the synergy of taking into account internal and external factors.

Based on official data of the National Bank of Ukraine and international financial institutions, it was established that a sufficient level of bank capitalization, high liquidity, control of credit risks and preservation of depositors' trust play a decisive role in ensuring financial stability. At the same time, external factors - macroeconomic dynamics, currency volatility, fiscal burden, geopolitical risks and conditions of global financial markets - significantly increase the vulnerability of the banking system and necessitate an adaptive regulatory policy.

The results of quantitative modeling confirmed the statistically significant impact of both internal and external variables on the integral index of financial stability, which indicates the feasibility of using a comprehensive approach based on index analysis and the construction of a regression model. Particular attention is paid to emphasizing the role of European integration processes that contribute to improving the regulatory quality, transparency and stability of the banking system of Ukraine by approaching EU standards and the Basel Principles.

The practical significance of the results obtained lies in the possibility of their use by the National Bank of Ukraine and other regulatory authorities to improve macroprudential policy, form stress testing scenarios and assess systemic risks in the medium term. Further research should be directed at deepening the empirical analysis of the interaction of the banking sector with the real sector of the economy and assessing the impact of digitalization of financial services on financial stability.

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