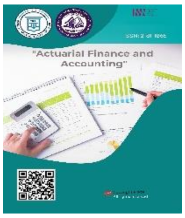

AKTUAR MOLIYA VA BUXGALTERIYA HISOBI ILMIY JURNALI

Vol. 4 Issue 03 | **pp.** 453-460 | **ISSN:** 2181-1865
Available online https://finance.tsue.uz/index.php/afa

ECONOMIC SECURITY OF BANKS: ASSESSMENT OF THE POSITION OF FINANCIAL SUSTAINABILITY AND STABILITY

Malikova Dilrabo Muminovna
PhD, Acting associate professor,
Samarkand Institute of Economics and Service
E-mail: dilrabo7malikova@gmail.com

Ashurova Oltin Yuldashevna
Assistant, Samarkand Institute of Economics and Service

Fazliyev Shahboz
Student, Samarkand Institute of Economics and Service

Abstract: *Ensuring the economic security of the banking sector is paramount for the sustainable development of the country's economy. It involves regulating financial activities, managing the money supply, and enhancing the stability of banks' operations. While there are various methods for assessing the financial security of banks, adherence to regulations set by the Central Bank of the Republic of Uzbekistan is essential. Meeting these requirements helps banks control potential risks associated with their operations. To enhance the economic security of modern banks, the paper proposes evaluating changes in their financial stability based on indicators such as capital adequacy, liquidity, asset volume, and profitability.*

Keyword: *economic security, commercial bank, threat, risk, financial stability, sustainability, assessment methods, security system, capital adequacy, profitability, prudential standards, Central bank, Altman model, GDP, asset quality.*

1. INTRODUCTION

The banking system is an integral part of a country's economic structure, encompassing all credit institutions. It plays a crucial role in facilitating various financial transactions and operations to meet society's needs and generate profit. As commercial banks worldwide introduce innovative services, ensuring the economic security of the banking system becomes a priority for governments due to its significance in national security and the economy.

The economic security of banking institutions hinges on their ability to prevent and mitigate threats effectively. These threats may stem from deliberate or inadvertent actions of individuals, competing banks, international financial institutions, or local authorities. In the era of digitalization, intensified competition, and evolving external factors, banks must carefully assess their financial stability and seek optimal strategies for enhancement.

Banking crises pose significant risks to the entire sector, characterized by a domino effect, accumulation of problematic assets, and liquidity shortages, triggering widespread unrest such as mass deposit withdrawals and reduced interbank lending. Confidence in banks dwindles, impacting payment volumes, financial markets, and the overall stability of the banking system.

The availability of robust diagnostic methods for evaluating the financial security of commercial banks, developed by domestic and foreign experts, is vital for maintaining the sector's sustainable operation. It is advisable to explore existing diagnostic techniques to ensure the stability and reliability of modern banks.

2. LITERATURE REVIEW

The economic security of commercial banks refers to the measures taken to safeguard their operations from both internal and external threats, aimed at ensuring their stable and efficient functioning. This involves a complex interplay of factors and elements within the internal and external environment of the bank, which can evolve over time and impact the bank's economic stability.

From this perspective, the concept of economic security can be interpreted in several ways, including:

- the overall state of the banking sector or the country's economic system;
- the stability of the banking sector or the economy as a whole;
- the level of security and resilience of the banking sector or the economic system;
- a combination of various factors, measures, and conditions that contribute to the development potential of banking institutions or the national economy.

Diagnostic assessments of economic entities typically rely on specific criteria, which serve as indicators for evaluating their financial stability. Key criteria for assessing the financial stability and reliability of modern banks include capital adequacy, liquidity position, asset quality, liabilities, and profitability. It is crucial to understand the structure and significance of these criteria for conducting effective analyses.

In banking practice, ensuring sufficient equity capital is considered fundamental for maintaining the complete financial stability of commercial banks.

Economists frequently emphasize the importance and function of adequate bank equity capital, as it forms the foundation of the bank's activities and serves as a significant resource base. Sufficient capital not only instills trust among clients and investors but also demonstrates the bank's ability to meet its financial obligations to creditors and borrowers. Trust from investors, including depositors and creditors, is crucial for maintaining stability and financial reliability within the comprehensive banking system of Uzbekistan.

3. METHODOLOGY

The study used empirical research methods such as observation, comparison as well as analysis, induction and deduction.

In order to assess the impact of the entire banking system on ensuring the direct economic security of the state, it is advisable to unambiguously analyze the dynamics of the differential indicators of banking institutions. A comprehensive analysis of the banking sector can of course be carried out in the following steps:

Stage 1 involves conducting a comprehensive analysis of the banking system in Uzbekistan.

Stage 2 entails examining the performance of the banking system, with a specific focus on the financial stability indicators of the entire sector. This analysis is conducted annually by the regulatory authority, the Central Bank of the Republic of Uzbekistan.

4. ANALYSIS AND DISCUSSION

In Stage 1, an assessment of the banking system in Uzbekistan was conducted, which included a review of its position within the country's overall economy. Additionally, basic performance indicators of the comprehensive banking sector for the years 2017-2022 were analyzed.

Table 1 data indicates that the proportion of total bank assets to GDP in Uzbekistan ranged from 52-53% by the end of 2018-2019. However, there was a notable increase in this indicator by the end of 2020, reaching 60.8%.

Table 1

Variation of assets of entirely commercial banks of Uzbekistan to GDP (measured in billion soums)

The name of indicators	01/01/2019	01/01/2020	01/01/2021	01/01/2022	01/01/2023
GDP	406,648.50	511,838.10	601,193.0	734,587.7	888,341.7
Bank assets	214,419.60	272,726.90	366,121.1	444,922.5	556,746.3
Asset to GDP ratio, percent	52.7%	53.3%	60.8%	60.6%	62.7%

By the conclusion of 2021, both the GDP and total assets of all commercial banks in Uzbekistan had increased by an average of 22% compared to the previous year. This proportional increase was observed for both indicators. However, the distribution of bank assets in relation to GDP remained consistent at around 60.6%. By the end of 2022, this proportion had risen by 2.1 percentage points to reach 62.7%. This suggests that the banking system of Uzbekistan maintains a relatively high ratio of total banking assets to GDP.

A general analysis of the banking sector indicates positive trends by the end of 2022. Total assets across the sector grew by 25.1% compared to 2021, while the loan portfolio expanded by 19.5%. Deposits from legal entities and individuals also increased significantly, rising by 38.8%. Additionally, the capital of commercial banks saw a 12.2% increase, reaching a total of 79.6 trillion soums during the comparable period in 2022.

The net profit of the entire banking sector surged to 10.0 trillion soums, marking a 2.6-fold increase from the previous year’s figures.

Moving on to Stage 2 analysis, the financial stability of the entire banking system can be evaluated using a wide range of indicators, which can be categorized into:

- capital adequacy indicators;
- liquidity parameters;
- indicators reflecting the quality of liabilities;
- indicators reflecting the quality of assets;
- profitability parameters.

The values of these coefficients, established by the Central Bank of Uzbekistan for assessing the financial stability of the banking sector as a whole, are presented in Table 2 below.

Table 2

Indicators of financial stability of the entire banking system in 2020-2022 (in percentages)

The name of indicators	01/01/2021	01/01/2022	01/01/2023	Change
Ratio of regulatory capital to total risk-weighted assets	18.4	17.5	17.8	0.3
Ratio of Tier I regulatory capital to total risk-weighted assets	15.2	14.6	14.5	-0.1
Ratio of NPL to total loans and borrowings	2.1	5.1	3.5	-1.6
Return on assets	2.2	1.3	2.5	1.2
Return on Equity	10.3	6.1	13.3	7.2
Ratio of liquid assets to total assets	15.4	18.6	21.5	2.9
Ratio of net open foreign exchange position to total capital	4.0	6.0	1.7	-4.3
Ratio of personnel expenses to non-interest expenses	45.2	43.4	34.6	-8.8
Ratio of customer deposits to the total amount of loans and borrowings (excluding interbank ones)	35.5	42.2	47.8	5.6
Ratio of loans and borrowings for residential real estate to the total amount of loans and borrowings	10.1	10.9	11.7	0.8

Table 2 reveals fluctuations in key indicators of financial stability within the entire banking sector of Uzbekistan. The ratio of banks' regulatory capital to their risk-weighted assets increased by 0.3 percentage points to reach 17.8% by the end of 2022, meeting the minimum requirement of 13%.

Conversely, the ratio of Tier I regulatory bank capital to total risk-weighted assets saw a slight decline of 0.1 percentage points compared to the previous period, settling at 14.5% as of the beginning of 2023, still above the minimum requirement of 10%.

There was a notable decrease of 4.1 percentage points in the proportion of non-performing loans (NPL) to bank regulatory capital compared to 2021, indicating a positive trend. Additionally, the decrease in NPL as a share of the total loan portfolio of Uzbekistan's banks by 1.6 points signifies an improvement in the quality of assets across the banking sector.

Return on assets (ROA) witnessed a significant decline from 2.2% in 2020 to 1.3% by the end of 2021, indicating decreased efficiency in asset utilization. However, this figure rebounded by 1.2 percentage points to reach 2.5% as of January 1, 2023.

Return on equity (ROE) experienced a decline from 10.3% in 2020 to 6.1% by the end of 2021, reflecting low profitability and disappointing returns for bank investors. By the beginning of 2023, the ROE indicator for the entire banking sector of Uzbekistan rose to 13.3%.

In assessing a bank's financial security, ensuring economic security is paramount to creating conditions for achieving optimal financial results. Compliance with established standards enables banks to mitigate potential risks associated with their activities, overseen by specialist analysts within each bank.

While Central banks may utilize methodologies that vary slightly from the Basel Agreement, they often impose relatively stringent requirements. Given the understanding of the mandatory methodology of the Central Bank of Uzbekistan, alternative methods for diagnosing and assessing the financial position of commercial banks are explored.

The financial condition of commercial banks in Uzbekistan is assessed using the Altman Z-score model, originally developed for non-manufacturing companies and later adapted by Altman in 1993. This improved model excludes the indicator X5 = Sales / Total Assets.

The formula for Altman's Z-score model for banks is as follows:

$$Z = 6{,}56X_1 + 3{,}26X_2 + 6{,}72X_3 + 1{,}05X_4$$

Where:

X1 - Working capital / Assets (calculated as Working capital / Total assets).

X2 - Retained earnings / Assets.

X3 - Profit before tax / Assets.

X4 - Equity / Liabilities.

After calculating these indicators and applying the formula, the resulting Z-score is interpreted as follows:

If the Z-score is equal to or less than 1.1, the position is critical, indicating a very high risk of default.

If the Z-score is equal to or greater than 2.6, the position is unstable, although the probability of default is low.

If the Z-score falls within the range of 1.10 to 2.6, the position is considered stable, with a relatively low probability of default.

Table 3 presents the final reliability indicators of banks in Uzbekistan calculated using Altman's Z-score model.

Table 3

Reliability indicators of banks in Uzbekistan using the Z-model method of Altman as of 01/01/2022 and as of 01/01/2023

Coefficient	Name of the bank									
	Turonbank		Davr-Bank		Anor-Bank		PSB		MKB	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
x1	0.15	0.11	0.14	0.15	0.17	0.08	0.12	0.12	0.18	0.22
x2	0.01	-0.01	0.01	0.05	0.17	-0.01	0.04	0.05	0.01	0.01
x3	0.00	-0.02	0.05	0.06	0.00	-0.00	0.02	0.01	0.00	0.00
x4	0.18	0.13	0.17	0.18	0.20	0.09	0.14	0.14	0.22	0.28
Z	**1.27**	**0.75**	**1.53**	**1.78**	**1.87**	**0.57**	**1.24**	**1.18**	**1.45**	**1.81**

The data in Table 3 reveals that as of January 1, 2022, all analyzed banks have a Z-score falling within the range of 1.10 to 2.6, indicating a low probability of bankruptcy. In other words, all five banks assessed at the beginning of 2022 are deemed stable according to the Altman model. However, by January 1, 2023, the positions of Turonbank and Anorbank are considered critical, signifying a high risk of default. Additionally, PSB's situation appears precarious, nearing a critical level.

In summary, the interaction of various groups of factors underscores the importance of employing a comprehensive set of indicators to effectively diagnose a bank's financial stability.

5. CONCLUSIONS

The core of economic security within the banking system lies in ensuring the optimal utilization of banking resources while mitigating potential threats that could jeopardize commercial banks. This involves creating favorable conditions for their stable and efficient operations, ultimately leading to maximized profits.

For each bank, ensuring economic security entails safeguarding its economic interests by pursuing priority goals outlined in its charter. Effective management of economic security involves employing methods and techniques to mitigate economic threats, thereby upholding the sovereignty and stability of the domestic economy.

Therefore, addressing economic security concerns falls within the purview of the risk management concept, which aims to diagnose and minimize potential losses inherent in banking activities.

A financially stable bank meets specific criteria, including adequate capitalization, optimal liquidity, high-quality assets, profitability, and well-structured liabilities. Each criterion plays a significant role, and neglecting any one of them could lead to a critical situation for the bank. Hence, it is crucial to meticulously assess and justify each criterion to ensure objective economic reasoning and enhance economic security.

6. REFERENCES

[1] Abalkin L.I. Ekonomicheskaya bezopasnost' Rossii: ugrozy i ih otrajenie // Voprosy ekonomiki. 1994. № 12. – S.4-13.

[2] Alenin V.V. Strategiya obespecheniya ekonomicheskoi bezopasnosti regional'nogo bankovskogo sektora: metodologiya, metody i praktika. Avtoref. dis. … kand. ekon. nauk: 08.00.10; [Mesto zaschity: Ivanovskii gosudarstvennyi universitet].- Ivanovo., 2007. – S.11-12.

[3] Cao, Lansheng, Ming Gu, Ding Jin, and Changyan Wang. 2023. 'Geopolitical Risk and Economic Security: Exploring Natural Resources Extraction from BRICS Region'. Resources Policy. Elsevier Ltd. https://doi.org/10.1016/j.resourpol.2023.103800.

[4] Chen, Zhenyun, Huxing Li, Tianbo Wang, and Junxian Wu. 2023. 'How Digital Transformation Affects Bank Risk: Evidence from Listed Chinese Banks'. Finance Research Letters 58 (December): 104319. https://doi.org/10.1016/j.frl.2023.104319.

[5] 'Commercial Banks' Contribution to Expanded Investment and Credit in Jordan | International Journal of Professional Business Review'. n.d. Accessed 16 December 2023. https://openaccessojs.com/JBReview/article/view/1832.

[6] Delas, Vitalina, Euvgenia Nosova, and Olena Yafinovych. 2015. 'Financial Security of Enterprises'. Procedia Economics and Finance, 22nd International Economic Conference of Sibiu 2015, IECS 2015 'Economic Prospects in the Context of Growing Global and Regional Interdependencies', 27 (January): 248–66. https://doi.org/10.1016/S2212-5671(15)00998-3.

[7] Dominguez, Maria. 2017. 'Industry Specific Q&A: Financial/Banking Security'. In Women in the Security Profession, edited by Sandi J. Davies, 13–17. Boston: Butterworth-Heinemann. https://doi.org/10.1016/B978-0-12-803817-8.00003-1.

[8] Gehrig, Thomas, Maria Chiara Iannino, and Stephan Unger. 2024. 'Social Responsibility and Bank Resiliency'. Journal of Financial Stability 70 (February): 101191. https://doi.org/10.1016/j.jfs.2023.101191.

[9] Grunevald, Isabel, Liane Mahlmann Kipper, Jorge Andre Ribas Moraes, and Leandro Haupt. 2023. 'Scientific Contributions on Cleaner Production through the Use of Patent Information: A Bibliometric Analysis'. Renewable and Sustainable Energy Reviews 188 (December): 113785. https://doi.org/10.1016/j.rser.2023.113785.

[10] Gu, Chao, Cyril Monnet, Ed Nosal, and Randall Wright. 2023. 'Diamond–Dybvig and beyond: On the Instability of Banking'. European Economic Review 154 (May): 104414. https://doi.org/10.1016/j.euroecorev.2023.104414.

[11] Gulati, Rachita, Nirmal Singh, Sunil Kumar, and Geeta Duppati. 2023. 'Bank Stability in the Indian Subcontinent Region: Evolution and Determinants'. Pacific-Basin Finance Journal 79 (June): 102023. https://doi.org/10.1016/j.pacfin.2023.102023.

[12] Ilinich, E.V. Ekonomicheskaya bezopasnost' v sfere bankovskoi deyatel'nosti special'nost' / Avtoref. kand. ekon. nauk. – M.: 2004. – 13 s.

[13] Kalinovskaya E.O. Ekonomicheskaya bezopasnost' v bankovskoj sfere: ponyatie, sushchnost'. "Aktual'nye voprosy nalogooblozheniya, nalogovogo administrirovaniya i ekonomicheskoj bezopasnosti" sbornik nauchnyh statej V Vserossijskoj nauchno-prakticheskoj konferencii. Tom 2. Kursk, 2021. 69-73 s.

[14] Kaplan, R.S. The Balanced Scorecard: Translating Strategy into Action / R.S. Kaplan, D.P. Norton // Harvard Business Review Press; 1st edition. 1996. 336 p.

[15] Krokhicheva, Galina, and Elena Baranova. 2023. 'MECHANISM FOR ENSURING ECONOMIC SECURITY OF THE ENTERPRISE'. Science & World 2023 (December): 11–15. https://doi.org/10.26526/2307-9401-2023-4-11-15.

[16] Malikova, D. (2023). Methodology for effective assessment of the level of economic security of banks. Innovative Society: Problems, Analysis and Development Prospects (Spain), 96-98.

[17] Malikova, D. (2023). EKONOMICHESKAYA BEZOPASNOST' KOMMERCHESKIH BANKOV I METODIKA OCENKI UROVNYA EE OBESPECHENIYA. Economics and Education, 24(1), 182-188. https://doi.org/10.55439/ECED/vol24_iss1/a27.

[18] Nechaev, V. I., Mihailushkin, P. V. Ekonomicheskii slovar' / V. I. Nechaev, P. V. Mihailushkin // Krasnodar: Prosveschenie. - YUg. - 2011. - 464s.

[19] Taradaeva, A.V., Syumkina, A.A. Teoreticheskie aspekty ekonomicheskoi bezopasnosti kommercheskogo banka / A.V. Taradaeva, A.A. Syumkina // Vektor ekonomiki. - 2017. - №4(10). - S. 38.