FINANCIAL STABILITY OF BANKS AND THEIR RISKS

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Abstract. The banking sector is an important element of any country's economic system and plays the role between lenders and borrowers. This article discusses the main aspects of the financial soundness of banks and their risks, as well as methods of risk management to ensure the sustainable functioning of the banking system.

Keywords: financial soundness of banks, credit risk, operational risk, market risk, risk management, liquidity.

Introduction. The banking sector is an important element of any country's economic system. It provides financial services and acts as an intermediary between lenders and borrowers. However, like any other business, banks face risks. The financial soundness of banks is a key factor for the sustainability of the economy as a whole. This article discusses the main aspects of banks' financial stability and risks.

Main part. Financial soundness of banks is a bank's ability to overcome potential losses and maintain its operations in the event of economic difficulties. The financial soundness of banks is determined by their ability to withstand economic shocks and maintain their solvency. This ability depends on several factors, such as the level of capitalization, liquidity, asset quality, and risk management.

Credit risk is one of the major risks faced by banks. Credit risk occurs when a borrower is unable to repay their loan debt on time. To reduce this risk, banks conduct a thorough analysis of loan applications and assess the creditworthiness of potential borrowers.

There are several methods of credit rating assessment. One of the most common methods is the Credit Rating method of credit risk assessment. This method was developed in the late 1970s and is currently used by many large banks and financial institutions.

The Credit Rating credit risk method is based on an analysis of several factors that can affect a borrower's creditworthiness. These factors include the borrower's credit history, financial condition, credit rating of the borrower's company, the size and structure of the borrower's debt, and the sector of the economy in which the borrower operates.

For each factor, a scoring system is used to determine how much weight each factor carries in calculating the credit rating. For example, a borrower's credit history may be given more weight than the size of his or her debt or the sector of the economy in which the borrower works. Once each factor has been evaluated, a mathematical model is used to determine the borrower's credit rating. The credit rating can be presented as a numerical scale that allows banks to estimate the likelihood of defaulting on a loan or credit. The higher the borrower's credit rating, the less likely it is that the loan or credit will not be repaid, and the lower the interest income the bank will receive.

The Credit Rating method of assessing credit risk has several advantages. First, it allows banks to evaluate a borrower's creditworthiness based on objective factors, which reduces the likelihood of subjective interference. Second, the Credit Rating method allows banks to compare the credit rating of borrowers within the same industry or across industries, which helps make credit decisions.

However, the Credit Rating method of assessing credit risk also has its limitations. First, it may not be effective in evaluating borrowers who have no credit history or whose credit history is inadequate. Second, the Credit Rating method does not take into account certain factors that can affect the likelihood of a loan or credit default, such as changes in the economy or political situation.

Despite these limitations, the Credit Rating method is one of the most common methods of assessing credit risk in the banking business. It allows banks to assess the likelihood of a loan or credit default, which helps to reduce credit risk and improve the financial stability of the banking system as a whole.

Operational risk is the risk of loss resulting from deficiencies in internal processes, systems or human factors. This risk arises from incorrect or inadequate functioning of the management system, internal processes, human factors or external events such as cyber-attacks, natural disasters, etc.

Operational risk covers a wide range of risks, such as the risk of lack of control and verification procedures, the risk of human error, the risk of legal irregularities and the risk from changes in technology. It can lead to serious financial consequences for the bank, including capital losses, reputational risks and damage to the bank's business and customers.

Banks use a variety of methods to manage operational risk, including risk assessment, developing and implementing policies and procedures, improving staff knowledge and skills, and using technology and systems, such as operational risk monitoring and risk management systems.

A key factor for effective operational risk management is the development and implementation of policies and procedures aimed at ensuring the safety of banking operations. This may include conducting regular audits and reviews, as well as implementing controls and risk management mechanisms at all levels of the organization.

Market risk is the risk of losses due to changes in market prices of financial instruments such as stocks, bonds, currencies and commodities. Market risk is associated with changes in interest rates, infla-

tion rates, exchange rates, changes in prices of goods and services, and market events such as company bankruptcies, changes in political regimes, etc.

Market risk includes two main types of risks: price risk and portfolio structure risk. Price risk relates to possible changes in the prices of financial instruments, which may lead to a loss in the value of the portfolio. Portfolio structure risk is related to the incorrect allocation of assets, which may lead to undesirable consequences when the prices of various financial instruments change.

Another method of market risk management is the assessment of exposure to market risks. This assessment allows the bank to determine how vulnerable its portfolio is to market fluctuations. When assessing exposure to market risk, banks use metrics such as Value at Risk (VaR), which is an estimate of the maximum possible loss a bank could incur over a given period of time at a given confidence level.

Liquidity is a bank's ability to overcome potential difficulties in case of cash shortages. Banks must have sufficient liquid assets to meet their obligations to customers and creditors. One way to manage liquidity is to regulate the timing of deposits and loans. Banks should also have liquidity management plans in case of economic difficulties. These plans should contain liquidity management strategies and risk mitigation measures.

Capital is a bank's own funds that can be used to cover potential losses. Banks must have a sufficient level of capital to overcome potential losses and maintain their operations in the event of economic difficulties.

Banks use a variety of methods and tools to manage capital. One such tool is rating agencies. Rating agencies assess the creditworthiness of banks and give them credit ratings that allow investors and creditors to assess risks.

A variety of risk management techniques are used to ensure the financial soundness of banks. Risk management is one of the key functions in the banking business. Effective risk management is critical to the financial soundness of banks.

Banks can use several methods to manage risk:

Table – Pros and cons of methods to manage risk

Method	Pros	Cons
1	2	3
Portfolio	Reduces the risk of loss from individual assets	Diversification may not always work, espe-
Diversification	or market conditions.	cially during systemic risk events when many
	Helps spread risk across different economic	asset classes are affected.
	sectors or countries.	Requires a significant investment in research
	Can improve the overall return on investment.	and analysis to properly diversify a portfolio.
Risk Limiting	Limits potential losses by setting limits on cer-	Limits may be too conservative, limiting the
	tain types of transactions. Provides a clear	bank's ability to generate profits.
	framework for managing risk.	May require significant resources to set and
	Helps maintain regulatory compliance.	monitor limits effectively.
Hedging	Protects the bank from asset price risks.	Hedging can be costly and may not always be
	Provides a way to offset potential losses.	effective in mitigating risks.
	Can be used to gain exposure to assets or mar-	May require specialized knowledge and ex-
	kets while managing risk.	pertise to implement effectively.
Monitoring and	Constantly monitoring operations and control-	Can be time-consuming and may require sig-
control	ling risks to prevent potential losses.	nificant resources.
	Allows for quick identification and resolution of	May be less effective in managing risks that
	potential issues.	are difficult to quantify or predict.
	Helps maintain regulatory compliance.	
Stress testing	Assesses how the bank will handle extreme	Stress tests may not always capture all possi-
	conditions. Helps identify potential weaknesses	ble risks or the full impact of potential scenar-
	in risk management.	ios.
	Provides a basis for developing contingency	Can be resource-intensive and require signifi-
	plans.	cant expertise to perform effectively.

1	2	3
Credit Analysis	Helps assess a borrower's creditworthiness and	Credit analysis may not always be accurate
	identify possible risks. Provides a basis for set-	and may not capture all risks associated with
	ting loan terms and conditions. Helps maintain	a borrower. May require significant resources
	regulatory compliance.	to perform effectively, especially for large
		loan portfolios.
Analysis of	Analyzes potential risks associated with new	Analysis can be time-consuming and may
potential risks	products or services before they begin offering	delay the introduction of new products or
	them to customers.	services.
	Provides a basis for developing risk manage-	May not capture all potential risks or the full
	ment strategies.	impact of a new product or service on the
		bank's operations.

In general, risk management methods should be flexible and tailored to the bank's specific needs. In addition, risk management should be an ongoing and systematic process that includes analysis, monitoring and control.

Conclusion. The financial soundness of banks and their risk management are key aspects that determine the success of the banking sector. Banks must find a balance between profitability and the risks they face in order to maintain their resilience and protect their customers and depositors.

The article discussed the main types of risks faced by banks - credit risk, market risk, operational risk, as well as methods of their assessment and management. The role of liquidity in ensuring the financial stability of banks was also considered.

As a result, we can conclude that solving the problems of financial stability and risk management are important tasks for banks and require a comprehensive approach, including the development of appropriate strategies and policies, implementation of new technologies, as well as staff training. Only in this way can banks effectively manage their risks and ensure the long-term sustainability of their operations.

References

- 1. European Central Bank [Electronic resource] https://www.ecb.europa.eu/home/html/index.en.html Access date 12.04.2023.
- 2. Frontiers [Electronic resource] https://www.frontiersin.org/articles/10.3389/fpsyg.2022.909141/full Access date 12.04.2023.
- 3. IMF [Electronic resource] https://www.imf.org/en/Blogs/Articles/2022/04/19/blog-gfsr-financial-stability-risks-grow-as-war-complicates-push-to-contain-inflation Access date 12.04.2023.