## Elmi Xəbərlər № 1, 2025 (İctimai və Texniki elmlər seriyası)

### Scientific bulletin № 1, 2025 (Social and Technical Sciences Series)

#### Sheyla Zaur HUSEYNOVA

Master's student, Khazar University ORCID: 0009-0006-7162-2415 Email: sheylah@hotmail.co.uk

#### **BANKING SECTOR RISK TYPES**

#### **Summary**

This article examines the main types of risks encountered in the banking sector and analyzes their impact on financial stability. The complex and dynamic economic environment in which banks operate brings with it a variety of risks, and effective management of these risks is essential for the stability of the financial system.

The main objective of the article is to identify credit, market, interest rate, liquidity, operational and legal risks in the banking sector and to provide a framework for how they can be managed. It also explains why effective control of these risks is important for economic growth and the stability of the financial system. Globalization, rapid developments in capital markets and increased competition in the financial sector have required banks to adopt more sophisticated methods of risk management.

This study emphasizes that risk management in the banking sector is important not only for individual banks, but also for overall macroeconomic stability. Effective risk management contributes to maintaining financial stability, increasing capital adequacy and sustainable development of the banking sector.

**Keywords:** Banking risks, credit risk, risk management, financial stability, banking sector.

**UOT:** 33.0, 338. **JEL:** O31, O32.

**DOI:** <a href="https://doi.org/">https://doi.org/</a> 10.54414/ KJTB2851

### Introduction

The contemporary banking sector faces various risks due to operating in a dynamic and complex economic environment. These risks directly affect financial stability, profitability of banks and stability of the economic system in general. Proper management and minimization of banking risks contributes to the overall macroeconomic stability as well as increasing the efficiency of financial institutions.

Financial institutions have faced various difficulties for many years due to different reasons. The primary cause of serious problems in the banking sector continues to be factors such as inadequate credit standards, weak portfolio risk management, or failure to properly monitor economic developments and changes in other conditions that could lead to a deterioration in the creditworthiness of bank customers. This experience has been observed not only in G-10 countries but also in non-G-10 member countries.

Banking risks can be classified according to various criteria. For example, by source of occurrence (pure risks, speculative risks), by level of coverage (micro-level risks and macro-level risks; international risk, national risk, risk of an individual bank, risk of a bank client), by factors causing the risk (external risks, internal risks), by time of occurrence (retrospective, current, prospective risks), by the degree of dependence on the bank, etc. One of the key criteria for distinguishing the main types of banking risks in practice is such a parameter as the degree of its impact on the stability of the bank's position and profitability, according to which risks can be divided into financial and non-financial. Financial risks include all types of risks that directly affect the stability of the bank's position and its profitability, while non-financial risks influence these parameters indirectly through their relationship with the former. Examples of financial risks include credit risk (which also includes concentra-



tion risk), liquidity risk, market risk (which includes stock, interest rate, currency, and commodity risks), insolvency risk, and the risk of asset loss for the bank. The main non-financial banking risks include operational risk, legal risk, business transaction loss risk, country risk, transfer risk, etc [1, p. 183].

Based on the degree of risk impact on the overall effectiveness of the banking sector, systemic risk, banking group risk, risk of a bank with a universal license, and risk of a bank with a basic license can be distinguished. Depending on the degree of impact on the bank's business model, risk can be aggregated (affecting all business processes) or influence specific areas of its operations. An example of aggregated risk could be the risk of insolvency and loss of bank assets, while risks affecting specific banking operations may include operational risk, liquidity risk, etc.

Banking risk management is a process aimed at identifying, measuring, and reducing potential losses in the activities of a credit institution. The main elements of the risk management system (RMS) in modern commercial banks are:

- Principles of formation;
- Subjects and objects;
- Regulatory and legal framework;
- Organizational structure;
- Stages of RMS implementation;
- Methods of quantitative and qualitative risk assessment;
- Risk management tools, the key ones being risk transfer (segmentation, hedging, risk insurance), risk elimination and reduction (limiting, diversification, reserve formation, securitization, etc.).

Credit risk, in its simplest sense, refers to the probability that one of the parties in a transaction may fail to fulfill its obligations to the other party. Credit risk, which is of great importance in terms of potential losses, describes the situation banks face when a bank customer fails to fulfill their obligation partially or entirely on time by not complying with the contractual requirements [1, p. 185].

In the past, the traditional definition of credit risk among banks was limited to the counterparty's failure to meet its obligations and repay the loan. To protect themselves from this risk, banks have extended credit to large or medium-sized firms that are well recognized in the market, while they have preferred not to take on credit risk for other firms due to the inability to conduct a reliable risk assessment for them. To secure the loans they provided, banks have required strong collateral from debtor firms.

In the 1980s, the fact that most banks world-wide reported high profits during economic growth periods and high losses during economic contractions, that firms within the same sector or group strengthened or weakened during similar economic periods, and that the correlation effect between loans was not taken into account led to discussions about the insufficiency of the traditional credit risk approach. During this period, the importance of credit risk management increased due to the following reasons:

- As a result of globalization and economic recession, companies have become unable to compete, leading to an increase in corporate bankruptcies.
- ➤ The rapid development of capital markets has enhanced the ability of medium-sized firms, in addition to large firms, to access funding directly from capital markets, enabling a large number of small-scale firms to establish credit relationships with banks.
- ➤ With the rapid increase in competition within the financial sector, profit margins applied to customers have significantly narrowed, making the risk-return relationship even more critical.
- With the rise of derivative products, the credit risk carried by banks has exceeded the risks reflected in their balance sheets.
- ➤ The rapid advancement of technology has facilitated data collection and storage, leading to the implementation of new models and techniques, thereby increasing the importance of credit portfolio analyses.
- ➤ In addition to all these developments, international regulations—particularly BIS regulations—have started to play a guiding role in credit risk measurement, management, and analysis for banks [2, p. 13].

In line with these developments, effective credit risk management has been defined as a more comprehensive approach, where customer profitability is prioritized, loans are monitored as a portfolio, the deviation from the expected

## Elmi Xəbərlər № 1, 2025 (İctimai və Texniki elmlər seriyası)



### Scientific bulletin № 1, 2025 (Social and Technical Sciences Series)

portfolio value is calculated using statistical methods, the risk-return relationship is measured, it is linked to capital, and the risk factor is considered in credit pricing.

Market risk is the probability of a bank incurring losses on on-balance-sheet or off-balance-sheet positions due to adverse changes in market prices. Market risk does not arise solely from fluctuations in market prices; it can also stem from the activities of market buyers and sellers who take on risks or seek to mitigate them.

Market risk refers to the likelihood of investment and trading activities, as well as held positions, generating losses due to changes in interest rates, exchange rates, credit spreads, stock prices, commodity prices, their correlations, and their volatilities.

The assets and liabilities subject to market risk are those whose values change regularly in a defined and structured market. Changes in market values can occur due to fluctuations in stock prices, interest rates, exchange rates, and commodity prices. However, among these, the most significant changes for banks are generally those in exchange rates and interest rates. This is because, in line with the economic needs of certain countries, various regulations have been introduced that impose restrictions on the banking sector's investments in stocks or commodities.

Market risk that banks face is generally considered to have two main dimensions. These are exchange rate risk, which arises from trading activities conducted by the treasury, and interest rate risk, which results from asset-liability maturity mismatches in the balance sheet. Additionally, stock price fluctuation risk can also be included in this category [3, p. 41].

Interest rate risk is the risk that the return on an investment will differ from the initially expected return due to changes in interest rates. Banks are institutions that are continuously exposed to interest rate risk due to their operations. Interest rate risk affects both a bank's earnings and the economic values of its on-balance-sheet and off-balance-sheet items.

Exchange rate risk refers to the changes in a firm's debts, receivables, and market value caused by unexpected fluctuations in exchange rates. For exchange rate risk to arise, an entity must be exposed to it—meaning its assets and

liabilities must be sensitive to exchange rate fluctuations. Banks operate in markets with various objectives while creating supply and demand. Primarily, they demand foreign currency in spot markets to meet their foreign exchange needs or supply excess foreign exchange funds to these markets. Another purpose is to hedge against currency risks arising from foreign exchange transactions by generating foreign exchange supply and demand in futures markets. Additionally, banks engage in arbitrage transactions to take advantage of exchange rate differences in various markets. These activities expose banks to exchange rate risk [4, p. 569].

Stock price fluctuation risk: This risk arises from fluctuations in stock prices. In some sources, this type of risk is also referred to as security price risk. Compared to fixed-income securities markets or foreign exchange markets, stock markets exhibit greater volatility. Therefore, stock price risk is a significant source of market risk.

To determine stock price risk, it is first necessary to identify the factors affecting stock prices. These factors can be categorized into two groups: firm-specific factors and market-specific factors.

Firm-specific factors, also known as unsystematic risk, represent risks unique to a particular company. This risk is associated with random outcomes caused by internal corporate behaviors or events. Lawsuits within the company, strikes, successes or failures in marketing programs, gains or losses in major contracts, and other events contribute to firm-specific risks.

Operational risk is defined as the risk of loss arising from inadequate or failed internal processes, people, and systems, or from external events.

In its broadest sense, operational risk can be described as "all risks other than pure credit and market risk" and refers to the risks banks encounter while carrying out their activities. In this regard, operational risk in banks may arise from internal factors such as failures in internal controls leading to undetected errors and irregularities, management mistakes, and failures or disruptions in information technology systems. It may also stem from external factors, including fraud involving third parties, natural disasters



such as earthquakes, fires, and floods, as well as terrorist activities and social unrest [5].

Liquidity Risk— Liquidity refers to a bank's ability to meet its debts, cover potential deposit withdrawals with minimal loss, and fulfill the market's credit needs. Liquidity risk, on the other hand, can be defined as "the risk of loss that may affect a bank's earnings and capital due to its inability to meet its obligations on time or without significant losses caused by adverse liquidity conditions".

The liquidity of a balance sheet refers to the ability of a company's assets to meet obligations, the alignment of the time required to convert an asset into cash with the maturity of liabilities. The risk of unbalanced bank liquidity is the probability of the bank failing to fulfill its obligations due to a mismatch in the receipt and issuance of financial units in terms of volume, timing, and currency. This risk arises under the influence of factors such as liquidity loss, early loan repayments, clients' failure to fulfill contract terms, inability to sell an asset, and accounting errors.

The grouping of assets and liabilities forms the basis for determining liquidity risk. To assess the risk, an analysis of the company's financial flows is conducted based on terms, payment groups, and currencies. It is necessary to evaluate the potential for early loan repayment demands and the level of asset recoverability.

Country and transfer risk – Country risk is defined as a risk that arises when a country, for various reasons, either cannot or does not want to repay its external debts. It is distinct from other general risks associated with foreign borrowing and foreign investments.

The factors leading to country risk can be analyzed in three categories: political, economic, and social events. These include war, military and civilian coups, ideological conflicts, political polarizations, conflicts between religious groups, economic disputes, civil wars, income inequality, strikes, economic downturns, rapid cost increases, declines in exports, and sharp rises in raw material and energy imports [6, p. 7].

Transfer risk, on the other hand, refers to the possibility that the borrower—whether an individual or an institution—cannot repay its foreign

currency debt in the same currency or in another convertible currency due to the economic conditions and regulations of its home country.

In international credit transactions, risks associated with the borrower's country (such as its economic, social, and political structures) are as important as the borrower's individual risk. Country risk is particularly significant in loans granted to foreign governments and public institutions. Transfer risk is an extension of country risk. These risks arise when the borrower's obligations cannot be met due to the inability to define liabilities in the national currency.

Legal Risk – Financial risk can arise not only from banks' high-risk investments but also from legal regulations. The significant role banks play in national economies explains governments' desire to maintain control over these institutions.

Legal risk refers to the possibility of incurring a loss due to transactions conducted based on incorrect or incomplete legal information or documentation. Additionally, lawsuits filed by shareholders against companies that have suffered significant losses also constitute a type of legal risk.

Legal risks are managed within the framework of policies established through joint decision-making by an institution's risk managers and senior executives. Before finalizing any agreement, the institution must ensure that the contracts are legally enforceable. In cases where substantial losses are involved, legal disputes often result in high litigation costs due to the significant investments at stake.

Bank portfolios and financial balances structured in compliance with existing regulations and legal frameworks can be disrupted by changes in legislation, exposing banks to additional risks and potential losses.

Reputation risk is defined as "the potential material and moral losses that may arise due to failures in the bank's operations and non-compliance with legal regulations, leading to a decline in trust toward the bank".

Capital adequacy risk – Another type of risk encountered in banking is capital risk. In this field, capital and risk are closely related concepts. Capital, in banking terms, can be defined as the contribution provided by the bank's owners to ensure its continued operations. This risk

## Elmi Xəbərlər № 1, 2025 (İctimai və Texniki elmlər seriyası)



### Scientific bulletin № 1, 2025 (Social and Technical Sciences Series)

can be described as "the risk arising from a bank's decision on whether or not to maintain the capital required for the continuation of its current activities" [7, p. 353].

Problems observed in both our country and other nations have brought the concept of capital adequacy to the forefront. Regulations in the banking sector are designed to encourage banks to increase their capital. On the other hand, bank owners and bankers tend to operate with lower capital levels due to the multiplier effect on financial leverage and return on equity (ROE). The increase in capital is aimed at reducing risk. Additionally, a rise in capital leads to an appreciation in the value of shares.

In light of these developments, as seen both in our country and globally, minimum capital requirements have been imposed on the banking sector. These regulations aim to ensure that banks maintain a predefined minimum capital ratio or amount, with penalties applied to those that fail to meet this requirement.

Exchange rate risk – The likelihood of a loss in an institution's foreign exchange position due to the depreciation of the national currency against foreign currencies (currency risk) or changes in cross exchange rates. Exchange rate risk is analyzed in two categories: currency risk and parity risk. Since currency risk has been discussed earlier, only parity risk will be addressed here.

Parity risk arises from fluctuations in the exchange rates of foreign currencies held in a bank's foreign exchange position. Suppose a bank holds two different foreign currencies in its exchange position, and one of these currencies appreciates against the other. If the bank fails to accurately predict exchange rate movements and does not convert the other currency into the appreciating one, it misses out on an alternative return. This situation is referred to as parity risk [8, p. 44].

#### Conclusion

Credit, liquidity, interest, foreign exchange, market and operational risks affect the operations of banks in various ways, and failure to manage them effectively can lead to serious financial losses and even systemic crises. In order to minimize these risks, it is important to implement modern risk management strategies, benefit from international experience and strengthen the regulatory framework. As a result, it is of great importance to manage risks with a comprehensive approach in order to ensure the sustainable development of the banking sector and financial stability.

#### REFERENCES

- 1. Acharya, V. V., Engle, R. (2016). "Modeling Financial Crises: A New Approach". Journal of Financial Economics, 120(1), pp. 179-197.
- 2. Borio, C., Drehmann, M. (2009). "Assessing the Risk of Banking Crises". Bank for International Settlements Working Paper No. 308. 28 p.
- 3. Георгий Д. (2019). Введение в рискменеджмент. Учебное пособие, 62 с.
- 4. Hanson, S. G., Shleifer, A., Vishny, R. W. (2015). "Bank Stability and Financial Intermediation". Journal of Financial Economics, 116(3), pp. 561-578.
- 5. <a href="http://www.ozyazilim.com/ozgur/mar-mara/uluslararasi/politikrisk.htm">http://www.ozyazilim.com/ozgur/mar-mara/uluslararasi/politikrisk.htm</a>
- 6. Gros, D. (2017). "The Political Economy of Banking Regulation: Risk-Taking, Regulation, and Globalization". European Journal of Political Economy, 47, pp. 1-10.
- 7. Haldane, A. G., May, R. M. (2011). "Systemic Risk in Banking Ecosystems". Nature, 469(7330), pp. 351-355.
- 8. Tezel, N. (2000). "Bankacılık Risk Alma İşidir. O Zaman Risk Yönetimine Artan Önemle Yaklaşım Nedendir", Active Bankacılık ve Finans Makaleleri, No. 4: s. 43-46.



# Şeyla Zaur HÜSEYNOVA

Magistrant, Xəzər Universiteti ORCID: 0009-0006-7162-2415 E-mail: sheylah@hotmail.co.uk

### BANK SEKTORUNDA RİSK NÖVLƏRİ

#### Xülasə

Bu məqalədə bank sektorunda rast gəlinən əsas risk növləri araşdırılır və onların maliyyə sabitliyinə təsiri təhlil edilir. Bankların fəaliyyət göstərdiyi mürəkkəb və dinamik iqtisadi mühit özü ilə müxtəlif riskləri də gətirir və bu risklərin effektiv idarə olunması maliyyə sisteminin sabitliyi üçün vacibdir.

Məqalənin əsas məqsədi bank sektorunda kredit, bazar, faiz dərəcəsi, likvidlik, əməliyyat və hüquqi riskləri müəyyən etmək və onların necə idarə oluna biləcəyinə dair çərçivə təmin etməkdir. O, həmçinin bu risklərə effektiv nəzarətin iqtisadi artım və maliyyə sisteminin sabitliyi üçün nə üçün vacib olduğunu izah edir. Qloballaşma, kapital bazarlarında sürətli inkişaf və maliyyə sektorunda artan rəqabət banklardan risklərin idarə edilməsinin daha mürəkkəb üsullarını tətbiq etməyi tələb etdi.

Bu araşdırmada vurğulanır ki, bank sektorunda risklərin idarə edilməsi təkcə ayrı-ayrı banklar üçün deyil, həm də ümumi makroiqtisadi sabitlik üçün vacibdir. Effektiv risklərin idarə edilməsi maliyyə sabitliyinin qorunmasına, kapital adekvatlığının artırılmasına və bank sektorunun davamlı inkişafına kömək edir.

Açar sözlər: Bank riskləri, kredit riski, risklərin idarə edilməsi, maliyyə sabitliyi, bank sektoru.

# Шейла Заур ГУСЕЙНОВА

Магистрант, Университет Хазар ORCID: 0009-0006-7162-2415 E-mail: sheylah@hotmail.co.uk

#### ТИПЫ РИСКОВ БАНКОВСКОГО СЕКТОРА

#### Резюме

В этой статье рассматриваются основные типы рисков, встречающихся в банковском секторе, и анализируется их влияние на финансовую стабильность. Сложная и динамичная экономическая среда, в которой работают банки, несет с собой множество рисков, и эффективное управление этими рисками имеет важное значение для стабильности финансовой системы.

Основная цель статьи — выявить кредитные, рыночные, процентные, ликвидные, операционные и юридические риски в банковском секторе и предоставить основу для того, как ими можно управлять. В ней также объясняется, почему эффективный контроль этих рисков важен для экономического роста и стабильности финансовой системы. Глобализация, быстрое развитие рынков капитала и возросшая конкуренция в финансовом секторе потребовали от банков принятия более сложных методов управления рисками.

В этом исследовании подчеркивается, что управление рисками в банковском секторе важно не только для отдельных банков, но и для общей макроэкономической стабильности. Эффективное управление рисками способствует поддержанию финансовой стабильности, повышению достаточности капитала и устойчивому развитию банковского сектора.

**Ключевые слова:** банковские риски, кредитный риск, управление рисками, финансовая стабильность, банковский сектор.