

WAYS TO ELIMINATE PROBLEMS IN THE PROCESS OF CREDIT RISK ASSESSMENT AND MANAGEMENT

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Abstract

This article analyzes the legal and institutional foundations of credit risk management in commercial banks, as well as the dynamics of non-performing loans (NPLs) in the banking sector of Uzbekistan. The study examines theoretical approaches of economists such as Milton Friedman, Robert Solow, and V. Usoskin in connection with the implementation of modern financial regulatory mechanisms in Uzbekistan, including ICAAP, Basel III standards, and stress-testing practices. Based on statistical data for the period 2020–2024, the research identifies the causes of the growth of non-performing loans in state-owned and private banks, highlighting macroeconomic factors and changes in credit policy. The author proposes several scientific recommendations aimed at strengthening the stability of the banking system, including the full digitalization of risk assessment processes, expansion of hedging instruments, and improvement of risk-based supervisory mechanisms.

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Introduction

Credit risk is one of the most significant financial risks faced by commercial banks and plays a decisive role in ensuring the stability and liquidity of banking activities. This type of risk primarily arises when borrowers fail to fulfill their obligations in a timely and complete manner, and its effective management directly affects the stability of the banking system.

The effectiveness of credit risk management in commercial banks largely depends on the strength of the legal and institutional framework regulating this process. In Uzbekistan, the legal basis in this area is defined by a number of legislative acts and regulatory documents [1].

One of the key legal documents regulating the activities of commercial banks in Uzbekistan, including credit risk management, is the Law “On Banks and Banking Activities”. This law was adopted on November 5, 2019, and formalized as Law No. O’RQ–578. It establishes the main legal norms governing banking operations, supervision, capital adequacy, risk assessment, and internal governance mechanisms [2].

The law outlines general legal principles for reducing credit risk and ensuring effective risk management. In particular, it obliges banks to identify, assess, and manage risks, as well as to adopt appropriate internal regulations and policies. Although the law aims to comply with international standards, particularly Basel requirements, it does not provide sufficient details regarding advanced risk assessment instruments such as stress testing, the Internal Capital Adequacy Assessment Process (ICAAP), and other modern approaches. In

practice, there are also cases where the requirements of this law are implemented by banks in a formal rather than substantive manner [3].

Literature Review

The theoretical approach of Milton Friedman plays an important role in understanding the relationship between the volume of credit operations conducted by commercial banks and the stability of money circulation [4]. According to Friedman, excessive lending may increase inflationary pressure, reduce the value of money, and threaten economic stability. Therefore, strict and effective mechanisms of control over money supply and bank credit issuance should be implemented by the central bank. His concept of a “stable demand for money function” is based on the idea that the growth of money supply must be proportional to the needs of the economy and occur in a stable and predictable manner. This view is consistent with the ongoing institutional reforms in Uzbekistan, including the implementation of ICAAP, stress-testing frameworks, and Basel III standards [5].

In his scientific work, V. Usoskin examined important aspects of the lending mechanism used by commercial banks and formulated several scientific conclusions. One of his key findings is that opening credit lines for borrowers can significantly reduce risk levels. According to Usoskin, the use of compensating balances in credit line financing allows banks to provide loans to clients at relatively lower interest rates, thereby reducing credit risk and increasing the likelihood of loan repayment [6].

Research conducted by various economists also indicates that commercial banks widely apply several instruments to reduce credit risk, including the use of highly liquid collateral, insurance mechanisms, credit limits, and standardized approaches to credit risk assessment.

When providing loans for investment projects, it is also important to consider the risk of technological obsolescence. According to Robert Solow, if a bank provides credit to enterprises operating with outdated technologies, such firms may fail to compete in the market, increasing the probability of default and credit risk [7].

Research Methodology

The dissertation research employs several scientific methods, including scientific abstraction, logical reasoning, comparative analysis, stress testing, data grouping, and comparative evaluation techniques.

Main Part

Several factors are considered in the process of credit risk assessment, and these factors are regulated by relevant legal and regulatory documents.

Credit history information plays a crucial role in evaluating credit-related risks. In this regard, the Law “On the Formation and Exchange of Credit Histories”, adopted on August 29, 2006, serves as the legal basis for the functioning of the credit information system [8].

In order to effectively manage credit risks and limit their negative impact on the financial stability of commercial banks, the Central Bank of the Republic of Uzbekistan has adopted a number of regulatory documents. In particular, the instruction approved by Resolution No. 12/4 dated May 31, 2021 establishes procedures for organizing internal control and internal audit systems in commercial banks [9].

Additionally, a special guideline on credit risk hedging and minimization was adopted by Resolution No. 34/4 on December 31, 2020. This document outlines procedures for forming provisions (reserves) to cover potential loan losses, evaluating collateral guarantees, and assessing the liquidity of pledged assets [10].

Furthermore, in order to systematically assess the impact of credit risks on bank capital, the Internal Capital Adequacy Assessment Process (ICAAP) was introduced through Resolution No. 25/6 dated August 23, 2021. Through this mechanism, banks assess the balance between their capital and risk exposure and conduct stress scenario analyses related to capital adequacy.

Moreover, based on international experience and the standards developed by the Basel Committee, including Basel II and Basel III requirements, several reforms are being implemented in Uzbekistan to ensure accurate

credit risk assessment and maintain capital adequacy. In particular, the introduction of a risk-based supervision system has contributed to the development of more effective risk mitigation mechanisms.

Table 1

**Legal and Institutional Framework for Credit Risk
Management in Commercial Banks
(Comparative Analysis of Uzbekistan and International Practice)**

| Aspect | Uzbekistan Practice | International Practice (Europe, Basel Standards) |
|---------------------------------|---|---|
| Main legislation | Law “On Banks and Banking Activities” | National banking laws; in the EU – CRD IV (Capital Requirements Directive) |
| Supervisory authority | Central Bank of the Republic of Uzbekistan | European Central Bank (ECB), Financial Conduct Authority (FCA – UK), European Banking Authority (EBA) |
| Regulatory standards | Risk management guidelines issued by the Central Bank (2020–2023) | Basel II and Basel III standards: ICAAP, IRB, probability of default (PD), exposure levels, and other indicators |
| Capital adequacy | Minimum requirements set by the Central Bank (Tier 1 \geq 6%, CAR \geq 12%) | Basel standards: Tier 1 \geq 6%, CAR \geq 8%, as well as Countercyclical Buffer and Capital Conservation Buffer requirements |
| Credit risk assessment | Commercial banks use internal assessment models and formulas specified in the Central Bank’s guidelines | Internal Ratings-Based (IRB) and Standardised Approach models are used to calculate the expected level of credit risk and potential losses |
| Institutional structure | Credit Committee, Risk Committee, Internal Audit, Compliance Department | In addition to similar structures, international banks also operate with a Chief Risk Officer (CRO) and integrated internal/external risk audit units |
| Data exchange system | Unified national credit information database under the Central Bank | In the EU – AnaCredit; in the USA – Central Credit Registry; in Germany – monitoring of large exposures through BaFin and Deutsche Bundesbank |
| Risk hedging instruments | Guarantees, creditworthiness assessment, loan loss provisioning | Credit insurance, derivatives, Credit Default Swaps (CDS), and collateral-based agreements (ISDA frameworks) |
| Risk-based supervision | Gradually introduced since 2020 | Widely implemented in developed countries through ICAAP and SREP supervisory mechanisms |

Analysis of Legal and Institutional Framework and NPL Dynamics

The table below presents a comparative overview of the legal and institutional framework used for credit risk management in commercial banks in Uzbekistan and international practices.

The comparison shows that the legal and institutional framework for credit risk management in Uzbekistan is gradually being aligned with international standards. In particular, Basel II/III requirements, the Internal

Capital Adequacy Assessment Process (ICAAP), and capital adequacy regulations are being progressively introduced into national practice. However, several areas still require further development:

- Full implementation of risk-based supervision mechanisms – banks should be supervised not only according to formal regulatory requirements but also based on the dynamics and level of risks they face.
- Development of data exchange and credit rating platforms – it is necessary to establish systems that allow banks to exchange credit history information online in a fast, transparent, and efficient manner.
- Expansion of internal credit history systems (ICH), derivatives, and hedging instruments – the implementation of comprehensive instruments based on the practices of leading international banks is essential for reducing credit risks [11].

The mechanism for managing credit risk in Uzbekistan's banking sector is developing gradually. However, at present, these mechanisms are not fully digitalized or automated, and a systemic approach is not yet widely applied. Therefore, for effective credit risk management it is important to expand the use of information technologies, introduce analytical systems, improve staff qualifications, and integrate risk management at the strategic level [12].

Since 2016, positive trends have been observed in the banking sector of Uzbekistan. However, in recent years, state-owned banks have become one of the main sources of structural problems within the national banking system.

Table 1

Non-Performing Loans (NPL) of Commercial Banks

| № | Bank Name | 2020 | | 2021 | | 2022 | | 2023 | | 2024 | |
|----|-----------------------------|-------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| | | NPL | Share | NPL | Share | NPL | Share | NPL | Share | NPL | Share |
| | Total | 6,518 | 2.4% | 18,392 | 5.7% | 13,992 | 3.6% | 16,621 | 3.5% | 21,185 | 4.0% |
| | State-owned banks | 5,893 | 2.5% | 16,118 | 5.8% | 15,926 | 5.5% | 13,267 | 4.0% | 14,344 | 3.9% |
| 1 | National Bank of Uzbekistan | 2,025 | 3.2% | 3,344 | 4.7% | 3,322 | 4.2% | 3,098 | 3.1% | 3,275 | 3.0% |
| 2 | Uzsanoatqurilishbank | 633 | 1.6% | 1,643 | 3.8% | 2,652 | 6.2% | 1,283 | 2.2% | 1,844 | 2.8% |
| 3 | Agrobank | 359 | 1.5% | 1,435 | 4.6% | 1,563 | 4.5% | 2,071 | 3.8% | 2,903 | 4.9% |
| 4 | Asaka Bank | 1,174 | 3.5% | 1,802 | 4.8% | 1,707 | 4.6% | 1,731 | 4.4% | 1,752 | 4.5% |
| 5 | Xalq Bank | 527 | 2.9% | 1,185 | 5.9% | 3,444 | 18.4% | 1,855 | 7.6% | 1,253 | 4.2% |
| | Other banks | 625 | 2.0% | 2,274 | 5.0% | 2,158 | 4.2% | 3,354 | 2.4% | 6,841 | 4.1% |
| 11 | Ipoteka Bank | 693 | 2.9% | 1,305 | 4.5% | 861 | 2.9% | 1,733 | 4.7% | 3,577 | 10.2% |
| 12 | Kapitalbank | 36 | 0.9% | 246 | 3.3% | 249 | 2.5% | 375 | 1.4% | 1,437 | 4.5% |
| 13 | Hamkorbank | 250 | 3.5% | 155 | 1.7% | 91 | 0.9% | 99 | 0.6% | 319 | 1.7% |
| 14 | Ipak Yuli Bank | 172 | 3.5% | 290 | 4.5% | 271 | 3.9% | 251 | 2.1% | 218 | 1.5% |
| 15 | Orient Finance Bank | 41 | 1.2% | 35 | 1.0% | 29 | 0.7% | 25 | 0.3% | 23 | 0.2% |

Analysis of Non-Performing Loans (NPL)

According to the analysis results, the total volume of non-performing loans (NPLs) increased significantly from 2022 to 2024. In 2022, the total amount of NPLs was 13,992 billion UZS, which increased to 16,621 billion UZS in 2023 and reached 21,185 billion UZS in 2024. This indicates that total NPLs increased by 2,629 billion UZS in 2023 and by 4,564 billion UZS in 2024.

An analysis of state-owned banks shows that non-performing loans increased by 624 billion UZS from 2022 to 2023, and by 1,077 billion UZS from 2023 to 2024. Although these banks maintained a significant share of total NPLs, their proportion slightly decreased in 2024 [13-14].

A bank-level analysis indicates that the National Bank of Uzbekistan experienced an increase in NPLs by 460 billion UZS between 2022 and 2023, and by 177 billion UZS between 2023 and 2024, although the share of NPLs in total loans remained relatively stable at 3.0%.

Similarly, Uz sanoat qurilish banki experienced a decline in NPLs in 2023, followed by an increase of 561 billion UZS in 2024. Meanwhile, Agrobank's NPLs increased by 386 billion UZS from 2022 to 2023, and by 832 billion UZS from 2023 to 2024, reaching 4.9% of its total loan portfolio.

Overall, the share of non-performing loans increased from 3.5% in 2023 to 4.0% in 2024, indicating growing repayment difficulties within the banking system and a noticeable increase in NPL ratios in certain banks. Therefore, it is necessary to strengthen measures aimed at reducing credit risk, ensuring financial stability, and improving debt repayment monitoring.

Factors Influencing the Growth of NPL

The growth of non-performing loans and their increasing share in total loans can be explained by several key factors related to the economic environment, banking credit policies, and changes in external markets [15].

First, macroeconomic factors played a significant role in the growth of NPLs. Rising inflation increased the prices of goods and services, which led both companies and individuals to delay or fail to repay their loans due to increased financial burdens. In addition, the mismatch between wage growth and credit expansion negatively affected borrowers' repayment capacity. At the same time, declining demand in certain sectors and reduced production capacity decreased company revenues, forcing many enterprises to postpone loan repayments.

Second, changes in bank credit policies also contributed to the rise in NPL levels. In order to expand their customer base, some banks relaxed lending requirements, which resulted in loans being issued without sufficient risk analysis. Furthermore, weaknesses in financial monitoring mechanisms in some banks contributed to the increase in credit risks. In some cases, loan maturities were extended or problematic loans were restructured in ways that concealed their actual risk levels.

Conclusion

In the process of implementing economic reforms and ensuring financial stability, effective credit risk management in commercial banks plays a crucial role.

Recent regulatory documents adopted by the Central Bank of the Republic of Uzbekistan, including mechanisms such as ICAAP, stress testing, capital adequacy assessment, internal control and internal audit systems, and sectoral analysis, have proven to be important tools for identifying and minimizing risks in the banking sector.

Some banks have already achieved positive results by implementing approaches such as diversification of credit portfolios, improvement of borrower evaluation systems, and the introduction of modern scoring and monitoring methods. At the same time, the necessity of further reforming the national banking system in accordance with international standards such as IFRS and Basel III has also been emphasized in order to ensure effective credit risk management.

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