

EFFECTIVENESS OF CREDIT RISK MANAGEMENT MECHANISMS

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Credit risk arises when borrowers fail to meet their contractual obligations, potentially leading to financial losses for banks. Over the past decades, the increasing complexity of financial products and the diversification of lending practices have elevated the importance of systematic credit risk assessment and management. Banks are now required to not only evaluate the creditworthiness of individual borrowers but also monitor the collective risk embedded in their entire loan portfolio. A high-quality credit portfolio is characterized by a low proportion of non-performing loans, balanced exposure across different sectors, and a proactive approach to risk mitigation. Conversely, poor portfolio quality may jeopardize a bank's solvency, damage its reputation, and reduce investor confidence.

The management of credit portfolio quality involves a combination of strategic, operational, and analytical measures. These include the development of risk assessment models, implementation of credit scoring systems, and periodic monitoring of loan performance. In addition, regulatory frameworks, such as Basel II and Basel III accords, emphasize the need for comprehensive risk management practices, encouraging banks to maintain sufficient capital buffers against potential credit losses. The integration of technological tools, including automated credit evaluation systems and predictive analytics, has further enhanced banks' capacity to identify, measure, and mitigate risks in real time.

In the context of commercial banks in emerging markets, such as Uzbekistan, credit portfolio management faces additional challenges. Economic volatility, sectoral imbalances, and limited access to credit information can increase the likelihood of non-performing loans. Therefore, banks must adopt robust risk management strategies that combine traditional assessment methods with innovative approaches tailored to local conditions. Furthermore, the evaluation of portfolio quality is not solely a technical task;

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it requires strategic foresight to align lending practices with broader economic trends and institutional objectives.

This paper aims to analyze the quality of credit portfolios and the practices of risk management in commercial banks, with a particular focus on identifying the key factors influencing portfolio performance and the effectiveness of risk mitigation measures. By examining both theoretical frameworks and practical experiences, this study seeks to provide insights into how banks can enhance portfolio quality, reduce credit-related losses, and strengthen overall financial resilience. The findings of this research will be valuable for bank managers, regulators, and policymakers in designing more effective credit risk management policies and promoting sustainable banking development.

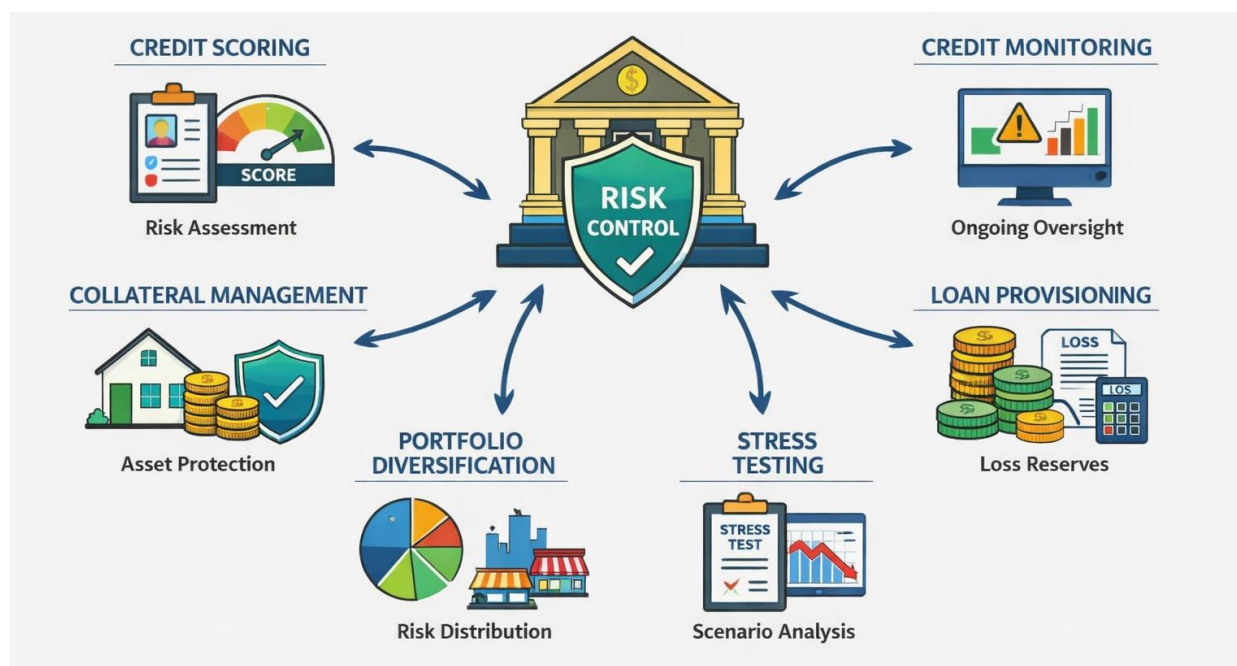


Figure 1. Credit Risk Management Mechanisms in Commercial Banks¹

This infographic illustrates the key mechanisms of credit risk management in commercial banks. At the center, a bank icon represents “Risk Control,” symbolizing overall portfolio protection. Six major mechanisms radiate from the center: Credit Scoring, Credit Monitoring, Collateral Management,

¹ Developed by the author based on data from official international websites.

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Loan Provisioning, Portfolio Diversification, and Stress Testing. Each mechanism is visually represented with clear icons showing its function. Credit scoring evaluates borrower risk, monitoring tracks loan performance, and collateral management protects bank assets. Loan provisioning, portfolio diversification, and stress testing collectively enhance risk mitigation and ensure financial stability.

Foreign researchers Lanyero Esther, Dr. Nyakundi, and Dr. Manyangele have identified in their studies that the effectiveness of a credit portfolio is associated with three main factors: credit assessment, credit monitoring, and credit risk management. Regression analysis indicated that these factors explain 40.5% of the variations in overall credit portfolio performance. In other words, if risk management is effective, the quality of the portfolio improves significantly. The authors emphasize that banks need to implement innovative programs in credit risk management, as this reduces the share of non-performing loans (NPLs). It can be argued that the efficiency of credit portfolio management is enhanced not only through statistical analysis but also through the practical application of risk management strategies.

This section presents a detailed analysis of the empirical findings obtained through quantitative and qualitative data collection. The focus is on the assessment of credit portfolio quality indicators and the effectiveness of risk management practices in commercial banks. The findings are discussed in relation to key variables such as non-performing loan (NPL) ratios, capital adequacy, portfolio diversification, credit assessment efficiency, and monitoring outcomes.

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Table 1 Key Indicators of Credit Portfolio Quality in Commercial Banks²

No	Indicator	Description	Impact on Portfolio Quality	Evaluation Method
1	Non-Performing Loan (NPL) Ratio	Share of loans with overdue payments	Higher NPL reduces portfolio quality and increases risk	Ratio analysis (NPL/Total Loans)
2	Capital Adequacy Ratio (CAR)	Bank's capital relative to risk-weighted assets	Higher CAR ensures financial stability and loss absorption	Basel standards (Basel II/III)
3	Portfolio Diversification	Distribution of loans across sectors and borrowers	Reduces concentration risk and stabilizes returns	Sectoral distribution analysis
4	Loan Loss Provisioning	Funds reserved for potential loan losses	Enhances resilience against credit losses	Provision coverage ratio
5	Credit Growth Rate	Expansion of loan portfolio over time	Balanced growth improves profitability without excessive risk	Growth trend analysis
6	Collateral Coverage Ratio	Value of collateral relative to loan size	Reduces potential losses in case of default	Collateral-to-loan ratio
7	Return on Loan Portfolio	Profitability generated from lending activities	Reflects efficiency of credit allocation	ROA/ROE related to loans
8	Default Recovery Rate	Percentage of recovered defaulted loans	Higher recovery improves portfolio sustainability	Recovery ratio analysis

This table presents a systematic overview of the key indicators used to assess the quality of credit portfolios in commercial banks. The first indicator, the **Non-Performing Loan (NPL) Ratio**, reflects the share of loans with overdue payments and is one of the most critical measures of credit risk. A higher NPL ratio indicates a deterioration in portfolio quality and signals increased financial vulnerability for the bank.

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The second indicator, the **Capital Adequacy Ratio (CAR)**, measures the bank's capital relative to its risk-weighted assets. It demonstrates the bank's ability to absorb potential losses and maintain financial stability, in line with international regulatory frameworks such as Basel II and Basel III.

The third indicator, **Portfolio Diversification**, refers to the distribution of loans across different sectors and borrower groups. A well-diversified portfolio reduces concentration risk and contributes to more stable financial performance.

The fourth indicator, **Loan Loss Provisioning**, represents the reserves set aside to cover potential credit losses. Adequate provisioning enhances the bank's resilience and ensures preparedness against loan defaults.

The fifth indicator, **Credit Growth Rate**, shows the expansion of the loan portfolio over time. Sustainable and balanced growth improves profitability while avoiding excessive risk exposure.

The sixth indicator, **Collateral Coverage Ratio**, evaluates the value of collateral relative to the loan amount. Higher collateral coverage reduces potential losses in the event of borrower default.

The seventh indicator, **Return on Loan Portfolio**, reflects the profitability generated from lending activities. It indicates how efficiently the bank allocates its credit resources to generate returns.

The eighth indicator, **Default Recovery Rate**, measures the proportion of recovered funds from defaulted loans. A higher recovery rate strengthens the sustainability and overall quality of the credit portfolio.

In conclusion, these indicators collectively provide a comprehensive framework for evaluating the quality and performance of a bank's credit portfolio. Effective monitoring and management of these metrics enable banks to minimize credit risk, enhance financial stability, and improve long-term profitability. Therefore, integrating these indicators into strategic decision-making processes is essential for ensuring sustainable banking development.

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