

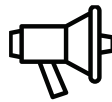
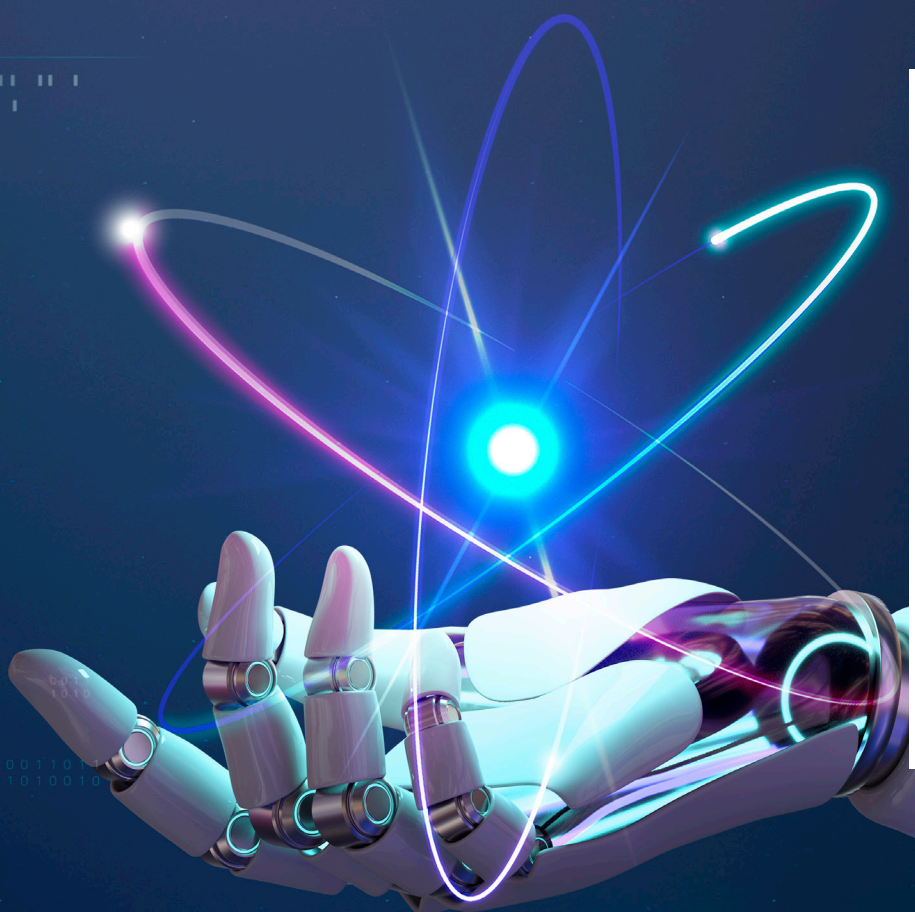
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# WAYS TO IMPROVE BANKING EFFICIENCY IN THE CONDITIONS OF TRANSFORMATION

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**Abstract:** This article analyzes the main directions for improving the efficiency of commercial banks in the context of the transformation of the banking system. The study examines the impact of banking system modernization, improvement of bank management, the introduction of digital banking services, and the diversification of banking services on banking efficiency. In addition, the main financial indicators used to assess bank performance, mechanisms of banking risk management, and modern approaches to improving operational efficiency are analyzed. Based on the research results, scientific and practical recommendations for improving the efficiency of commercial banks during the transformation process are proposed.

**Key words:** commercial banks, banking system transformation, banking efficiency, bank management, digital banking services, banking innovations, banking risks, financial stability, operational efficiency, diversification of banking services.

## INTRODUCTION

Currently, the processes of globalization in the world financial system, the integration of financial markets, and the rapid development of digital technologies require the banking system to move to a new stage of development. In this context, the transformation of the banking system, the modernization of commercial banks, and the strengthening of their role in the national economy have become important factors of contemporary economic development. Banks play a crucial role in the economy as key financial intermediaries, facilitating investment processes, ensuring the efficient allocation of financial resources, and stimulating economic growth. Therefore, improving the efficiency of banking activities, enhancing bank management, and developing banking services in accordance with modern requirements during the transformation process are among the most urgent scientific and practical issues.

International experience shows that improvements in the efficiency of banking systems in developed countries are achieved through the transformation of banking activities, the introduction of digital banking services, the diversification of banking products and services, and the implementation of modern banking management mechanisms. In particular, the widespread adoption of innovative technologies in the banking sector, the optimization of operational processes, and the implementation of effective risk management systems are considered key factors in increasing banking efficiency. From this perspective, it is important to conduct a scientific analysis of the ways to enhance the efficiency of commercial banks in the context of banking system transformation.

In the Republic of Uzbekistan, large-scale reforms are also being implemented to fundamentally reform the banking system, transform the activities of commercial banks, and increase their competitiveness in international financial markets. The President of the Republic of Uzbekistan, Shavkat Mirziyoyev, emphasizing the importance of introducing modern management mechanisms in the process of banking system transformation, noted: "It is necessary to strengthen the role of the banking system in the economy by transforming commercial banks, improving their corporate governance systems, and enhancing the quality of banking services." [1]

The effective implementation of these tasks requires the development of scientific foundations for improving the efficiency of commercial banks within the process of banking system transformation. In this regard, identifying the main directions for improving the efficiency of commercial bank activities, introducing modern management mechanisms, and developing scientific and practical recommendations aimed at increasing competitiveness in the banking services market constitute the main objectives of this research.

## LITERATURE REVIEW

The issue of improving the efficiency of commercial banks in the context of banking system transformation is considered one of the important scientific directions in the fields of economic theory and banking management. In modern economic conditions, issues related to increasing the efficiency of banking activities, improving bank management, and modernizing banking services have been widely studied by economists. In particular, during the transformation of the banking system, methods for assessing banking efficiency, mechanisms for risk management, and the diversification of banking services have become key subjects of scientific research.

In the scientific literature, the issue of improving banking efficiency has been examined from various theoretical perspectives. Researchers emphasize the importance of factors such as the effectiveness of bank management, the quality of the loan portfolio, the level of operational costs, the introduction of digital banking services, and the effectiveness of banking risk management systems. At the same time, based on the experience of banking systems in developed countries, modern methods for evaluating banking activities and management mechanisms aimed at improving banking efficiency have been widely studied.

From this perspective, the analysis of existing scientific literature plays an important role in identifying the theoretical foundations for improving the efficiency of commercial banks in the context of banking system transformation, studying the factors affecting banking efficiency, and scientifically substantiating modern approaches to banking management.

In particular, foreign economists C. Almanza and J. Rodriguez note that "differences in efficiency can be explained by the fact that large banks tend to accept greater credit and market risks, whereas small banks rely more heavily on their own funds as a source of financing." [2]

According to A. Alhassan and M. Tetteh, "there is a non-linear relationship between bank efficiency and scale; specifically, a positive relationship is observed only up to a certain level of assets, after which efficiency begins to decline." [3]

M. Mamonov and A. Vernikov studied the efficiency of commercial banks using the stochastic frontier approach. Their research revealed that large state-owned banks demonstrate higher efficiency compared to private and foreign banks. The authors also identified a positive relationship between bank efficiency and market power measured by the Lerner index in the lending market. [4]

Similarly, V. Belousova, A. Karminsky, N. Myachin, and I. Kozyr emphasize that foreign and state-owned banks tend to demonstrate higher efficiency. Their research also considers factors such as specialization (the structure of assets and attracted funds) and risk propensity (indicators of credit risk, liquidity, and open currency position). [5]

S. Moudud-ul-Huq demonstrated that strengthening capital adequacy requirements positively affects the efficiency of commercial banks in BRICS countries, including Russia. [6]

In the research of E. Osuagwu, W. Isola, and I. Nwaogwugwu, it is noted that "the banking sector remains highly regulated due to the necessity of ensuring the stability of the payment system and financial markets, while national regulatory characteristics significantly determine differences in the efficiency of commercial banks." [7]

At the same time, studies by Z. Zhou and other researchers present contrasting conclusions, arguing that financial reforms involving the liberalization of regulation do not necessarily lead to improvements in the efficiency of commercial banks. However, some studies indicate that competition can positively influence banking efficiency primarily through the optimization of operational costs. [8]

Similarly, G. Li Yang, N. Noor, M. Bakri, W. Yusof, and N. Zainal state that "comparative analyses of banking systems show that stronger regulation and supervision can have a positive impact on the efficiency of credit institutions regardless of their scale of activity." [9]

The scientific views of these foreign economists demonstrate that improving the efficiency of commercial banks is a complex and multifaceted economic process. In these studies, banking efficiency is interpreted as being closely related to factors such as bank size, capital adequacy, credit and market risk levels, government regulation of the banking sector, and the degree of competition in financial markets.

Some researchers emphasize that market competition and the optimization of operational costs play an important role in improving banking efficiency, while other studies highlight that stronger regulatory policies and capital adequacy requirements contribute positively to ensuring financial stability and efficiency in banks. At the same time, certain studies evaluate the impact of financial liberalization on banking efficiency differently, indicating that this process largely depends on the level of development of the banking system and the characteristics of the national economy.

In the author's opinion, under the conditions of banking system transformation, assessing the efficiency of commercial banks should not be limited to individual financial indicators. Instead, banking efficiency should be evaluated through a comprehensive approach that considers not only financial performance but also the effectiveness of bank management, the quality of the loan portfolio, the level of operational costs, the extent of digital banking service implementation, and the effectiveness of the risk management system.

Furthermore, in the context of banking system transformation, improving the efficiency of commercial banks can be achieved through the modernization of banking management, diversification of banking services, the widespread introduction of digital technologies, and the improvement of risk management systems. Therefore, studying the experience of foreign banking systems and adapting it to the national banking sector is of great importance for enhancing the efficiency of commercial banks and ensuring the financial stability of the banking system.

## RESEARCH METHODOLOGY

In this study, both general scientific and specialized economic research methods were applied to examine the theoretical foundations for improving the efficiency of commercial banks. In particular, the methods of a systematic approach, scientific abstraction, comparative analysis, economic–statistical analysis, and logical generalization were employed.

During the research process, the scientific works of both domestic and foreign scholars on the efficiency of commercial banks were analyzed. In addition, regulatory and legal documents related to the banking system, as well as statistical data concerning banking activities, were examined.

The application of these methodological approaches made it possible to identify the main factors influencing the improvement of commercial bank efficiency and to substantiate their theoretical and practical aspects within the context of banking system transformation.

## ANALYSIS AND RESULTS

Improving the efficiency of commercial banks in the context of banking system transformation is considered one of the key directions for the development of the modern banking sector. Banks play a crucial role in the economy as major financial intermediaries, facilitating the mobilization and allocation of financial resources, financing investment processes, and contributing to macroeconomic stability. Through their intermediary function, banks connect savers with borrowers, support entrepreneurial activities, and promote the sustainable development of the national economy. Therefore, enhancing the efficiency of banking activities and introducing modern banking management mechanisms are among the priority tasks for the development and modernization of the banking system.

In modern economic conditions, the efficiency of banking activities is closely associated with several key factors, including the level of utilization of bank resources, financial performance indicators, the quality of the loan portfolio, the efficiency of operational expenditures, and the effectiveness of risk management systems. These factors directly influence the financial stability and competitiveness of commercial banks. Consequently, assessing and analyzing banking efficiency requires the application of various financial indicators and economic metrics that reflect the overall performance of banks and their ability to operate effectively in a competitive financial environment.

Within the framework of this research, the main directions for improving the efficiency of commercial banks under the conditions of banking system transformation are analyzed. In particular, the study examines the key financial indicators used to evaluate banking activities, the effectiveness of bank management, the implementation of digital banking services, and the diversification of banking products and services. Special attention is also paid to the role of technological innovations and modern management practices in increasing operational efficiency and improving the quality of financial services.

The results obtained from the analysis provide an opportunity to formulate scientific conclusions and practical recommendations aimed at further developing the banking system and enhancing the efficiency of commercial banks.

Table 1. Indicators for analyzing the efficiency of commercial banks in the context of banking system transformation<sup>1</sup>

No.	Indicator Name	Formula	Description	Analytical Significance
1	Return on Assets (ROA)	$\text{Net Profit} / \text{Total Assets} \times 100$	Shows the efficiency of using bank assets	Evaluates the profitability of bank assets
2	Return on Equity (ROE)	$\text{Net Profit} / \text{Equity} \times 100$	Reflects the efficiency of using bank capital	Important indicator for investors
3	Net Interest Margin (NIM)	$(\text{Interest Income} - \text{Interest Expense}) / \text{Interest-Earning Assets} \times 100$	Shows the profitability of lending operations	Evaluates the main source of bank income

<sup>1</sup> Compiled by the author

4	Cost-to-Income Ratio (CIR)	Operating Expenses / Operating Income × 100	Characterizes operational efficiency	Assesses cost management efficiency
5	Capital Adequacy Ratio (CAR)	Bank Capital / Risk-Weighted Assets × 100	Reflects the financial stability of the bank	Evaluates the bank's ability to cover risks
6	Liquidity Ratio	Liquid Assets / Short-term Liabilities	Shows the bank's ability to meet short-term obligations	Evaluates financial stability and solvency
7	Non-Performing Loans Ratio (NPL)	Non-performing Loans / Total Loans × 100	Characterizes the quality of the loan portfolio	Helps assess credit risk
8	Loan Portfolio Growth Rate	(Current Loans – Previous Period Loans) / Previous Period Loans × 100	Shows the dynamics of lending activities	Evaluates the level of credit allocation to the economy
9	Share of Digital Banking Services	Digital Transactions / Total Banking Transactions × 100	Reflects the level of banking digitalization	Helps evaluate banking transformation
10	Operational Efficiency Ratio	Operating Income / Operating Expenses	Shows the effectiveness of banking operations	Evaluates management efficiency

This set of indicators makes it possible to comprehensively assess the efficiency of commercial banks in the context of banking system transformation. In particular, Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM) reflect the profitability level of banks, while the Cost-to-Income Ratio (CIR) and the operational efficiency ratio are used to evaluate the effectiveness of banking operations.

In addition, indicators such as the Capital Adequacy Ratio (CAR), liquidity ratio, and the share of Non-Performing Loans (NPLs) play an important role in determining the financial stability of the banking system and the effectiveness of risk management practices. Furthermore, the share of digital banking services represents one of the key indicators characterizing the level of innovative development in banking activities at the current stage of banking system transformation.

Table 2. Key indicators of commercial banks in the Republic of Uzbekistan for 2020–2024<sup>2</sup> (billion UZS, by banking sectors)

Date	Assets (Total)	State-owned banks	Other banks	Loans (Total)	State-owned banks	Other banks
01.01.2021	366,121.1	310,729.5	55,391.6	276,974.8	244,483.9	32,490.9
01.01.2022	444,922.5	362,421.9	82,500.6	326,385.6	280,073.6	46,311.9
01.01.2023	556,746.3	435,135.6	121,610.7	390,048.9	324,680.8	65,368.2
01.01.2024	652,157.1	441,777.2	210,379.9	471,405.5	333,298.1	138,107.4
01.01.2025	769,330.4	503,187.0	266,143.4	533,121.2	366,730.5	166,390.7

According to the data presented in Table 2, the banking system of the Republic of Uzbekistan demonstrated a stable growth trend in total bank assets during the period 2021–2025. In particular, at the beginning of 2021 the total assets of commercial banks amounted to 366.1 trillion UZS, while by the beginning of 2025 this figure had reached 769.3 trillion UZS. This indicates that the total volume of bank assets increased by approximately 2.1 times during the analyzed period. Such growth can be explained by the ongoing institutional reforms in the national banking system, the expansion of banking services, and the increasing scale of financing provided to various sectors of the economy.

Within the structure of bank assets, state-owned banks continue to occupy a dominant position. For example, at the beginning of 2021 the assets of state-owned banks amounted to 310.7 trillion UZS, accounting for the major share of total banking assets. By the beginning of 2025 this indicator had increased to 503.2 trillion UZS. At the same time, the assets of other commercial banks also demonstrated significant growth, rising from 55.4 trillion UZS to 266.1 trillion UZS over the same period. This trend indicates a gradual increase in the share of private banks in the banking sector and the strengthening of competitive conditions within the banking system.

The dynamics of loan allocations are also considered one of the key indicators of banking sector development. According to the data presented in the table, the volume of loans issued by commercial banks to the economy amounted to 276.9 trillion UZS at the beginning of 2021, while by the beginning of 2025 this figure had reached 533.1 trillion UZS. This means that the total loan portfolio almost doubled during the analyzed period. The growth in lending volumes indicates the increasing role of the banking system in financing economic sectors, supporting investment projects, and promoting entrepreneurial activity.

<sup>2</sup> Compiled by the author based on data from the Central Bank of the Republic of Uzbekistan

In the structure of the loan portfolio, state-owned banks also maintain a significant share. For instance, at the beginning of 2021 the loan portfolio of state-owned banks amounted to 244.5 trillion UZS, while by the beginning of 2025 it had increased to 366.7 trillion UZS. At the same time, the loan portfolio of other commercial banks also expanded considerably, rising from 32.5 trillion UZS to 166.4 trillion UZS. This indicates that lending activity by private banks has also been expanding, reflecting the gradual development of the private banking sector.

Overall, the data presented in the table demonstrate that in recent years the banking system of the Republic of Uzbekistan has experienced steady growth in the volume of assets and loan allocations, an increase in the share of private banks, and a strengthening of the financial intermediation role of the banking sector in the national economy. At the same time, within the process of banking system transformation, diversifying the structure of bank assets, improving the quality of the loan portfolio, and expanding the share of private banks remain important factors for ensuring the sustainable development of the banking sector.

## CONCLUSION AND SUGGESTIONS

The process of transforming the banking system plays a significant role in modernizing the activities of commercial banks, strengthening their financial stability, and improving the efficiency of banking services. In recent years, as a result of institutional reforms implemented in the banking system of the Republic of Uzbekistan, the volume of bank assets and loan allocations has increased considerably, and the role of the banking sector as a financial intermediary in the national economy has continued to strengthen. In particular, the stable growth of commercial banks' assets and loan portfolios during the period 2021–2025 indicates the expansion of the banking system's resource base and the growing capacity of banks to finance various sectors of the economy.

At the same time, the relatively high share of state ownership in the banking system indicates that the competitive environment in the banking sector has not yet been fully formed. However, the gradual increase in the share of private banks demonstrates that the processes of banking system liberalization and the development of competition in the banking services market are steadily continuing. In the transformation process, improving the efficiency of banking activities is closely related not only to financial indicators but also to the effectiveness of bank management, the development of risk management systems, the optimization of operational processes, and the widespread introduction of digital banking services.

The research findings indicate that indicators such as Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), Cost-to-Income Ratio (CIR), Capital Adequacy Ratio (CAR), liquidity ratios, and the share of Non-Performing Loans (NPLs) play an important role in assessing banking efficiency. These indicators allow for the evaluation of the effectiveness of bank resource utilization, the profitability of banking activities, and the financial stability of banks. In addition, the introduction of digital banking services, diversification of banking products, and the development of modern risk management systems are important factors for improving banking efficiency in the context of banking system transformation.

Based on the research results, the following scientific and practical recommendations are proposed to improve the efficiency of commercial banks under the conditions of banking system transformation:

1. Improving the bank management system. Enhancing corporate governance systems in commercial banks in accordance with international standards, introducing strategic planning mechanisms, and increasing transparency in bank management can contribute to improving banking efficiency.

2. Expanding digital banking services. The introduction of modern fintech technologies and the development of mobile banking and internet banking services can increase the speed and efficiency of banking operations.

3. Diversification of banking services. Expanding the range of banking products and services, introducing new financial instruments, and developing customer-oriented service systems can contribute to increasing bank revenues.

4. Improving risk management systems. Developing effective mechanisms for managing credit, liquidity, and market risks, as well as implementing modern risk management systems aimed at reducing the share of non-performing loans, plays an important role in ensuring banking stability.

5. Optimizing operational costs. Automation of banking operations, wider implementation of digital technologies, and optimization of banking infrastructure can help reduce operational expenses and improve banking efficiency.

6. Increasing the share of private banks. Expanding the role of private banks in the banking system, strengthening competition in the banking sector, and gradually reducing the share of state ownership can positively influence the overall efficiency of the banking system.

In general, improving the efficiency of commercial banks in the context of banking system transformation can be achieved through the modernization of bank management, the introduction of digital technologies, the diversification of banking services, and the development of effective risk management systems. The implementation of these measures will contribute to strengthening the financial stability of the banking system and enhancing the role of the banking sector in the country's economic development.

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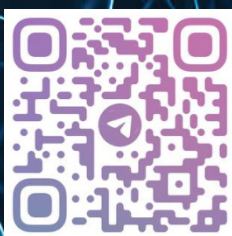
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