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# Efficiency of Commercial Banks' Activities: Essence and Main Approaches to Assessment

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**Abstract:** This study analyzes the economic essence of the efficiency of commercial banks' activities, as well as the main theoretical and practical approaches to its assessment. In particular, the criteria for determining the efficiency of commercial banks' activities, assessment methods, and internal and external factors affecting efficiency are scientifically examined. In addition, the study highlights opportunities to improve efficiency through effective organization of banking activities, ensuring financial stability, improving the risk management system, and introducing modern digital technologies. The results of the study contribute to improving the assessment system of commercial banks' activities, increasing their economic efficiency and competitiveness.

**Keywords:** Efficiency of Commercial Banks' Activities, Economic Essence, Assessment Approaches, Evaluation Criteria, Financial Stability, Banking Risks, Bank Management, Digital Technologies, Banking Services, Efficiency Indicators.



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## 1. Introduction

In the context of the modern global economy, the intensification of integration processes, deepening of financial markets, and rapid development of digital technologies have made the study of the economic essence of commercial banks' efficiency and the development of modern approaches to its assessment an urgent scientific and practical issue. As key financial institutions within the national economy, commercial banks play a crucial role in financing investment processes, ensuring the efficient allocation of financial resources among economic agents, and maintaining overall financial stability.

The efficiency of commercial banks' activities is determined by their ability to utilize financial resources rationally, ensure profitability, effectively manage risks, maintain asset quality, and improve the quality of services provided to clients. Therefore, the assessment of bank efficiency requires a comprehensive analysis of financial results, profitability, liquidity, capital adequacy, asset quality, and management effectiveness.

In the Republic of Uzbekistan, large-scale reforms are being implemented to transform the banking system, modernize the activities of commercial banks, and enhance their competitiveness in international financial markets. The President of the Republic of Uzbekistan, Shavkat Mirziyoyev, has emphasized the importance of banking system development, stating: "Fundamental reform of the banking system, development of the financial services market, and increasing the role of banks in the economy are among the key directions of economic reforms" [1]. Furthermore, the head of state has highlighted the necessity of strengthening the role of the banking sector in the economy, noting that "banks are important institutions in supporting the real sector of the economy, promoting

entrepreneurship, and expanding access to financial services for the population" [2].

In assessing the efficiency of commercial banks, it is essential to consider both internal and external factors. Internal factors include the quality of bank management, the level of operational costs, efficiency of capital utilization, quality of the loan portfolio, and the effectiveness of the risk management system. External factors, in turn, are related to macroeconomic stability, the condition of financial markets, the competitive environment, and regulatory and legal frameworks.

Under these conditions, the main approaches to assessing the efficiency of commercial banks include financial ratio analysis, coefficient methods, comparative (benchmarking) analysis, risk-based assessment, as well as modern econometric and digital analytical methods. Such a comprehensive approach enables an objective evaluation of banks' financial condition, identification of factors affecting efficiency, and enhancement of their competitiveness.

From this perspective, a scientifically grounded understanding of the essence of commercial banks' efficiency, improvement of evaluation criteria, and development of modern assessment approaches adapted to current economic conditions represent important scientific and practical tasks. These efforts contribute to strengthening the financial stability of banks, improving service quality, and enhancing their role in the national economy.

**Literature review.** In the context of a transforming banking system, determining the essence of commercial banks' efficiency and developing a unified methodology for its assessment represents one of the key scientific and practical challenges. In practice, the lack of a unified approach and a generally accepted system of indicators for evaluating the efficiency of commercial banks necessitates further in-depth research in this field. Existing approaches primarily identify asset size, profitability, capital adequacy, and management quality as the closest indicators for assessing banking efficiency [3]. At the same time, an efficiently operating commercial bank is expected to maintain all of these indicators at an optimal level.

At present, although various analytical tools, ratings, and information products are available for analyzing banking activities, most of them focus on basic balance sheet indicators — such as assets, capital, and profit — rather than conducting a comprehensive evaluation of efficiency. This situation highlights the need for a more complex and multi-factor approach to assessing the efficiency of commercial banks.

Ensuring the stable and continuous operation of commercial banks requires regular analysis of their financial condition. Such analysis makes it possible to assess asset and liability management policies, the structure of own and attracted funds, the profitability of banking operations, liquidity levels, financial stability, and the state of banking risks. In this regard, the efficiency of commercial banks is determined not only by profit levels but also by the effectiveness of resource utilization, the quality of risk management, and the effectiveness of managerial decision-making [4].

One of the most widely used traditional methods for evaluating the financial condition of banks is ratio analysis. This approach allows for the assessment of bank liquidity, profitability, and financial performance through a system of financial indicators [5]. However, this method has certain limitations, including the lack of clearly defined optimal threshold values and the possibility of ambiguous interpretation of results.

Modern research classifies methods for evaluating the efficiency of commercial banks into two main groups. The first group consists of approaches based on financial indicators, which are widely used in practice to assess profitability, liquidity, capital adequacy, asset quality, and overall financial performance. The second group includes econometric approaches, which are primarily applied in academic research and allow for a deeper evaluation of efficiency, such as through production frontiers, cost efficiency, or resource utilization levels. Foreign economists M. Mamonov and A. Vernikov analyzed the efficiency of commercial banks using the stochastic frontier approach and identified both the higher efficiency of large state-owned banks compared to private and foreign banks, and a positive relationship between bank efficiency and market power measured by the Lerner index [6]. A. Alhassan and M. Tetteh, in turn, argue that there exists a nonlinear relationship

between bank efficiency and size, where efficiency increases only up to a certain asset level, after which it begins to decline [7].

C. Almanza and J. Rodriguez explain differences in bank efficiency by variations in size and risk-taking behavior, noting that large banks tend to assume greater credit and market risks, while smaller banks rely more heavily on their own funds [8]. V. Belousova, A. Karminsky, N. Myachin, and I. Kozyr emphasize the importance of considering specialization, the structure of assets and liabilities, credit risk indicators, liquidity, and open currency positions when assessing bank efficiency [9].

Furthermore, E. Osuagwu, W. Isola, and I. Nwaogwugwu highlight that the highly regulated nature of banking activity is a defining characteristic of the sector. According to these authors, regulation is essential for ensuring the stability of payment systems and financial markets, and national regulatory frameworks significantly influence differences in the efficiency of commercial banks [10].

Overall, the analysis of the above-mentioned scientific perspectives demonstrates that the efficiency of commercial banks is a complex economic category determined by profitability, capital adequacy, liquidity, asset quality, management quality, and the effectiveness of risk management. Therefore, relying solely on individual financial indicators is insufficient for an accurate assessment. In modern conditions, the application of comprehensive, multi-criteria, and comparative analytical approaches is a crucial prerequisite for determining the real level of efficiency of commercial banks and enhancing their competitiveness.

## Methodology

In this study, both general scientific and specialized economic research methods were comprehensively employed to examine the theoretical and methodological foundations of assessing the efficiency of banking activities. In particular, the systems approach enabled the evaluation of banking activity as an integrated system and facilitated the identification of interrelationships among its structural elements. Through the method of scientific abstraction, the key factors determining the efficiency of banking activities were identified and their essence was generalized. During the research process, the scientific works of domestic and foreign scholars related to the assessment of banking efficiency, regulatory and legal documents governing the banking system, as well as statistical data were thoroughly analyzed. These methodological approaches made it possible to determine the criteria for evaluating banking efficiency, to comprehensively study the factors influencing it, and to develop scientifically grounded recommendations aimed at improving efficiency [11].

## 2. Result and Discussion

From an economic perspective, commercial banks function as monetary and credit institutions that regulate money (payment) circulation in both cash and non-cash forms. Within this framework, commercial banks are considered not only as ordinary economic entities but also as important financial institutions. Their activities serve, on the one hand, their own commercial interests, and on the other hand, the broader economic interests of society.

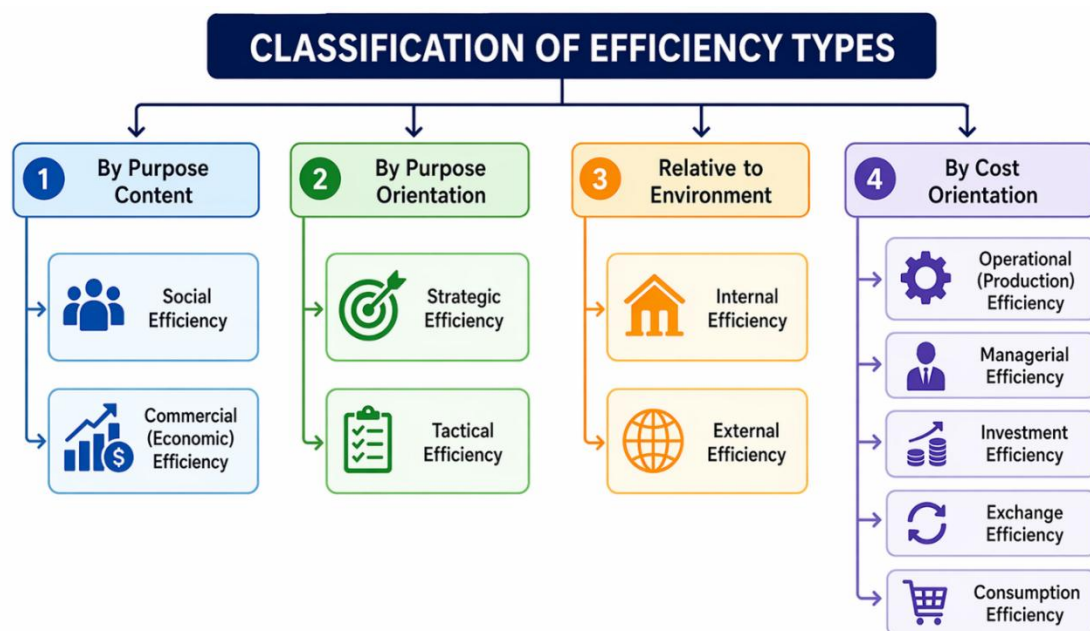
Therefore, the efficiency of commercial banks' activities is determined not only by their financial results but also by their role in regulating monetary circulation, their impact on economic processes, and their ability to meet societal needs. Thus, from a scientific standpoint, efficiency is interpreted as an economic category that reflects the relationship between the system-forming results of production and economic activity and the elements of the internal and external environment – namely costs, goals, values, and needs. When applied to commercial banking, this approach implies that bank efficiency should be assessed in relation to achieved financial and operational outcomes in conjunction with available resources, managerial objectives, and market requirements [12].

Based on this approach, the efficiency of commercial banks' activities can be defined as the ability of a credit institution to achieve its objectives. In this context, banking activity must be carried out not only with regard to economic outcomes but also in compliance with existing socio-economic and cultural norms of society. Consequently, the efficiency of commercial banks is characterized by their capacity to fulfill both economic objectives and socially significant functions.

The efficiency of commercial banks can be classified according to various criteria. In particular, based on the content of objectives, efficiency is divided into social efficiency (serving societal interests) and commercial (economic) efficiency (profit-oriented). According to the direction of objectives, efficiency can be categorized into strategic efficiency (long-term development outcomes) and tactical efficiency (short-term operational results).

Furthermore, in relation to the environment, efficiency is distinguished as internal efficiency (reflecting the effective use of internal resources) and external efficiency (reflecting interactions with the market and external environment). Based on the direction of incurred costs, efficiency can be classified into operational (production) efficiency, managerial efficiency, investment efficiency, exchange efficiency, and consumption efficiency [13].

Depending on which elements of the internal and external environment the results are compared with, different types of efficiency are identified. These types of efficiency play a significant role in the comprehensive assessment of commercial banks' activities and are systematically illustrated in Figure 1.



**Figure 1.** Classification of types of commercial bank efficiency.

In Figure 1, the classification of efficiency types is systematically presented based on four main criteria. This classification serves as an important methodological foundation for the comprehensive assessment of economic efficiency and is widely used in analyzing the performance efficiency of commercial banks.

The first criterion is efficiency by purpose content, which is expressed in two main forms: social efficiency and commercial (economic) efficiency. Social efficiency reflects the extent to which banking activities meet societal needs, while commercial efficiency represents the bank's ability to generate profit and achieve financial performance.

The second criterion is efficiency by purpose orientation, which includes strategic and tactical

efficiency. Strategic efficiency reflects the achievement of long-term development goals, whereas tactical efficiency characterizes the level of fulfillment of short-term operational tasks.

The third criterion is efficiency relative to the environment, which is divided into internal and external efficiency. Internal efficiency reflects the effectiveness of the bank's internal resources, management system, and operational processes. External efficiency, on the other hand, represents the bank's adaptability to the market environment, its competitiveness, and its interaction with macroeconomic factors.

The fourth criterion is efficiency by cost orientation, which encompasses operational (production), managerial, investment, exchange, and consumption efficiency. This classification makes it possible to evaluate efficiency across various functional areas of banking activity. For example, operational efficiency reflects the effectiveness of resource utilization; managerial efficiency indicates the quality of decision-making; investment efficiency shows the return on capital investments; exchange efficiency reflects the profitability of financial operations; and consumption efficiency represents the value of services delivered to customers.

This Table 1. classification enables a multidimensional and comprehensive assessment of commercial bank performance efficiency and plays an important role in both scientific analysis and the development of practical management decisions [14].

**Table 1.** Analysis of commercial bank efficiency by types (on the example of JSCB "Turonbank").

| Indicator Name                          | 2020    | 2021    | 2022      | 2024      |
|-----------------------------------------|---------|---------|-----------|-----------|
| Net profit (million UZS)                | 115,169 | 101,563 | 52,867    | 23,158    |
| Interest income                         | 683,516 | 994,750 | 1,230,918 | 1,585,352 |
| Interest expenses                       | 413,230 | 647,077 | 742,678   | 1,205,676 |
| Net interest income                     | 270,286 | 347,673 | 488,239   | 379,676   |
| Loan portfolio (trillion UZS)           | 6.6     | 8.0     | 9.2       | 12.4      |
| Term deposits (trillion UZS)            | 1.16    | 1.72    | 2.15      | 3.84      |
| Total assets (trillion UZS)             | 8.7     | 11.0    | 12.8      | 17.5      |
| Equity capital (trillion UZS)           | 1.21    | 1.91    | 1.87      | 1.91      |
| Operating expenses                      | 199,666 | 286,929 | 352,098   | 480,842   |
| Operating profit                        | 347,266 | 409,997 | 439,463   | 513,306   |
| Absolute liquidity (%)                  | 51.0    | 108.8   | 105.5     | 102.3     |
| Capital adequacy ratio (%)              | 16.1    | 37.9    | 26.0      | 18.9      |
| Non-interest income                     | 128,431 | 199,847 | 392,355   | 441,183   |
| Profit from foreign exchange operations | 24,942  | 26,454  | 158,005   | 86,822    |
| Cost-to-income ratio (%)                | 58      | 70      | 80        | 94        |
| Investments (billion UZS)               | 132     | 49      | 200       | 604       |
| Solvency                                | 368%    | 138%    | 141%      | 177%      |

The efficiency of commercial bank operations is a complex economic category that reflects the level of achieving maximum financial results through the rational use of bank resources. This concept is determined not only by net profit indicators but also by the bank's liquidity, stability, level of risk management, and adaptability to market conditions.

The analysis of indicators based on the example of JSCB "Turonbank" shows that a comprehensive approach using several methods is necessary to evaluate bank efficiency:

First, within the financial (economic) approach, the dynamics of net profit and net interest income are of key importance. As can be seen from the table, interest income steadily increased during 2020–2024 (from 683,516 million UZS to 1,585,352 million UZS), indicating an expansion of the bank's assets. However, the decline in net profit (from 115,169 million UZS to 23,158 million UZS) is explained by the rapid growth of expenses. This situation reflects a decrease in profitability.

Second, the efficiency of resource utilization is reflected in the volume of loans and deposits.



The increase in the loan portfolio from 6.6 trillion UZS to 12.4 trillion UZS indicates the expansion of lending to the economy. At the same time, the significant growth in deposits (from 1.16 trillion UZS to 3.84 trillion UZS) demonstrates increased trust from households and business entities. This reflects the bank's socio-economic efficiency.

Third, within the framework of financial stability and risk management, liquidity and capital adequacy play an important role. The increase in liquidity from 51% to above 100% indicates that the bank has strengthened its ability to meet short-term obligations. However, the declining trend in capital adequacy (from 37.9% to 18.9%) suggests an increasing risk burden.

Fourth, the operational efficiency approach is assessed through the ratio of costs to income. The increase in the cost-to-income ratio from 58% to 94% indicates a decline in operational efficiency, meaning that expenses are growing faster than income. This highlights the need to improve management efficiency.

Fifth, the diversification and income structure approach is analyzed through non-interest income. The significant growth of non-interest income shows that the bank has expanded its range of services and diversified its income sources. In particular, profits from foreign exchange operations show high volatility, reflecting dependence on external market factors.

Sixth, the investment efficiency approach is evaluated through the volume of investments. By 2024, the sharp increase in investments (from 132 billion UZS to 604 billion UZS) indicates that the bank is focusing on long-term development strategies.

In general, the evaluation of commercial bank efficiency has a comprehensive nature, encompassing financial results, resource utilization, liquidity, stability, operational efficiency, and investment activity simultaneously. The analysis based on JSCB "Turonbank" shows that although there is growth in assets and revenues, overall profitability has declined due to the rapid increase in operating expenses.

Therefore, Table 2. under modern conditions, improving the efficiency of commercial banks requires optimizing costs, strengthening risk management, and diversifying income sources.[15]

**Table 2.** Results of the comparative analysis of methods for evaluating the efficiency of commercial bank operations.

| Evaluation Method                   | Content                                                                                         | Advantages                                                    | Disadvantages                                                                           | Area of Application                       |
|-------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------|
| Ratio Analysis                      | Evaluation based on financial indicators such as profitability, liquidity, and capital adequacy | Simple, clear, and widely used in practice                    | Limited capacity for comprehensive assessment; possibility of subjective interpretation | Practical bank analysis, rapid assessment |
| CAMELS System                       | Assessment of capital, asset quality, management, earnings, liquidity, and sensitivity          | Comprehensive and systematic approach; international standard | Requires large amounts of data; complex calculations                                    | Central banks and supervisory authorities |
| Comparative Analysis (Benchmarking) | Comparison of a bank's indicators with those of other banks                                     | Identifies competitiveness                                    | Highly dependent on external factors                                                    | Market analysis, ratings                  |
| DEA (Data Envelopment Analysis)     | Determines the efficiency frontier based on resources and outputs                               | Multi-factor assessment identifies optimal results            | Complex calculations require specialized software                                       | Scientific research                       |

|                                    |                                                       |                                              |                                   |                                   |
|------------------------------------|-------------------------------------------------------|----------------------------------------------|-----------------------------------|-----------------------------------|
| SFA (Stochastic Frontier Analysis) | Determines efficiency while considering random errors | High accuracy; considers economic factors    | Complex model development         | Scientific and empirical research |
| Regression Analysis                | Identifies factors affecting efficiency               | Provides in-depth analysis of factor impacts | Results depend on the model       | Scientific research               |
| Cost-Income Method                 | Evaluation of operational efficiency                  | Quick and accurate assessment                | Shows only operational efficiency | Practical analysis                |
| Risk-Based Assessment              | Evaluation of risk level and stability                | Determines bank safety                       | Requires comprehensive data       | Risk management                   |

As can be seen from this table, there is no single universal method for evaluating the efficiency of commercial bank operations. Each method highlights specific aspects of efficiency. Therefore, under modern conditions, a comprehensive approach, that is, the combined application of several methods, is considered the most effective.

### 3. Conclusions

The results of the study show that the efficiency of commercial bank operations is a multifaceted economic category, which is assessed not only by the level of profit but also through liquidity, capital adequacy, asset quality, operating costs, risk management, and the quality of banking services. The study substantiates the necessity of using financial indicators, ratio analysis, CAMELS, comparative analysis, DEA, SFA, regression analysis, Cost-Income, and risk-based approaches in evaluating bank efficiency.

The analysis conducted on the example of JSCB "Turonbank" indicates an increase in the bank's assets, loan portfolio, deposits, and interest income. However, the decline in net profit from 115,169 million UZS in 2020 to 23,158 million UZS in 2024, as well as the increase in the cost-to-income ratio from 58% to 94%, demonstrates a decrease in operational efficiency.

At the same time, the maintenance of liquidity indicators above 100% reflects the bank's stable ability to meet its short-term obligations. However, the decrease in the capital adequacy ratio from 37.9% in 2021 to 18.9% in 2024 indicates an increasing risk burden.

To improve the efficiency of commercial bank operations, it is advisable to develop an evaluation system based not only on individual financial indicators but also on a set of comprehensive indicators. In this context, profitability, liquidity, capital adequacy, asset quality, risk levels, customer satisfaction, and operational efficiency should be analyzed together.

In the case of JSCB "Turonbank," the increasing cost-to-income ratio highlights the need to optimize operating expenses, reduce interest expenses, and improve the efficiency of resource utilization. Furthermore, considering the growth trend of non-interest income, it is recommended to expand commission-based services, digital banking services, and investment operations.

Combining methods such as CAMELS, Cost-Income analysis, comparative analysis, DEA, and SFA is considered effective in evaluating bank performance. This approach allows for an objective assessment of the bank's financial condition, operational efficiency, and resilience to risks.

Improving the risk management system, regularly monitoring the quality of the loan portfolio, and strengthening capital adequacy are also of great importance. These measures contribute to ensuring the long-term financial stability of the bank.

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