



THEORETICAL-CONCEPTUAL APPROACHES TO IMPROVING THE CONCEPTUAL BASIS OF THE EFFICIENCY OF COMMERCIAL BANKS' ASSETS

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Article history:		Abstract:
Received:	14 th February 2026	This article discusses the theoretical and conceptual foundations of improving the efficiency of commercial banks' assets and ways to improve them. The study analyzes the economic content and interdependence of the main financial indicators used to assess the efficiency of bank assets - return on assets (ROA), return on equity (ROE), share of non-performing loans (NPL) and loan-to-deposit ratio (LDR). Also, the inverse relationship between ROA and NPL and the scale effect between the volume of assets and profitability are scientifically substantiated. According to the results of the study, it was found that the efficiency of bank assets is directly dependent not only on the volume of assets, but also on their quality, risk level and management efficiency. Based on the analysis conducted in the article, theoretical and practical recommendations were developed to improve the activities of commercial banks.
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INTRODUCTION. In the modern economy, commercial banks, as one of the main institutions of the financial system, play an important role in ensuring economic stability, supporting investment processes and stimulating economic growth. The effective functioning of the banking system, in particular, the quality management of commercial bank assets and their efficiency, directly affect the level of development of the financial market and the reliability of economic entities.

The efficiency of commercial bank assets is closely related to the profitability, liquidity and risk level of banking activities, and these indicators are among the main factors determining the financial stability of the bank. Therefore, the issues of effective management of bank assets and improving their conceptual foundations are of urgent importance today not only theoretically, but also practically.

Globalization processes, the development of the digital economy and the widespread introduction of financial innovations are placing new demands on the activities of commercial banks. This creates the need to develop modern approaches to managing bank assets, revise existing theoretical concepts and improve them. In particular, the issues of optimizing the composition of assets, assessing their risk level, and ensuring a balance between profitability and security are relevant as a separate object of scientific research.

The purpose of this article is to study theoretical and conceptual approaches to improving the efficiency of commercial banks' assets and to develop scientifically based conclusions on their improvement. During the study, existing theories of bank asset management are analyzed, criteria for assessing efficiency are studied, and proposals are put forward for their development.

The research objectives are:

- to reveal the economic essence of the efficiency of commercial bank assets;
- to analyze existing theoretical approaches to asset management;
- to identify the main factors affecting the efficiency of bank assets;
- to develop scientific proposals for improving theoretical and conceptual approaches.

This article serves to deepen theoretical knowledge in the field of asset management of commercial banks and to develop practical recommendations.

LITERATURE REVIEW ON THE TOPIC. The study of the efficiency of commercial banks' assets has been widely studied in the economic literature, and various theoretical and methodological approaches have been developed in this direction by foreign and domestic scientists. The issues of assessing bank efficiency, analyzing the quality of assets and their profitability are considered important scientific problems from the point of view of ensuring financial stability.



The theoretical foundations of measuring bank efficiency are associated with the Data Envelopment Analysis (DEA) model, first developed by Charnes, Cooper and Rhodes, this approach allows assessing the relative efficiency of decision-making units (DMUs) [1]. Later, Aigner, Lovell, and Schmidt proposed the Stochastic Frontier Analysis (SFA) model, which allowed for the evaluation of efficiency by separating it into statistical error and inefficiency components [2]. These two approaches are the main methodologies widely used in analyzing bank performance today.

A comprehensive literature review on bank efficiency was conducted by Emrouznejad and Yang, and the evolution of scientific works based on the DEA method has been systematically studied since 1978 [3]. These studies show that methods for assessing bank efficiency are developing and becoming more sophisticated.

The issue of the relationship between the quality of bank assets and efficiency has also been studied by many scholars. In particular, Abata in his study found that the quality of bank assets, in particular the quality of the loan portfolio, directly affects the financial performance of the bank [4]. An increase in the share of problem loans reduces the profitability of the bank and reduces overall efficiency.

In a study conducted by Cvetkoska on the efficiency of the banking system of developing countries, the relative efficiency of banks was assessed based on the DEA model and significant differences were found between banks [5]. These differences are mainly explained by the efficiency of management, the level of resource utilization and the risk management system.

Also, in a study conducted by Dinka, operational efficiency, allocative efficiency and income diversification were analyzed as factors affecting bank efficiency [6]. According to the results of the study, banks can increase the efficiency of their assets by diversifying their sources of income.

Among domestic economists, Otakhonov Sh.U. studied the financial efficiency of commercial banks of Uzbekistan based on profitability, liquidity and capital adequacy indicators [7]. His research allows assessing efficiency taking into account the specific characteristics of the national banking system.

Also, Ruziev B.S. analyzed the issues of the composition and quality of commercial banks' assets and showed that an increase in the share of problem loans in the assets structure is one of the main factors reducing bank efficiency [8]. This confirms the importance of effective credit risk management and asset portfolio diversification for banks.

In general, the analysis of the literature shows that the issue of increasing the efficiency of commercial banks' assets requires an integrated approach. The theoretical and methodological foundations developed by foreign scientists form the scientific basis for assessing bank efficiency, while domestic researchers have contributed to the application and development of these approaches in the conditions of the national economy. At the same time, risk management, improving the quality of assets, and diversifying sources of income stand out as important areas in increasing asset efficiency.

RESEARCH METHODOLOGY. In preparing this article, a comparative and critical analysis of the legal documents, the literature and Internet information used, and the scientific and theoretical views of economists on the topic were carried out. In the course of studying the topic, along with general economic methods, systematic analysis, generalization, abstract-logical thinking, and statistical methods were used.

ANALYSIS AND DISCUSSION OF RESULTS.

Theoretical approaches serve as an important methodological basis for assessing the efficiency of commercial bank assets. In particular, the concept of efficiency is interpreted in the economic literature as the optimal use of resources, achieving maximum results and minimizing risks. From this point of view, the efficiency of bank assets is determined by the extent to which the resources (deposits, capital) attracted by the bank are invested in income-generating assets.

Theoretically, two main approaches are widely used in assessing efficiency: parametric (SFA) and non-parametric (DEA) methods. The DEA approach determines the relative efficiency of banks by comparing them with the "best practice frontier", while the SFA distinguishes between random errors and inefficiencies based on the production function. These approaches allow for a comprehensive assessment of the efficiency of bank asset management.

Based on theoretical concepts, the efficiency of bank assets is expressed through the following three main components:

- profitability,
- risk exposure,
- resource utilization.

These components are measured in practice through financial indicators. Below are the main indicators characterizing the activities of commercial banks.

Table 1

Key financial indicators that reflect bank performance (theoretical and practical correlation) [9]



Indicator	Theoretical content	Practical expression	Impact on efficiency
ROA	Return on assets	Net profit / total assets	Higher means higher efficiency
ROE	Efficiency of capital utilization	Net profit / equity	Indicates the level of capital utilization
NPL	Credit risk level	Non-performing loan ratio	Higher means lower efficiency
LDR	Liquidity and asset balance	Loans / deposits	Optimal means higher efficiency

The table above presents the theoretical content, practical expression and impact on efficiency of the main financial indicators widely used in assessing the efficiency of commercial banks' assets - ROA, ROE, NPL and LDR. These indicators reflect various aspects of banking activities and allow for a comprehensive assessment of the efficiency of bank assets. The return on assets (ROA) indicator presented in the table reflects

the efficiency of using the bank's total assets. Theoretically, ROA measures the ability of bank assets to generate income. The higher the ROA, the more efficiently the bank uses its assets. In practice, this indicator is defined as the ratio of net profit to total assets and is an important indicator in assessing the overall management efficiency of the bank.

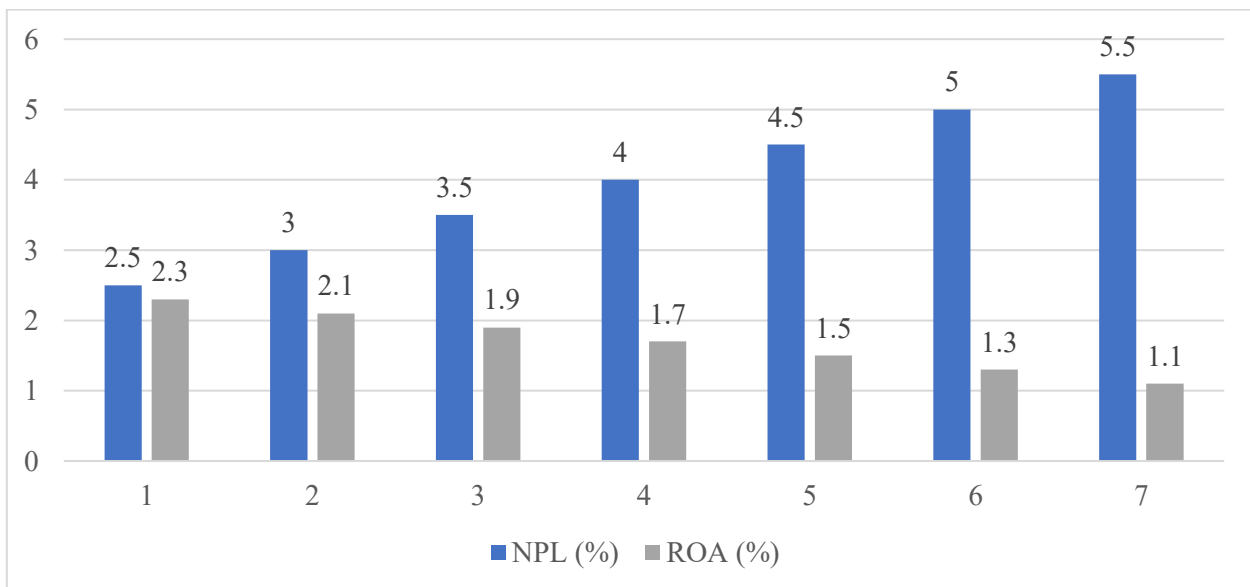


Figure 1. Relationship between ROA and NPL [10]

The above figure illustrates the relationship between two important indicators of the efficiency of commercial banks' assets - return on assets (ROA) and the share of non-performing loans (NPL). The graph shows that with an increase in the NPL level, the ROA indicator tends to decrease.

Theoretically, this is explained by the direct impact of the quality of bank assets on profitability. An increase in the share of non-performing loans means that the bank's loan portfolio has an increase in high-

risk assets. As a result, income from such assets decreases, reserves increase, and net profit decreases. Therefore, the ROA indicator decreases.

Thus, the figure shows that the quality of assets, in particular the quality of the loan portfolio, is a decisive factor in improving the efficiency of bank assets. By reducing the NPL level, banks expand the possibility of obtaining higher returns from their assets.

While the inverse relationship between ROA and NPLs represents one aspect of the efficiency of bank

assets, in order to fully understand efficiency, it is necessary to analyze the relationship between the size of assets and their profitability. From this point of view, the following graph examines the relationship between the size of assets and ROA.

Theoretically, an increase in the size of assets leads to the emergence of economies of scale in the bank. However, after a certain threshold, due to the

complexity of management and the increase in risks, the growth of ROA slows down and stabilizes. This indicates the need for optimal management of bank assets.

Therefore, Figure 2 analyzes the dynamics of ROA in the context of increasing asset volume and sheds more light on the relationship between efficiency and scale and risk factors.

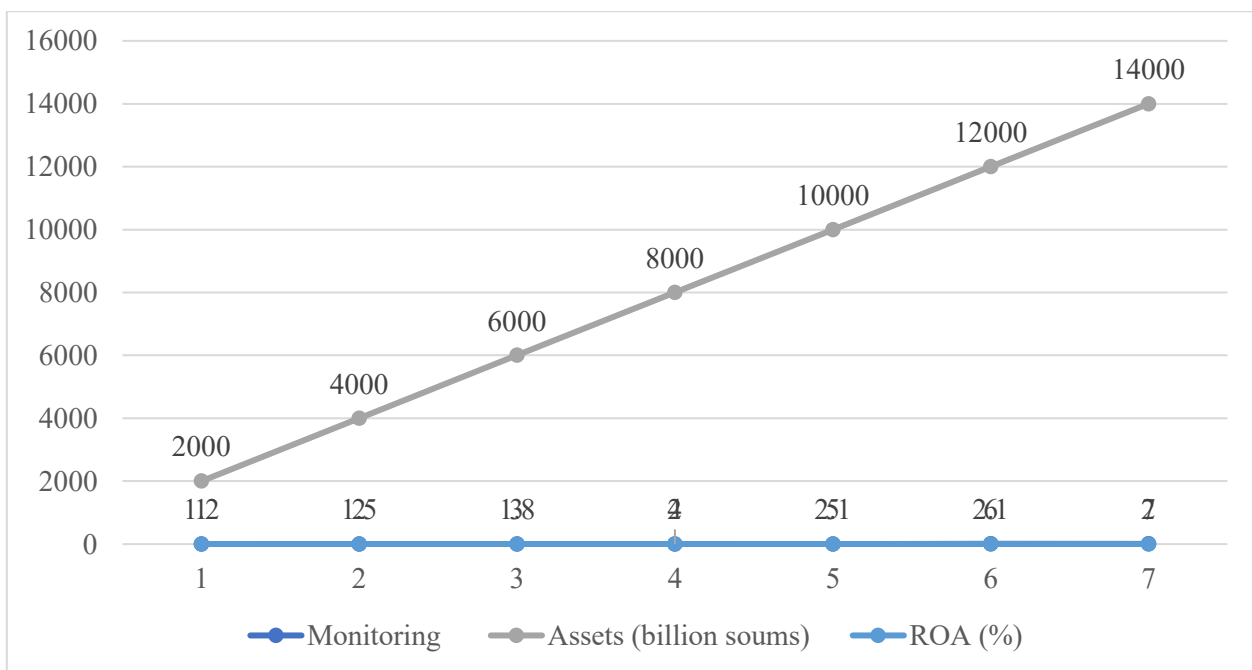


Figure 2. Relationship between asset size and ROA [11]

Figure 2 illustrates the relationship between the size of assets of commercial banks and return on assets (ROA). Graphical analysis shows that with an increase in the size of assets, the ROA indicator initially has a growth trend, but after reaching a certain level, its growth slows down and stabilizes.

Theoretically, this situation is explained by the concept of economies of scale. The expansion of the size of assets allows the bank to use resources more efficiently, relatively reduce operating costs and increase income. Therefore, in the initial stages, an increase in the size of assets leads to an increase in the ROA indicator.

However, as the size of assets increases excessively, bank management becomes more complicated, risk control becomes difficult, and operating costs may increase. As a result, the growth of ROA slows down and almost stabilizes after a certain point. This situation is explained by the principle of diminishing returns. Thus, Figure 2 shows that increasing the volume of bank assets does not always ensure continuous growth in

efficiency. On the contrary, maintaining the volume of assets at an optimal level and their effective management is an important factor in ensuring the sustainable profitability of the bank.

The system of indicators used to assess the efficiency of commercial banks' assets and the relationship between them theoretically require a comprehensive approach. The conducted analysis shows that the efficiency of bank assets is inextricably linked to several factors - asset quality, asset volume, risk level, and resource efficiency.

In particular, the inverse relationship between return on assets (ROA) and the share of problem loans (NPL) confirms the direct impact of the quality of bank assets on profitability. Theoretically, an increase in the share of problem assets in the loan portfolio reduces the effective turnover of resources allocated by the bank, increases the volume of reserves, and, as a result, reduces net profit. This leads to a decrease in the return on assets. Therefore, credit risk management and asset



quality improvement play an important role in improving the efficiency of bank assets.

In addition, the analysis of the relationship between asset size and ROA shows that banks have economies of scale. Although an increase in asset size initially increases efficiency, after a certain limit, profitability growth slows down due to the complexity of management and increased risks. This is explained by the principle of marginal efficiency and implies the need to manage bank assets optimally.

In the banking system of Uzbekistan, the issue of increasing the efficiency of commercial banks' assets has been considered one of the most pressing issues in recent years. The reform of the banking system, privatization processes, as well as the expansion of lending volumes, which are being implemented in the country, have a direct impact on the composition and quality of bank assets.

According to practical observations, the share of loans in the composition of assets in commercial banks of Uzbekistan is high, which is the main source of bank income. At the same time, in some periods, the increase in the share of problem loans has had a negative impact on the quality of assets and caused fluctuations in the profitability indicators of banks. This situation also theoretically confirms the existence of an inverse relationship between ROA and NPL.

In recent years, Uzbekistan has been experiencing a significant increase in the volume of bank assets. This, in turn, is explained by the expansion of lending volumes and increased financial support for the economy. However, along with the growth of assets, the issues of their effective management, risk minimization and optimal use of resources are also gaining importance.

Also, in the banking practice of Uzbekistan, prudential requirements established by the Central Bank for maintaining the loan-deposit ratio at an optimal level, liquidity management and ensuring capital adequacy play an important role. These requirements serve to ensure the financial stability of banks and create an institutional basis for increasing asset efficiency.

In general, in the practice of commercial banks of Uzbekistan, increasing asset efficiency is directly related to diversifying the loan portfolio, reducing the share of problem loans, introducing digital technologies and improving the risk management system. This contributes to the sustainable development of the national banking system and increasing its competitiveness in international financial markets.

In general, the theoretical and empirical analyses conducted show that several indicators should be considered in an integrated approach when assessing

the efficiency of bank assets. ROA and ROE represent profitability, NPLs represent asset quality, and asset size represents economies of scale and management efficiency. An integrated analysis of these indicators allows for a more in-depth assessment of the activities of commercial banks and the development of scientifically sound conclusions on improving efficiency.

CONCLUSION AND SUGGESTIONS.

The issue of increasing the efficiency of commercial banks' assets is one of the important areas of the modern banking system. Based on the theoretical and practical analysis, it can be concluded that the efficiency of bank assets is comprehensively assessed through a number of key indicators - return on assets (ROA), return on equity (ROE), share of problem loans (NPL) and loan-to-deposit ratio (LDR).

As a result of the analysis, it was found that there is an inverse relationship between ROA and NPL, and it was confirmed that the deterioration of asset quality has a negative impact on bank profitability. It was also found that the relationship between asset size and ROA is explained by the scale effect, and it was found that an increase in asset size increases efficiency to a certain extent, but then this growth slows down or stabilizes.

In general, increasing the efficiency of commercial banks' assets should be carried out not only by expanding the volume of assets, but also by improving their quality, effectively managing risks and ensuring optimal use of resources.

In order to increase the efficiency of commercial banks' assets, it is advisable to implement a number of theoretical and practical measures:

1. Strengthening credit risk management. In order to reduce the share of problem loans, it is necessary to diversify the loan portfolio, conduct in-depth analysis of borrowers and improve monitoring systems.
2. Improving asset quality. Banks should give priority to assets that generate high income, but with a controlled risk level. This will ensure a stable growth of the ROA indicator.
3. Determining the optimal asset size. When expanding the size of assets, banks should take into account the complexity of management and operating costs, along with the economy of scale. Determining the optimal size increases efficiency.
4. Effective allocation of resources. It is necessary to maintain the LDR indicator at an optimal level by effectively directing attracted deposits and other liabilities to lending and investment areas.
5. Introducing digital technologies. The use of credit scoring systems, big data and artificial intelligence technologies will allow for accurate risk assessment and optimize the decision-making process.



6. Strengthening the internal control and audit system. By developing internal control mechanisms in the bank, it is possible to continuously monitor the quality of assets and prevent the emergence of problem assets.

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