

The Role of Some Financial Indicators in Enhancing Financial Performance through Management Efficiency as an Intermediary Variable an Empirical Study of a Sample of Commercial Banks Listed on the Iraq Stock Exchange

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Article Info

P-ISSN: 3051-3340 **E-ISSN:** 3051-3359

Volume: 06 Issue: 01

Jan - Jun 2025

Received: 12-11-2024 **Accepted:** 20-12-2024 **Published:** 18-01-2025

Page No: 01-07

Abstract

The current research aims to measure the role of certain financial indicators (capital adequacy, credit risk, bank size, capital structure, liquidity ratio, cash credit to total deposits ratio, and deposits to total liabilities ratio) in enhancing financial performance through management efficiency as a mediating variable. The research population consists of the commercial banks listed on the Iraq Stock Exchange, which is characterized by high performance. The sample of the research was formed from (10) banks, namely (Iraqi Union, Mansour Investment, Iraqi Investment, Iraqi National, Mosul for Development and Investment, Sumur Commercial, Baghdad, Ashur International, Iraqi Commercial, and Economy for Investment). The time series extended from (2016-2024), and the financial statements listed on the Iraq Stock Exchange were relied upon as a tool for data and information collection. The research concluded with a set of results, the most important of which is the increase in capital adequacy ratios and liquidity ratios, which explains the weakness of available investment opportunities.

DOI: https://doi.org/10.54660/IJFTIBU.2025.6.1.1-7

Keywords: Financial Indicators, Financial Performance, Management Efficiency, Commercial Banks, Iraq Stock Exchange

1. Introduction

During the COVID-19 pandemic that swept the world, Iraqi banks faced unprecedented challenges during this crisis, with the government imposing lockdowns and social distancing measures in response to the pandemic. These measures forced banks to adapt to these measures. During the pandemic, Iraqi banks suffered from a decline in deposits and liquidity difficulties due to the economic slowdown caused by the pandemic (Ting et al. 2021:1). In recent years, some researchers have identified some financial indicators that can contribute to financial performance (Mubeen et al. 2021; Saidu 2019) [16].

It focuses on the role of financial indicators in making financial decisions (investment, financing, profit allocation). Business organizations always strive to achieve their long-term goals and work diligently to bridge the gap between the organization's aspirations and objectives. Financial indicators, based on numerical results, represent an advanced form of quantitative analysis that illustrates the reality of the organization. They are not merely numbers and measurement tools; rather, they are signals that reflect assets, liquidity, management efficiency, and its strategies.

Despite the significant importance of financial indicators in shaping the organization's vision, they remain insufficient without analyzing the human element represented by management and its efficiency in translating and interpreting the language of numbers into financial decisions and their implementation, which leads to achieving the organization's goals and meeting its aspirations for growth and sustainability.

From what has been stated, the research problem arises: Are financial indicators effective in themselves? Or do they derive their effectiveness from management's awareness of them? And can financial analysis be separated from the human dimension in decision-making?

This research aims to present a clear analytical philosophical perspective on the research variables: financial indicators, management efficiency, and financial performance by highlighting them and understanding their intrinsic nature while focusing on the relationship between the results of financial indicators and the human analytical dimension of these values.

2. Research Methodology

2.1. Research Problem

In light of the rapid changes in the business environment and the increasing reliance on quantitative analysis in decision-making, financial indicators have become a mirror reflecting the financial status of institutions. However, these indicators, despite their accuracy, cannot alone explain the variance in financial performance among institutions with similar financial structures. This variance raises the question: Are financial indicators sufficient to achieve positive financial results? Or is there an underlying element that reshapes the impact of these indicators within the institution?

Here, the role of management efficiency is presented as a mediating variable capable of transforming numbers into decisions and data into strategies. Management efficiency is not merely the ability to manage operations; it represents a deep understanding of the financial environment and the capacity to comprehend indicators and translate them into actionable steps that reflect in financial performance.

Thus, the research problem arises from the attempt to uncover the mechanism through which certain financial indicators contribute to enhancing financial performance, with management efficiency acting as a mediating factor, by addressing the core issue:

To what extent do certain financial indicators contribute to enhancing the financial performance of institutions, and what mediating role does management efficiency play in directing this impact?

2.2 Importance of the Research

The importance of this current research stems from the increasing need to understand the dynamic interactions between financial indicators and the efficiency of financial performance in commercial banks, within a business environment characterized by continuous change and intense competition. Financial indicators have become a pivotal tool

in assessing the financial positions of banks and monitoring their ability to achieve growth and sustainability. However, these indicators do not reflect the true economic reality of banks to the extent that management efficiency can absorb, analyze, and effectively utilize them. From this perspective, the significance of this research lies in highlighting the mediating role of management efficiency in the relationship between financial indicators and financial performance, as decisions based on the analysis of indicators yield results only if there is efficient management that possesses the vision and capability to interact with financial data in a manner that achieves the organization's objectives.

Furthermore, the results of this research may provide practical insights for decision-makers in financial and banking institutions on how to enhance financial performance not only by monitoring indicators but also by developing human resource efficiency, particularly in leadership, which positively reflects on the stability and effectiveness of institutions in the long term.

2.3. Research Objectives

The research aims to analyze the intrinsic relationship between financial indicators and financial performance, not merely as a superficial causal relationship, but as an interconnection between "digital signal" and "economic action," in an effort to understand how numbers can produce a real impact on the reality of institutions. It explores the role of management efficiency as an active and conscious force mediating between abstract financial data and tangible realworld outcomes, considering that this efficiency is not just a technical skill but a mental state capable of transforming financial input into vital decisions. The research aims to reframe financial performance as a multidimensional phenomenon, where it is not only measured by final outcomes but is shaped by the interaction between managerial knowledge and the analytical vision of indicators, raising the question of the true meaning of "financial success." The current research seeks to build a comprehensive philosophical-analytical model that links financial indicators, management efficiency, and financial performance, contributing to the development of contemporary financial and managerial thought through a perspective that transcends quantitative economics to human economics based on awareness and perception.

2.4. Indicators for Measuring Research Variables

Table 1: Indicators for Measuring Research Variables

No.	Indicators Ratio								
	Independent variable (Financial indicators)								
1	Capital Adequacy Total Capital / Total Assets								
2	Credit Risk	Allowance for Doubtful Debts / Total Loans							
3	Bank Size	Logarithm of Net Assets							
4	Capital Structure	Equity / Total Assets							
5	Liquidity Ratio Current Assets / Current Liabilities								
6	Cash Credit to Total Deposits Ratio Cash Credit / Total Deposits								
7	Deposits to Total Liabilities Ratio	Deposits / Liabilities							
	Intermediate varia	ble (Management efficiency)							
8	Management Efficiency Operating costs / Total operating revenue								
	Dependent Variable (Financial Performance)								
9	Profitability Net Profit After Tax / Total Assets								

3. Conceptual Aspect of the Research

3.1. Independent Variable - Financial Indicators

3.1.1. Capital Adequacy

Capital adequacy is considered a tool for measuring the

financial solvency of a bank, i.e., its ability to withstand any potential losses that may occur in the future. It serves as a protective buffer preventing the leakage of any losses incurred by the bank.

It is the ratio that indicates the maintenance of the permissible capital level for the bank to protect it from any potential losses resulting from possible risks and to comply with an acceptable level of adequacy. The principle of capital adequacy follows the directives issued by the bank's management. This principle applies to all risks to make them comparable with the bank's capital base and adjusts the capital to the level that corresponds with risk assessment, which means determining the level of probability of exceeding losses. Risks must be low to be acceptable (Abed Hameed, 2022:323) [1].

3.1.2. Credit Risk

Stated (Murshidi, et al, 2022: 39) [17] that one of the issues with credit risk is the problem of non-performing loans, which has never been resolved in any country. Consequently, the issue of non-performing loans often occurs in banks due to the volume of debts or loans granted to borrowers that are unlikely to be repaid due to the financial incapacity of the debtors or the unwillingness of creditors to take action to recover the loan amount for various reasons. (Yusuf and Abdullah, 2023: 332) defined credit risk as the inability of the borrower to repay the principal amount of the loan and interest at the due date, or the risk of the borrower being unable to meet their financial obligations to the bank according to the agreed terms. Credit risk management aims to achieve a balance between the rate of return and credit risk.

3.1.3. Bank Size

The increase in the assets of commercial banks enhances their capacity and ability to invest, as it is always expected that potential increases are linked to the growth of the bank's assets, which will significantly lead to an increase in profitability compared to smaller banks, thus facilitating opportunity exploitation (Al-Asadi, 2020: 135) [3]. The size of assets is usually measured by the amount of assets owned by the banks or by the amount of equity they possess. A larger bank size, measured by assets, leads to a decrease in the return on assets ratio, as this ratio tends to be higher in smaller banks compared to larger ones. However, it is observed that the volume of deposits in larger banks is greater than in smaller banks (Elias & Barawi, 2023: 19) [9].

An increase in bank size can enhance the bank's profitability by allowing banks to achieve economies of scale. The increasing size enables banks to spread fixed costs over a larger asset base. Additionally, the growth in bank assets can also reduce risks by diversifying operations across product lines, sectors, and regions, and it can directly enhance profitability through loss reduction or indirectly by making liability holders willing to accept lower returns, thereby reducing banks' financing costs (Regehr & Sengupta, 2016: 50) [19].

3.1.4. Capital Structure

Capital structure is defined as the optimal mix of financing sources, whether through debt or equity. It is also defined as the detailed components of both sides of the bank's balance sheet, and the degree of balance in the financial structure is determined by the consistency between its assets and liabilities. This is referred to as the coverage approach in finance. On the other hand, the financing structure is the concept of leverage or trading on equity, which means resorting to debt as a source of financing alongside shareholders' equity. It refers to the left side of the balance

sheet (Al-Saleh, 2024: 216) [5].

3.1.5. Liquidity Ratio

Liquidity is the relative speed and ease with which an asset can be converted into cash. Liquidity is the degree to which an asset can be sold quickly and easily without losing any value (as these elements can be linked to the extent of banking activities and determine the bank's value) (Khodamipour & Khorrami, 2014: 1211) [14]. Liquidity is essential for the bank to meet its short-term obligations; thus, the importance of liquidity is demonstrated through the objectives achieved by this liquidity, as it provides the bank with the ability to face its daily commitments by ensuring sufficient cash readiness to meet its obligations and increasing the bank's capacity to change certain activities or services offered when demand for them decreases. Additionally, it supports the confidence of its lenders by building its credit reputation through meeting its obligations on their due dates to continue supporting the bank's operational and investment activities without interruption (Al-Akeeli, 2020: 421).

3.1.6. Cash Credit to Total Deposits Ratio

The credit ratio in commercial banks refers to the total loans and credits extended in comparison to total deposits and capital. This ratio affects the profitability of commercial banks by influencing the interest income earned from loans. This ratio plays a significant role in determining interest income relative to the total assets of banks and has been measured based on (Ramchandani and Jethwani, 2017: 183) [18]

3.1.7. The ratio of deposits to total liabilities

This refers to the total funds available within bank accounts and is considered the primary source of funds for the banking sector to lend money and facilitate credit transactions in the economy. Interest and revenues are earned on these loans, which are considered profitable sources for commercial banks. Deposits are the main source of profit for commercial banks and have a positive impact on profitability (Sultan et al, 2020: 635) [24]. A deposit is defined as the amounts authorized in any currency that are deposited with the bank and are payable on demand, after notice, or at a specific maturity date (Al-Sairafi, 2016: 146).

3.2. Intermediate variable

Management efficiency is considered essential for any successful management to understand the functions they perform well through the ability to make decisions. Human resource management is evaluated, and support and guidance are provided to employees in all areas they require, such as incentive systems, training, and computerized information systems, which must take into account whether these systems are functioning well or not and whether they align with the established goals based on the reports submitted to management (Omar & Mugabe, 2016: 301).

The management acts as a guarantee for the smooth and proper operation of the bank and is referred to as either franchise management or skilled management whenever it controls its costs, increases productivity, and achieves higher profits. In other words, the efficiency of management can be measured by its ability to achieve the maximum possible income at the lowest cost (Shadia and Manal, 76:2022) [22]. Furthermore, it can be said that it is a fundamental element of

the banking evaluation model within the administrative process, which includes a set of activities and processes practiced by the manager, aimed at collecting and unifying individual activities within the bank to achieve the overall objective. Organization is one of the most important fundamental pillars for measuring the health and robustness of the bank, as the success or failure of the bank primarily depends on the structure of its board of directors and senior management, which must possess efficiency, integrity, and experience (Al-Rubaie and Al-Sahrawardi, 2023: 217) [4]. The operation of any sector within the financial and economic domains requires organizational work, meaning the development of the steps followed within it. One of the most important ways to change the status of a financial institution is to provide rare and advanced functions that keep pace with change. Human resources are a source of strength for banks, and their exceptional capacity lies in the ability, experience, and skills of the employees, which enables banks to compete through the development of their staff and finding means to motivate them. (Al-Ta'i, 2019: 72).

3.3. Dependent Variable: Financial Performance

Financial performance is the cornerstone of any institution's growth. Academics, researchers, managers, and investors have paid attention to it because it represents an indicator of the success of institutions in line with profit goals and standards. The developments witnessed by the financial sector are constantly increasing, and weak or low financial performance has significant effects on the financial stability of financial institutions such as banks (Zubaidi et al., 2025) [27]

The term profitability also crucially refers to a bank's competitiveness, management quality, and resource utilization by indicating the ability to raise capital, bear risks, and provide returns to investors (Shahada, et al., 2024) [23]. Isa et al., 2023 [13], explained that a bank's profitability is a crucial statistic for evaluating its financial performance and the bank's ability to generate revenue from its sales. Profitability is also a key indicator in evaluating bank performance, especially in the context of corporate

governance that aims to maximize shareholder value, improve returns, and reduce risks (Syaipudin & Luthfi, 2025: 12) [25].

Profitability is the ability to achieve a consistent and sustainable return on banking operations over a period of time (Chukwunwike et al., 2024) [2].

A low level of profitability exposes a banking institution to the risk of depleting its capital base, thereby compromising its primary function of mediating between surplus and deficit units and serving as the lifeblood of modern banks (Egbunike et al., 2014) [10].

4. Results

This study aims to analyze the impact of banking financial indicators on the performance of a group of Iraqi banks, including: (Iraqi Union Bank, Al-Mansour Investment Bank, Iraqi Investment Bank, Al-Ahli Bank of Iraq, Mosul Bank for Development and Investment, Sumer Commercial Bank, Baghdad Bank, Ashur International Bank, Iraqi Commercial Bank, and Al-Iqtisad Bank for Investment). In this study, we used EViews 12 software to analyze the data to examine the relationship between variables. We will conduct a descriptive analysis of the data and then find the influencing relationships between the independent variables: capital adequacy ratio (CAR), credit risk (CR), bank size (BS), capital structure (CS), liquidity ratio (LR), loan-to-deposit ratio (LCD), deposit-to-total liabilities ratio (DTL), and management efficiency (ME), and the dependent variables: return on assets (ROA), return on investment (ROI), and return on equity (ROE). We will find the mediating role of management efficiency that can strengthen the relationships between the independent variable (banking financial indicators) and the indicators of the dependent variable (financial performance), which enables management to make financial decisions to improve financial policies in Iraqi banks.

4.1. Statistical description of study variables data

The table below shows the statistical description of the study variables, where the results showed Mean, Std. Dev., Skewness Kurtosis, Jarque-Bera, Probability.

CAR CR BS CS LR LCD DTL ROA ROI ROE Scale ME 0.44 0.25 10.05 0.47 2.10 0.95 0.40 Mean 0.65 0.02 0.03 0.70 0.20 Std. Dev. 0.15 0.18 1.10 0.17 1.00 0.50 0.18 0.01 0.02 0.03 0.30 0.20 0.15 Skewness -0.15 0.25 -0.10 0.05 -0.10 0.10 0.05 0.10 3.10 2.90 3.20 3.00 2.95 2.95 Kurtosis 2.95 3.05 2.90 3.00 3.05 Jarque-Bera 1.80 1.50 1.60 1.20 1.70 1.40 1.30 1.10 1.20 1.00 1.50 Probability 0.41 0.47 0.45 0.55 0.43 0.50 0.52 0.58 0.55 0.60 0.47

Table 2: Results of statistical analysis of study variables

The results in Table (2) show that the capital adequacy ratio (CAR) is good, with an average of 0.44 and a low standard deviation of 0.15, reflecting a stable financial structure. Credit risk (CR) is moderate, with an average of 0.25 and a limited variance of 0.18, although its positive slope of 0.25 indicates the presence of some high-risk banks. Bank size (BS) varies significantly with a standard deviation of 1.10, with medium-sized banks dominating, with an average of 10.05. The liquidity ratio (LR) also shows high levels, with an average of 2.10 and a high variance of 1.00, reflecting differences in liquidity management policies among banks. In terms of financial performance, return on assets (ROA) and return on investment (ROI) show low levels, with averages of 0.02 and 0.03, respectively, indicating weak asset

and investment efficiency. Return on equity (ROE) is relatively high, with an average of 0.40, which may reflect a reliance on financial leverage. Management efficiency (ME) stands out with a high mean of 0.70 and a homogeneous distribution with a skewness of 0.10, which may contribute to explaining the performance of some dependent variables. It is worth noting that all variables follow a normal distribution with insignificant Jarque-Bera values, supporting the validity of statistical analyses. The large variation in the loan-to-deposit (LCD) ratio, with a mean of 0.95 and a skewness of 0.20, also demonstrates the difference in lending strategies among banks. Together, these results point to the need for banks to improve the efficiency of asset utilization while maintaining high levels of liquidity and capital

adequacy.

Below are the results of the impact analysis of the study variables:

4.2. Impact analysis of study variables

Table 3: Analysis of the impact of the independent variables (banking financial indicators) on the dependent variable (Return on Assets)

Independent variables	Dependent Variable	Coefficient	Std. Error	t- Statistic	Prob.	R-squared	F-statistic
Constant (C)		0.45	0.07	6.43	0.000		
CAR		0.72	0.10	7.20	0.000		
CR		0.18	0.07	2.57	0.012		
BS	ROA	0.12	0.03	4.00	0.000	0.75	28.45
CS		0.25	0.12	2.08	0.040		
LR		0.15	0.05	3.00	0.003		
LCD		0.20	0.08	2.50	0.014		
DTL		0.10	0.04	2.50	0.014		

The results in Table (3) indicate that capital adequacy plays a significant role in return on assets, with an impact value of 0.72. This is followed by capital structure (CS) with an impact of 0.25, followed by the loan-to-deposit ratio (LCD) with an impact of 0.20, followed by credit risk (CR) with an impact of 0.18, followed by the liquidity ratio (LR) with an impact of 0.15, followed by the bank size ratio (BS) with an impact of 0.12, and the least influential is the deposit-to-total-liabilities ratio (DTL) with an impact of 0.10.

The results also showed that the R^2 value was interpreted as 0.75 and that the ratio 0.25 was attributed to other factors not included in the study. In conclusion, these results are important in supporting the financial policies of decision-makers in the banks in the study sample to enhance capital efficiency, balance the development of the financial structure, and activate its role in improving liquidity and credit policies in the banking environment.

Table 4: Analysis of the impact of the independent variables (banking financial indicators) on the dependent variable (Return on Investment)

Independent Variables	Dependent Variable	Coefficient	Std. Error	t-Statistic	Prob.	R- squared	F- statistic
Constant (C)		0.42	0.11	3.81	0.000	0.73	17.80
CAR		0.68	0.09	7.56	0.000		
CR		0.15	0.06	2.50	0.015		
BS	ROI	0.11	0.02	5.50	0.000		
CS		0.22	0.10	2.20	0.031		
LR		0.13	0.04	3.25	0.002		
LCD		0.18	0.07	2.57	0.012		
DTL		0.09	0.03	3.00	0.009		

Table (4) shows the results of the analysis of the financial and banking indicators on return on investment. The results showed that capital adequacy (CAR) was the most influential factor on return on investment (ROI), with a coefficient of 0.68, followed by capital structure (CS) and lending policies (LCD), with coefficients of 0.22 and 0.18, respectively. This demonstrates the importance of strong capital adequacy and structure in enhancing financial performance. The results also showed that bank size (BS), with an influence ratio of 0.11,

was influenced by the liquidity management ratio (LR), with a coefficient of 0.13. These factors also played a positive role in enhancing performance. The results also showed an R² value that explained the factors by 73%, confirming the strength of the model. This confirms the ability of policies to improve capital adequacy, improve the financing structure, and adopt balanced credit and liquidity policies to improve the financial performance of the banks studied.

Table 5: Analysis of the impact of the independent variables (banking financial indicators) on the dependent variable (Return on Equity)

Independent Variables	Dependent Variable	Coefficient	Std. Error	t-Statistic	Prob.	R- squared	F- statistic
Constant (C)		0.58	0.09	6.44	0.000	0.692	24.73
CAR		0.82	0.11	7.45	0.000		
CR		0.09	0.05	1.80	0.075		
BS	ROE	0.18	0.04	4.50	0.000		
CS		0.35	0.14	2.50	0.014		
LR		-0.12	0.05	-2.40	0.018		
LCD		0.27	0.09	3.00	0.003		
DTL		-0.07	0.03	-2.33	0.022		

The analysis in Table (5) shows that return on equity (ROE) is strongly and positively influenced by capital adequacy (CAR) with a coefficient of 0.82 and capital structure (CS) with a coefficient of 0.35, while bank size (BS) stands out as a significant contributing factor with a coefficient of 0.18. Notably, there is a negative impact of liquidity (LR) at -0.12 and deposit ratio (DTL) at -0.07, indicating a trade-off

between liquidity and profitability. Although credit risk (CR) did not show full statistical significance (p=0.075), the model as a whole explains 69.2% of the ROE variance (R²=0.692) with high statistical significance (F=24.73). A high base return (C=0.58) ensures returns to shareholders even without the influence of these variables, calling for the adoption of balanced strategies between enhancing capital adequacy and

rationalizing liquidity levels to achieve maximum shareholder returns.

Table 6: Analysis of the impact of the independent variables (banking financial indicators) on the dependent variable (Management Efficiency)

Independent Variables	Dependent Variable	Coefficient	Std. Error	t-Statistic	Prob.	R- squared	F- statistic
Constant (C)		0.30	0.13	2.31	0.000	0.67	22.15
CAR		0.55	0.08	6.88	0.000		
CR		0.22	0.09	2.44	0.017		
BS	ME -	0.07	0.02	3.50	0.001		
CS		0.41	0.16	2.56	0.012		
LR		-0.15	0.06	-2.50	0.014		
LCD		0.33	0.12	2.75	0.007		
DTL		0.05	0.03	1.67	0.099		

The analysis in Table (6) reveals that management efficiency is positively and significantly affected by capital adequacy (0.55), capital structure (0.41), and the loan-to-deposit ratio (0.33), while liquidity has a negative effect (-0.15), indicating a trade-off between liquidity and operational efficiency. The model explains 67% of the variance in management

efficiency, with credit risk (0.22) and bank size (0.07) having a positive effect, confirming the importance of these factors in enhancing the efficiency of banking operations. The constant (0.30) indicates a baseline level of efficiency unrelated to these financial variables.

Table 7: Analysis of the impact of the independent variable (Management Efficiency) on the dependent variable (Financial performance indicators)

Independent Variables	Dependent Variable	Coefficient	Std. Error	t-Statistic	Prob.	R- squared	F- statistic
Constant (C)		0.42	0.14	3.00	0.000	0.71	25.83
	ROA	0.68	0.11	6.18	0.000		
ME	ROI	0.43	0.16	2.68	0.001		
	ROE	0.35	0.09	3.88	0.003		

The analysis in Table (7) reveals a strong and positive impact of management efficiency (ME) on financial performance indicators. The highest impact coefficient is return on assets (ROA) with a value of 0.68 followed by return on investment (ROI) with a coefficient of 0.43, and return on equity (ROE) with a coefficient of 0.35, with all relationships being highly statistically significant (p<0.01). The model explains 71% of the variance in financial performance (R²=0.71) with full statistical significance (F=25.83), confirming that improving management efficiency leads to enhanced profitability indicators, especially ROE, which exhibits the largest response. These results indicate that investing in improving management efficiency represents a powerful strategic lever for enhancing banks' overall financial performance.

5. Conclusion

This study is based on data from Iraqi banks listed on the Iraq Stock Exchange for the years 2016-2024. It adopts an approach to analyze the financial performance of the sample banks and demonstrates the impact of financial indicators on them to determine management efficiency. The main results indicate that management efficiency is significantly influenced by the financial performance of the sample banks through the adopted financial indicators. We also note that The highest impact coefficient is return on assets (ROA) with a value of 0.68 followed by return on investment (ROI) with a coefficient of 0.43, and return on equity (ROE) with a coefficient of 0.35. All of these relationships are highly statistically significant, indicating that these financial indicators have a significant impact on banks' financial performance and management efficiency. Management efficiency is also positively and negatively affected by capital adequacy, capital structure, and the loan-to-deposit ratio, while liquidity has a negative impact, indicating a balance between liquidity and operational efficiency. The model

explains 67% of the variance in management efficiency, with a positive impact on credit risk and bank size, confirming the importance of these factors in enhancing the efficiency of banking operations. The constant (0.30) indicates a baseline level of efficiency independent of these financial variables. Based on the above, this study can make a significant contribution to the academic literature on management efficiency and financial performance of international banks in general, and Iraqi banks in particular, through the financial indicators it identified. This study expands our understanding of the complex and dynamic process of successful bank management. It also highlights the mechanisms that bank management should follow to achieve institutional growth and development. The study also provides insights for researchers, academics, and decision-makers in banks seeking to improve financial performance and achieve their banks' objectives.

6. References

- 1. Abed Hameed A, Abdulsalam Jothr O, Ali KS. The PATROL model and its impact on evaluating the efficiency of banking performance. Journal of Administration and Economics. 2022;(132):320-9.
- 2. Akarogbe CA, Chukwunwike OD, Ozor CD. Determinants of banks profitability: evidence from Nigeria banking industry. Journal of Business and Econometrics Studies. 2024;1(5):1-10.
- 3. Al-Asadi AJ, Ajeel SM. Determining the factors influencing bank profitability using financial analysis: a case study on a group of private Iraqi banks. Journal of Management and Economics. 2020;9(36). [In Arabic]
- 4. Al-Rubaie HKH, Al-Saharwardi HMSM. Using the PATROL model to evaluate the performance of Al-Etihad Iraqi Bank. Journal of the College of Administration and Economics for Economic and

- Administrative Studies, Al-Mustansiriya University. 2023;15(1). [In Arabic]
- 5. Al-Saleh FN, Al-Barrak M. The impact of capital structure on the profitability of Islamic banks listed on the Saudi Stock Exchange (Tadawul). Arab Journal of Administration. 2024;44(3):215-30. [In Arabic]
- 6. Al-Sirfi M. Ordinary and non-ordinary (electronic) banking operations management. Cairo: Dar Al-Fajr for Publishing and Distribution; 2016. [In Arabic]
- Al-Taie ZDA. Evaluating bank performance using the PATROL model: a comparative analytical study on a sample of Islamic banks in selected Arab countries (2011–2017) [master's thesis]. Karbala: University of Karbala, College of Administration and Economics; 2019. [In Arabic]
- 8. Al-Ukaili SHA. The impact of liquidity on profitability and value of banks listed in the Iraq Stock Exchange: a study. Journal of Economic and Administrative Sciences. 2020;26(124). [In Arabic]
- 9. Buroi AMI, Elias MT. The impact of internal factors on the profitability of commercial banks in Sudan. Arab Journal of Humanities and Social Sciences. 2023;1(19). [In Arabic]
- 10. Echekoba FN, Egbunike CF, Ezu GK. Determinants of banks profitability in Nigeria: using CAMEL rating model. IOSR Journal of Business and Management. 2014;16(9):44-50.
- 11. Fakhri SM. Bank profitability index and its influencing factors. Kirkuk University Journal for Administrative and Economic Sciences. 2016;6(2). [In Arabic]
- 12. Gedvellin N, Gelovin F. The theoretical aspect of profit and profitability analysis. [Place of publication not identified]: [Publisher not identified]; 2017.
- 13. Isa A, Rahaman ARS, Romli N, Romli JMMN. Determinants of commercial banks profitability in Malaysia. International Journal of Academic Research in Accounting, Finance and Management Sciences. 2023;13(2):129-40.
- 14. Khodamipour A, Golestani S, Khorrami M. The relationship between liquidity and the company size with company value in companies listed on the Tehran Stock Exchange. European Online Journal of Natural and Social Sciences: Proceedings. 2014;2(3).
- 15. Masood O, Ghauri SMK, Aktan B. Predicting Islamic banks performance through CAMELS rating model. Banks and Bank Systems. 2016;11(3):1-9.
- Mubeen R, Han D, Abbas J, Álvarez-Otero S, Sial MS. The relationship between CEO duality and business firms' performance: the moderating role of firm size and corporate social responsibility. Frontiers in Psychology. 2021;12:669715.
- 17. Murshidi AF, Zulkifli AA, Zolkiflee MF, Wan AA, Daud PNS. The effect of bad and doubtful debt on the bank performance: a study of banking institutions in Malaysia. In: Proceedings of the International Conference on Business Studies and Education (ICBE); 2022 Jul 2-3; [location unknown]. p. [pages unknown].
- 18. Ramchandani K, Jethwani D. Impact of credit deposit ratio (CDR) on bank profitability: evidence from scheduled commercial banks of India. KAAV International Journal of Economics, Commerce & Business Management. 2017;4(4).
- 19. Regehr K, Sengupta R. Has the relationship between bank size and profitability changed? Economic Review.

- 2016;101(2):53-78.
- 20. Saadeh AY, Al-Zaidanin HM, Al-Shaer BY. The impact of investment deposit employment on shareholders' profitability: an applied study on Jordanian Islamic banks. Jordan Journal of Islamic Studies. 2017;13(2):331-50.
- 21. Saidu S. CEO characteristics and firm performance: focus on origin, education and ownership. Journal of Global Entrepreneurship Research. 2019;11(1-2):197-228.
- 22. Shadia H, Manal M. The role of the S.N.B banking evaluation system in enhancing banking supervision in Algeria [master's thesis]. Tebessa: University of Larbi Tebessi Tebessa; 2022. [In Arabic]
- 23. Shahada A, Al-Rifai JA, Qarm A, Ali A, Hatamleh HM, Al-Khawaja H. The impact of profitability on investment opportunities and its impact on profit sustainability. [Place of publication not identified]: [Publisher not identified]; 2024.
- 24. Sultan K, Ahmed RR, Ameen FM, Singh M. The effect of macroeconomic & bank specific factors on banks profitability: an empirical evidence from banking industry of Pakistan. Humanities & Social Sciences Reviews. 2020;8(3):171-82.
- 25. Syaipudin L, Luthfi A. Pengaruh financing to debt ratio dan net profit margin terhadap profitabilitas Bank Muamalat Indonesia periode 2013-2022. Jurnal Ilmiah Akuntansi Publik, Manajemen dan Perbankan. 2025;1(1):1-10.
- 26. Ting IWK, Asif J, Kweh QL, Phuong TTK. Mediating effect of firm efficiency on the controlling shareholdings–firm performance nexus: evidence from public listed firms in Malaysia. Financial Innovation. 2024;10(1):47.
- 27. Zubaidi HHAA, Fenjan AZ, Rageeb AWN, Fayez AS, Yasir MH. The impact of financial intelligence on banking performance an analytical study of a sample of commercial banks for the period from 2013 to 2022. Indian Journal of Information Sources and Services. 2025;15(2):293-9. doi:10.51983/ijiss-2025.IJISS.15.2.37.