

The Impact of Financial Analysis Tools on Optimizing the Financial Decision of the Bank of Baghdad for the Period (2013-2022)

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Abstract

The aim of this research is to identify the financial ratios (cash ratio, inventory turnover ratio, return on equity ratio) and the extent of the impact of these ratios on making informed decisions for the Bank of Baghdad by studying the financial statements of the Bank of Baghdad, through analyzing the questionnaire distributed to the employees working at the Bank of Baghdad using the statistical program (SPSS). The results of the questionnaire analysis indicated a clear impact of financial ratios on making informed decisions at the Bank of Baghdad, and these results supported the research hypothesis.

Keywords: Financial Analysis, Financial Analysis Tools, Optimizing, Decision Financial of Bank.

INTRODUCTION

Financial analysis is a precise and thorough process aimed at enhancing decisions that have proven successful in financial statements, adjusting decisions that show gaps, and also forming an information system on which the financial manager relies in the planning process and decision-making. Financial analysis is considered an effective and successful means to achieve the goal of financial control and analyze the performance of financial activities and operations of the institution. Through financial analysis tools, we can evaluate the profitability, efficiency in managing assets, financial balance, liquidity, expansion plans, and growth of the institution. It is also relied upon in decision-making, making financial analysis a safety valve and the most beneficial for economic institutions and their employees in making sound and timely decisions.

The Research Problem

The research problem can be formulated through the following questions:

What is the degree of reliance of banks on financial analysis tools in rationalizing financial decisions?

Is financial analysis used in Iraqi commercial banks when making financing decisions?

Research Hypothesis

In light of the previous questions, the following hypothesis can be formulated:

Financial ratios can impact financing decisions as commercial banks can make sound and well-thought-out decisions by analyzing the results of financial ratios.

Research Objectives

Understanding financial ratios and their calculation method

Analyzing financial ratios for Bank of Baghdad

Analyzing the research tool (questionnaire) and reaching conclusions

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Research Importance

The importance of the research lies in clarifying the importance of financial analysis in rationalizing credit decisions, providing banks with necessary information in making financing decisions at Bank of Baghdad, and highlighting the role of financial analysis tools used in providing appropriate information to financial data users.

FIRST TOPIC: THE CONCEPTUAL FRAMEWORK OF FINANCIAL ANALYSIS AND FINANCIAL RATIOS

First Requirement: The Conceptual Aspect of Financial Analysis

Firstly: The Concept of Financial Analysis

Financial analysis is classified as a science with rules, standards, and principles that focus on collecting data and information related to financial statements, tabulating them, and subjecting them to a detailed study in order to find the relationships between them. For example, the relationship between current assets representing liquidity and current liabilities representing short-term obligations, the relationship between shareholders' equity and long-term liabilities, as well as the relationship between revenues and expenses. Then, interpreting the results reached, investigating their causes to discover the strengths and weaknesses in financial plans and policies, and proposing necessary solutions and recommendations⁽¹⁾.

Financial analysis is known as the study of financial statements after tabulating them and using quantitative methods with the aim of showing the relationships between their elements, the sudden changes in these elements, the size and impact of these changes, and deriving a set of indicators that help in studying the operational and financial situation of the establishment, evaluating the performance of these establishments, and providing the necessary information to the parties concerned in order to make sound administrative decisions⁽²⁾.

Secondly: - The Importance of Financial Analysis⁽³⁾

- 1 - Determining the efficiency of management in raising funds on one hand, and operating them on the other hand.
- 2 - Assisting in the financial planning process of the company.
- 3 - An indicator of the success or failure of the company's management in achieving the desired objectives.
- 4 - An indicator of the true financial position of the company.
- 5 - Providing a suitable ground for making appropriate decisions.

Thirdly: Financial Analysis Objectives

Financial analysis aims to achieve the following: ⁽¹⁾

Evaluate the financial and cash position of the company.

Evaluate the results of investment and financing activities.

Identify deviations in performance from the planned and diagnose their causes.

Utilize the results of the analysis for preparing budgets and future plans.

Second Requirement: Conceptual Aspect of Financial Ratios

First: Concept of Financial Ratios

Financial ratio analysis is considered one of the most important and oldest financial analysis methods used in studying the financial and credit position of the project and judging its business results. This method is based on the principle that examining any number from the financial statements does not indicate anything important in itself and does not provide us with useful information. However, the importance of this number becomes apparent when compared to other numbers or ratios.⁽²⁾

Financial ratios are one of the tools of financial analysis and are a mathematical relationship between two quantities, representing a part of financial information and another part. ⁽³⁾

Secondly: The Objectives of Financial Ratios: ⁽⁴⁾

Maintaining an appropriate liquidity ratio for the project in line with its requirements and needs will lead to achieving the following objectives:

Enhancing the financial and credit reputation of the project.

Providing the project with the opportunity to choose, negotiate, and make financial deals at the minimum cost.

Benefiting from discounts when obtaining commercial credit with payment terms including the discount rate.

Ability to expand, invest, and seize available opportunities.

Facing financial crises, economic fluctuations, or deviations in obtaining expected cash flows.

Third: Types of Financial Ratios

Liquidity Ratios: Liquidity ratios refer to the examination of the relationship between current assets and current liabilities to determine whether the company is able to meet its obligations towards short-term liabilities.⁽¹⁾ One of these ratios is the cash ratio, which indicates the number of times cash and near-cash assets can cover current liabilities. It is an indicator of the company's ability to pay its current liabilities using the available cash liquidity. It is worth noting that few companies hold sufficient cash liquidity to meet all short-term obligations, making this ratio uncommonly used, especially since it ignores short-term obligations throughout the fiscal year and is calculated according to the following formula ⁽²⁾:

$$\text{The cash equivalent ratio} = \text{Cash ratio} / \text{Current liabilities}$$

Activity Ratios ⁽³⁾

The activity ratio refers to the organization's performance, indicating the efficient use of various assets of the organization. Most ratios falling under this category depend on the turnover rate and are thus called turnover ratios. One of these ratios is the fixed assets turnover ratio, which measures the total turnover of assets and the company's ability to generate sales by using assets. It is calculated as follows ⁽¹⁾:

$$\text{Fixed asset turnover ratio} = \text{Net sales} / \text{Net fixed assets}$$

3-Profitability ratios ⁽²⁾: provide indicators of the organization's ability to generate profits from sales or investments. The importance of these ratios is not limited to management, as they also concern owners and creditors who provide long-term loans to the organization. The profits generated by the organization are considered one of the most important factors affecting the owners' wealth, as creditors expect the organization to be able to repay long-term loans from the profits it generates rather than from selling the assets it owns. Among these ratios is the return on equity ratio ⁽³⁾, which is a ratio of profitability ratios related to investment, linking the net profit earned during a period with the equity for the same period.

$$\text{Return on equity} = \text{Net profit} / \text{Equity}$$

The Second Topic: Analysis of Financial Indicators for the Financial Statements of Baghdad Bank for The Period (2013-2022)

1- Cash Ratio (Liquidity Ratio)

Table 1. Cash Ratio (Liquidity) for the sample companies studied for the period from (2013-2022).

The General	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bank of Baghdad	0.688	0.646	0.679	0.590	0.615	0.752	0.647	0.799	0.697	0.468

Source: Prepared by the researcher based on the financial statements of Bank of Baghdad for the period (2013-2022).

It is noted from the previous table that the cash ratio for Baghdad Bank in the years (2013, 2014, 2015) was close, at (0.688, 0.646, 0.679) respectively, indicating the stability of the bank's financial situation and maintaining an appropriate cash ratio during this period. However, in 2016, the ratio decreased to (0.590), indicating a decrease in the bank's financial position by (18.8%) due to a decrease in cash credit by (30%)⁽¹⁾. In 2017, the cash ratio slightly increased to (0.615) due to a decrease in liabilities by (13.7%)⁽²⁾. However, in 2018, the ratio increased to (0.752) due to the increase in balances at the central bank by (67.1%) of the total cash balances, indicating the bank's sound position and its ability to face emergency situations⁽³⁾. In 2019, the ratio decreased to (0.647) due to increased investments during that period. In 2020, the ratio increased to (0.799) as the bank achieved a strong financial position and was able to grow to achieve outstanding performance levels compared to the previous year⁽⁴⁾. In 2021, the ratio slightly decreased to (0.697), while in 2022, the ratio decreased significantly to (0.468) due to the bank's expansion in investments and reducing risky assets through collection in credit portfolios and other assets, as well as investing in treasury bills with a maturity of six months and one year.⁽⁵⁾

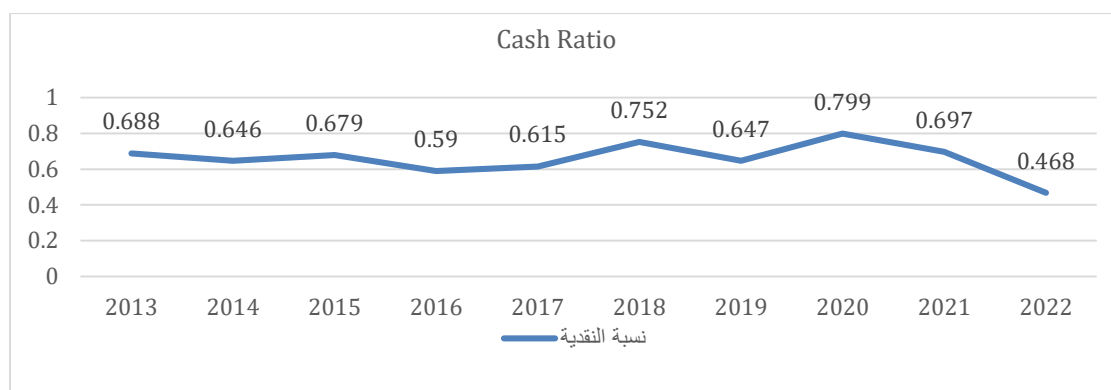


Figure 1. Evolution of the liquidity ratio for Bank of Baghdad for the period (2013-2022).

Source: Prepared by the researcher based on Table (1).

Table 2. Asset turnover ratio (activity) for Bank of Baghdad for the period (2013-2022).

The General	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bank of Baghdad	0.032	0.006	0.007	0.010	0.024	0.019	0.022	0.028	0.039	0.052

Source: Prepared by the researcher based on the financial statements of Bank of Baghdad for the period (2013-2022).

Asset Turnover Ratio (Activity Ratio)

From Table (2), it is noted that the asset turnover ratio for Bank of Baghdad was (0.032) in 2013, then the ratio decreased to become (0.006, 0.007) for the years (2014, 2015) due to a decrease in banking operations revenues and consequently a decrease in net sales⁽¹⁾. The years (2016, 2018) witnessed a slight increase where the ratio was close ranging from (0.010, 0.024, 0.019) due to an increase in bank revenues resulting from increased sales⁽²⁾. As for the years (2019, 2020), the ratio saw a slight increase and relative stability, reaching (0.022, 0.028) respectively, attributed to sales stability⁽³⁾. We notice a significant improvement in the asset turnover ratio for the years (2021-2022) due to increased sales growth and revenue increase⁽⁴⁾.

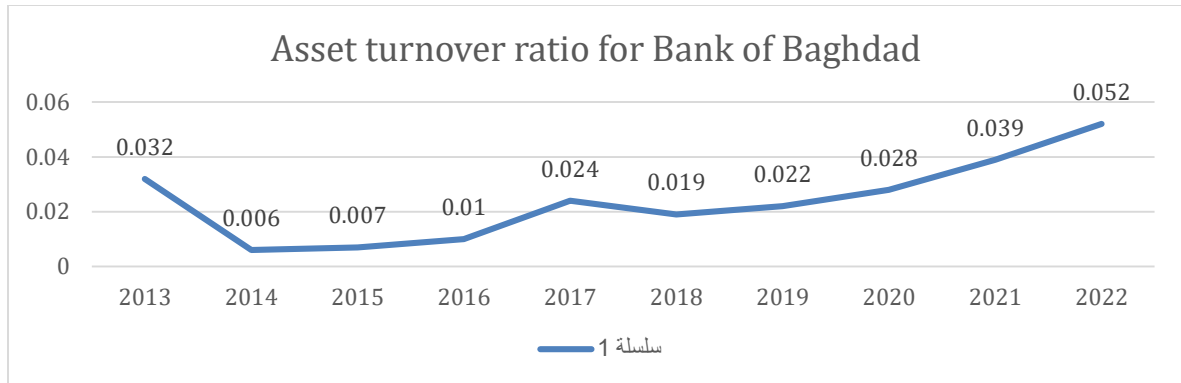


Figure 6. illustrates the evolution of the asset turnover ratio for Bank of Baghdad for the period (2013-2022).

Source: Prepared by the researcher based on Table (2) data.

Return on equity (profitability ratio)

Table 3. Return on equity for Bank of Baghdad for the period (2013-2022).

The General	العام	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bank of Baghdad	مصرف بغداد	0.133	0.095	0.021	0.071	0.022	0.015	0.026	0.072	0.096	0.152

Source: Prepared by the researcher based on the financial statements of Bank of Baghdad for the period (2013-2022).

We note from Table (3) that the return on equity ratio in the year (2013) was (0.133), while the ratio witnessed a significant decrease in the years (2014 and 2015) reaching (0.095, 0.021) respectively due to a decline in the bank's profit margin as a result of its increasing expenses ⁽¹⁾. In the year (2016), the ratio increased to (0.071) due to a 8% increase in the bank's profits from the paid-up capital ⁽²⁾. The ratio decreased in the years (2017-2019) respectively, becoming (0.022, 0.015, 0.266) due to a decrease in the bank's revenues leading to a decrease in its profits ⁽³⁾. In the years (2020, 2021), the ratio gradually increased slightly, reaching (0.072-0.096) due to achieving a high net profit ratio (176.8%) and a decrease in operating expenses ⁽⁴⁾. In 2022, the ratio increased significantly to (0.152) as a result of the growth in net commission revenues and net interest income by (56%) and (18%) respectively ⁽⁵⁾.

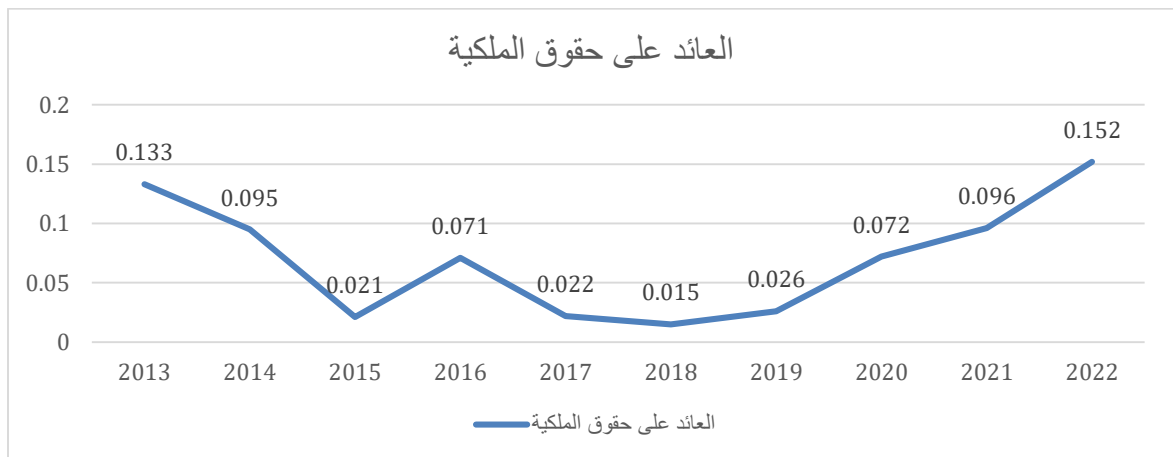


Figure 3. Shows the evolution of the return on equity ratio for Bank of Baghdad for the period (2013-2022).

Source: Prepared by the researcher based on Table (3).

Third Section: Discussion and Analysis of the Survey Form

First: Study Tool

Due to the nature of the subject and the methodology followed in the study, it was found that the best way to collect the necessary data to determine the role of financial analysis tools in rationalizing decision-making in Iraqi commercial banks is through a questionnaire. The questionnaire consists of two axes:

The first axis: includes personal information about the individuals in the study sample such as gender, specialization, etc.

The second axis: comprised of 19 questions related to the sample individuals' responses about financial analysis, its tools, and its impact on rationalizing financial decision-making in the study sample banks.

Secondly: Questionnaire design: The pentagonal Likert scale was used to measure the questionnaire form according to the following table

Table 6. Likert pentagonal scale degrees.

Response	Strongly agree	Agree	Neutral	I disagree	I strongly disagree
Score	5	4	3	2	1

Source: Mahfouz Jouda, *Basic Statistical Analysis using SPSS*, Wael Publishing House, Amman, 2008, p. 23.

Thirdly: Questionnaire Stability

The stability of the questionnaire means that it gives the same result if redistributed more than once under the same conditions, which refers to the stability of the questionnaire results and their consistency if redistributed to sample individuals multiple times within the same time period. The stability of the questionnaire was verified by using Cronbach's alpha coefficient as shown in Table (7).

Table 7. Cronbach's alpha coefficient for measuring the stability of the questionnaire.

Variable	Stability coefficient (Cronbach's Alpha)	The truth *
All survey questions, totaling 19 questions	0.894	0.94

Note: *Reliability is the square root of Cronbach's alpha coefficient.

SPSS Source: Researcher's tally based on program outputs.

From Table (7), it can be observed that the Cronbach's alpha coefficient for the questionnaire as a whole was (0.89), which is high and statistically acceptable, indicating a high degree of questionnaire stability. As for the validity measure, which is the square root of Cronbach's alpha coefficient, its value was (0.94), which is a high percentage, confirming the researcher's confidence in the validity and stability of the questionnaire.

Table 8. Arithmetic Means, Standard Deviations, and Significance Level of Sample Individuals' Responses to Survey Questions.

Phrases	Mean	Standard deviation	Test t	Level of significance sig
1 The bank uses financial analysis in making financing decisions.	0.00	30.74	0.75	4.44
2 The mutual trust between the board members and stakeholders is closely related to the development and improvement of performance indicators in the institution.	0.00	40.16	0.57	4.48
3 The institution maintains a tangible competitive advantage as a result of implementing rules and strategic objectives that ensure its position in the financial market.	0.00	36.23	0.64	4.48
4 Financial performance standards and indicators increase the confidence of market participants, which is reflected in the organization's stock and considered an attractive tool.	0.00	46.85	0.52	4.74
5 The application of financial performance indicators positively impacts the institution's performance by streamlining financial decisions.	0.00	40.49	0.57	4.51
6 Efforts are being made to develop mechanisms for involving all employees at various levels and their collaboration contributes to improving the institution's financial performance.	0.00	31.93	0.74	4.59
7 The institution seeks to organize regular meetings between employees and senior management to gather opinions on work performance methods and their suggestions for improvement.	0.00	30.74	0.75	4.44

8	The general objectives of the institution are reflected in decision-making by rationalizing and activating financial decisions and improving overall performance.	0.00	36.23	0.64	4.48
9	Your bank relies on sound and well-thought-out plans in making its financial decisions.	0.00	24.60	0.93	4.40
10	The decision-maker seeks to determine the relationship between efficiency, effectiveness, and the performance of the board of directors by achieving the institution's general objectives.	0.00	36.05	0.64	4.44
11	The effectiveness of financial funding is evaluated by achieving the institution's goals and rationalizing financial decisions.	0.00	28.73	0.79	4.40
12	There is a written code of ethics in the institution that specifies the decision-making process and the personal ethics of managers.	0.00	39.10	0.62	4.66
13	Contributing to the optimal use of available resources and utilizing them within the effectiveness of decisions made, and contributing to choosing the optimal alternative and evaluating financial decisions and rationalizing them.	0.00	30.64	0.74	4.40
14	Implementing decisions can help avoid financial risks, contributing to identifying and rationalizing appropriate financial decisions for the institution.	0.00	30.83	0.72	4.29
15	Decision-makers in the institution work to improve its performance by making sound and healthy financial decisions, gaining the trust of stakeholders.	0.00	33.00	0.69	4.40
16	Financial analysis, through its various tools, helps provide the necessary information for making financial decisions in commercial banks.	0.00	40.16	0.57	4.48
17	Identifying financing-related risks can be achieved by relying on financial analysis tools.	0.00	40.49	0.57	4.51
18	Commercial banks use financial analysis tools to assess the liquidity of the institution seeking financing, thereby determining its ability to meet its obligations.	0.00	33.91	0.69	4.55
19	The bank uses financial analysis tools to streamline financing decisions.	0.00	40.16	0.57	4.48
	Total	4.48	0.39	59.46	0.00

Source: Prepared by the researcher based on the outputs of the SPSS program.

Fourthly: Descriptive Statistics Results

From Table (16), we notice that the arithmetic mean for all survey items ranged from (4.29 to 4.74), with the lowest arithmetic mean for the statement "Implementing decisions can prevent financial risks, contributing to identifying and rationalizing appropriate financial decisions for the institution" at a mean of (4.29), and the highest arithmetic mean for the statement "Financial performance standards and indicators increase market confidence, reflecting on the organization's share and being an attractive tool" at a mean of (4.74). The overall arithmetic mean for all items was (4.48), indicating that they all belong to the strongly agree category, showing the significant role of financial analysis tools in rationalizing financing decisions in these banks.

The standard deviation, which indicates the extent of dispersion of sample responses from the mean, was 0.39 for all sample responses, which is a very low percentage, indicating that the responses were very consistent. The significance level (sig) was less than 1% for all sample responses, meaning that the confidence level for the responses was high.

As for the t-test for questionnaire statements, they ranged from 24.60 to 46.85, all at a significance level of 0.05 or less. The overall average value of t was 59.46, indicating that most responses were high and strongly agreeable.

CONCLUSIONS

Iraqi commercial banks rely on financial analysis in making financing decisions because it plays a crucial role in guiding bank decisions. It helps them understand the current financial situation and future expectations, enabling them to make informed decisions regarding lending, risk management, and overall financial performance improvement.

Iraqi commercial banks use financial ratios to evaluate their financial performance and make sound financing decisions, as it enables them to identify potential risks and make economic and financial decisions based on accurate data analysis.

Financial ratios play a crucial role in making financial decisions for banks as they provide a comprehensive picture of the bank's financial performance and help analyze strengths and weaknesses. For example, they help in determining the bank's ability to withstand financial risks and predict its ability to achieve future returns.

RECOMMENDATIONS

It is essential to rely on financial analysis when making financing decisions and not focus on tangible and cash guarantees.

The necessity of increasing focus on financial analysis through continuous training and development of credit employees by involving them in specialized courses in financial analysis.

The importance of paying attention to all financial ratios that impact financial decision-making and not focusing on a specific type.

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