

The Impact of Interest Rate Fluctuations on Banks' Financial Performance: An Applied Study of the Commercial Bank of Iraq and the Middle East Bank for the Period (2020-2023)

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ABSTRACT

The issue of interest has been and is a point of difference between economists since ancient times, through interest rates, the monetary policy tools of the Central Bank of the State can be implemented in order to reach the economic goals set by the economic policy of any country, and with the emergence of banks, which are considered the lifeblood of the economy and the main cell of the growth and engine of the national economy, because they preserve the country's money. In order to move them, develop them and facilitate their trading, the interest rate has become the immune system of commercial banks because of its great impact on the imports and expenses of these banks through the interest rates debited and credited applied to their activities and the gap between them, and within this framework, the researcher aimed to study the extent of the contribution of interest rate fluctuations on the profitability of the Commercial Bank, by applying it to the Iraqi Commercial Bank and the Middle East Bank during the period 2020-2023 because credit and debit interest constitute a large percentage of the bank's revenues and expenses, by presenting the size of the bank's revenues and expenses and the extent to which they are affected by the interest rates imposed by the Central Bank, and the hypothesis of the study was "The profitability of the bank is affected by the fluctuations of interest rates, and the conclusions of the research concluded a set of results, most notably that the profitability of commercial banks consists mostly of the prices of the banks. Interest which expresses the difference between the interest payable on the granted facility and the interest debit paid on the deposits.

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Introduction

The evaluation of the financial performance of banks is of particular importance in all countries and economic systems, due to the increasing interest in economic and financial resources compared to the great needs of them, so it is considered one of the most important challenges faced by bank managers is how to use the financial resources available to them optimally, and the main goal of analyzing and evaluating the financial performance in banks is to provide financial information to all parties interested in the bank's activity to identify its strengths and weaknesses, and for this reason, financial indicators have been one of the most common analysis tools used in evaluating the financial performance of all organizations, and this can be done by comparing the financial indicators during a specific period of time or comparing the average of financial indicators, as well as evaluating the financial performance in the banking sector is very important because it helps the management in rationalizing its plans and drawing up its policy to make the best decisions, as well as knowing the positions of power in it and emphasizing them to strengthen them. Knowing the weaknesses and deviations in them

to work to correct them or work to reduce them, all of which will contribute to improving the level of the bank's financial performance and enhancing its competitiveness, considering that banks represent an important sector in the Iraqi economy, play an important role in supporting and developing it, and a safer intermediary between savers and investors in terms of depositing and reinvesting funds optimally.

The researcher believes that it is necessary to evaluate the performance of banks because the process of performance evaluation is considered essential to determine their skill in managing their assets and liabilities optimally and to show their ability to improve and develop the quality of their work and the quality of the services they provide, in addition to developing future plans to advance the banking business to the required and satisfactory level in line with economic and technical progress, and the evaluation of performance through financial indicators gives a real picture of the financial position of banks. In the diversity and multiplicity of banking operations and services, banks had to pay attention to the subject of financial analysis, which studies, analyzes and interprets the financial statements, a detailed analytical study that provides the necessary standards and indicators for the general administration that helps them in planning, organizing and controlling various aspects of banking activity. The importance of financial analysis has increased in recent times and the prospects of using its tools have developed in addition to the development of its methods because it is based on the evaluation of the financial performance of banks at the present time and prevents falling into the risk of bankruptcy, and represents one of the most important supervisory and planning means that are resorted to in order to evaluate the performance of banking institutions.

Study Methodology

First: The research problem

Risk in general is one of the main issues addressed in financial studies related to banking activities. Therefore, it is necessary to address the subject of risk, whether by emphasizing it or referring to its importance in all decisions taken by financial institutions that affect the growth and stability of operations, and based on the importance of the role played by interest rates in commercial banks, as net interest income constitutes the largest percentage of their profits, it exposes the bank to the risks of its change, and in light of this, the research problem can be formulated through questions The following:

1. Does interest rate risk affect financial performance?
2. What is the extent of the risks facing the bank as a result of changes in the interest rate?
3. Does interest rate risk affect the profitability of the Commercial Bank and what are the appropriate treatments to face the current and expected changes in interest rates?

Second: The Importance of Research

The interest rate has a great impact on commercial banks, as its fluctuation and change exposes the bank to the risks of the interest rate that threaten its profitability, and since private banks are exposed to these risks, it is necessary to study the impact of interest rate changes on the profitability of these banks, and the importance of research can be determined in the following points:

1. Commercial banks are exposed to the impact of the interest rate in its various aspects of its activity, which changes and fluctuates, which exposes it to risks that must be identified, measured and managed
2. Studying the impact of interest rate risk changes on the commercial bank's revenues.
3. Studying the impact of interest rate risk changes on the expenses of the Commercial Bank.
4. Studying the impact of changes in net interest income on profitability in the Commercial Bank.

Third: Research Objectives

The objectives of the research are as follows:

1. Definition of the concept of interest rate and its risks.
2. Define the concept of profitability of commercial banks and the variables affecting them.
3. Statement of the relationship between both interest receivable and bank expenses The study examines the relationship between net interest income and gross operating income and net profit.
4. Clarifying the role in which banking departments are able to define an appropriate view of assets and liabilities and through which they can face risks and choose modern methods to address the risks of interest rate changes and exposure to them with the least possible losses.
5. The interest rate has a great impact on commercial banks, as its change and fluctuation can threaten the bank's profitability. Therefore, it has become imperative for banks to study the impact of these changes on the bank's profitability

Fourth: Research Hypothesis

- 1- The value of the bank is affected by changes in interest rates
- 2- Assets and liabilities can be protected against interest rate changes by managing interest rate risk

Fifth: Research Sample

The research sample represents the Commercial Bank of Iraq and the Middle East Bank, which represent part of the private banking sector in Iraq.

Sixth: The study population:

This community was selected because it provides the appropriate banking environment to test the impact of interest rate fluctuations on financial performance in commercial banks, and from this community, two banks (Iraqi Commercial and Middle East) were selected, and these banks identified these banks as a sample for the study, and with regard to the duration of the study, it was limited to four years and for a period of 48 months from (2020-2023) according to the available monthly reports. For the banks of the study sample.

Seventh: Research Methodology

In order to achieve the objectives of the research, the researcher followed the descriptive-analytical method through:

1. Relying on books, periodicals, researches, previous studies, and university theses in order to collect information on the interest rate, commercial banks, and points related to the research, in order to develop the theoretical framework for the research.
2. Relying on the financial statements of the Commercial Bank, analyzing the sample of the study, and collecting the data from them that we need in the analytical study.
3. Using mathematical methods in a way that serves the research objectives.

Eighth : Research Tools

- 1- In the theoretical aspect, the researcher used books, foreign studies, researches, and university theses related to the subject of study.

- 2- In the practical aspect, the researcher relied on the annual financial statements published by the bank of the study sample (private banks) during the study period (2020-2023) and for a period of 48 months to study the impact of fluctuations in interest rates and their impact on the financial performance of the banks

Ninth: Analysis Indicators

The study focused on the use of a set of indicators and models related to the research topic, which are as follows:

1. Interest Rate Risk Indicators

- A. Gap = Total Interest Rate Sensitive Assets – Total Interest Rate Sensitive Liabilities
- B. Relative Gap = Total Gap/Total Assets
- C. Gap sensitivity ratio = total interest rate sensitive assets / total interest rate sensitive liabilities
- D. Net Interest Margin = Net Interest Income / Total Profitable Assets

2. Financial Performance Indicators

There are many of the most important indicators that were used in the study according to the available data in the annual reports of the banks in the study sample.

- A. Return on Assets (ROA) = Net Income/Total Assets
- B. Return on Equity (ROE) = Net Income/Equity
- C. Return on Deposits = Net Income/Deposits
- D. Net Income Margin = Net Income/Revenue

Topic Two: Managing Interest Rate Risk Techniques and Their Impact on the Bank's Financial Performance

I. The Concept of Interest Rate Risk

Introduction

Interest rate risk is a natural part of the banking business and can be an important source of profitability and value for shareholders' equity, however, excessive interest rate risk can pose a significant risk to the bank's profits and capital base, the reverse fluctuations in the prevailing interest rate in the market constitute the most important risk that can threaten the bank and contribute to a significant reduction in its returns. This type of risk is of utmost importance, especially in light of the complexity of the capital markets as well as the countries that have liberalized interest rates in their markets (Hanafi, 2007: 196). The interest rate is a variable of the external environment of banks because a single bank in a multi-bank financial system cannot affect the interest rate, so the bank is exposed to the risk of changing it. These risks generally occur in two forms:

First: Unexpected changes in the interest rate lead to a decrease in the market value of the investment portfolio. Second: Unexpected changes in the interest rate are reflected on the bank's revenues as a result of their different effects on asset returns and liabilities costs to varying degrees, the slogan adds, explaining that interest rate fluctuations affect the performance of commercial banks regardless of the size of their business on a global scale, however, the existence of foreign currency balances makes managing interest rate risk a work that is associated with more challenges. The strategy of matching the sensitivity of the total assets to the interest rate with the sensitivity of the total liabilities of this price to an automatic reduction of the interest rate risk, and Al-Makawi has defined the risk of the interest rate is the exposure of the financial position as a result of changes in interest rates, which leads to a decline in revenues due to the inconsistency of the pricing deadlines of both liabilities and funds, and

this loss is exacerbated in the absence of the bank's information system that allows it to identify the rates of the cost of liabilities and the rates of return on assets and determine the amount of the gap. between assets and liabilities in terms of pricing management and sensitivity to interest rate variables (Al-Makkawi, 2013: 18).

As for Hammad, he defined interest rate risk as the risk of declining revenues as a result of interest rate movements, and most of the final budget items generate revenues and costs that are linked to interest rates by an index, and since interest rates are unstable, revenues are also unstable, and anyone who advances or borrows is exposed to interest rate risk, the lender who earns a rate is exposed to the risk that revenues will fall with interest rates falling, and the borrower who pays variable interest incurs higher costs when interest rates rise. Both positions are risky because they generate revenues or costs associated with market prices by means of a particular index, while the other side of the process is that they also provide opportunities for profit (Abdel Aal, 2007: 453).

Hindi defined it as "the possibility of future interest rate fluctuations" (Hindi, 2000: 199).

Abdulkarim and Abu Salah talked about the most important risks of the interest rate, which are the difference in maturity dates of loans against the fixed interest rate, and the re-pricing against the variable interest rate of the bank's assets, liabilities and financial positions outside the budget (Abdel Karim and Abu Salah, 2007: 11).

Abu Hamad defined it as interest rate risk as the uncertainty or fluctuation of future interest rates, so if the bank contracts with the customer on a certain interest rate and then the prevailing interest rates in the market in general rise, the interest rate on loans that carries the same degree of risk as the agreed loan, means that the bank has been involved in an investment that generates a return that is lower than the current prevailing return in the market (Abu Hamad, 2002: 225). From the above, interest rate risk can be defined as: the risks resulting from interest rate fluctuations that may have a negative impact on the bank's revenues and capital, as banks face these risks from the perspective of being a financial intermediary, and therefore interest rate risks may pose a significant threat to the bank's profits and capital, which requires the bank to manage interest rate risks by maintaining acceptable levels of risk for the bank.

Second: Interest Rate Risk Management Techniques

Banks today seek to explain the concept of cash flows because time is an important factor and to work to achieve protection from interest rate risk and avoid loss of value, and in addition, these technologies have many possibilities in the field of investment and financing, which reflects their importance to institutions. Finance in general and banks in particular.

Concept of Technologies Gap analysis is one of the preferred methods for managing interest rate risk, and the gap refers to the difference between interest rate-sensitive assets and interest rate-sensitive liabilities over specific periods of time, if the liabilities are greater than the assets, the increase in interest rates will decrease the bank's profits and vice versa (CASU, 2006:263), gap analysis is a tool to manage interest rate risk based on its budget, and this tool focuses on the various fluctuations of interest rates during specific periods, where the focus is on managing net income. of interest (net interest margin) where assets and liabilities are distributed into aggregates according to their maturities (CASU, 2006:264)

Gap is defined as an alternative way of measuring interest rate risk, where the sensitivity of the market value of a financial institution's net worth to changes in interest rates is tested, as this technique focuses on the amount of market value of assets and liabilities that change when the interest rate changes (Hyderabad, 2013:13).

The gap analysis includes (Sironi, 2008:13)

1. Estimating the Interest Rate Forecast
2. Estimating the market value of the Bank's assets and liabilities
3. Estimation of the weighted term of assets and the weighted duration of liabilities

4. Impact both in-budget and off-budget items and use these estimates to calculate the tenure gap
5. Anticipate changes in market value and change in interest rate

Gap analysis is one of the preferred methods of interest rate management, where the impact of changes in interest rates on the bank's interest income and the net interest margin is ideally evaluated, so banks should focus on these important changes that affect the bank's profitability. Assets and liabilities that are revalued as interest-rate-sensitive assets and liabilities and the value of the gap are called equal to the difference between the assets and liabilities as shown below

(Casu, 2006: 263) (Khan, 2003: 47).

$GAP = RSA - RSL \dots\dots\dots (1)$

$GAP = RSA - RSL \dots\dots\dots (2)$

interest Sensitivity Ratio = $RSA / RSL \dots\dots\dots (3)$

GAP = Gap

RSA = Interest Rate Sensitive Assets

RSL = Interest Rate Sensitive Liabilities

A = Interest Rate Sensitive Assets

L = Interest Rate Sensitive Liabilities

W = Weight

Third: Financial Performance

1- The Concept of Financial Performance

The issue of financial performance is of great importance for financial institutions, especially in recent times due to the rapid changes in the world and the bankruptcy of many large financial institutions, and the performance evaluation in banks aims to measure the efficiency of the use of the financial resources available to them, and the performance evaluation varies from one bank to another and according to the purpose of the evaluation and the quality of the beneficiaries of the This evaluation, where depositors focus on liquidity and shareholders on profitability, and this is what makes the subject of evaluating the financial performance of banks increasing more and more important, and it is defined as a diagnosis of the financial health of the institution to know the extent of its ability to create added value and prepare for the future by relying on the financial budget, the table of accounts, results, as well as the rest of the financial statements, but there is no point in This assessment is not taken into account the economic aspect and the industrial sector to which this institution belongs (Moncef Sharafi, Amerouch Beschlaghem, 2020: 186).

It is also defined as the core of financial management, which is the pillar of any institution, regardless of its nature and degree of growth, as it contributes to its continuity as a result of its connection to the decision-making process related to obtaining funds optimally and investing them efficiently and in a way that ensures maximizing the market value of the company, and this contributes to achieving the company's ultimate goal, which is survival and continuity (Merabet Zeinab, Mashri Hasnaa, 2021: 2). Financial performance is defined as the ability of an institution to achieve its financial objectives at the lowest possible cost, i.e., achieving financial balance and providing liquidity to pay its obligations and achieve a good return at the lowest cost. Hence, we note that financial performance is represented in the bank's ability to reduce its costs and increase revenues in order to meet its obligations. Masoudi, 2015: 23). Financial performance is what has been accomplished based on business standards in terms of strategic plans and objectives, which are based on performance strategies at all levels in order to achieve the strategic objectives of the financial institution (Al-Mutairi, 2011: 11). Financial performance is defined as measuring the relationship between the elements of the financial position such as assets and liabilities, shareholders' equity/operational activity to determine the

strength of the financial position of the financial institution, as the process of evaluating financial performance provides a measure of the bank's success and achieving efficiency, effectiveness, and the ability to survive and continue (Al-Hassan, 2018: 7)

Based on the above, the measurement and evaluation of financial performance by the bank allows it to identify the error as well as search for the way or how to address it, in addition to drawing up appropriate policies to raise and improve the level of financial performance, and on the contrary, in the event of non-practice of evaluation within the bank, especially in light of the developments and prevailing conditions in the economy, competition, fluctuations and crises surrounding the institutions, performance appraisal is a policy to hedge against falling into a mistake that may lead to bankruptcy And collapse.

2- The Importance of Performance Evaluation

The performance appraisal process is one of the important links in the comprehensive administrative process, which relies on the use of a set of indicators and measures to examine the extent to which the economic unit achieves its set goals, and to identify deviations, which is the process of determining the degree of application of a number of performance and management standards to a person or a group of people through a systematic scientific system that includes the development of scientific foundations and rules. The outcome of this process is the general strategic framework and long-term goals, which reflect the future direction of the institution, and the process of evaluating performance in banking activity requires adherence to the effectiveness and efficiency of performance together, because the pursuit of profits in banks and increasing them needs to evaluate efficiency, while achieving liquidity goals and other goals related to the work of The banking needs to evaluate the effectiveness: That is, the performance evaluation process seeks to develop the banking sector to become parallel and at the forefront of advanced banks, by improving the quality and quality of the services provided on the one hand, and raising the confidence of its customers to achieve the best financial resources for them and the least burdens and obligations incurred on them on the other hand, performance evaluation is the measurement to ensure that the bank's financial performance meets the specified performance standards, and evaluation is a very important requirement In order for the organization to achieve its goals based on the set criteria, it is a periodic process that aims to measure the strengths and weaknesses in order to achieve a specific goal that the organization has planned in advance (Al-Salem and Saleh, 2003: 102).

Almost every company is interested in performance appraisal and this is done through certain methods, with the aim of identifying the financial efficiency of the organization and in order to identify the aspects of development in performance, and the performance evaluation provides information about the level of performance and is the basis of the planning process because the information generated from the performance evaluation gives indicators about the efficiency of the company's work and knowing its future needs (Aqili, 2005: 376).

Performance evaluation is also defined as a set of procedures and controls by which the results achieved of the financial activity are compared with its set objectives for the purpose of knowing the extent of the compatibility of those results with the specific objectives to estimate the level of effectiveness of the financial performance of banks, and it also compares the elements of the activity inputs with its outputs to ensure that the performance of the banking activity has been done with a high degree of efficiency, and this definition contributes to clarifying two important explanations, namely (Al-Amin, 2005 :163)

The first is related to measuring the extent to which the organization's planned or determined goals are achieved, and is known as the evaluation of performance effectiveness. Second: It relates to the appropriateness and efficiency of the methods developed to achieve these goals, and is known as performance efficiency assessment.

The concept of performance evaluation at the level of banking institutions, including commercial banks, is not much different from other business organizations such as productive organizations and service organizations, as performance indicators are close to measuring performance, and we often find that banking writers define banking performance according to this framework (it is the necessary means, different aspects of activity, and the efforts exerted for banks to perform their role to carry out their functions in light of the environment surrounding them to provide banking services that achieve the goals). Based on this approach, performance evaluation is defined as the evaluation of the valuer using efficiency and effectiveness or any other social factor, so it is possible that the performance of the establishment is good at times and weak at other times, and a clearer concept of performance can be given as an important means of diagnosing weaknesses and strengths in the performance of the bank's activities, and then providing the necessary information to take the right measures to ensure that the bank remains in the competitive market and thus achieve revenues. and profits. (Hello, 2004):245).

3- Financial Performance Indicators

The safety and security of banking operations in commercial banks requires the prior attention of shareholders and their representatives on the boards of directors to the issue of analyzing and evaluating the performance of banks in order to ensure that the bank's strategy developed and implemented by senior management balances risk and return and that risk mitigation measures do not prejudice the necessary protection of shareholders' and depositors' funds alike. Typically, the measurement of banking performance is based on the use of three main sets of financial indicators: The set of profitability indicators, the set of operational efficiency indicators, and the set of economic efficiency indicators, at the macro and micro levels in commercial banks. We will talk only about the Profitability Ratios because they are more representative in measuring the efficiency of banking performance in commercial banks.

Business organizations in general and banks in particular are interested in the most important element or goal through which they seek to reach which is profitability, as it is the basis through which the bank enables to build or develop its competitive strategies to be considered in itself the result of its business and effort from accomplishing its entrusted functions of obtaining and investing amounts and achieving profits, so it is described as the life of the organization as well as other goals, especially if the organization in question is profit-oriented.

Profitability is defined as "the total income achieved by business activities over a certain period of time, and it refers to the strength of the bank to earn profits, and also indicates the strength of its operational and financial performance. On this basis, it is collectively defined as "the ability of a particular instrument to generate a return on its use." (Al-Karwi, 2015:91)

This concept expresses the relationship between the profits achieved by the institutions and the investments that contributed to the achievement of these profits. Profitability is measured through the relationship between profits and the volume of sales, or it is measured through the relationship between profits and investments that achieved these profits, knowing that what is meant by investments here is either the value of assets or the value of the rights of the owners of the institutions. available to it, which it obtained from its multiple and different sources, and the trade-off in its investment between the fields that give the highest return, taking into account the retention of a certain percentage to perceive the risks and protect these institutions from bankruptcy.(Shaykh ,2008, p. 41)

Commercial banks seek to achieve profits, and the goal of profitability is one of the main goals of the bank, and in order for the bank to be able to achieve the goals, it must invest the money in assets that generate appropriate returns such as loans and investments, and the more banks seek to increase their revenues and reduce their costs, this will lead to an increase in their profitability. (Beautiful,2007:122)

Profitability is the main goal that investors aspire to, and this is achieved through two important decisions, namely the investment decision and the financing decision, as the financing decision is related to the selection of the sources from which the necessary funds are obtained to finance the investment in its assets in a way that enables them to obtain the largest possible return without being exposed to risk, while the investment decision is the retained profits come at the forefront of the sources of financing, followed by loans, and then new ones are issued, and therefore it is clear that the institution is heading towards increasing its profitability. (Al-Mahjan, 2012:22).

4- Profitability Indicators

There are many criteria for measuring profitability, as there are many measures that are used in the bank's profitability.

First: Return on Assets (ROA)

It is the ability of the bank to generate profits as a result of the use of its assets in its core activity, and more simply, it is the profit from operations to the assets of the institution. (Abu Zuaier, 2006:22)

"The rate of return on assets enables us to measure the effectiveness of management in using the company's assets, and the extent to which it is able to achieve returns from funds available from various sources of financing and reflects how management can use its real investment resources well and efficiently in generating profits and is measured by this equation (Al-Far, 2018: 22)

$$\text{ROA} = \text{Net Profit/Total Assets}$$

This indicator measures the relationship between the profit of operations and assets, through which it is possible to measure the quantitative efficiency of the management in achieving profits from its total investments in assets, and the high level of this indicator indicates the efficiency of the bank's investment policies. (Al-Hussain, 2016):82)

Second: Return on Ownership

This index is measured on every dinar invested by ordinary shareholders and takes the financing and operational activities together and is influenced by the degree of leverage and the capital structure. Al-Mutairi, 2011:22)

ROE is sometimes called return on net worth and indicates the rate of return on shareholders' investments in the company, and the return on equity is usually measured by dividing the net income by the total shareholders' equity, it measures the efficiency of management in maximizing the return generated from shareholders' funds, in other words, measuring the return on each dinar invested in the ordinary shareholders' funds, increasing the rate of return on equity means increasing the optimal utilization of equity and increasing the profits achieved, and this rate is calculated as Following: (Al-Nasser, 2012:24)

$$\text{ROE} = \text{Net Profit/Equity}$$

The percentage of return per monetary unit of equity can be measured and the higher this return the better because this means that the bank can distribute more dividends to shareholders. (Massoudi, 2015:45).

Third Topic: The Applied Aspect

First: Interest Rate Risk Indicators

Determining the composition of a bank's assets is determined by how profitability affects interest rates, so that if a bank expects interest rates to fall, it allocates most of its funds to the

acquisition of assets that are not much affected by interest rate fluctuations, such as fixed-rate loans, as well as assets that increase in value as interest rates fall. Therefore, the expected decrease in the interest rate leads to a decrease in the cost of money and the result leads to a higher return.

1- The Gap

The gap is one of the most commonly used measures to indicate the sensitivity of the bank's balance sheet items to changes in interest rates, and it is called the sensitivity gap or interest rate sensitivity gap, and represents the difference between interest-rate-sensitive assets and interest-rate-sensitive liabilities.

Table (3-1) Commercial Bank's Interest Rate Gap from 2020-2023 for a period of 48 months

The month	2020	2021	2022	2023	Total
January	191,981,195,793	195,981,195,793	280,959,567,987	285,959,567,036	954,881,526,609
February	193,961,196,493	195,961,876,493	214,239,230,876	222,239,230,229	826,401,534,091
March	194,971,196,193	192,971,345,193	272,959,466,036	281,959,567,036	942,861,574,458
April	194,981,196,293	194,981,123,293	214,250,433,229	221,239,230,229	825,451,983,044
May	190,986,196,793	197,986,165,793	272,959,765,036	285,959,567,036	947, 891, 694, 658
June	191,781,196,955	190,781,200,955	210,239,230,777	219,239,230,229	812,040,858,916
July	192,681,196,983	192,681,156,983	267,959,567,934	284,959,567,036	938,281,488,936
August	195,981,196,963	197,981,186,963	217,239,238,729	218,600,230,229	829,801,852,884
September	193,981,196,121	192,981,196,133	272,959,567,436	287,959,567,987	947,881,527,677
October	194,981,196,432	194,981,196,432	216,239,230,269	215,343,230,229	821,544,853,362
November	190,981,196,765	197,981,196,665	292,959,567,036	280,959,567,212	962,881,527,678
December	191,981,196,543	195,981,196,843	220,239,230,279	282,239,200,229	890,440,823,894
Medium	193,270,779,860.58	199,405,736,756.17	246,854,103,028.58	250,554,475,305.42	890,085,094,950.75

The table prepared by the researcher based on the SPSS program

Table (3-2) Middle East Bank's interest rate gap from 2020-2023 for a period of 48 months

The month	2020	2021	2022	2023	Total
January	192,941,265,794	95,981,195,793	205,981,195,793	282,959,567,036	877,863,224,416
February	194,941,177,593	95,961,876,493	208,961,876,493	213,239,230,229	813,104,160,808
March	192,971,156,1793	92,971,345,193	209,971,345,193	282,959,567,036	878,873,603,215
April	195,9681,196,283	94,981,123,293	211,981,123,293	213,239,230,229	816,169,673,098
May	197,976,176,784	97,986,165,793	212,986,165,793	282,959,567,036	891,908,075,406
June	194,781,196,856	90,781,200,955	2115,781,200,955	213,239,230,229	2,714,582,828,995
July	193,681,199,984	92,671,156,9983	220,681,156,983	283,859,587,026	890,893,100,976
August	194,881,196,9687	97,95,186,933	121,981,186,963	213,239,250,219	728,052,821,102
September	196,9781,196,154	96,981,196,133	222,981,196,133	281,969,567,046	898,913,155,466
October	197,981,196,732	93,981,196,432	222,981,196,432	216,249,220,219	831,192,809,815
November	196,981,196,465	90,981,196,665	223,981,196,665	282,959,557,046	894,903,146,841
December	195,931,196,983	91,981,196,843	224,981,196,843	217,279,230,329	830,172,820,998
Medium	195,502,446,117.33	94,434,169,792.42	366,937,503,128	248,679,400,307	1,005,553,519,344.75

It is clear from Table (3-1) that the interest gap was positive for both banks, i.e. they have interest rate sensitive assets that are greater than interest rate sensitive liabilities, i.e. the value of the gap is greater than zero and the gap ratio is greater than one. Despite the superiority of the Commercial Bank as a whole compared to the Middle East Bank for both of the two years studied. The same is true at the level of the general average and the average for both years, and in itself, it is considered a positive indicator for Commercial Bank if compared to the Middle East, but it is the most risky in terms of interest rates, which have changed up or down for both parties (interest-sensitive assets and liabilities).

2- Relative Gap

This index is calculated by dividing the gap by the total assets and by the following equation

$$\text{Relative Gap} = \frac{\text{IS Gap}}{\text{total assets}}$$

Table (3-3) shows the relative gap of the Commercial Bank for the period 2020-2023

The month	2020	2021	2022	2023	Total
January	0.40	0.55	0.60	0.46	2.01
February	0.43	0.58	0.61	0.47	2.09
March	0.44	0.59	0.61	0.49	2.13
April	0.42	0.48	0.59	0.50	1.99
May	0.48	0.59	0.58	0.52	2.17
June	0.43	0.50	0.57	0.54	2.04
July	0.56	0.58	0.59	0.55	2.28
August	0.46	0.57	0.58	0.57	2.18
September	0.49	0.60	0.61	0.58	2.28
October	0.45	0.61	0.60	0.59	2.25
November	0.46	0.62	0.58	0.60	2.26
December	0.50	0.60	0.59	0.63	2.32
Medium	0.46	0.573	0.593	0.542	1.755

The table prepared by the researcher based on the SPSS program

Table (3-4) shows the relative gap of Middle East Bank for the period 2020-2023 for a period of 48 months

The month	2020	2021	2022	2023	Total
January	0.19	0.25	0.20	0.11	0.75
February	0.21	0.27	0.22	0.13	0.83
March	0.23	0.26	0.24	0.15	0.88
April	0.19	0.27	0.25	0.17	0.88
May	0.18	0.23	0.24	0.19	0.84
June	0.22	0.22	0.25	0.20	0.89
July	0.23	0.24	0.27	0.21	0.95
August	0.21	0.20	0.29	0.24	0.94
September	0.20	0.23	0.28	0.22	0.93
October	0.19	0.26	0.25	0.26	0.96
November	0.21	0.25	0.25	0.28	0.99
December	0.22	0.23	0.27	0.30	1.02
Medium	2.48	2.92	3.01	2.46	

The table prepared by the researcher based on the SPSS program

This index is calculated by dividing the gap by the total assets, and it is clear from Table (3-3) that the relative gap was positive for both banks because of its dependence on the previous index, which means that they have interest rate-sensitive assets that are greater than the interest rate-sensitive liabilities, i.e. the value of the gap is greater than zero. Despite the fact that Commercial Bank excelled significantly as an average compared to the Middle East Bank for

both of the two years researched, and by a large margin, and the reason for this was in 2022, when the difference was very large from The other bank, which greatly affected the average for this year for both banks and the total compared to the Middle East Bank, despite the increase in this index in 2023 compared to Commercial Bank.

3- Interest sensitivity gap ratio

It is calculated by the following equation:

$$\text{Interest-Sensitivity Ratio} = \frac{\text{Interest-Sensitive Assets}}{\text{Interest-Sensitive Liabilities}}$$

Table (3-4) shows the gap percentage of Al-Tijari Bank for the period 2020-2023 for a period of 48 months

The month	2020	2021	2022	2023	Total
January	1.6	2.14	2.25	2.43	8.42
February	1.9	2.18	2.30	2.45	8.83
March	1.10	2.22	2.32	2.47	8.11
April	1.11	2.24	2.35	2.49	8.19
May	1.13	2.28	2.38	2.51	8.30
June	1.15	2.22	2.41	2.53	8.31
July	1.6	1.10	2.31	1.40	6.41
August	1.8	1.15	2.33	2.54	7.82
September	1.10	1.18	2.36	2.56	7.20
October	1.11	1.22	2.38	2.67	7.38
November	1.13	1.26	2.39	2.69	7.47
December	1.16	1.29	2.41	0.71	5.57
Medium	1.324	1.707	2.349	2.288	7.668

Source: Prepared by the researcher based on the SPSS program

The month	2020	2021	2022	2023	Total
January	2.7	2.12	2.24	2.42	9.48
February	2.11	2.16	2.28	2.43	8.98
March	2.13	2.21	2.30	2.45	9.09
April	2.16	2.23	2.32	2.47	9.18
May	2.18	2.26	2.36	2.49	9.29
June	2.20	2.24	2.39	2.51	9.34
July	1.21	1.14	1.30	1.38	5.03
August	1.23	1.18	1.32	1.41	5.14
September	1.25	1.20	1.34	1.43	5.22
October	1.16	1.27	1.36	1.46	5.25
November	1.18	1.29	1.37	1.49	.33
December	1.122	1.31	1.49	1.52	5.442

Medium	1.719	1.7175	1.839	1.955	7.2305
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Source: Prepared by the researcher based on the SPSS program

Table (3-4) shows the relative gap of Middle East Bank for the period 2020-2023 for a period of 48 months

It is an asset that is sensitive to the interest rate on interest rate sensitive liabilities, and this ratio reflects the risk that the bank bears based on forecasts of future interest rate trends, with a preference of a higher than one percentage, as it leads to an increase in the bank's returns, especially if the interest rate risks increase, and vice versa. It is clear from Table (3-1) that the interest gap was positive for both banks, as well as the value of the gap was greater than zero, with a clear superiority of Commercial Bank as an average compared to the Middle East Bank for both years researched, and by a relatively large difference, especially in 2023, where the average was more than (2) compared to the previous year, which greatly affected the average for this year for both banks and the general average.

4- Net Interest Margin

The net interest margin is the difference between the interest earned on the assets and the interest paid (expense) on liabilities.

$$\text{NIM} = \frac{\text{Net interest income}}{\text{Total earning assets}}$$

Table (3-4) Net Interest Margin of Commercial Bank

The month	2020	2021	2022	2023	Total
January	0.02	0.05	0.02	0.06	0.15
February	0.01	0.07	0.01	0.09	0.18
March	0.03	0.06	0.05	0.11	0.25
April	0.03	0.04	0.10	0.13	0.3
May	0.01	0.03	0.09	0.19	0.32
June	0.04	0.06	0.09	0.10	0.29
July	0.03	0.07	0.08	0.13	0.31
August	0.01	0.07	0.07	0.15	0.3
September	0.02	0.09	0.06	0.19	0.36
October	0.05	0.03	0.05	0.11	0.24
November	0.04	0.07	0.08	0.10	0.29
December	0.02	0.09	0.04	0.18	0.33
Medium	2.58	6.08	6.16	12.83	27.65

the table prepared by the researcher based on the SPSS program

Table (3-4) Net Interest Margin of Middle East Bank

The month	2020	2021	2022	2023	Total
January	0.04	0.01	0.01	0.02	0.08
February	0.02	0.02	0.05	0.08	0.17
March	0.01	0.06	0.05	0.09	0.21
April	0.06	0.02	0.02	0.04	0.14

May	0.03	0.03	0.09	0.09	0.24
June	0.02	0.07	0.02	0.10	0.21
July	0.01	0.04	0.07	0.03	0.15
August	0.02	0,05	0.03	0.01	0.11
September	0.05	0.07	0.05	0.02	0.19
October	0.06	0.04	0.05	0.09	0.24
November	0.02	0.06	0.08	0.10	0.26
December	0.01	0.08	0.04	0.11	0.24
Medium	0.0292	0.0453	0.0475	0.0667	0.1887

The table prepared by the researcher based on the SPSS program

It is clear from Table (3-4) that the net interest margin, which is calculated by dividing the net current operations by the total loans and investments, as we find that both banks have a relatively equal margin at the average level, despite their differences at the level of the two years between the rise of one year and the other and a relatively small difference, but the year 2022 at the level of the two banks is better than 2023 and by a relatively large difference, which affected the average of this year for both banks and the general average.

Second: Profitability Indicators

Banking performance is usually measured through major sets of financial indicators and we will talk here only to the set of Profitability Ratios as they are more representative of measuring banking performance.

In the framework of analyzing banking performance indicators at the macro level, the main objective is to maximize the wealth of shareholders, and to achieve this, it is related to the bank's ability to achieve profits by using profitability indicators as one of the most important indicators that reflect the bank's overall performance and its ability to generate returns, which is an important, vital and necessary aspect of commercial banks to continue their work and stay in the banking market.

1- Return on Assets

This ratio has been used in most studies to measure the profitability of banks and is calculated by dividing the net income by the total assets.

$$ROA = \frac{\text{net income}}{\text{total assets}}$$

Table (3-5) Return on Assets of Commercial Bank

The month	2020	2021	2022	2023	
January	0.03	0.01	0.01	0.02	0.07
February	0.02	0.02	0.02	0.03	0.09
March	0.04	0.04	0.03	0.01	0.12
April	0.06	0.02	0.02	0.04	0.14
May	0.02	0.01	0.01	0.04	0.08
June	0.01	0.07	0.02	0.04	0.14

July	0.03	0.02	0.06	0.03	0.14
August	0.05	0,05	0.03	0.01	0.14
September	0.02	0.05	0.02	0.02	0.11
October	0.05	0.04	0.01	0.01	0.11
November	0.04	0.03	0.02	0.14	0.23
December	0.02	0.02	0.05	0.05	0.14
Medium	0.0325	0.0317	0.0250	0.0367	0.1259

Source: Prepared by the researcher based on the SPSS program

Table (3-5) Return on Assets of Middle East Bank

The month	2020	2021	2022	2023	Total
January	0.01	0.03	0.01	0.02	0.07
February	0.02	0.02	0.02	0.05	0.11
March	0.03	0.05	0.03	0.03	0.14
April	0.05	0.02	0.02	0.04	0.13
May	0.02	0.01	0.01	0.05	0.09
June	0.01	0.02	0.02	0.04	0.09
July	0.02	0.02	0.06	0.03	0.13
August	0.04	0.03	0.03	0.01	0.11
September	0.02	0.05	0.02	0.02	0.11
October	0.05	0.04	0.01	0.06	0.16
November	0.03	0.03	0.02	0.04	0.12
December	0.02	0.04	0.05	0.03	0.14
Medium	0.0267	0.0300	0.0250	0.0350	0.1167

The table prepared by the researcher based on the SPSS program

Table (3-5) shows the feasibility of investing in assets to achieve profits, as it shows that the relative decrease of this index at the level of the two years, which means the useless function of the total assets of the two banks, which reflected negatively on these results, as well as the increase in the amount of costs when compared to revenues, contributed to the decrease in this percentage.

2- Return on Title

Return on equity (ROE) is defined as net income over total shareholders' equity. A higher percentage indicates the bank's ability to make investment and operational decisions efficiently.

$$ROE = \frac{\text{net income}}{\text{total equity}}$$

Table (3.6) Return on Title of Commercial Bank

The month	2020	2021	2022	2023	
January	0.02	0.01	0.02	0.04	0.09
February	0.02	0.02	0.02	0.02	0.08
March	0.01	0.03	0.04	0.01	0.09
April	0.05	0.02	0.02	0.04	0.13
May	0.03	0.01	0.01	0.05	0.10
June	0.04	0.03	0.02	0.03	0.12
July	0.02	0.02	0.01	0.04	0.09
August	0.03	0.04	0.04	0.01	0.12
September	0.02	0.05	0.02	0.02	0.11
October	0.01	0.02	0.03	0.06	0.12
November	0.03	0.03	0.02	0.02	0.10
December	0.04	0.05	0.06	0.03	0.18
Medium	0.0267	0.0275	0.0258	0.0308	0.1108

The table prepared by the researcher based on the SPSS program

Table (3-6) Return on Title of Middle East Bank

The month	2020	2021	2022	2023	
January	0.01	0.01	0.02	0.04	0.08
February	0.02	0.02	0.02	0.02	0.08
March	0.05	0.02	0.01	0.01	0.09
April	0.05	0.02	0.02	0.03	0.12
May	0.04	0.01	0.05	0.01	0.11
June	0.04	0.03	0.02	0.03	0.12
July	0.01	0.04	0.02	0.05	0.12
August	0.03	0.04	0.04	0.04	0.15
September	0.01	0.02	0.03	0.02	0.08
October	0.01	0.02	0.03	0.06	0.12
November	0.02	0.05	0.02	0.01	0.10
December	0.03	0.04	0.05	0.01	0.13
Medium	0.0267	0.0267	0.0275	0.0358	0.1434

Source: Prepared by the researcher based on the SPSS program

It is clear from Table (3-6) that an important indicator of profitability is the return on equity, which shows the extent of the contribution of shareholders' equity, whether in retained profits, reserves or paid-up capital to the profits of the two banks, as there was a state of a somewhat large relative superiority of Middle East Bank compared to Al-Tijari with the increase in the percentage of Middle East Bank during the two years studied compared to the relative decline of Al-Tijari Bank, which greatly affected the general average of this index.

3- Return on Deposits

It indicates the bank's ability to obtain funds and is thus a good indicator of successful investment of funds represented by deposits. It is calculated through the following equation

$$OD = \frac{\text{net income}}{\text{total Deposits}}$$

Table (3-7) Return on Deposits of Commercial Bank

The month	2020	2021	2022	2023	Total
January	0.02	0.03	0.01	0.06	0.12
February	0.02	0.01	0.04	0.02	0.09
March	0.01	0.01	0.01	0.07	0.10
April	0.05	0.03	0.03	0.03	0.14
May	0.03	0.04	0.05	0.08	0.20
June	0.02	0.02	0.03	0.03	0.10
July	0.01	0.05	0.02	0.09	0.17
August	0.01	0.02	0.05	0.04	0.12
September	0.02	0.03	0.05	0.07	0.17
October	0.04	0.04	0.01	0.06	0.15
November	0.03	0.01	0.02	0.09	0.15
December	0.04	0.03	0.07	0.07	0.21
Medium	0.025	0.0258	0.0325	0.0592	0.1425

The table prepared by the researcher based on the SPSS program

Table (3-7) Return on Deposits of Middle East Bank

The month	2020	2021	2022	2023	Total
January	0.03	0.03	0.01	0.01	0.08
February	0.02	0.02	0.04	0.02	0.10
March	0.04	0.01	0.01	0.02	0.08
April	0.05	0.02	0.04	0.03	0.14
May	0.05	0.04	0.05	0.04	0.18
June	0.02	0.03	0.01	0.03	0.09
July	0.01	0.05	0.02	0.03	0.11
August	0.02	0.04	0.01	0.04	0.11
September	0.01	0.03	0.05	0.05	0.14
October	0.04	0.02	0.03	0.06	0.15
November	0.02	0.01	0.02	0.08	0.13
December	0.05	0.04	0.07	0.07	0.23
Medium	0.03	0.02	0.03	0.04	0.12

The table prepared by the researcher based on the SPSS program

Table (3-7) shows an important indicator of profitability, which is the return on deposits, which shows the extent of the contribution of deposits as an important financing aspect associated with the interest granted by the bank to its customers in exchange for deposits, whether they are fixed, savings or current deposits (without interest granted) in achieving the profits of the two banks, as there was a state of somewhat great relative superiority for Commercial Bank

compared to the Middle East, with the relative decline of Commercial Bank during the two years under study compared to the relative decline of the Middle East Bank. It has significantly impacted the overall average of this index.

4- Net income margin

This index measures net income realized from total revenue. It also measures the bank's ability to control and control expenses and reduce taxes and is calculated through the following equation

$$\text{NPM} = \frac{\text{net income}}{\text{Total Revenues}}$$

Table (3-8) Net Income Margin of Commercial Bank

The month	2020	2021	2022	2023	Total
January	0.10	0.18	0.27	0.39	0.94
February	0.11	0.20	0.30	0.40	1.01
March	0.14	0.23	0.33	0.43	1.13
April	0.15	0.21	0.35	0.45	1.16
May	0.18	0.19	0.38	0.38	1.13
June	0.20	0.17	0.32	0.37	1.06
July	0.19	0.18	0.31	0.34	1.02
August	0.18	0.20	0.33	0.36	1.07
September	0.20	0.24	0.36	0.38	1.18
October	0.21	0.21	0.37	0.39	1.18
November	0.20	0.23	0.02	0.41	0.86
December	0.19	0.26	0.07	0.43	0.95
Medium	0.171	0.208	0.268	0.411	1.058

The table prepared by the researcher based on the SPSS program

Table (3-8) Net Income Margin of Middle East Bank

The month	2020	2021	2022	2023	Total
January	0.12	0.20	0.28	0.12	0.72
February	0.11	0.22	0.27	0.18	0.78
March	0.19	0.23	0.29	0.22	0.93
April	0.15	0.18	0.16	0.21	0.7
May	0.17	0.19	0.19	0.22	0.77
June	0.20	0.16	0.20	0.24	0.8
July	0.21	0.18	0.21	0.16	0.76
August	0.18	0.21	0.22	0.19	0.8
September	0.22	0.24	0.27	0.20	0.93
October	0.21	0.22	0.28	0.22	0.93
November	0.23	0.23	0.22	0.21	0.89
December	0.19	0.25	0.26	0.24	0.94
Medium	0.1816	0.2091	0.2375	0.2008	0.829

The table prepared by the researcher based on the SPSS program

It is clear from Table (3-8) that another indicator of profitability, which is the margin of net income, which is calculated by dividing the net income by the total revenues, whether revenues from current operations and others, in their details, and knowing the extent of their impact on the corresponding expenses as well as taxes, and the larger the indicator, the better it appears that the bank has the employment and management in reducing costs. In addition, the year 2022 is the best for both banks when compared to 2023, which greatly affected the general average of this index.

Conclusions and Recommendations

Conclusions

1. The analysis shows a state of relative compatibility of the gap indicators for Commercial Bank compared to the Middle East in the two years under review, despite the relative disparity between both during that period, and this is a positive indicator, especially if the risk of interest rates increases and its reflection on the bank's returns.
2. The analysis shows that the profitability indicators were relatively low when compared to the volume of funds and their investments, with a clear superiority of the Commercial Bank compared to the Middle East, and with a relative disparity and decrease during the two years studied for both banks and vice versa.
3. The analysis of the margins shows that despite the superiority of Commercial Bank compared to the Middle East, the volume of money employed in investments and loans is not proportional to the volume of revenues generated by them in relation to the first margin, while the second margin, which is the margin of net income, was relatively high, and this may be due to the decrease in expenses or the diversity of the revenue area of the two banks (especially the Commercial Bank), which affected those results.
4. The results of the analysis of interest rate risk indicators showed that both banks in the study sample achieved a positive gap, which indicates that the interest rate-sensitive assets are greater than the interest rate-sensitive liabilities and this is reflected on the bank's profitability.
5. The value of the assets and liabilities sensitive to the interest rate varies in different periods, and this variation shows a difference in the banks' policy in granting loans and investments, and therefore there is a difference in the extent to which these banks are exposed to interest rate risk.

Recommendations

1. Banking management should pay attention to strategies and methods of managing interest rate risk whenever this reflects positively on their profitability.
2. Because of the great impact that interest rate risk has on the bank's profits, capital, assets and liabilities, it can be a reason for its loss and exit from the banking market, so banks in particular and financial institutions in general should adopt modern methods to face this risk.
3. The necessity for banks to follow an appropriate strategy for assets and liabilities without any impact on the size and profitability of the bank and without a change in the structure of the investment portfolio, and if this happens, they must reconsider their policy, objectives and strategy
4. The necessity of adopting the appropriate strategies and adopting them on the right and sound foundations if they wish to achieve the return that all banks seek and maintain them from all aspects of risk.
5. In particular, banks should make great efforts to face all types of risk, have a comprehensive strategy to manage interest rate risk without affecting the bank's capital, thereby improving profitability and in the long term, and take into account the trade-off between return and risk.

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