The possibility of applying the PATROL model to assess financial performance in Iraqi banks

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Abstract:
The aim of the research is to identify the suitability of a patrol model in evaluating the financial performance of Iraqi banks. The financial reports of five Iraqi commercial banks were approved as a sample for research for the period from 2015 to 2020. The most common financial ratios were adopted for the purpose of measuring the five elements of the model, which are capital adequacy, profitability, credit risk, bankal efficiency and liquidity. The results showed the possibility of using the PATROL model in evaluating the performance of Iraqi banks, as it gave a realistic image of the reality of Iraqi banks in terms of high capital adequacy index and high liquidity, as well as fluctuation in profitability index, not to mention the problems of non-performing loans. The research recommends the adoption of a patrol model by the Central Bank of Iraq instead of the camels model that is currently adopted in evaluating the performance of Iraqi banks, due to the lack of full application of the camels model as shown by the guide to classify Iraqi banks, as the market sensitivity index is not being calculated because the Iraqi economy is an unstable economy and has been exposed to many Changes and shocks are what cause the difficulty of measuring this indicator in light of fluctuating market prices, so the patrol model is more suitable for the Iraqi environment because it is free from the indicator of the sensitivity of change to market prices.
Keywords: Financial performance, patrol model, capital adequacy, profitability, credit risk, bank efficiency

1. Introduction

Business institutions are very interested in the process of evaluating financial performance, as it gives a position on their current level of performance and provides indications of what will happen in the future and indicates the institution's ability to achieve financial and administrative efficiency through the effective use of available resources.

Financial performance plays an important role in making decisions about risk practices, such as the provision of credit or financing in different sectors within a country's economy and can be a relevant indicator of reliability and expected ability to repay debt. Financial analysts use the ratios presented in financial statements to analyze and evaluate the financial performance of banks. Examination of financial reports for banks provides valuable information that is useful to banks, commercial and investment institutions, government and decision makers in banks and this information can be used to determine financial performance, risks, health of banks and forecast future conditions.

At the banking level, financial performance assessment helps provide a complete image of the bank’s performance in terms of liquidity and profitability in light of investment decisions, financing, return, risk and management quality by examining and analyzing the bank’s data in order. To obtain information showing the financial and credit position of the bank, the efficiency of liquidity and monetary investment policies. And the efficiency of the bank’s management, as the rationale for evaluating the bank’s performance is to diagnose the information contained in the financial statements to judge the amount of profits and their sustainability in the future and the ability to pay the interests and debts due and the appropriate profit distribution policy, and then determine the strength of the bank's financial position where financial success or failure is expected for the bank

2. Research methodology

2.1: search problem

The assessment of financial performance is a measure of the extent of the success of the economic unit and provides information for the various administrative levels to take decisions that are in the interest of the bank. On the contrary, the wrong assessment will expose the process of planning, control and decision-making to failure as it is not based on scientific and objective facts. Therefore, the research problem was in the form of the following question.

Is the patrol model considered an appropriate model for evaluating the performance of Iraqi banks in light of the conditions of instability that the country suffers from, leaving its impact on the financial performance of these banks?

2.2: Research objective

The aim of the research is to identify the appropriateness of a patrol model in evaluating the performance of banks operating in an unstable economy such as the Iraqi economy.

2.3: The importance of research

The importance of the research is highlighted by clarifying the most appropriate model in evaluating the performance of Iraqi banks due to the great importance of the performance evaluation process in extrapolating and diagnosing the current reality of the financial activity of companies.

2.4: Research Hypothesis

The research is based on the following hypothesis:

The patrol model is an appropriate model for evaluating the performance of Iraqi commercial banks.

2.5 : Research Sample

The research sample was a number of Iraqi commercial banks, namely the Investment Bank, the Middle East Bank, Baghdad, Sumer, the Gulf, and these banks.

2.6: Methods of data collection

The search data was collected through the financial reports of the selected banks for the period from 2010-2020 for the purpose of extracting the data required by the financial ratios necessary to measure the indicators of the patrol model. The data was collected and arranged in Excel**..**

2.7: Measuring the indicators of the model

The five indicators included in the model were measured based on the most common and used financial ratios in relevant research and studies. Table (3) includes the financial ratios approved in the research**.**

3. Theoretical framework

3.1 theoretical review

- Study (Al-Mutairi, 2022)

The study focused on evaluating the performance of Iraqi banks using the patrol and cameras models, by making a comparison between them to identify which of these two models is more suitable for the Iraqi banking environment. The study concluded that the patrol model is more appropriate with the Iraqi banking environment.

- Study (Al-Nuaimi, 2017)

The study aims to evaluate the performance of banks using a patrol model. The research showed that performance evaluation helps banks to identify errors and deviations for the purpose of developing treatments for them to raise the level of current performance. The research found the possibility of using the model in evaluating the performance of Iraqi private banks.

- Study (Al-Taei, 2019)

The aim of the research is to evaluate the performance of Islamic banks using a patrol model, and the researcher chose this type of banks due to the role they have proven in times of crisis. banks.

- Study (Abdullah, 2020)

The study aimed to make a comparison between the performance of several banks using the patrol model. The results of evaluating the performance of banks were the presence of a discrepancy in performance between one bank and another, as well as a discrepancy at the level of the same bank from one year to another from one to another.

- Study (Saliha and Muhammad, 2021)

The study aimed to present one of the modern banking evaluation models, which is a patrol model, and its use in evaluating the performance of the National Bank of Algeria during the period from 2015 to 2019. The study showed the role of the patrol model in enabling decision makers in the bank to take appropriate measures by revealing strengths and weaknesses in the bank and take the necessary measures in a timely manner.

3.2. Financial performance

The developments that have taken place in the financial sector industry in all advanced economies have increased the importance of analyzing the performance of banks, as it is an indicator of financial stability and the health and status of any bank. It is also an appropriate measure of the bank's credibility and its ability to continue and survive (Jalil.et.al, 2019,p1090).

Performance metrics play an important role in understanding the determinants of successful corporate performance and help initiating or implementing technological innovations and bankal change by providing incentives to improve financial and management performance by identifying best and worst practices associated with high and low measurement efficiency of past and current trends and determining future estimates of bank performance (Mustafa ,2014,p170).

The term performance generally refers to the act of performing, executing, accomplishing, and fully mobilizing a given task measured according to predetermined criteria of accuracy, completeness, cost, and speed (Abdullah &Ahmad 2014.p31). As for financial performance, it is a measure of what the bank has achieved for a certain period of time for the purpose of obtaining useful information related to the flow of funds, the use of funds, effectiveness, and efficiency. Besides, the information can also motivate the managers to take the best decision (Almajali.et.al,2012).

(Fatihudin, et.al.2018,p560) finds that the financial performance is the achievement of the bank's financial performance for a certain period that covers the collection and allocation of finance measured through capital adequacy, liquidity, solvency, efficiency, financial leverage and profitability. Financial performance and the bank's ability to manage and control its resources. Cash flow, balance sheet, profit and loss and capital change can be the basis of information for corporate managers to make decisions.

(Eljelly 2004) finds that financial performance analysis is the evaluation and interpretation of the bank's financial positions and operations, and it includes a comparison and interpretation of accounting data for the purpose of evaluating past performance, financial position, liquidity status, future prospects for profits, the ability to pay interest at maturity and profitability for companies, and diagnosing the information contained in the financial statements in order to judge the The bank's profitability and financial soundness.

Performance analysis is an important tool used by many stakeholders who operate within the bank such as managers or outside the bank and who are part of the external operating environment of the bank such as regulators, depositors, shareholders, regulators, managers, direct competitors, credit rating firms, financial markets and other market participants (Casu et al 2006).). Therefore, the type of analysis varies according to the specific interest of each party, as follows:

• Trade creditors: They are interested in assessing the bank's liquidity.

• Bond holders: interested in the bank's cash flow in terms of evaluating the bank's capital structure, current and future profitability and sources and uses of funds

• Investors: interested in evaluating the bank's profitability and financial position (with current and expected future profits in addition to the stability of these profits).

Management: interested in the best financial position, better performance, and internal control, ie evaluating the bank's current financial position, evaluating opportunities in relation to this current situation, and the return on investment provided by the bank's various assets (Gitman, 1997,p 116).

3.3.Methods for evaluating financial performance

There are several ways to measure and evaluate financial performance, the most important of which are:

1. Preparation of final financial reports: The regular financial reports prepared by the accounts department of the institution at the end of each period, for example, semi-annual or annual, represent the most important and most common reports in measuring and evaluating the financial performance of the institution, and they include the income statement, balance sheet, and statement cash flows, and disclosure of changes in equity. The income statement explains the net profits or losses realized in the institution in the past period, for example, a year, while the balance sheet aims to indicate the financial position of the institution, its book value, its assets, the level of liquidity, and the financing structure on a specific date. While the statement of cash flows shows each of the cash flows in and out of the institution in the past period, for example, a year, with an indication of their sources, whether operational or internal, or those resulting from investment, or financial cash flows resulting from loans and capital. The statement of changes in equity shows the amount of the increase or decrease in the net value of equity in the enterprise on a specific date.

2. Estimation of the net economic added value: It means the estimation of the net profits (or the added value) achieved by the institution from its establishment to date, and it includes profits minus the cost of capital. It can be estimated by calculating the net present value of the institution (which represents the present value of the realized annual cash flows minus the weighted investment cash flows for the past period), or the internal return (the profit return that makes the realized net present value equal to zero) realized for the institution minus the average cost of capital . The bank’s net added value can also be estimated as a financial ratio by estimating the rate of return on investment (which represents the bank’s actual net present value divided by the investment cost for the past period divided by the project’s default life, or using the simple accounting method, which is the average net profit divided by the average value of assets) , and then estimating the weighted cost of the institution's capital (the average cost of the interest rate on loans, the return on preference shares, and the return on ordinary shares of the institution's capital),

and estimating the profits by subtracting the weighted cost of capital ratio from the return on investment. The net value added can also be estimated on a standard annual basis by subtracting the annual net operating profit minus the annual capital cost. (Rami & Nahil: 2016.p54).

3. Estimation of the net market added value: It is the sum of subtracting the book value of the institution from its actual market value. The book value of the institution, which is the net equity, can be estimated through the balance of net assets minus the balance of current liabilities and loans. The market value of the institution can be estimated through several methods, including the method of discounting the future annual cash flows, the price multiplier, the valuation of assets, the ideal method, and others. (pleasant. 2014,p54).

4. The Balanced Scorecard: It is a method developed by Robert Kaplan of Harvard University in 1992, to meet the need of companies to achieve a balance between customer needs, financial needs, internal management needs, innovation and learning needs within the bank. The Balanced Scorecard measures the needs of the five areas of the bank based on the expected areas. It focuses on measuring the performance of an bank on four distinct activities: marketing, finance, human resources, and operation(Salma ,2014.p58).

There are also ways to assess the financial performance of companies through the financial models developed by financial institutions such as banks and what was formulated by financial researchers. These models include camels, patrol, Altman and many models that consist of several financial indicators that reflect the level of companies' performance in terms of profitability, liquidity, asset quality and efficiency Management, risks, and the bank's sensitivity to changes in it and other financial indicators**.**

3.4 Patrol model

The PATROL model plays an important role in evaluating banking performance through its five elements (capital adequacy, profitability, credit risk, regulation, liquidity) which enable it to guide decision makers in banks by revealing strengths and weaknesses in order to take appropriate actions at the right time. . The use of the model in evaluating the performance of banks comes as a result of its reliance on five important elements that are directly related to the specificity of banking performance, which enables it to identify deviations and errors and determine their causes. Moreover, this model enables the bank to develop an appropriate strategy to improve and raise the current performance of the bank. It is worth noting that the PATROL model is not much different from the CAMELS model in terms of rating degrees, as they are two models aimed at evaluating banking performance in order to determine the strengths and weaknesses. strong) to 5 (unsatisfactory) as in Table (1)

Table 1: The degrees of sub-classification of the model

Form Elements	The first classification	the second classification	the third classification	the fourth classification	the fifth classification
capital adequacy	12>%	12<%	10%>	8%>	8%<
bank efficiency	%25 >	%30-%26	%38-%31	%45-%39	%46<
Profitability	%2.5<	%2.5>	%1.5>	%0.5>	1-
Liquidity	%20<	>%10	>%5	>%1	1-
sensitivity to risk	%25>	%30-%26	%37-%31	%42-%38	%43 <

Source: Banks Classification Guide issued by the Central Bank of Iraq in 2009, indicators for evaluating the performance of banks for the year 2011, Asaad 2018.

After sub-classification of each element of the model, the composite rating is performed for the average ratings of the elements of the model, which also takes from (1-5) as in Table No. (2)

Table (2) Degrees of Composite Classification

Category	Rating score	bank position	control procedures
Strong	1.0 – 1.4	Good position in all respects	No correction needed
Acceptable	1.5 – 2.4	Relatively healthy with some flaws	Need to address the negatives
Exposed	2.5 – 3.4	It has strengths and weaknesses	Need to monitor and follow up
my limit	3.5 – 4.4	Failing	Develop a program of reform and field follow-up
Unacceptable	4.6– 5.0	very dangerous	Constant supervision + supervision

Source: (Boateng: 2019:p42)

4. Evaluate the financial performance of banks and discuss the results.

In this topic, the performance of the Iraqi banks will be evaluated, the research sample, using the PATROL model for the period from 2015 to 2020, using some of the most appropriate financial ratios in measuring the indicators of the model, which are presented in Table (3).

Table (3) the percentages used to measure the elements of the model

Form Elements	Percentage
capital adequacy	Owned Capital/Deposits
Profitability	Net profit after interest and tax / total assets x 100
credit risk	Non-performing loans / equity x 100
bank efficiency	Expenses / Total Assets x 100
Liquidity	Cash / Total Assets x 100

The table was prepared by the researcher

4.1 Evaluation of the financial performance of the Investment Bank of Iraq according to a patrol model for the period from 2015 to 2020

Table (4) indicates the financial indicators that reflect the financial position of the bank during the period from 2015 to 2020, through which it can be inferred that the bank has met the standard ratios of capital adequacy approved by the Basel Committee for Supervision and Banking Supervision of 10.5% and what was approved by the Central Bank of Iraq of 15.5 % of the risk-weighted assets, that is why the bank obtained the first classification degree according to the patrol model. As for the profitability index, it witnessed a fluctuation between high and low throughout the research period, which reflects the fluctuation of the return on assets due to the fluctuation of net profit after interest and tax, so it obtained a classification degree that ranged between (1-4) during the specified period. While the credit risk index was recording significant progress due to the low percentage of non-performing loans, which made the bank move from the fifth rating to the first rating. As for the bank's efficiency index, it reached the lowest percentage in 2020 and was (1.80), while the highest percentage was in 2015. It reached (3.50), which made the bank obtain the fifth classification degree throughout the research period. Finally, the bank obtained the first rating on the liquidity index throughout the research period due to the high ratio of cash to bank deposits, which in some years reached five times.

Table (4) Investment bank indicators according to the patrol model for the period from 2015 to 2020

Liquidity	bank efficiency	credit risk	profitability	capital adequacy	year
1.38	3.50	1.10	4.5	1.08	2015
1.67	2.70	0.08	2.5	1.14	2016
1.56	2.90	0.07	1.0	1.15	2017
1.48	2.10	0.09	0.1	1.18	2018
5.57	2.10	0.00	0.0	1.24	2019
5.63	1.80	0.01	4.5	0.97	2020

The table was prepared by the researcher

Table (5) indicates the rating degrees obtained by the Investment Bank of Iraq according to a patrol model for the period from 2015 to 2020 for each indicator of the model. It raises concerns and requires continuous monitoring and follow-up. The bank was able to correct it starting in 2016, during which the bank made progress to the second classification level and until 2020 to reflect a relatively healthy and satisfactory situation, but it has some negatives that need to be addressed.

Table (5) The degrees of the sub-classification of the investment bank indicators according to the patrol model For the period from 2015 to 2020.

Rating score	average rating	Liquidity	bank efficiency	credit risk	Profitability	capital adequacy	Year
3	2.6	1	5	5	1	1	2015
2	1.8	1	5	1	1	1	2016
2	2.2	1	5	1	3	1	2017
2	2.4	1	5	1	4	1	2018
2	2.4	1	5	1	4	1	2019
2	1.8	1	5	1	1	1	2020
2.16							Arithmetic mean

The table was prepared by the researcher

4.2 Evaluation of the financial performance of the Middle East Investment Bank according to a patrol model for the period from 2015 to 2020

By measuring the indicators of the Middle East Bank for Investment, which include capital adequacy, profitability, credit risk, bankal efficiency and liquidity, it was found that the bank scored advanced degrees in capital adequacy throughout the research period, the highest in 2016 reaching (1.14), and thus it obtained the first classification degree. While the profitability index witnessed a fluctuation in its rates and moved from (1.3) in 2015 to (2.9) in 2016, after which the bank recorded three consecutive losses and then returned to rise in 2020 to score (2.5), which caused the bank to obtain rating degrees that ranged between (-1) 5). Whereas, the liquidity index, which started to rise during the last years of the research and was (5.50) and (5.49), respectively, was in the first degree throughout the research period, and this is an indication of the high percentage of cash in the bank and the presence of fears of its employment. As for the credit risk index, it occupied the fifth degree throughout the research period due to the increase in non-performing loans with the bank. Likewise, the bankal efficiency index recorded the lowest scores throughout the research period due to the rise of banks to the total assets, especially in 2019, if it reached (3.10), which reflects poor bank that caused the bank to obtain the fifth degree according to the model during the research period. Table (6) refers to the indicators of the Middle East Bank for the period from 2015 to 2020.

Table (6) Middle East Bank indicators according to the patrol model for the period from 2015 to 2020

Liquidity	bank efficiency	credit risk	profitability	capital adequacy	Year
0.98	5.30	0.20	1.3	0.83	2015
1.33	3.30	0.40	2.9	1.14	2016
1.32	3.40	1.60	-0.1	0.80	2017
1.10	2.20	2.60	-0. 6	0.62	2018
5.50	2.40	3.10	-0.0	0.95	2019
5.49	2.50	1.50	2.5	0.99	2020

The table was prepared by the researcher

Table (7) shows the degrees of the sub- and composite classification obtained by the bank according to the patrol model for the period from 2015-2020, which indicates a decline in the bank's performance, as the degree of the composite classification was at the second degree during the years 2015 and 2016, but it declined to the third degree from 2017 until 2020 due to the decline in the profitability index, credit risk and regulatory efficiency.

Table (7) the degrees of the sub-classification of the indicators of the Middle East Bank according to the patrol model For the period from 2015 to 2020

Rating score	average rating	Liquidity	bank efficiency	credit risk	profitability	capital adequacy	Year
2	2.2	1	5	1	2	1	2015
2	2.4	1	5	4	2	1	2016
3	3.4	1	5	5	3	1	2017
3	3.4	1	5	5	3	1	2018
3	3.4	1	5	5	3	1	2019
3	2.6	1	5	5	3	1	2020
2.66							Arithmetic mean

The table was prepared by the researcher

4.3 Evaluation of the financial performance of the Bank of Baghdad according to a patrol form for the period from 2015 to 2020.

It appeared by measuring the indicators of the Bank of Baghdad presented in Table (8) the stability of capital adequacy ratios during the research period, where the lowest ratio was (0.31) and the highest was (0.35), so the degree of the composite rating was at the first rank from 2015 to 2020, and this is an indication To a strong capital compared to risks, as well as a growth in assets.. While the profitability index stabilized during the research period at the level (1.0 and 1.4), except for the year 2016, in which the indicator reached (4.4) in which the bank received the first rating, while it achieved in the rest of the year. The years are on the third classification degree. This indicates an acceptable level of profits, with weaknesses in one of the factors that if it continues without putting treatments for it, the bank will be at risk. As for the indicators of credit risk and bank efficiency, each of them witnessed a fluctuation in the ratios, which made the first obtain rating degrees that ranged between (1 and 5), while the second received a fifth rating, and this indicates a critical and ineffective management performance. While the liquidity index was on the rise until it reached (5.73) in the year 2020, in a way that enabled the bank to obtain the first classification degree, and this indicates that the bank has strong liquidity that enables it to perform its obligations without losses.

Table (8) Bank of Baghdad indicators according to the patrol model for the period from 2015 to 2020

Liquidity	bank efficiency	credit risk	profitability	capital adequacy	Year
0.95	3.00	5.11	1.0	0.31	2015
0.68	3.20	0.59	4.4	0.35	2016
0.67	3.60	0.11	1.4	0.35	2017
0.78	2.50	0.60	1.0	0.34	2018
5.61	1.90	0.55	1.2	0.34	2019
5.73	1.70	0.34	1.3	0.35	2020

The table was prepared by the researcher

Table (9) indicates the degrees of the sub- and composite rating obtained by the Bank of Baghdad during the research period. It is clear that the bank obtained the second compound rating degree in 2016 only, and it reflects an acceptable and relatively sound situation, with some negatives and shortcomings that need to be addressed. As for the rest of the years, the bank's performance declined. This was evident through the third classification degree it obtained, which indicates that the bank possesses elements of strength and weakness, and there is a need for continuous monitoring and follow-up.

Table (9) degrees of sub-classification of Bank of Baghdad indicators according to the patrol model For the period from 2015 to 2020.

Rating score	average rating	Liquidity	bank efficiency	credit risk	profitability	capital adequacy	Year
3	3	1	5	5	3	1	2015
2	2.6	1	5	5	1	1	2016
3	3	1	5	1	3	1	2017
3	3	1	5	5	3	1	2018
3	3	1	5	5	3	1	2019
3	2.6	1	5	3	3	1	2020
2.83							Arithmetic mean

The table was prepared by the researcher

4.4 Evaluation of the financial performance of Sumer Bank according to the patrol form for the period from 2015 to 2020

Table (10) indicates the financial indicators of Sumer Bank, which started with the capital adequacy index, which was measured through the owned capital / deposits, as it was found that this indicator continued to rise during the research period from 2.86) in 2015 to reach (4.82) in 2020, due to the high capital owned, so the bank obtained the first classification degree throughout the studied period. As for the profitability index, it fluctuated between high and low during the research period, so it got ratings that ranged between (1-4). The credit risk index was in continuous decline due to the high volume of non-performing loans with the bank, while the efficiency index of regulation witnessed fluctuation between rise and fall due to the high volume of expenses, which reflects poor regulation of what called for the bank to obtain the fifth rating for these two indicators throughout the research period. As for the liquidity index, which continued to rise during the period and stabilized at the first classification degree, to reflect the bank's retention of high rates of cash from the volume of total assets and the ability to perform obligations, but on the other hand, it reflects the freezing of funds and not directing them towards investment.

Table (10) Sumer Bank indicators according to the patrol model for the period from 2015 to 2020

Liquidity	bank efficiency	credit risk	Profitability	capital adequacy	Year
2.23	0.60	0.50	1.4	2.86	2015
2.62	2.80	0.40	1.2	3.94	2016
2.49	3.10	0.50	0.1	2.97	2017
2.69	1.50	0.60	0.3	3.32	2018
5.68	1.40	0.60	3.2	4.30	2019
5.85	2.00	2.50	1.6	4.82	2020

The table was prepared by the researcher

In view of the above results, the Bank of Baghdad obtained a composite rating degree that stabilized at the third degree throughout the research period, which indicates that the bank is at risk and that there are weaknesses in the activities that require quick corrective action. Table (11) indicates the degrees of the sub-classification of the Sumer Bank indicators according to the patrol model.

Table (11) degrees of sub-classification of Sumer Bank indicators according to the patrol model For the period from 2015 to 2020

Rating score	average rating	Liquidity	bank efficiency	credit risk	profitability	capital adequacy	year
3	3	1	5	5	3	1	2015
3	3	1	5	5	3	1	2016
3	3.2	1	5	5	4	1	2017
3	3.2	1	5	5	4	1	2018
3	2.6	1	5	5	1	1	2019
3	2.8	1	5	5	2	1	2020
3							Arithmetic mean

The table was prepared by the researcher

The discussion of results should focus on the interpretation rather than repeating information from the Results section. A comparative or descriptive analysis of the study based on results, on previously studies, etc. The results should be presented in a logical sequence, given the most important findings first and addressing the stated objectives. The number of tables and figures should be limited to those absolutely needed to confirm or contest the premise of the study. The authors should deal only with new or important aspects of the results obtained. The relevance of the findings in the context of existing literature or contemporary practice should be addressed.

4.5 Evaluation of the financial performance of the Gulf Bank according to the patrol form for the period from 2015 to 2020.

Table (12) refers to the financial indicators that reflect the financial position of the bank during the period from 2015 to 2020, through which it can be inferred that the bank has met the standard ratios of capital adequacy, so the bank obtained the first classification degree according to the patrol model. As for the profitability index, it fluctuated between high and low, ending with recording a loss in recent years, so it received a rating score that ranged between (1-5) during the specified period. While the credit risk index was recording significant progress due to the low percentage of non-performing loans, which made the bank obtain the first rating throughout the study period. On the contrary, the regulation efficiency index witnessed a continuation and decline, reaching the highest percentage in 2015 and amounting to (3.10) and continued to decline during the years of research, which made the bank obtain the fifth classification degree throughout the research period. As for the liquidity index, it got the first rating because of the high ratio of cash to bank deposits, which in some years reached five times

Table (12) Gulf Bank indicators according to the patrol model for the period from 2015 to 2020

Liquidity	bank efficiency	credit risk	profitability	capital adequacy	Year
0.54	3.10	0.12	2.8	0.84	2015
3.90	2.40	0.12	1.2	7.52	2016
0.75	3.50	0.14	1.0	1.20	2017
0.52	2.70	0.16	1.5	1.35	2018
5.47	2.60	0.08	-4.0	1.52	2019
5.40	2.80	0.09	-3.0	1.66	2020

The table was prepared by the researcher

Table (13) shows the degrees of the sub- and composite rating obtained by Gulf Bank according to the patrol model for the period from 2015-2020, which indicates a decline in the bank's performance. From 2019 to 2020 due to the decline in the profitability index, credit risk and regulatory efficiency.

Table (13) degrees of sub-classification of Gulf Bank indicators according to the patrol model For the period from 2015 to 2020

Rating score	average rating	Liquidity	bank efficiency	credit risk	profitability	capital adequacy	Year
2	1.8	1	5	1	1	1	2015
2	2.2	1	5	1	3	1	2016
2	2.2	1	5	1	3	1	2017
2	2.2	1	5	1	3	1	2018
3	2.6	1	5	1	5	1	2019
3	2.6	1	5	1	5	1	2020
2.33							Arithmetic mean

The table was prepared by the researcher

4.6 Comparison of the rating scores of the study sample banks for the period from 2015 to 2020.

It is clear from the table (14) which indicates the rating degrees obtained by each bank during the years of research that the investment bank has witnessed progress in its performance, as it moved from the third classification degree in 2015 to the second classification degree from 2016 to 2020, and this is an indication that the bank succeeded in monitoring And following up on the elements of weakness that he possessed, and he strengthened the elements of strength, and he became in a relatively sound position, but there are some shortcomings that need to be addressed.

As for the Middle East Bank, the results indicate a decline in its performance, as it moved from the second classification degree, which reflects a relatively sound situation in which the bank did not try to develop solutions and treatments for them, which led to aggravating them and the decline of the bank's performance to the third degree, in which the bank became vulnerable.

As for the banks of Baghdad and Sumer, they settled at the third degree throughout the research period, with the exception of 2016, which indicates the lack of efforts by the bank's management to address the reasons for the low degree of the bank's classification during the years studied.

Finally, Gulf Bank, which achieved the second degree for four years, starting from 2015 to 2018, was in an acceptable position in financial and administrative terms, but it declined, starting in 2019 to score the third degree, instead of advancing towards the first degree or maintaining its position as a minimum.

Accordingly, it can be said that the Investment Bank of Iraq was the best among the banks in the research sample, as the arithmetic mean of the rating degrees during the years of research was (2.16) and reflects an acceptable financial and administrative situation. In the second sequence comes the Gulf Bank, whose average rating score was (2.33), and in the third sequence it was for the Middle East Bank, where its average rating was (2.66), and the Bank of Baghdad was its fourth sequence among the banks, where its average rating score was (2.88), while Sumer Bank is the worst among the banks, where the average rating score obtained during the research period was grade (3), which reflects a situation in which the bank is exposed to risk.

Table (14) Comparison of classification degrees for the study sample banks for the period from 2015 to 2020

Gulf	Sumer	Baghdad	Middle east	investment	Year
2	3	3	2	3	2015
2	3	2	2	2	2016
2	3	3	3	2	2017
2	3	3	3	2	2018
3	3	3	3	2	2019
3	3	3	3	2	2020
2.33	3	2.83	2.66	2.16	Arithmetic mean

The table was prepared by the researcher

5. Conclusion

5.1 .The patrol model is one of the financial performance evaluation models that helps the supervisory authorities to form a clear image of the financial and administrative performance of companies, including banks, and enables them to objectively judge the performance of those companies. Strengths and treatment of failures.

5.2 . The capital adequacy ratio in all banks in the research sample was close to the ratio approved by the Basel Committee for Banking Supervision and Supervision of 10.5% and the ratio approved by the Central Bank of Iraq, and this gives an indication of the ability of these banks to absorb the losses that they may be exposed to.

5.3 . It became clear from the research that all the banks in the research sample have high rates of liquidity, and this is an indication that these banks are able to perform the obligations they owe on the one hand, and on the other hand, this is a disruption to the funds that, if they were employed in feasible areas, would have contributed to raising rates. The fluctuating profitability of all banks during the research period.

5.4 . All the studied banks witness a high index of credit risk, and this indicates a weakness in the control of credit risks and the presence of severe problems in controlling them by the management of the bank, which is consistent with the low indicator of the efficiency of regulation, as it occupied the fifth degree of the model rating degrees in all banks.

5.5 . The results indicate that all the banks of the research sample suffer from deficiencies in the financial and administrative aspects that need to develop treatments for them with continued monitoring and follow-up of their performance as they fall within the second and third classification degrees..

5.6 . The results showed the possibility of using the PATROL model in evaluating the performance of Iraqi banks, the research sample, as it has the possibility of arranging the performance of banks in descending order from (1-5) starting with the banks that achieved the best performance and ending with the banks that achieved the lowest performance.

6. Recommendations

6.1 The Central Bank of Iraq's adoption of the patrol model in evaluating the performance of Iraqi banks instead of the currently adopted camel model. As the adoption of the last model is done without calculating the market sensitivity index due to the instability of market prices, as the Iraqi economy is an unstable economy and is subject to many changes and shocks, so the Patrol model is more suitable for the Iraqi environment because it is free from the market sensitivity index..

6.2 Establishing controls by the Central Bank of Iraq that prevent Iraqi banks from maintaining very high rates of capital adequacy and benefit instead by employing those funds and enhancing the bank’s profitability, taking into account the size of the risks that the bank is willing to bear.

6.3 Iraqi banks should activate the role of asset management in a way that prevents maintaining high rates of liquidity and disrupting funds without directing them towards investment on the one hand, and on the other hand managing loans in a way that prevents them from defaulting and hyenas have the opportunity to recover it, which helps in reducing the allocations for bad loans and investing the surplus from them.

6.4 The research recommends the necessity of involving the directors of risk departments in the membership of the bank's board of directors and submitting risk reports to the board of directors directly without passing them through the branch manager in the bank to prevent managers' bias towards their self-interests and to achieve interaction and integration between the board of directors and risk management.

6.5 The adoption by the Central Bank of Iraq, when conducting the annual assessment of banks, of a mechanism that creates a spirit of competition between banks for the purpose of improving the degree of their classification, such as the Central Bank granting the higher bank a classification of some exceptions in granting loans or reducing the ratios of reserves and other facilities that encourage banks to improve the indicators of the approved model in the evaluation.

6.6 Qualifying the bank's employees and putting them in training courses to see the latest developments in the banking business in order to raise the efficiency indicators in the bank, taking into account the interest in specializations when they are appointed or when they are assigned to hold administrative positions in the bank.

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