



THE EFFICIENCY OF FINANCIAL RATIOS IN PREDICTING THE FINANCIAL SUCCESS OR FAILURE OF FINANCIAL INSTITUTIONS-AN ANALYTICAL STUDY OF THE BANK OF BAGHDAD

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Article history:	Abstract:
Received: 24 th August 2024	The research aims to demonstrate the efficiency of financial ratios in predicting the success or failure of financial institutions and the impact of credit risks to which the banks of the study sample are exposed to on granting loans and credit facilities, and to attempt to reduce the amount of credit risks to which banks are exposed as a result of granting loans and credit facilities, as credit risk is the oldest form. It is a form of risk in the financial markets, and all banks bear a degree of risk when they grant loans and credit facilities to companies and customers, as they are exposed to financial losses when some borrowers fail to repay their loans as agreed upon. At the same time, credit facilities are the most profitable operations for the bank, as they are the most profitable banking operations. Income from other banking operations. The research population was represented by banks listed on the Iraq Stock Exchange, while the research sample was represented by the Bank of Baghdad, for the period (2017-2022), and a set of financial indicators were used (total debt ratio, capital adequacy ratio, debt-to-equity ratio, and loan-to-equity ratio). Current assets, the rate of provision for loan losses, and the ratio of loans to deposits) to measure the research variables and test the research hypotheses. The research concluded that there is no statistically significant effect of credit risk indicators on loans and credit facilities in general, but there is a partial effect of some credit risk indicators. On indicators of loans and credit facilities.
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INTRODUCTION

The banking sector plays an important role in economic advancement as it is the main artery of the national economy. The development taking place in various fields has led to increased interest in this sector, especially after banks began to face many risks as a result of the expansion of their business, as banks are considered among the most important national financial institutions. Due to the volume of activities and various services it provides to its customers, in accepting deposits, granting loans and advances, financial investments, etc., it is thus exposed to different types of risks. Credit risks represent its main pillar through the use of its funds and the funds of shareholders in various activities. Therefore, financial institutions have intensified their efforts, through a set of legislation, international standards and procedures, to implement best practices in the field of risk management by banks with the aim of sparing the banking sector various crises, and helping it make sound decisions to manage and confront risks.

1. The first section - research methodology

1.1. The importance of research

The importance of the research stems from the fact that it focuses on the use of the financial ratios method in banking risk management, specifically in decisions related to the most important businesses and activities provided by banks, which are credit and granting loans. The financial ratios analysis method is one of the quantitative methods that deals with a multiple and conflicting set of objectives, as Targeting a set of goals lies at the heart of banking, especially when making decisions related to managing credit risks to which banks are exposed, as this method attempts to help decision makers develop appropriate solutions to confront or mitigate those risks.



Second: The aim of the research

It aims to provide an image for researchers and those interested in the banking sector and decision makers alike, about the possibility of using the financial ratio analysis method to help decision makers rationalize credit risk management decisions, in light of a group of variables surrounding the banking business and the various goals that the bank seeks to achieve, provided that a basis is provided. Integrated information and data, with the aim of reducing the possibility of these banks being exposed to risks or facing them as a result of carrying out their various activities.

1.2. The research problem

The continuous development and expansion of the banking business creates many risks, which are difficult to manage and deal with using traditional methods, due to their diversity and the complexity of the environment surrounding them. Therefore, the need has emerged to adopt scientific methods in making decisions, and to adopt appropriate methods to assist risk departments in banks, especially decision makers. Giving credit to make rational and sound decisions that will lead to avoiding or mitigating the risks to which you are exposed. In addition to using quantitative methods, solving problems and making decisions requires creative thinking from the decision maker, which depends primarily on the ability and skill of the manager.

1.3. Research hypothesis

The first hypothesis: There is a statistically significant effect of credit risk indicators on loans and credit facilities

The second hypothesis: The use of financial ratio analysis, which is one of the quantitative methods, helps in arranging the priorities that banks adopt in granting loans.

The third hypothesis: Using financial ratio analysis helps the credit decision maker determine which loan applications are approved and which loan applications are rejected in each alternative and according to the bank's policy.

1.4. The financial methods used

Methods based on financial statements are:

- A- Total debt ratio.
- B- Capital adequacy ratio
- C- The ratio of debt to ownership rights
- D- The ratio of loans to current assets
- E- Provision for loan losses
- F- The ratio of loans to deposits

1.5. Research sample

The Bank of Baghdad was chosen because it is one of the main banks among a group of private banks in Iraq.

2. The second section: A conceptual framework on credit risk

2.1. The concept of credit risk.

Bank credit risk refers to the assumed risks of the lender, which is the bank, not being sure that the borrower, which is the customer, will repay the loan he obtained on the due date. Therefore, loans are considered one of the most important sources of credit risk, so these risks were defined according to this concept, It is the risk of not repaying interest or principal, or both, for securities or loans on time (Hempel & Simonson, 1999: 68), which leads to the realization of credit risk and the loss of the opportunity for others to obtain loans faster if repayment was made on the dates specified for those loans.

2.2. Second: The reasons for the occurrence of credit risks.

Credit risk occurs due to various factors that result in failure to repay the loan when it is due, including what is related to the borrower, what is related to the bank, or the possibility of the impact of external environment conditions (Gup, 2023:14).

- 1- The decline of the general economic conditions in the country and the occurrence of unexpected emergency circumstances, regardless of the circumstances of customers that are difficult to control, such as unemployment, recession, inflation, and changes in interest rates.
- 2- Competition between banks, as banks must provide excellent services at lower prices than their counterparts in the market, and this negatively affects the bank's returns, as banks are forced to provide many facilities in order to attract customers, and this leads to increased risks.
- 3- Inaccuracy of credit studies carried out by credit employees, whether it is the result of poor qualifications of employees or the pressure of the bank's management in expanding the granting of loans.
- 4- The bank does not have an effective information system, as management must constantly obtain accurate and comprehensive reports about the bank's customers in order to be able to make a sound credit decision.
- 5- Ineffective monitoring processes: The bank should monitor the borrower after granting him the loan, such as monitoring his company's performance, its position in the market, and the decisions it takes within the company.



6- The bank management's neglect of the bank's employees, especially those responsible for lending and credit, by not disbursing financial incentives, for example. If they are not taken care of, they may tend to give loans to customers who do not have creditworthiness, which leads to the occurrence of credit risks.

2.3. Third: Types of credit risks.

It is possible to distinguish between two groups of credit risks. The first was classified according to credit operations, while the second group was classified according to the factors surrounding the bank, as follows:

The first group: Types of credit risks according to credit operations.

1- Risks related to the borrower, including the following: (Horcher, 2020:50)

- The borrower's eligibility and suitability to obtain the loan.
- The borrower's credit reputation can be known from internal and external sources.
- The social status and behavior of the borrower and the extent of its impact on his financial situation.
- The borrower's financial situation is identified through the customer's historical data.
- The borrower's ability and the possibilities to enhance and develop it in the future.

2- Risks related to the sector in which the borrower operates.

These risks are usually related to the nature of the economic activity in which the borrower operates and the varying production and marketing conditions between different sectors. Here, the bank faces difficulty in estimating risks that may vary according to consumer tastes and consumption habits, the diversity of markets, technological and industrial developments, and so on.

3- Risks related to the operation to be financed.

The degree of these risks varies from one operation to another in light of the circumstances surrounding the required credit, the guarantees provided, and future developments. For example, the risks of lending with the guarantee of commercial papers differ from the risks of lending with the guarantee of a real estate mortgage.

4- Risks related to general conditions.

These risks are usually related to the circumstances related to the economic, political, social and legal conditions. These risks increase in conditions of recession, for example, and decrease in conditions of prosperity and prosperity. Political unrest also affects the increase of these risks, and political stability limits these risks.

5- Risks related to bank errors.

These risks are related to the extent of the financing bank's ability to follow up on the credit granted and verify that the borrower fulfills the requirements required of it. An example of these errors is when a customer withdraws his deposit, even though this deposit is a guarantee for another customer's loan. The error mentioned here is that the bank did not reserve this deposit in proportion to the amount of the loan or facility granted.

The second group: Types of credit risks according to external variables.

These risks can be illustrated through the following images: (Horcher, 2020:54).

1- Risks of exchange rate fluctuation.

This type of risk does not usually appear when there is a lending process to clients abroad, and the loan is in the currency of the country in which the borrower is located. In the event of a decline in the exchange rates of that country's currency, for example, this means a definite loss for the lending bank due to the decrease in the purchasing value of money.

2- Risks of alcohol.

It is the possibility that the borrower will not pay his obligations in a way that is not consistent with the terms of the loan. The failure may be in the form of postponing payment or the inability to pay permanently due to various considerations.

3- Concentration risks.

The impact of these risks can be observed in organizations with non-diversified production in terms of sectors and regions. Changes that occur in the market may negatively affect the entire sector or industry, and financial institutions that expand their business within one sector will suffer if things go wrong in that sector. The bank that Credit is extended to a large number of borrowers in a particular industry that is subject to concentration risk.

2.4. Fourth: Methods of reducing credit risks

Banks follow many methods to mitigate credit risks, the most prominent of which are (Hamilton, 2020: 10):

1- Study the elements of granting credit.

The process of studying the elements of granting credit, which are (Cs6), (5Ps), and others, is based on evaluating the borrower's ability to repay the loan principal and its interest to the bank on the dates specified according to the agreement. Evaluating these capabilities is one of the most important steps that a credit official should follow because it is the basis upon which it is relied upon. It is necessary to evaluate the ability to repay (Kellogg, 2003: 215).



2- Diversification.

Credit risk can be reduced through diversification according to loan segments, as well as sectorally and geographically, because diversification protects the bank from concentration of risks. If the bank concentrates its loans in a specific sector, any defect in that sector will lead to noticeable or important effects on the bank's profits (Andria&Rivai, 2006: 114).

3- Credit rationalization.

Rationalizing credit is a method as old as banking, and the goal of rationalization is to grant credit once it is certain that the return from the credit equals the amount of potential risks associated with it. This includes setting higher interest rates for transactions with higher risks to compensate for the additional risks resulting from credit. Eakins & Mishkin believe that credit rationalization takes two forms. The first occurs when the bank refuses to grant a loan of any amount to the borrower, even if the borrower wishes to pay a high interest rate. As for the second form, it occurs when the bank wants to grant the loan but sets the size of the loan at less than the loan requested by the borrower (Horcher, 2005:112).

4- Credit insurance.

Credit insurance protects the insurer from non-payment by customers for the goods that were provided to them or the services that were provided to them, provided that the insurance company approves. Credit insurance also reduces the bank's exposure to credit risks due to the amount of debt covered by the insurance policy (Babara&Philip, 2002: 103)

5- Securitization or securitization.

Some researchers confirm that securitizing assets makes a significant contribution to the process of hedging credit risks, by diversifying the loan portfolio and distributing the risks to a broad base of investors. Some studies recommend transferring the assets assigned to private entities that are not affiliated with the bank in order to eliminate credit risks, because the bank will not be legally responsible for these assets because they have become the property of the special purpose entity (Classman, 2010: 93).

6- Monitoring.

After the borrower obtains the loan, he may engage in risky activities that increase the possibility of non-payment. In order to reduce exposure to this moral hazard, the bank must adhere to the basics of lending in order to manage credit risk by writing down conditions in the loan contract in a way that prevents borrowers from practicing risky activities. By monitoring the activities of borrowers, the bank ensures their compliance with restrictive covenants and then enforces or strengthens these covenants if borrowers do not comply with them. (Rejda, 2008: 30).

7- Guarantees.

Collaterals help improve credit quality, and are extremely important as a tool for controlling credit risks in traditional banks (Mishkin & Eakins, 2020:621).

8- Syndicated loans.

The intensification of various types of banks' efforts in the field of developing the banking syndicated loan market is with the aim of distributing risks on the one hand and enhancing the level of credit studies on the other hand, as the participation of more than one bank in a study gives it a higher degree of credibility and accuracy (Horcher, 2005: 11).

9- Compensated balances.

One of the special formulas for achieving the required guarantee is when the bank grants loans through what is known as compensated balances, where the borrowing company keeps a small part of the loan with the bank to confirm its good desire to deal. The compensated balances make the bank monitor Borrowers more efficiently. (Mishkin & Eakins, 2000: 633)

2.5. Fifth: Credit risk analysis

The aim of credit risk analysis is to evaluate the risks that are associated with granting credit to individuals or companies that deal with the bank (Koch & Macdonald, 2006:428). The bank's credit risk analysis process can be carried out at several levels. The focus may be on the credit risk of a single loan, or on each type of loan (short, medium, and long-term) or on the loan portfolio on a societal or total basis. Banks have used many different models for the loan default risk assessment process (Koch, 2022:12).

The expert system is the oldest method for analyzing credit risks, as the rules of this system work on the expert's self-evaluation, his experience, and his risk weights, and by it the probability of the borrower's inability to repay the value of the loan is determined and a decision is made to grant him the loan or not. This system is known as 5CS (Treacy, 2023:26). These elements can be explained as follows:



Character: These are the personal qualities present in the customer, which are honesty, trustworthiness, integrity, discipline, reliability, dependability, and good manners. A customer with a good character will pay his obligations, as he will reveal all the facts of his deal with credibility (Bagchi, 2020: 41).

Collateral security: These are the assets that the customer provides to the bank as collateral in exchange for obtaining the value of the loan (Kellogg, 2003: 49).

Capital: The borrower's capital is an important factor in reducing credit risk, because it represents the borrower's ability to repay the loan through its equity (Besiss, 2019:11).

Capacity: means the ability to repay, that is, the fluctuations that occur in the borrower's income during the loan repayment period. In other words, the borrower's ability to achieve income that enables him to pay the obligations of the loan contract (McCormick, 2018:10).

Surrounding Conditions: This means the circumstances surrounding the customer, as granting credit is affected by economic and social fluctuations that negatively affect the customer's expected return (Robert, 2023:27).

Sixth: Indicators for measuring credit risk

Since banks tend to maintain relatively small capital compared to the total value of their assets, it is possible for a small percentage of the total non-performing loans to lead them to default, and therefore there should be indicators by which the bank can measure credit risk to try to avoid the damage it causes to the bank. Credit risk will be measured by Through the following indicators:

1- Total debt ratio.

The total debt ratio is represented by the percentage of funds provided by creditors, which expresses the proportion of all assets financed by debt (Treacy, 2023: 175). The more debt a bank uses in relation to its total assets, the greater its financial leverage, which expresses the amplification of return and risk (Ross, 2019:76). The total debt ratio is calculated through the following equation

$$100 \times (\text{Equity Total} - \text{Liabilities Total}) / (\text{Assets Total}) = \text{Debt Total Ratio}$$

2- Capital adequacy ratio.

Capital adequacy is the primary measure of the financial strength of the bank from the point of view of the regulatory authority, as it represents the funds that the bank should maintain to ensure that it has sufficient capital to face operating losses. This ratio is a measure of the amount of the bank's capital that is expressed as a percentage of exposure. Weighted risk. In theory, banks with a good capital adequacy ratio obtain good profitability. The capital adequacy ratio will be calculated through the following equation: (Simon, 2005:45),

$$100 \times (\text{Equity Total}) / (\text{Assets Total}) = \text{Capital Adequacy Ratio}$$

3- Debt to equity ratio

The debt-to-equity ratio is one of the solvency ratios. The debt-to-equity ratio is usually used to evaluate debt to equity by comparing the entire debt, including current liabilities, with the total equity. It is a measure used in the process of analyzing financial statements to show the amount of collateral available. To the creditor, the ratio of debt to equity will be calculated according to the following equation: (Weston, Fred J., Besley, Scott & Brigham,,2020:27),

$$100 \times (\text{Debt Total}) / (\text{Equity Total}) = \text{Equity to Debt Ratio}$$

4- Ratio of loans to current assets.

An increase in this ratio indicates an increase in credit risk, due to the increase in the percentage of short-term loans, which increases the possibility of facing the risk of non-payment by borrowers on their due dates. This percentage is measured through the following equation: (Besiss, 2019:45).

$$100 \times (\text{Total Loans}) / (\text{Total Current Assets}) = \text{Current Assets to Loans Ratio}$$

5- Loan loss allowance rate



This indicator measures the value of potential credit risks in the loan portfolio, as the higher the percentage of this indicator, the higher the credit risk, and the lower the percentage of the provision for loan losses, the lower the credit risk (Abu Fakhra, 2006: 136). This indicator is measured through the following equation: (Ken & Peter a, 2016:16).

$$100 \times (\text{Loans Loss Allowance}) / (\text{Loans Total}) = \text{Loans Loss Allowance Rate}$$

6- Loan to deposit ratio

This ratio measures the total loans that the bank grants to customers to the total deposits it obtains from depositors (Besis, 2019:20). This ratio aims to indicate the bank's exploitation of this type of financing sources, in order to contribute in one way or another to the bank obtaining the desired returns from them, and at the same time the bank guarantees the deposited funds in the event that someone refuses to pay, and thus it is considered a critical ratio and an important measure of credit risk. Because a rise in this ratio will expose the bank to crises and face other risks in addition to credit risks, and credit risks will be measured through the following equation: (Hempel & Simonson, 2019:21).

$$100 \times (\text{college loans}) / (\text{college deposits}) = \text{deposits to loans ratio}$$

3. The third section: Analysis and discussion of the research variables

The research includes analyzing and discussing data on the study variables extracted from the financial reports and statements of the bank sample of the study for the period 2012-2017.

Analyzing and discussing the credit risk indicators of the bank in the study sample for the period 2012-2017.

1- Analyzing and discussing the total debt ratio of the bank in the study sample for the period 2012-2017.

The total debt ratio represents the percentage of funds provided by creditors to the bank. This percentage expresses all the assets financed by debt. The percentage is calculated by dividing the total assets after subtracting the ownership rights from them into the total assets, as a high percentage indicates a high credit risk in the bank as a result of Due to the high liabilities owed by the bank compared to its assets, which makes it difficult for it to cover those liabilities, while the decrease in the ratio indicates a decrease in credit risks, as a result of the decrease in the bank's liabilities compared to its assets, which allows the bank to fulfill its obligations, and Table (1) shows the percentage of total debt for the bank in the study sample and for the period 2017-2022.

Table 1: Total debt ratio (%) for the Bank of Baghdad 2017-2022

Standard Deviation	Mean	2022	2021	2020	2019	2018	2017	Bank Name
0.04	81	75	76	83	84	83	84	Bank of Baghdad

The Bank of Baghdad achieved the highest average total debt ratio, reaching (81%), with a standard deviation of (0.04), which indicates a high credit risk in the bank as a result of the high liabilities owed by the bank compared to its assets, which makes it difficult for it to cover those liabilities.

2- Analyzing and discussing the capital adequacy ratio of the bank sample of the study for the period 2017-2022.

The capital adequacy ratio represents the ratio of funds that the bank must maintain to ensure sufficient capital to face operating losses. This ratio is measured by dividing the total equity by the total assets. A high ratio means a decrease in credit risk as a result of the high capital owned in the bank. The bank ratio, which indicates the bank's ability to face any risks that may occur to it. However, when this ratio decreases, this indicates an increase in credit risks as a result of the weakness of the capital owned by the bank, and its inability to confront the operational risks that may occur to it. Table (2) shows the average capital adequacy ratio for the bank in the study sample for the period 2017-2022.

Table 2: Capital adequacy ratio (%) for the bank in the study sample and for the period 2017-2022

Standard Deviation	Mean	2022	2021	2020	2019	2018	2017	Bank Name
0.04	19	25	24	17	16	17	16	Bank of Baghdad



The Bank of Baghdad achieved the lowest average capital adequacy ratio, reaching (19%), with a standard deviation of (0.04). This means that a decrease in this ratio indicates the bank's inability to face the credit risks that may occur to it, due to the decrease in capital that supports the bank in currency

3- Analyzing and discussing the ratio of debt to equity of the bank in the study sample for the period 2017-2022.

This indicator represents one of the financial solvency ratios of the bank. This ratio is usually used to evaluate the debt in the bank against equity, which is measured by dividing the total debt represented by the total debtors in the bank to the total equity. A high ratio indicates an increase in credit risk in the bank, due to A high debt-to-equity ratio means that the bank cannot cover the debt with its owned capital, and a decrease in it indicates a decrease in credit risks, because the bank will be able to cover the debt with its owned capital. Table (3) shows the average debt-to-equity ratio for the bank in the study sample. For the period 2017-2022

Table 3: Debt to equity ratio (%) for the banks in the study sample and for the period 2017-2022

Standard Deviation	Mean	2022	2021	2020	2019	2018	2017	Bank Name
0.13	26	19	8	47	32	22	28	Bank of Baghdad

It is clear from Table (3) that the average ratio of debt to equity for the bank in the study sample for the period amounted to 26%, with a standard deviation of (0.13). This means that the bank's credit risk is high, and that a high ratio indicates a high debt compared to equity, which weakens the bank's ability to Withstand the risks that are likely to occur due to the equity not covering the bank's debt.

4- Analyzing and discussing the ratio of loans to current assets of the bank in the study sample and for the period 2017-2022.

This indicator represents the ratio of the total loans granted by the bank to the total current assets in it. This ratio is extracted by dividing the total loans in the bank by the total current assets, as a high ratio indicates an increase in credit risk as a result of the high rate of granting loans compared to the bank's current assets, which It makes the bank unable to cover the losses that may occur to it as a result of the borrower's failure to return the amount borrowed from the bank along with the interest resulting from it. A decrease in this ratio indicates a decrease in credit risk, due to the decrease in the ratio of loans compared to current assets, which gives the bank liquidity through which it can Facing any risks that may occur to it, Table (4) shows the average ratio of total loans to total current assets for the private banks in the study sample for the period 2017-2022.

Table 4: Ratio of loans to current assets for the banks in the study sample for the period 2017-2022

Standard Deviation	Mean	2022	2021	2020	2019	2018	2017	Bank Name
0.02	10	13	14	09	9	9	8	Bank of Baghdad

It is clear from Table (4) that the average ratio of loans to current assets of the bank in the study sample for the period 2012-2017 reached (10%), and the standard deviation (0.02), which means that the credit risk in it was low, due to the decrease in loans towards current assets, which enables the bank to Facing any dangers that may happen to him.

5- Analyzing and discussing the rate of provision for loan losses for the bank in the study sample for the period 2012-2017.

This indicator represents the percentage of the bank's provision for loan losses divided by the total loans that the bank grants to its customers. This indicator measures the value of potential credit risks in the loan portfolio. A high rate of this rate indicates a rise in credit risks, because a high rate of provision for loan losses for loans granted shows that The bank expects losses to occur in the loan portfolio that it must cover in this provision. A decrease in this ratio indicates a decrease in credit risk due to a decrease in the potential losses of the bank's loan portfolio. The percentage of the provision for loan losses is determined in accordance with the guidelines issued by the Central Bank, which specifies the percentage of the provision for loan losses. Depending on the duration of late payment, the guarantees provided, and the credit rating of the loans, Table (5) shows the average rate of provision for loan losses for the bank in the study sample for the period 2012-2017.

Table 5: Provision rate for loan losses for banks in the study sample for the period 2012-2017



Standard Deviation	Mean	2017	2016	2015	2014	2013	2012	Bank Name
0.05	17	25	17	22	11	11	16	Bank of Baghdad

It is clear from Table (5) that the average rate of allowance for loan losses for the Bank of Baghdad from 2012-2017 reached (17%), which means that the credit risks in the bank were low due to the low rate of allowance for loan losses, which indicates that the bank does not expect large losses to occur. About the bank's inability to collect loans granted to its customers.

6- Analyzing and discussing the ratio of loans to deposits for the study sample and for the period 2012-2017

This indicator represents the ratio of the total loans granted by the bank to its borrowing customers to the total deposits that the bank obtains from its depositing customers. It aims to indicate the extent to which the bank exploits the most important types of financing sources (deposits) to obtain the desired returns from the lending process by collecting the interest that accrues from the process of granting the loan and paying the interest paid to depositing customers, in addition to achieving profits, which is always the ultimate goal of any commercial bank. This ratio is considered critical and an important indicator for measuring credit risk because when this ratio rises, the bank will be exposed to a major crisis as a result of the increase in credit risk. Thus, the rise in this ratio is a negative indicator as a result of not creating a balance between loans and deposits. Table (6) shows the average ratio of total loans to total deposits for the private banks in the study sample for the period 2012-2017.

Table 6: The ratio of loans to deposits for Egypt, the study sample, for the period 2012-2017

Standard Deviation	Mean	2017	2016	2015	2014	2013	2012	Bank Name
0.03	14	17	19	15	10	11	10	Bank of Baghdad

It is clear from Table (12) that the average loans to deposits for the Bank of Baghdad for the period 2012-2017 reached (14%), and the standard deviation was 0.03. This means that the bank has low credit risks due to not giving a large percentage of the funds deposited in the bank in loan granting operations. Thus, the bank will be able to return deposits to their owners whenever they want to withdraw them without causing problems to the bank.

4. SECTION FOUR: CONCLUSIONS AND RECOMMENDATIONS

4.1. Conclusions

- 1- The most important types of credit risks are the risks resulting from the customer's default and inability to pay the credit amount, and the risks of credit concentrations that occur as a result of the lack of diversification of the investment portfolio, whether at the bank level or in general.
- 2- From the analysis and discussion of the study variables, the variation in the total debt ratio reached the highest total debt ratio, and this indicates that the total debt ratio is subject to the extent of the bank management's awareness of the credit risks that result from a high debt ratio, which in turn affects the bank's profits.
- 3- Analysis and discussion of the study variables showed that the capital adequacy ratio was the lowest, while the management of the Bank of Baghdad was not concerned with the adequacy of capital, causing this bank to face significant credit risks.
- 4- It became clear from the analysis and discussion of the study variables that the ratio of debt to equity is the highest, which caused an increase in credit risks in this bank due to the high debt compared to equity, which weakens the bank's ability to face any risks that may occur in it.
- 5- The analysis and discussion of the study variables showed that the ratio of loans to current assets was low, which means that the credit risks in it are low, due to the decrease in loans towards current assets, which enables the bank to face any risks that may occur to it.
- 6- With regard to the rate of allowance for loan losses, which is one of the most important indicators for measuring credit risk, the analysis and discussion of the study variables showed that they were low due to the low rate of allowance for loan losses, which indicates that the bank does not expect large losses resulting from the bank's inability to collect the loans granted. To his customers
- 7- It became clear from the analysis and discussion of the study variables that the ratio of loans to deposits varied and was the lowest, which indicates that the credit risks in this bank were low.
- 8- Regarding the research hypothesis of the impact of credit risk indicators on loans and credit facilities indicators, we note that there is no statistically significant effect of credit risk indicators on loans and credit facilities, but there is a partial effect of some credit risk indicators on loans and credit facilities.



4.2. Recommendations

- 1- The banks sample of the study should pay attention to the credit risks to which they are exposed, due to their clear role in reducing the losses that occur to those banks, by following the methodological principles in credit risk management.
- 2- Continuous work to manage credit risks in line with developments occurring in the knowledge field of banks, such as introducing credit ratings for customers for the purpose of granting credit in accordance with credit controls and standards to reduce their impact.
- 3- Private banks must work to reduce credit risks by developing credit policies that ensure the bank achieves its goals.
- 4- The management of the Bank of Baghdad, whose total debt ratio was higher than the general average ratio, should reduce the debt ratio and try to reduce the credit risks in those banks.
- 5- The management of the Bank of Baghdad, whose capital adequacy ratio was lower than the general average, should try to raise capital in the bank, to face the potential losses that they may face.
- 6- The management of a bank whose debt-to-equity ratio was greater than the general average ratio should reduce the debt ratio and increase the bank's ability to face risks.
- 7- The management of a bank in which the ratio of loans to current assets was greater than the general average ratio should reduce the ratio of loans to current assets.
- 8- The bank should pay attention to cash and pledged credit facilities and study the processes of granting credit in a way that allows the bank to achieve its goals and not face losses that could lead it to bankruptcy.

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