



The impact of regulating bank credit risks on the value of commercial banks / An analytic study of the commercial banks listed on the Iraqi Stock Exchange for the period (2020-2015)

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Abstract:

This study aims to focus on the most important mechanisms and means used to confront the credit risks to which commercial banks are exposed and work to reduce or control them, by shedding light on how to manage and control bank credit risks and make investment and financial decisions in light of strict supervisory and administrative systems and methods, it ensures that banks clearly identify and classify these risks and thus take appropriate decisions that lead to better achieving their objectives, then we present the basic principles of credit risk management, which include a set of measures that must be taken by banks for the purpose of activating their new policy to codify or mitigate the severity of those risks, Credit risk is considered the main variable fundamental that affects both net income and the market value of property rights, in this study we analyse the impact of using bank credit risk mitigation by using the following methods which are (principles of good lending, market segmentation, and portfolio diversification credit, credit insurance, credit control and bank strategy), the study found that there is a direct, statistically significant relationship between capital risk management and the degree of banking safety, and that an increase in banking risk management by one unit leads to an increase in the degree of banking safety by (0.422), relying on the principles of good lending when granting credit, in addition to monitoring and periodic review of the credit portfolio before and after granting credit.

(key words: (Credit risks, methods of reducing risks, commercial banks

introduction.

The risk is considered an integral part of banking, especially with the increasing intensity of competition, technological development, the increase in the volume of banking transactions and the need for banks of large sizes, nowadays the commercial banks face various banking risks that vary in degree of seriousness from one bank to another even if they are properly evaluated, analysed, studied, and then managed, the overall potential risks are among the factors that help its success and ensure its continuation in the banking market with satisfactory returns and low risks,



considering that commercial banks are establishments of a special nature that face returns and risks of various forms at the same time, credit risks are among the most important ones that they face resulting from banking transactions with customers and institutions, which They are classified into different types that can be measured with advanced indicators that allow the bank to identify them accurately and predict them in the future which helps them to control or reduce them if they are difficult to eliminate.

The first topic

Study methodology

1. study problem.

The study problem can be expressed in a set of the following questions:

- a. Do the overall risks (systemic risks and unsystematic risks) affect on the existence of banks and pose a real threat to their disappearance?
- b. Is there a direct impact of credit risk on banking activity in the Iraqi Stock Exchange?
- c. Analysis of the impact of using credit risk rationing on the value of Iraqi commercial banks, including: principles of good lending, market segmentation and diversification of the credit portfolio, credit insurance, credit control and the bank's strategy?
- d. Iraqi commercial banks' awareness of the risks of the credit portfolio, the ultimate outcome of which is the risk of non-payment or credit default, and the impact of this on the value of banks through the returns achieved for owners and shareholders?

2. Objectives study:

This study aims to review the credit risks to which Iraqi commercial banks are exposed and how to manage and reduce them, which requires answering the following questions:

- a. What is meant by credit risk ?
- b. What are the main forms of bank credit risk ?
- c. What are the methods for managing bank credit risks to limit or reduce them?

3. importance study.

The importance of the study in this regard lies in the importance of contemporary studies that have focused their attention on how to manage and control bank credit risks and make investment and financial decisions in light of strict supervisory and administrative systems and methods that guarantee banks a clearer identification and classification of those risks and thus take appropriate decisions that lead to better achieving their objectives.

4. Study hypotheses.

The study's main hypothesis is the idea that there is a direct, statistically significant relationship between capital risk management and the degree of banking security, and the following hypotheses branch out from it:

- a- The first null hypothesis (H₀): There is no direct relationship with a statistically significant level between credit risk management and the degree of banking safety.



b-The second hypothesis: Acceptance (H1): There is a direct relationship with a statistically significant level between credit risk management and the degree of banking safety.

5. sample population:

The sample population represents commercial banks operating in the Iraq Stock Exchange during the extended study period (2015-2020).

a-Spatial boundaries: Iraq Stock Exchange for the period (2015-2020).

b-Time limits: Iraqi commercial banks for the period (2015-2020).

The second topic; theoretical framework

The first axis: The nature of banking credit risks

Although the nature of credit varies in its size, purpose, interest rates, maturity date, and type of guarantee required from one client to another .

The risk is always present in the granted loan and is considered one of the most prominent risks facing the activity of bank within this entry, we discuss the concept of bank credit risk, its main forms, and some indicators, measure these risks within the following points:

(1-1)The concept of bank credit risk.

The economic studies have dealt with banking risks by analyzing and predicting them which would help the bank to make objective decisions, the risk is generally defined as a case of adverse deviation from an expected result that results in harm, damage, or loss. Specifically in the banking field, banking risks are defined as the possibility of the bank being exposed to unexpected losses or fluctuation in the return on a particular investment that affects on the achievement of the bank's desired goals, among the main risks that face banks are credit risks, which are meant by:

(AL-Amin, 2020:P:10)

a. The risks that arise due to failure to pay in full and on time, resulting in financial loss.

b. Credit risk is defined as the possibility that the borrower client will not be able to repay the loan and its burdens according to the terms agreed upon when granting credit.

Accordingly, credit risk is a potential loss resulting from the inability of the borrowing client to pay the value of the original borrowed amount and its interest to the lending bank on the due date specified in the terms of the credit contract, these risks include items within the budget such as loans and bonds and items outside the budget such as letters of guarantee and documentary credits:(Naqar,2019:111)

(1-2)Sources of bank credit risks:

The risks to which loans are exposed can be divided into special risks and general risks, and we are exposed to each of them as follows:

”a- Special risks “unsystematic risks:



Unsystematic risks are those internal risks that are unique to a company or industry under certain circumstances. Examples of these circumstances include weak banking management, administrative errors, labor strikes, and changing customer tastes as a result of the emergence of new products, this type of exceptional risk Non-market would affect the customer's ability and desire to pay his obligations to the bank granting the loan within the agreed upon term.(Mounir,2012:p227)

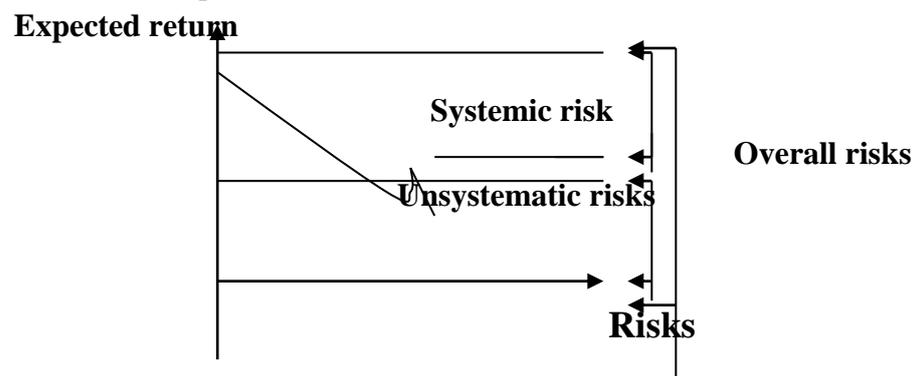
”b- General risks “systemic risks:

Systematic risk means all the risks that affect all loans, regardless of the circumstances of the lending bank, due to economic, political, and social factors that are difficult to control, examples of these risks include the risks of changing interest rates, the risks of changing customer tastes, the risks of inflation, and the risks of changing exchange rates, foreign currencies, In addition to technological changes.(Afana,2017:p66)

The bottom line is that special risks occur as a result of internal factors that affect the bank’s ability which requires it to predict them and anticipate their occurrence in the future and they can be reduced or controlled through diversification, unlike general risks that affect the movement of the market as a whole and are difficult for the bank to control and predict in the future, therefore, general risks cannot be avoided by the largest share of total risks is due to systemic risks and a portion of diversification unsystematic risks which can be explained by the following equation:

Total risk = systematic risk + unsystematic risk.

The following figure (1) shows (sources of risks and cases of diversification and non-diversification). (Afana,2017:p105)



Source: Prepared by the researcher based on (Afana,2017:p105)

(1-3)The most important credit risks and some indicators for measuring them: (Saeed,2016:p111)

Credit risk can occur as a result of unforeseen circumstances and variables resulting primarily from the customer’s inability to pay and the total deficit and this has



negative effects on the bank and its banking reputation and consequently its financial transactions. Below we present in summary the most important forms of credit risks that obstruct banking activity and some indicators for measuring it. A- Credit risk. (Al-Qadi,2017:p41)

1- Liquidity risk: The policy of granting credit to customers is linked to the existence of compatibility with the terms of the bank's sources of funds which provides it with sufficient liquidity to meet withdrawal requests for deposits from other customers, as the bank's inability to immediately liquidate assets at an acceptable cost affects its profitability, creating what is called the risk of failure in Matching and reconciliation between customers' cash withdrawals and the borrower's repayments, among the reasons for exposure to liquidity risks are: :(Shaheen,2018:p30)

a. Weak liquidity planning at the bank, which leads to inconsistency between assets and liabilities in terms of maturity dates.

b. Misallocation of assets to uses that are difficult to convert into liquid balances.

c. The sudden transformation of some contingent obligations into actual obligations.

d. The impact of external factors such as economic recession and severe crises in financial markets.

2- Pricing risks: The bank must study the prices of the lending products that are charged to customers in the form of burdens and link them to the level of risks, the greater the risks, the higher the expected return from the facilities, this is related to the additional margin that distinguishes between one client and another, therefore, the basic lending price is determined by the historical cost of funds or the market rate, plus the reserve ratio and the cost of debt management, at a periodic meeting of the bank's assets and Liabilities Management committee, the basic lending rate is discussed. (Kanaan,2017:p329)

3- Risks associated with the facilitation period: It is important for the bank to grant credit facilities that the facilitation period suits the nature of the client's activity, the purpose of the financing, and the recovery period for the expected return from the financing, the bank's role is to make the facilitation period balanced, meaning that it should not be short, which constitutes bottlenecks, or long, which will affect the bank must focus on the direction of expected returns, and in general it should not be directed to financing activities with quick returns for medium or long terms, the bank must also focus supervision on the activity of new customers and their financial situation. .(Kanaan,2017:p329)

4- Implementation risks: among the decisions necessary to grant credit is that the bank should focus on updating customers' information (their account positions) on a daily basis, and that any delay in affecting customers' obligations by increase or decrease through daily operations reflects a clear risk to the soundness of the credit decision, whether by rejection, or approval. (Saeed,2016:p111)

5- The risk of inability to repay: this is the full risk of credit, and it is a risk that arises primarily from the customer, the reasons vary depending on the defaulted credit cases, the most important of which are: (Shaheen,2018:p33)

a. human risk: It relates to the customer's personality, eligibility, competence, and ability to pay his financial obligations based on his reputation and creditworthiness.



b. the risk of providing misleading and exaggerated information to the bank (8) where the customer resorts in an improper manner to concealing information about his identity in order to obtain credit or in order to increase the ceiling of credit facilities, and in this case the borrowing customer is unable to pay the value of the borrowed amount with the interest due by the agreed upon term, a payment failure is announced when it is unable to pay scheduled amounts on time for a period of less than (3) months after the payment date and breach of the agreement. Therefore, the bank is keen to study the financial statements of its customers for the previous (3) months and determine the adequacy of converting assets into cash and the size Guarantees that guarantee the repayment of the loan amount with the interest due.

6-Political and legal risks: Following up on the political and legal aspects is one of the important matters that requires lending officials to follow up on them, and failure to adhere to and adhere to them constitutes a real danger to the banking services industry Among, the political risks are those related to the state's ability to adhere to its pledges and fulfill its debts, as well as what is related to how to supervise... Financial institutions and the regulations and laws regulating this within the country's financial system. (Khaled,2019:p103).

b- The most important indicators for measuring credit risk:

Accurately identifying credit risks and developing indicators and data that help measure them among the things that help for managing and controlling those risks and thus reduce risks to their lowest levels. (Khaled,2019:p103).

The most important indicators for measuring credit risk are as follows: (Suleiman,2020:p77)

1- Data on the distribution of the loan portfolio among sectors of economic activity on a quarterly basis.

2 - Data on the distribution of the portfolio to facilities with in-kind guarantee, with the value of the guarantee determined at the last quarterly evaluation, and facilities without in-kind guarantee.

3- Asset quality indicators approved within the bank according to the warning system, which is calculated on a monthly basis as follows: (AL-Youssef,2018:153)

- a. Ratio of credit portfolio to total deposits.
- b. Distribution of the portfolio among sectors of economic activity.
- c. Percentage of unsecured loans to the total portfolio.
- d. The ratio of provisions to the total non-performing facilities represented by loans and outstanding facilities.
- e. Percentage of irregular facilities/total credit portfolio.
- f. Ratio of allowances for doubtful debts/total credit portfolio.

The following is a presentation of the most important risk measurement indicators, including credit risk:

(Al-Janabi,2015:87)

to measure types of risks

1.Credit risks:



- a-Net loan burdens/total loans
- b-Provisions for doubtful debts/total loans
- 2.Liquidity risk:
 - a- Basic deposits / total assets
 - b-Volatile deposits/total assets
- 3.Exchange rate risk:
 - a -Open position in each currency/capital base
 - b-Total open positions/capital base
- 4.Operational risks:
 - a- Total assets / number of employees
 - b-Labour expenses /number of employees
- 5.Capital risks:-
 - a -Shareholders' equity/total assets
 - b-The first tranche of capital/risk-weighted assets

The second axis: bank credit risk management

Based on what was mentioned above regarding credit risks and how to measure and control them, it is necessary for the bank's central risk management to supervise them and work to limit and mitigate them in order to modify the credit path and ensure banking performance. The following is a presentation of how to manage risks and manage non performing loans.

(1-1)Risk management in banks in accordance with the requirements of the Basel Committee on Banking Supervision:

With the exacerbation of the external debt crisis of Third World countries and the rise in the percentage of doubtful debts, the Basel Committee on Banking Supervision included the participation of the major industrialized countries in the presence of representatives of the central bank governors of twelve countries (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland), (United Kingdom, United States of America, Luxembourg) in 1988, it was agreed to set a rate of (8%) as a minimum for banks' capital adequacy, and banks were obligated to apply it at the end of the year (1992), the Basel Committee, as a supervisory system, was concerned with the banking risks facing banking activity, risk measurement systems and management methods to mitigate them and maintain the stability of the banking system' .(Hindi,2015:p120)

We point out in this regard that good risk management in banks requires adherence to the following basic principles: (Al-Khatib,2011:p153)

- 1- Each bank should have an independent committee called the "Risk Management Committee" concerned with preparing general policy, while the specialized risk management department is responsible for implementing those policies, and also monitors and measures risks periodically.
- 2- Appointing a "risk officer" for each type of major risk who has sufficient experience in the field The bank.



- 3- Establishing a specific system to measure and monitor risks in each bank and setting precautionary ceilings
. * for credit and liquidity
- 4- Evaluating each bank's assets, especially investment assets, as a basic principle for measuring risks and profitability.
- 5- Use modern information systems to manage risks and establish appropriate safety controls.
- 6- The necessity of having an independent internal audit unit in banks that reports directly to the bank's board of directors and reviews all the bank's activities, including risk management.

(1-2)Credit risk management approaches:

Credit process management means how credit decisions are made at various administrative and organizational levels, this policy includes the general standards and directives that credit agencies in branches must adhere to to avoid credit risks . Generally credit management focuses on two types of approaches through which credit is analyzed to determine the degree of risk, we explain them as follows: (Husseini,2008:p7)

1-The first approach: It is known as the "discriminatory approach" and is based on the idea of evaluating clients, taking a general idea of their personality, social status, and extent of their credibility and determining the goal of the credit application, the type of activity financed, and the nature of the guarantee provided, credit management focuses on studying the client's ability and desire to repay the value of the loan with Interest on the maturity date by determining its financial solvency.

2-The second approach: It is known as the "experimental approach." After ensuring the borrower's personality, financial solvency, and the compatibility of the guarantees provided with the size of the credit, a point or weight is then given to each measure, provided that it matches the weights specified by the credit department.

Analyzing and predicting risks in advance allows credit management to control them, mitigate their severity, and avoid their effects on the

banking system. In general, the objectives of risk management focus on

ensuring:(Total risks likely to occur, concentration of risks, risk measurement, Monitoring risks by controlling them and preparing reports in accordance with legal rules) below we discuss how to manage credit risks and reduce the risks of non performing loans.

(1-2-1)Managing credit risks:

Risk management means a set of administrative arrangements that aim to protect the bank's assets and profits and reduce losses to their lowest levels by identifying and measuring the type of these risks and working to prepare procedures to control them.

Risk management is based on three basic principles, which are: (Tariq,2013:244)

- 1 - Optional: that is, choosing at least a number of debts with zero risks.
- 2-Setting a limit on risks: This depends on the type and type of loan.
- 3-Diversification: This avoids concentrating loans to specific clients.



In managing potential credit risks, banks rely on banking inquiries to assess the size of the risks resulting from the decision to grant credit, as well as focusing on the preventive method by credit management to avoid the occurrence of risks or on the remedial method in the event of risks that require confronting their negative effects on the banks' performance: (Hussein,2008:p9)

1. Banking inquiries: Before granting credit, the bank resorts to inquiring and investigating in all possible ways and means about the customer's personal and financial situation and the extent of his ability to fulfill his obligations on their due dates in accordance with the agreed upon conditions, among the most important sources of obtaining information we mention: (AL-Rasheed,2009:P283)

a- Conducting an interview with the loan applicant: Conducting a personal interview with the client reveals to the bank a large aspect of his personality, reputation, and the extent of his honesty in the information provided about the institution's status, activity, competitive position, and future plans. It also reveals the institution's past and its financial dealings, which helps the credit management official evaluate and know the size of the loan applicant. Risks that may face the granting credit.

b- Internal sources from the bank: The internal organization of the bank is one of the important sources in the credit decision, especially if the loan applicant is one of those who have previously dealt with the bank. Internal sources of information are determined through: (Naima,2014:p255)

1- The customer's bank accounts which reveal his status as a creditor or debtor, and which determine the nature of his practical relationship with the bank.

a- The client's financial position and the record of checks drawn on him

b- The client's commitment to the terms of the contract and his efficiency in paying his obligations according to the agreed upon due dates.

c- External sources of information: (Naima,2014:p476)

External departments represented by other banks, suppliers, bulletins of the Department of General Statistics, chambers of commerce, official newspapers, and courts help provide the credit department with information about borrowers and exchanging information between banks about debtors would help them assess the extent of risks.

d- Financial statement analysis: It is one of the most important sources of obtaining information. The credit department is concerned with analyzing the organization's past years' lists, preparing and analyzing future lists and determining the estimated cash budget that reveals the organization's financial position on a specific date, which provides the credit department with information about the financial position of the



borrower and the extent of his ability to generating cash flows to ensure repayment of the loan amount with interest.

2.Preventive method: In order to prevent the risk of default before it occurs, the credit management resorts to following up on the credit granted to avoid the risks resulting from it by focusing on the following elements: (Muhammad,2010:p39)

3- Requesting appropriate guarantees: To avoid potential risks, the credit department evaluates the value of the loan, and on its basis or more than that, the appropriate guarantee is determined, it is considered one of the most important and effective preventive measures to confront the risk of non-payment arising from the customer . as this procedure allows the bank to be compensated and the financing provided is usually restored, the bank focuses on two types of guarantees: (Ahmed,2011;155)

4-Personal guarantees: they are a personal pledge and commitment on the part of the borrower guaranteeing the payment of the loan value and interest . Thus they express security in covering the loan and include:

=Guarantees: Guarantee is a contract whereby a person called a guarantor undertakes to fulfill this obligation to the creditor if the creditor himself does not fulfill it.

=Reserve guarantee: it is a written commitment by a specific person under which he pledges to pay the amount of a commercial paper or part of it in the event of the inability of one of the signatories to pay , the papers on which this type is used are the promissory note, bond, and checks.

=Credit insurance: It is a form of personal guarantee that involves a guarantee provided by the insurance institution on behalf of the beneficiary to cover the risk of non-payment, the fact that credit coverage is contingent is what makes it a subject of insurance.

5-Real guarantees: These guarantees are based on the thing provided that is the subject of the guarantee, such as goods, equipment, and real estate, these guarantees are provided as a mortgage and not as a transfer of ownership in order to guarantee the recovery of the loan and take the form of a mortgage, possessory mortgage, or lien, in general, the bank must when Determining the guarantee should take into account: (Ahmed,2011:p155)

a.The value of the guarantee should not fluctuate significantly during the credit period.

b.Sufficient guarantees to cover the loan with interest and other commissions.

6- Limiting credit concentration: Credit concentration means directing credit to one customer due to its large position and refraining from offering it to other clients, which constitutes risks that must be mitigated through: (Al-Tahar,2012:p165)

a.Some countries impose limits on credit facilities for a single client, ranging between (10% - 25%) of the allocated capital, attention must be paid to monitoring any



concentration of credit risks for any economic activity or geographic region, with periodic follow-up.

b. Requesting guarantees when estimating the size of risks is one of the essential matters because real guarantees are not reached until that value is collected.

c. Capital adequacy of commercial banks, as it is an internationally agreed upon precautionary system (Basel Committee on Banking Solvency), it requires that research into capital adequacy be preceded by a sound and adequate account of allocations to ensure the quality of existing assets.

7- Efficiency in preparing the credit policy: in order to reach a sound credit policy and avoid the risks of default, the bank's management must constantly intensify the training of credit cadres to raise their level and efficiency, which helps in setting sound goals and plans, including determining the level of potential risks and managing them according to regulatory standards and standards.

4. Therapeutic method: it consists of using methods and techniques to manage and eliminate risks. This method is based on: (Salah El,2008:p72)

- Organizing the credit collection function: With the aim of the bank recovering the credit granted in appropriate circumstances and to avoid the occurrence of losses, the bank resorts to following a policy of collecting its dues from customers by organizing the credit granting mechanism and setting effective standards that guarantee the full collection of the loan and its interests within the specified deadlines. In organizing this function, it relies on: (Salah El,2008:p72)

- Preparing methods to detect current and future non-payment cases .

- Continuing to follow up and process credit .

- Establishing advanced measures that work to recover the largest possible amount of receivables.

(2-2-1) Management of non-performing loans:

Non-performing loans arise as a result of certain reasons that can be divided into three groups: (Aqeel,2014:p45)

a - Reasons committed by the bank that lead to credit default: These are reasons resulting from the lack of objective study of the credit decision and identification of potential risks in terms of management risks, market risks, capital risks, and real estate guarantee risks, so the facility is disbursed in one go without monitoring and follow-up.

b - Reasons committed by the customer that lead to the loans defaulting: the risk of default arises when the customer provides false information about his financial position or submits it incompletely on the one hand, and on the other hand his technical and administrative incompetence in using the loan and directing him into inappropriate financing activities, the nature of the loan results in... he defaults and is unable to fulfill his obligation to the bank.

c- External reasons: These are reasons that are beyond the control of the bank



management and the customer and are related to the economic situation of the country (the stage of contraction) or to the political and legal conditions when making changes in the systems and legislation that govern the country, non-performing loans result from the customer's inability or unwillingness to pay in the first place, which the bank is required to take measures that vary depending on the borrower's condition. (Ahmed,2011:p155)

d- If the borrower's condition is one of difficulty in fulfilling obligations, the credit department resorts to analyzing the financial statements to study them and correct the imbalances. It may also ask the borrower for an estimated cash budget to determine the volume of cash flows and determine the ability to repay the loan granted.

e- If it is noted that the borrower's situation is temporary or circumstantial, the credit department works to help the client and provide advice to postpone payment, reschedule, reduce the interest rate on loans, and may also grant him additional facilities to facilitate his activities , the credit department resorts to such a friendly method in close relations with Customers with trust and a good reputation in order to maintain the bank's position with existing customers and attract new customers. (Ahmed,2011:p158)

Third axis: Means of reducing credit

The predictive theory of credit risks is considered to be methods of accurately measuring and indicators of things that help credit management to analyse, study, and bear them. There are many diverse definitions in using some methods of managing many results "the process of making different types defines multiple types of diversity, while it is not possible to we disagree, especially since it is fully defined, including the only variety related to many issues" (Christoffersen.2013:3), and it is also defined as ((preventive measures taken by management to negatively affect multiple impacts and keep them to a minimum). (Al-Qadi,2017:p45).

It is also defined as “ an integrated organization that aims to confront many causes and reduce costs by discovering, analysing and measuring these many means of responding to them through the most appropriate means to achieve the goal” and below we discuss the diversification of building an independent bank and Markotz: (Al-Shammari,2013:p145)

First: Diversification of credit risks and Marcotz's theory:

The idea of diversifying risks is the most important means taken by credit management and the idea of diversification is based on the following:

(Kumar,2013:p145)

- 1.Analysis of the portfolio according to the economic activities to which the existing facilities that were granted to clients belong.
- 2.Portfolio analysis according to the terms of the facilities granted (short, medium, long).
- 3.Portfolio analysis according to customer size (small, large)
- 4.Analysis of the portfolio according to the type of currencies in which the facilities are granted (by preparing the bank's financial positions according to a specific main process).



Diversification in its simple sense is an application of the proverb that says, “Do not put all your eggs in one basket.” Based on this perception, Harry Markowitz’s theory was based on the following concepts: (Kumar,2013:p153)

1-In the case of undertaking investment projects that are completely and negatively related to each other, and the return on investment (A) is greater than the return on investment (B), “that is, the correlation coefficient (-1),” then diversification in this case results in eliminating the risk completely, but it is not possible. Practically.

2-In the event that investment projects are not related (that is, the correlation coefficient = (0), then diversification in this case leads to a significant reduction in the degree of risk.

3-In the case of undertaking investment projects that are fully and positively correlated (i.e., the correlation coefficient is (+1), diversification in this case does not result in any reduction of risk.

Thus, the theory of diversification was reflected in the bank’s credit decision, on the basis of which the extent of propensity for risk is determined, in order to ensure achieving returns and avoiding risks, credit management must adopt the diversification approach and Markutz’s portfolio theory, as this allows for hedging against potential risks by reducing them and limiting them to the lowest possible level when there is the greatest diversification that leads to the lowest risk.

(Al-Madhoun,2011:p63)

Second: Diversify the investment portfolio:

In addition to diversifying credit risks, credit management resorts to diversifying its credit portfolio, which is known as the “simple diversification” method. Markutz’s vision revolves around diversifying the investment portfolio in light of two main dimensions: (Robert,2018:p75)

1.Rate of return on assets

2.The expected change in this return based on the standard deviation of the return.

In the case of forming an investment portfolio consisting of two or more assets, there is no perfect correlation between them, and by means of the standard deviation measure a relatively lower level of risk is determined than if the correlation was perfect or large, the theory of diversification aims to form an efficient investment portfolio in terms of return and risk, in light of greater... the level of possible return is matched by a certain level of risk, the risks of a particular investment decrease and decrease as the investment portfolio is more diversified. (Ali,2020:p11)

Third: Objectives of banking risk management:

The objectives of risk management are as follows: (Al-Asadi,2005:p138)

1.Work to prevent the occurrence of danger and follow the best means that will protect the facility and its employees from the material losses to which the bank is exposed, and provide employees with educational courses on how to perform their work correctly and avoid falling into losses.



2.Stability of profits, risk management contributes to reducing the variance in income resulting from losses associated with risks to the lowest possible level. In addition reducing the variance in income can help maximize tax deductions for losses and reduce taxes.

3.Creating and providing stability and confidence in the banking system that eliminates or reduces fears of loss on the part of depositors and creditors this increases their confidence in financial and banking institutions, and this represents the primary goal of the bank’s management.

**The third topic/practical framework
Methods of measuring study variables**

1.The degree of security in the Iraqi banking system for the study sample:-

Banking safety degrees measure the extent to which banks are able to be aware and cautious of the risks to which they are exposed from their operational operations, this degree is measured through the following equation:-

(Ownership rights/total assets) this ratio appears: whenever it increases, it indicates a high degree of safety for the bank, and whenever it decreases, it indicates a low degree of safety. (Al-Shammari,2013:p153)

Table (1) Banking safety score ratios for sample banks for the study (2020-2015)

Bank	2015	2016	2017	2018	2019	2020	Average degree of safety
Al-Ahly Iraqi	0.491	0.570	0.045	0.310	0.427	0.486	0.388
Iraqi commercial	0.463	0.546	0.488	0.587	0.632	0.660	0.562
United Investment	0.354	0.377	0.439	0.448	0.531	0.553	0.45
Iraqi Union	0.573	0.445	0.195	0.435	0.387	0.413	0.408
The Arabian Gulf	0.237	0.337	0.353	0.390	0.425	0.398	0.356
The Middle East	0.144	0.206	0.229	0.261	0.449	0.411	0.283
Al Mansour Investment	0.491	0.402	0.614	0.354	0.319	0.268	0.408
Babylon	0.297	0.394	0.368	0.490	0.609	0.682	0.473
Baghdad	0.123	0.159	0.159	0.165	0.160	0.173	0.156
Sumer	0.631	0.630	0.587	0.632	0.619	0.713	0.635

Source: Prepared by the researcher based on the financial reports of the banks sampled for different years



It is clear in Table No. (1) that the banking safety degree ratio reached its highest level in the Sumer Commercial Bank in the year (2020) with a rate reaching (0.713), while it reached its lowest level in the National Bank of Iraq in the year (2017) with a safety rate reaching (0.045), from the table above, we note that the degree of safety for the commercial banks in the research sample was in varying proportions, the Sumer Commercial Bank achieved first place in terms of the degree of safety with an average of (0.635), followed by the Commercial Bank of Iraq (0.562), and then the Bank of Babel, Al-Ittihad, and the rest of the sample banks. Study straight.

2. Liquidity risk management:

Liquidity risk appears when depositors use their money directly from the bank, the bank must borrow additional funds or sell its assets, liquidity risk is calculated through the following equation: (Cash in the box or at the bank/total deposits). This ratio appears as the lower it indicates the higher, Liquidity risk of the bank. (Kumar,2013:p162)

Table (2) Liquidity risk ratio for banks sampled for the study for the period (2020-2015)

Bank	2015	2016	2017	2018	2019	2020	Liquidity risk management
Al-Ahly Iraqi	0.980	1.452	1.664	1.063	1.210	1.164	1.256
Iraqi commercial	0.533	1.305	1.226	1.983	1.111	1.606	1.294
United Investment	0.734	0.457	0.876	0.325	0.190	0.516	0.516
Iraqi Union	0.177	1.465	0.845	0.882	0.794	0.267	0.728
The Arabian Gulf	0.399	0.445	0.613	0.884	0.802	0.598	0.624
The Middle East	0.742	0.731	0.735	0.764	0.976	0.980	0.819
Al Mansour Investment	0.535	0.612	0.678	0.437	0.488	0.315	0.511
Babylon	1.026	0.913	1.38	0.544	0.527	0.766	0.819
Baghdad	0.710	0.654	0.776	0.728	0.665	0.971	0.751
Sumer	1.435	1.227	1.414	1.761	1.819	2.232	1.684

Source: Prepared by the researcher based on the financial reports of the banks sampled for different years

By reviewing Table No. (2) above, we note that the highest liquidity risk rate reached (2.232) in Sumer Commercial Bank in the year (2020) as a result of the high level of activity in the bank compared to the rest of the banks in the study sample, while the lowest level of risk was in Al-Ittihad Bank, the Iraqi Bank reached (0.267), while the rest of the banks varied in the risk ratio as shown in the table, while the management



of Souf Bank achieved the highest level of risk management with a rate of (1.684), which is a good percentage compared to the level of risk achieved in the bank’s activity during the study period.

3.Capital risk management.

Capital risk indicates that the market value of assets is less than the market value of liabilities, capital risk is calculated through the following equation (capital owned / total assets), this ratio shows that the lower it indicates the higher the capital risk, and the higher it indicates the lower the risk, capital .

Table No. (3) shows the capital risk ratios of the banks in the study sample for the period (2020-2015)

Bank	2015	2016	2017	2018	2019	2020	Capital risk management
Al-Ahly Iraqi	0.464	0.541	0.296	0.280	0.405	0.466	0.409
Iraqi commercial	0.294	0.404	0.340	0.448	0.556	0.602	0.441
United Investment	0.289	0.305	0.353	0.397	0.502	0.516	0.394
Iraqi Union	0.473	0.413	0.162	0.307	0.359	0.399	0.352
The Arabian Gulf	0.209	0.293	0.244	0.319	0.367	0.369	0.300
The Middle East	0.113	0.149	0.183	0.193	0.366	0.370	0.229
Al Mansour Investment	0.435	0.367	0.579	0.316	0.283	0.323	0.369
Babylon	0.490	0.368	0.329	0.457	0.573	0.660	0.481
Baghdad	0.104	0.129	0.134	0.141	0.136	0.161	0.134
Sumer	0.583	0.594	0.558	0.602	0.595	0.677	0.602

Source: Prepared by the researcher based on the financial reports of the banks sampled for different years

We note from Table No. (3) that the ratio for capital management was overlapping for one reason through the data above and here more than that it depicted the risks in the year (2020) compared to the rest of the years, which are for both Sumer (0.677) and



Babylon (0.660), and Iraqi commercial (0.602), and he became able to fully manage in that country. Nasser has the highest percentage, and his size reached one million somers in managing many (0.602) and (0.481), and the last Iraqi commercial (0.441).

(General statistics)

General statistics for the independent and dependent variables of the study,

Table No. (4)

Variables	Number of samples	lowest value	highest value	Arithmetic mean	standard deviation
Dependent variable					
Degree of banking security	10	0.157	0.635	0.412	0.134
Sub-independent variables					
Liquidity risk management	10	0.511	1.648	0.897	0.377
Capital risk management	10	0.134	0.602	0.371	0.130

Source: Relying on the results of the statistical program (spss.vr.20)

Table (4) shows that the lowest value for the dependent variable represented by the degree of banking security was (0.157), the highest value was (0.635), the arithmetic mean was (0.412), and the standard deviation was equal to (0.134), and the minimum value for liquidity risk management was (0.511), while The highest value was (1.648), the arithmetic mean was (0.897), and the standard deviation was equal to (0.377), and the lowest value for capital risk management was (0.371) and the standard deviation was equal to. (0.130)

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Conclusions((

The most important conclusions of the research can be summarized as follows:

- 1.The subject of studying the impact of credit risk mitigators on the value of Iraqi banks is one of the most important topics that banks should pay extensive attention to in order to ensure that this phenomenon is avoided and that they continue in the banking market and their capabilities to compete and achieve the greatest amount of profits.
- 2.Given the recent topic of the impact of credit risk mitigators on the value of Iraqi banks, there is no comprehensive understanding of the nature of these risks facing commercial banks due to the ineffectiveness of the risk management department in banks despite the Central Bank of Iraq requiring all banks to have a specialized risk



management department in them, while the bank is taken into account. The Central Bank does not issue special instructions for managing banking risks facing banks in general, and there are no such instructions.

3.Despite the diversity and multiplicity of risks to which credit management is exposed, credit risks represent the basis of the fundamental risks that hinder the credit decision.

4.Knowing these risks requires identifying them accurately by knowing their causes and the factors that increase the likelihood of their occurrence, which helps credit management to hedge against them and avoid their negative effects. Eliminating banking risks in general and credit risks in particular is impossible, as the risk remains present in all the bank's activities which requires taking action, preventive measures to avoid them or remedial measures to avoid and confront the possible consequences of their occurrence.

5.Credit analysis is the basis for monitoring and managing bank credit risks, and measuring these risks helps to a great extent in reducing them, among the important means of limiting and minimizing these risks that has become a recent trend adopted by many institutions in light of the increase in competition and the abundance of risks, is to rely on the philosophy of diversification, whether by diversifying credit risks or diversifying the investment portfolio to ensure achieving returns with the least possible losses.

6.There is a direct, statistically significant relationship between capital risk management and the degree of banking safety, and an increase in banking risk management by one unit leads to an increase in the degree of banking safety by (0.422)

7.Many factors contributed to the decline in the values of banks, including the political conditions that the region is going through, especially Iraq which had a direct impact on many sectors, especially the banking sector that caused a record decline in stock prices and a sharp decline in the number of stocks that were sold and been traded.

)).Recommendations((

The recommendations that are made by the researchers and they can be summarized as follows:

- 1.The need to strive to reduce the impact of credit risks on the Iraqi banking sector in general, by finding a balance between banks and credit risks.
- 2.The management of Iraqi banks must pay attention to and study the factors that affect on the degree of banking security and work to mitigate the credit risks that



hinder the work of banks by seeking to reconcile capital, liquidity and profitability . As well as paying attention to the quality of banking services that they provide to their customers, diversifying them, and drawing up credit policies that are compatible with their capabilities which increases its ability to compete in marketing its banking services in an optimal manner.

3.The need for bank management to organize workshops and a development course for bank employees to raise their awareness and educate them on the concept, importance and objectives of the impact of credit risk mitigators on the Iraqi banking sector.

4.The need for the banking administration to follow up on the continuous development of the supervisory and banking controls necessary to ensure good management of banking risks and to demonstrate the strength of their impact on the degree of banking safety, while following up on the ongoing review procedures for them.

5.Relying on the principles of good lending when granting credit, in addition to monitoring and periodic review of the credit portfolio before and after granting credit, since most credit problems occur when the bank exceeds these principles which leaves a negative impact on the performance and value of the bank.

6.Financial analysts use the(Tobins Q)ratio to determine the value of the bank and evaluate performance and profitability and to provide them with additional information that shows its importance in terms of its significance in accurately determining the value of the bank, in addition to evaluating performance and profitability.

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