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Use of CAMELS Standard in the Assessment of Iraqi Commercial Banks

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Abstract

This current research aims to identify the most important factors affecting Iraqi commercial banks using the CAMELS model. The research was based on a sample of (13) Iraqi commercial banks listed in the Iraqi Stock Exchange. The CAMELS, which consists of (30) equation, was used for the research. The economic inflation and other economic factors affecting the distribution of the financial ratios of the equations on five levels within the CAMELS standard were considered. An algorithm was adopted in the MATLAB program, in addition to adopting statistical categories method, taking the large differences between one ratio and another and adjusting the categories according to the standards of (CAMELS). The research found that Iraqi banks suffer from weaknesses in some sensitivity aspects of market risks and unable to handle the heavy shocks in market risks as well as its low management, other details are mentioned in the summary.

Keywords: CAMELS; Iraqi; Commercial Banks

Introduction

Banks have great importance in the economies of the developing countries because of the banks' large size and the multiplicity of stakeholders from depositors, debtor, and shareholders. The integrity of any national economy depends on the integrity of the banking system. If banks are exposed to any risk, it will directly affect the national economy, thus the importance of banks supervision was increased by the Central Bank and other regulatory bodies. CAMELS is one of the most important globally used standards.

Based on the above, this research aims to identify the most important objectives of applying the CAMELS. It is to evaluate the status of commercial banks and to identify their strengths and weaknesses to find solutions before they widely expand and damage the national economy, and the description and analysis of the system standards, its tools and its impact on performing commercial banks. And to adapt the CAMELS system with the nature of Iraqi commercial banks to develop the banking business. And also to determine the commitment of commercial banks by the international evaluation standards. And work on finding comprehensive financial indicators that help banks to identify the financial performance and predict future performance in the light of financial challenges.

The research is important as it links the components of the CAMELS model to performing Iraqi commercial banks. This model is one of the most important tools used by Central Banks to evaluating and

control banks to ensure the stability and the safety of the financial system. And to achieve the endurable stability in the commercial banks besides knowing their impact on the national economy. The practical importance of the CAMELS model is highlighted as one of the modern methods in evaluating the performance of commercial banks and it is also used to detect the banking crises before they occur and providing solutions.

The results we reach are of great importance to the regulatory bodies because they give us a deeper understanding of performing commercial banks. And its contribution to the development of the national economy. Therefore, this research opens new horizons because it is based on more comprehensive measures than in previous studies in Iraq.

Based on the above, it can be said that this research shall answer several questions, which is considered a real problem:

1. Are commercial banks committed to achieving capital adequacy?
2. How good are the assets owned by Iraqi commercial banks?
3. Do commercial banks have the ability to bring liquidity for employment and retention?
4. Do commercial banks maintain their balance by achieving sufficient profitability for stability?
5. Do commercial banks contribute to efficiency?
6. How sensitive are the commercial banks to banking errors? and are they able to overcome market risks?
7. What is the effect of the variables related to the bank represented by elements of (CAMELS) on the performance of Iraqi banks?
8. What are the maximum cases of commercial banks and how they can be utilized?

The Theoretical Side

CAMELS Standard

Is an effective unified regulatory system to assess the performance of banks to determine their financial viability by identifying their strengths and weaknesses based on six essential elements in order to enable the Supervisory Authority to correct the situation and protect financial integrity (Al-Imam, 2010). The system dates back to November 1979, when it was first used by the Federal Council to examine financial institutions. It is a quick indicator of the true financial position of any bank and the degree of its classification. The standard is one of the direct means of control that is established through field inspection, as the regulatory authorities have worked on the results of the standard (Tourist, 2012), (Debic, 2015).

Here is a detailed explanation of the CAMELS components:

Capital adequacy

Capital adequacy indicators determine the viability of the financial institutions in face-to-face budget items shocks and take into account the most important financial risks facing financial institutions such as exchange rate risk, credit risk, and interest rate risk (Valahzaghavd & Bahrami, 2013). The capital adequacy ratio reflects the amount of the Bank's capital to bear unanticipated losses and to meet the obligations.

Capital adequacy is the critical element in addressing the banking risks, which has become a constant supply as a result of the rapid developments in the technology banking field such as electronic banking in general and the Internet in particular, which required a minimum capital adjustment to address the resulted risks (Al Amin, 2010). The type and size of the risk determine the capital level be reduced. It

represents the capital ratio to its assets with 8% of the capital, which is greater than the required minimum, and this is included in the Basel II Committee decisions in 2010.

Therefore, in 1999, the Basel Committee submitted some proposals containing new ideas, including the expansion of the capital adequacy accounting framework to meet the objectives of increasing the financial system's safety, security and robustness.

The Central Bank's capital classification is based on a number of factors identified by (Dehreb, 2010), (Sarker, 2005) and (Desta, 2016).

1. The level and quality of the capital and the overall bank financial position.
2. The administration ability to make reserves as additional capital.
3. The direction and size of non-performing loans as well as the adequacy of provisions and assessment reserves.
4. Components of the Bank's budget such as the nature and size of intangible assets, market risks, concentration risks and risks related to non-conventional activities.
5. Risks related to extrabudgetary activities, quality, and strength of revenues and how reasonable dividend distribution is.
6. The ability to enter capital for financing and other sources of capital, including support from the parent company.
7. The Bank's future growth.

Assets Quality

The assets quality means the type, the risks it faces, its ability to generate returns, the ability to recover them in the agreed aggregate, the collateral adequacy given to its liabilities and the absence of rigid or unproductive assets.

The asset quality rating gives the level of the financial future risks associated with borrowing as well as Portfolio investment, real estate, and off-balance sheet risk. It also shows the classification of the management's ability to identify, measure and control risks. To asset the assessment, we should take into account the adequacy of the debt allocation and the risks based on the value of the investment such as operational risks, corporate's image, strategy, change systems.

Asset quality is particularly important in the evaluation system because it is a critical part of the bank's activity that runs its operations. However, the Bank's acquisition of good assets will result in more income generation and better valuation of both liquidity and capital (Rahim, 2014) (Shaddady & Moore, 2019).

Asset quality is based on the following issues:

1. The size and intensity of troubled assets for total capital.
2. Size and trends of repayment of overdue loans and actions taken to reschedule them.
3. Large credit concentrations and the risk of the sole debtor or related debtors.
4. The volume and treatment of the management of staff loans.
5. Effective loan portfolio management in view of the strategies, policies, procedures, controls, and instructions in force.
6. Legal activities related to credit (claim, the pursuit of borrowers).
7. The provisions level made to meet the losses of loans and bad credit.
8. Methods of managing other assets and investing in securities, second assets, bills of exchange ... etc.)

Assets quality also determines the degree of risk in assets and the Bank diversifies into the total loans and geographical areas as well as the investment in securities in order to reduce the risk to which it

may be exposed. The bank's acquisition of good assets will generate more profits and better valuation of liquidity, management, and capital (Muralidhara & Lingam, 2017).

(Almahmoud, 2014), (Treaa, 2015), (Handorf, 2016) and (Dincer et al, 2018) noted that asset quality rating reflects the size of current and future risks related to lending, investment portfolio, depreciated real estate and extra-budgetary activities. The classification reflects the management's ability to quantify risk control.

An asset quality assessment must consider the adequacy of debt provisions, the risks that affect the value of investments such as operational risk, market, strategic capacity, and regime change.

An asset quality assessment depends on the following factors:

1. The adequacy of the collateral criteria, the strength of loan management and the relevance of the risk identification.
2. The distribution level of the severity and direction of the classified scheduled debt and non-operating debt within and outside the budget.
3. Adequacy of debt and investment allocations or valuation reserves.
4. Lending risks arising from or low in off-budget operations such as unfunded credit commitments and lending lines.
5. Diversity and quality of loans and investments portfolio.
6. Undertaking activities related to trading activities.
7. Policies and procedures for loans and investments.
8. The management ability to manage the bank's assets, including debt collection.
9. The adequacy of internal control and information systems.
10. Size and nature of debt documentation.

Management Efficiency

The ability of the management to control & manage the banking and credit policy on a sound basis measured by several indicators such as profit trends achieved over several financial periods and the financial institution reports on the internal control systems, which reduces the errors incidents of and irregularities and the ability to attract deposits in addition to the adequacy of the Central Bank in placement. As well as follow the bank decisions and controls governing the banking work issued by the monetary authority. There are some quantitative indicators that can be relied upon:

1. Spending rates.
2. Income ratio of each employee.
3. Expanding the preparation of financial institutions.

(Zagod, 2015), (Williams, 2011)

It reflects the efficiency and ability of the Bank's Board of Directors and its Executive Management in managing risk. Management efficiency will be measured by its ability to control the Bank's operating banks by dividing the Bank's operating expenses on total assets.

We consider the administrative performance as an essential component to judge the Bank's success in achieving its objectives through the interaction of many factors related to the tasks and responsibilities assigned to management, the ability to deal with the developments, environmental and banking changes and to achieve the necessary supervision in this regard.

The following are the most important issues to be considered.

To determine the appropriate classification of management by studying the following factors:

1. Understand the risks inherent in banking, environmental and economic activities.
2. The financial performance of the bank in view of the quality of the assets, the adequacy of capital, profits, and liquidity.
3. Develop and implement plans, policies, and controls in all key areas of work.
4. Power and convenient function and realization of internal and external audit.
5. Adhering to the laws and the in-force regulations of the Central Bank.
6. Trends towards the bank public interest.
7. Compliance with the laws and legislation and the interaction between the Board of Directors and the General Assembly of shareholders.
8. Application of the principles of acquisition of experience and functional skills to take into account career substitution.
9. Experiences with the concerns and recommendations of the Central Bank and taking into account the accuracy of financial reports and statements.
10. Provide training programs for human resources and attract them effectively and to make sure that it works with high quality.

In general, the Board of Directors should not be involved in the Bank's daily operations, but the Board should provide guidelines for the acceptable risk the level and ensure that appropriate policies, procedures, and practices have been created (Shakara, 2012), (Rozzani &Rahman&Dincer, 2013), (Hacioglu, 2015)

The management's ability evaluation shall be based on the following factors:
1. The level and quality of management of the Bank's activities.
2. The ability of the board of directors and management, each according to its competence, to plan and deal with the risks that may arise from changes in working conditions or providing new activities and products.
3. The adequacy of the internal control systems to deal with all risks.
4. Accuracy, timeliness, and effectiveness of information systems and risk control systems.
5. Adequate audit systems and control systems to activate the efficiency of operations.
6. Experiences with recommendations from auditors and control authorities.
7. The extent to which the board of directors and management is an outside influence.
8. Reasonableness of incentive policies and avoidance of individual work.
9. The extent of the administration's desire to take care of the bank's legal interests and community service.

Earnings

Earnings are the Bank's ability to consistently generate revenues and profits in a balanced manner, as well as implementing policies that reduce public expenditure and track doubtful debts so as not to falter. It also shows the factors influencing earnings and the lending risk which pushes the Bank to make provisions and risks of the financial market that cause the Bank profits changes as a result of its impact on interest rates. Earnings are affected by relying on undisclosed or unnecessary profits. (Al-Amin, 2010) (Al-Qaisi, 2017) (Britch et al, 2013).

Earnings achievement is the most important objectives and determinants of the bank performance since profits are the main source for achieving appropriate returns to the bank shareholders. The Bank's management considers profits as an important element to ensure the Bank's continuous performance. It directly affects the strength of the assets and its effectiveness which is measured by determining the return on average assets as the starting point for profit assessment as well as studying and analyzing the following factors:

1. Profit adequacy to meet losses, enhance capital adequacy and pay reasonable dividends.
2. The quality and installation of net income elements including taxes.
3. Size and trends of various elements of net income.
4. The extent of reliance on exceptional items, securities transactions, high-risk activities or non-traditional income sources.
5. Budget effectiveness and control the income and expenditure items.
6. Provisions adequacy of and loan losses provisions.

The Earnings ratio for taxonomic purposes is usually determined based on the lower performance of the banks of similar characteristics. Focusing on them leads to some results. For example:

The bank may earn very high profits, but the source of profits may come from a one-off or non-traditional (high-risk) activity. In spite of high Earnings, retention of profits remains insufficient to allow capital growth and maintain a guideline to assets.

Earnings reflects the realized profits level of, their contribution to the bank's growth and capital increase (Gilbert et al, 2002).

The profit classification should not only reflect its direction but also the profits quality and the factors affecting them such as credit risk and market risk. The Bank's profits may be subject to change as a result of the change in the interest rate. Also, the quality of the profit is affected by non-recurring profits or tax advantage (Aspal & Dhawan, 2016).

The revenue quality can also be affected by reliance on non-recurring profits or on a tax advantage. Earnings can also be affected by the inability to access financing needs, inability to control expenditures or adopting a weak strategy (Rauf, 2016) and (ALreda&Albasry, 2011).

Revenue classification is based on the following factors:
1. The revenues level including the direction and stability of revenues.
2. Ability to consolidate capital accounts through retained earnings.
3. Quality and revenue sources.
4. Banks ratio to operations.
5. The budget system adequacy, forecasting processes, and information risk management.
6. The adequacy of the volume of debt provisions.
7. Income related to market risks such as interest rate and exchange rate.

Liquidity

It is the relevance between collecting liquidity as quickly as possible and the best price, and between investing and employing it in a meaningful manner. The bank's liquidity management aims at achieving the following:

1. Making the right decisions regarding the volume of the deposit, which shall reach a certain level as the increasing of the volume of the deposit in the employment absence leads to low earnings.
2. Maintain adequate liquidity ratios for emergency needs.
3. Respecting liquidity ratios set by the monetary authority in addition to setting a minimum liquidity limit in line with the Bank's activities (Al-Tayy and Mahmoud, 2013) (Khodashahi et al, 2018).

Liquidities are particularly important in assessing the Bank financial adequacy because it reflects the Bank's ability to meet its obligations to creditors, especially depositors. Liquidity will be measured by dividing the liquid assets of the Central Bank on total assets.

The bank's liquidity management shall ensure that the bank is able to maintain an adequate level that liquidity is not at the expense of cost or rely on funds sources that may be available in difficult circumstances.

Liquidity is the ability of the Bank to meet depositors' withdrawals while meeting the needs of borrowers at the same time without having to sell securities with large losses or borrowing at high-interest rates (Rahman & Islam2018).

When assessing the bank's liquidity, it is necessary to focus on the current level of liquidity as well as the future need. Liquidity management shall ensure adequate liquidity to meet different liabilities on perfect time, taking into account the mismatch between the assets and liabilities in the banking sector or at large-sized financial institutions level (al-Tai and Mahmoud, 2013), (Sarker, 2005) (Ghasempour & Salami, 2016).

Sensitivity to Market Risk

Sensitivity to Market Risk reflects the changes in interest rates, exchange rate, commodity price, and stock prices that may adversely affect the Bank's financial position or capital. In assessing sensitivity, consideration should be given to the management's ability to determine the monitoring and control of these risks, the size of the bank, the complexity of these processes, the adequacy of revenues and capital in relation to the level of these risks. For most banks, the main source of this type of risk is non-trading positions and their sensitivity to interest rate risk in large banks. Foreign banking operations can be a source of market risk. In some banks, trading activities are the main source of market risk, (Rostami, 2015), the most important of which are:

1. Credit risk, 2. Price risk, 3. Liquidity risk

Market risks refer to the impact of lower asset prices on the Bank's net worth. The reason for the decline is due to several reasons, the most important of which is the portfolio's concentration in certain types of assets or banks' tendency to direct their investments to assets with significant activity such as mortgages.

The sensitivity to market risk reflects the changes in the interest rate, exchange rate and securities prices that negatively affect the financial position of the bank. In light of the developments and challenges in the financial and banking arena, it is necessary to focus on the sensitivity of the assets structure and liabilities and bank's net profits to adverse changes in interest rates and exchange rates, (Rahim, 2014), (Drummond, 2000), (Githinji, 2010).

The advantages of the CAMELS system:

(Al-Amin, 2010), (Dhehrb, 2010) and (Dang, 2010) pointed to a number of advantages as follows:

1- Banks classification according to a unified standard.
2. Standardize reporting.
3. Shortening the evaluation time by focusing on six items and not stabilizing efforts in evaluating unnecessary items
4. Dependence on digital assessment rather than the reporting style, which reduces the volume of the report and increases their credibility.

5- To make a comprehensive classification of the banking system as a whole according to a unified approach and analyzing the results horizontally for each bank separately and for each similar group of banks and vertically for each of the six banking performance elements.

6. CAMELS are less costly than office software.

7. This is a standard that is truly capable of isolating risk factors that may lead to problems in the future.

8. The results of this system shall be based on the supervisory decisions and the procedures following the evaluation.

The disadvantages of the CAMELS system:

(Al-Imam (2010) and (Dervizpodiera, 2008) pointed to a number of disadvantages:

1. The choice of the financial ratios, on which the Standard is based, is based on personal judgment and not on statistical assumptions. Some scientific research has found other financial ratios that are more efficient and have a greater impact on the Bank financial position than the ratios currently used by the Standard. It may be useful to replace current ratios with new ratios, which may improve the standard efficiency.

2. The standard is based on the bank's classification into similar groups according to the size of the assets, since the average values of the used ratios reflect the whole group, however, the average differs significantly from one bank to another within the same group and therefore does not reflect the reality of the group.

3. The Standard measures the performance based on the other banks constituting the relative group. In case of any structural change in that group performance or the performance of the banking system as a whole, valuation indicators are not normally changed accordingly when calculating the final ratings.

4 - The system gave weights to all elements and it is difficult to install them throughout the evaluation periods without giving consideration to the variables and this may also reduce the standard accuracy and the importance of its results.

5. In the case of a significant change in the assets size of a particular bank, which puts it in another relative group larger or smaller than the previous relative group and may change markedly in the assessment weights and the questioned bank classification, although the indicators of its financial position has not changed, but confined to the change in Assets size only.

Banking classifications by CAMELS method

Each (Dahir, 2015) and (Al-Qaisi, 2017) refers to the bank's classification according to the CAMELS standard as in Table (1):

Table (1) Banks Classification by CAMELS standard

Classification	Degree of classification	Bank position	Control Procedure
Strong	1 ----- 1.4	A good position in all respects	don't take any action
Satisfactory	1.5 ------ 2.4	Relatively true with some deficiencies	Treatment of negatives
Fair	2.5 ---- 3.4	Shows the elements of weakness and strength	Control and follow-up to the Bank
Margin	3.5 ---- 4.4	Risk may lead to failure	Field reform and follow-up program
Unsatisfactory	4.5 ---- 5	Very dangerous	Permanent control+ supervision

The classification grades are usually divided into the six components of the mentioned standard according to the following weights for each system element or according to the monetary authority as shown in Table (2)

Table (2): CAMELS elements Weights

item	**C**	**A**	**M**	**E**	**L**	**S**
weight	20%	20%	25%	15%	10%	10%

Shakara (2012), (Dahrib, 2010), (Masoud et al, 2016) referred to a detailed explanation of each classification

1. Strong classification: This rating is given to a bank that is robust in all respects and has no weaknesses. They are usually minor and can be dealt with by the Board of Directors of the bank. The banks that fall within this classification are strong banks and then have the ability to resist any external situation, such as economic instability and also these banks are fully committed to the laws and regulations. It has strong performance and efficient risk management and does not pose any concern to regulatory authorities. These banks have liquid assets to normally meet the volatility of deposits and loans demand, with limited reliance on interbank borrowing for liquidity needs.

2. Satisfactory classification: The banks in this group are basically solid but suffer from minor problems fall within the control of each board. These banks are stable and able to deal with economic fluctuations. These banks are largely committed to regulations and laws. The risk management of these banks is somehow satisfactory compared to the bank's size and the complexity of its operations. There is no material concern by the regulatory authorities and therefore the intervention of the supervisory authority is usually limited. These banks include weaknesses in one or more factors and these weaknesses can be corrected by applying a reasonable time frame. There is a little likelihood that these risks will affect the revenues level and capital. The revenues level and capital are sufficient to cover market risks taken by the Bank.

3. Fair classification: Banks within this group are a concern for regulatory authorities because of some of the above classification components. These banks suffer from some weaknesses ranging from medium to severe. Bank management can reduce the ability or willingness to deal with weaknesses within a specific time frame. Such banks are usually unable to cope with business fluctuations and are more susceptible to external conditions than those classified as (1, 2) and are not compliant with a reasonable degree of regulation. The risk management for these banks is also less satisfactory. In addition to the banks need of the regulatory authorities. These banks' failure is uncertain. These banks include major weaknesses that may turn out to be worse, requiring regulatory oversight to ensure management reform.

4. Marginal classification: The banks that fall within this group suffer from unsafe and unsustainable practices and there are serious administrative and financial problems that can lead to unsatisfactory performance. The banks problem ranges from acute to critical. The problems and weaknesses are not satisfactorily dealt with by the Board of Directors of the bank. The banks within this group are unable to deal with working fluctuations and do not comply with the banks' laws and regulations. The risk management of these banks is not acceptable compared to the bank size, complexity, and risk degree. These banks require considerable control by the regulatory authorities; in return, these banks are required to take the necessary steps to correct the situation. These banks represent a threat to the Deposit Guarantee Corporation and these banks' failure probability is significant if the weaknesses are not satisfactorily addressed. These banks face severe liquidity problems that require immediate action to ensure that the bank meets its current needs and plans for short-term and unanticipated liquidity needs.

5. Unsatisfactory classification: Banks that fall within this category suffer greatly from unsafe and unsustainable practices and suffer from poor performance and significant risk management weaknesses in terms of the bank's size, complexity, and risk. And it represents a major concern for the regulatory authorities. The size and degree of severity of the problems lie outside the administration's ability to adjust and correct them. These banks need to emergency assistance if they want continue. These banks also need constant control and its failure probability is magnificent. This type of bank requires the central bank's help to prevent the collapse of the bank because of its inability to meet the creditors and depositors' needs.

Methodology

Measurements used in the research

The CAMELS standard, which was adopted by Rostami (2015), was relied on. And it's used on a sample of Iraqi commercial banks listed in the Iraqi market exchange and is all explained in detail with a brief explanation as in the tables.

Table (3) Capital Adequacy

Capital (C)	
TIER1= Total shareholders 'equity/Total risk-weighted assets	**TIER2= Total complementary capital/Total risk-weighted assets**
TIER1: It measures bank's financial strength in dealing with the losses in risk-weighted assets and as these ratio increases, the Bank's ability to offset losses arising from risks such as trading, investing and lending increases too.	**TIER2:** It measures the complementary capital capacity addressing losses in risk-weighted assets and as the percentage increases, it indicates the bank's strength to address losses without affecting its financial position
CAR= Total capital base/ Total complementary capital	**TLTE= Liabilities/ Equity**
CAR: The this ratio increasing is an evidence of the strength of the bank's core capital and a rise in the IPO and retained earnings	**TLTE**: The lower the ratio, the greater the Bank's ability to meet its liabilities and its ability to pay all its debts to shareholders in the Bank if the bank is liquidated.
TDTE=Deposits/Equity	
TDTE: Whenever this ratio is low, it indicates the bank's ability to meet all amounts of deposits if it was withdrawn at one time from the bank and is not affected by its financial position in case of large withdrawals	

Table (4) Assets Quality

Assets quality (A)	
EATA= Total current assets /Total assets	**DA= Deposits/Total assets**
EATA: It measures the amount of underlying assets, most of which are liquid assets, and the higher the ratio, the greater the strength of the bank's financial position in generating profits	**DA:** It measures the deposits increasing rate to the total assets. The increasing of this ratio is a good indicator and evidence of the deposits' accumulation and non-investment
TBPA=Bank shares of income/Total assets	**TAEA= Fix assets/Equity**
TBPA: It measures the total amount of the bank's income to the total assets and the	**TAEA**: The rise in this ratio is evidence that the bank has fixed assets in excess of shareholder

greater the percentage, it is a good sign of the bank's ability to generate high income	value and this is a good indicator
FIX= Fix assets/Total assets	
FIX: The rise in this index is not good, it is evidence of the lack of liquid assets on the short term	

Table (5) Management Efficiency

Management quality (M)	
TPTB=Net profit/Number of branches	**TLTB= Total liabilities/Number of branches**
TPTB: The higher the ratio over the years is a good indicator and if the number of branches increases but the ratio don't increase, this is evidence that the new branches did not benefit the bank	**TLTB:** The lower the ratio, the better the ratio of liabilities to the number of branches, so each branch will be able to meet its liabilities well. Without affecting its financial position
TATB= Total assets/Number of branches	**TDTB= Total deposits/Number of branches**
TATB: The rise in this ratio is a good indicator in terms of the total amount of assets and if there is a decrease in the indicator ratio, this is an evidence of the assets' depreciation or that newly opened branches did not achieve an increase in total assets	**TDTB** The increase in this index is not good, indicating that there are deposits that are not well invested
TFTB= Total loans/Number of branches	
TFTB: The increase in this index makes the bank faces an embarrassing situation in the event of a financial crisis, it will be unable to avoid the crisis in case of lenders objection and the failure to pay their money.	

Table (6) Earnings

Earnings (E)	
FTI=Fees and commissions/Total Income	**PD= Deposit cost/Deposit**
FTI: The rise of this index is a positive sign for the bank, which is an evidence of the abundance of services provided by the bank and is charged with financial commissions	**PD:** The rise in this ratio is not good, it indicates a high cost incurred by banks in order to keep deposits
PF= Loan income/Loans	**PP= Loan income/Deposit cost**
PF: The rise in this index is a good sign that customers continue to repay the loan amount with interest. In case of decline, it indicates the reluctance of customers to pay the money and affects the financial position of the bank	**PP:** The rise in this ratio is a good sign of higher loan income on the cost of deposits. It shows that there is a movement in deposits and is granted in loans form.
OI= Deposit Cost/Total Income	
OI: The rise in this ratio is not a good indicator and indicates the high cost of deposits relative to gross income	

Table (7) Liquidity

Liquidity (L)	
INT=(Investment/Total assets)	**OTA=Security/Total assets**
INT: The rise of this ratio is a good indicator of the increase in banking investments relative to total assets	**OTA:** The rise in this ratio is a good indicator of the bank's increasing in securities investments relative to the total assets
VTC=Current liquidity/Deposits	**VD=Current liquidity/(Demand deposits)**
VTC: The rise of this ratio is a good indicator of the bank's high liquidity and the bankability to meet the amount of the deposit	**VD:** The rise in this ratio is a good sign and evidence of the bank's ability to face large and sudden withdrawals in current deposits
LI=Liquidity/Assets	
LI: The rise in this ratio is a good indicator of the bank's ability to generate large liquidity compared to its total assets	

Table (8) Sensitivity to Market Risk

Sensitivity and risk (S)	
NPL=Doubtful debts/Loans	**NPL2= (Bad debts + Overdue)/Loans**
NPL: The increase in this ratio is not a good indicator because of the debtors reluctance to pay loan installments	**NPL2:** The rise in this ratio is not good because of the high ratio of the bad debt or the delay in loan installments payment
PROV= Provisions of loan/Loans	**OPER=Long term deposits/Deposits**
PROV: The increase in this ratio is a good indicator and indicates provisions existence of to face default in the repayment of the loan	**OPER:** The rise in this ratio is a positive sign and evidence that the bank has long-term guaranteed investments
DD= Demand deposits/Deposit	
DD: The rise in this ratio is not good and it is evidence that the bank has current deposits more than the rest of the deposits types, which are savings deposits and term deposits	

Table (9) provides a brief description of the terms used in the research scale

index	Details
Total shareholders 'equity	Shareholders' equity is often referred to as the company's book value and comes from two main sources, the first and original source is the money invested in the company, besides any additional investments made thereafter, and the second source is the retained earnings the company able to collect over time through its operations
Total risk-weighted assets	are the amount of capital that is required within banks based on a percentage of the assets, weighted by risk
Total capital base	can refer to the capital acquired during an IPO, or the additional offerings of a company, plus any retained earnings
Total complementary capital	Including (foreign exchange differences + fair value reserve for financial assets through equity, up to 45% if it is positive or fully repaid if negative + general bank risk reserve) + medium or long-term supporting loans with common characteristics between equity instruments Debt under certain conditions + Unregulated reserves + Revaluation reserves + Reserves to counter bad debts + Securities
Liabilities	as a company's legal financial debts or obligations that arise during the course of business operations. ... Recorded on the right side of the balance sheet, liabilities

	include loans, accounts payable, mortgages, deferred revenues, and accrued expenses
Equity	which represents the amount of money that would be returned to a company's shareholders if all of the assets were liquidated and all of the company's debt was paid off
Deposits	consist of money placed into banking institutions for safekeeping. These deposits are made to deposit accounts such as savings accounts, checking accounts and money market accounts. The account holder has the right to withdraw deposited funds, as set forth in the terms and conditions governing the account agreement.
Rate base assets	refers to the underlying assets giving value to a company, investment or loan. The asset base is not fixed. It will appreciate or depreciate according to market forces, or increase and decrease as a company sells or acquires new assets Principal assets = Cash and balances in the Central Bank + Balances with banks and other financial institutions + Net direct credit facilities + Financial assets at fair value through comprehensive income + Financial assets at amortized cost
Total Assets	include anything a company owns that has monetary value, even if it can't be readily sold. They are split into two classes -- current assets, which refers to assets that a company can (or will) sell within one year, and long-term assets, which are the assets a company cannot (or doesn't plan to) sell within a year. Examples of a company's assets include, but are not limited to Cash and equivalents, Investments, such as equities or debt securities, Equipment, Inventory, Real estate, Accounts receivable, Intangible assets, such as goodwill
Fixed assets	also known as tangible assets or property, plant and equipment (PP&E), is a term used in accounting for assets and property that cannot easily be converted into cash. This can be compared with current assets such as cash or bank accounts, described as liquid assets
Bank shares of income	It measures the Bank's share of generated total income during the financial year
Fees and commissions	A commission is a fee paid to a bank in exchange for an in-service or completing a sale transaction. The commission may be structured as a flat fee, or as a percentage of the revenue, gross margin, or profit generated by the sale. fee definition: an amount of money paid for a particular piece of work or for a particular right or service.
Total Income	It represents revenue from all sources, and it is before deducting the costs and tax
Deposit cost	Which are the costs borne by the bank due to the retention of deposits and the increase in the cost of the deposit is not a good indicator
Loan income	Which is the income amount that the bank receives from the loans granted to customers, it represents the on-time granted loan interest
Loans	Is the amount of money the Bank gives to customers for interest and guarantees
Security	Investment in securities Shares, bonds and treasury bonds that are characterized by their ability to switch to quickly liquidity as needed
Demand deposits	They are current and demand deposits that can be withdrawn by the client at any time and without a fixed limit for the withdrawn funds amount. The bank does not pay any interest
Current liquidity	Bank liquidity means the commercial bank's ability to pay in cash for all its trade obligations and to respond to credit requests or to grant new loans. This requires the availability of liquid cash at the bank or the possibility of obtaining it by liquidating some of its assets
Investment	It is a capital used in the production or provision of services or goods. It may be a fixed investment such as preferred stocks and bonds, or a variable investment such as property ownership. Investment is defined as the assets that individuals and

	enterprises purchase in order to obtain current or future income.
Doubtful Debts	are those debts which a business or individual is unlikely to be able to collect. The reasons for potential non-payment can include disputes oversupply, delivery, the condition of the item or the appearance of financial stress within a customer's operations.
Provisions of loan	A loan loss provision is an expense set aside as an allowance for uncollected loans and loan payments. This provision is used to cover a number of factors associated with potential loan losses, including bad loans, customer defaults, and renegotiated terms of a loan that incur lower than previously estimated payments
Long-term deposits	Refer to terms of more than 12 months. You'll usually have the option to put your money away for between one and five years. As an incentive to leave your money untouched for a longer period, long-term deposits usually offer higher interest rates than the shorter-term ones.

In order to apply the CAMELS standard to the Iraqi banks, it will be necessary to determine the location of each ratio of the indicators found within the degree to which they correspond, which are from 1 to 5. As we have already seen, the number 1 represents the excellent position of the bank. Class 5 is the lowest level, as shown in Table (10).

The distribution of the reached percentages within these five degrees of the CAMELS standard requires a lot of effort and time to put them in a table that fits with the variables in the Iraqi environment and take the current inflation rate and the amount of national income and other indicators related to economic ratios. As well as the use of a number of statistical equations in relation to the categories distribution in order to distribute each proportion into five categories, taking into account the differences and financial mutations in some ratios and taking into account the highest value and subtracting from the lowest value for each equation and the teams begin to distribute it in five categories and then we undertake In the end, Table 10 was prepared, on the basis of which each percentage was distributed within the appropriate degree.

A special algorithm was developed within the MATLAB program and all the data on the CAMELS scale were included in order to assign each percentage to each equation Etc. (1 to 5) based on Table 10 and all six of the CAMELS six indicators to which they apply. This algorithm has been developed to match the data entered in 2017. It should be borne in mind that these percentages in Table (10) change each year in accordance with economic conditions and inflation rates. Because they have a strong impact on the scale accuracy of the. Through the algorithm that has been developed can be constantly updated and locate the bank within the CAMELS standard.

With this algorithm, it can be linked to the bank database and the data is automatically generated. The bank manager can tell the degree to which the bank will be within the CAMELS standard at any time. In the future, we hope that this program, which we are still working on, will be linked to the Iraq Stock Exchange database so that the data can be automatically spoken within the program without having to be re-entered. The code for each budget variable and income statement is given to matching the program codes and the data is automatically calculated and the degree to which each bank will be calculated at a fast pace for decisions to be made quickly. This requires artificial intelligence to automatically transfer data from the Iraq Stock Exchange database to the CAMELS database, which we have prepared and link directly with the CBI so that the central bank can conduct ongoing monitoring. Where data are automatically generated when the Bank inserts data each year and sends them to the Iraqi Stock Exchange. (Caglar, 2018), (Rostami, 2015), (Brandimarte, 2013), (Kienitz & Wetterau, 2012) (McCarthy, 2018).

Table (10) shows the details of the conversion of the CAMELS financial ratios to the progressive scale, which starts from 1 strong to 5 weak and for each equation used after relying on many previous studies to develop these ratios that are appropriate to the Iraqi financial environment.

No.	Equations	1	2	3	4	5
1	TIER1	More than 98%	80%---98%	70%---80%	50%---70%	Less than 50%
2	TIER2	More than 96%	78%--96%	78%--65%	65%--59%	Less than 59%
3	CAR	More than 93%	88%--93%	88%--78%	78%--55%	Less than 55%
4	TLTE	Less 32%	32%--44%	44%--58%	58%--80%	More than 80%
5	TDTE	Less 39%	39%--47%	47%--59%	59%--72%	More than 72%
6	EATA	More than 90%	90%--74%	74%--58%	58%--47%	Less than 47%
7	DA	Less than 46%	46%--51%	51%--63%	63%--81%	More than 81%
8	TBPA	More than 94%	94%--85%	85%--73%	73%--55%	Less than 55%
9	TAEA	More than 89%	89%-- 81%	81%--65%	65%--50%	Less than 50%
10	FIX	Less than 50%	50%-- 62%	62%--76%	76%--84%	More than 84%
11	TPTB	More than 11 Billion	11--7 Billion	7--6 Billion	6—3 Billion	Less than 3 Billion
12	TATB	More than 48 Billion	48—30 Billion	30—20 Billion	20—8 Billion	Less than 8 Billion
13	TLTB	Less than 7 Billion	7—11 Billion	11—20 Billion	20—75 Billion	More than 75 Billion
14	TDTB	Less than 7 Billion	7—13 Billion	13—26 Billion	26—38 Billion	More than 38 Billion
15	TFTB	Less than 49 billion	49—57 Billion	57—67 Billion	67—82 Billion	More than 82 Billion
16	FTI	More than 85%	85%--73%	73%-- 60%	60%--43%	Less than 43%
17	PF	More than 90%	90%--80%	80%-- 60%	60%-- 33%	Less than 33%
18	PD	Less than 30%	30%--35%	35%--42%	42%-- 66%	More than 66%
19	PP	More than 90%	90%--82%	82%-- 60%	60%-- 35%	Less than 35%
20	OI	Less than 20%	20%--37%	37%--44%	44%-- 69%	More than 69%
21	INT	More than 86%	86%--71%	71%-- 60%	60%--45%	Less than 45%
22	VTC	More than 90%	90%--80%	80%-- 70%	70%--49%	Less than 49%
23	OTA	More than 93%	93%--82%	82%-- 71%	71%--49%	Less than 49%
24	VD	More than 90%	90%--80%	80%-- 72%	72%--52%	Less than 52%
25	LI	More than 88%	88%--77%	77%-- 60%	60%--46%	Less than 46%
26	NPL	Less than 10%	10%--15%	15%--44%	44%--60%	More than 60%
27	NPL2	Less than 12%	12%--23%	23%--46%	46%--62%	More than 62%
28	PROV	More than 88%	88%--78%	78%-- 67%	67%--48%	Less than 48%
29	OPER	More than 90%	90%--80%	80%-- 70%	70%--40%	Less than 40%
30	DD	Less than 35%	35%--47%	47%--65%	65%--80%	More than 80%

The sample

A sample was taken from Iraqi commercial banks listed in the Iraqi Stock Exchange. The remainders that were not selected are due to the lack of data for the study for 2017, although we live in 2019, so it has been neglected. The following table shows the banks that have been taken and the banks that have been neglected for not following the transparency principle in providing full data to the Iraqi securities market. Or because there is a lack of necessary data.

Table (11): Sample of the study selected from the rest of the banks with the number of branches in Iraq

No.	Iraqi banks listed in the market for securities	Code	Number of branches in Iraq	Sample
1	Ashur International Investment Bank	BASH	8	**yes**
2	Bank of Babylon	BBAY	13	**yes**
3	Bank of Baghdad	BBOB	34	**yes**
4	Commercial Bank of Iraq	BCOI	25	**yes**
5	Tigris and Euphrates Development and Investment Bank	BDFD		**no**
6	Dar AL- Salaam Investment Bank	BDSI		**no**
7	Economy Bank for investment	BEFI		**no**
8	Erbil Investment & Finance Bank	BERI		**no**
9	Gulf Commercial Bank	BGUC	20	**yes**
10	Iraqi Investment Bank	BIBI	16	**yes**
11	International Development Bank for Investment and Finance	BIDB		**no**
12	Middle East Investment Bank	BIME	15	**yes**
13	Kurdistan International Bank	BKUI	5	**yes**
14	Mosul Bank for Development and Investment	BMFI		
15	Al Mansour Investment Bank	BMNS	9	**yes**
16	National Bank of Iraq	BNOI	10	**yes**
17	North Bank for Finance and Investment	BNOR		**no**
18	Iraqi Credit Bank	BROI		**no**
19	Region Trade Bank for Investment and Finance	BRTB		**no**
20	Sumer Commercial Bank	BSUC	10	**yes**
21	Bank across Iraq for investment	BTRI		**no**
22	United Investment Bank	BUND	26	**yes**
23	Bank Union of Iraq	BUOI	18	**yes**
24	Al Warka Investment Bank	BWAI		**no**
25	United Arab financial transfer	MTUA		**no**

Hypotheses

1. The implementation of the CAMELS standard, which leads to the evaluation of banking and increasing profits
2. Apply the CAMELS standard to achieve the quality of banking assets.

Practical side

Capital Adequacy Indicators

It is clear from Table (12) that most of the banks in the research sample did not reach the highest level, therefore are t not within the strong classification. But was limited between the satisfactory and fair classification. This means that banks are unable to withstand the strong shocks of exchange rate risk, credit risk, and interest rate risk, and in this case, all banks are required to raise their capital. Because the Iraqi financial environment is unstable, especially within the political transformations experienced by the region, making it in the future unable to withstand any strong shock in the economy, especially banks that fall within the reasonable level will be most vulnerable to exposure to risk which requires the Central Bank to monitor and follow up these banks. But in turn, these banks are able to cope with only minor economic changes.

Table (12) Capital adequacy index

No.	Banks	TIER1	TIER2	CAR	TLTE	TDTE	Average	Classification
1	BASH	2	3	2	4	3	2.3	Satisfactory
2	BBAY	3	3	2	4	4	3.2	Fair
3	BBOB	2	3	2	3	2	2.4	Satisfactory
4	BCOI	2	2	3	2	4	2.6	fair
5	BGUC	3	3	3	3	4	3.2	Fair
6	BIBI	3	3	2	3	3	2.8	Fair
7	BIME	3	2	3	2	4	2.8	Satisfactory
8	BKUI	1	2	2	1	4	2	Satisfactory
9	BMNS	3	3	3	3	4	3.2	Fair
10	BNOI	4	4	2	4	3	3.4	Fair
11	BSUC	3	4	2	4	3	3.2	Fair
12	BUND	3	3	2	3	4	3	Fair
13	BUOI	3	2	3	4	3	3	Fair

Asset Quality

It is clear from Table (13) that Iraqi banks contain rigid assets that do not generate financial returns, weak management of the loan portfolio and lack of high diversification in the bank's financial portfolio. As well as the lack of diversity in the loans granted as most of the Iraqi banks do not rely on the loans diversity to almost note that they depend on the same pattern in the loans granting and the existence of competition between them in a variety of granting loans and this because of the routine and it has not a great freedom in grants Loans. Banks in this case also suffer from operational risks that the banks management must deal with quickly, especially those that fall within the margin classification. Otherwise, these banks will not be able to generate income to cover their expenses in the future.

Table (13): Assets quality

No.	Banks	EATA	TBPA	DA	TAEA	FIX	Average	Classification
1	BASH	4	3	4	3	2	3.2	Fair
2	BBAY	3	3	5	3	2	3.2	Fair
3	BBOB	3	4	4	4	2	3.4	Fair
4	BCOI	3	3	3	2	1	2.4	Satisfactory
5	BGUC	3	4	5	3	2	3.4	Satisfactory
6	BIBI	4	3	4	4	2	3.4	Satisfactory
7	BIME	3	3	4	3	3	3.2	Fair
8	BKUI	2	2	2	2	1	1.8	Satisfactory
9	BMNS	4	4	4	4	2	3.6	Margin
10	BNOI	3	3	5	3	3	3.4	Satisfactory
11	BSUC	4	4	5	3	3	3.8	Margin
12	BUND	5	4	4	4	3	4	Margin
13	BUOI	5	4	5	4	3	4.2	Margin

Efficiency Management

By following the table (14) we note that there is a clear weakness of many banks in the management field. This weakness is represented by the management inability to adjust the banking policy on sound bases. This indicates that management has experienced a number of errors and that there are no plans to develop future banking policies. In all its equations, this indicator is based on the number of branches of each bank distributed throughout Iraq. Although these banks provided, however, when conducting the survey and information collection, we found that the number of branches are very few in the whole of Iraq as shown in Table (11). This is strong evidence that the current banks cannot meet the requests of customers. This is due to the lack of public awareness of the public towards banks, which

made these banks limited to a very few numbers of branches and many of them has limited branches in some cities and the absence of the bank activity in other cities.

Table (14): Efficiency Management

No.	Banks	TPTB	TATB	TLTB	TDTB	TFTB	Average	Classification
1	BASH	3	3	3	4	4	3.4	Fair
2	BBAY	2	2	3	4	3	2.8	Fair
3	BBOB	3	4	4	4	3	3.6	Margin
4	BCOI	2	3	4	3	3	3	Fair
5	BGUC	3	3	3	4	4	3.4	Fair
6	BIBI	2	3	2	4	4	3	Fair
7	BIME	4	4	3	4	4	3.8	Margin
8	BKUI	1	2	1	2	2	1.6	Satisfactory
9	BMNS	2	3	3	5	4	3.4	Fair
10	BNOI	4	3	4	5	5	4.2	Margin
11	BSUC	4	4	5	4	5	4.4	Margin
12	BUND	3	4	4	5	4	4	Margin
13	BUOI	3	3	5	4	4	3.8	Margin

Earnings

Table (15) shows that Earnings achieved by banks is not within the required level. This means that the banks incur high expenses and have doubtful debts, which affected the decline in profits. And there is a lack of strong strategies at the bank to reduce costs. When reviewing several studies in the Iraqi environment, we did not find adequate studies to reduce costs at the level of banks. This also indicates risk in lending operations which reduced Earnings. This is also evidence of the existence of market risks and instability in the economic situation, which led banks to reduce the loans granting and reduce their Earnings, especially long-term loans.

Table (15): Earnings

No.	Banks	FTI	PF	PD	PP	OI	Average	Classification
1	BASH	4	2	2	3	3	2.8	Fair
2	BBAY	3	2	2	3	3	2.6	Fair
3	BBOB	3	2	2	3	2	2.4	Satisfactory
4	BCOI	2	2	2	3	2	2.2	Satisfactory
5	BGUC	4	3	3	4	3	3.4	Fair
6	BIBI	4	2	3	3	3	3	Fair
7	BIME	4	2	3	4	4	3.4	Fair
8	BKUI	1	2	1	2	2	1.6	Satisfactory

9	BMNS	4	3	3	3	3	3.2	Fair
10	BNOI	4	4	4	3	4	3.8	Margin
11	BSUC	5	3	5	5	4	4.4	Margin
12	BUND	4	3	4	4	5	4	Margin
13	BUOI	4	2	3	5	4	3.6	Margin

Liquidity

By following the table (16) we note that most banks suffer from a lack of liquidity and this is evident because of the realized low profits and the cost increase, as evidenced by the Earning index. This is due to the decline in long-term investments in Iraqi banks as most of their investments are short-term and a few of it is medium-term, this is due to the lack of financial experts with high experience or lack of data available to them to enter into long-term investments. This was reflected in lower liquidity. Most of the Iraqi banks have little investment in securities, mostly internal rather than international. We conclude that Iraqi banks are unable to cope with large withdrawals. As well as the inability of Iraqi banks to achieve an optimal investment of their total assets.

Table (16) Liquidity

No.	Banks	INT	VTC	OTA	VD	LI	Average	Classification
1	BASH	4	3	4	5	4	4	Margin
2	BBAY	3	3	5	4	4	3.8	Margin
3	BBOB	3	4	4	3	4	3.6	Margin
4	BCOI	3	3	3	4	3	3.2	Fair
5	BGUC	4	4	4	4	3	3.8	Margin
6	BIBI	4	3	4	4	4	3.8	Margin
7	BIME	4	3	4	5	4	4	Margin
8	BKUI	2	2	3	2	3	2.4	Satisfactory
9	BMNS	4	4	4	5	4	4.2	Margin
10	BNOI	4	5	5	5	5	4.8	Unsatisfactory
11	BSUC	4	4	4	5	5	4.4	Margin
12	BUND	5	4	4	5	4	4.4	Margin
13	BUOI	4	3	4	5	4	4	Margin

Sensitivity to Market Risk

Table (17) shows that Iraqi banks are currently exposed to high market risks. These risks may be represented by lower asset prices on the Bank's net worth. As well as the lack of diversity in the financial portfolios or lack of securities investment, it can be seen in Table (17). Also, the specific provisions to meet defaults are not within the required level. We note that the indicator (OPER) is within a bad level because of the lack of long-term investments of all Iraqi banks. Most Iraqi banks also have current deposits at a large rate and in some cases may reach be equal to the rest of the deposits or more.

Table (17): Sensitivity to Market Risk

No.	Banks	NPL	NPL2	PROV	OPER	DD	Average	Classification
1	BASH	3	3	4	4	4	3.6	Margin
2	BBAY	2	3	3	4	3	3	Fair
3	BBOB	3	3	3	4	3	3.2	Fair
4	BCOI	1	2	2	3	3	2.2	Satisfactory
5	BGUC	3	3	4	4	4	3.6	Margin
6	BIBI	3	3	4	4	3	3.4	Fair
7	BIME	3	4	2	3	3	3	Fair
8	BKUI	2	3	2	3	2	2.4	Satisfactory
9	BMNS	3	3	3	4	4	3.4	Fair

10	BNOI	4	4	4	5	5	4.4	Margin
11	BSUC	2	3	4	5	5	3.8	Margin
12	BUND	3	2	3	5	4	3.4	Fair
13	BUOI	3	3	3	5	3	3.4	Fair

CAMELS Index

After we discussed the indexes in the previous tables we reach the final stage, which is the final score for each bank. Note from table (18) we find that most banks sample research did not reach the strong level but graduated from the **Satisfactory, Fair, Marginal** and this indicates that the banks within the classification (fair) include some weakness & strength elements and it needs to be controlled and followed-up and develop considerable cost reduction programs. Banks in the **Margin** are at risk and may lead to failure. These banks need to develop reform and follow-up programs as soon as possible to not reach financial failure. Iraqi banks need to review the types of provided loans. Note from the table (18) that the bank (BKUI) is the only bank that is better off than the rest of the banks because the bank is located within the Kurdistan region of Iraq and has good administrative cadres. The northern region is also witnessing more political and economic stability than the rest of Iraq, which has contributed to making the bank in a satisfactory classification.

Table (18): CAMELS Index

No.	Banks	C	A	M	E	L	S	Average	Classification
1	BASH	2.3	3.2	3.4	2.8	4	3.6	3.2	Fair
2	BBAY	3.2	3.2	2.8	2.6	3.8	3	3.1	Fair
3	BBOB	2.4	3.4	3.6	2.4	3.6	3.2	3.1	Fair
4	BCOI	2.6	2.4	3	2.2	3.2	2.2	2.6	Fair
5	BGUC	3.2	3.4	3.4	3.4	3.8	3.6	3.4	Fair
6	BIBI	2.8	3.4	3	3	3.8	3.4	3.2	Fair
7	BIME	2.8	3.2	3.8	3.4	4	3	3.3	Fair
8	BKUI	2	1.8	1.6	1.6	2.4	2.4	1.9	Satisfactory
9	BMNS	3.2	3.6	3.4	3.2	4.2	3.4	3.5	Margin
10	BNOI	3.4	3.4	4.2	3.8	4.8	4.4	4	Margin
11	BSUC	3.2	3.8	4.4	4.4	4.4	3.8	4	Margin
12	BUND	3	4	4	4	4.4	3.4	3.8	Margin
13	BUOI	3	4.2	3.8	3.6	4	3.4	3.6	Margin

Conclusion

The CAMELS standard contributed to detect and identify the negative points of the Iraqi banks because of their lack of a modern evaluation system that reveals the banks weaknesses and treats it. We have found that the long-term investments of Iraqi banks are very few, which indicates that they cannot provide support for industrial projects in the long-term. Also, the investment of Iraqi banks in securities is not at that level and that most of their investments are in local securities and almost international investments barely exist. They also do not have a variety of portfolios, which makes banks unable to cope with market risks. It is important to find that the sample banks branches of the research in Iraq is very few and does not fit the current situation. This requires the banks to set up new branches and diversify their services.

The CAMELS standard analyzes the bank's performance and compares it with the industry level in the banking environment, which helps to formulate a policy and plans for management and focus on the negative elements. Most banks cannot face withdrawals on deposits during a short period and in large

quantities. The profitability of banks was also not within a strong level and this raises the question of the absence of any bank on the first level.

The application of the CAMELS standard is to support the bank's efficiency and effectiveness. There should be a unified database for all banks, in which all the details and numbers required to know the position of the bank through the equations that we applied, in order to know the position of the bank. The database for each bank should be directly linked with the **CBI** and updated continuously through the synchronization technology in order to address the deviations that occur in the banks. Banks are the most sensitive to risk and this requires disclosure of all data. Preparing the research, we have a difficulty of the data lack for a number of banks; however, in 2019, we did not get full data for a number of banks only for the year 2017.

The Central Bank should exercise its oversight role through office and field controls. And shall be a central database so that banks that fail to disclose their data are fully identified. The Central Bank should establish training courses in the field of banking evaluation and control and the development of technical capabilities in order to reach an efficient banking system and the necessity of obligating all banks to implement the CAMELS standard. We also find that it is better for a number of banks that cannot rise to a better level to merge with each other or merge with other top-level banks in order to be able to face market risks. Banks must work to increase profitability by employing deposits and exploiting liquidity and investing them. And encourage individuals to place time deposits by offering acceptable benefits on these deposits. Banks should increase their capital in proportion to the volume of deposits and assets in order to reduce banks risks and address credit concentrations within the banks investment portfolios and improve the bank assets quality and reduce the losses suffered by the bank due to troubled assets. As well as the need to use a special department to manage all types of risks.

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