

Evaluating Banks' Performance That Operating in Iraq according to the International Indicators System (CAMELS); An applied study on Trade Bank of Iraq (TBI) for the period 2014-2017

¹AHMED MUSHRIF RASHID, ²AHMED FADHIL SALEH, ³SINAN RAHEEM
JASIM, ⁴ASSAD FARHAN HAMIN

Abstract

The research shows banking evaluation system by using CAMELS's indicators. The study included Trade Bank of Iraq (TBI) to identify banking risks that constitute weaknesses in the financial and administrative operations of the bank. A descriptive approach has been utilized in collection and analysis of published financial statements of Trade Bank of Iraq (TBI) depending on CAMELS's system for four financial years started from 2014 to 2017.

The research results indicate that Trade Bank of Iraq (TBI) has got a strong classification according to the policy of composite evaluation of (CAMELS). The results also indicate the bank was in the right path regarding to the growth of its strongly performance, its assets, the management, and determination of appropriate levels of capital & profits reasonable distribution.

The study showed the importance of U.S. banking evaluation system (CAMELS), through which the positive aspects of its application and its role in feedback and information control to reveal some of weaknesses and deficiencies in early way. CAMELS also helped the Trade Bank of Iraq (TBI) to perform a comprehensive analysis of the Bank's performance and comparison to the industry level in the banking environment which helps management by focusing on their financial positions.

As well as, it encourages the Central Bank of Iraq (CBI) in terms of monitoring other banks operating in Iraq and follow-up global developments related to specialized systems of financial analysis and control and various types of banks.

¹ University of Anbar, Ramadi, Iraq

² University of Anbar, Ramadi, Iraq

³ Federal Board Of Supreme Audit

⁴ University of Anbar, Ramadi, Iraq

Keywords: *CAMELS system, Trade Bank of Iraq(TBI), Capital Adequacy, Assets quality.*

I. Introduction

Financial and economic crises are considered one of the most important economic phenomenon that cause a huge impact on the economic activity and the international economic relations. Banks need long time periods in order to get over crises' bad effects. Furthermore, it threatens the economic and political stability for all countries. These crises became a features of the modern era [1].

The economic theory that deals with financial crises and studies its causes and how it can be resolved has developed. This research focuses on the international indicators system called (CAMELS) which function as safety margin to avoid financial crises in early stages. Financial crises can be defined as severe regression in financial markets for a country or a group of countries that lead to the failure of the banking system to perform its main goals [1] [6]. This eventually adversely affects the currency value and stock price for countries.

Banking crises might occur when the bank faces a huge and sudden requests to withdraw the deposited money. While the main task of the bank is lending and operating the deposited money and only keep specific amounts for daily withdrawing, thus it will not be able to fulfill the high withdrawing requests when it is exceeding that amount. Therefore, a liquidity crises occurs. As a result, the international indicators system (CAMELS) was put in place to measure all the signs that might cause financial crises for banks. By depending on these indicators, the management can come up with solutions to avoid such crises [16].

The research aims to know and evaluate the performance of TBI by using one of the most modern and effective systems for financial indicators (CAMELS), through which the strengths and weaknesses can be indicated thus, weaknesses can be resolved and strengths can be reinforced in order to maximize the banking effectiveness and efficiency.

II. Theoretical Framework

2.1. The Development of the Banking Evaluating System (CAMELS);

The United States began using CAMELS standards derived from the spirit principles of (Basel 1) as one of the indirect oversight methods on commercial banks since 1978, where the U.S. Federal Reserve Bank classifies and evaluates banks and provides them with classification results annually without publishing them to the public, which reflected good results in the reality in the field where the monetary authorities were able to predict the banking collapse before its occurrence, so the number at the beginning of the crisis was reduced to (3) banks only in 1998, after which many demanded the necessity of publishing these results and considering the market as a monitor on the performance of banks in order to inform and assist the public in choosing to deal with the lowest risk and the best performance [15].

However, the CAMELS system did not reach its current form until after stages of development and changes like other systems. The system started with a mini standard called the (CAEL) standard, which symbolizes each letter of it to an element and an evaluation indicator, and thus it focuses on four basic elements to evaluate and classify the performance of commercial banks (The letter C denotes the capital adequacy ratio, the letter (A) stands for the asset efficiency ratio, the letter (E) stands for the profitability or revenue efficiency ratio, the letter (L) symbolizes the liquidity ratio). In order to keep pace with the field developments, factors affecting banks have been added. Another criterion for those criteria and indicators is (E) refers to efficient management and (S) which refers to the standard sensitivity to market risk system to become under the name of (CAMELS) [1][2].

2.2. Classification of the American evaluation system (CAMELS)

The American banking evaluation system is considered as a tool for banking control and depends on analyzing the annual returns of the senders from the banks to the central bank and then making an evaluation and classification of annual returns. That is done based on four elements of the six components which are: capital adequacy, the quality of the assets, profitability and liquidity, and does not include the standard of management and the sensitivity towards market risks, as these two elements cannot be measured only through performance appraisal[3] [6].

The CAMELS system is a fast indicator of the reality of the financial position for any bank and know of the degree of its classification, which is considered one of the main direct control systems carried out by field control and the regulatory authorities rely upon in their decisions [2].

Table No. (1) indicators of the International Evaluating System (CAMELS)

Capital Adequacy
Asset Quality
Management Quality
Earning Management
Liquidity Position
Sensitivity of Market Risk

Source; The authors & [2].

2.3. The Overall Classification of Banks According to The CAMELS System

The overall classification depends on an accurate assessment of the bank's performance at all administrative, operational, financial levels and the extent of compliance with the regulations and instructions. The main elements that are used to evaluate the bank's operational and financial activities are capital, asset quality, management capacity, revenues quality, sufficient liquidity, and sensitivity to market risks . Rating levels range from level 1 which is the best, to level 5 which is the worst, the following figure illustrates the different categories of the assessment [3].

Table No. (2) Classification of Banks According to the American Banking Rating System (CAMELS).

Classification metrics	Classification of the group	Classification of analysis
	1 – 1.4	Strong
	1.6 – 2.4	Satisfactory
	2.6 – 3.4	Reasonable
	3.6 – 4.4	Marginal (Risk)
	1.6– 5	Unsatisfactory

Source; [1] [3] and [5].

1- First Classification (Strong): The average classification of camels is within (1- 1.4).

2- The second classification (satisfactory): the average classification of CAMELS components falls within the field (1.6 - 2.4).

3- The third classification (reasonable): the average classification of CAMELScomponents falls within the field (2.6 - 3.4).

4- Fourth rating (marginal): The average classification of CAMELS components falls within the range (3.6 - 4.4).

5- Fifth rating (unsatisfactory): The average classification of CAMELS components falls within the field (1.6 – 5).

2.4. Decisions of Basel III Committee and its Important Implications for the Banking System:

The global financial crisis that occurred between the years 2007 -2008 showed the weakness and disadvantages of banking supervision systems at the international and local levels, which led to the emergence of the importance of strengthening and supporting regulatory systems. As a result, Basel Committee established a great role since the financial crisis to support and strengthen international banking supervision[4].

It obligated banks with their decisions in order to address weak capital and liquidity problems. Supporting and strengthening of banks can take place through capital restructuring where banks rely

more on basic capital and to a lesser extent on supporting capital. In January 2010, the Basel Committee, on banking Supervision, issued a new framework called Basel III decisions to achieve banking safety called blocking pillars to provide a more solid framework for capital requirements, liquidity and risk ratios [4].

III. The Scientific Aspect:

Applying the American Banking Evaluation System (CAMELS) on the financial statements of (TBI) for the years 2014-2017.

This section deals with the process of applying the six indicators of the banking evaluation system (CAMELS) on TBI's financial statements to know in which extent of commitment and implementation TBI compliances to the Basel Committee and to stay away from risk areas [3].

3.1. Capital adequacy indicators

These indicators determine the ability of financial institutions to face events that may affect the balance sheets of these institutions. Their importance comes from dealing with the most sensitive financial risks such as exchange rate risk, credit risk and interest rate risk as well as calculating the risk of items off-balance sheet, such as trading in derivatives [5].

The Central Bank of Iraq has approved the base of capital adequacy calculation in banks according to the Basel Committee framework since 1994 after making adjustments to the names and changing the percentages according to the rules of the Iraqi banking system [7]. The bank sets the minimum percentage for applying the capital adequacy ratio to all Iraqi banks by (15%), Which was reduced to 12% for government banks only due to the privacy of their business, and being responsible for accepting government department deposits and providing the necessary loans to them as well as for lowering their capital. The Central Bank specified five weights (zero%, 10%, 20%, 50% , 100%) applied to the items of assets on and off-balance sheet used to evaluate capital adequacy ratio of its capital [6].

The Central Bank of Iraq (CBI) also determined the minimum amount of capital in accordance with Article (16), which states that "every bank maintains capital at all times that includes its proper capital and reserves in Iraq not less than 12% of the total value of its assets identified on the basis of taking into account the element of risk or a higher percentage than that issued by the Central Bank of Iraq" [7], so that at least half of this capital consists of the basic capital, reserves and assets in accordance with international standards [7].

Table No. (5) Summary of TBI Capital Adequacy Assessment

Details				
	2014	2015	2016	2017
(1) Total shareholders' equity				
Core capital	\$ 856,166	\$ 1,500,858	\$ 1,500,858	\$ 2,346,882

Reserves	248,457	238,568	193,687	178,190
Accumulated surplus (profits)	1,534,831	1,023,563	1397989	687,422
Total (1)	2,639,454	2,762,989	3,092,534	3,212,494
Total assets (2)	30,271,147	23,305,644	19,735,240	19,299,656
capital adequacy ratio(1/2)	8.72%	11.86%	15.67%	16.65%

Source: The authors based on the financial statements of the Trade Bank of Iraq (TBI)).

$$8.72\% + 11.86\% + 15.67\% + 16.65\%$$

$$\text{Average capital adequacy ratio} = \frac{\quad}{4} = 13.22\%$$

4

The average capital adequacy ratio of (13.22%) is considered a basis in the classification of TBI. According to the data above in Table No. (1), the following can be inferred:

1- The capital adequacy ratio for year 2014 was according to the criterion of the Basel Committee (8%), but it is less than the percentage set by the CBI's standard (12%).

2- the basic capital increased in 2015 was by 57% over the base year 2014, and in return the accumulated surplus (profits) decreased in the second year 2015 by 67% , and the capital adequacy ratio has increased to reach (11.86%) which is greater than the Basel standard, but less than the CBI standard (12%).

3- The capital adequacy ratio increased in 2016 to 15.67% and a clear increase from years (2014-2015). It was higher than the Basel standard and higher than the CBI standard. It could be that TBI has maintained the same size of the basic capital in 2015, which amounted to (\$1,500,858). The reserves decrease by 8%, and, in contrast, the accumulated surplus (profits) increased by 7% over the year 2015.

By relying on the results of the data reached, the average capital adequacy amounted to (13.22%) and compared with the ratio set by the Basel I standard (8%), and the percentage set by the Central Bank of Iraq on commercial and private banks (12%). The Banking Rating System (CAMELS), which measures the strength and durability of banks, places TBI in classification No. (1) strong. This proves that there is a strong performance and efficient management of risks and it does not pose any concern to the regulatory authorities.

3.2. Assets Quality

The quality of the assets basically is evaluated on the basis of the level of orientation and distribution of the assets [1]. Table (6) nevertheless shows the assets and how they are classified.

Table (6). Assets Quality Ratios

Details	2014	2015	2016	2017
---------	------	------	------	------

Shareholders' equity (1)	\$2,639,454	\$2,762,989	\$3,092,534	\$3,212,494
Written off debt (2)	10,547	370,606	45,000	59,114
Allowance for bad debts (3)	36,983	37,051	36,550	36,550
Shareholders' equity + Allowance for bad debts (4)	2676437	2,800,040	3,129,084	3,249,044
Asset quality rating ratio (3/4)	1.38%	1.32 %	1.17%	1.12%
Total assets quality ratio (2/4)	0.39 %	13.24%	1.44%	1.82%

Source: The authors based on TBI's financial data.

$$1.38 \% + 1.32\% + 1.17\% + 1.12\%$$

$$\text{Average Asset Classification Ratio} = \frac{\quad}{4} = 1.2475\%$$

4

$$0.39\% + 13.24\% + 1.44\% + 1.82\%$$

$$\text{Average Ratio of Total Assets} = \frac{\quad}{4} = 4.2225 \%$$

4

The average assets classification ratio and the total rating percentage are 1.2475% and 4.2225% respectively. By using data in table (6) above, and making a comparison between the average ratios shown in the reached table with asset quality categories set by the American Evaluation Institute (Benchmarks) shown in the following table.

Table (7). Asset Quality Classification

Classification degree	Classification type	Percentage of weighted assets	Percentage of total rating
1	Strong	Less than 5%	Less than 20%
2	Satisfactory	5% - 15%	20% - 50%
3	Good to a specific extent	15% - 35%	50% - 80%
4	Marginal	35% - 60%	80% - 100%
5	Unsatisfactory	More than 60 %	More than 100%

Source: [16].

From above, it is clear that the TBI's classification of the asset quality ratio falls in a strong classification degree (1.2475%) and this percentage is less than 5%. And the average total assets ratio of 4.2225% indicates strong classification because it falls within the category of less than 20% .

These ratios measure the strength or weakness of the quality of the assets and by comparing them with the estimated ratios according to the composite evaluation policy we find that it falls in the first level and is a (strong) indicator which makes us confirm the second hypothesis that there is a case of strength for TBI at the asset quality ratio.

3.3. Management

Administrative performance is an essential component of judging the extent of success of banks. Proper management practices that can be inferred through knowledge of the record of senior management, staff efficiency, adequacy of policies and control systems taking into account the size and degree of complexity of the bank, audit & control system. Assessing management capacity should depend on the following factors [15].

- The level and quality of the board's directors knowledge of the bank's activities. And its competence to plan and deal with risks that may arise from changing work conditions or initiating new activities and products.
- The adequacy of internal control to deal with all risks. And accuracy, timing and effectiveness of information systems and risk control systems.
- The sufficiency of auditing & control systems to enable efficient operations, the process of writing reports, protecting assets, and ensuring compliance with laws and regulations. Hence, responding to recommendations from auditors and regulatory authorities.

Management can be classified as follows

Classification (1) it means strong performance by management & board of directors. This classification means that management is able to face risks and deal with them successfully.

Classification (2) it refers to satisfactory management commensurate with the size of risks, and there are slight weaknesses, but they are not of material impact that could threaten the bank.

Classification (3) it indicates that the performance of bank's management and board of directors needs some kind of improvement and development, or that risk is less than satisfactory.

Classification (4) it means that the management & the board of directors have weakness in management risk and the level of risk is high. In other words. The risks are not sufficiently defined, monitored and require immediate necessary action by the board of directors to maintain the bank's durability.

Classification (5), this classification indicates a significant weakness in a performance of the management & board of directors. Therefore, they did not seem to have any desire or ability to correct conditions or implement good risk management. Risks are not defined and monitored sufficiently which threatens the continuity of the bank's existence[8].

In sum, based on the previous financial indicators represented in the adequacy of capital and the quality of assets in which the TBI appeared in classification (1) strong classification. It can be said that the TBI falls within classification (1), which indicates that the bank has strong management.

3.4. Earning

The profitability indicators are considered one of the most important financial indicators used in evaluating the performance of commercial banks [8]. These indicators enable the measurement of the ability of the commercial bank to achieve a final net return on the invested funds. That means these indicators focus on profit, which is the effective factor in the continuation and expansion of commercial banks and essentially generate profits to achieve the continuous growth. Therefore enhancing its ability to continue, compete and ensure stability through the 'confidence of customers in commercial bank' [10]. The following however are several types of profitability indicators which are:

$$\text{Profit Margin Ratio} = (\text{Profit Margin} \div \text{Total Assets}) \times 100\%$$

This ratio measures the net return from the interests that assets have achieved to the bank. An increasing in the returns means increasing the ability of assets to generate profits or profit margins for the bank and vice versa.

$$\text{Return on Equity} = (\text{Net profit after taxes} \div \text{Shareholders equity}) \times 100\%$$

This rate is considered as one of the most important indicators for measuring an efficiency of the use of funds. Commercial banks always work to increase this rate in proportion to the size of risks that the bank's shareholders bear.

$$\text{Return on Total Assets} = (\text{Net profit after taxes} \div \text{total assets}) \times 100\%$$

While this rate measures the share of each unit of assets from net profit after taxes and an increase in this rate means efficient use of the funds invested in the assets [9].

Table (8) shows the percentages for TBI bank returns (USD in Millions)

Details	2014	2015	2016	2017
Assets (1)	\$ 30271147	\$ 23305644	\$ 7294552	\$ 19,299,656
Shareholders' Equity (2)	2,639,454	2,762,989	3,092,534	3,212,494
Net Assets (1 – 2)	27,631,693	20,542,655	4,202,018	16,087,162
Profits (Revenues)	328,304	123,535	453,949	362,432
Return on Assets Ratio	1.08%	0.53%	6.22%	1.88%
Returns on Equity Ratio	12.44%	4.47%	14.68%	11.28%
Return on Net Assets Ratio	1.19%	0.60%	10.80%	2.25%

Source: The authors based on TBI bank financial statements [20].

$$1.08\% + 0.53\% + 6.22\% + 1.88\%$$

$$\text{Average Ratio of (ROA)} = \frac{\quad}{4} = 2.4\%$$

$$12.44\% + 4.47\% + 14.68\% + 11.28\%$$

$$\text{Average Ratio of (ROE)} = \frac{\quad}{4} = 0.72\%$$

$$1.19\% + 0.60\% + 10.80\% + 2.25\%$$

$$\text{Average Ratio of (RONA)} = \frac{\quad}{4} = 3.71\%$$

Based on the above data, we note the following that:

The average of ROA, ROE, and RONA were 2.4%, 0.72%, and 3.71%, respectively. Comparing these ratios to the standard (CAMELS) bank evaluation system of 1% and the overall average rate of return on assets for private commercial banks is 1.20% (according to the CBI report that set the industry standard for return on assets of 1.20%, issued in May 2007), these ratios put the TBI in classification (1). The standard of the banking evaluation system indicated that the bank classifies of No. 1 is characterized by its profit rate if it was greater than 1%, while the profit rate of the TBI has achieved a profit rate of 2.4%.

So, by reviewing the average ratio of (RONA) of 3.71% which measures the strength or weakness of the bank's profitability and comparing it with established ratios according to the CAMELS banking evaluation system, we find this ratio places the TBI under research in a strong classification.

3.5.Liquidity:

Liquidity ratios measure the bank's ability to face its obligations of the request for withdrawing deposits and adherence to the laws of the Central Bank and its liquidity instructions [1]. Liquidity ratios however can divide to:

- **Cash Ratio:** This criterion indicates the adequacy of current assets in paying deposits or current liabilities, as this ratio represents the relationship between the bank's liquid cash resources and its total financial obligations and can be expressed in the following relationship [9].

$$\text{Cash ratio} = \frac{\text{Cash and cash equivalents}}{\text{Current Liabilities}} \times 100$$

According to the CBI cash ratio for banks calculated as follows:

$$\text{Cash at the central bank} + \text{cash on hand} + \text{other current assets}$$

$$\text{Cash Ratio} = \frac{\quad}{\text{Total deposits}} \times 100$$

• **Legal Reserve Ratio:** Banks usually maintain a certain percentage of the reserves available from various deposits with the central bank in the form of a cash credit balance held by the bank and without interest. This balance is called legal reserve. This ratio is subject to change depending on the economic conditions of the country and that the rise in this ratio increases the bank's ability to meet its financial obligations in times of crisis. This ratio ranges from 20 to 35% according to the instructions of the central bank of each country and is measured according to the following formula[13].

$$\text{Legal Reserve Ratio} = \frac{\text{Cash balance at the central bank}}{\text{Total deposits}} \times 100$$

• **Legal Liquidity Ratio:** It represents a measure of the ability of primary and secondary reserves to meet the financial obligations owed by the bank in various circumstances, the greater the legal liquidity rate, the greater the bank's liquidity. This ratio ranges between (30% -35%) as a maximum in economic systems. It can be measured as follows [13][11]:

$$\text{Legal Liquidity Ratio} = \frac{\text{Cash and cash equivalents}}{\text{Deposits}} \times 100$$

Cash and cash equivalent balances represent all cash and gold with the bank plus the balances with the central bank in addition to all commercial papers, securities and investments in addition to treasury bills on deposits. It represent the total deposits in the local currency plus the borrowed amounts in the central bank plus bank dues, in addition to all the checks, letters of guarantee and transfers payable.

Table (9) **Classification of liquidity ratios**

Classification Degree	Classification Type	Ration of liquid assets / total assets
1	Strong	Greater or = 50%
2	Good	45% – 49.99%
3	Acceptable	38% - 49.99%
4	Poor	33% - 37%
5	Critical degree (marginal)	Less than or = 32%

Source: [11][19].

It is clear from the above table, and by calculating the ratio of liquid assets to total assets, that the TBI bank's rating is within a strong rating.

Table (10) Shows liquidity ratios for the TBI for the years (2014-2017).

Details	2014	2015	2016	2017
Cash& balances at the Central Bank	\$8,705,683	\$7,793,312	\$7,294,552	\$6,486,006
Balances at the banks	17,732,775	8,892,759	5,606,091	4,746,301
Total	\$26,438,458	\$16,686,071	\$7,860,643	\$11,232,307
Total Assets	\$30,271,147	\$20,295,041	\$19,735,240	\$19,299,656
Liquidity Ratio	%87.39	%82.22	%39.83	%58.20
Average liquidity	%66.91			
Classification degree	Strong			

Source; Authors based on the financial statements of the Iraqi Trade Bank [20] for the years 2014 to 2017.

$$\%87.39 + \%82.22 + \%39.83 + \%58.20$$

$$1- \text{Average ratio of cash liquidity} = \frac{\quad}{4} = \%66.9$$

$$\%0.63 + \%0.75 + \%0.80 + \%0.82$$

$$2- \text{Average ratio of legal liquidity} = \frac{\quad}{4} = \%0.75$$

From the table above, TBI has strong classification degree (1) with liquidity average ratio of %66.91. Since the ratio has exceeded 50%, it shows that the bank has a surplus in monetary assets, especially in 2014 and 2015.

3.6. Sensitivity of Market Risk

The degree of sensitivity expresses the risks that occur due to changes that occur in market conditions and consequently. These changes are accompanied by a potential of adverse impact on the profits and capital of the bank. The market risks include factors associated with changes in the interest rate, foreign currency exchange price as well as stock prices and services provided by the bank. These risks directly affect the bank's financial earnings [12]. In other words, these changes referred to, whether by a decrease or an increase that affect the trading activities of the bank, which will directly affect the

adequacy of the profits and capital of banks when compared to the level of risk, and accordingly, analyzing the degree of sensitivity of the market risk requires analyzing the ratios as shown below [12]:

- **The share price ratio (profits):** There are two types of prices that affect the returns of profit accounted for by future forecasts when the bank deals in the stock market. The first is called (interest rates on currencies) and the second type is (exchange rates). The first is related to borrowing and loan operations, and the second is related to the increase and decrease in foreign exchange rates [18]. For example, the high exchange rate that is accompanied by dividends in shares reflects the idea of whether the bank is able to gain profits from market or not.
- **Ratio of total securities to total assets:** The ratio of total securities to total assets means that the bank's portfolio will be more exposed to market risks while its decline is a good indicator because it reflects the bank's appropriateness to market risk [15].
- **Credit risk ratio:** It can be said when there is a higher credit risk, the inability of the customers dealing with the bank to fulfill their obligations on time will be high as well and that leads banks to failure [1] [9]. Therefore, the bank should monitor the funds designated as credit when dealing in monetary markets.
- **Liquidity Ratio:** Analysis of liquidity ratio risk is important as it is a tool through which the bank can determine the ability to obtain liquidity when it is needed. For example, the bank has the Dollar and this currency is difficult to trade (selling) in the market and the bank needs to borrow other currencies from the market, this will make the bank to pay a higher cost in order to get that borrowing or currencies. In other words, high interest rates have to be paid to get that borrowing and increases the cost to the bank [15][13].

The degree of sensitivity to market risk can be calculated by calculating the gap (GAP) between the assets that are affected by the impact of the market risk and the sensitive liabilities due to the impact of the market. Hence if the percentage extracted from the gap (GAP) divided by total assets is positive, this means that the assets are more sensitive to market risk from liabilities and vice versa [11]. The CAMELS system has determined the degree of sensitivity of market risk as in the following table (10).

Risk sensitivity / Total Assets	Classification degree	Classification type
25% and less	1	Strong
26% - 30%	2	Good
31% - 37%	3	Acceptable
38% - 42%	4	Weak
43% and greater	5	Critical

Source: [11].

Table (11) shows the degree of the bank's sensitivity to market risk.

Details	2014	2015	2016	2017
Asset sensitive to risk				
Cash with central bank	8,705,683	7,793,312	7,294,552	6,486,006
Other balances with banks	17,732,775	8,892,759	5,606,091	4,746,301
Loans and deposits granted to customers	2,721,658	4,336,761	1,834,789	5,117,138
Securities investments	865,988	1,793,504	1,834,789	2,534,929
Total (1)	30,026,104	22,816,336	19,471,960	18,884,374
Liabilities sensitive to risks				
Total deposits	27142469	20295041	16434886	15,904,338
Total (2)	27142469	20295041	16434886	15,904,338
GAP (1 – 2)	2,883,635	2,000,000	3,037,074	15,904,338
Total Assets	30,271,147	23,305,644	19,735,240	2,980,036
GAP / Assets	0	0	0	19,299,656
Average Ratio				15.44%
Bank classification degree				12.24%

Source; [11] and The authors based on TBI's financial data [20].

Since the bank classification degree is (12.24%) less than (25%), thus the classification degree is strong.

Sensitivity analysis on market risk: The gap (GAP) is used to measure the difference between sensitive assets and sensitive liabilities, and if the gap value is positive, this means that sensitive assets are larger than liabilities, and the previous table shows us the value of a positive gap of the TBI with an average rate of (15.44%) With a total amount reached in the year 2017 (19,299.656) million dollars. Therefore any increase in interest rates will lead to an increase in interest return. When the bank maintains large assets and high interest rates it is in the benefit of the bank and the opposite occurs in the case of low interest. The percentage of absolute gap shows (GAP) the bank sensitivity towards these changes. The

ratio achieved by the bank is a low ratio compared with the evaluation model, this ratio puts the bank within the category (1) strong level.

IV. Conclusions

1- The TBI is positively working and obtains the first level according to the (CAMELS), which means that the bank is in a good position. The TBI can be classified within the first level (Strong rating No. 1) for capital adequacy. The average cash and legal liquidity ratio (66.9%, 0.75%).

2- The average capital adequacy ratio was 13.22%. By comparing this ratio with the criterion of the (Basel Committee 1) which is (8%) and the adequacy ratio set by the Central Bank of Iraq in which (12%), the bank is classified at the first level regarding having enough capital.

3- The bank's administration has taken good measures to improve the capital, which is due to an increase in the capital adequacy ratio to reach 16.65% for the year 2017 compared to the ratios of 8.72%, 11.86%, 15.67% for the years 2016, 2015, 2014, respectively.

4- Despite the decrease in the capital adequacy ratio for the years 2015, 2014 from the capital adequacy standard that was set by the Central Bank of Iraq, which is (12%), however, the ratios remain within the capital adequacy standard set by the Basel committee (1) of (8%).

5- By reviewing the average rating percentage for the quality of the assets and the total classification rate of (1.248%) and (4.223%) which measures the strength or weakness of the quality of assets and comparing them with the established percentages according to the composite evaluation policy, we found that they are located at the first level.

6- The average ratio of provisions to shareholders' equity, and the average ratio of expenditures (written off debts) to shareholders' equity and provisions is at the first level (strong).

7- The average ratio of both the return on assets and return on net assets was (2.4%) and (3.71%), respectively, and by comparing these percentages with the standard of the banking evaluation system of (1%) and the overall average rate of return on assets for commercial banks in Iraq (1.20) %. These percentages classified the TBI as No. 1. Hence, CAMELS approach demonstrated the accuracy, effectiveness, and efficiency of management through the results of the technical and administrative evaluation process.

V. Recommendations

- 1- All investors, before dealing with any bank, must have access to the bank's financial statements and analyze the data according to the CAMELS system to know the financial indicators and thus avoid the high financial risks.
- 2- The necessity for the financial and legislative authorities (the central bank) to set limits for standard ratios that compel local banks to apply them.
- 3- Committing banks to the principle of transparency and making financial statements available for studying and evaluating the performance of banks and thus avoiding financial risks.

- 4- Investing monetary assets in assets that are less affected by price fluctuations by reducing securities such as stocks and bonds.

References

- [1] A, Fadhil. The importance of CAMELS system in evaluating the performance of banks in Iraq, Baghdad Journal of Economic Sciences, Vol 39 (2014), No 31, University of Baghdad, Iraq.
- [2] G, Al-Amin (2016). Measuring the efficiency of Algerian commercial banks using the CAMELS model, case study of the Algerian External Bank BEA and Ouargla, No 14 (2016), unpublished Ms thesis.
- [3] I, Zugoud. Early Warning Using the CAMELS Model to Evaluate the Performance of Commercial Banks - A Case Study of the Algerian National Bank. Unpublished Master's thesis. No 59, (2015).
- [4] A, Abdul Rahman. (2016). (Basel I, II, III decisions) and its role in evaluating the banking performance of banks operating in Sudan. A field study on a sample of Sudanese banks. Journal of Graduate Studies, No. 25 (2016), pp 89-90, ISSN 1858-6228, University of Nile, Sudan.
- [5] A, Ali. indicators of total caution and early predictability of crises. General Directorate of Statistics and Research. Central Bank of Iraq. Un published Report (2009).
- [6] H, Al-Janabi. Measurement of the extent to which Iraqi government banks apply Basel II decisions. An applied study. Journal of Al Mamoun University College, Vol. 18 (2011), No. 18, pp(5-11), Iraq.
- [7] Iraqi Banking Law No. 94, 2004, Article 16.
- [8] K., Ibrahim. Contemporary basic frameworks in banking supervision and risk management. Arab Monetary Fund Economic Policy Institute, Abu Dhabi Emirates. No p.30-31.
- [9] F, Shady. Mechanisms for evaluating financial performance in Algerian commercial banks, unpublished MS thesis, No. 49, (2014).
- [10] K, Barrah & S, Elham, Commercial Banks Running According to the Capital Adequacy Standard - Case Study of Algeria, unpublished MS Thesis. N. 19, (2016).
- [11] HseebBdder & GulZeb. (2011). CAMEL RATING SYSTEM FOR BANKING INDUSTRY IN PAKISTAN. Op.cit No 5 (2011), p54.
- [12] ASPAL, Parvesh Kumar; DHAWAN, Sanjeev. Camels Rating Model For Evaluating Financial Performance of Banking Sector: A Theoretical Perspective. International Journal of System Modeling and Simulation, [S.l.], v. 1, N. 3, p. 10-15, dec. 2016. Available at: <<http://researchplusjournals.com/index.php/IJSMS/article/view/223>>.
- [13] Aspal, Parvesh Kumar, and Dhawan, Sanjeev, "Camels Rating Model For Evaluating Financial Performance of Banking Sector: A Theoretical Perspective", International Journal of System Modeling and Simulation Vol.1, 2016.

- [14] Abbas, Ali &Obayes, Alyaa&Abdulkadhim, Alyaa, Use of CAMELS Standard in the Assessment of Iraqi Commercial Banks. International Journal of Multicultural and Multireligious Understanding. Vol 6 (2019),No 24. 10.18415/ijmmu.v6i3.812.
- [15] J, Aldahan&A, Almosawi&H, Aljubori. (2018). Using the CAMELS model as a tool for measuring bank safety "An analytical study of a sample of banks listed in the Iraqi Stock Exchange for the year 2017". 10.13140/RG.2.2.25710.05448.
- [16] A, Shaheen. The effect of applying the American Banking Rating System (CAMELS) to support the effectiveness of the inspection system for commercial banks - a case study on Bank of Palestine. Journal of Commercial Studies and Research, Vol 1, No 10, (2005).
- [17] T, Zaabi. Development of a capital adequacy calculation model for Islamic banks within the framework of Basel Committee decisions, unpublished Master Thesis, (2008).
- [18] B, Youssef, Impact of the application of the American Banking Rating System (Camels) on the effectiveness of the system of monitoring, Vol 10 (2012),No 18-25.
- [19] Iraqi Central Bank website www.cbi.iq.
- [20] Annual reports of the Iraqi Trade Bank (TBI) for the years 2014-2017.