EVALUATING FINANCIAL PERFORMANCE OF BANKS USING ACCOUNTING DATA: EVIDENCE FROM IRAQ

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THESIS APPROVAL PAGE

I certify that in my opinion the thesis submitted by Alsajed Asaad Kamal AL-DOORA titled "EVALUATING FINANCIAL PERFORMANCE OF BANKS USING ACCOUNTING DATA: EVIDENCE FROM IRAQ" is fully adequate in scope and in quality as a thesis for the degree of Master of Arts.

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I hereby declare that this thesis is the result of my own work and all information included has been obtained and expounded in accordance with the academic rules and ethical policy specified by the institute. Besides, I declare that all the statements, results, materials, not original to this thesis have been cited and referenced literally.

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FOREWORD

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ABSTRACT

In this research, it is aimed to evaluate the financial performance of banks operating in Iraq with the CAMELS model. The population of the study consists of banks operating in Iraq. Five of Iraqi banks are selected in our research as the sample, because these banks are traded in the Iraqi stock exchange which publish their financial statements most regularly. As a result of the research, it is observed that in some CAMELS indicators of Iraqi Banks positive developments were seen but some of them have bad signals in terms of the performance. In terms of capital adequacy, asset quality, management adequacy and liquidity, we do not observe any serious problem. The increase in capital indicates good management, high profit for the bank, and the efficiency of the bank’s management bank capital. However, earnings and sensitivity to market risk indicators show that the government and regulatory authorities should pay attention on these issues for Iraqi banks.

Keywords: Financial Analysis, Accounting Data, CAMELS.

ÖZ

Bu çalışmada Irak'ta faaliyet gösteren bankaların finansal performanslarının CAMELS modeli ile değerlendirilmesi amaçlanmıştır. Çalışmanın evrenini, Irak bankaları oluşturmaktadır. Örneklem olarak ise Irak Menkul Kıymetler Borsası'nda işlem gören ve finansal tablolarını düzenli olarak yayınlayan beş banka oluşturmaktadır. Çalışmanın sonucuna göre, Irak bankalarının yıllar itibariyle bir kısım CAMELS göstergeleri açısından olumlu gösterdiği, diğer bir kısım göstergenin ise kötü sinyaller verdiği gözlemlenmiştir. Sermaye yeterliliği, varlık kalitesi, yönetim yeterliliği ve likidite yönünden ciddi bir sorunla karşılaşılmamıştır. Özellikle sermaye yeterliliği, yönetimini başarısını ve yüksek kâr beklentisini ortaya koymaktadır. Bununla birlikte kazançlar ve piyasa riskine duyarlılık hususlarında devlet ve düzenleyici otoritelerin önlem alması gerekmektedir.

Anahtar Kelimeler: Finansal Analiz, Muhasebe Verileri, CAMELS.

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ABBREVIATIONS

CAR **:** Capital Adequacy Ratio

CBI **:** Central Bank of Iraq

FATCA **:** Foreign Account Tax Compliance Act

IASB **:** International Accounting Standards Board

IFRS **:** International Financial Reporting Standards

SUBJECT OF THE RESEARCH

The subject of the research is to determine financial performance of selected Iraqi banks. The Iraqi banking sector after 2003 witnessed a phase of economic transformation towards a market economy and concentrated in the banking field through the 2004 issue of the Iraqi Regulations of the Banking System, which gives it complete independence away from government interference in the economic policy administration**.**

PURPOSE AND IMPORTANCE OF THE RESEARCH

The purpose of the research is to evaluate the financial performance of Iraqi banks using financial ratios. Iraq, as a young and developing nation, is trying build a strength and stable financial system. Banks are the one of the most crucial and significant elements of financial system. When looking into existing especially English literature, there is limited research which focuses on the performance of Iraqi banks. It is thought that this study will contribute to the related literature.

This research aims to identify the extent of using financial ratios in evaluating financial performance in Iraqi commercial banks, by setting a clear vision to solve the problems that hinder the use of those ratios in Iraqi commercial banks, and that is by achieving the following:

1. Measuring the effect of using capital adequacy ratios in evaluating the financial performance of Iraqi commercial banks.
2. Measuring the effect of using asset quality ratios in evaluating the financial performance of Iraqi commercial banks.
3. Measuring the effect of using management adequacy ratios in evaluating the financial performance of Iraqi commercial banks.
4. Measuring the effect of using earnings ratios in evaluating the financial performance of Iraqi commercial banks.

5. Measuring the effect of using liquidity ratios in evaluating the financial performance of Iraqi commercial banks.
6. Measuring the effect of using market sensitivity ratios in evaluating the financial performance of Iraqi commercial banks.

METHOD OF THE RESEARCH

This research evaluates the financial performance of Iraqi banks. The research adopts the CAMELS model which is frequently used in the literature to assess the performance of commercial banks. Although the main components of the CAMELS system are common, the ratios used to measure the performance could vary. Thus, this research adopts a CAMELS model which is based on Dincer et al. (2011).

POPULATION AND SAMPLE

The research population consisted of 24 commercial banks listed in the Iraq Stock Exchange. The research sample consisted of five commercial banks listed on the Iraq Stock Exchange which are Babylon Bank, Bank of Baghdad, Iraqi Commercial Bank, Economy Bank, and Al Khaleej Commercial Bank. The reason to select these five banks that they are the largest commercial banks in Iraq. Also they have branches in all cities of Iraq, as well as publish their financial reports on a regular basis and more formal than the other banks.

LIMITATIONS / DIFFICULTIES

The main limitation of the research is obtaining the financial statements of Iraqi Banks. Most of banks in Iraq do not publish their financial statements periodically. Also, financial results are announced later than in other countries. Because of the reasons mentioned, the data of the research is limited to financial reports of the years between 2015-2019.

1. CHAPTER ONE: Banking Sector of Iraq

1.1. Historical Development

The search for the history of banks in the world and in Iraq, there was no explicit text to lead to the source of the emergence of banks in the world. So, when searching for banking sources that talk about the emergence of banks historically in the world, it came to the conclusion that the source of the emergence of banks without any doubt started from Iraq, the "Civilization of Mesopotamia," due to the great expansion that occurred during the era of the Sumerians and before them the cave people who developed the economic sector from dependence In nature, in harvesting food and exchanging it among themselves according to benefit and yield. However, a new phase in economic dealings began when the Iraqi man learned how to cultivate the land, meaning that he learned how to manage the land and gain access to the world of economics where feudalism arose, cities were built, (agricultural villages), then schools were established, and the administrative and political system was established, then the law was enacted which begins with the law of Ur Nammu and its end was with the law of Hammurabi, and with these developments that occurred in the life of the Iraqi person, it was necessary to manage money, find money and exchange simple goods. All of these matters require the establishment of a financial administration that guarantees the smooth running of the economic process, that is, the establishment of houses of money that will facilitate the process of production, wages, commodity exchange, and so on. To get into the topic of how banks originated historically, the following points must be mentioned (Khaleda Naji, 2010, p. 22):

- Houses of money originated from the specialization of some individuals in dealing, loans, debt, and deposits. This process was very rudimentary and not foolproof.
- Individual conglomerates in establishing financial groups that guarantee money management. banks and these banks were almost guaranteed.
- The creation of banking legislation led to the creation of a kind of financial guarantee for these institutions, as happened in the era of Hammurabi.

- Large and trustworthy banks were established, according to domestic and international legislation, and these banks are the ones that operate now. To list the stages of the emergence of banks in the world and Iraq in particular, the below:

The history of the emergence of banks extends back to the Babylonian era, since the emergence of a group of bankers and temple priests, and the beginning of the credit and deposit operations. In the Babylonian era, the bank used to carry out financing operations employing written orders on clay tablets and to carry out current operations. Among the most important of these operations is the trade of minerals such as gold, copper, and ivory. It had quasi-branches outside Iraq to transport minerals and complete accreditation and remittance transactions. He was involved in real estate transactions, slave trade, and credit (Muhammad Fadel, 2004, pp. 5-6).

Then came the era of Hammurabi in 1728-1989 BC, in which financial and banking transactions were defined as well as other operations that were installed in the well-known obelisk of the Hammurabi Sharia, which included (288) a legal article in which the need arose after trade developed and new forms appeared From financial and monetary dealings, and the most important of which is the rise and rise of money houses, lending and financing operations, settlement of payments and other banking activities (Najafi, 1992, p. 11).

Then banks developed at the time of the Phoenicians, as the banks became widely known in the field of trade with Persia and the countries bordering the Mediterranean coasts. It is from the knowledge that the first regular bank was established in Babylon by the captive Jews who were brought by Nebuchadnezzar after the two invasions of 586-597 B.C after the destruction of their temple in Jerusalem. The label is to this day (Yusra al-Samarrai, 1999, p. 8).

In light of the economic developments in the world, especially after the prosperity that occurred in the Roman and Byzantine civilizations, which benefited from the developments that took place in Mesopotamia regarding money management, and these two civilizations became concerned with how to manage money. This was done during the Ptolemaic era when payments made and the collection of receipts related to the treasury were added, and credit operations took a medium-term. Banking operations progressed in the Roman era, as deposits for deposits became almost continuous, which is now called current accounts. The banking business expanded in the eleventh century A.D, including changing money as well as depositing and borrowing money (Muhammad Fadel, 2004, pp 4-5).

Banking operations have evolved and researchers have unanimously agreed that the history of the emergence of modern banks starts from the middle of the twelfth century A.D, as the first bank was founded in Venice in 1157, followed by the Bank of Barcelona in 1401, the Rialto Bank in 1794 in Venice and the Bank of France, which he founded Napoleon in the year 1800, then banks were established after that in America and other countries of the world (Al-Hindi, 1986, p. 11).

After the developments that took place in the world, especially after the industrial revolution in the eighteenth century, banks developed a lot to face the increase in industrial production in the world, commodity exchange, and the emergence of multinational companies and giant companies in the world, all of this led to the establishment of specialized national, regional and global banks. This episode had developed a lot "in the era of modern technology, where banks were created with the modern technical banking work that today spread all over the world (Al-Alaq, 2001, p. 85).

1.1.1. The Development of Banks in Iraq

1.1.1.1. The Royal Era

This era begins since the establishment of the Iraqi government in 1921 and extends to 1958. During this era, the Iraq's Central Bank was set up in 1956, which took over the affairs of banking and money in Iraq, in addition to the Iraq's Central Bank. British-Jewish Banks of private sector were operating in Iraq until 1941. Where the Rafidain Bank was established in 1941, the Agricultural Bank, which was established in 1946, the Industrial Bank in 1946, the Real Estate Bank in 1948, and the Commercial Bank in 1953. During this period, several national, foreign, and Arab banks were established. One of the Iraqi banks is the Iraqi Commercial Bank. As for the branches of Arab banks, they are The Jordanian Arab Bank. And The United Lebanese Bank and Elantra Bank. As for the branches of foreign banks, they are, The National Bank of Trade and Industry (Africa) - and the National Bank of Pakistan (Al-Mada electronic newspaper, 2009).

1.1.1.2. The Republican Era

The republican era began after the July Revolution of 1908. This era was the beginning of building a free economy, and several banks were extending from the monarchy. National banks represented by the Iraq's Central Bank was set up in 1956, the Rafidain Bank which was established in 1941, the Agricultural Bank in 1946, the Industrial Bank in 1946, the Real Estate Bank in 1948, and the Ottoman Bank that was transformed into the Bank of Credit 1992 (Dr. Abdel Moneim Ali, 1984, p. 320).

Private banks were established to support savings and raise the cash flow ceiling in Iraq and this coincided with the time of the blockade imposed on Iraq since 1990. Private banks were established to carry out this task, such as Warka Bank for Investment and Finance, North Bank, Baghdad Bank, Dar Al Salam Investment Bank, Iraq's Central Bank, Ashur International Investment Banking, The Middle East Bank of Iraq for Investment, Regional Islamic Cooperation Bank for Development and Investment, Investment Bank of Iraq, Kurdistan International Bank for Investment and Finance, Mansour Bank, Mosul Bank for Development and Investment, Sumer Commercial Bank, Babylon Bank, Tigris and Euphrates Bank for Development and Investment, Union Bank of Iraq, Al Ahli Bank of Iraq (Central Bank Law 64, 1976).

After the occupation 2003 and up to 2008, Iraqi banks witnessed excesses, thefts, and looting that included all Iraqi national and private banks, and these banks are still working at present for their recovery and financing by the state and giving the Central Bank many powers in supervising and establishing banks as well as investment. However the Baghdad Stock Exchange was established, and many of the banking markets spread in Baghdad, and the governorates that engage in banking and monetary exchange, were established (Khaleda Naji, 2010, p. 45).

Banking development falls within the context of economic development and is considered one of its main components in the economic development program. Banking development can be defined as a set of measures that seek to reduce the restrictions imposed on the banking sector and reduce the state's monopoly on it and open it to competition (Salhiya & Boualem, 2004, p. 477).

And one of the researchers (Roland, 2008, p. 182) indicates that the effects of banking liberalization at the macro level may lead to the following:

- Increasing bank savings and the abundance of capital.
- Improving the efficiency of banking capital allocation.
- Banking liberalization has a direct relationship with financial development, as it leads to an increase in the financial depth and relative importance of money and bank deposits.
- It leads to a higher level of financial development and thus supports economic growth.

1.1.1.3. Iraq Private Banks League

The League was established on 05.05.2004 with the participation of representatives of the nineteen private banks that were operating at that time (League of Iraqi Private Banks, 2021). It began its activity in following up on developments that affect the Iraqi banking business in general and the effects on private banks in particular. This is through the development of the relationship with the monetary authority represented by the Iraqi Central Bank by extending bridges of understanding through the exchange of views in meetings and continuous meetings with the governor and officials in the bank on various the levels that led to building a mechanism of understanding and trust. This association aims to:

- Strengthening the bonds of cooperation among its members and preserving their common rights and interests.
- Representing private banks in Iraq and abroad before all concerned parties, highlighting their entity, developing them, and achieving their spread in the governorates and districts of Iraq to finance Iraq's reconstruction projects and serve economic development.
- Spreading awareness and banking culture among bank employees through seminars, meetings, and workshops to advance their work with the aim of providing banking services to citizens in the easiest way, in addition to increasing

awareness among citizens to encourage dealing with banks as a civilized phenomenon to employ citizens' savings to contribute to economic development for the well-being of Iraqi society.

- Expressing opinion and advice on the relevant legislation and laws for the development of banking business in Iraq.
- Strengthening cooperation between representatives of Iraqi banks (civil and government), as well as with Arab and foreign banks.
- Developing and qualifying human cadres in banks by engaging them in training courses to modernize banking work, using banking technologies, software, and communication devices.
- Exchange of information and banking experiences with Arab and foreign banks and the establishment of a library at the association's headquarters to serve researchers.
- Work to build a base of understanding between Iraqi bank departments in order to preserve the common interest and to achieve harmony in the rules of banking and its development.
- Cooperating with Arab and foreign organizations and bodies with common goals and exchanging information and experiences in order to identify the developments in the banking industry and the development of its methods.
- Cooperation with civil society organizations in all fields to serve the issues of the Iraqi people (the League of Iraqi Private Banks, 2021).

1.1.1.4. Union of Arab Banks

The Union of Arab Banks was established on the thirteenth of March of the year 1973, following a meeting of elite leaders of Arab banks and administration, under the umbrella of the Arab Organization for Administrative Development, in order to establish an Arab regional body/organization operating within the framework of the unions emanating from the League of Arab States, as Iraq is an effective and very important member of the Union (The Union of Arab Banks, 2021).

The main objectives of the union are to support ties, strengthen cooperation between Arab banks, highlight their Arab entity to achieve their common interests, develop banking and finance work in Arab countries, and increase the effectiveness of the role played by Arab banks and financial institutions in advancing the process of economic and social development. The Union has sought, and seeks, to be a basic and real support for joint Arab economic action, and the cornerstone in the process of building and developing banking cooperation and placing it in the service of banking, financial and economic development purposes over the entire area of the Arab world (The Union of Arab Banks, 2021).

1.1.2. The Concept of Banks

There are several definitions and concepts of the bank, and to adequately cover the topic.

1.1.2.1. The Concept of the Bank Economically

The bank is known economically as a financial institution that aims to facilitate financial transactions for clients, preserving and operating funds, and it is the appropriate place to store cash and money in it and the place from which to borrow when needed in exchange for a guarantee that covers the value of the loan or against a pledge of a guarantor who guarantees coverage or return of the principal of the loan when the debtor is late by paying at the bank house from a banker (the owner or manager of the bank) and a group of employees (Khaleda Naji, 2010, p. 20) .

1.1.2.2. The Concept of Banking Globally

The word bank in the language is derived from (exchange), including banking, which means dealing with funds, and it is synonymous with the word bank, which has its origin in the French word “banjue” and to the origin of the Italian word “banca”, which means these two words "a controlled fund or trustee to preserve valuables" (Bashir Al-Alaq, 2001, p. 6).

In addition to the traditional business of banks, it has practiced other activities to contribute to supporting the countries' economy and giving it sufficient flexibility to move at home and abroad, thus contributing to supporting industry, agriculture, and trade. It has also provided the world with its technical services in the field of international trade and in other fields such as financing housing and construction projects, activating savings methods, and spreading steam and banking awareness among individuals (Ramadan, 1999, pp. 15-16).

The researcher tried to divide the banks in the world according to their types. Therefore, the subject was studied in all its aspects, based on many sources searching in the types of banks, and the researcher did not find consensus in most of these sources, so the researcher adopted an extensive summary of this matter and the banking division. According to its specializations, activities, and work to the following (Ramadan, 1999, pp. 15-16):

- Central Banks
- Commercial Banks
- Industrial Banks
- Real Estate Banks
- Agriculture Banks
- Pension and Saving Deposited Banks
- Cooperative Banks

a) Central Banks

They are the governmental banks that issue paper money excluding the metal cash issued by the Ministry of Finance exclusively (Central Bank Law No. 56, 2004), as well as controlling the amount, movement, and movement of national money, as well as controlling the activities and activities of other national banks. The activities of these banks have accompanied all countries and governments since the emergence of states or mini-states at the dawn of history, and the personality of this activity was related to the financial man of the state, such as the Minister of Finance at present. These institutions were usually called “the House of Money” as in Islamic times.

As for the work of central banks, it includes the following operations:

- Maintaining reserves of commercial banks and others.
- Granting facilities to banks and other financial institutions in the form of re-deducting their securities and granting them secured loans.
- Carrying out clearing operations between banks.

Monitor banks and supervise their business in order to preserve the rights of depositors and shareholders, and to ensure the soundness of their financial conditions. And its commitment to the legal rates imposed on it, such as the mandatory reserve ratios, legal liquidity, the credit to deposit ratio, and other instructions issued by the Central Bank regarding credit control in general.

It acts as a state or government bank, that is, it maintains the accounts of the various ministries and state departments. It performs any banking services on its behalf. The central bank also usually manages the internal public debt, i.e. buying and selling treasury bills and government bonds, and pays the interest due on them on behalf of the government.

Maintaining the country's reserves of foreign cash balances and administering and servicing foreign loans on behalf of the state. Central banks perform these functions as specified by their laws. In practice, it difficult to approve a particular job as the most important job, not a group of jobs according to the importance of each one, because all of these jobs are interconnected and complementary with each other, and the general principle of the bank in managing its jobs is to work only in the interest of society without considering profits mainly (Ali & Al-Eisi, 2004, pp. 128-130).

b) Commercial Banks

These banks, their history extends back to ancient times with a primitive concept when man started commodity exchange based on the evaluation of the value of the commodity exchanged with the other commodity and its balance and size from some persons with commercial experience and this was the beginning of dealing with commercial banks and then these commercial concepts developed in commodity exchange and institutions were established on their basis. Primitive to carry out these actions, the first bank was established in 1587 in Venice, then the Bank of Amsterdam in 1909. After that, banks began to spread around the world (Abu Atros, 2006, pp. 5-7).

The definition of commercial banks differs according to the approach used by researchers and the different views of the functions that these banks perform. Therefore, the definitions varied in a way that it is difficult to enumerate a comprehensive definition of a commercial bank. However, the development of financial institutions in societies and the emergence of new ones led to the clarity of the concept of the bank and it became easy to identify the main features. Accordingly, commercial banks can be defined based on these features as they are those institutions that provide various banking services to the public without discrimination. They offer savers various opportunities to invest their savings through traditional deposits or short-term certificates of deposit, as well as provide many opportunities for borrowers by providing loans. Short, medium, and long term Commercial banks are distinguished from other financial institutions or other specialized banks in accepting deposits and granting loans. They allow the commercial bank to create money and this is what distinguishes it from other financial institutions and accepting deposits of all kinds is what distinguishes commercial banks from the rest of other specialized banks. As for the commercial banking jobs that have developed with the development of societies and their economic needs, they are divided into two parts: traditional jobs and modern jobs (Haddad & Hathloul, 2008, pp. 106-109).

c) Industrial Banks

These are the banks that specialize in granting financing to industrial establishments whose goal is to develop industry and increase industrial projects in the development of the state's economic resources in general. The objectives of the industrial banks are as follows (Haddad & Hathloul, 2008, pp. 174-175):

- Granting partial or complete financing for the establishment, expansion, or development of industrial projects.
- Encouraging local and manual industries (small) in order to absorb unemployment and increase job opportunities.
- Carrying out the necessary studies such as economic feasibility studies and providing the necessary administrative and technical advice for some projects.
- Contributing to the ownership of shares of some industrial projects and encouraging the private sector to own their shares as well.
- Providing credit facilities locally or abroad to finance the industrial sector in a manner that does not contradict the general economic policy of the state.

d) Real Estate Banks

The objectives of real estate banks can be summarized as follows:

- Providing financing for the establishment of residential projects and people with limited income, partially or completely.
- Executing private housing projects and selling them to citizens at prices and installments that suit their incomes.
- Preparing strategic studies on the general population policy of the state and carrying out the necessary population and statistical studies for that.
- Implementing investment projects within established populated areas to encourage movement to them, encourage small crafts and vocational training programs, and work to provide job opportunities for the beneficiaries of population projects (Haddad & Hathloul, 2008, pp. 175-176).

e) Agricultural Banks

The objectives of agricultural banks can be summarized as follows:

- Granting of financing of all ages for various agricultural purposes.
- Encouraging the establishment of agricultural projects and agricultural industrialization projects.
- Providing the necessary agricultural supplies at competitive prices to farmers.
- Financing the marketing and export of agricultural products.
- Preparing economic feasibility studies for agricultural projects and providing the necessary technical and administrative expertise to establish these projects (Haddad & Hathloul, 2008, p. 174).

f) Pension and Saving Deposit Banks

These banks were established and represent high-profile establishments that collect individual savings from individuals and private and government establishments in the form of deposits with a focus on deposits that are not immediately withdrawable, and then re-lend these savings after fulfilling the legal obligations specified by banking legislation and instructions issued by the Central Bank - for different materials or investing it in the form of shares and bonds (Al-Husseini & Al-Douri, 2008, p. 5).

g) Cooperative Banks

In other countries, cooperative societies are established, which jointly establish a bank to serve these societies and the individuals they belong to (Abdul-Sattar & Suad , 2007, p. 43) .Cooperative banks to achieve the following goals (Abdul-Sattar & Suad, 2007, p. 43):

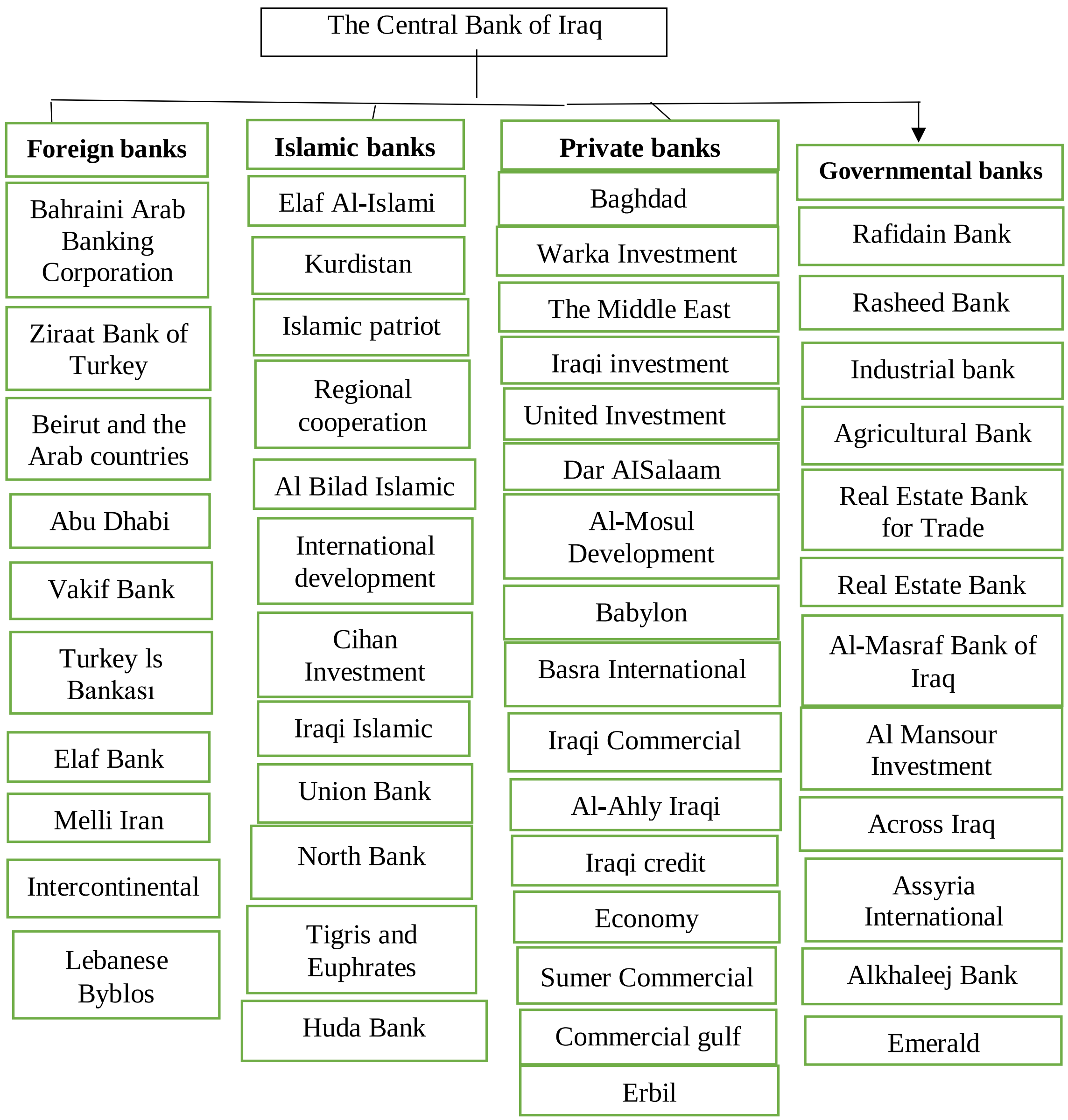
- Providing financing to cooperative societies and their members and providing them with banking services.
- Spreading the cooperative culture by establishing institutions that support it, such as cooperative societies.
- Providing technical and administrative advice and studies necessary for cooperative societies' projects, representing the cooperative movement and organizing its financial relations with other institutions.
- Carrying out supply, insurance, and financial and administrative support services for cooperative societies.

Apart from types of banks mentioned, there are some other type of banks, especially international banks such as the World Bank and the International Monetary Fund. These institutions help the countries about implementation of investment projects, a cash interface that earns cash and increases the ceiling for its establishment, and a political front where it supports the state in implementing joint projects with other countries.

1.2. Banking System in Iraq

The Iraqi banking sector after 2003 witnessed a phase of economic transformation towards a market economy and concentrated in the banking field through the 2004 issue of the Iraqi Regulations of the Banking System , which gives it complete independence away from government interference in the economic policy administration. As well as issuing the public debt law for the sale and purchase of securities according to the market mechanism. In addition, the Iraqi Banking Law No. 94 of 2004 was issued to establish a modern banking system that works in accordance with international standards, and the efforts of the Iraqi banking bank continued throughout the period 2004-2016 to improve financial and supervisory legislation to strengthen the financial system with the aim of reforming this sector and by undertaking many measures. Among them is the obligation of commercial banks to raise their capital to 250 billion dinars to increase their suitability in line with international standards in addition to diversifying their banking services, in addition to issuing instructions regarding the flow of foreign capital for investment purposes and allowing commercial banks to buy foreign currency from the Central Bank auction for import purposes. Total banks operating in the Iraqi banking market are 68 banks until the end of 2016 by 7 governmental and 42 banks, having 9 Islamic banks 10 and participating banks with foreign banks.

Figure 1: The Structure of the Iraqi Banking System



Source: The Annual Reports of the Central Bank of Iraq, Based on Statistics and Research Directorate, 2019.

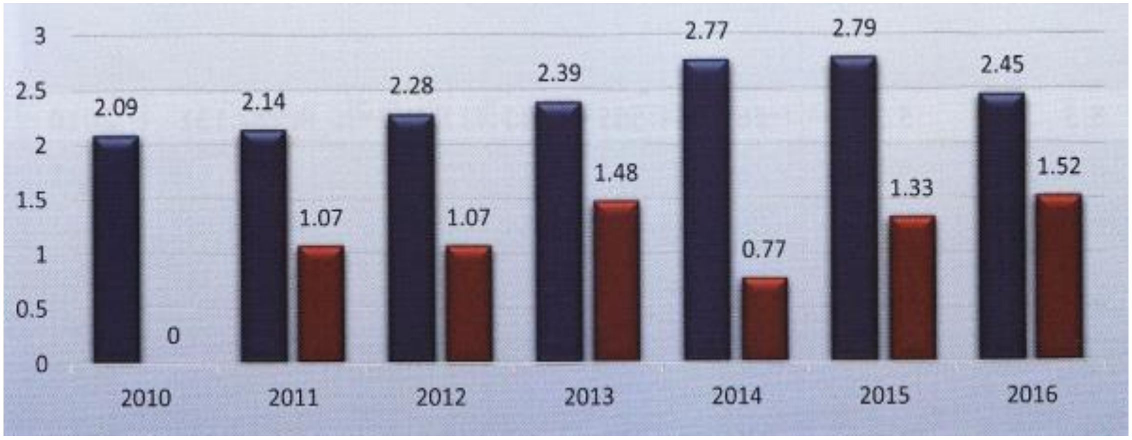
In Iraq, the Central Bank of Iraq has set within the strategy for the years 2016-2020 many directions, among which comes the expansion and development of the percentage of financial inclusion in Iraq, keeping in mind many issues, the first of which is the definition of financial inclusion by the number of dealers with banks, whether they are their permanent customers or other auditors who wish In obtaining some of the services provided by it, and the second is to work diligently and continuously to raise the percentage of financial inclusion, which currently stands at "11%, which is a modest percentage compared to" the rates achieved by many foreign and Arab countries and the neighboring countries of Iraq. The low percentage is due to the decrease in the banking density for many years now, reaching "about one bank branch for every 35,500 people in 2016, after it was around one bank for every 75,000 people in 2003 due to the backwardness of mechanisms and techniques in the banking sector, and the lack of banking plans." Sober in expanding the network of banking branches and spreading their services in the widest area within the geographical area of Iraq, bearing in mind that the global standard ratio is one branch to serve every ten thousand people, as shown in Table 1 (The Annual Financial Report for 2016 Issued by the Financial and Monetary Stability Department in Central Bank of Iraq).

Table 1: Banking Spread Automated Teller Machines (ATM)

Years	Payment Points	Number ATM	Number of Adults (Customers)
2011	50,000	467	19,929
2012	50,000	467	20,569
2013	30,000	647	21,227
2014	30,000	337	21,926
2015	30,000	580	22,082
2016	30,000	660	22654

Source: The Annual Financial Report for 2016 Issued by The Financial and Monetary Stability Department in Central Bank of Iraq.

Figure 2: The geographical spread of the banks per 1,000 km^2



The number of ATMs per (1000) km^2 Number of branches per (1000) km^2

Source: The Annual Financial Report for 2016 Issued by The Financial and Monetary Stability Department in Central Bank of Iraq.

Since 2008, the Central Bank of Iraq began studying this phenomenon and the idea of developing payment methods was born in the private sector, facilitating the processes of conducting transactions and clearing debts using electronic payment tools through the establishment of the global company (Key Card), in which the Rafidain and Rasheed Banks contributed 30% of its capital And the Iraq's Central Bank granted her leave to practice her business to serve the largest segment of Iraqi society, namely the retired, as their number currently stands at “about three and a quarter million retirees. Approximately 150 branches out of the total of 350 branches of the two banks until 2008. Where salary payment procedures were routine and backward banking methods were used, and many retirees were exposed to terrorist operations by terrorists blowing themselves up on queues standing for long hours in front of the doors of banks. Name blame, their low-value salaries that do not cover their living requirements. The establishment of this company also contributed to saving the time and efforts of the retired segment, and bank employees alike, as the salary card holder can get his salary from hundreds of outlets scattered throughout Iraq, day and night, “with ease, ease and safety without being exposed to the risks of extortion or harm and with a commission.” (Abdel Nabi, 2018, pp. 4-5).

1.2.1. Types of Banks

There are two types of banks in Iraq, namely conventional banks and Islamic banks, and each of them will be explained separately (Central Bank of Iraq, 2004, p. 10).

1.2.1.1. Conventional Banks:

The post-2003 phase was characterized by reform and financial liberalization in Iraq, as it included the emitting Law No 56 for 2004 from the Central Bank of Iraq, according to which the Central Bank was granted complete independence of the government in the conduct of its central financial operations, and then the issuance of the Iraqi Commercial Banks Law No. 94 For the year 2004, which represented an important step towards establishing a financial system that works in accordance with international standards, and one of the characteristics of this stage is an attempt to restart and to evolve public and private banks' task (Jawad, 2005, p. 24). At the end of 2003, the number of Iraqi banks reached 25 banks, all working in the field of comprehensive banking, including 6 government banks and 18 private banks, including one Islamic bank and one mixed bank, the United Bank for Investment (Central Bank of Iraq, 2004, p. 23), as well as the bank count continued to increase due to the economic developments taking place in the country and the increasing need for their establishment throughout Iraq, and the number of banks operating in Iraq reached 71 banks at the end of 2018 (Ali Farid, 2021, p. 98).

1.2.1.2. Islamic Banks

Islamic banks are considered financial institutions that conduct their business in accordance with the rules and provisions of the true Islamic religion, and these banks may practice financial intermediation operations like other banks, but the essential difference between them is that Islamic banks do not deal with usury by giving and taking in their operations, and this is validated and applied. God Almighty says "... God has permitted trading and forbidden usury..." (Surat Al-Baqarah, Verse: 275). Islamic banks have received great and distinguished attention in the banking industry environment, not only in Arab countries, but this included a number of European countries through the transformation of some banks to work with the methods and tools of financing that Islamic banks deal with or through opening windows for Islamic dealings in those countries within their traditional banks (Al-Sabawi, 2011, pp. 153-154).

Islamic banks appeared in response to the needs of the Islamic community in the form of financial institutions operating within the framework of the application of the provisions of Islamic law, in order to get rid of financial transactions based on usury, which was absolutely prohibited in the Holy Qur'an and the purified Sunnah of the Prophet (pbuh). Islamic banks are known as banking financial institutions that collect funds and employing them in accordance with the provisions of Islamic Shariah in a manner that meets the needs of the Islamic society and achieves distributive justice, with the commitment not to deal with usurious interests, taking or giving, and to avoid any action that is contrary to the provisions of the Islamic religion. (Abu Obeid, 2005, p. 4).

Islamic banks are also defined as: an entity and a container in which sound investment and economic thought and money that searches for halal profit are mixed, so that channels can emerge from it that embody the fundamental foundations of the Islamic economy and transfer its principles from theory to application. (Al-Khidr, 2007, p. 197).

1.2.2. Regulations and regulatory and supervisory organizations

The Central Bank of Iraq is considered one of Arabia's earliest central banks. It was established in 1947 after a long struggle with the British authorities that lasted for 26 years, "since the establishment of the first Iraqi national ministry headed by Abdul Rahman Al-Naqib in 1921, and the approval was not obtained despite the demands of subsequent ministries. Except at the time of Saleh Jabr's government, when the Minister of Justice, Mr. Tawfiq Al-Suwaidi, presented a draft law on the Central Bank of Iraq and it was approved by Parliament, according to which the bank was established. Currently 100 billion Iraqi dinars, and it has four different sections distributed over the governorates of Basra, Mosul, Erbil and Sulaymaniyah. With the aim of granting the Bank complete independence in formulating and implementing its monetary policy and carrying out its other functions, similar to the developed international central banks, its new Law No. 56 of 2004 was issued, which allowed it financial, administrative and legal independence, as it was linked to the House of Representatives. For the purpose of implementing the provisions of its law above, the bank performs the functions and works mentioned below and mentioned in the provisions of Article 4 of the above-mentioned law (Abdul Nabi, 2018, pp. 2-3):

- Formulating and implementing monetary policy in Iraq, including foreign exchange policy.
- Ownership of all formal foreign reserves for Iraq in accordance with Article 27, excluding the operational budget of the state.
- Gold ownership and government golden resources administration.
- Provision of government consulting and investment banking in accordance with the provisions of Section Four of its law.
- Supplying banks with stability services, in accordance with the provisions of Articles No. 28 and 30 of its law.
- Emission and management the Iraqi currency in accordance with Section VII of its law.
- Compile and publish data related to the banking and financial system and data related to the economy in accordance with the text of Article No. 41 of its Law 28.
- Carry out any additional tasks or transactions that may arise during the exercise of the tasks stipulated in this law.
- In addition, the Iraq's Central Bank may take the measures it considers essential to do the following:
    1. Combating Washing of cash and terrorist financing based on Law No. 93 of 2004.
    2. Setting and supervising the Regulations governing loan firms, small loan providers, and any non-bank Economic firms not subjected to Iraqi legal regulations.
- The Central Bank of Iraq shall have the authority to issue executive regulations in order to implement this law and carry out its duties.
- The Iraqi Central Bank does have the competence to grant internal regulations and general guidelines for the organization and management of the bank.

In order to unify and coordinate the tasks of the Central Bank of Iraq, it can be unified in three groups (Abd al-Nabi, 2018, p. 3):

- The basic functions, which include issuing the currency and preparing monetary policy, maintaining, and improving the exchange rate of the dinar, achieving economic growth, and supervising and controlling banks and financial institutions for which the bank is the sectoral entity such as investment companies, exchange companies and intermediary financial institutions.
- Functions that are positively related to the objectives. The primary objectives of the bank include the possession of the legal cash reserve, the provision of liquidity services to the banking system, the gold ownership and Government inventory administration of it, the provision of advisory services to the state, the compilation and dissemination of data on the banking system and setting rules governing the work of lending companies and loan evaluation companies small.
- Functions that are not related to the basic objectives of the bank, but do not conflict with the achievement of those objectives, and the bank must be careful and beware of them, which is the function of combating money laundering entrusted with it based on the provisions of Article 12 of the Anti-Money Laundering Law No. 93 of 2004.

It should be noted that there are two major tasks assigned to the Central Bank of Iraq that were not mentioned in its Law No. 56 of 2004, and they are (Abdul Nabi, 2018, p. 4):

- Supervising and controlling financial investment companies in accordance with the provisions of Paragraph 9 of Companies Law No. 21 of 1997.
- Establishing an anti-money laundering office based on Article 12 of the Anti-Money Laundering Law No. 93 of 2004.

In order to ensure the success of the Central Bank of Iraq in achieving its above-mentioned objectives, these objectives must be characterized by four characteristics, which are (Abd al-Nabi, 2018, p. 4):

- Clarity: It means that the bank's objectives and means of achieving them are clear, transparent and guaranteed to institutions and the public, such as what the exchange rate means, the means of improving and maintaining it, and its economic and monetary impact on the national economy.

- Consistency: ensuring complete harmony between the bank's objectives and the means to achieve them, such as clarifying the exchange rate's relationship to achieving economic stability and providing monetary stability to the internal market.
- The ability to accomplish goals: in light of the financial, supervisory, technical and human capabilities available to the Central Bank of Iraq, which vary from one stage to another.
- Enhancing sustainable growth: by making the main objectives of the Central Bank of Iraq with directions aimed at stabilizing local prices, maintaining them, enhancing and maintaining market stability, tackling inflation and achieving economic prosperity.

Monitoring banks in Iraq aims to achieve two main goals, namely, the safety country's economics and finance safeguarding investors. Given that preserving financial system integrity results in the protection of custodians, particularly relevant articles in the Central Bank of Iraq Law No. 51 of 2004 and Banking Law No. 94 of. The year 2004 includes simultaneously achieving these two goals. As for achieving the safety of the national economic situation and protecting depositors' money, the law gave the Central Bank of Iraq the authority to urge banks to make maximum efforts and develop the public's savings for investment with their own funds in a manner consistent with the objectives of the plan drawn up by the Ministry for National Economic Development (Abd al-Nabi, 2018, p.12).

The General Directorate of Banking and Credit Control uses two main methods to monitor banks, the office method, and the field method, the first of which is based on specific limits and ratios in the banking law. (Abdel Nabi, 2018, pp. 12-13). The capital of any bank shall not be less than 200 billion dinars, fully paid to new and existing banks in accordance with the provisions of Article 14 of the law, and 7 million dollars for branches of foreign banks. That banks maintain a capital adequacy ratio of no less than 12% of the total risk-weighted assets in accordance with the provisions of Article 16 of the law.

Monitoring the ratio of investment to sound capital and sound reserves amounting to 20% specified in accordance with the provisions of Article 33 of the law. As well as the ratio of total credit to sound capital and sound reserves, which amounts to 400% according to Article 31 of the law and 800% according to a decision issued by the Board of Directors of the Central Bank of Iraq. The legal cash reserve ratio of 15% of the total deposits, of which 5% are kept in the banks' vaults themselves. The percentage of credit that banks can grant to one customer without referring to the Central Bank, which is 10% of the sound capital and reserves. The percentage of credit that the bank can provide to the customer, his companies, and his first-degree relatives, amounting to 15% of the sound capital and sound reserves. The liquidity ratio is not less than 30%. The proportion of the provision for facing overdue debts is 2-5%.

The workplace approach also relies on the data and statistics that banks are required to provide lawfully. or send to the competent authority. Accordingly, and among the most important of them (Abd al-Nabi, 2018, pp. 13-14):

First: Checking the periodic and non-periodic records, data and Banks provide to the Federal Reserve statistics.

Second: Studying the banks' abilities to protect their property security.

Third: To what degree such institutions retain the customers' rights.

Fourth: Studying the control and Security measures utilized for maintaining their assets by bank branches.

Fifth: Note the adequacy of the internal audit methods in the bank.

In support of the supervisory powers of the Central Bank of Iraq and to increase its activities, Article 56 of the Banking Law stipulates the imposition of administrative and penal sanctions against violating banks. Banking (Abdel Nabi, 2018, p. 14).

The Central Bank of Iraq monitors banks on a unified basis, as follows:

- Reviews the data, documents, information, clarifications and proofs submitted by banks for the purposes of implementing this law.
- The Bank may ask the banks or any of its branches or subordinates to submit and prove in writing that it is necessary, any additional information, documents, clarifications or proofs.
- The Central Bank of Iraq may, at any time, conduct an on-site inspection of a bank carried out by one or more officials of responsibility or by another person

or any other persons designated by the Central Bank of Iraq for this purpose. The inspection reviews the operations of the bank to verify its financial position and the extent of its compliance with the provisions of laws and regulations related to the management of its activities and its commitment to internal policies. The Central Bank of Iraq inspects all banks on a continuous basis and at least once a year, except for representative offices, which are inspected at least once every two years.

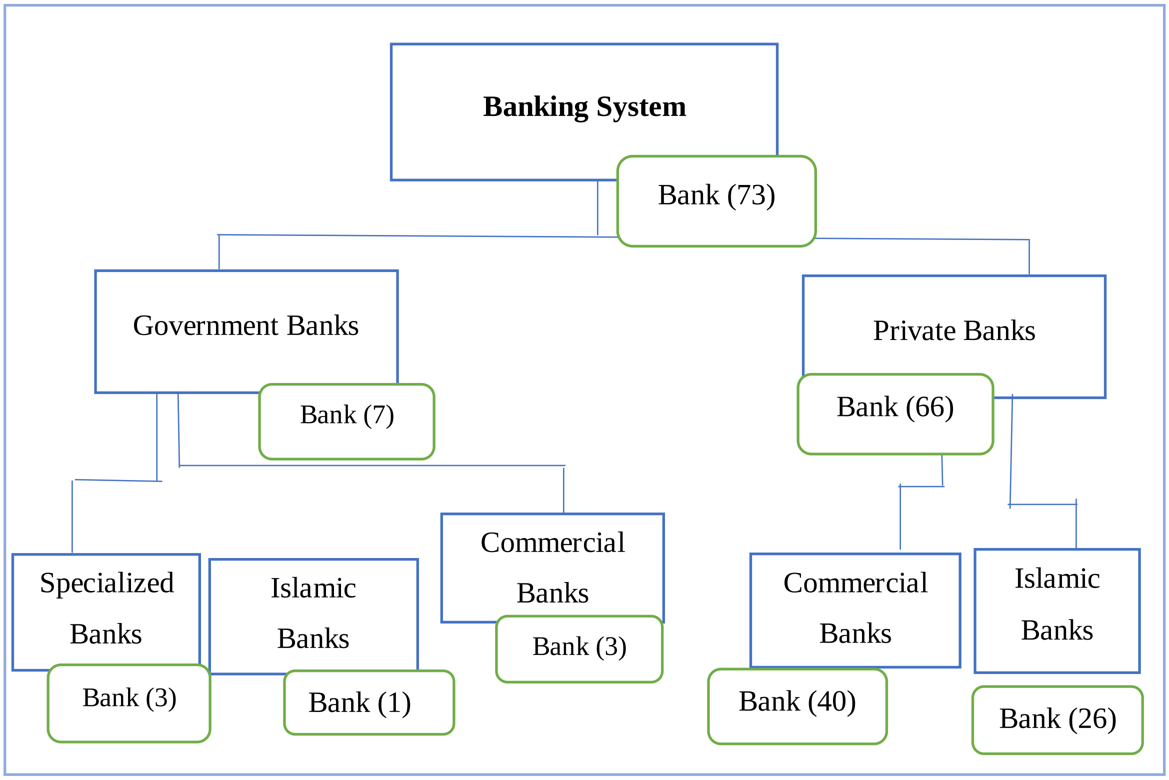
- Any person authorized to carry out the inspection process under this Article is subject to the requirements of confidentiality and may request any administrator, official, employee or customer of a bank, its branches or subordinates to provide him with all necessary books, accounts, records and documents. appropriate during the inspection process.
- The inspectors submit a report to the Central Bank of Iraq on the results of the inspection, and the Central Bank informs the board of directors of the concerned bank of the results of the inspection (Article 53 of the Iraqi Banking Law No. 94 of 2004, pp. 58-59).

1.2.3. Current Situation

The banking system in Iraq consists of 73 banks as in 2019, of which 7 are government banks and 66 are local and foreign private banks, and that the largest number of them are commercial banks, numbering 43 banks, followed by Islamic banks at 27 One bank, then the specialized banks, at the rate of 3 banks, as shown in Figure 3.

The size of the banking system's assets increased from 123 trillion dinars in 2018 to 133 trillion dinars in 2019 with an increase rate of 8.21%, and despite the increase in the number of banks in Iraq to 72 banks, the percentage of assets of the five largest banks has reached 78% of the total assets and the rest is the share of other banks, which is an indication of the high activity of these banks compared to other banks.

Figure 3: The structure of the Iraqi banking system as in 2019

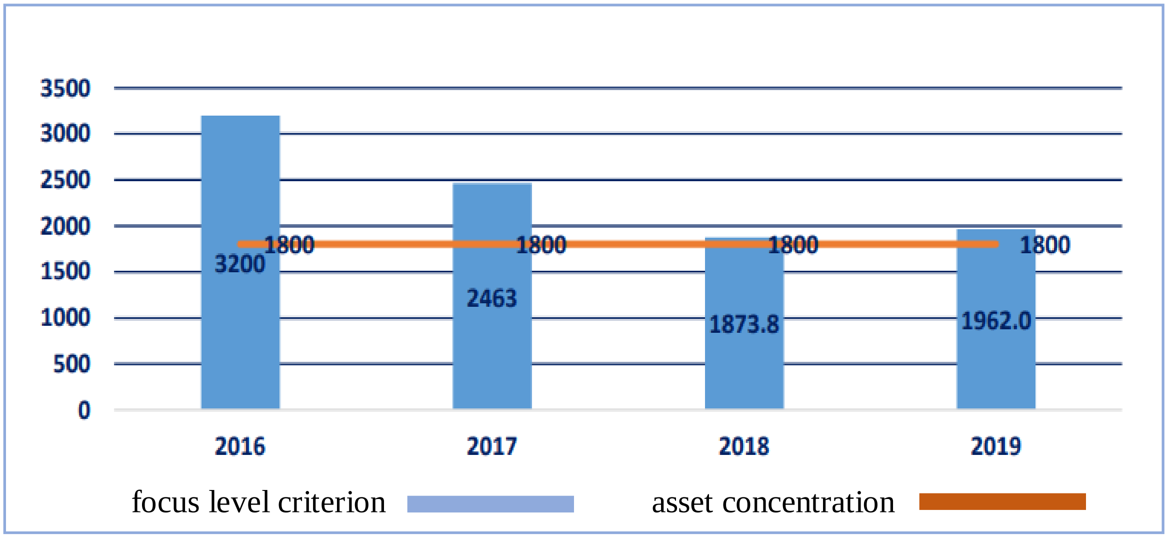


Source: The Annual Reports of the Central Bank of Iraq, 2019.

The amount of assets concentration of the top five institutions (Herfindahl - Hirschman) index reached 1962 points in 2019, as shown in Figure 4, and this indicates a moderate concentration level in the assets of the banking system, but the increase in the concentration index in 2019 from the previous year. It means a decrease in the level of competition between banks, and the concentration index increased as a result of the rise in the assets of government banks from 95 trillion dinars in 2018 to 104.8 trillion dinars in 2019.

The value of Herfindahl – Hirschman index ranged between 0–10000, if the value was less than 1000, this indicated that there were no concentrations, and if the value was between 1000 – 1800 it indicated moderate concentrations, and if the value was greater than 1800 it indicated To the level of high concentrations, the indicator is measured according to the following formula (HHi = $\sum si^2$), as (si) represents the relative importance "market share" of the variable.

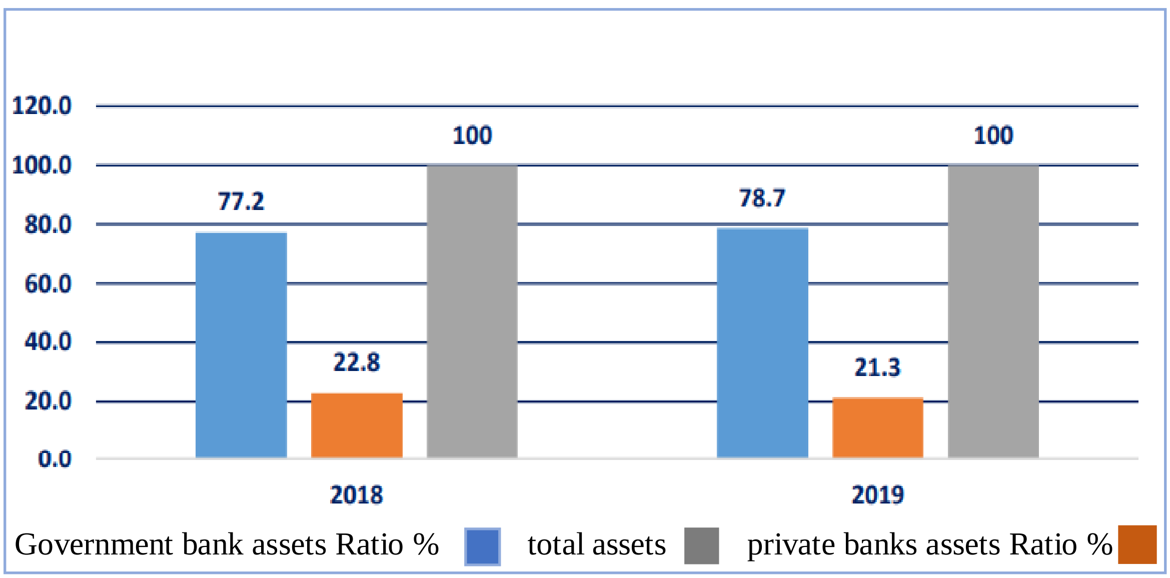
Figure 4: The Level of Asset Concentration for the Five Largest Banks



Source: The Annual Reports of the Central Bank of Iraq, 2019,

The data also shows a slight increase in the ratio of government banks' assets to total assets and a slight decline in the assets of private banks during the period (2018-2019), and this reflects a decrease in the level of competition between private and government banks, as in Figure 5.

Figure 5: Assets of Public and Private Banks

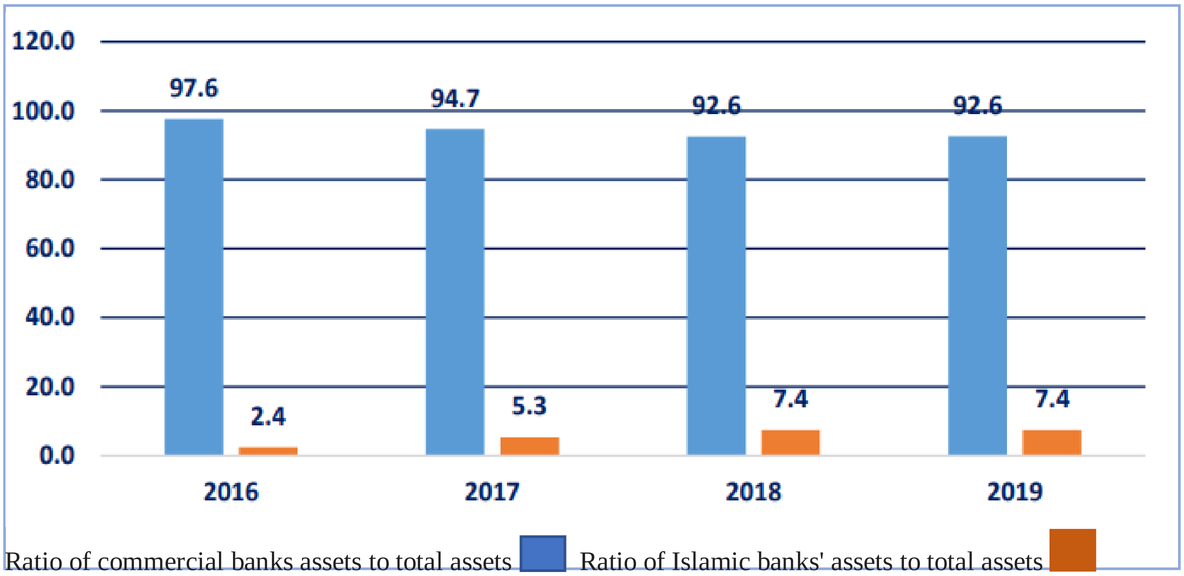


Source: The Annual Reports of the Central Bank of Iraq, 2019,

As for the assets in terms of the type of conventional and Islamic banks, the commercial banks acquired the largest proportion of the total assets, reaching 92.6% in 2019, and this is the result of the old commercial banks compared to the newly established

Islamic banks, while the proportion of the assets of Islamic banks has stabilized from the total Assets at 7.4% in 2019, and this is illustrated by Figure 6.

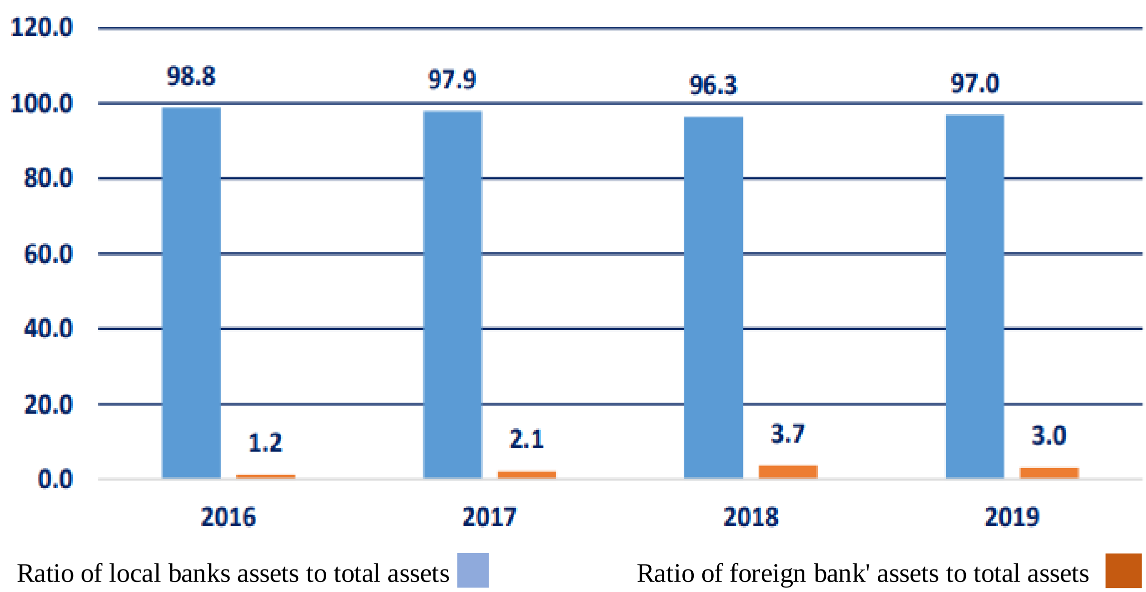
Figure 6: Ratio of Assets of Commercial and Islamic Banks to Total Assets



Source: The Annual Reports of the Central Bank of Iraq, 2019,

The weakness of the activity of the foreign banking sector operating in Iraq continued in 2019, as the ratio of foreign banks' assets to total assets was recorded at 3%, as shown in Figure 7.

Figure 7: Ratio of Local and Foreign Banks' Assets to Total Assets



Source: The Annual Reports of the Central Bank of Iraq, 2019,

1.2.4. Five Banks Examined in the Research

1.2.4.1. Bank of Baghdad

The Bank of Baghdad is the first bank to be licensed in Iraq, as it started banking operations in 1992, placing the needs of the national economy at the forefront. The Bank of Baghdad was established after amending Article Five of the Central Bank of Iraq Law. The Bank of Baghdad, until September 25, 1998, practiced commercial banking business only. Then, it diversified its service portfolio to include banking services on a larger scale, after the Central Bank of Iraq allowed all private banks to engage in all banking activities. The Bank of Baghdad, with its 36 branches, it is one of Iraq's major private business banks. Its aim is to merge customer support with technologies. The Baghdad Bank has become one of the region's biggest banks that provides financial services with quality and complete confidence. The Baghdad Bank offers small and medium-sized companies its economic and international services. It has specialists in other areas as well. Their services include business property services, building lending, credits, loans and trade financing. It offers a wide variety of bank deposits, home loans, personal loans and auto credits as well as services to its consumers. Bank of Baghdad has a foothold in the North and Middle East of Africa and is a part of the Kuwaiti project owner “Holding” company. It consists of a seven associate banks such as, Baghdad Bank, Iraq, Syria and Gulf Bank, Syria, Algeria Gulf Bank, Jordan Kuwait Bank Jordan, Burgan Bank Tunisia, United Gulf Bank Bahrain and Burgan Bank Kuwait. The United Gulf Bank Securities Company in Bahrain, UK Gulf Financial Services Company in Qatar, and Kuwait Investment Projects Asset Management Company in Kuwait have established a number of institutions that provide financial services for asset management and other investments. Hospitality Investment Company in Kuwait, Royal Capital in Abu Dhabi, Shamal Company Africa Holding in Kuwait and Manafea Investment Company in Kuwait. The Bank of Baghdad has evolved from a local bank to a global bank during the past years. Notwithstanding the turbulence in international stock system and regional volatility hurting the Iraqi economic, it continues to expand and function effectively. A great deal of the achievement of the Bank has been accomplished through technical improvements and its future strategic importance. It plays an effective and important role in rebuilding Iraq by taking advantage of the available opportunities for developing the oil and non-oil sectors, building infrastructure and financing construction (Bank of Baghdad, 2021).

1.2.4.2. Bank of Babylon

Babylon Bank is considered one of the reputable Iraqi private banks, which was established in 1999 with a capital of 500 million Iraqi dinars, and at a steady pace forward, the capital was increased to reach 250 billion Iraqi dinars after the approval of the general assembly on the fifteenth of the month February of 2014, which was preceded by a capital increase of 150 billion Iraqi dinars on the twenty-seventh of February 2013. Despite the succession of departments, the bank continued to follow an approach based on the development of its infrastructure in line with the development of the banking industry locally, regionally and internationally, in order to achieve the best services for the bank's customers and to preserve the rights of shareholders. Bank of Babylon complies with all laws of the Central Bank of Iraq and all relevant Iraqi laws in force. It also conforms with global economic and financial legislation such as Foreign Account Tax Compliance Act (FATCA), anti-money launder regulations and worldwide agreements to prevent funding for terrorists and abstains from interacting with suspects or internationally susceptible to or local sanctions. The banking authority generally uses the CAMELS method to review the very same banks and the concept of self at an annualized rate, and all divisions and offices of the institution apply this concept. Babylon Bank aims to apply modern concepts as tools to stimulate the spread and growth rates of the bank's brand, and to take its natural position and share from the local and regional market, and this is overlapping on several lines and axes through the good promotion of the bank's products and providing the best services in a technical way. Modern to present it to the audience of dealers in the financial and banking sector and to build the best local, regional and international banking relations (Babylon Bank, 2021).

1.2.4.3. Gulf Commercial Bank

The private combined equity is Gulf Major Bank Company established under Corporation Certificate No. CR/7002 dated 10.20.1999 issued by the Registering Businesses in accordance with Companies Law No. 21 for 1997 “emended” with a fully paid Gulf Commercial Bank's equity 600 million Iraqi dinar began banking operations. The primary part of the Central Bank of Iraq, after receiving a bank license number B.C 9/3/115 from 02.07.2000, has amended the company contract several times by increasing the bank's capital to reach 300,000 billion of Iraqi dinar after the legal procedures have been compiled on 01.04.2000 and by the law No. 64 of 1976 on conducting its banking activity re-used the deposit (Gulf Commercial Bank, 2021).

1.2.4.4. Economy Bank for Investment and Finance

The Economy Bank for Banking and Investing was established in 1997 in Baghdad. Currently, the Economy Bank is one of the five most important private banks in Iraq. As a result of the profits and achievements of the Bank, it is now seeking to expand its achievements and investments outside Iraq, which is a wonderful opportunity and achievement for the Iraqi private sector, opening the way and creating opportunities for investments and foreign investors to invest in Iraq, in order to create more job opportunities and achievements, and this is one of the most important objectives of the Economy Bank (Economy Bank for Investment and Finance, 2021).

1.2.4.5. Commercial Bank of Iraq

The Commercial Bank of Iraq, which is considered one of the first private sector banks established in Iraq, was established in 1992 after amending local laws to allow the establishment of private banks in Iraq, with a capital of 250 billion Iraqi dinars. The business of the Commercial Bank of Iraq witnessed tremendous developments after it opened a network of branches throughout the capital and its surrounding areas, and its shares were officially listed on the Iraq Stock Exchange in 2004 (Commercial Bank of Iraq, 2021).

2. CHAPTER TWO: Using Accounting Data in Financial Analysis of Banks

2.1. Financial Statements for Banks

The financial statements are the outputs of the accounting system, and it is the method used to deliver the accounting information to all its internal and external users. These are a set of finance recorded data and the application of recognized principles in accounting and personal assessment which prepared according to generally accepted accounting principles (Al-Waqqad, 2011, p. 94). Financial statements are the main means through which information is communicated to external parties. Financial statements usually include balance sheet, income statement, cash flow statement, and retained earnings statement. (Al-Sabban et al., 2013, p. 3).

The components of the financial statements are in accordance with the International Accounting Standard No. 1 for the year 2006 to present the financial statements, which indicated that the purpose of the financial statements of general purpose is to display information about the financial position of the unit and the performance of business results and cash flows, and that the financial statements created to fulfill these requirements many users are frequent in making their economic decisions, and this information is provided through a complete set of financial statements that consist of the following components: (International Accounting Standards, 2006: 692)

- Balance Sheet
- Income statement
- Cash Flow Statement
- Statement of Shareholders Equity

These statements, as a group, are intended to provide useful and necessary information that is characterized by an appropriate, reliable and timely relationship. It is necessary in the process of evaluating the financial performance of economic institutions, including banks, through analysis and thus serve and meet the financial objectives (Dahmash et al., 2004, p. 34).

2.1.1. Balance Sheet

Balance sheet clarifies the information on the economic resources of the unit and the obligations on those resources at a specific moment in time (Rose, 2013, p. 131). It includes the assets of the facility, its obligations, and the property rights as on a specific date. The list of financial position provides useful information for users of accounting information, as this list shows information related to the following (Abu Nassar & Hamidat, 2014, pp. 30-31):

Liquidity: It is represented in cash and cash equivalents and the timing of future cash flows expected to occur within the operating cycle of the facility, and the higher the liquidity, the more able the company to pay its obligations.

The ability to repay long-term debts: The budget elements are a tool for determining the facility's ability to pay its long-term debts upon maturity. The more long-term liabilities the facility has, the facility's ability to meet debts is low due to the higher risk of this establishment because more of its assets will be subject to confrontation. Fixed debt burdens, such as interest and debt installments.

Financial flexibility: The concept of financial flexibility is broader than the concept of liquidity, as financial flexibility measures the facility's ability to adjust the size and timing of cash flows, which enables it to respond to unexpected needs and opportunities, and there is an inverse relationship between financial flexibility and the enterprise's risk of exposure to financial failure. On the size of the enterprise's activity through the total assets, it also gives a perception of the size and quality of its economic resources, the structure of the obligations arising from it, and the rights of the establishment's owners in those economic sources.

The balance sheet of any commercial bank includes two sides, the first is the right side, and it includes the assets or what is sometimes called the bank's money uses side, while the second is the left side and includes the liabilities or sources of funds for the bank. The components of the assets in the balance sheet appear sequential according to their liquidity, so the most liquid assets such as cash balances appear first, followed by the least liquid, then the least, and so on. As for liabilities, they are organized according to their cost and size, so deposits of various types appear, then the various funds, and then the capital owned (Al-Ali, 2013, p. 65).

The following equation shows the balance sheet equation (Rose, 2013, p. 131):

Assets = Liabilities + Equity

The balance sheet consists of the following components:

Assets: They are the economic factors tend to generate benefits in the future and are represented in the future economic benefits embodied in the original in the possibility of contributing to achieve free income flow and equal to the credit, explicitly or implicitly. This option might be profitable, which is component of the running operations of the organization. It may also take the form of convertibility into cash or its equivalent. Or the ability to reduce cash flows abroad, just as an alternative manufacturing process reduces production costs (Jumah, 2010, p. 49).

Liabilities: They are potential future sacrifices of economic benefits that arose as a result of an existing commitment on the entity due to events or operations that occurred in the past, by transferring assets or providing services to other economic units as a result of the exchange operations that took place between the firm and others. Obligations have the following characteristics:

- The existence of a financial commitment that includes future economic sacrifice in the form of transferring ownership or providing a service, whether this obligation has a specific date or an emergency and is identifiable as a result of the occurrence of a specific process.
- The commitment of the entity to the entity as a result of an actual exchange transaction that took place.
- The commitment resulted from events and processes that actually took place in the past time (Abd Al-Hussein, 2010, p. 29).

Shareholders' equity: It is defined as the residual value of the assets of the economic unit after deducting the liabilities and liabilities on this unit, meaning that the owners' rights are equal to the net assets of the economic unit (assets - liabilities) and it represents the capital provided by the owners to the company which is used to produce and collect revenues, as well as reserves and retained earnings from previous periods (Abdullah & Jassim, 2017, p. 9).

2.1.2. Income Statement or Statement of Earnings

Income statement shows the revenues achieved during the financial period, compared to the expenditures spent in achieving them with the net result of the period's work, whether it was a profit or loss, and then after that the distribution of profits and what is withheld from them (Matar, 2006, p. 6).

The profit and loss account consists of two aspects: the revenue side, in which all the bank's revenues from its various operations during the period in which the account was prepared and the expenses side are placed in it. And vice versa (losses) if the expenditures exceed revenues (Al-Ali, 2013, p. 65). The most important vocabulary of the revenues and expenditures side follows: (Al-rawi, 2001, pp. 264-265)

1) Revenue side
   - The interest and investment income: It represents all the revenues resulting from the investment of the bank's funds.
   - Currencies and other revenues: It represents all revenues resulting from bank service and any other incidental revenues.
2) Expenses side
   - Interest and commissions: It represents the financial burdens that the bank pays to others to obtain funds for their investment.
   - General and administrative expenses and allocations: This item includes all the bank's administrative expenses and general expenses. It also includes depreciation of fixed assets. This item includes the provisions that must be calculated in order to reach the net distributable profit.

2.1.3. Cash Flow Statement

Cash flow statement shows the credit and cash receipts of the facility during a certain period, which are classified as flows from operating activities, investment activities and financing activities. The International Accounting Standard number 7 defined those activities as follows (Abo nsar & Hamidat, 2014, p. 56):

- Operating activities: These are the main profits generating activities in the establishment and additional actions not considered investment or financing activities.
- Investment activities: These are activities represented in the purchase and sale of protracted investments and from other non-cash assets equivalent items.
- Financing activities: These are the behaviors that contribute to scale changes and components of capital ownership and borrowing operations undertaken by the establishment.
- The primary objective of the cash flow statement is to provide information on cash receipts and cash payments during a specific period of time, and to provide information on investment and financing activities.

2.1.4. Statement of Shareholders Equity

Statement of shareholders equity shows the amounts and sources of changes in shareholders' rights from capital operations with the owners of the establishment. Equity rights may include the following items (Dahmash et al., 2004, p. 36):

- Ordinary shares at par.
- Preferred shares, statutory reserve, share premium (additional capital), retained earnings.

The objectives of the financial statements that defining the objectives of the financial statements is the starting point in the application of the usefulness of accounting information approach. The objectives are the general rule upon which accounting alternatives are evaluated. Therefore, as long as there is room for comparison between methods and methods of measurement and disclosure, the accounting choice must be made in a way that provides the most useful information. In the field of rationalizing decisions (Jerboa, 2001, p. 71).

The general objectives of the process of publishing reports and financial statements can be formulated as follows: (Bani Atta, 2007, p. 93)

- Providing useful information in making rational investment and credit decisions.

- Providing information that is useful in estimating future cash flows.
- Providing information related to the facility's resources, obligations and changes that occur to it.
- Providing information related to the facility's performance and determining profits.
- Providing information related to the degree of liquidity and the flow of funds and the sources of obtaining them.
- Providing information that is useful in determining the responsibility of the administration and evaluating its efficiency.
- Providing explanatory and explanatory information to the management.

The application of international financial reporting standards (IFRS) has become binding on Iraqi banks in 2015 by the Central Bank of Iraq (CBI). The term the financial reports of general purpose are referenced to as "financial statements that are intended to meet the needs of users who cannot ask for an economic unit, and to prepare reports tailored to their specific needs for information. 2018 "is to provide financial information about the reporting unit that will be useful to current and prospective investors, lenders and other creditors in making administrative decisions related to providing resources for the economic unit." (Alibhai, 2019, p. 29) defines the conceptual framework for the year 2012 issued by the IASB (Conceptual Framework) for Financial Reporting, Chapter 3 that they are in the form of financial reports that provide information about reporting assets, liabilities, property rights, revenues and expenditures of the economic unit.

2.2. Accounting Data and Ratio Analysis

Financial analysis is one of the current efficiency assessment methodologies of banking business, and it is based on translating the published financial reports and statements and publishing them in the form of financial and credit standards and indicators with specific connotations in order to build a set of financial tools related to evaluating the performance of financial institutions, so that the analysis and translation of those reports and financial statements. It reveals the bank's performance level and the position it has reached compared to other banks. The process of financial analysis is nothing but a method or procedure performed by a person called a financial analyst (Al-Hayali, 2009, p. 60). The aim behind this is to identify the positive aspects of work, to exploit them as much as possible, to enhance their presence, to stand on the negative aspects in it, to take appropriate decisions regarding them, and to try to avoid them in the future (Abd al-Rahman, 2012, p. 61).

Financial analysis is the function or activity that supports the work of banks and supports their management and provides them with the necessary data and information to make various and correct decisions (Bembek, 2008, p. 11) by analyzing securities and submitting opinions and suggestions regarding them (Al-Hayali, 2009, p. 60). Financial analysis is defined as: “An organized and coordinated process of analyzing and processing the financial statements related to an institution to obtain information that helps in evaluating performance (Al-Wondawi, p. 2002), diagnosing problems and obstacles that prevent the completion of the work to the fullest, and taking appropriate decisions, whether immediate or future (Al-Shammari, 2010, p. 54). Financial analysis is also known as, studying and analyzing the financial statements with the aim of evaluating the ability and efficiency of the organization in managing its financial affairs, and obtaining sufficient appropriate and appropriate information to enhance the strengths in the banking business and to recognize its weaknesses and get rid of them (Al-Rawi & Saada, 2006, p. 43). and determining the bank’s ability to achieve its goals and its efficiency in taking appropriate decisions and drawing future plans and policies (Abd al-Rahman & Al-Sabawi, 2011, p. 109).

The financial analysis process is the source on which the decision-maker relies in obtaining quantitative and qualitative data and information that help him make appropriate decisions through analyzing financial statements data and accounting systems. The financial analysis process also prepares future plans and budgets by undertaking the performance evaluation process and determining the bank’s financial condition to identify the defects and deviations and determine their causes (Matar, 2010, p. 6). This is in addition to analyzing the results of the bank's investment and financing operations, predicting failures and identifying appropriate opportunities for investment in order to seize them, and thus ensuring that appropriate measures and procedures are taken to face the various results and possibilities (Al-Nuaimi & Al-Tamimi, 2008, p. 21). In this way, it contributes to achieving appropriate profits from investment operations and taking the necessary measures to maintain the liquidity required for current and future projects and to create surplus money on an ongoing basis (Al-Shammari, 2010, p. 55).

The financial analysis process is affected by the nature of the data and information subject to financial analysis in terms of accuracy and appropriateness. It is also affected by the analysis process itself in terms of its location and timing. It is also affected by the qualities and qualifications of a financial analyst, as resorting to a successful, qualified and trained analyst to carry out the analysis process contributes to the success of this process. All of these factors may increase the value of the results of the financial analysis process if used and administered in the correct way or limit them if used in a wrong way (Al-Jubouri, 2007, p. 255).

In order for the beneficiary to obtain his purpose from the financial analysis, its methods and tools must be efficient and effective, which is achieved if they are characterized by a number of qualities, including: comprehensiveness, realistic continuity, stability, simplicity and clarity, and ease of dealing with it and its composition (Hamdan & Thuwaini, 2010, p. 129).

The topic of financial analysis has aroused the interest of many writers, researchers, administrative thinkers, and accountants, in the past and in recent times, due to its connection with the data contained in the financial statements issued by various financial institutions. The financial analysis process is based mainly on studying the data included in the financial statements in an analytical and detailed manner, and providing an accurate and detailed illustration of what the numbers contain in terms of concepts, facts, and clear and hidden evidence in order to support the plans and procedures of the various activities carried out by the bank and control the stages of their implementation, and compare the course of business between past and present avoid the risk of loss and bankruptcy. The financial analysis also reflects the nature of the bank's financial position and its ability to fulfill its various obligations towards depositors by analyzing the amount of liquidity and profitability it possesses and researching a balance between them to achieve the greatest returns and profits. The financial analysis process has a role in building future plans and policies related to the performance of the financial institution in the future by drawing clear perceptions about the financial conditions of the institution, especially after the introduction of modern and advanced technology in the financial analysis process, which led to the use of many variables in the analysis process, which contributed to giving a stronger and clearer perception about the financial capabilities and capabilities of the financial institution (Abd al-Rahman & al-Sabawi, 2011, p. 154).

The idea of financial ratios is based on adopting a set of measures and indicators in the form of financial ratios, to be used in measuring and evaluating performance within the field of financial analysis. The importance of financial ratios appears in the process of financial analysis as a method and procedure that provides the administration with the necessary information about the bank's liquidity status and the obligations resulting from it, studying the assets and funds available for employment and determining the amount of indebtedness and the nature of work in it. These ratios are characterized by the ease of calculation, unlike the analysis and interpretation of their results, because the latter requires high skill and dedication, the ability to do arithmetic operations and the ability to determine the nature and position of the outputs, analyze and interpret them. The skill of analysis is the point of separation between an efficient and less qualified financial analyst (Hindi, 2004, p. 73).

In financial analysis, comparison of the institution with other institutions of the same sector that allows the institution to understand its position in the sector by finding strengths and weaknesses as CBS and the latter is one of the most frequently utilized instruments for financial analysis because it shows that a set of functions in the budget or the table of results is used in the form of analyzes based on instruments, the study of cash flows and the return, and the study of financial risks related to investment, which are in the form of monetary means such as the use of automated information. Financial analyzes: The financial analysis takes place in a series of stages, depending on the type of analysis, its relevance and the amount of information necessary. Most financial analysis academics believe that:

Financial analysis tools express a set of methods, policies and strategies that the bank adopts in verifying the ability of the customer or the credit applicant to pay his current and future obligations and dues, and among the most important of these tools are the following:

1) Horizontal Analysis: The idea of horizontal analysis is based on analyzing the financial statements through a comparison process between the amount of change and the base year, and this process aims to analyze future trends (Abboud, 2008, p. 200).
2) Vertical analysis: The idea of vertical analysis is based on analyzing the financial statements by making a ratio between the relative distribution of each element of the financial statements and the total of the list, and this process is called the proportional distribution of the elements of the current statements (Abboud, 2008, p. 200).

2.3. Ratio Analysis in Banks

The CAMEL system is one of the effective methods for evaluating the performance of banks and determining the strength and durability of their financial positions and the conditions of their management, and then the extent of determining their ability to deal and adapt to any changes or developments related to their activities and to identify the elements of strength and weakness in the performance of banks, which enhances the supervisory authority's capabilities (Gilbert & Meyer, 2000, p. 35). The system refers to the first letters of the bank's performance elements, namely capital adequacy, asset quality, management quality, earning, liquidity (Rose, 2002, p. 524), and a sixth component, sensitivity of market risk, was added in January 17. Thus, this system has become called CAMELS (Sinkey, 2002, p. 131). Each of these elements is expressed in a number of financial indicators, and central banks have developed this system in accordance with their conditions, and each of these indicators includes detailed indicators according to the circumstances of each country and the system. These indicators are used by the banks and the extent of the availability and quality of data published on the banking system (Sahiwala & Berg, 2000, p. 4).

The evaluation system takes into account some financial and administrative factors and adherence to regulations that are similar for all banks. Under this system, the supervisory authority seeks to assess all banks on a unified and comprehensive basis, and the interest of the supervisory authorities is to focus primarily on those banks that show some kind of financial and practical indicators (Berger & Davies, 1994, p. 17). Under the unified evaluation system each bank is given a classification based on the evaluation and classification of six main elements referred to previously related to the bank's financial and operational conditions, and that the evaluation of the elements takes into account the size of the bank, the degree of complexity of its activities and the bank's overall risks (Hirtle & Lopez, 1999, p. 6). The classification is based on a numerical basis 1-5, as the ratings 1-2 indicate higher or better classification, outstanding performance, good risk management and less need for the attention of the supervisory authorities, while classification 3 indicates that the bank suffers from some aspects. Weakness that must be corrected. As for the ratings 4 and 5, the lowest or lowest classification, poor performance, inefficient risk management, and thus the need for great attention by the supervisory authorities (Rose, 2005, p. 529). The composite or total classification of the bank is related to the classification for each of the six elements and includes any element that has a major impact on the strength of the bank's financial position. The ability of the management to respond to the circumstances and developments and to deal with the risks that may arise as a result of the bank's introduction of new products has a great impact on assessing the bank's risks and supervisory needs by the supervisory authorities. For these reasons, the topic of management gives special attention when the combined or total classification of the bank is made (Al-Karasina, 2009, p. 20).

Usually, the degree of evaluation according to the CAMELS system is confidential and the classification of the bank is disclosed to the bank's board of directors, senior management in the bank and the relevant supervisory authorities for the purpose of taking appropriate measures (Gilbert & Khan, 2008, p. 65). The importance of the risk approach or the CAMELS rating system to determine the total banking position in a comprehensive and unified manner. The unified evaluation system will help in identifying the banks whose financial, operational and administrative weaknesses pose a prominent risk of their collapse. It requires special supervisory attention, and when necessary, the central bank intervenes to address dangerous weaknesses (Central Bank of Iraq, 2006, p. 1)

The CAMELS model is considered one of the most important models used by the supervisory authorities to measure the performance of banks as it is an indicator of knowledge of the reality of the financial position of any bank, knowledge of the degree of its classification, and it is one of the direct control methods that are carried out through field inspection, and it is relied upon in control decisions because it reflects the real reality of the situation. The bank, which is a self-rating system based on the opinion and judgment of the inspector. This model was adopted by the financial supervision institutions of banks in the United States of America in 1979 (FED, 2013).

The degree of general evaluation of CAMELS depends on the opinion of the inspection team, and this is done through indicators, quantitative standards, historical data, and legislation and regulations in force, and instructions issued by central banks (Zaitouni, 2007, p. 29).

2.3.1. Capital Adequacy Ratios

The results of the analysis for each bank are compared with standard ratios specified by the Basel Committee regarding capital adequacy and the ratios specified by the Central Bank to show the bank’s commitment and the extent of the bank’s financial position and its ability to generate profits (Central Bank of Iraq, 2008).

Financial and banking studies have indicated that there is a strong relationship between risks and capital adequacy, and that increasing risks requires increasing capital adequacy to face investment risks, which requires the bank in the final outcome to increase property rights to face risks. Thus, it appears that the relationship between risk and capital adequacy is an inverse relationship in the sense that higher risks lead to lower capital adequacy and vice versa (Obaidat, 2008, p. 10).

The Central Bank of Iraq, through the instructions for regulatory capital and capital adequacy and instructions for the minimum capital of banks operating in Iraq, has determined the solvency and capital adequacy of the licensed banks, and therefore reversing these instructions may cause an unsafe and unsafe situation for the bank (Central Bank of Iraq, 2008).

According to the CAMELS banking evaluation model, a composite standard to measure the adequacy of the bank is adopted by the Central Bank of Iraq and includes the capital adequacy ratio and the ratio of basic capital to risk-weighted risky assets, or the ratio of capital to total assets (Central Bank of Iraq, 2008).

When the model is used individually for evaluation, some points must be mentioned (Al-Farra, 2008, p. 49):

- The bank whose capital has been rated 1 is considered to have exceeded the capital levels and financial ratios all the legal requirements, and the strong profit performance, the good banking operations management and the good growth of the assets.
- The bank that classifies its capital 2 has the same characteristics as the bank that rates its capital 1 as the levels of capital adequacy ratios match the statutory requirements and do not exceed them.
- A rated bank 3 meets the equity adequate and legal competencies, requiring regulation monitoring to guarantee fair discussion of important problems by administration and investors and to take appropriate actions to increase sufficiency of assets.
- The bank describing its capital 4 witnesses several problems due to insufficient capital to face the risks inherent in business processes and banking operations. Usually, the bank has some level of losses in bad loans, and this bank also witnesses large losses in its transactions and foreign currency exchange. Otherwise, management and shareholders take immediate action to correct the imbalances. The bank is expected to be imminent bankruptcy, and in order for administration and investors to take proper steps to increase capital sufficiency, legal surveillance is necessary.
- The bank that classifies its capital 5 is considered insolvent in terms of capital adequacy and that capital adequacy is below the requirement, as it requires strong supervisory supervision to try to avoid losses of depositors and creditors, with little opportunity to avoid the ultimate breakdown of the bank's leadership and investor activities. The bank conducts foreign exchange operations or lends that converge or exceed the total capital.

2.3.2. Assets Quality Ratios

Asset quality assessment has great importance in the CAMELS banking evaluation model, and to determine the quality of the assets, they must be classified according to the degree of the risks surrounding them, and the monitoring device must analyze the adequacy of the provisions formed to meet the losses in assets and the size, type and level of risks involved in the credit operations. Extra-budgetary commitments, the extent of quality and diversification in investment and credit portfolios, the extent of credit concentrations, and the effectiveness and adequacy of the internal control and control system (Smadi, 2011, p. 91).

The assets, the risk of classified assets, the importance of the amount and the distribution of the debts and the assets with a low interest rate as a result of the scheduling are reviewed. The adequacy of the provision for doubtful accounts, the ability of the management to follow up and collect the bad debts, the adequacy of the provisions and the management proving the organization and collection of facilities, and whether there are any concentrations in the portfolio are reviewed. Credit and investments that are not appropriate for the nature and size of the different classifications, and the adequacy and appropriateness of credit granting policies and credit management procedures (Numan & Micheal, 2011, p. 83).

Upon proper credit analysis, the inspector should obtain certain basic information about the borrower's financial position, purpose, borrowing terms, and potential repayment on a regular basis, and the process of obtaining this information varies according to the size of the pope to be inspected and the type and complexity of the records used for him (Cole, Rebel & Jeffery Gunther, 1999, p. 65).

When the model is used individually for evaluation, some points must be mentioned (William et al, 2012, p. 6):

- The rated bank 1 is distinguished by the existence of a positive and consistent trend in loan repayment processes, as well as the existence of effective control in the processes of monitoring and following up compliance with the standards and controls set by the management in this regard, as it shows that the management maintains adequate and necessary allocations corresponding to the expected losses in loans.

- The bank whose asset quality is rated 2 exhibits similar characteristics to the quality of assets rated B 1 but witness weaknesses or minor defects, and the Without tight legal supervision the administration can rectify deficiencies.
- The bank whose asset quality is rated 3 shows major weaknesses, which if not corrected directly, this may lead to capital loss or insolvency of the bank, which calls for strong supervisory supervision to ensure that management takes immediate steps to rectify the matter, study weaknesses and correct defects.
- The bank whose asset quality is rated 4 shows a general weakness in many of the aforementioned elements, which highlights the need to take the necessary corrective measures by the monetary authority to re-strengthen the situation and provide the necessary protection for depositors' funds. This classification is characterized by the large volume of bad credit that may reach 60% of total capital.
- The emergence of a high percentage of distressed assets of the bank whose asset quality is rated 5 and which threaten the capital sharply, or cause a negative position for it, which requires the presence of strong supervisory supervision to reduce capital depletion more than that, and to provide protection to shareholders and lenders. However, administrative initiatives are slightly likely to improve the value of the bank's resources.

2.3.3. Management Adequacy Ratio

Management effectiveness is necessary to evaluate the efficiency of the bank in the achievement of its goals, and this is done through the interaction of many factors related to the tasks and responsibilities entrusted to the administration and the ability to deal with environmental and banking developments and variables and to achieve the necessary control in this regard (Shaheen, 2005, p. 13).

This component includes analyzing five qualitative indicators that are mainly: governance, human resources, monitoring and auditing, information system and strategic planning. The quality of the bank's management is evaluated through the following five criteria (Bou Raqba, 2008, p. 9):

Governance: where the work of the board of directors is evaluated on the basis of the type of technology freedom and its ability to make decisions independently of management, with effectiveness and flexibility.

Human Resources: The second criterion that assesses whether human resources provide advice and directions and has a clear influence on users, is through the recruitment and training standard, as well as the worker motivation system and the performance evaluation system.

Control and audit process: where the degree of formation of basic operations and their effectiveness in managing risks at the level of the organization is evaluated through an evaluation of the internal control system and the quality of internal and external audits.

Information system: which evaluates the efficiency and effectiveness of the information system in providing accurate and timely annual reports.

Strategic planning: which determines whether the organization has developed an integrated approach to short and long-term financial projections, and whether the development plan has been updated.

When the model is used individually for evaluation, some points must be mentioned (Berger et al, 2001, p. 10):

- If the bank's management is classified as 1, then this means that the management has a comprehensive understanding of the risks inherent in banking activities, and the strength of the financial performance rate in all areas, and the management is based on the appropriate understanding and ability to respond to changes in the economic environment, taking into account the commitment to planning processes and accuracy Implement effective control policies, procedures and controls in the areas of work and the accuracy and suitability of the internal and external audit function.
- The department that is classified 2 has similar characteristics as in classification 1, but there are some defects that can be easily corrected without regulatory oversight, but there are some problems related to one or more of the

administrative fields, which requires attention and caution about the financial and banking conditions associated with it. Bank business.

- The management that is classified 3 exhibits major weaknesses, which Regulation supervision is required to guarantee that investors leadership or committee takes appropriate corrective measures. The department that is classified as 3 is Categorized by serious staff exploitation, failure to respect legal standards and inadequate assessment. The hazards and the planning process of the banking business, and the inappropriate reactions in dealing with economic hardships and weak economic performance.
- There is a general weakness in a number of management factors that are classified 4, which requires strong regulatory action to ensure that the necessary corrective action is taken by the central bank, especially if misuse by employees is rampant, ignoring organizational and administrative requirements that may destroy Performance and hence the probability that the bank will face bankruptcy.
- The department that is classified 5 is completely ineffective and requires an immediate monitoring procedure, as this administration shows defects in most factors and the bank witnesses' severe weakness in its financial performance, which requires the central bank to impose custody of the assets and make an immediate change of management.

2.3.4. Earnings

The management of banks considers profitability as a key factor in ensuring the continuity of the bank and the scattering of profits directly, the extent of the quality of the resources and their efficiency are assessed by the starting point for establishing the rate of return on total assets for assessing profits (Shaheen, 2005, p. 29).

The change in net profit is linked to the change in revenues and expenditures, and the increase in revenues is linked to the increase in the bank's activity in employing the funds available to it by increasing its investments. The decrease in revenues also indicates an increase in the volume of expenditures, or a reduction in the bank's activities in employing its money. He has internal and external sources of funds to draw up a policy of employing funds aimed at directing his investments to the most profitable areas, in order to achieve the highest possible return for matching liquidity and profitability. Therefore, it is necessary to know the reason for the change in the net profit by increase or decrease, and the factors that led to this change (Fur, 2008, p. 78).

When the form is used individually for evaluation, some points must be mentioned (Shaheen, 2005, p. 30):

- Earnings whose classification is 1 that income is sufficient to meet the requirements of building reserves necessary for capital growth "profit seizure", paying reasonable dividend distribution to shareholders, sound budgeting conditions, planning and strong control over items of income and expenditures.
- The bank whose earnings are 2 produces adequate revenue in order to fulfill the backup needs required, creates development in assets and provides appropriate returns. Poor tendencies might nonetheless be seen in the bank that begin with relying on exceptional income to increase net profits, which requires improving management's ability to plan and control budget operations.
- Major weaknesses appear in the bank whose profits are classified 3 in the allocation of appropriate returns. Usually, there is a need for regulatory control to ensure appropriate steps are taken to improve the performance of bank returns.
- The bank whose profits are classified 4 witnessed several profitability problems, and the net profit may be positive, but it is insufficient to maintain adequate reserves and the required capital, and it requires us to strengthen the performance of returns to asset losses prevention and administration must immediately take measures to enhance revenue and limit the costs. The central bank or administration is also required to restrict non-positive operations by canceling or stopping the license granted to them and imposing basic requirements on the board of directors to reduce the growth of assets by suspending some banking activities.
- The bank whose profits are classified 5 is experiencing losses in a manner that exposes its efficiency to risks, which requires strong regulatory oversight to implement corrective measures, as without immediate action, losses may cause imminent bankruptcy of the bank.

2.3.5. Liquidity Ratio

The liquidity component is considered one of the basic elements of the evaluation system, and the liquidity component may be seen as one of the reasons leading to the banks getting into trouble and thus their failure to fulfill their obligations. The speed of converting it into cash and ensuring that the asset is converted into cash without loss or with minimal losses (Habib, 2012, p. 35).

When the form is used individually for evaluation, some points must be mentioned (Habib, 2012, p. 36):

- The bank whose liquidity is classified 1 is characterized by an understanding of the overall management of the balance sheet, the customer environment and the economic environment, along with the availability of accessible resources for banking and liquidity instability for loans naturally in addition to unexpected requests, and therefore the bank has limited reliance on interbank borrowing operations liquidity, provides requirements for strong oversight and oversight of operations.
- The bank whose liquidity has been rated 2 has the same characteristics as the liquidity rating 1, but this bank suffers from weaknesses and this can be corrected by applying a reasonable time frame without close regulatory oversight, or the bank may witness problems regarding liquidity and management should make provisions. However it may fail to take the necessary steps to prevent the recurrence of liquidity problems.
- The bank whose liquidity is rated 3 suffers from major weaknesses, which requires regulatory oversight to ensure that management is properly considered for important matters. The classification of liquidity 3 is characterized by an unskilled methodology of managing liquidity, which leads to the emergence of recurring problems in liquidity, and there is also the need to study the immediate management of negative trends to avoid crises in the capacity of the bank to fulfill its commitments.
- The bank has serious issues with the viability assessment 4, that demand robust regulatory oversight immediately. Substantial action must thus be made to

enhance resources in order for the bank to satisfy its present demands. The bank must also undertake extensive planning to deal with unforeseen short-term liquidity needs.

- The bank whose liquidity is rated 5 needs central bank assistance or external financial help to satisfy its existing financing requirements and such quick help is necessary to keep the bank from collapsing since it cannot satisfy the requirements of the near and the depositors.

2.3.6. Sensitivity to Market Risk

The assessment of the sensitivity of market risks does not depend on basic ratios like other elements of the CAMELS system, but to a great degree relies on the components of the balance sheet and the activities that it includes, and therefore this item requires competencies of inspectors with experience and high technical competence (Al-Farra, 2008, p. 81).

As for banks, the sensitivity is related primarily to investment portfolios, as these instruments are subject to various risks such as equity price risk, exchange rate risk, interest rate risk and commodity price risk, each of which has different measures and the degree of bank sensitivity can be assessed through the following dimensions: Sensitivity of financial institutions to market risks and the ability of managers of financial institutions to measure and control market risks and to determine the complexity of risks of uncovered operations (Bou Raqba, 2008, p. 11).

When the model is used individually for evaluation, some points must be mentioned (Bou Raqba, 2008, p. 12):

- The bank whose sensitivity to market risk is rated 1 is characterized by that the degree of control of its market risk is large, and thus the net profits of the bank are able to face adverse changes in interest rates and the risks of management practices are very low, almost negligible, and the level of profits and capital are considered strong in the face of market risks.

- The bank whose sensitivity to market risk is rated 2 has similar characteristics as in classification No. 1. Except that there is a weakness in one or more of the aforementioned factors, the degree of control is strong market risk, and the level of profits and capital are strong in facing market risks.
- The bank's ability to control market risk, which is rated 3, is low and needs improvement, and the bank’s net profits are not strong in the face of adverse changes in interest rates, and it faces problems in management practices, in addition to the fact that the level of profits and capital are not strong in the face of market risk which regulation monitoring is necessary to maintain leadership or investors' authority takes appropriate corrective actions.
- The need for corrective action is necessary for the bank whose sensitivity to market risk 4 has been classified by the CENTRAL Bank, especially if there is a real problem in controlling market risks.
- The bank whose sensitivity to market risk is rated 5 is experiencing severe problems in controlling market risks, as well as its low profits and its ability to face risks is low, and it suffers from administrative problems, and this requires the introduction of administrative and financial corrections and comprehensive measures to deal with losses which, if continued, will Lead to bankruptcy.

3. CHAPTER THREE: Findings

This chapter presents the findings of the research, which aims to know the evaluation of the financial performance of Iraqi banks using financial ratios. This chapter also includes descriptive statistics and graphs for the financial ratios of five Iraqi banks.

3.1. Research Methodology

This research evaluates the financial performance of Iraqi banks. The research adopts the CAMELS model which is frequently used in the literature to assess the performance of commercial banks. Although the main components of the CAMELS system are common, the ratios used to measure the performance could vary. Thus, this research adopts a CAMELS model which is based on Dincer et al. (2011). The overall progress of the components in the CAMELS system will be shown depending on the years of observation. As mentioned before, the CAMELS system consists of six components, such as capital adequacy, asset quality, management, earnings, liquidity and sensitivity to market risk.

Capital adequacy indicates the measurement of the financial strength of a bank. As for the capital adequacy ratio it is the ratio which used to protect depositors from risks as credit risk, market risk, operational risk, and others, and the capital adequacy ratio promote the stability and efficiency of financial systems in banks, while this ratio has positive relation with the financial soundness of the bank, it is negatively related to a possible failure.

Asset quality shows the risk level of assets and rate of financial strength within a bank, banks must hold more capital to cover the related credit risk and book higher provisions to prepare for the expected losses. Banks earn interest revenue on these assets and this interest revenue is a key component of their income and profit. When their asset quality decreases, banks must hold more capital to cover the related credit risk and book higher provisions to prepare for the expected losses.

Management Quality is dependent on the current financial performance and this component consists of a large range of issues such as the education level and expertise of the management. The quality of management is to ensure that all the organization's stakeholders work together to improve the company's processes, products, services, and culture to achieve the long-term success that stems from customer satisfaction.

The earnings ability of banks is assessed through two ratios. The first ratio is return on equity, as for the second measure, it is return on assets. Both measures are positively related to the financial performance of the bank.

The liquidity level indicates the ability of the bank to pay off its liabilities, depicts the capacity of the bank to cover unanticipated deposit drains, but can be both negatively and positively related to the performance or the risk of failure. Cash is universally considered the most liquid asset because it can most quickly and easily be converted into other assets.

In this model, there is an indirect relationship between the size of a bank and its sensitivity to market risk which is the risk of a failure due to bad market conditions, sensitivity is the magnitude of a market instrument's reaction to changes in underlying factors, and sensitivity accounts for these factors that impact a given instrument in either a negative or positive way.

3.2. Research Population and Sample

The research population consisted of 24 commercial banks listed in the Iraq Stock Exchange. The research sample consisted of five commercial banks listed on the Iraq Stock Exchange which are Babylon Bank, Bank of Baghdad, Iraqi Commercial Bank, Economy Bank, and Al Khaleej Commercial Bank. The reason to select these five banks that they are the largest commercial banks in Iraq. Also they have branches in all cities of Iraq, as well as publish their financial reports on a regular basis and more formal than the other banks. Financial statements of these banks were obtained from the official websites of the banks.

3.3. Findings of the Analysis

CAMELS analysis of Iraqi banks that accept deposits formed between years of 2015-2019 and representative ratios are expressed in the following section.

3.3.1. Capital Adequacy

Within capital adequacy, 3 basic ratios were included in the analysis.

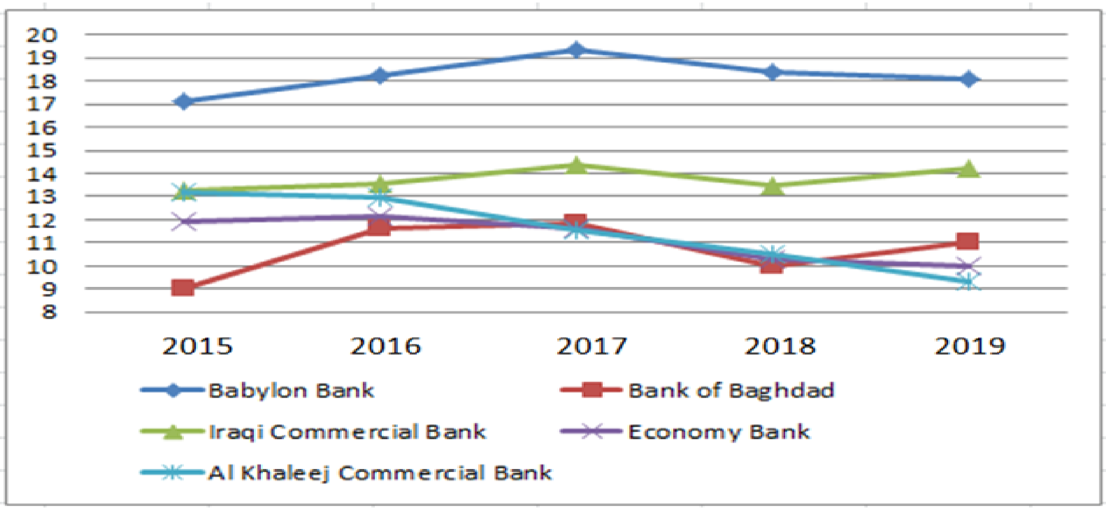
- Ratio 1: Shareholder's Equity / (Loan + Market + Principle Amount Subject to Operational Risk).
- Ratio 2: Shareholder's Equity / Total Assets.
- Ratio 3: Shareholder's Equity / (Deposit + Non-Deposit Sources).

Table 2: Calculated Values for Ratio 1

Bank	2015	2016	2017	2018	2019
Babylon Bank	0.1714	0.1820	0.1932	0.1839	0.1808
Bank of Baghdad	0.0899	0.1163	0.1188	0.0998	0.1103
Iraqi Commercial Bank	0.1328	0.1353	0.1437	0.1346	0.1420
Economy Bank	0.1188	0.1215	0.1159	0.1028	0.1001
Al Khaleej Commercial Bank	0.1321	0.1295	0.1157	0.1049	0.0934

The values for the Ratio 1 are also shown in the Figure 8:

Figure 8: Graphic of Calculated Values for Ratio 1



Ratio 1 shows the highest values for Babylon Bank, then the values for Iraqi Commercial Bank, but the values were decrease since 2015 to 2019 for both Al Khaleej Commercial bank and Economy Bank. That means the Babylon Bank and Iraqi Commercial Bank have signifies safe operations through effective performance and risk management practices the requirement for the adequate capital stock against current loan, operational and market risks of banks provided more flotation for the potential risks of banks, especially that the primary risk is depository risk derived from the sudden and considerably large scale of deposit withdrawals.

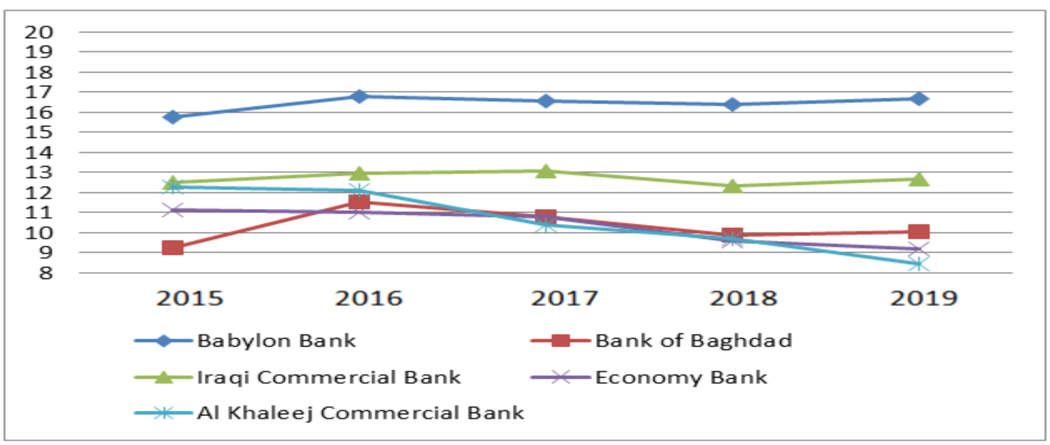
The values of Ratio 1 for Al Khaleej Commercial bank and Economy Bank gradually decreases over the years, that means these banks set forth the specific operational policies for inappropriately conducting the risk management of the group companies. However, the value for Bank of Baghdad gradually increases over the years that mean the basic policies for risk management are determined by the Bank of Baghdad management committee appropriately.

Table 3: Calculated Values for Ratio 2

Bank	2015	2016	2017	2018	2019
Babylon Bank	0.1576	0.1677	0.1653	0.1637	0.1667
Bank of Baghdad	0.0927	0.1152	0.10816	0.0990	0.1003
Iraqi Commercial Bank	0.1250	0.1295	0.1305	0.1236	0.1265
Economy Bank	0.1115	0.1100	0.1081	0.0958	0.0922
Al Khaleej Commercial Bank	0.1227	0.1211	0.1037	0.0973	0.0845

The values for the Ratio 2 are also shown in the Figure 9:

Figure 9: Graphic of Calculated Values for Ratio 2



Ratio 2 shows the highest values for Babylon Bank, then the values for Iraqi Commercial Bank, after that the values for Bank for Baghdad, but the values were decrease since 2015 to 2019 for both Al Khaleej Commercial bank and Economy Bank. That means the Babylon Bank and Iraqi Commercial Bank took the initiative in implementing the aimed plan to review bad debts, ensure the capital increase in the time period, and evaluate to what extent that bad debt can be converted into equity.

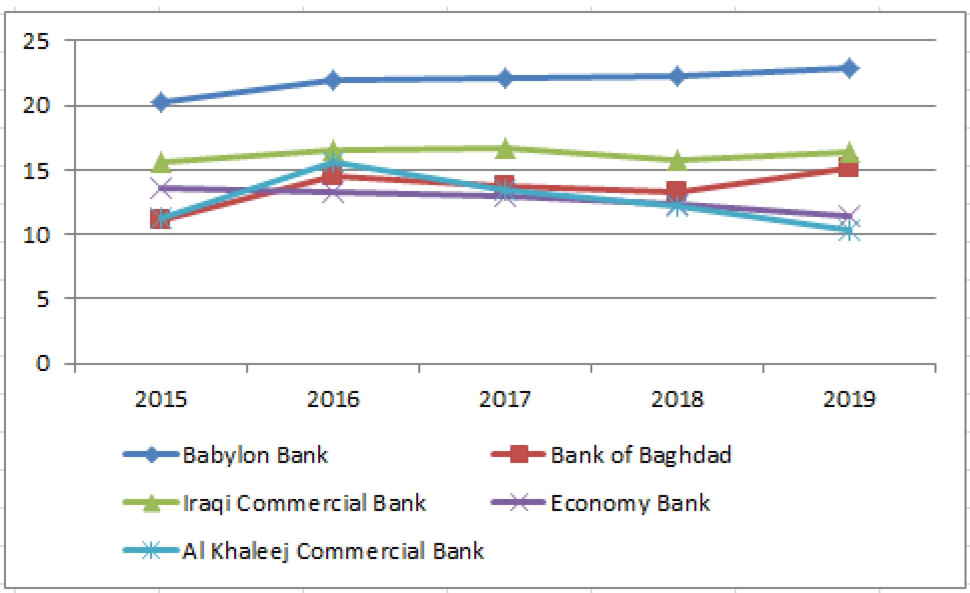
The values of Ratio 2 for Al Khaleej Commercial bank and Economy Bank gradually decreases over the years, that means these banks assessing the performance unhealthy therefore financial instability of banks and financial institutions. However, the value for Bank of Baghdad gradually increases over the years that mean adequate and suitable capital in this bank keep the banking system healthy and each bank or credit institutes.

Table 4: Calculated Values for Ratio 3

Bank	2015	2016	2017	2018	2019
Babylon Bank	20.23	22.01	22.15	22.18	22.89
Bank of Baghdad	11.17	14.44	13.68	13.26	15.06
Iraqi Commercial Bank	15.61	16.49	16.69	15.81	16.34
Economy Bank	13.55	13.29	12.91	12.42	11.48
Al Khaleej Commercial Bank	11.23	15.66	13.47	12.20	10.39

The values for the Ratio 3 are also shown in the Figure 10:

Figure 10: Graphic of Calculated Values for Ratio 3



Ratio 3 shows the highest values for Babylon Bank, then the values for Iraqi Commercial Bank, after that the values for Bank of Baghdad, but the values were decrease since 2015 to 2019 for both Al Khaleej Commercial bank and Economy Bank. That means the Babylon Bank and Iraqi Commercial Bank the highest shareholder's equity ratio within non-deposit sources such as credits obtained, payable to money market, funds and securities issued was seen in foreign deposit money banks

The values of Ratio 3 for Al Khaleej Commercial bank and Economy Bank gradually decreases over the years, that means lack of abilities to raise new capital to fulfill required regulatory standards to rectify deficiency in these banks. But the value for Bank of Baghdad gradually increases over the years that mean this bank keep lessening the losses to depositors and creditors**.**

3.3.2. Assets Quality

Within assets quality, 3 basic ratios were included in the analysis.

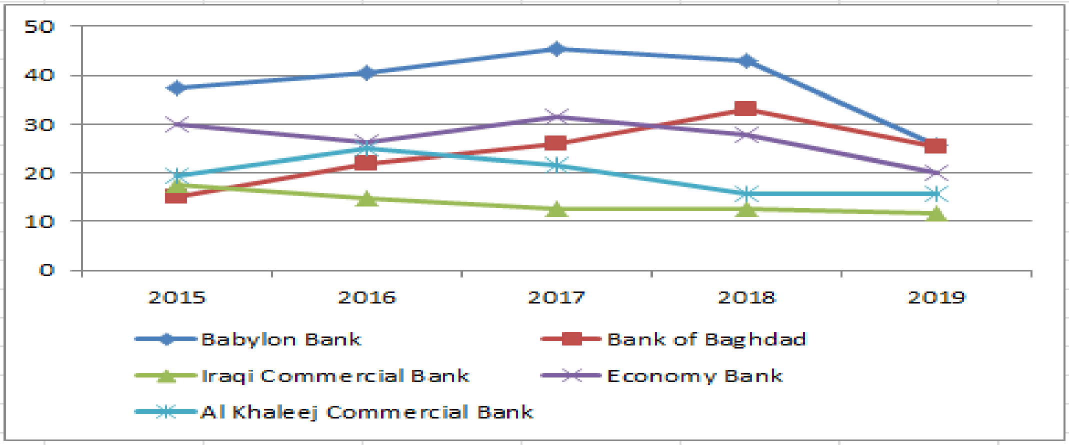
- Ratio 4: Financial Assets (Net) / Total Assets
- Ratio 5: Total Loans and Receivables / Total Assets
- Ratio 6: Permanent Assets / Total Assets.

Table 5: Calculated Values for Ratio 4

Bank	2015	2016	2017	2018	2019
Babylon Bank	0.37	0.40	0.45	0.437	0.25
Bank of Baghdad	0.15	0.21	0.25	0.32	0.25
Iraqi Commercial Bank	0.17	0.14	0.12	0.12	0.11
Economy Bank	0.29	0.26	0.31	0.27	0.20
Al Khaleej Commercial Bank	0.19	0.24	0.21	0.15	0.15

The values for the Ratio 4 are also shown in the Figure 11:

Figure 11: Graphic of Calculated Values for Ratio 4



Ratio 4 shows the highest values for Babylon Bank, and the values for Bank of Baghdad were increase, but the values were decrease since 2015 to 2019 for Al Khaleej Commercial bank, Iraqi Commercial Bank, and Economy Bank. That means the Babylon Bank took appropriately decision regarding allocation of the deposited amount of the bank in loan portfolio, owned real estate, investments, securities and balance sheet transaction.

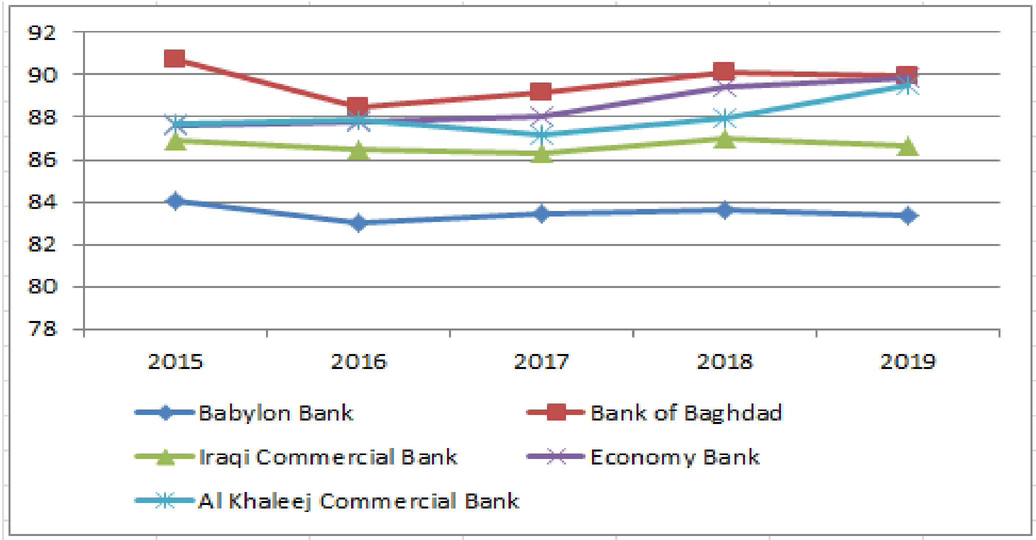
While the values for Bank of Baghdad were increase that mean this bank took collateral with quality and efficiency within specific conditions of debt repayment. But the values for Al Khaleej Commercial bank, Iraqi Commercial Bank, and Economy Bank gradually decreases over the years, these banks are facing negative trends in the level of unsettled long term debts.

Table 6: Calculated Values for Ratio 5

Bank	**2015**	**2016**	**2017**	**2018**	**2019**
Babylon Bank	0.840	0.830	0.834	0.836	0.833
Bank of Baghdad	0.907	0.884	0.891	0.900	0.899
Iraqi Commercial Bank	0.868	0.864	0.862	0.869	0.866
Economy Bank	0.876	0.878	0.880	0.894	0.898
Al Khaleej Commercial Bank	0.877	0.878	0.871	0.879	0.895

The values for the Ratio 5 are also shown in the Figure 12:

Figure 12: Graphic of Calculated Values for Ratio 5



Ratio 5 shows the highest values for Bank of Baghdad, and the values for Economy Bank and Al Khaleej Commercial bank were increase, but the values were very close to each other for Babylon Bank and Iraqi Commercial Bank. That means loan portfolio of the bank of Baghdad is managed efficiently, while the value for Al Khaleej Commercial gradually increases over the years so guiding principles and procedures set by the management are appropriately put into practice.

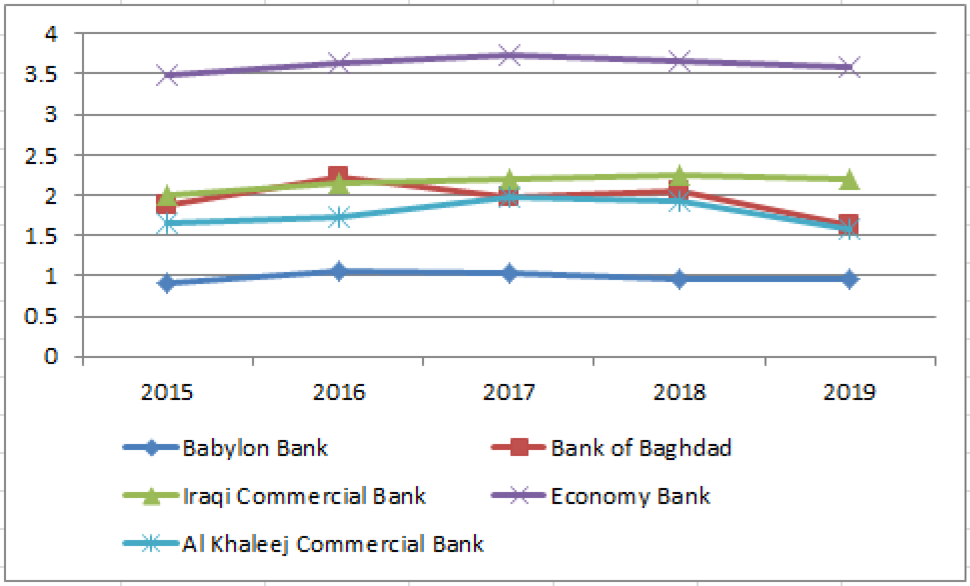
Finally, the values were very close to each other for Babylon Bank and Iraqi Commercial Bank, satisfactory level of loan to the insiders in these banks and there is a threat of losses because of abnormal risk showed by the non-credit assets.

Table 7: Calculated Values for Ratio 6

Bank	2015	2016	2017	2018	2019
Babylon Bank	0.009	0.010	0.010	0.009	0.009
Bank of Baghdad	0.018	0.022	0.019	0.020	0.016
Iraqi Commercial Bank	0.020	0.021	0.022	0.022	0.021
Economy Bank	0.034	0.036	0.037	0.036	0.035
Al Khaleej Commercial Bank	0.016	0.017	0.019	0.019	0.015

The values for the Ratio 6 are also shown in the Figure 13:

Figure 13: Graphic of Calculated Values for Ratio 6



Ratio 6 shows the highest values for Economy Bank, and the values for Iraqi Commercial Bank, Bank of Baghdad, and Al Khaleej Commercial bank were decrease, but the values were very close to each other for Babylon Bank. That means that the ratio of Economy Bank' affiliates, tangible assets and affiliated banks within total assets was increased that means capital of the bank is sufficient or satisfactory with respect to the support that may be provided to the bank in case of business and operational losses.

It is observed that capital for Iraqi Commercial Bank, Bank of Baghdad, and Al Khaleej Commercial bank were non satisfactory or insufficient or with respect to the support that may be provided to the bank in case of business and operational losses. There in Babylon Bank has strong supervision for regulatory authorities to guard the investment of the creditors and depositors and avoid corrosion of the capital.

3.3.3. Management Adequacy

Management Adequacy is quantified by those ratios:

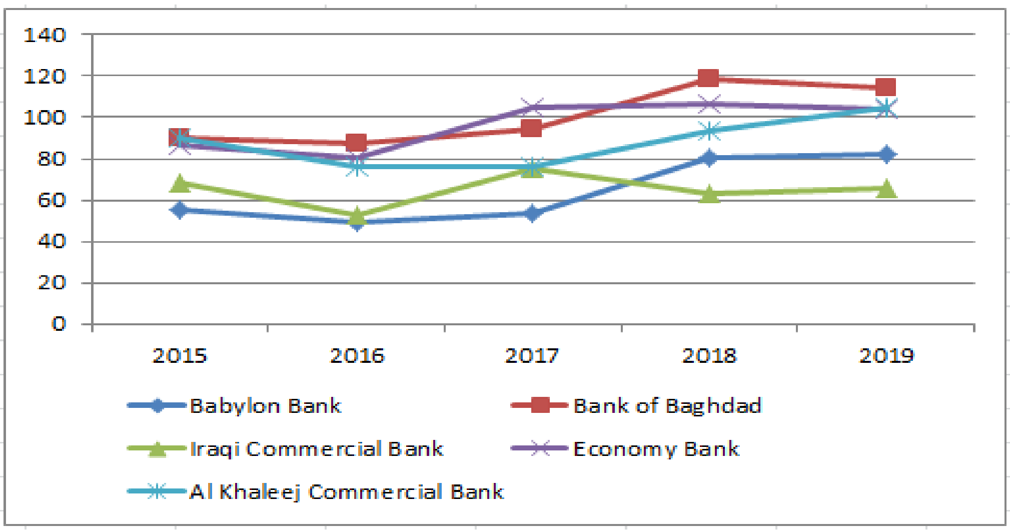
- Ratio 7: Interest Incomes / Total Incomes.
- Ratio 8: Interest Expenses / Total Expenses.
- Ratio 9: Total Incomes / Total Expenses.

Table 8: Calculated Values for Ratio 7

Bank	2015	2016	2017	2018	2019
Babylon Bank	0.553	0.495	0.538	0.807	0.823
Bank of Baghdad	0.897	0.877	0.938	1.189	1.141
Iraqi Commercial Bank	0.685	0.526	0.753	0.633	0.653
Economy Bank	0.864	0.802	1.050	1.063	1.039
Al Khaleej Commercial Bank	0.896	0.765	0.760	0.935	1.051

The values for the Ratio 7 are also shown in the Figure 14:

Figure 14: Graphic of Calculated Values for Ratio 7



Ratio 7 shows the highest values for Al Khaleej Commercial bank, then the values for Economy Bank, while the values for Iraqi Commercial Bank, and Bank of Baghdad were increase, but the values for Babylon Bank were decrease.

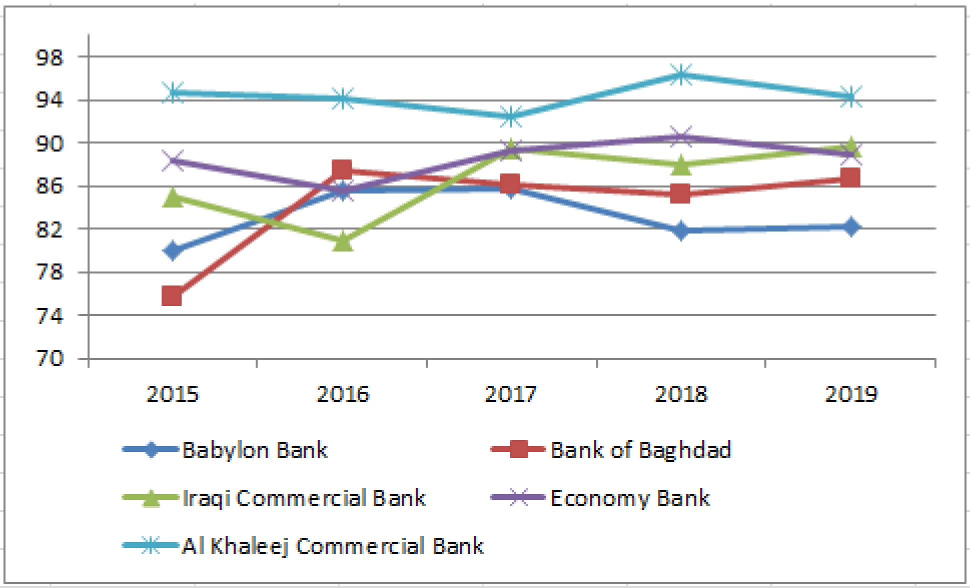
The management of Khaleeji Commercial Bank and the management of Babel Bank have the ability to deal with changing situations, and this indicates the ability of the board of directors and management in this bank to monitor and support the commercial activities and risks associated with these activities and put a proper plan for the future.

Table 9: Calculated Values for Ratio 8

Bank	2015	2016	2017	2018	2019
Babylon Bank	79.91	85.54	85.79	81.90	82.24
Bank of Baghdad	75.62	87.35	86.04	85.27	86.66
Iraqi Commercial Bank	85.00	80.92	89.46	87.98	89.62
Economy Bank	88.39	85.58	89.23	90.64	88.85
Al Khaleej Commercial Bank	94.60	94.19	92.49	96.34	94.31

The values for the Ratio 8 are also shown in the Figure 15:

Figure 15: Graphic of Calculated Values for Ratio 8



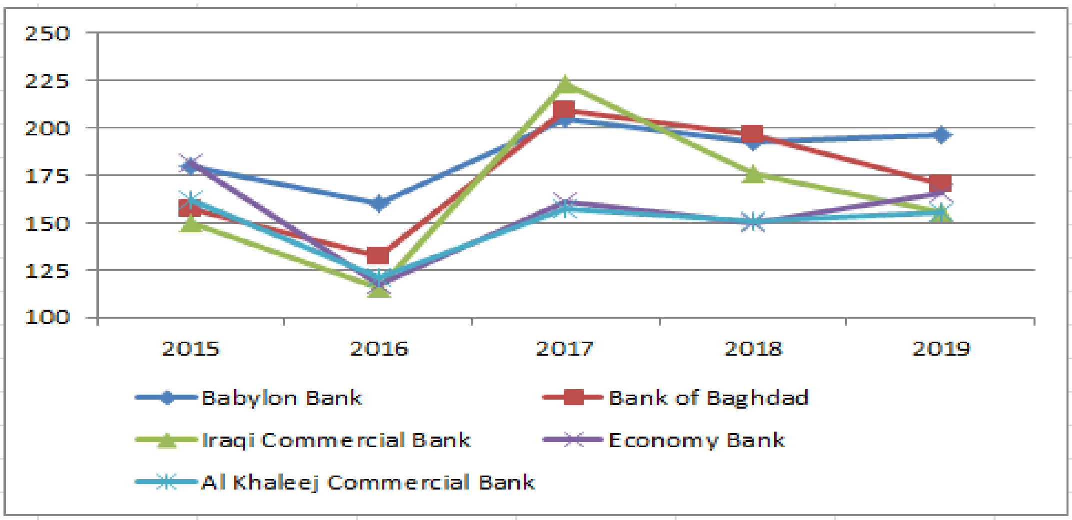
Ratio 8 it was observed that the percentage of interest expenses within the total expenses increased day by day for all banks, meaning that all banks had shortcomings. There is an urgent need for these banks for regular and planned monitoring in order to know whether the board of directors and management are taking appropriate remedial actions on the problems facing the bank, and these problems are represented in policies and procedures that are not written in the right way, poor financial performance.

Table 10: Calculated Values for Ratio 9

Bank	2015	2016	2017	2018	2019
Babylon Bank	1.79	1.57	1.50	1.81	1.61
Bank of Baghdad	1.60	1.31	1.15	1.17	1.21
Iraqi Commercial Bank	2.04	2.09	2.23	1.60	1.57
Economy Bank	1.93	1.96	1.75	1.50	1.51
Al Khaleej Commercial Bank	1.96	1.70	1.55	1.65	1.55

The values for the Ratio 9 are also shown in the Figure 16:

Figure 16: Graphic of Calculated Values for Ratio 9



Ratio 9 it is observed that the percentage of interest incomes within total expense was changed, increase or decrease in the same year, where the most value at 2017, and the lowest value at 2016. A loyal and strong management is similar in all banks, which helps the management to face the risks in the market, thus helping the bank's sustainability and achieving its efficiency in the market.

3.3.4. Earnings

Profitability ratios are expressed with:

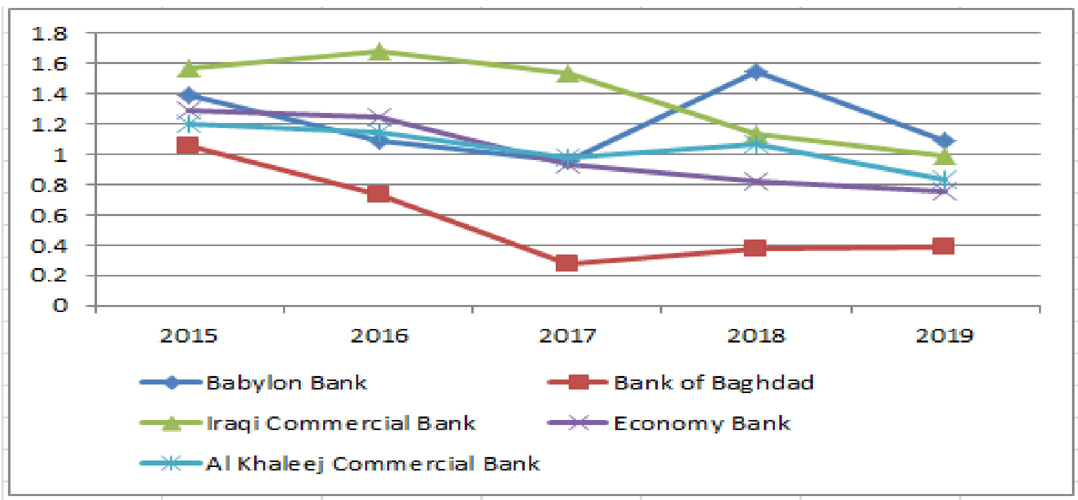
- Ratio 10: Net Profit (Losses) / Total Shareholders' Equity.
- Ratio 11: Net Profit (Losses) / Total Assets.

Table 11: Calculated Values for Ratio 10

Bank	2015	2016	2017	2018	2019
Babylon Bank	0.013	0.010	0.009	0.015	0.010
Bank of Baghdad	0.010	0.007	0.002	0.003	0.003
Iraqi Commercial Bank	0.015	0.016	0.015	0.011	0.009
Economy Bank	0.012	0.012	0.009	0.008	0.007
Al Khaleej Commercial Bank	0.012	0.011	0.009	0.010	0.008

The values for the Ratio 10 are also shown in the Figure 17:

Figure 17: Graphic of Calculated Values for Ratio 10



Ratio 10 shows the highest values for Iraqi Commercial Bank, but these values were decrease, also the values for Economy Bank, and bank of Baghdad, finally the values for Babylon Bank and Al Khaleej Commercial bank decreased in five years except 2018.

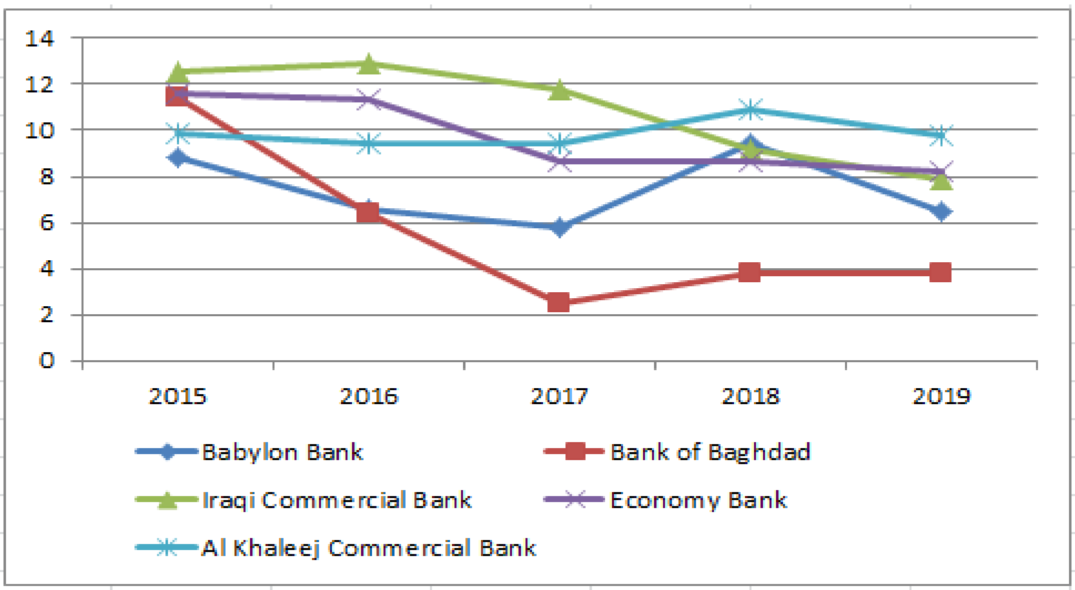
Earnings for all banks are good, but there was earning problems for the bank, capital position in all bank may be worse if there are insufficient earnings, Banks have a strong control over income and expenses through strong budgeting.

Table 12: Calculated Values for Ratio 11

Bank	2015	2016	2017	2018	2019
Babylon Bank	0.087	0.065	0.057	0.094	0.065
Bank of Baghdad	0.114	0.063	0.025	0.037	0.038
Iraqi Commercial Bank	0.125	0.129	0.117	0.092	0.078
Economy Bank	0.115	0.113	0.086	0.086	0.082
Al Khaleej Commercial Bank	0.098	0.094	0.093	0.109	0.098

The values for the Ratio 11 are also shown in the Figure 18:

Figure 18: Graphic of Calculated Values for Ratio 11



Ratio 11 it is observed that the percentage of return on equity was decreased, in five years except 2018, that means banks are totally dependent upon generation of adequate earnings, rewards to be paid back to its shareholders, protect and improve its capital, strong administration skills are required in these banks to avoid loss of capital.

3.3.5. Liquidity

Liquidity ratios are described below:

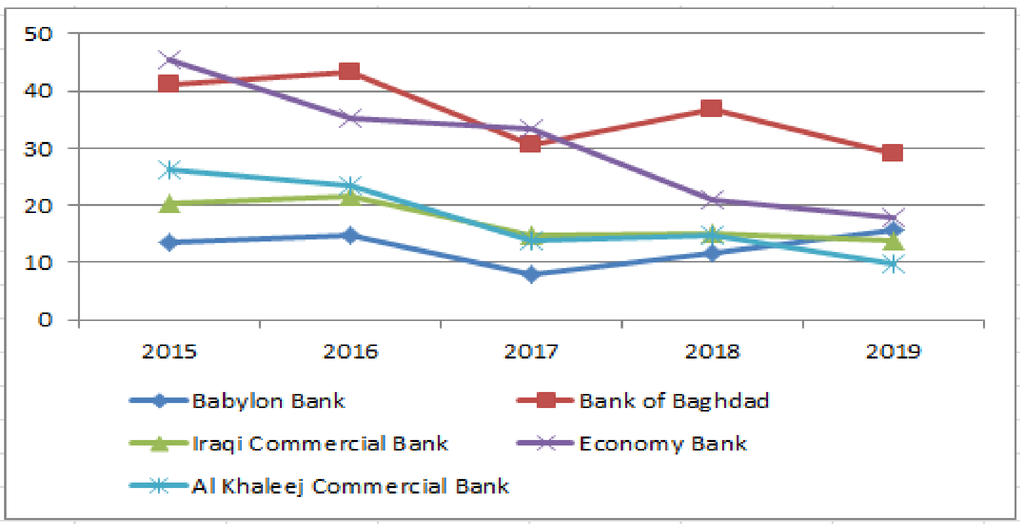
- Ratio 12: Liquid Assets / Total Assets.
- Ratio 13: Liquid Assets / Short Term Liabilities.
- Ratio 14: Liquid Assets / Deposit and Non-Deposit Funds.

Table 13: Calculated Values for Ratio 12

Bank	2015	2016	2017	2018	2019
Babylon Bank	0.134	0.147	0.080	0.115	0.157
Bank of Baghdad	0.410	0.432	0.306	0.368	0.291
Iraqi Commercial Bank	0.203	0.217	0.148	0.150	0.138
Economy Bank	0.455	0.353	0.332	0.208	0.178
Al Khaleej Commercial Bank	0.261	0.234	0.138	0.147	0.099

The values for the Ratio 12 are also shown in the Figure 19:

Figure 19: Graphic of Calculated Values for Ratio 12



Ratio 12 shows the highest values for bank of Baghdad and Economy Bank, and these values decreased, then the values for Al Khaleej Commercial bank and Iraqi Commercial bank, but the lowest values for Babylon bank, these values were increased.

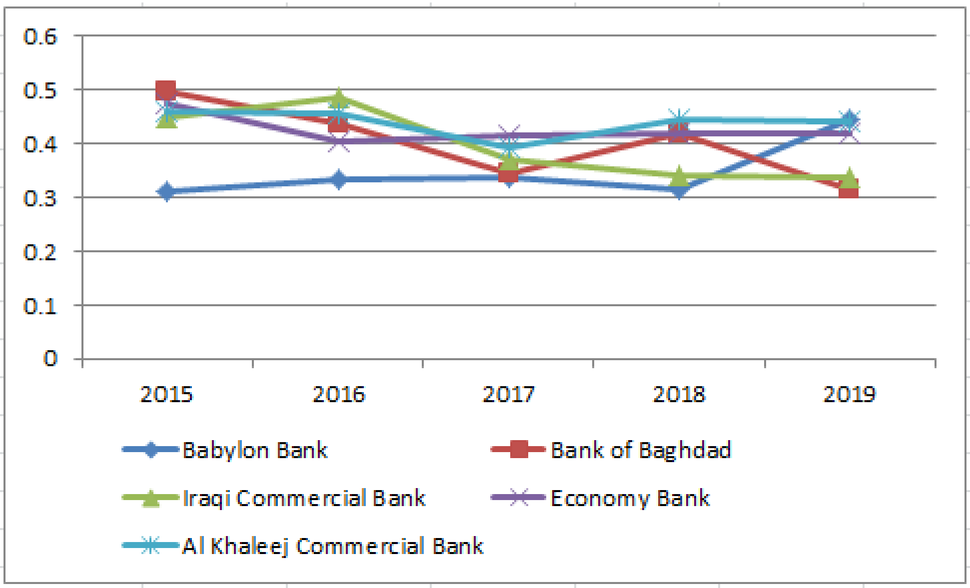
The Bank of Baghdad and the Bank of Economy had a satisfactory level of highly liquid assets that could be easily converted into cash to meet needs of services and the unexpected loans for customers. The management of the Gulf Commercial Bank and the Commercial Bank of Iraq had little experience in planning and control, as they had enough liquid assets to be able to comply with their own liquidity. The management of Babel Bank adequately faced liquidity problems and avoided inherent risks.

Table 14: Calculated Values for Ratio 13

Bank	2015	2016	2017	2018	2019
Babylon Bank	0.312	0.335	0.336	0.315	0.446
Bank of Baghdad	0.497	0.437	0.343	0.417	0.316
Iraqi Commercial Bank	0.447	0.486	0.371	0.342	0.337
Economy Bank	0.473	0.405	0.415	0.420	0.420
Al Khaleej Commercial Bank	0.459	0.455	0.391	0.445	0.442

The values for the Ratio 13 are also shown in the Figure 20:

Figure 20: Graphic of Calculated Values for Ratio 13



Ratio 13 it is observed that all percentages of liquid assets within short term liabilities were increase except the value for Babylon bank that decreased.

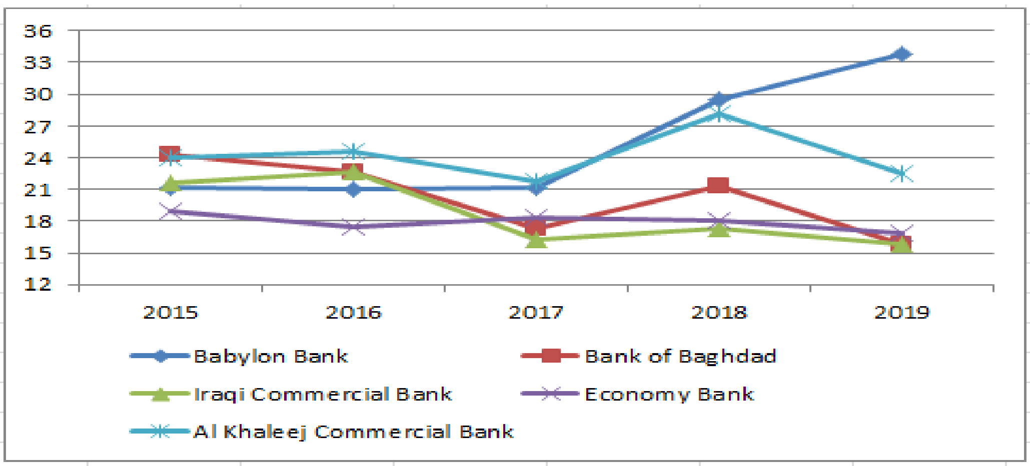
Babel Bank has a level of liquid assets sufficient to meet its liquidity obligations, which can be converted into cash and invested easily and disposed of in a good manner, and the management of all banks is sensitive to frustrating trends and is unable to deal with the problem of liquidity.

Table 15: Calculated Values for Ratio 14

Bank	2015	2016	2017	2018	2019
Babylon Bank	20.23	22.01	22.15	22.18	22.89
Bank of Baghdad	11.17	14.44	13.68	13.26	15.06
Iraqi Commercial Bank	15.61	16.49	16.69	15.81	16.34
Economy Bank	13.55	13.29	12.91	12.42	11.48
Al Khaleej Commercial Bank	11.23	15.66	13.47	12.20	10.39

The values for the Ratio 14 are also shown in the Figure 21:

Figure 21: Graphic of Calculated Values for Ratio 14



Ratio 14 shows the highest values for Babylon bank and it increased, finally the values for Al Khaleej Commercial bank, Iraqi Commercial bank, bank of Baghdad and Economy Bank increased at 2018. The increase in the size of the deposit in the absence of a job leads to a decrease in profits, so the Bank of Babylon made the right decisions regarding the size of the deposit.

Al Khaleej Commercial bank, Iraqi Commercial bank, bank of Baghdad, and Economy Bank had ability 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, especially in 2018.

3.3.6. Sensitivity to Market Risk

Sensitivity to market risk is quantified by those ratios:

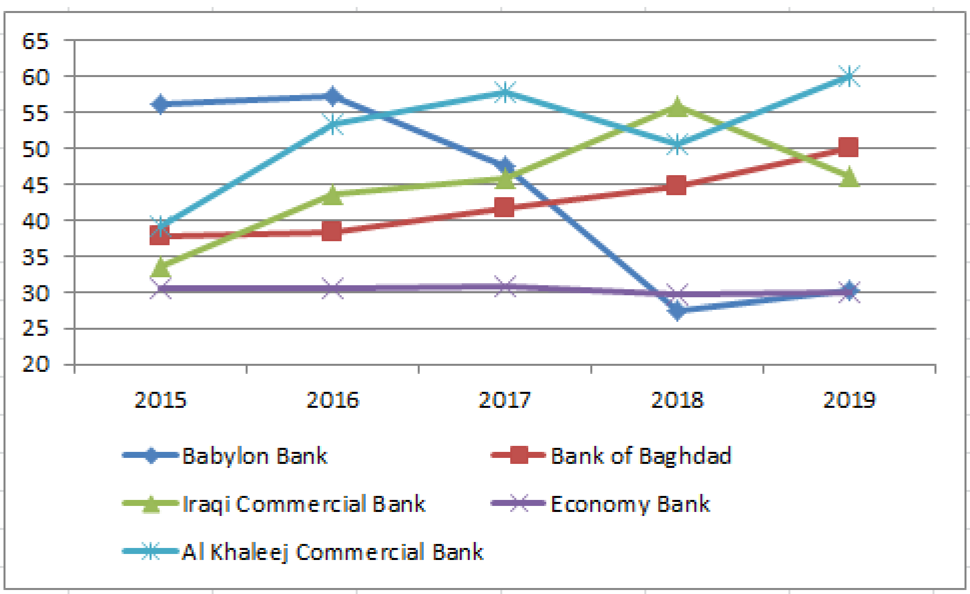
- Ratio 15: Total Assets / Sector Assets.
- Ratio 16: Total Loans and Receivables / Sector Loans
- Ratio 17: Total Deposits / Sector Deposits.

Table 16: Calculated Values for Ratio 15

Bank	2015	2016	2017	2018	2019
Babylon Bank	0.562	0.571	0.475	0.274	0.303
Bank of Baghdad	0.378	0.383	0.417	0.446	0.501
Iraqi Commercial Bank	0.334	0.436	0.457	0.558	0.462
Economy Bank	0.304	0.304	0.307	0.295	0.299
Al Khaleej Commercial Bank	0.390	0.534	0.578	0.505	0.601

The values for the Ratio 15 are also shown in the Figure 22:

Figure 22: Graphic of Calculated Values for Ratio 15



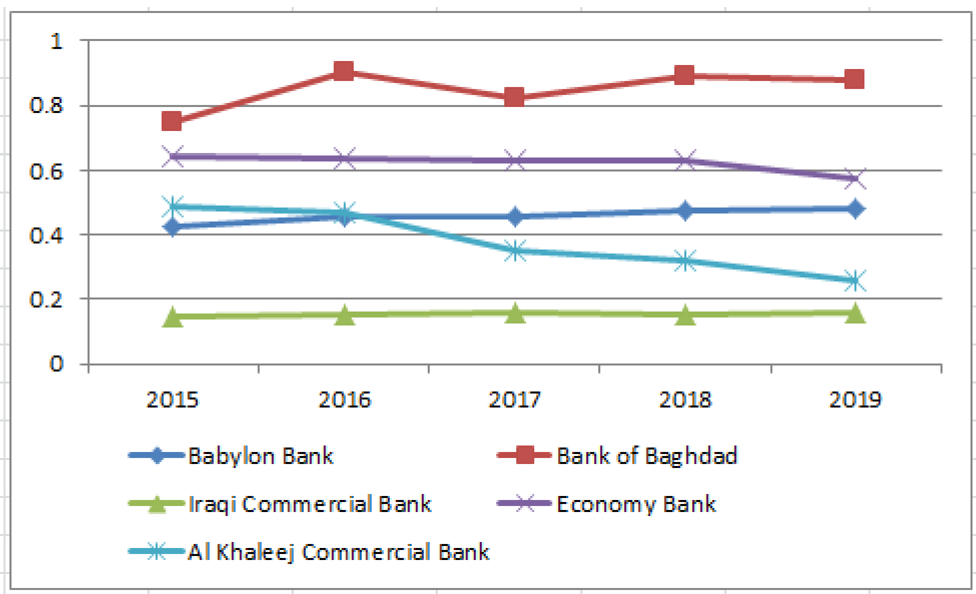
Ratio 15 shows the values for Al Khaleej Commercial bank, Iraqi Commercial bank, and bank of Baghdad increased, but the values for Babylon Bank decreased, finally the values of Economy Bank close to each other. The position of Al Khaleej Commercial bank, Iraqi Commercial bank and bank of Baghdad was secure, therefore sensitivity to the market risk is an extension of the liquidity or focus on stock ratios whether bank has sufficient liquidity.

Table 17: Calculated Values for Ratio 16

Bank	2015	2016	2017	2018	2019
Babylon Bank	0.428	0.454	0.456	0.476	0.479
Bank of Baghdad	0.746	0.904	0.822	0.888	0.878
Iraqi Commercial Bank	0.149	0.153	0.158	0.155	0.156
Economy Bank	0.643	0.637	0.627	0.630	0.576
Al Khaleej Commercial Bank	0.490	0.469	0.349	0.319	0.259

The values for the Ratio 16 are also shown in the Figure 23:

Figure 23: Graphic of Calculated Values for Ratio 16



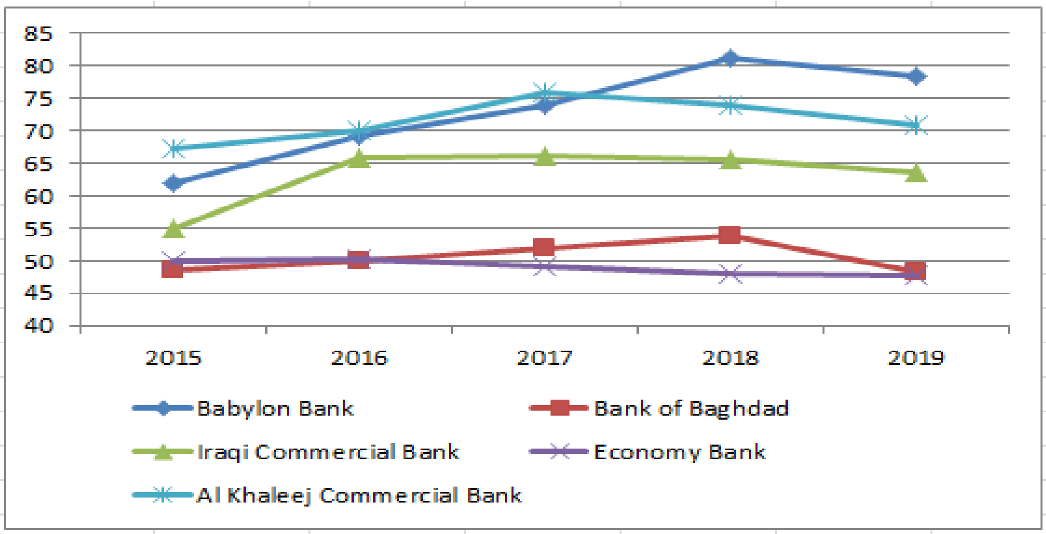
Ratio 16 shows the highest values for bank of Baghdad, next the values for Economy bank, then Al Khaleej Commercial bank and Babylon bank, finally the values for Iraqi Commercial bank. The capabilities for the bank of Baghdad and Economy bank management to recognize quantify and control over the market risk with respect to the bank's exposure to these risks.

Table 18: Calculated Values for Ratio 17

Bank	2015	2016	2017	2018	2019
Babylon Bank	61.92	69.30	73.88	81.28	78.40
Bank of Baghdad	48.53	50.10	51.94	53.77	48.24
Iraqi Commercial Bank	55.07	65.82	66.13	65.57	63.63
Economy Bank	49.90	50.27	49.09	48.00	47.63
Al Khaleej Commercial Bank	67.35	69.98	75.78	73.82	70.74

The values for the Ratio 17 are also shown in the Figure 24:

Figure 24 : Graphic of Calculated Values for Ratio 17



Ratio 17 shows the highest values for Babylon bank, and Al Khaleej Commercial bank, next the values for Iraqi Commercial bank, finally the values for Economy bank and bank of Baghdad. Babylon bank, and Al Khaleej Commercial bank ability to recognize, monitor, manage and control the market risk and give indication to management for the supervision in the problematic area.

CONCLUSION

One of the most important features of strong economies is that they have a developed and deep financial system. Along with money and capital markets, the banking system is one of the most important elements of the financial system. When looking at economic crises such as the great depression of 1929, the 2008 global financial crisis or the other local crises, it is seen that the main factor causing these crises is the weakness in the banking system. It is known that in the event of the spread of negative news about banks, or even the possibility of financial failure of one or more banks, depositors quickly withdraw their deposits from the banks by panicking. At the end of this process, which is called bank-run, many banks go bankrupt and economic stability is damaged and economic crises are experienced.

Governments and regulatory authorities seeking to strengthen confidence in the banking system require banks to meet a number of criteria. Mentioned criteria, which have become more standardized, especially with the introduction of Basel criteria, are imposed on banks as a mandatory by central banks. The CAMELS model is a method that central banks, investors and depositors use to assess the performance of banks. Capital adequacy, asset quality, management adequacy, earnings, liquidity, and sensitivity to market risk are the main points that the model focuses on.

In this research, it is aimed to evaluate the financial performance of banks operating in Iraq with the CAMELS model. The population of the study consists of banks operating in Iraq. Iraq has been taking financial liberalization steps especially after 2003. Five of Iraqi banks are selected in our research as the sample, because these banks are traded in the Iraqi stock exchange which publish their financial statements most regularly.

When the results of the study are examined, it is seen that there is a good progress for all banks in terms of capital adequacy, especially in terms of total assets and deposits. It is observed that Babylon bank is the most successful bank in terms of capital adequacy among the banks whose ratios were examined.

In terms of asset quality all banks meet the criteria. Thus, we can conclude that the banks are not facing any problem with asset quality. According to the Ratio 6, which shows the ratio of permanent assets to total assets, it can be noted that all banks have a stable asset structure over the years.

When the management adequacy ratios are analyzed, it is seen that the share of interest incomes in total incomes and the shares of interest expenses in total expenses tend to increase for all banks over the years. This result shows that banks have succeeded in increasing their interest income, however they also need to borrow for maintain their operations.

In terms of earnings, it is seen that there are serious problems for Iraqi banks. The profits of all banks show a decreasing trend over the years and the share of both net profit in shareholders' equity and in total assets is decreasing.

In terms of liquidity, a serious problem is not observed for Iraqi banks. However, it has been determined that the share of liquid assets in total assets has decreased over the years, but its share in deposits tends to increase.

In terms of sensitivity to market risk, credit share within total sector is stable for all banks over the years. By the way, the share of total assets in the sector assets shows volatility from bank to bank. In particular, the ratio of Babylon Bank's total assets to sector assets decreased dramatically between 2016 and 2018.

As a result of the research, it is observed that in some CAMELS indicators of Iraqi Banks positive developments were seen but some of them have bad signals in terms of the performance. In terms of capital adequacy, asset quality, management adequacy and liquidity, we do not observe any serious problem. The increase in capital indicates good management, high profit for the bank, and the efficiency of the bank's management bank capital. However, earnings and sensitivity to market risk indicators show that the government and regulatory authorities should pay attention on these issues for Iraqi banks. It is seen that serious provisions should be taken especially for banks to increase their earnings by relevant authorities. In addition, it is necessary to monitor the capital increase and decrease for fear of bankruptcy. For depositors, in the event of any loss from loans, there will be avoidance in meeting the demands of depositors because of the great risks facing banks, and to prevent the bank from failing it must take commitments for loans, and maintain a sufficient level of capital for the requirements of the bank and its customers, and this ratio determines the bank's ability to meet with commitments on time and other risks like credit risk, operational risk etc.

In future studies, more banks can be added to the analysis to make the results more generalizable. In addition, if researchers access the financial statements of the Iraqi banks, the analysis can be repeated for a longer period.

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