



Financial Stability Report



**Central Bank of Iraq
Department of Monetary &
Financial Stability**

**Financial Stability Report
2018**

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Financial Stability Report for 2018
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Introduction

The Iraqi Central Bank is pleased to present the ninth financial stability report for the year 2018 to the authorities concerned with the Iraqi financial system, researchers and the general public. The main objective of the report is to diagnose the systemic financial risks that the Iraqi financial sector may be exposed to, and to analyze the most important trends of the financial and banking indices to ensure a sound and stable financial sector.

The Financial Stability Report for the year 2018 includes a number of important subjects, which are: Analyzing the financial sector developments, analyzing the financial soundness indices of the banking system, the aggregate indicator measurement of banking stability, analyzing the results of the macro stress tests, analyzing the developments in the infrastructure of the financial system in addition to analyzing the developments of financial inclusion and the aggregate index measurement of financial inclusion.

The financial stability is considered one of the main goals to be achieved and maintained that have been provided for in article (3) of the Central Bank of Iraq Law No. (56) of 2004, and it is one of the main goals for each Central Banks together with the stability of the prices level and the exchange rate to ensure an effective performance of all the economic units towards achieving a sustainable economic development. This prompted central banks in the world to give greater importance in ensuring the soundness and durability and stability of their financial systems, and that is embodied in the preparation of periodic reports of financial stability.

The Central Bank of Iraq has given the subject of achieving financial stability increasing attention, and it stems from its responsibility to ensure a sound and stable financial system, maintain it, and minimize the potential risks after forecasting, and this is what encourages the Central Bank of Iraq to make the financial stability its first goal within its declared strategy for the period (2016 - 2020).

Financial stability means the situation in which the financial system with all its institutions is able to continue to perform its basic functions of mobilizing savings, granting different loans and settling payments effectively, especially in times of financial crisis resulting from the financial system itself, or from the real sector.

As for the volume of the overdue debts, it increased significantly from (4.3) trillion dinars in 2017 to (4.8) trillion dinars in 2018, and by an increase of (12.43%), and this reflects an increase in the rate of delay in the repayment of loans due for the year 2018. The rate of overdue debt growth varies over the period (2013 – 2018) and that the ratio of total overdue debt to total cash credit is on the increase during the period (2013-2018). This percentage has increased from (11.44%) in 2017 to (12.68%) in 2018, which reflects an increase in the risks faced by the banking system, especially the risks resulting from private sector activity although it received a lower percentage of the total credit compared to the credit provided to the public sector.

The data and statistics mentioned in the report of the Iraq Stock Exchange for the year 2018 indicate that the market has been characterized by a decrease in the performance of its annual indices, as the market index (IS 60) (an index that mainly depends on choosing (60) companies achieving the highest turnover of the shares of the participating companies) closed in its last sessions of 2018, on (510.12) points, a decrease of (12.1%) from its level in the last session of 2017 of (580.54) points and this is due to several reasons including the failure of some companies to hold their annual meeting and the others fail to distribute the profits to shareholders, as well as achieving a loss for others.

The analysis of financial soundness indices showed that the capital adequacy ratio for the banking system in general increased from (181%) in 2017 to (285%) in 2018, and these high ratio reflect a good adequacy and financial ability of banks operating in Iraq to help them face potential risks, as it significantly exceeds the standard ratio set according to the Basel standards, which is (8%) and also the one determined by the Central Bank of Iraq, which is (12%). The banks operating in Iraq also achieved a high liquidity rate, as the monthly average of the LCR ratio did not fall below the limit set for it during the year 2018, and it reached its highest rate in the month of April (which is 3309%), whereas the lowest rate for the LCR rate was in September where it was (406%).

And according to the base scenario in the statistical model of the stress tests, Non-performing Loans predicted ratio increased by from (% 12.424) in the first quarter of 2019 to (%13.249) in the fourth quarter of 2019, and the results showed a slight rise in the non-performing debt ratio as a result of negative shocks of the GDP growth rate and this slight decrease is due to the decrease in the ratio of banking depth in Iraq, which is considered an indication of the extent to which the banking sector contributes to the financing of real activity and hence, its decrease reflects the weak relationship between the banking sector and the real sector. As for international oil prices, it has shown a positive and statistically insignificant relationship on the Non-Performing Loans ratio and this is opposite of the expected, and this may be due to the government's ability to absorb the shock of the decline in international oil prices and to keep public spending level without major change and this is confirmed by the low oil prices crisis after 2014 and it is expected that the decline in the rate of growth of government spending will lead to an increase in the bad debts ratio but the relationship was direct and moral, as the rate of growth of government spending was accompanied by a decrease in the rate of growth of Non-Performing Loans for all seasons of 2019, and that the steady trend of this relationship may be due to the weak impact of government spending by the economic crises, especially the current spending thereof, as the government often keeps the current spending level, and provide alternative sources of financing in the event of low primary sources, but the length of the duration of the crisis could lead to the depletion of alternative funding sources, which may make the fiscal policy hampering the efforts of financial or banking stability therefore, additional financial buffers must be built to cope with crises as they occur and help reduce the transfer of the effects of fiscal policy to financial stability.

In connection with the development of the financial infrastructure as an essential element in support of financial stability, the Central Bank of Iraq issued a number of controls and instructions, including (regulations of Islamic financing tools, regulations of risk management in Islamic banks, regulations of the Shari'a Supervisory Board and Shari'a Auditing, regulations of the capital adequacy standard in accordance with Basel III requirements for conventional banks, instructions for Business Continuity Management System in the Iraqi banking sector, according to the International Standard ISO 22401, regulations governing the brokerage firms' for buying and selling of foreign currencies and instructions for the work of sub- agents for foreign remittance service providers).

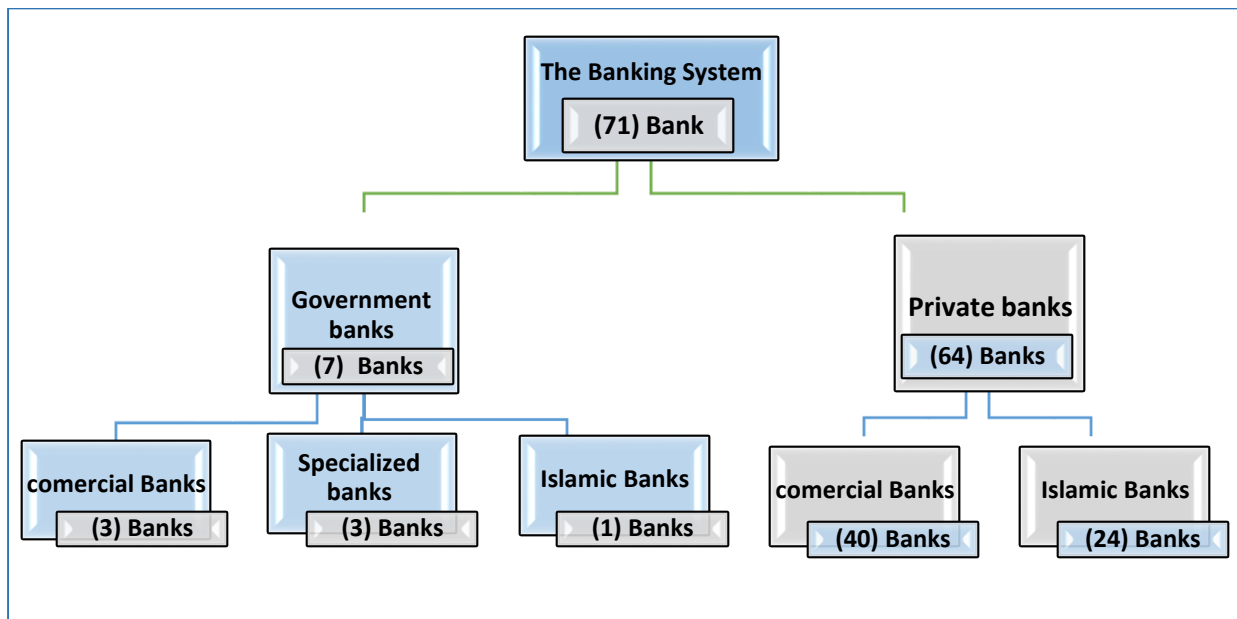
Financial Sector Developments in Iraq

1. Financial Sector Developments in Iraq

1-1 Banking sector development in Iraq

The banking system in Iraq consists of (71) bank as in 2018, including (7) government banks and (64) domestic and foreign private banks and the largest number therefrom are commercial banks and they are (40) banks, following by (25) Islamic banks then (3) specialized banks as shown in figure (1).

Figure (1)
The structure of the Iraqi banking system as in 2018

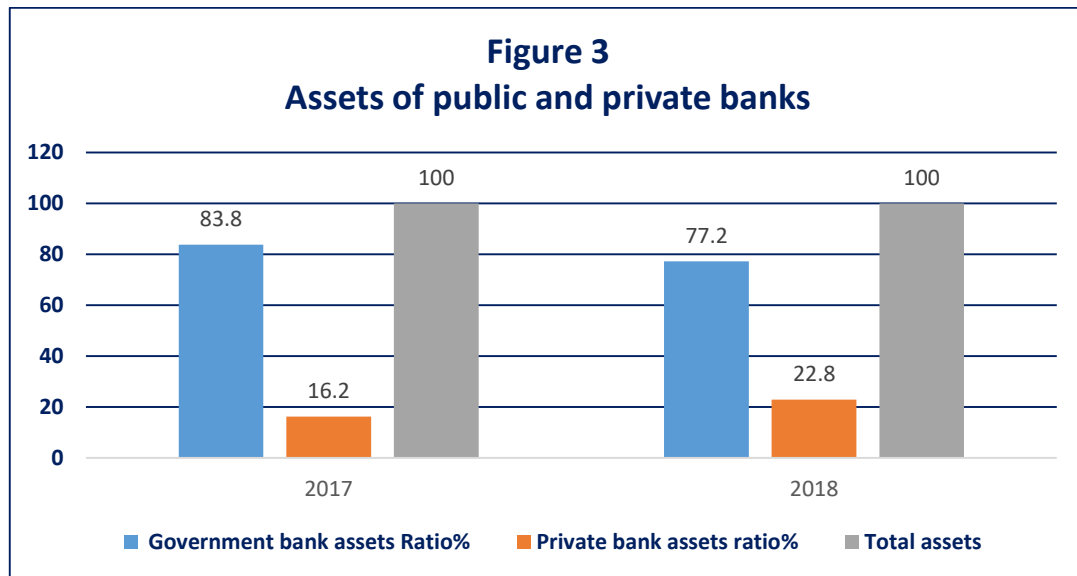


Source: Central Bank of Iraq, Department of Statistics and Research

1-1-1 Banking sector assets :

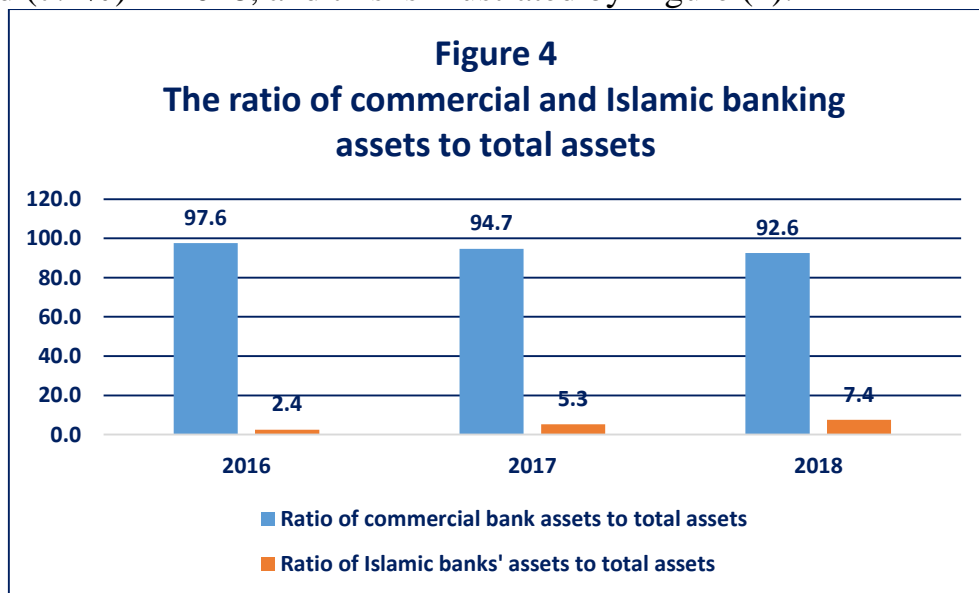
The size of the banking system assets increased from (111.2) trillion dinars in 2017 to (122.9) trillion dinars in 2018 with an increase rate (10.5%), and despite the increase in the number of banks in Iraq to (71) banks, the proportion of the assets of the five largest banks has reached (76.4%) of the total assets and the rest is in the share of other banks, and this indicates an increase in the activity of these banks compared to other banks.

¹ The assets were recalculated according to new international standards, starting in January 2012



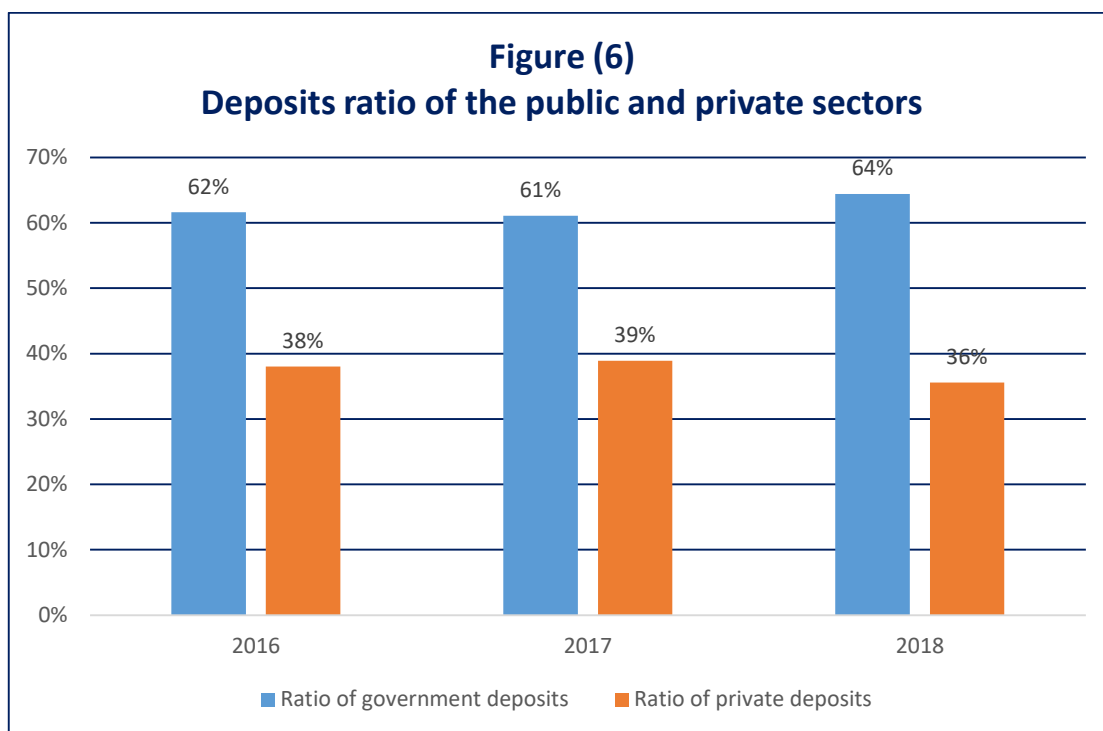
Source: Central Bank of Iraq, Department of Statistics and Research

As for the assets in terms of the type of banks, both conventional and Islamic, the conventional banks accounted for the largest percentage of total assets, they reached (92.6%) in 2018, and this is a result of the long history of conventional banks in comparison with newly created Islamic banks, but the share of Islamic banks' assets out of the total Assets have been increasing as a result of the expansion of their business and the establishment of new Islamic banks until they reached (7.4%) in 2018, and this is illustrated by Figure (4).



Source: Central Bank of Iraq, Department of Statistics and Research

Although the ratio of foreign banks assets to total assets of the banking sector increased from (1.2%) in 2016 to (3.7%) in 2018, this situation reflects the weak contribution of foreign banks in banking activity, as shown in Figure (5).

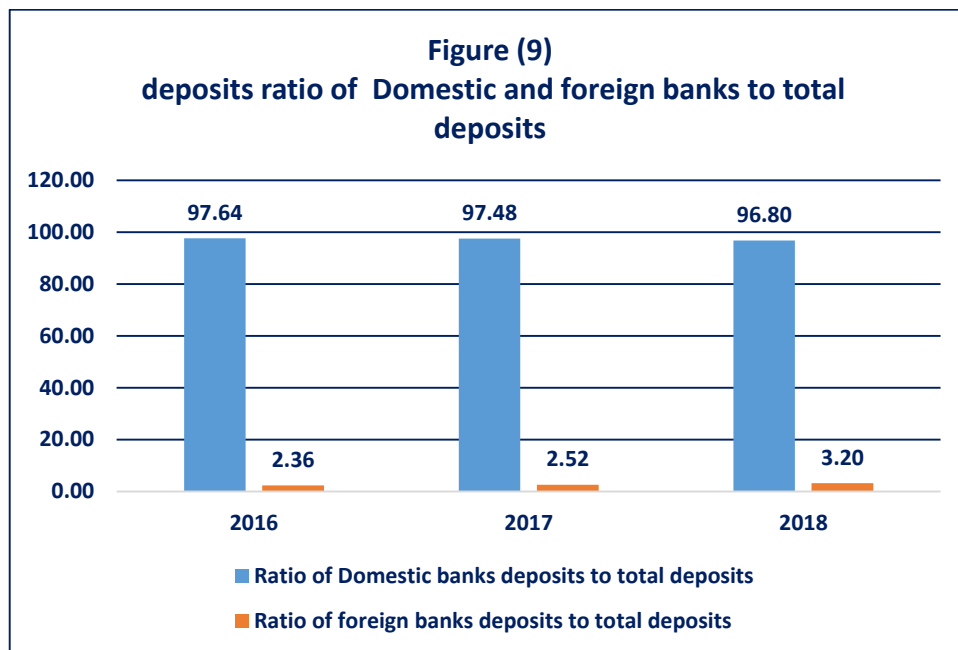


Source: Central Bank of Iraq, Department of Statistics and Research

And if the banks are classified according to their type, they will be classified into three different groups, the first includes government and private banks, the second includes conventional and Islamic banks, and the third includes domestic and foreign banks, then the distribution of deposits between them will be according to the following:

With regard to the first group, the ratio of government bank deposits accounted for the highest percentage of total deposits as it reached (85.96%) in 2018, despite the fact that their number represents (9.9%) of the number of banks, while the share of private banks was (14.04%) of total deposits for 2018. The increase in the share of government banks in total deposits reflects the high confidence of the public in government banks, as they are guaranteed by the state, as well as they have a wide network of branches scattered throughout Iraq beyond what all private banks possess, as the share of government banks from the number of branches to their total number is (61.4%), while the share of branches of private banks is (38.6%) for the year 2018. Figure (7) shows the ratio of deposits of government and private banks for the period (2016 – 2018).

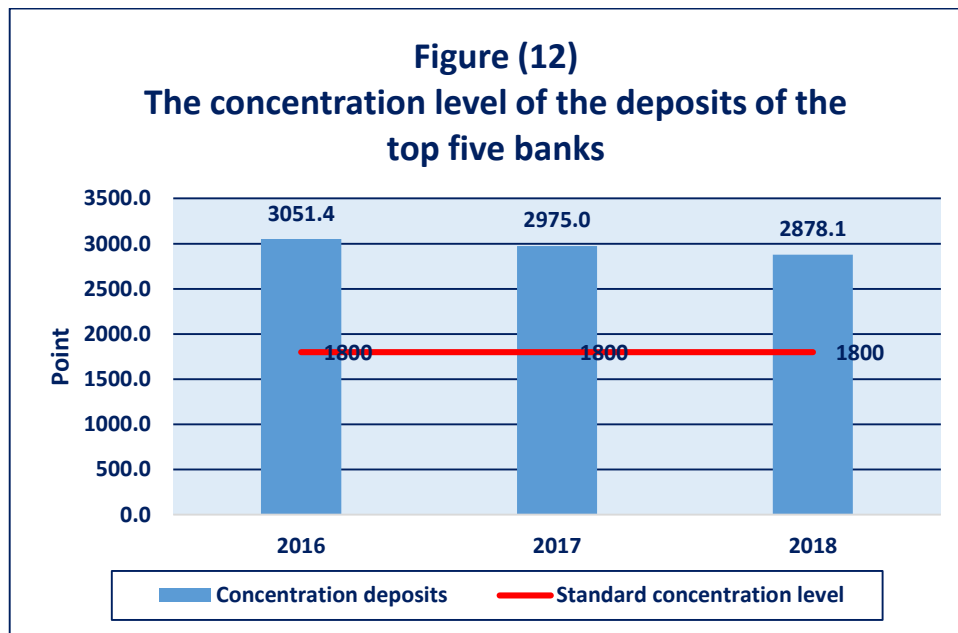
banks to total banks reached (3.20%) for the year 2018 although the number of foreign banks represents (22.5%) of the total number of banks, Figure (9) shows these ratios.



Source: Central Bank of Iraq, Department of Statistics and Research

As for the classifying the deposits in terms of their type (current deposits, savings deposits, and fixed deposits), current deposits continued to hold the largest portion of total deposits, as their contribution rate increased from (71.3%) in 2017 to (72.1%) in 2018, while the contribution rate of both fixed and savings deposits decreased from (12.87%) and (15.78%) in 2017 to (12.56%) and (15.31%) in 2018, respectively. The high contribution of current deposits compared to fixed deposits and savings deposits limits the ability of banks to expand granting credits, especially long-term credit that is often used in financing development projects, but the general trend of the data of these variables indicates a narrowing gap between current deposits on the one hand, fixed deposits and savings deposits on the other hand in favor of the latter, and this is a good indicator that contributes to increasing depth and financial stability in Iraq, and Figure (10) shows the types of deposits with commercial banks.

(2975.034) point with a decrease rate of (-3.25%) and this is an indication of the low concentration of deposits of the five largest banks. However, the concentration remains within the slightly high limits of the five largest banks as a result of public confidence in them is due to the fact that they are affiliated with the public sector, and therefore they are guaranteed by the state, thus the high concentrations in them are not a real danger, as it is unlikely that these banks will refrain from fulfilling their obligations in case depositors withdraw their deposits. Figure (12) shows the concentration of deposits for the five largest banks.

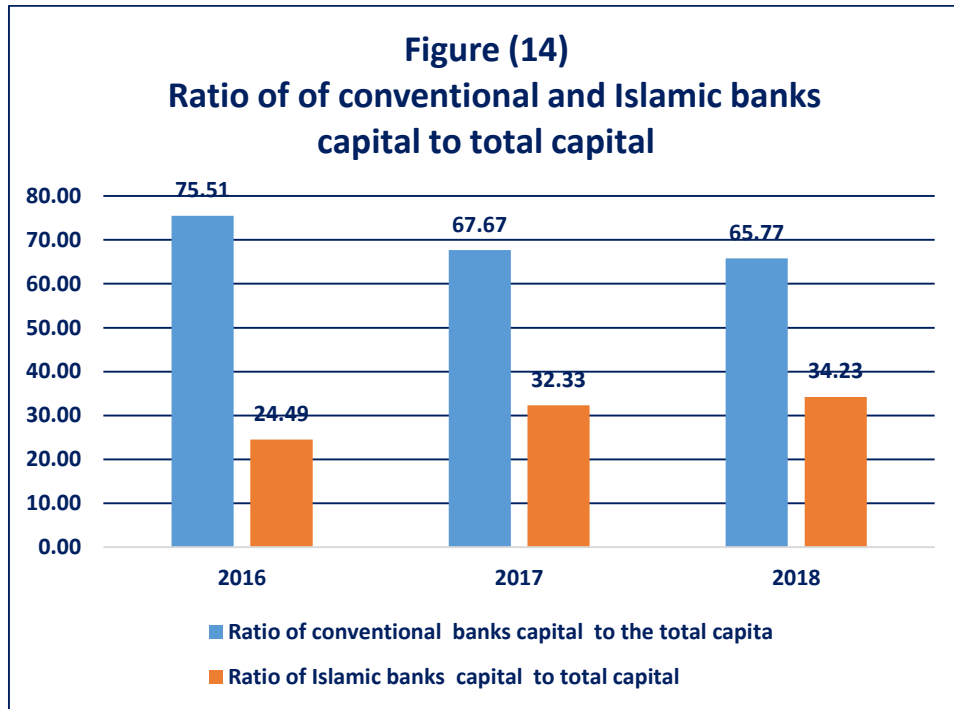


Source: Central Bank of Iraq, Department of Statistics and Research

1-1-3 Banking sector capital:

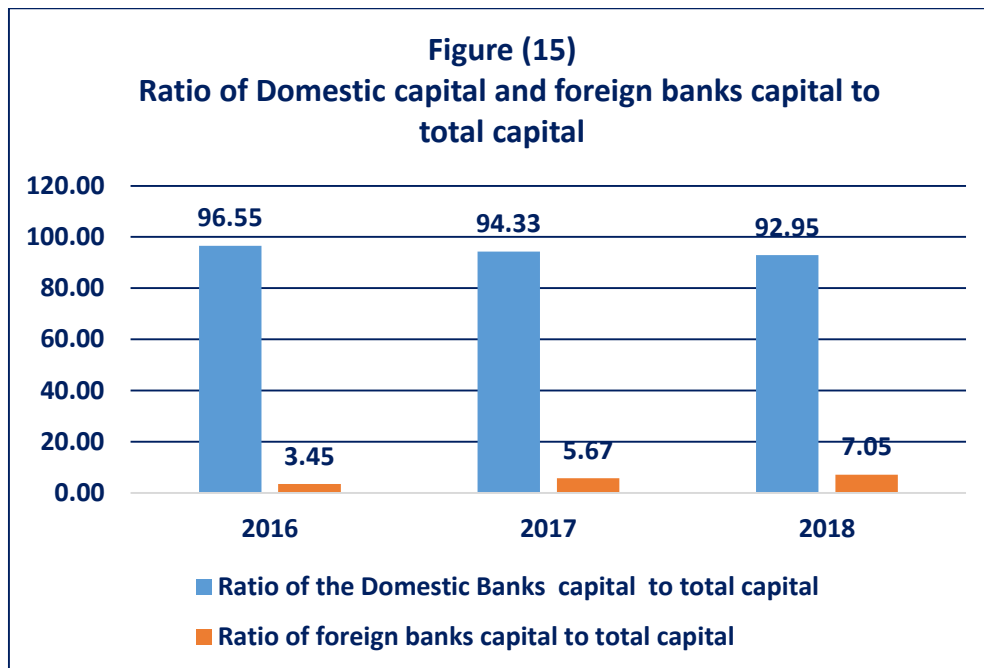
Banks capital increased by (4.50%) in 2018 to reach (15.1) trillion dinars, after it was (14.4) trillion dinars in 2017. If the banks are classified according to their type, they will be classified into three different groups: the first includes government and private banks, the second includes conventional and Islamic banks, and the third includes domestic and foreign banks, and the distribution of capital between them will be as follows:

Regarding the first group, the ratio of the capital of private banks formed the highest percentage to total capital, reaching (77.55%) in 2018, while the share of government banks was (22.45%), as a result of the increase in the number of private banks compared to government banks, in addition to the adherence of the banks concerned with the regulations of the Central Bank to raise the capital to (250) billion dinars, Figure (13) shows the contribution rates for the two types of banks.



Source: Central Bank of Iraq, Department of Statistics and Research.

As for the third group represented by the ratio of the capital of domestic and foreign banks separately to the total capital, the capital of domestic banks constituted the highest percentage of the capital, as shown in Figure (15)



Source: Central Bank of Iraq, Department of Statistics and Research

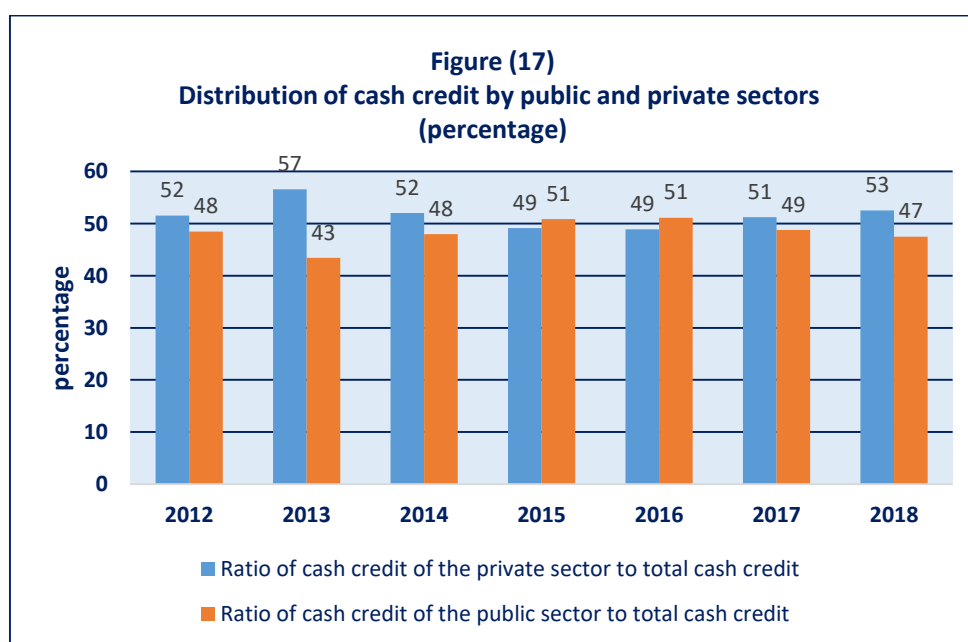
Table (1)
Cash credit and pledged credit for commercial banks for the period (2012-2018)
 (Million dinar, growth rate, percentage)

Year	Total overall credit	Overall credit growth rate%	Cash credit	Growth rate%	Relative importance %	Pledged credit	Growth rate%	Relative importance %
2012	72,612,878	22.29	28,438,688	39.79	39.16	44,174,190	13.17	60.84
2013	83,619,037	15.16	29,952,012	5.32	35.82	53,667,025	21.49	64.18
2014	85,031,460	1.69	34,123,067	13.93	40.13	50,908,393	-5.14	59.87
2015	77,285,840	-9.11	36,752,686	7.71	47.55	40,533,154	-20.38	52.45
2016	70,461,730	-8.83	37,180,123	1.16	52.77	33,281,607	-17.89	47.23
2017	65,604,207	-6.89	37,952,829	2.07	57.85	27,651,378	-16.92	42.15
2018	63,823,580	-2.71	38,486,947	1.41	60.30	25,336,633	8.37-	39.70

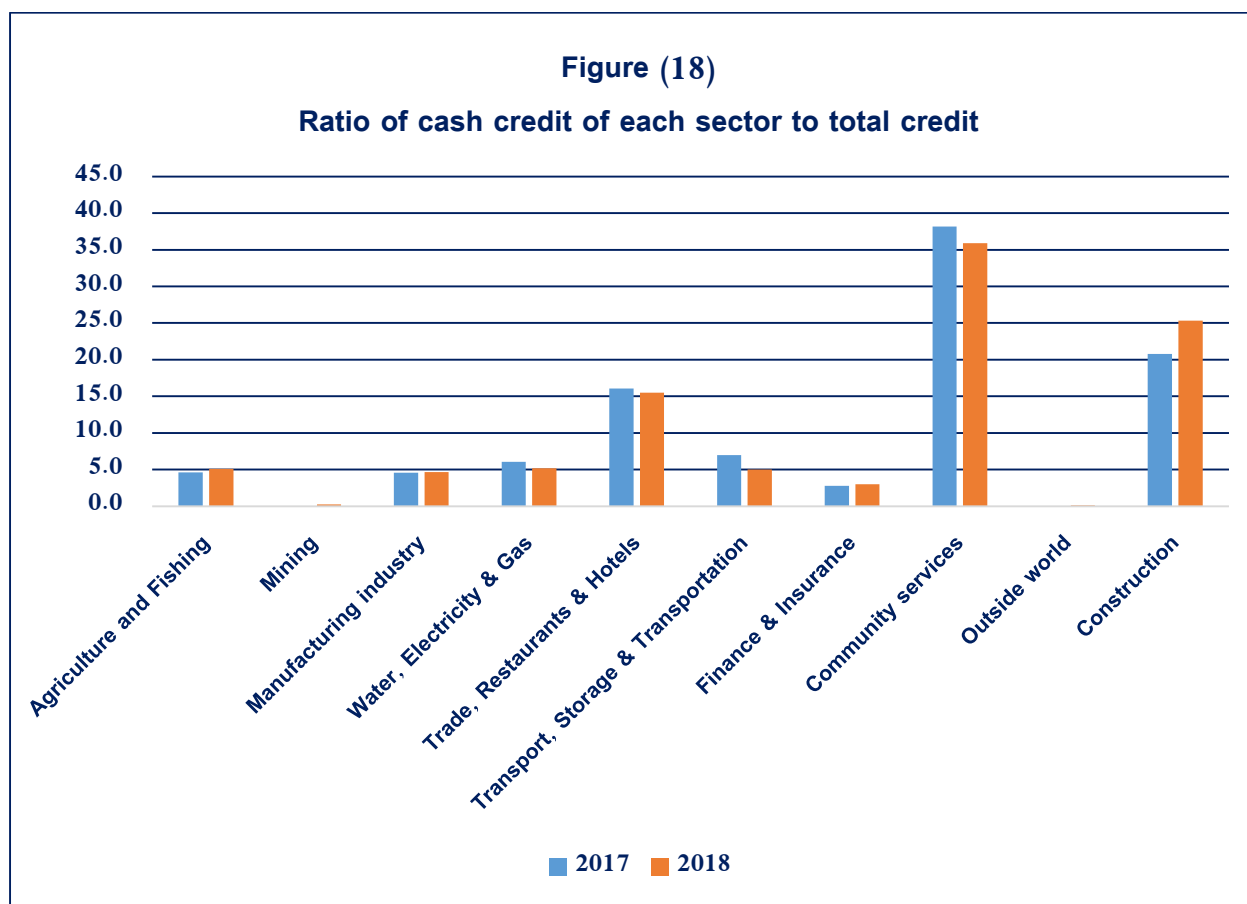
Source: Central Bank of Iraq, Department of Statistics and Research

1-1-4-2 Sectoral distribution of cash credit

The share of the private sector in cash credit increased from (51.25%) in 2017 to (52.53%) in 2018, while the share of the public sector in cash credit decreased from (48.75%) in 2017 to (47.47%) in 2018 as the cash credit granted to the public institutions decreased (which is financed exclusively by government banks) at a rate of (- 62.95%), while the cash credit granted to the central government increased at a rate of (38.27%) and this increase reflects the continuation of the expansionary trend of public expenditures after the economic and security crisis years that Iraq has gone through.



Source: Table data (2)

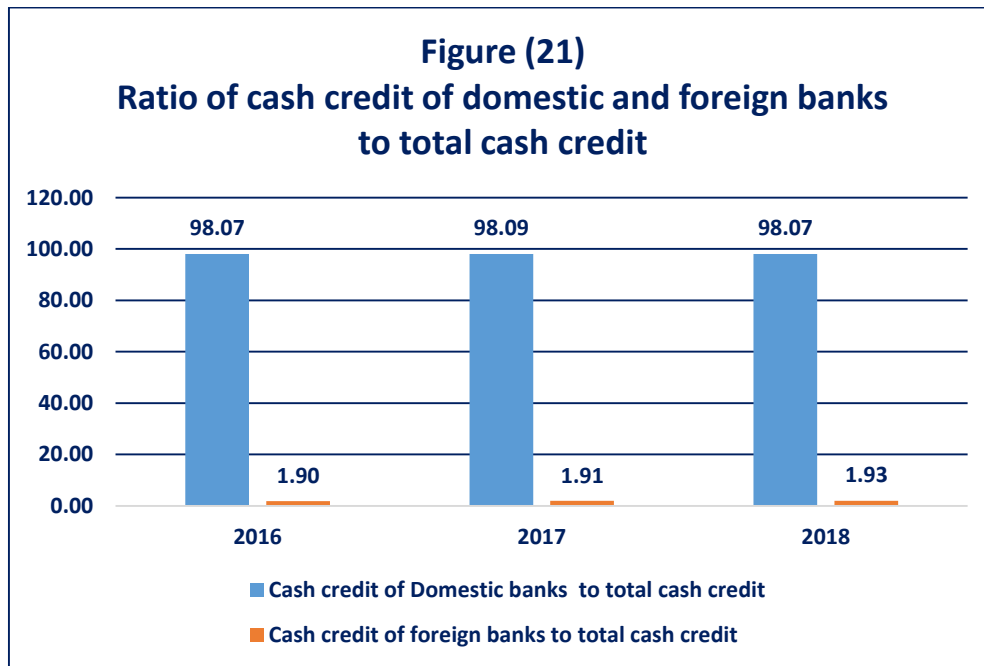


Source: Table data (2)

And if the banks are classified according to their type, they will be classified into three different groups, the first includes government and private banks, the second includes conventional and Islamic banks, and the third includes domestic and foreign banks, and the distribution of cash credit between them will be according to the following:

Regarding the first group, the governmental banks acquired the largest ratio of cash credit to the total cash credit, which amounted to (80.93%) in 2018, while the share of private banks was (19.07%) for the same year, and despite the fact that the number of government banks constitutes only (9.9%) of the total number of banks, its acquisition of (85.96%) of the total deposits as a result of public confidence in it made it acquire the largest ratio of cash credit, and Figure (19) shows the contribution ratio of government and private banks.

(1.93%) for foreign banks in 2018, this shows the limited contribution of foreign banks to support the National Economy, although their number constitutes (22.5%) of the total number of banks, but it provided cash credit amounting to (1.93%) of the cash credit granted in 2018, and Figure (21) shows this ratio for the period (2016 – 2018).

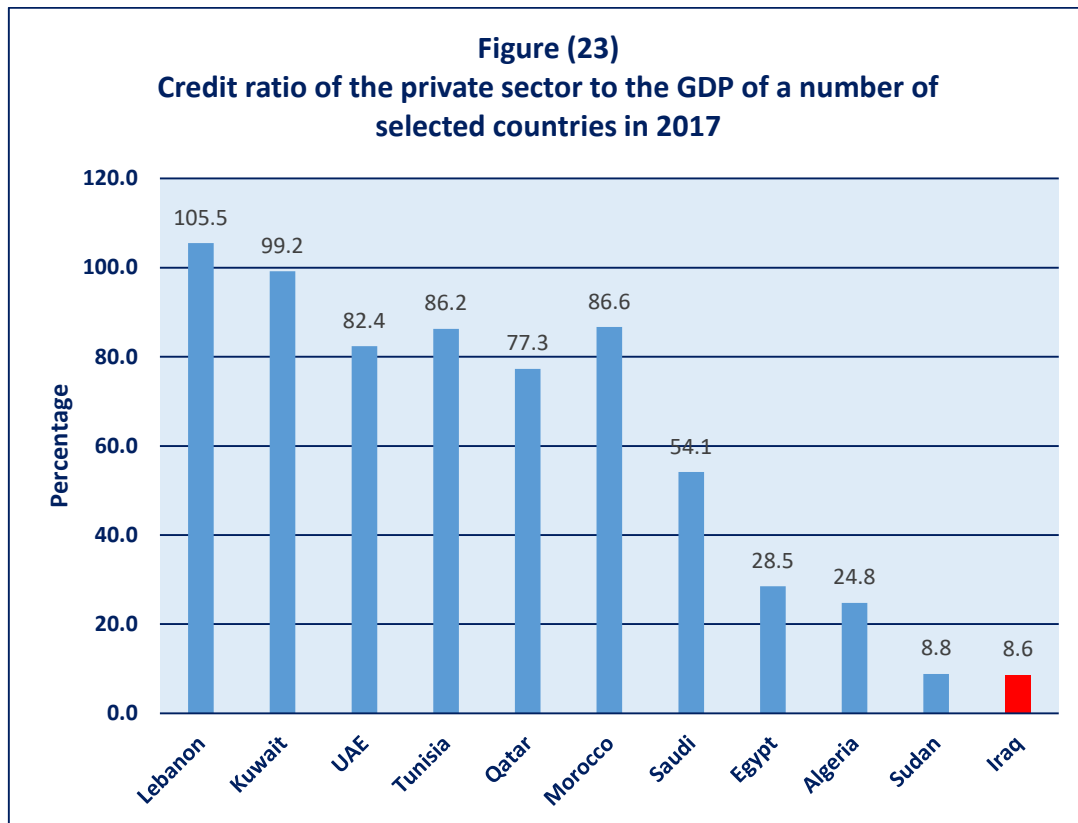


Source: Central Bank of Iraq, Department of Statistics and Research

1-1-4-3 Bank credit concentrations

State-owned banks continued to dominate the largest proportion of credit provided by the banking sector, as the ratio of credit provided by the largest five government banks (80%) of the total cash credit so that the market share was high in government banks, and the degree of credit concentration of the five largest banks in 2018 reached (2060.34) points, lower by (72.41) point from the year 2017 that was (2132.75) point.

The concentration of credit with government banks reveals their impact on controlling the banking sector, and this is a natural result of its network of branches scattered throughout all of Iraq, the ease of access to its services, and its evolving development role by increasing the credit it provides compared to private sector banks, as well as banking awareness of government banks through the various visual and audio means of communication and the services they provide even to retirees by granting them advances, as shown in Figure (22).



Source: Central Bank of Iraq, Department of Statistics and Research World Bank, Financial Sector data: <http://data.worldbank.org/topic/financial-sector>

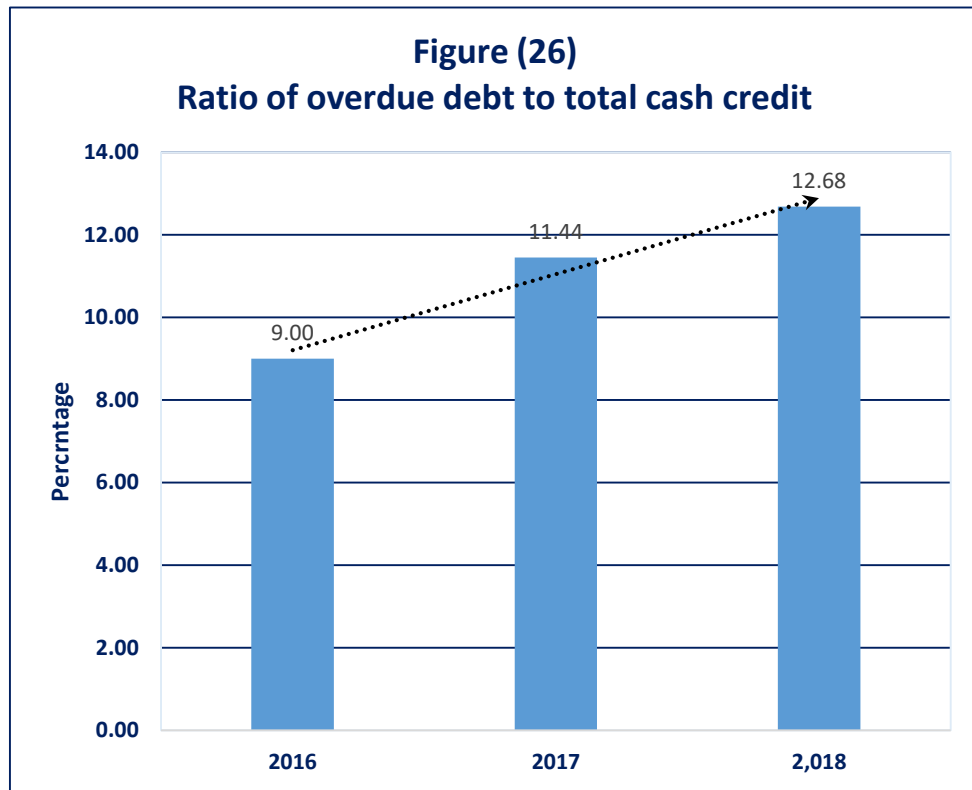
Hodrick - Prescott (HP) Filter method suggested by (BCBS) is used in calculating Credit to GDP Gap ¹ in Iraq and the results shown in Figure (24) indicate that this gap falls below the minimum, and it is less than one, whether in the case of adopting GDP data with oil or without oil,

This indicates that bank credit can increase without worrying about creating instability in the Iraqi financial system, taking into account the basic criteria ² that must be met when granting credit to the various economic sectors.

¹ Includes the credit granted to the private sector only.

² For example 5Cs standards that include Character, Capacity, Capital, Collateral and Conditions

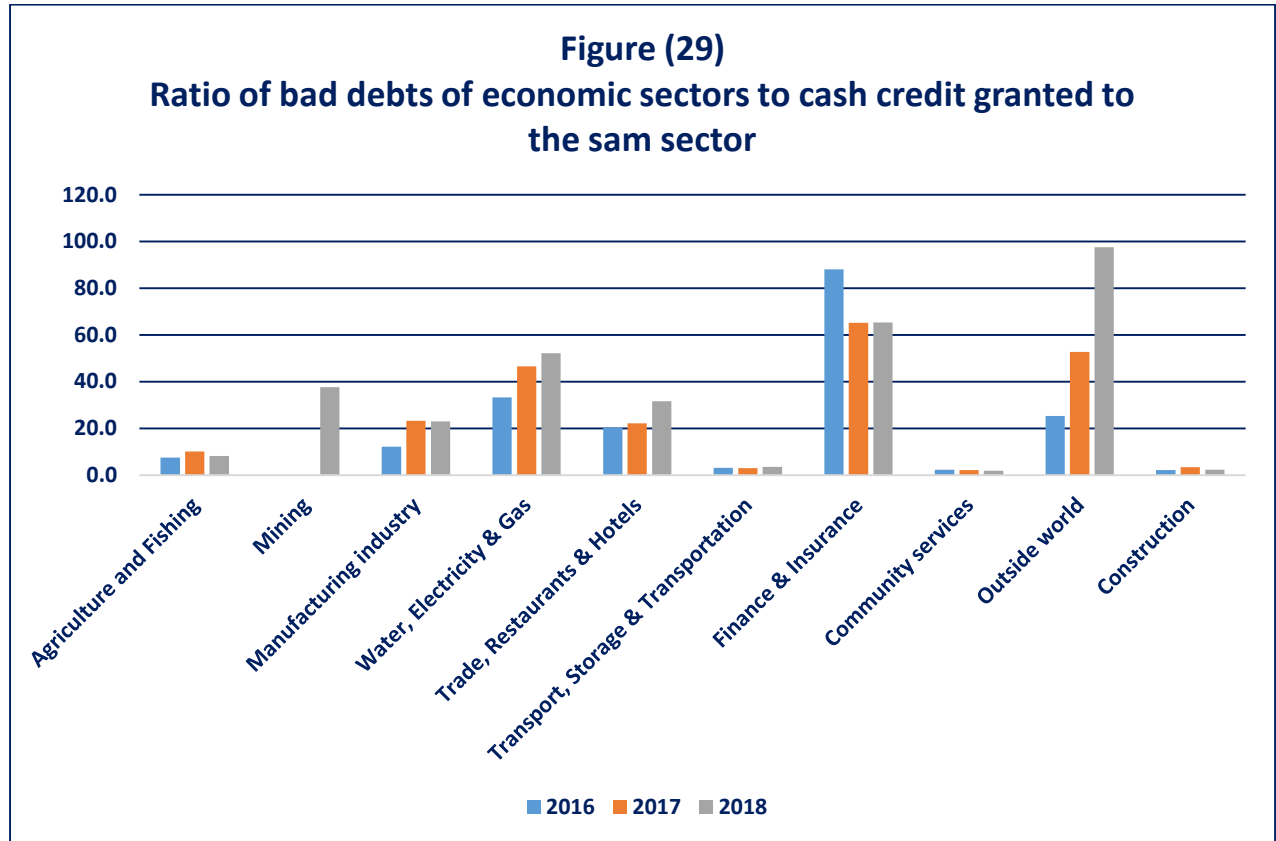
The ratio of total overdue debts to total cash credit is in a steady increase during the period (2016-2018) and this percentage has increased from (11.44%) in 2017 to (12.68%) in 2018, which reflects an increase in the risks facing the Banking System, especially the risks arising from private sector activity despite having a lower ratio of total credit (Figure 26).



Source: Central Bank of Iraq, Department of Statistics and Research

Figure (27) shows the ratio of overdue debts of the public and private sectors to total overdue debts, and reveals that the private sector continued to acquire the largest proportion of overdue debts in 2018, as it reached (99.51%), and this requires more attention by the monetary authorities for the subject of credit provided to the private sector, as (25.6%) of the loans provided by government banks to the private sector, and (21%) are overdue debts in 2018 and these ratios have risen from those in 2017 when they were (25.27%) and (16.2) for the two ratios respectively, and this requires banks to study the creditworthiness of the customer well, especially the five main components of granting credit.

of cash credit, but it is low-risk, and the construction sector is one of the low-risk sectors due to the required collateral required for granting housing loans represented by the guarantee of the house or real estate of all kinds, in addition to the fact that the property prices have not fallen during the period (2016 - 2018).



Source: Central Bank of Iraq, Department of Statistics and Research

companies) has increased by (5.9%, 5.1% and 3%) respectively for the same year.

1-2-1 Trading in the regular market:

The total number of shares traded for companies listed in the Iraq Stock Exchange decreased to (376.8) billion shares during 2018, down by (67.6%) from 2017 amounted to (631.4) billion shares, and the banking sector companies ranked first with (333.5) billion shares decreasing at a rate of (79.4%) from that on 2017 of (598.5) billion shares, while the value of trading for all companies declined during 2018 to (232.6) billion dinars, down (66.3%) from their value for 2017 of (386.9) billion dinar and the trading value of the banking sector companies formed (127.3) billion dinars for the year 2018, which decreased by (140.1%) from its value in 2017, amounting to (305.8) billion dinars.

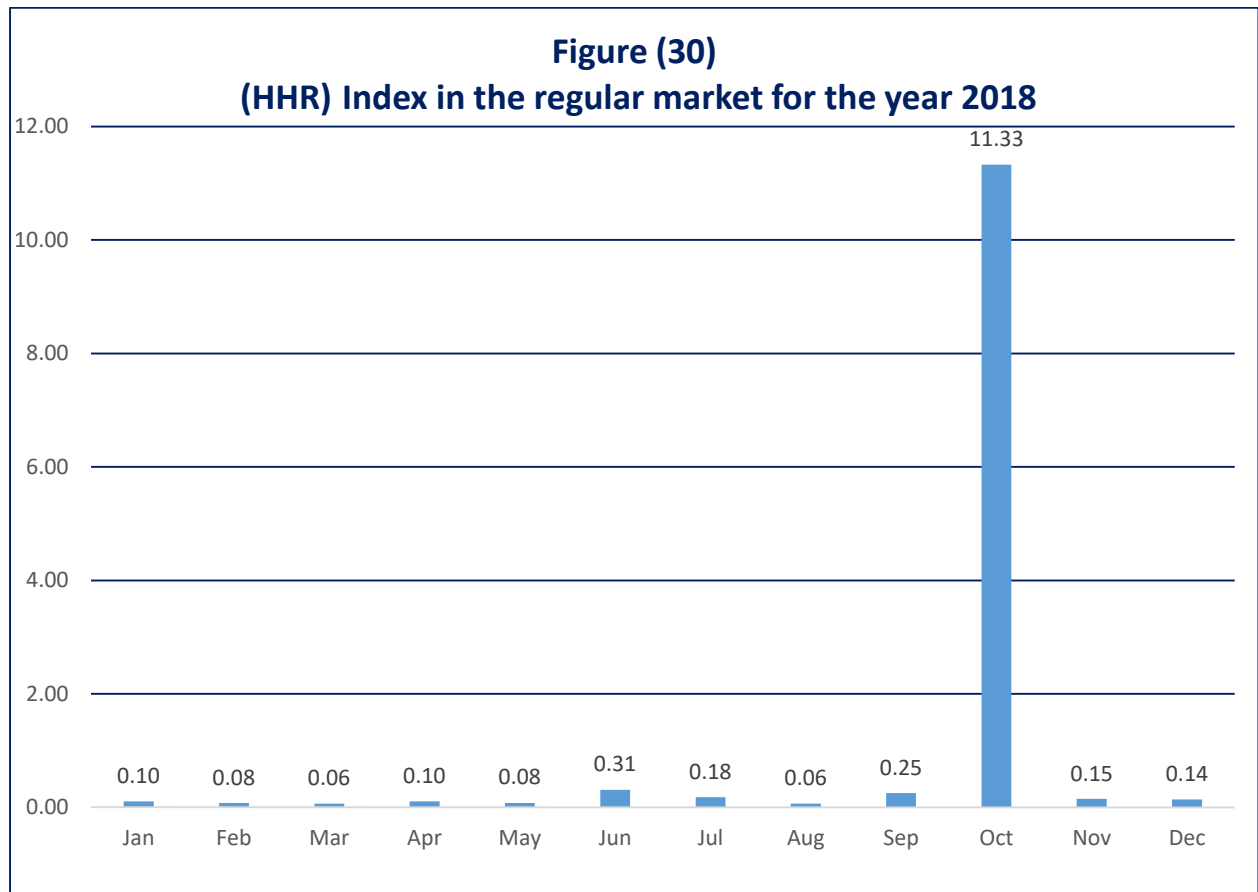
The total number of contracts executed during 2018 decreased to (87512.0) contracts for all economic sectors, declining by (8.5%) from the year 2017 of (94,994) contracts, and the number of contracts in the banking sector reached (33364.0) contracts ranked first for the year 2018 from the rest of Participating sectors, down by (40.5%) from 2017, which amounted to (46,890) contracts, as shown in Table (3).

Table (3)
Number of shares, value of shares traded, number of contracts and sessions in the regular market for the years (2017 –2018)
 (Million dinar, Percentage)

Sectors	No. shares traded (million share)			Value of trades (million dinar)			No. contracts executed		
	2017	2018	growth rate%*	2017	2018	growth rate%*	2017	2018	growth rate%*
Banking sector	598565.6	333579.8	-79.4	305821.5	127372.7	-140.1	46890.0	33364.0	-40.5
telecommunications sector	3120.2	2394.4	-30.3	17609.2	20374.9	13.6	3712.0	2635.0	-40.9
Insurance sector	1358.5	400.0	-239.6	1030.4	193.3	-433.1	1625.0	297.0	-447.1
Investment Sector	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0
Services sector	4830.1	3731.0	-29.5	8311.3	9046.0	8.1	9940.0	7563.0	-31.4
Industry sector	21505.3	34296.8	37.3	37869.0	54852.5	31.0	19821.0	30742.0	35.5
Hotels and tourism sector	814.5	785.8	-3.7	11269.1	12731.6	11.5	6215.0	5923.0	-4.9
Agriculture Sector	1225.5	1618.0	24.3	4963.3	8109.8	38.8	6700.0	7006.0	4.4
Total	631420.1	376806.3	-67.6	386879.0	232681.1	-66.3	94994.0	87512.0	-8.5
No. Sessions	239.0	238.0	-0.4	239.0	238.0	-0.4	239.0	238.0	-0.4

Source: Iraq Stock Exchange Annual Report for 2017 and 2018

*Annual growth rate between 2017 and 2018

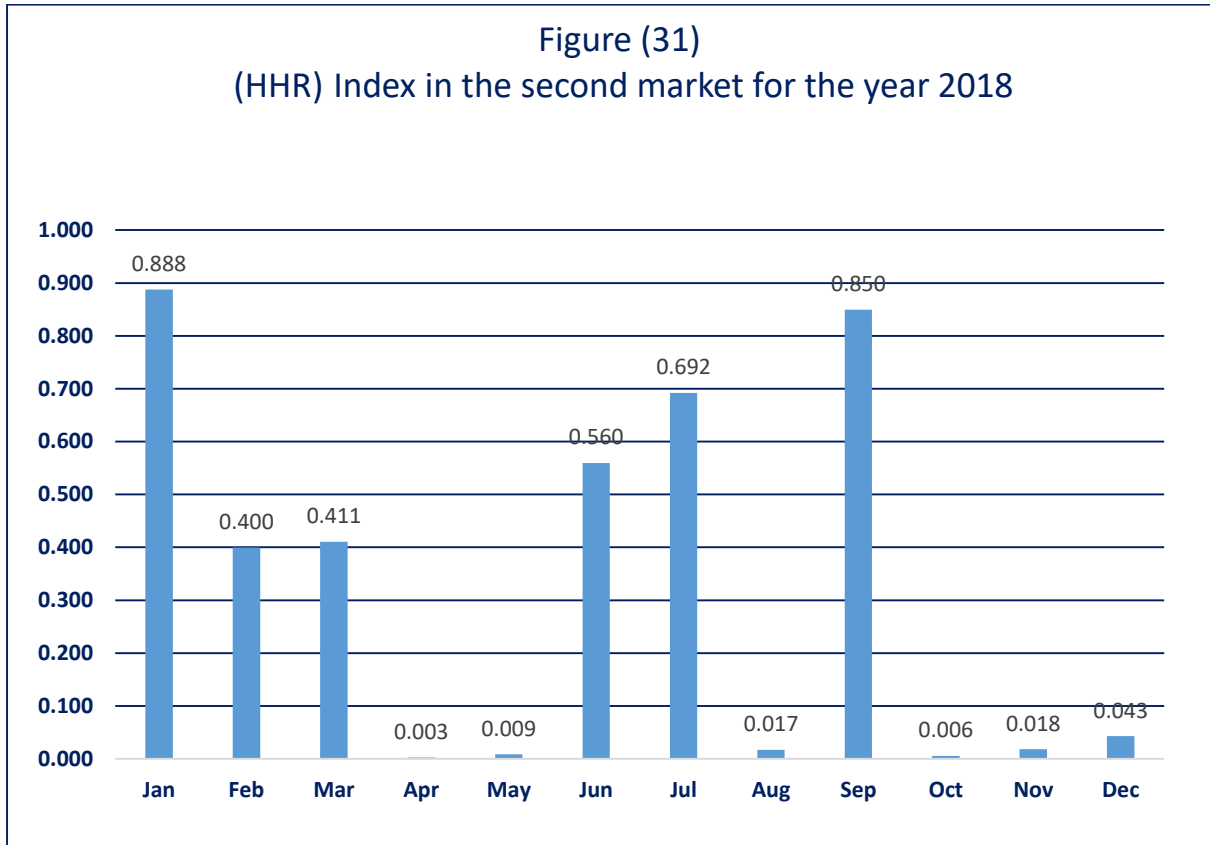


Source: Iraq Stock Exchange monthly (2016) statements published on the site: www.isx-iq.net

1-2-2 Trading in the second market:

The number of shares traded in the second market witnessed a decrease in 2018 by (21.90%) as it decreased from (58.3) billion shares in 2017 to (45.5) billion shares in 2018, as well as a decrease in the value of trading in 2018 by (54.45%), it decreased from (51.3) billion dinars in 2017 to (23.3) billion dinars in 2018, and the banking sector had the largest share in terms of the number of shares and the value traded despite its decline from 2017. The second market witnessed the entry of the telecommunications sector, as a new sector to be invested in, as shown in Table (5).

While the highest value of the index was (0.888) for the month of January, which reflects the depth and resilience of the second market in the Iraq Stock Exchange for the year 2018, as shown in the Figure (31).



Source: Iraq Stock Exchange monthly statements published on the site: www.isx-iq.net

Financial Soundness Indicators

2. Financial Soundness Indicators

2-1 Capital adequacy ratio index

The capital adequacy ratio index is one of the most important indices that are used to identify the bank's solvency and its ability to withstand potential losses or insolvency, as the more capital increases, the possibility of financial insolvency, and accordingly the degree of its financial solvency rises, and vice versa, so the Central Bank of Iraq has paid special attention to strengthen the financial position of banks by increasing their capital, as the first line of defense to make them more able to overcome potential risks, and the Basel II standard was adopted to measure capital adequacy.

The capital adequacy ratio for the banking system as a whole increased from (181%) in 2017 to (285%) in 2018, which is a very high rate that reflects the ability and efficiency of the banking system to confront the risks and unexpected problems that may be exposed to it, and banks maintained this high level of financial solvency is the result of capital components, most of which are from Tier 1 capital consisting of core capital.

As for the capital adequacy ratio for government banks according to the Basel II standard, it reached (43%) in 2018 higher by (13.2%) from its ratio in 2017 which recorded (38%) as shown in Figure (32), and this is due to the decrease in the risk-weighted assets on and off the budget, in contrast to the increase in the capital of banks, and this calculated ratio reflects the adequacy and good financial ability of government banks to help them face potential risks, as this ratio is greater than the standard ratio set by the Central Bank of Iraq, which is (12%).

And **the capital adequacy ratio for private banks** according to the Basel II standard was (309%) in 2018, it recorded a slight decrease from the year 2017, when it reached (323%), although this ratio, despite its decrease slightly from the previous year, is a very high ratio that exceeds significantly the ratio specified by Basel standard amounting (8%), as well as the specified by the Central Bank of Iraq amounting (12%), this is due to the fact that the number of private banks is high compared to government banks, as (3) private banks were opened in 2018, and the capital adequacy ratios of the latter was very high compared to the long-standing operating banks, as its capital is high compared to risk-weighted assets, its capital adequacy ratio increases.

2-2 Liquidity index

Basel II introduced a new framework to regulate the liquidity where it focused on high quality capital (ordinary shares). The new liquidity standard consists of liquidity coverage ratio (LCR) which requires banks to maintain a sufficient amount of high-quality liquid assets to enable them to cope with stressful situations for a period of no less than (30) days, as well as from the net stable funding ratio (NSFR) that is considered a structural supervisory tool in measuring the level of liquidity.

Table (6)
The application of LCR and NSFR by Banks

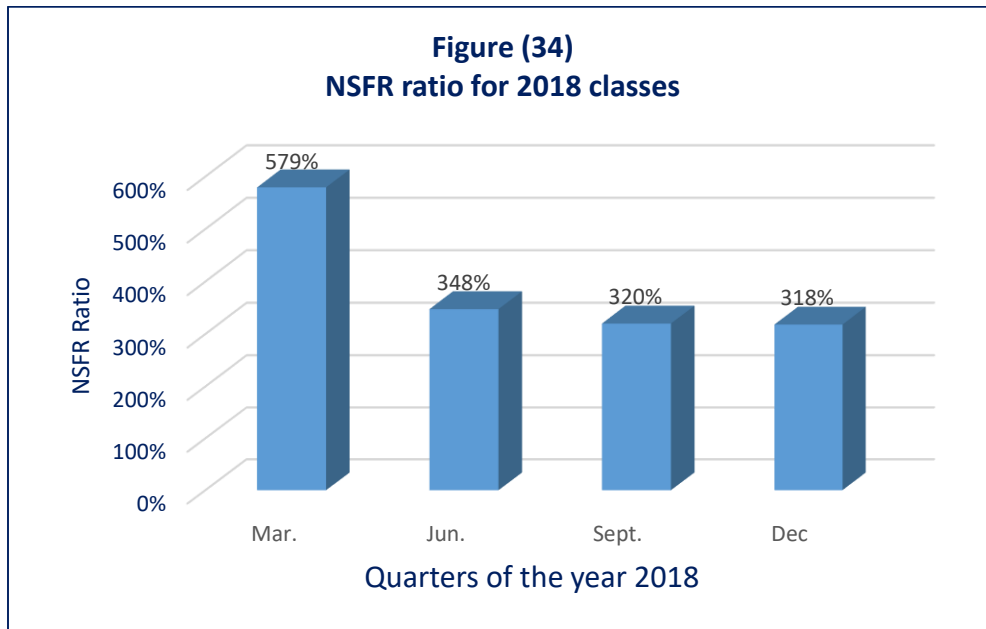
Year \ Ration	2017	2018	2019
LCR	80%	905	100%
NSFR	100%	100%	100%

Source: Central Bank of Iraq, Financial Operations and Debt Management Department

2-2-1 LCR

The Central Bank of Iraq has begun to implement LCR as of 2017 by (80%), and it is done gradually until it reaches (100%), and it should not be less than this percentage, as shown in Table (6), in order for the bank to be able to guarantee that its liabilities and liquidity needs are met for a period of (30) days, which prevents falling into financial insolvency problems in the short term.

The banks operating in Iraq achieved a high liquidity rate of LCR if the monthly average of this ratio does not fall below the minimum set for it during 2018, and LCR recorded its higher average in April where it reached (3309%) as a result to a rise of LCR of some newly established banks while the lowest average of LCR was in September where it reached (406%) which is much higher than the minimum LCR amounting (100%). Iraqi banks have succeeded in applying the liquidity coverage ratio as a whole banking sector. As for individual banks, there are some banks that did not meet the required ratio, while some banks reached high levels till very high limits, and these rates reflect their ability to face liquidity within (30) days and Figure (33) illustrates the monthly average of LCR for operating banks in Iraq.



Source: Central Bank of Iraq: Banking Supervision Department.

The banking system has high levels of liquidity in excess of those set by the Central Bank of Iraq, where the bank has an appropriate level of liquidity keeps the challenge great for bank management, because it is facing a trade-off between profitability and liquidity. In the event of a decrease in liquidity levels, the bank is exposed to significant financial risks that may lead to its failure (Bankruptcy), on the other hand, liquidity indicators can be measured according to four indicators which are liquid assets to short-term liabilities, liquid assets to total deposits, liquid assets to total assets and cash credit to deposits, By calculating the ratios of these indicators, we find that the banking system has a high liquidity ratio that gives it a shield and a buffer against the crises resulting from the withdrawals that it may be exposed to. Hence, the degree of risk is the least possible, and he can avoid it through the liquid assets available to him, and if it affects the profitability goal of banks, moreover, the banks have the ability to expand in the granting of bank credit, according to the following:

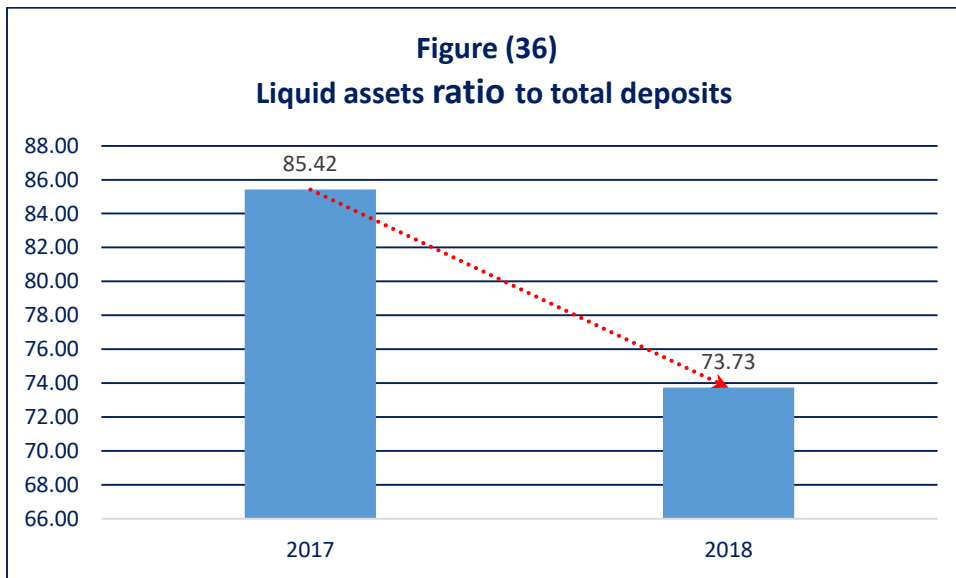
2-2-3 Liquid assets / short-term liabilities¹

The ratio of the liquid assets index to the short-term liabilities of the banking system in general decreased to (102.2%) in 2018

¹Short-term liabilities include (current deposits and deposits of a current nature)

2-2-4 Liquid assets / total deposits

This index expresses the amount of liquid assets held by the bank including (cash with the central bank, as well as cash on hand, and other liquid balances), and the extent of its investment in granting loans of various kinds. **In general, the banking system** registered a percentage of (73.73%) on 2018 down by (13.7%) than on 2017 of (85.42%)¹, i.e.: The banking system is not likely to be exposed to liquidity risk in the short term, but keeping this high ratio reflects negatively on the return and profitability, as the liquidity goal will conflict with the profitability goal, because this liquid fund is not employed in investments that can generate significant financial returns for the bank, and therefore its decline reflects a clear trend towards the use of Loanable Funds and Figure (36) reflects the liquid assets ratio to the total deposits of the banking sector.



Source: Central Bank of Iraq, statistic website: <http://cbiraq.org>

2-2-5 Liquid assets / total assets

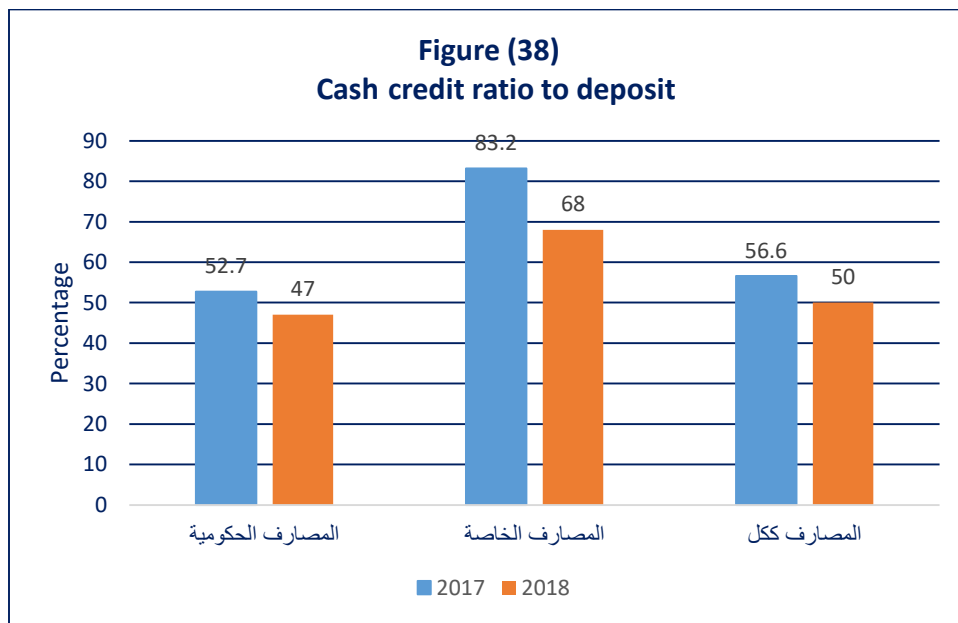
This ratio shows the extent to which the bank maintains full liquidity assets to meet depositor withdrawals, and measured relative to the total assets of the bank, the ratio of liquid assets to the total assets of the banking system in general decreased from (51.5%) in 2017 to (46.1%) in 2018, and although it is decreased it is a high ratio.

¹ As a result of the assets being recalculated according to new international standards as of January 2012, the value of all associated ratios has changed.

It is noted that the rate of increase in deposits is greater than the rate of increase in cash credit, and this indicates that state-owned banks maintain redundant liquidity that is employable without prejudice to the mentioned standard and without carrying additional risks.

As for the level of **private banks**, the ratio reached (68%) in 2018, which is lower than in 2017 of (83.2%), that private banks are ahead of government banks to invest their deposits, and state-owned banks maintain more liquidity than planned and employ low deposits.

The thing that encourages banks to employ low deposits is to give them low interest rates on deposits against loans and this is embodied in the rate of credit and debit interest margin (Spread) with the Iraqi commercial banking system, as it reached (7.12%) in the Iraqi dinar in 2018, and the interest margin in foreign currencies (8.19%) for the same year, while the defined and standard interest margin rate is (3%).



Source: Central Bank of Iraq, statistic website: <http://cbiraq.org>

1 See:

- <http://www.albayan.ae/economy/capital-markets/2016-08-22-1.2700768>
- Qatar Central Bank, Financial Stability Report 2014, p. 78

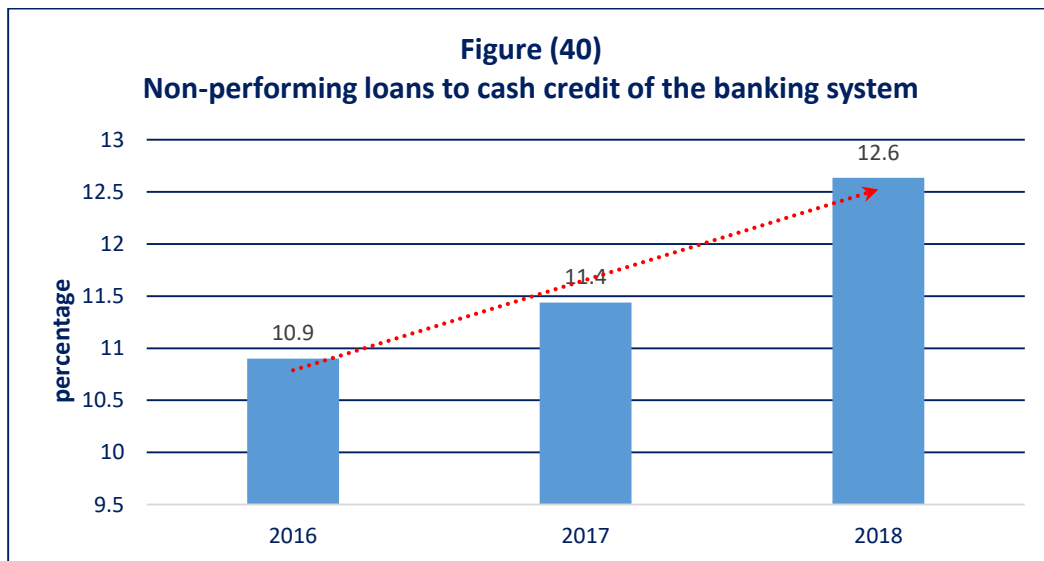
2-3 Assets Quality Indices

The quality of assets is the cornerstone of the level of credibility of capital ratios, since most of the risks of financial insolvency in financial institutions often result from the quality of the assets or the difficulties of converting them into liquidity when needed.

2-3-1 Nonperforming loans (NPL) ratio / total cash credit

The non-performing loans at Iraqi banks recorded (4.8) trillion dinars in 2018, with a growth rate of (12%) compared to 2017, when it reached (4.3) trillion dinars, which led to an increase in the of non-performing loans ratio to cash credit from (11.4%) in 2017 to (12.6%) in 2018, this affects the financial stability index in Iraq, as the ratio of non-performing loans is one of the variables included in its calculation.

Non-performing loans for the year 2018 were distributed at (3.3) trillion dinars for government banks, at a rate of (11%) of cash credit and (1.5) trillion dinars for private banks and at (21%) of cash credit, and this indicates that private banks are more exposed to the risk of non-payment compared to government banks, due to the high ratio of their non-performing loans to cash credit compared to government banks, as shown in Figure (40).



Source: Central Bank of Iraq, Department of Statistics and Researches

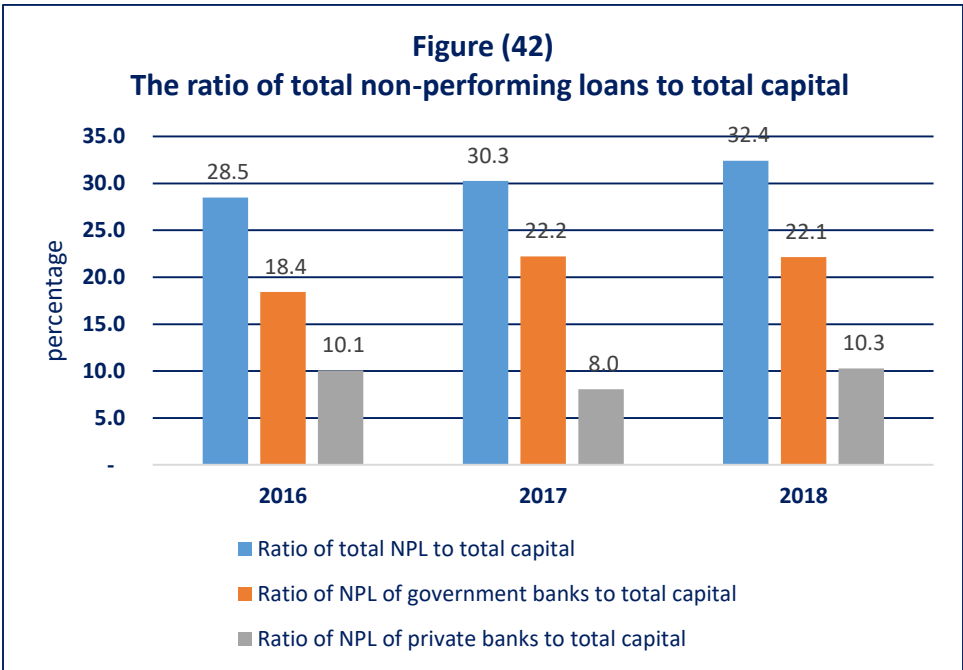
1 For the year 2017, the total assets data have been approved from the statistical site of the Central Bank of Iraq because of adjustments to them according to new standards. As for the year 2018, it was approved from the statistical bulletin.

2-3-3 Nonperforming loans (NPL) ratio / capital

The high ratio of non-performing loans to capital gives a clear indication of the risk in banking institutions and then affects the financial stability index in Iraq, which is evident in governmental banks as a result of the large volume of their loans and the small volume of their capital.

However, the exacerbation of this ratio in the banks' balance sheets gave an indication of the existence of financial risks therein beyond any doubt, which requires the regulatory authorities to give this matter a great deal of importance in order to avoid any possible default that may happen in the future.

The ratio of non-performing loans to capital increased in 2018 to (32.4%) compared to the same ratio in 2017 of (30.3%) for total banks, as a result of the rise in non-performing loans for government and private banks, and Figure (42) shows the ratio of non-performing loans contribution of the government banking sector and the private banking sector to the total capital of the banking sector in general, and this ratio reached in 2018 (22.1%) for government banks and (10.3%) for private banks, due to the decrease in the capital of government banks compared to private banks.

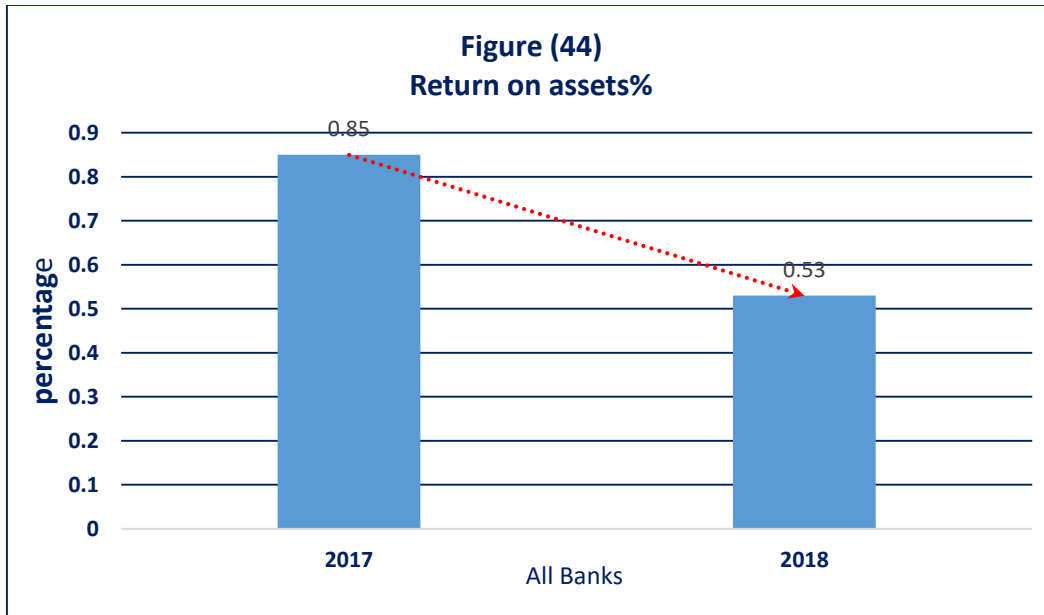


Source: Central Bank of Iraq, Department of Statistics and Researches.

2-4 Revenue and Profitability indices

2-4-1 Ratio of return on assets

The ratio of return on assets decreased to (0.53%) in 2018, compared to its ratio of (0.85%) at the end of 2017 for all banks , as a result of the decrease in bank profits, as net interest income decreased from (1,529,018) million dinars in the year 2017 to (1,319,451) million dinars in 2018, with a decrease rate of (-13.7%).The non-interest income also decreased from (1,141,626) million dinars in 2017 to (934,509) million dinars in 2018 at a rate of (-18.1%), as well as the growth of assets at a rate of (10.7%), and Figure (44) shows the ratio of return to assets.



Source: Central Bank of Iraq, Department of Statistics and Researches.

2-4-2 Ratio of return on equity

The ratio of return on equity decreased at the end of 2018 to (4.37%) compared to 2017 in which the ratio reached (9.2%) for all government and private banks, and this ratio reflects the rate of return that investors owners of capital in the financial institution receive, the efficiency of the institution, and the extent of its success in generating profits from each unit of equity and the main reasons for this decrease are the decrease in the value of income and the rise in the value of assets, as shown in the previous paragraph, and as shown in Figure (45).

Measurement of the Aggregate Index of Banking Stability in Iraq

3.Measurement of the aggregate index of banking stability in Iraq

The interest in measuring the aggregate index of banking stability by many central banks in the world has increased because it gives a better picture of the soundness and performance of the banking system rather than relying on individual indicators, especially after the crises and fluctuations that the world has witnessed, whether at the level of the economy or policy that have an impact on Banking stability, and because the latter cannot be measured and evaluated on the basis of only one indicator without taking into consideration other indicators that reflect the state of the performance of the banking system. The aggregate index of banking stability in Iraq was built on the best international practices in this area by relying on a set of appropriate financial ratios appropriate to the nature of the Iraqi banking system, and that these ratios are the capital adequacy, liquidity, profitability, asset quality, foreign exchange risk and bank concentrations described in detail in the table (7) as these indicators reflect the soundness of the Iraqi banking system as well as an analysis of the level of risk to the banking system in general.

Some indices are expected to have positive relationship with the aggregate index (capital adequacy, profitability, liquidity quality and banking concentrations), while other indicators will have an inverse relationship with the financial stability index (asset quality and foreign exchange risk).

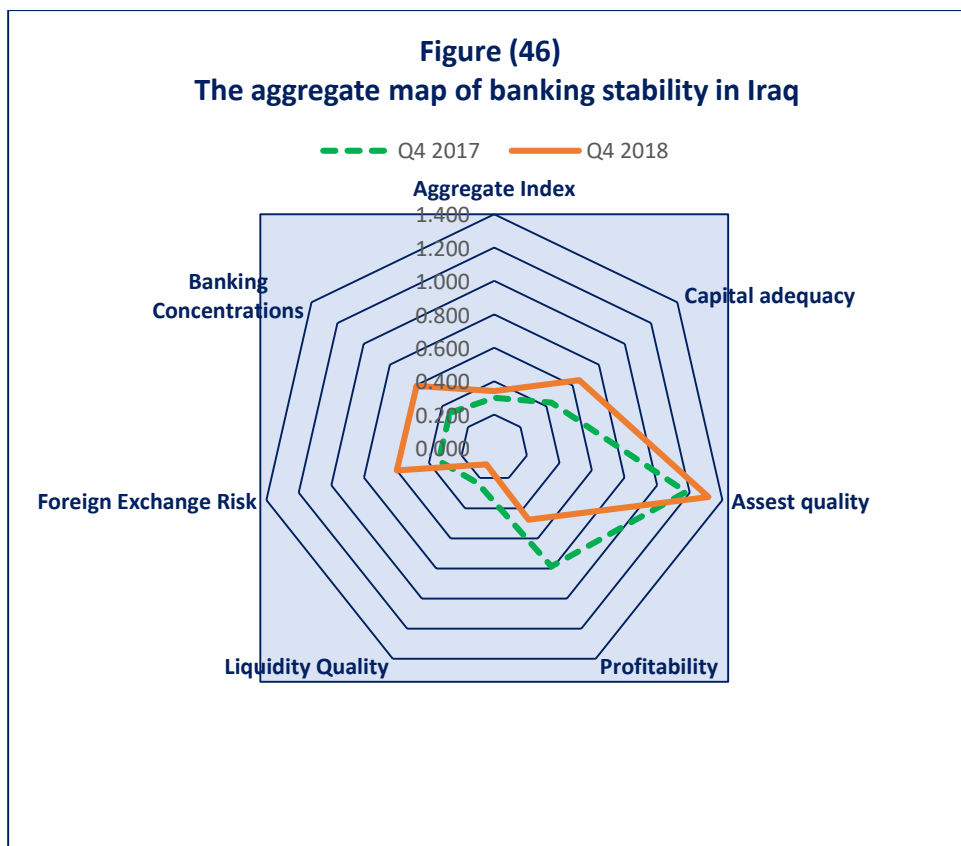
Table (7)
Indices for measuring the aggregate index of banking stability in Iraq

Sub-Indices	Variables	Weights	Type of relationship
Capital adequacy	Core capital + ancillary capital / risk weighted assets within the balance sheet + risk weighted assets off balance sheet	0.166	+
	Nonperforming loans / capital	0.166	
Asset quality	Nonperforming loans / total loans	0.166	-
	Return / Assets	0.166	
Profitability	Return / Equity	0.166	+
	Liquid assets / total assets	0.166	
Liquidity quality	Liquid assets / short-term liabilities	0.166	+
	Net open position in foreign currency / capital	0.166	
Foreign exchange risk	Liabilities in foreign currency / total liabilities	0.166	-
	Central government and public institutions deposits / total deposits	0.166	
Banking concentrations	Loans to central government and public institutions / total loans	0.166	+

3-1 Banking stability trends in Iraq

3-1-1 Banking stability map

The banking stability map provides a summary in a graphic way to link changes in risks and conditions that affect banking stability, which is also a tool for monitoring changes in indicators affecting banking stability, as Figure (46) indicates that the Iraqi banking sector witness a state of stability despite the fluctuations witnessed by the components of banking stability during the period (2018-2017).



3-1-2 Aggregate index of banking stability

The assessment of the level of banking stability by the aggregate index depends mainly on the components and trends of the aggregate index. The estimated aggregate index values recorded an increase in four indices and a decrease in other indices, during 2018, and the final result was an increase in the banking stability index from (0.301) in the fourth quarter of 2017 to (0.340) in the fourth

3-2 Analyzing the relationship between the aggregate index and sub-indices

The aggregate index of banking stability consists of several sub-indices, all of which ultimately affect the value of the index, and they are as follows:

3-2-1 Capital adequacy index

The standardized value of the capital adequacy index increased to (0.650) in 2018 with a rise of (48.8%) from 2017, and this indicates that banks operating in Iraq have very high financial durability and very low risk ratios that affected the rise in the aggregate index of banking stability positively and effectively.

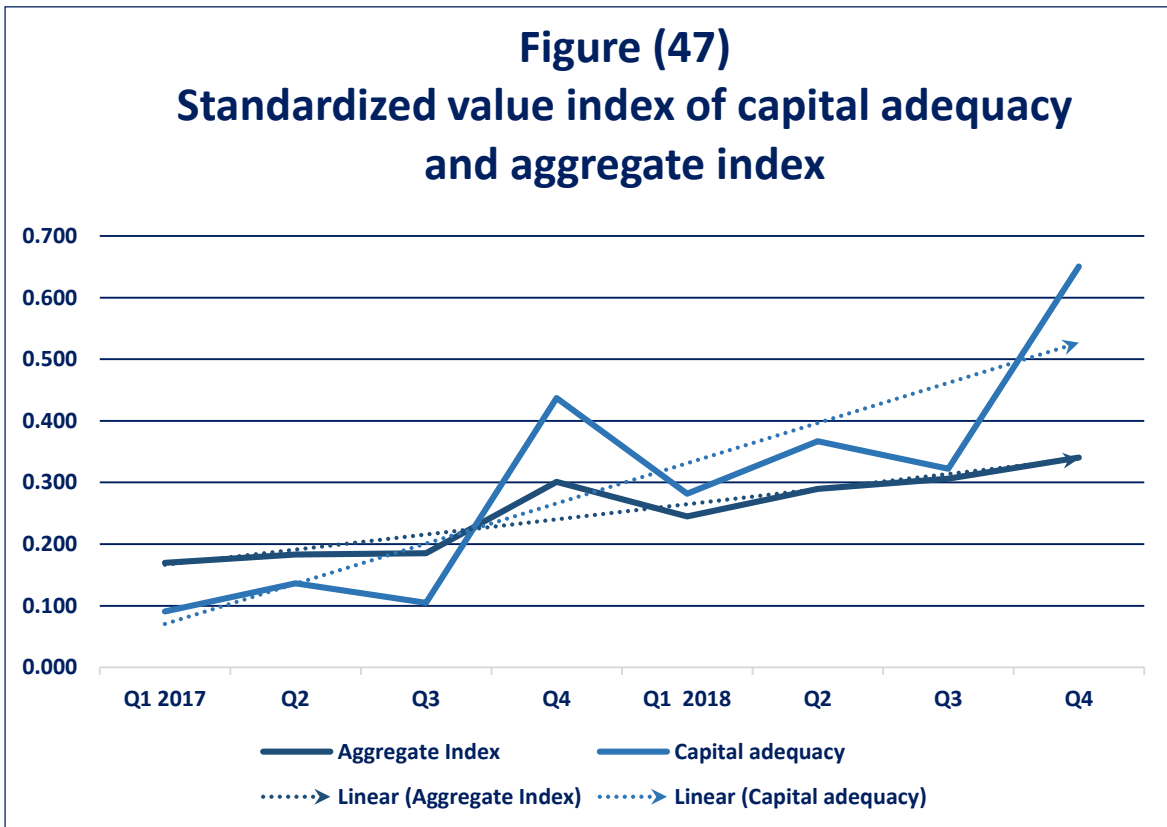
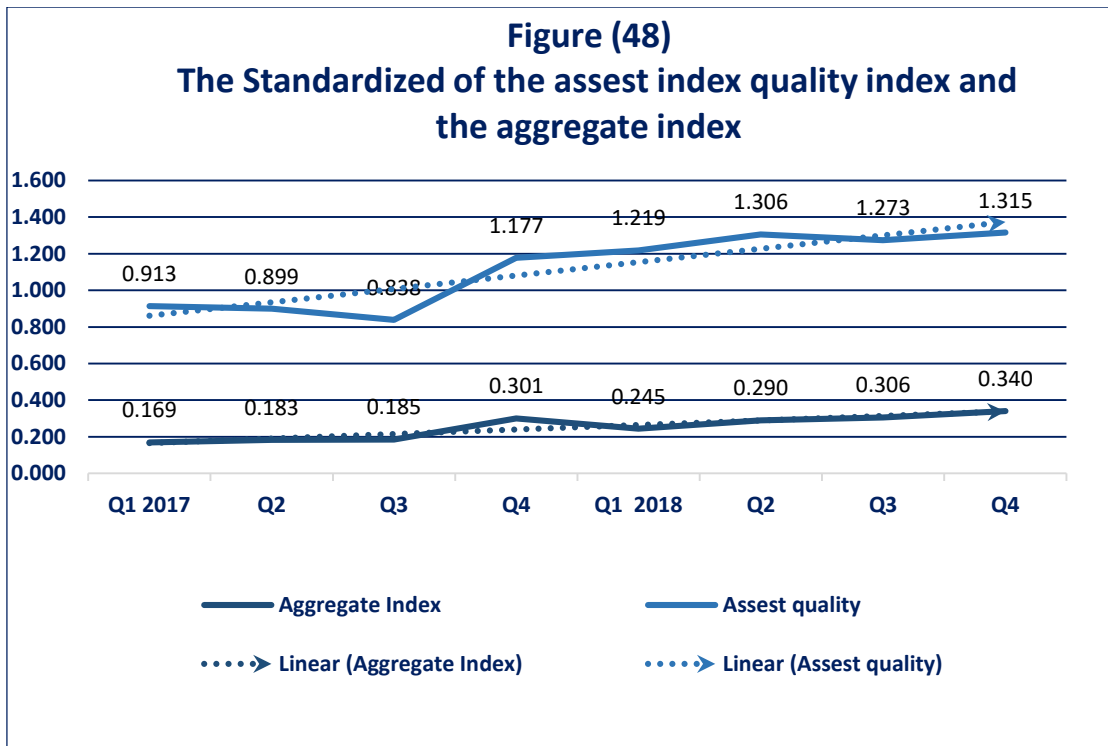


Figure (47) shows that the standardized value of the capital adequacy index reached (0.650) in the last quarter of 2018, which is a positive and significant change in the adequacy index compared to 2017, as the last quarter of 2017 recorded a ratio of (0.437), and

this increase came due to the increase in banks 'capital due to the establishment of (3) private banks in 2018.

3-2-2 Asset Quality Index

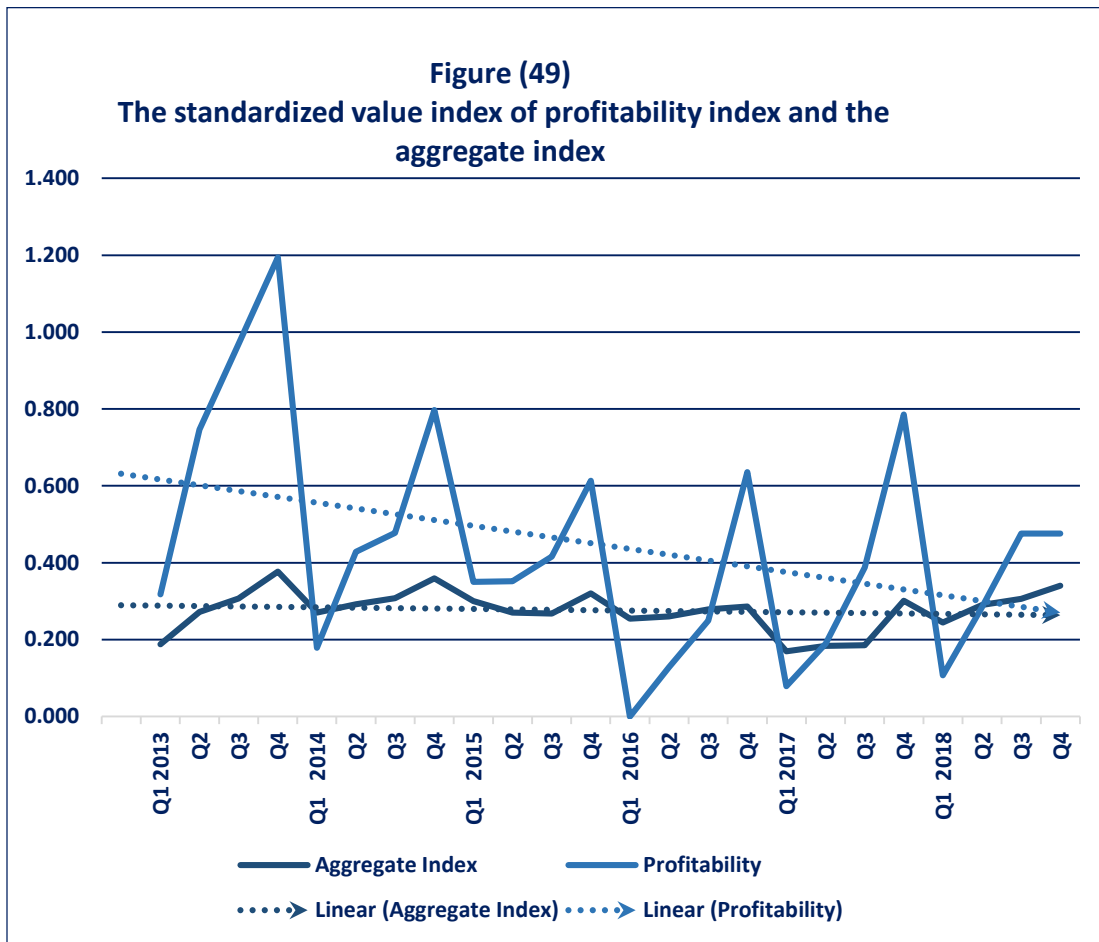
The standardized value of the asset quality index increased in the last quarter of 2018 compared to its value in 2017, as it reached in the last quarter of 2017 (1.177) and increased until it reached in 2017 to (1.315), as shown in Figure (48), that this increase is a result of the high ratio of non-performing loans to both capital and total loans during 2018, and this increase in the value of the asset quality index, although it is within acceptable levels, causes a decrease in the value of the aggregate index of banking stability.



3-2-4 Profitability Index

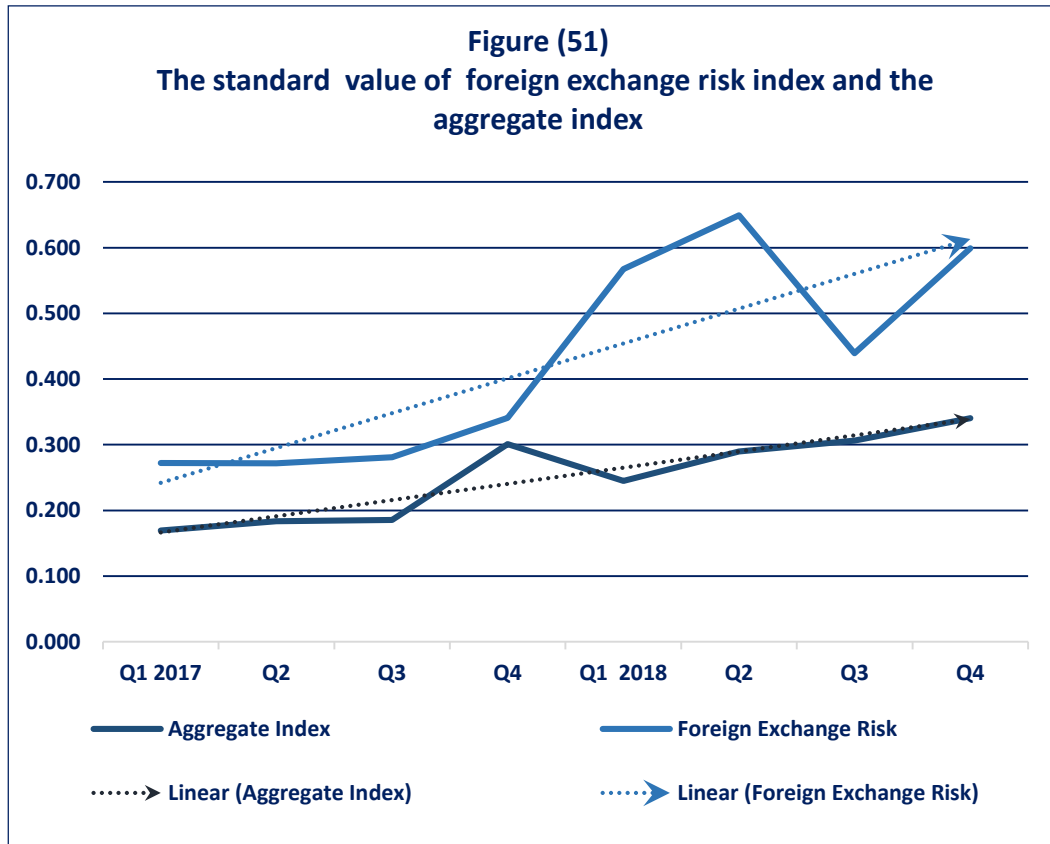
The standardized value of the profitability index continues in 2018 to record a downtrend, where the value of this index reached at the last quarter of 2018 (0.476), down from the last quarter of 2017 of (0.786), as shown in Figure (49), this decrease in the value of the index was due to a decrease in the value of the return of banks, as well as an increase in the value of assets between 2017 and 2018

and the decrease in the profitability index value negatively affected the value of the aggregate index of the banking stability.



3-2-4 Liquidity Index

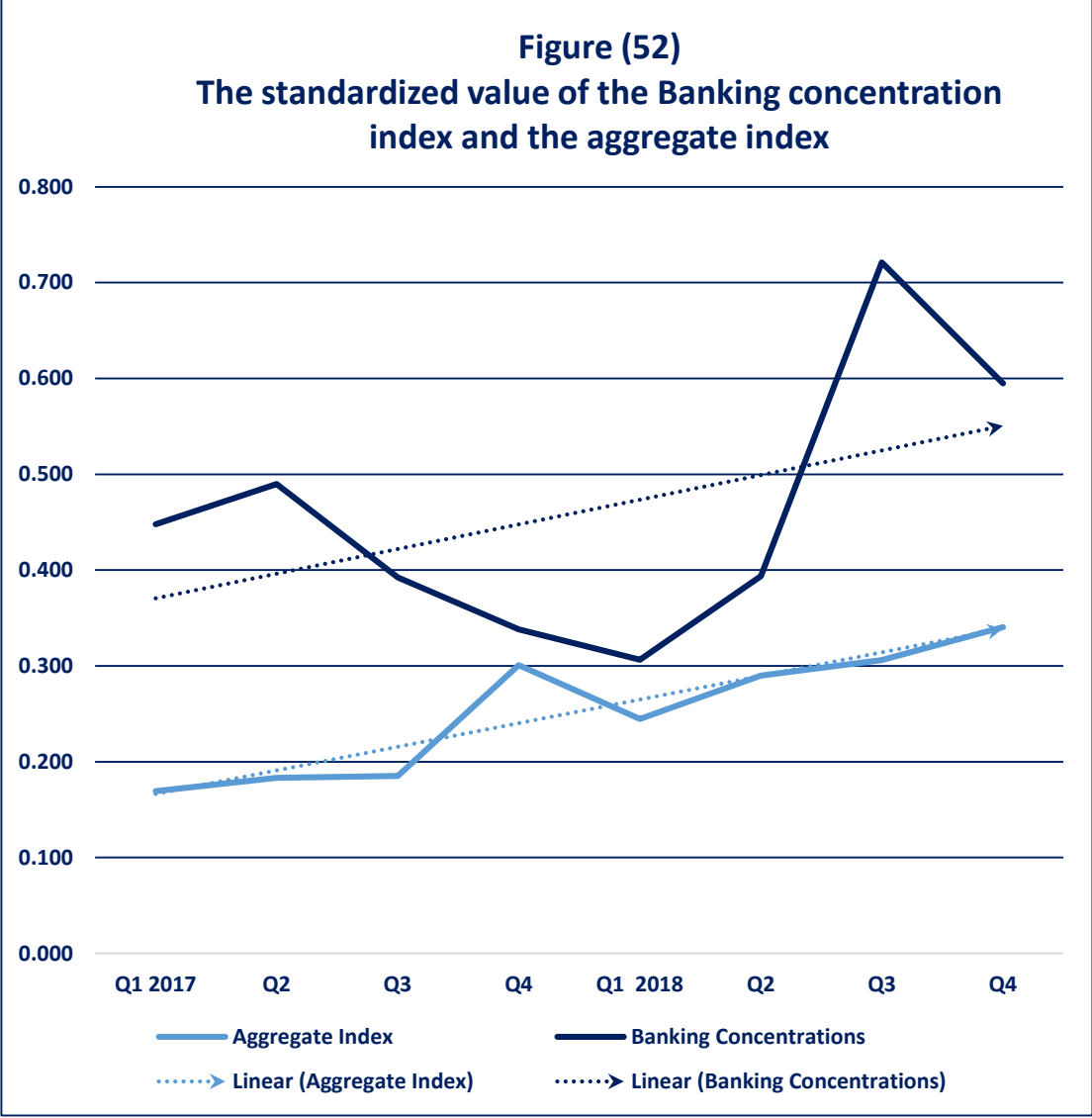
It is noticed that the value of the liquidity index took a downward trend during 2018, as it decreased from (0.232) in the last quarter of 2017 to (0.109) in the last quarter of 2018, as a result of the decrease in liquid assets, as in Figure (50), the decrease in the liquidity index value came as a result to the decrease of the ratio of liquid assets to total assets from (51.5%) in 2017 to (46.1%) in 2018, as well as a decrease in the ratio of liquid assets to short-term liabilities from (119.721%) in 2017 to (102.2%) in 2018, as shown in Figure (44).



3-2-6 Banking Concentration Index

The standardized value of the Banking Concentration Index increased in 2018, as this value increased from (0.338) in the fourth quarter of 2017 to (0.595) in the fourth quarter of 2018, and this value increased due to the increase in the standardized value of deposits of the central government and public institutions from (0.029) in the fourth quarter of 2017 to (0.359) in the fourth quarter of 2018, with an increase rate of (1154.76%), which led to an increase in the standardized value of the Banking Concentration Index.

The index reached its highest value in the third quarter of 2018, which is (0.721), as shown in Figure (52).



MACRO-STRESS TESTING

4. Macro – Stress Testing

Stress tests are a tool for managing risks in the financial system, and performing stress tests is an off-site supervision tool for bank performance.

The nature and degree of interdependence between the real and financial sectors makes it necessary to study developments and changes in one or both sectors, and the extent of their impact on the other sector, because any risks or shocks to the real sector may constitute sources of risk to the financial sector and vice versa as well.

Therefore, the prediction of the banking sector's ability to absorb external shocks requires analyzing and monitoring developments in the real economy, by building appropriate scenarios, and in this regard a set of macro scenarios that are divided into the basic scenario, medium and more severe, have been assumed for the purpose of assessing the ability of the banking system (the main component of the Iraqi financial sector) to withstand those shocks and continue to perform its primary functions without compromising the rights of depositors.

4-1 What are stress tests?

A stress test is a "what-if" analysis that takes the situation in general, but assumes fundamental changes in one or more variables for the purpose of observing what its effect is on other variables, and is also a tool for measuring the soundness and resilience of a particular financial institution or financial system in general under harsh and different events and scenarios. It is a quantitative exercise of the concept (what if?), to estimate: what will happen in the capital, profits, and cash flow of financial institutions individually, or the system as a whole, if some risks are occurred.

The emergence of stress tests as an instrument was not in the field of finance, but in technical sciences, in the broad sense, stress tests are a technique or method for measuring the stability of an organization or system under various undesirable conditions in the field of finance, and stress tests are used to evaluate the investment portfolio of a specific institution, or to measure the stability of a specific institution, and is called Micro – Stress Tests. Later this method was used to test the stability of a group of financial institutions together, or the financial system in general, which may affect the overall economy, and it is called Macro – Stress Tests which will be used in this report.

availability of data on a quarterly basis and for a period that allows for stress tests.

The model aims to estimate the relationship between the financial default of banks, and any shocks related to macroeconomic variables, especially the variables referred to above, to measure their impact on the rate of non-performing loans for the period (2013 Q1) till (2018 Q4) the model took the following functional form:

$$NPL = F(GGDP, GOILP, GEG)$$

Where:

NPL: non-performing loans ratio

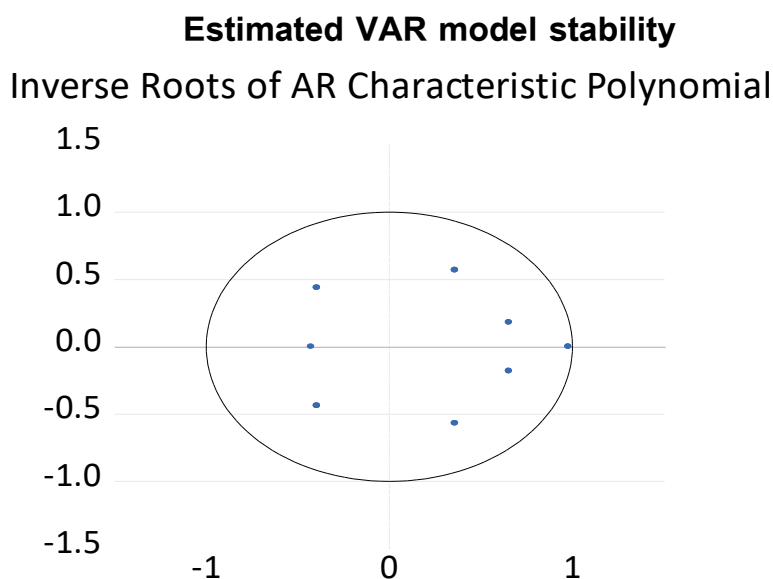
GGDP: Real GDP growth rate

GOILP: Growth rate of oil price

GEG: Government expenditure growth rate.

The test was conducted according to three scenarios, the first is the baseline scenario, by which the values of the variables included in the model has been predicted, estimated during the period from the Q1 of 2019 to Q4 of 2019, while the other two scenarios are the medium-intensity scenario, and the high-intensity scenario, and the tests were performed for each variable separately, assuming that the other variables were stable and after conducting Inverse Roots of AR Characteristic Polynomial, it turned out to be statistically stable, and valid for carrying out the prediction, as shown in Figure (53):

Figure (53)



same years and in Kuwait was (103.8%) and (99.17%), respectively, and for the same mentioned period¹.

The ratio of banking depth is an indication of the extent of the banking sector's contribution to financing real activity, and therefore its decline reflects the poor relationship between the banking sector and the real sector.

Table (10)
Scenarios for predicting non – performing loans ratio after GDP shock

Years Scenarios	2019			
	Q1 %	Q2 %	Q3 %	Q4 %
Baseline scenario	12.424	12.876	13.142	13.249
Medium-intensity scenario	12.424	12.897	13.363	13.653
High- intensity scenario	12.424	12.917	13.584	14.057

Table (10) shows an increase in the **non – performing loans ratio** predicted in the baseline scenario from (12.424%) for the Q1, to (12.876%), (13.142%) and (13.249%) for the second quarter, third quarter and fourth quarter, respectively, in 2019. As a result of the negative shock in the GDP growth rate according to the prepared scenarios, the non-performing loans ratio increased from (12.876%) to (12.897%) and (12.917%) for the baseline, medium and high-intensity scenarios respectively for the second quarter of 2019, as well as from (13.142%) to (13.363%) and (13.584%) for baseline, medium and high-intensity scenarios, respectively, for the third quarter of 2019.

As for the fourth quarter of 2019, the non-performing **loans ratio** increased as a result of the negative shock in the growth rate of GDP from (13.249%) to (13.653%) and (14.057%) for the baseline, medium and high-intensity scenarios, respectively. The slight impact of the low growth rate of GDP in the ratio of bad debts confirms the poor relationship between them, and this is shown by the low banking depth in the Iraqi economy.

Figure (54) shows that the negative shock in the growth rate of GDP will lead to an increase in the non-performing loans **ratio** of the medium intensity scenario (NPL_1) and the high-intensity scenario (NPL_2) from the Baseline scenario (NPL_0) by slight ratios and for all quarters of 2019.

¹For more ratios of countries, see Figure (23) of the report.

Table (11)
Scenarios for predicting non-performing loans ratio after the international oil price shock

Years Scenarios	2019			
	Q1 %	Q2 %	Q3 %	Q4 %
Baseline scenario	12.424	12.876	13.142	13.249
Medium-intensity scenario	12.424	12.591	13.012	13.161
High- intensity scenario	12.424	12.305	12.881	13.074

4-6 The impact of the negative shock of the government spending growth rate on the non-performing loans ratio

With regard to the effect of the government spending growth rate on the non-performing loans **ratio**, the results appeared to be contrary to the expected, as the decline in the government spending growth rate is expected to lead to a high rate of non-performing loans, but the relationship was direct and significant, as the low government spending growth rate could lead to a lower rate of non-performing loans growth for all quarters of 2019.

The direct trend of this relationship may be due to the poor impact of economic crises on government spending, especially current spending from it, as the government often maintains the level of current spending, and provides alternative sources of financing in the event of a decrease in main sources. Although public revenues decreased at high rates in the previous period, public expenditures did not decrease at the same rates, in addition to an increase in employee compensation, which is the main component of public expenditures, and the basic influential in theory in the non-performing loans ratio, as employee compensation increased from (28.4) trillion dinars in 2014 to (32.6) trillion dinars in 2015, and with a growth rate of (14%) despite the great shock that the Iraqi economy went through between 2014 and 2015, but the longevity of the crisis may lead to the exhaustion of alternative financing sources and this may make fiscal policy hampering the financial or banking stabilization efforts therefore, it is necessary to build additional fiscal buffers in order to face the crises when they occur, which helps in reducing the channel of transferring the effects of financial policy to financial stability.

The Financial System Infrastructure in Iraq

5. Financial infrastructure developments

5-1 The concept of financial infrastructure

The developed financial infrastructure is considered one of the most important requirements for ensuring financial stability, as it provides an appropriate and renewable legislative environment that accompanies developments in the financial and banking business for the purpose of ensuring a sound and stable financial sector. The Central Bank of Iraq seeks to develop the banking legislative environment, as it issued a set of regulations and instructions that regulate work in the financial and banking sector during the year 2018, as well as previous laws and regulations, such as the Central Bank Law, the Banks Law, the Islamic Banks Law, and Regulations No. (4).

5-2 The most important legislative environment developments of the financial sector

A set of instructions and regulations were issued to regulate the work of banks and financial companies, especially Islamic banks, as follows:

5-2-1 Regulations of the Islamic Financing Tools

After the Islamic Banks Law No.(42) for the year 2015, which is considered the first legal pillar upon which Islamic banks were based, was issued and according to Article (13-15) of the Islamic Banks Law, which obliged Islamic banks to apply the standards of the Accounting and Auditing Organization for Islamic financial institutions (AAOIFI) and for ease of reference of the said standards by the Islamic Banks especially the new ones, these regulations have been developed within the framework of achieving the (support and development of the Islamic banking industry) goal within the (2016-2020) strategic plan of the Central Bank of Iraq. These regulations have touched upon the accounting treatments for each Islamic banking product, and the conditions provided therein, and provided a detailed explanation of these products according to the (AAOIFI) standards starting from signing the contract until its

taken to mitigate investment risks. These regulations detailed the identification of market risks, liquidity risks, and operational risks, and defined the actions that banks can take in mitigating these risks, which leads to the presence of clear information for the risk management department in how to deal with various risks, and work to eliminate or reduce their negative effects, which leads to a stable environment for Islamic banking, and helps in achieving financial and economic stability.

5-2-3 Regulations of the Sharia Supervisory Board & Sharia Auditing

The year 2018 witnessed the issuance of the regulations of the Sharia Supervisory Board, the Sharia and Internal Auditing and Sharia Compliance for the Islamic banks, as the Central Bank considers the Sharia Supervisory Board is the regulatory entity through which a distinction can be made between commercial and Islamic banking at the level of activity and oversight, and is also considered the first regulatory level in generating commitment values to the principles and provisions of Islamic Shari'a, in a way that leads to achieving Islamic oversight and financing at the local and international level.

These regulations provide the basis to be followed by Islamic banks in laying the foundations for effective Sharia control by defining the responsibilities, powers and tasks of the Sharia Supervisory Board, Sharia Auditing Department, Sharia Compliance Department, and Compliance Officer, and reliance has been placed on the Islamic Banks Law, (AAOIFI) standards and Standard (10) of 2009 issued by The Islamic Financial Services Board (IFSB), Basel Document on Obligation in addition to clause (2-9) of the ISO 9001: 2015.

These regulations determined the number of members of the Sharia Board, their competencies, the tasks assigned to them, and the method of their appointment, as it considered from the

preparing a guide to the risks of non-compliance, and preparing a plan and schedule for field visits to the branches.

5-2-4 Regulations related to the capital adequacy standard in accordance with Basel III requirements for conventional banks

These regulations were issued based on the Iraqi Central Bank Law No. (56) For the year 2004 and the Banks Law No. (94) For the year 2004 with the aim of keeping pace with developments in the global banking system, and for the purpose of reaching what was confirmed by the decisions of the Basel Committee for Banking Supervision. The banks were given an opportunity to apply them experimentally on 09/30/2018, the results are sent to the Central Bank with inquiries and notes, after which a workshop will be held with banks to discuss and overcome all inquiries and notes, while the actual implementation of Basel III will take place in 2019. The regulations contain accurate details in the process of applying Basel III standard of capital adequacy by defining the terms contained therein, determining the method of extracting the capital base (the nominator of the ratio), the weighted assets with the weights of risks (credit risks, market risks, and operational risks) (the denominator of the ratio), and the central bank has set the capital adequacy ratio not less than (10%), which is less from what it was in the past, as the minimum levels were (12%), while the international standards set it not less than (8%).

5-2-5 Instructions for the business continuity management system in the Iraqi banking sector in accordance with the international standard ISO 22401

These instructions were issued in implementation of the (2016-2020) strategic plan of the Central Bank of Iraq and it works to define the necessary requirements for the principles of key business continuity in facing potential risks, and clarifies disaster recovery procedures and their negative effects. The

company can exercise, as well as prohibitions, the most important of which are not granting loans to customers or any credit facilities, issuing guarantees, issuing credits, and unlawful speculation, because they are of the Banking functions, in addition, there are punitive measures against companies that violate these regulations, allowing banking companies to operate with a clear legal framework that does not allow interference in the work of other financial institutions, and works to supply managers who have the ability to understand and develop work in the field of banking and exchanging foreign currencies to organize the process of buying and selling of foreign currencies, and building an important database that helps in achieving financial stability in the market.

5-2-7 Regulations for the work of sub- agents of foreign remittance service providers

These regulations were issued to regulate the work of sub-agents for electronic payment services providers. The money exchange companies are the most important subsidiary or sub-agents for banks and money transfer and electronic payment companies.

These regulations have been given to entities licensed by the Central Bank (banks, money transfer companies, and electronic payment companies) approval to be the main agent of electronic payment services providers, and they are entitled to have their sub- agent, in order to achieve a high level of spread and that electronic services can reach the farthest place in Iraq to enhance financial inclusion.

These regulations have specified some conditions that must be met by sub- agents, the most important of which is obtaining the approval of the central bank for such agency, and after that a contract is organized between the two parties to ensure that the Anti-money laundering and terrorist financing policy is followed, and the main agent is responsible to the Central Bank

The Central Bank of Iraq has taken several measures regarding (AML/CFT) due to its belief in the need for a sound and stable financial sector to provide financing and various financial services to the real sector, and to encourage economic activity. The Central Bank has worked to ensure the soundness of the activity of various financial and banking institutions, especially with regard to (AML/CFT) matters, to avoid international sanctions on financial institutions and Iraq in general.

Therefore, the Central Bank has taken several measures regarding (AML/CFT), the foremost of which is the enactment of the Anti-Money Laundering Law, the establishment of the (AML/CFT) Bureau, the formation of the Freezing of Terrorist Funds Committee, and the Central Bank has also joined and ratified the International Convention for the Suppression of terrorism and concluded bilateral agreements with countries to exchange information on money recovery, the Central Bank also issued (AML/CFT) regulations and instructions to financial institutions, and worked on preparing periodic reports by the Compliance Officer and Head of the Reporting Department at financial institutions to be sent to the Bank for evaluation and follow-up. The Central Bank of Iraq also worked to enroll employees of banks and financial institutions, and employees of the Central Bank in specialized training courses in the field of (AML/CFT), in cooperation with international and Arab training institutions, in addition to conducting a periodic evaluation of banks and determining the progress made in implementing the Central Bank's policy regarding (AML/CFT) Anti- money laundering and combating financing of terrorism.

Diagram (2) the most important regulations issued by the Central Bank of Iraq to the financial institutions

Due diligence rules	<ul style="list-style-type: none"> • The Central Bank of Iraq issues Regulations No. (1) regarding the rules of due diligence towards clients of financial institutions
Reporting Policy	<ul style="list-style-type: none"> • Obligating all financial institutions to notify the Anti-Money Laundering and Countering Financing of Terrorism (AML/CFT) Bureau immediately of any suspected operations that include money laundering or terrorist financing
Governance Guide	<ul style="list-style-type: none"> • Issuing a corporate governance guide for financial institutions to regulate the work of banks and the separation of powers
Classification of customers based on risk	<ul style="list-style-type: none"> • The Central Bank of Iraq obligated the banks to classify clients on the basis of money laundering and financing terrorism risks
Operation Guidelines	<ul style="list-style-type: none"> • Requiring banks to prepare and issue operation guidelines certified by their Boards of Directors that include the duties and responsibilities of compliance officers in their banks
Sources of funds for foreign currency purchase	<ul style="list-style-type: none"> • Directing all banks and financial institutions of the methods and procedures required to be approved to verify the sources of funds of applicants of purchase orders of foreign currency.
Banned banks and institutions	<ul style="list-style-type: none"> • Issuing circulars to prohibit dealing with all internationally banned banks and institutions, to stop dealing in US dollars with Iranian banks, and to prohibit dealing with North Korea
Law application in Kurdistan	<ul style="list-style-type: none"> • Implementing the provisions of the Anti-Money Laundering and Countering Financing of Terrorism (AML/CFT) Law in the Kurdistan Region • Establishing two branches of the Central Bank in the Kurdistan Region in accordance with the administrative order number 3819 dated 2016

Middle East and North Africa region (MENAFATF) was issued in May 2018, including several recommendations, including the basic, the main, and other recommendations (according to the classification of the report), which indicated the exit of Iraq from the control zone and the result was (Highly Committed).

The year 2018 also witnessed the exit of the Central Bank of Iraq formally from the European Union list of sanctions, as the Union officially announced the exit of the Central Bank of Iraq from the list of sanctions imposed by the European Union on financial institutions, by publishing it in the official newspaper of the Union, which confirmed the cancellation of sanctions imposed on the Central Bank in the era of the previous regime, those sanctions that stipulated the ban on dealing with a group of Iraqi financial and non-financial institutions, and this step comes as a result of the significant progress achieved by the Central Bank of Iraq in improving its performance and applying international regulations and standards.

Under these recent amendments, global and European financial and banking institutions will be allowed to deal in accordance with the new regulations, because the Central Bank of Iraq has become one of the reliable financial institutions to deal with European institutions, and that these developments help to attract capital from abroad for the purpose of investing in the financial sector and other sectors, within Iraq, to contribute in achieving financial and economic stability for the country.

5-4 The Central bank measures to correct the path of Troubled Banks

The Central Bank of Iraq uses various measures to correct the path of troubled banks. One of these measures is the establishment of the Interim Bank (the Bridge Bank), as Article (67 A) of the Banks Law No. (94) for the year 2004 authorized the Central Bank to establish and license an Interim Bank owned and managed by the Central Bank to receive any assets or liabilities from one or more banks to which a trustee was appointed, based on Chapter (11), or a Receiver under Chapter (14) of the aforementioned Banks Law.

In the case of the establishment of the Interim Bank, the Central Bank will provide it with capital, as well as appointing members of the Board of Directors from appropriate and fit persons, for this Board to implement the bank's Articles of Incorporation, and it has been approved by the Central Bank of Iraq.

localizing salaries for all state employees, and this project came for the purpose of switching from cash to electronic payment with all its tools. In 2018, salaries of employees of (124) spending units (ministry or government institution) were localized. This is a significant jump in the localization of salaries, as the total spending units whose salaries are localized (130) units spread over most ministries, which reflects the success of this experiment and its acceptability among the employees, but with this growth, the localization project still constitutes a percentage of (20.5%) out of the (633) spending units.

5-5-2 Iraq Retail Payment System Infrastructure (IRPSI)

After the start of the Iraqi retail payment system in 2017, in which (8) banks participated, the year 2018 witnessed an expansion in participation in this system, as (10) new banks participated and they are (Babylon Bank, Al-Junoob Islamic Bank, Al-Rashid Bank, Mosul Bank, Byblos Bank, Noor Iraq Islamic Bank, Ceyhan Bank, BankMed, Investment Bank, Abu Dhabi Islamic Bank), and the linking process was completed after the completion of all administrative, technical and organizational procedures.

5-5-3 Connecting comprehensive banking systems

For the purpose of updating bank statements (data) electronically without human intervention and to avoid errors and reduce risks in the use of electronic payment systems, comprehensive banking systems for a number of banks have been linked with electronic payment systems used by the Central Bank, namely (RTGS and C - ACH) and these banks are (Bank of Beirut and Arab countries, Bank of Mosul, Al Junoob Bank, Al-Rajeh Bank, Noor Iraq Bank, BankMed, Trade Bank of Iraq, Ceyhan Bank, and International Development Bank).

5-5-4 Provide guarantees of transfers through the payments system

The Central Bank of Iraq activated the work of the day-lending mechanism during 2018. The bank can use the guarantee to finance or cover its discontinued operations due to the lack of sufficient balance in its settlement accounts, by guaranteeing the bonds mortgaged with this bank, and this measure guarantees business continuity and achieves confidence in the Iraqi banking system.

5-6 Concentration in the payment and settlement systems

The Central Bank of Iraq relies on a set of electronic systems for the purpose of expediting the provision of electronic payment services and ensuring their quality, including the (RTGS) and (C – ACH) which are the backbone of settlement operations between customers and banks.

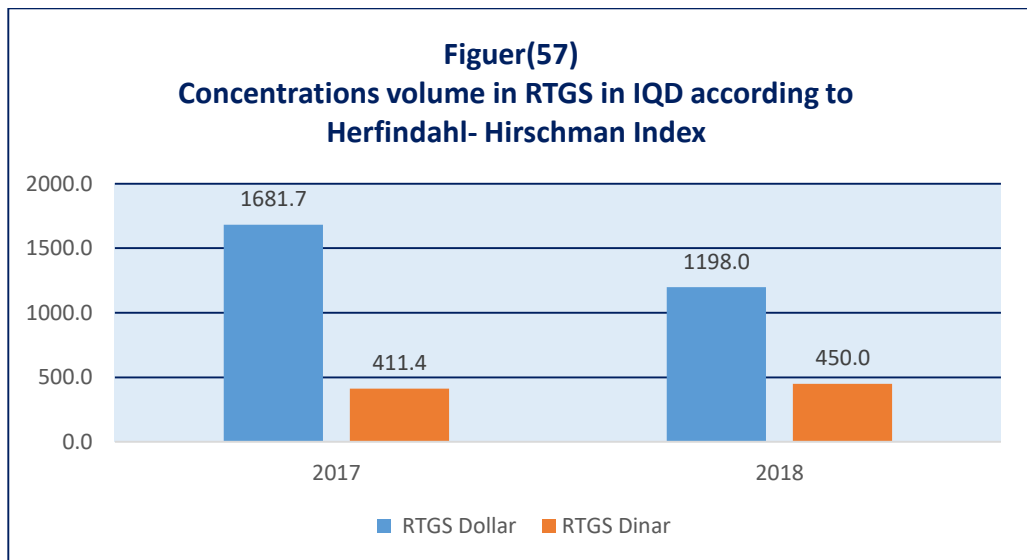
RTGS still takes the largest share in payments and financial settlements in 2018, where the total operation were about (147.9) trillion dinars despite its decline from the previous year 2017, as it was about (160.5) trillion dinars, a decrease of (7.8%). As for transactions in foreign currency, it reached in 2018 up to (3.8) billion dollars, which is higher than it was in 2017, as it was within the limits of (3.2) billion dollars, with an increase of (18.7%).

The electronic clearing in its two parts the electronic bonds and payment orders came in the second place, as it amounted to (31.1) trillion dinars in 2018 after it was (25.3) trillion dinars, and with a rise of 23%, as well as in the case with foreign currency operations, as it reached (560.4) million dollars in 2018, while it was (418.8) million dollars in 2017, with an increase of 34%, as shown in Figures (55) and (56).

this rise does not pose significant risks to the banking sector, because most transactions are in government banks that account for a high percentage of transactions in the banking market, as the acquisition rate of government banks of transactions (97.4%) of the total transactions of the ten banks that were subject to the concentration index.

As for the electronic clearing in foreign currency, the concentration ratio increased from (1401.5) points in 2017 to (2946.6) points in 2018, and that this increase in the volume of the concentration does not constitute high risks, especially since there are transactions for one government bank that constitutes (46%) of total transactions of the top ten banks that were subject to the index.

While the RGTS witnessed a slight rise in the concentration index for the year 2018 in Iraqi dinars, reaching (450) points, while in the year 2017 was (411) points, this indicates that there is no concentration in this system in transactions in the Iraqi dinar, as shown in Figure (57). As for foreign currency transactions, the concentration index decreased in 2018, reaching (1198) points, while 2017 was (1681) points, and in both years this is considered to be within the safe concentration limits, as shown in Figure (58).



Source: Central Bank of Iraq, Payments Department.

guidelines for managing information and communication technology risks, data security and cyber security, at banks and financial institutions.

Given the importance of the financial and banking sector, which is one of the most targeted sectors by hackers, piracy, and electronic attacks, the Central Bank of Iraq is keen to compel banks and financial institutions to develop technical and information infrastructure, data security and protection systems, as well as to follow standards in this regard and to develop and train workers in this field. The Central Bank also conducts auditing and educational visits to banks and financial institutions for the purpose of urging them to continue to work to provide programs (software) and tools for cyber security, as there are a number of banks and financial institutions that have tools and programs (software) for cyber security, while others are currently working to obtain these programs (software).

As for security gaps, the Central Bank of Iraq is working to implement an internal project for the survey system, assessing and managing security gaps for the purpose of conducting periodic checks, implementing updates to close the gaps, and avoiding their exploitation to implement electronic attacks.

There are some terminal accounts of the banks that contain malicious software, and because they are networked with the Central Bank to implement payment systems and other systems, some malicious software have been detected trying to enter the Central Bank's network, and they were stopped immediately and automatically by the protection systems and firewalls of this Bank and all banks were informed of the need to use licensed anti-virus software for terminal accounts related to the Central Bank of Iraq systems.

5-8 Supporting institutions

5-8-1 Iraqi Deposit Insurance Company

At the beginning of 2018, the Central Bank of Iraq signed the Articles of Incorporation of the Iraqi Deposit Insurance Company, with the founding body of the company, which includes (44) Iraqi and foreign banks including (6) government banks and (22) banks from the private sector, and (16) branches of a foreign bank, and the establishment of this company was driven by the duties and objectives of the Central Bank of Iraq

Financial Inclusion

6. Financial Inclusion

Care for financial inclusion has increased at the global level, and most countries worldwide have placed it among their strategic economic goals for the purpose of increasing financial depth, because of its direct and indirect positive effects on economic growth, income distribution, and reducing unemployment and poverty. There has been a continuous increase in the proportion of financial inclusion in most countries, as the World Bank data indicates that the proportion of financial inclusion worldwide reached (69%) in 2017, while this ratio was (62%) in 2014 and (51%) in 2011, note that this percentage varies between high-income countries in which the proportion of adults with bank accounts reaches (94%) compared to (63%) in developing countries, and this percentage also differs from one country to another ¹.

Financial inclusion is defined as the access of financial and banking services to the largest possible number of the population, especially segments of society with low incomes and at appropriate fees, through official channels and the creation of appropriate financial services.

The advanced technology, the expansion of the use of the Internet, and the increase in the use of the mobile phone are among the important elements in increasing financial inclusion. Therefore, achieving an increase in the proportion of financial inclusion requires providing an infrastructure of advanced and rapidly spreading information technology.

The Central Bank of Iraq has given care for promoting the level of financial inclusion, and raising the level of financial services to all groups of society, and to all regions of Iraq, while working to raise the level of quality of services, and the Central Bank of Iraq also worked in cooperation with banks and the Iraqi Private Banking Association to increase citizens' awareness of financial inclusion issues, by holding workshops and seminars, as well as using various media.

In order to enhance access to all groups of society and facilitate the use, including marginalized and underprivileged groups, of financial services and products that are appropriate to their needs, so that they are provided in a fair and transparent manner, at reasonable costs, and the concept of financial inclusion also includes protecting the rights of consumers of financial services and encouraging them to manage their money and savings in a sound manner and to achieve this, the Higher Committee of

¹ Asli Demirguc-Kunt; Leora Klapper; Dorothe Singer; Saniya Ansar and Jake Hess (2018), Global Findex Database of Financial Inclusion 2017: Measuring Financial Inclusion and the Revolution in Financial Technology, the World Bank Group.

There were (31) banks from the private sector participated in granting the initiative sums, divided into (16) Islamic banks, (13) conventional banks and two branches of a foreign bank, and these loans contributed to the creation of about (2100) small projects that contributed to finding job opportunities up to (4200) job opportunities for the unemployed. The Central Bank has worked to simplify granting procedures and complete transactions as quickly as possible, while urging banks to expand in this activity, which is one of the financial inclusion tools, in addition to that, the Central Bank has conducted advertising, promotional and awareness campaigns in the media and various social media.

6-1-2 Large Enterprises Financing Initiative

The Central Bank of Iraq was keen, among its goals, to promote economic development, and the Central Bank worked to achieve this important goal through Large Enterprises Financing Initiative at an amount of (5) trillion dinars, where the initiative's amounts were pumped through specialized banks, at a low interest rate, so it will not form a burden on the investor, for the purpose of continuation of his work, to raise production rates in important economic sectors (agricultural, industrial, and real estate) that contribute to increasing economic growth, as well as contribute to solving the housing shortage by providing soft loans to build housing units, or to build large housing complexes. Table (13) shows the nature of the distribution of these sums to the specialized banks and the housing fund.

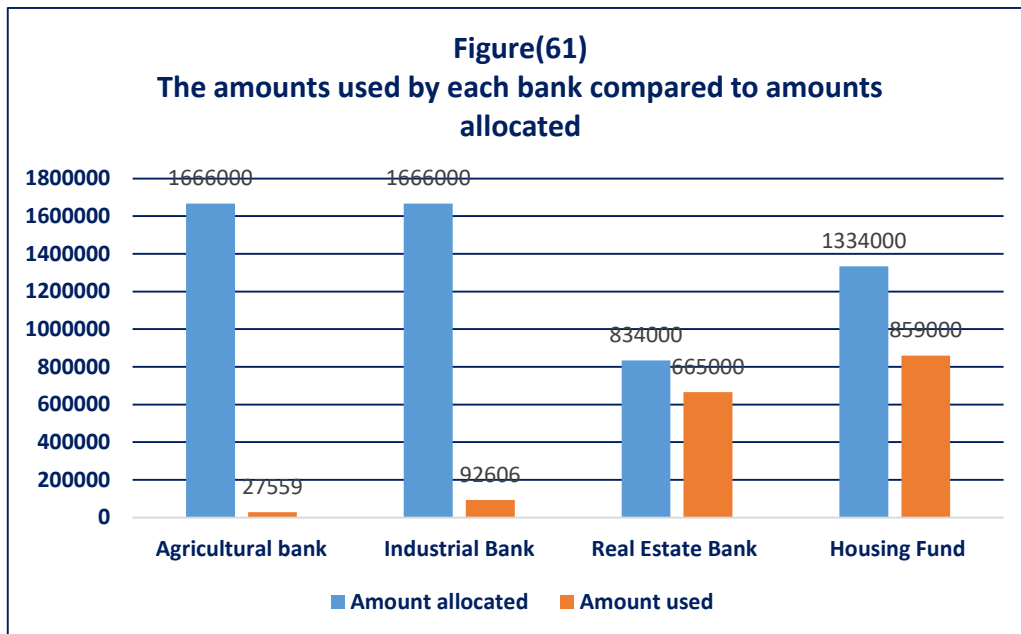
Table (13)

The market share of banks in the large enterprises financing initiative

Banks' name	Amount allocated	Actually granted		Interest rate	Operating ratio		Growth rate in grant
		2017	2018		2017	2018	
Agricultural Bank	1,666,000	15,832	27,559	%4	0.95	1.65	%74
Industrial Bank	1,666,000	17,667	92,606	%4	1.06	5.73	%424
Real Estate Bank	834,000	600	665,000	%3	0.07	79.7	% 1107
Housing Fund	834,000 Increased to 1,334,000	824	859,000	%2	0.10	64.39	%1042

Source: Central Bank, Financial Operations and Debt Management Department

Iraq encouraged banks to grant credit to investors with a very low interest rate in support of the national economy, as shown in Figure (61).



Source: Central Bank, Financial Operations and Debt Management Department

6-2 Financial Inclusion Indices

The basic indices used to measure the level of financial inclusion can be divided into three types, namely: access, usage and quality. The first and second dimensions (access and usage) will be touched upon, and the third dimension (quality), which reflects the quality of financial services provided, is somewhat complex to measure; therefore, the focus will be on the other two dimensions.

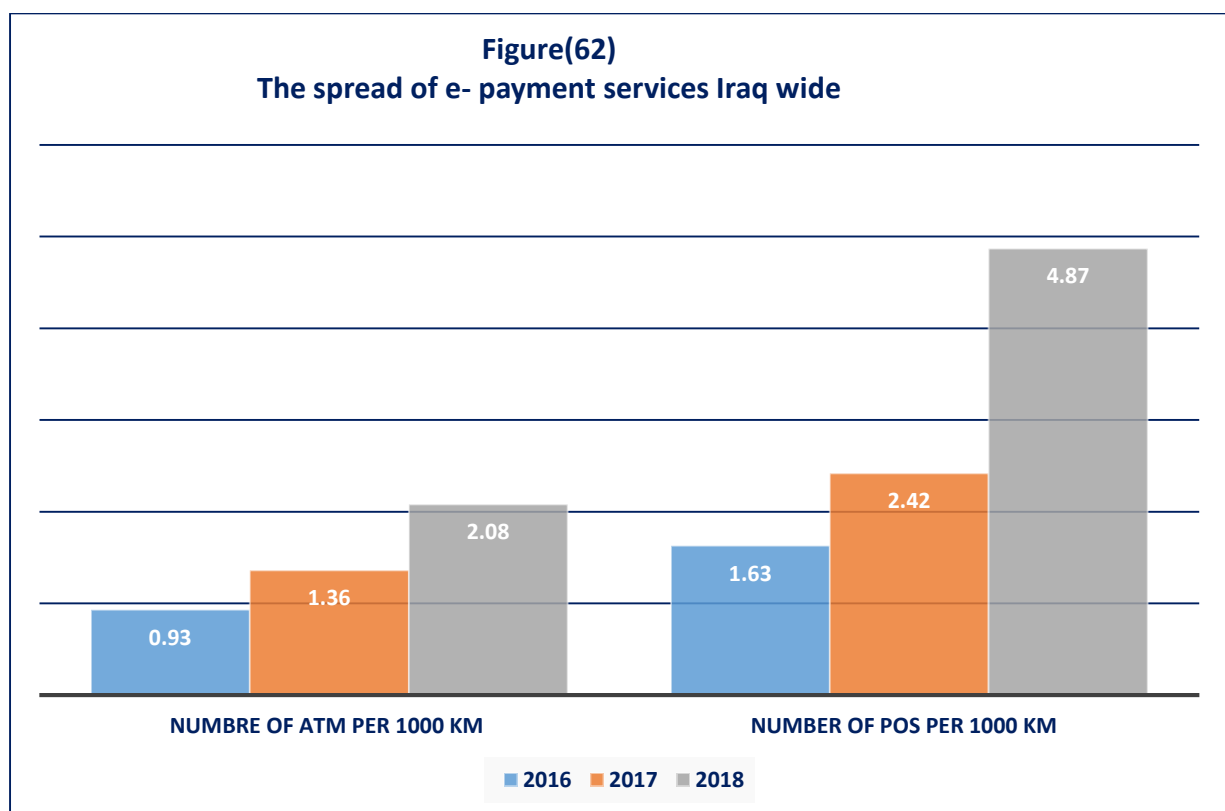
6-2-1 Access: This dimension relies on a number of variables as follows:

6-2-1-1 Banking intensity and banking spread index

Banking intensity and banking spread in Iraq are still below the required level, despite the opening of new banks during 2018, as well as the encouragement of the Central Bank of Iraq to banks to open branches in all of Iraq, and the year 2018 witnessed a slight increase in the number of bank branches, reaching (843) branches, while they were (843) branches in 2017, and this increase came as a result of opening new banks, after converting the activity of some money transfer companies to Islamic banks.

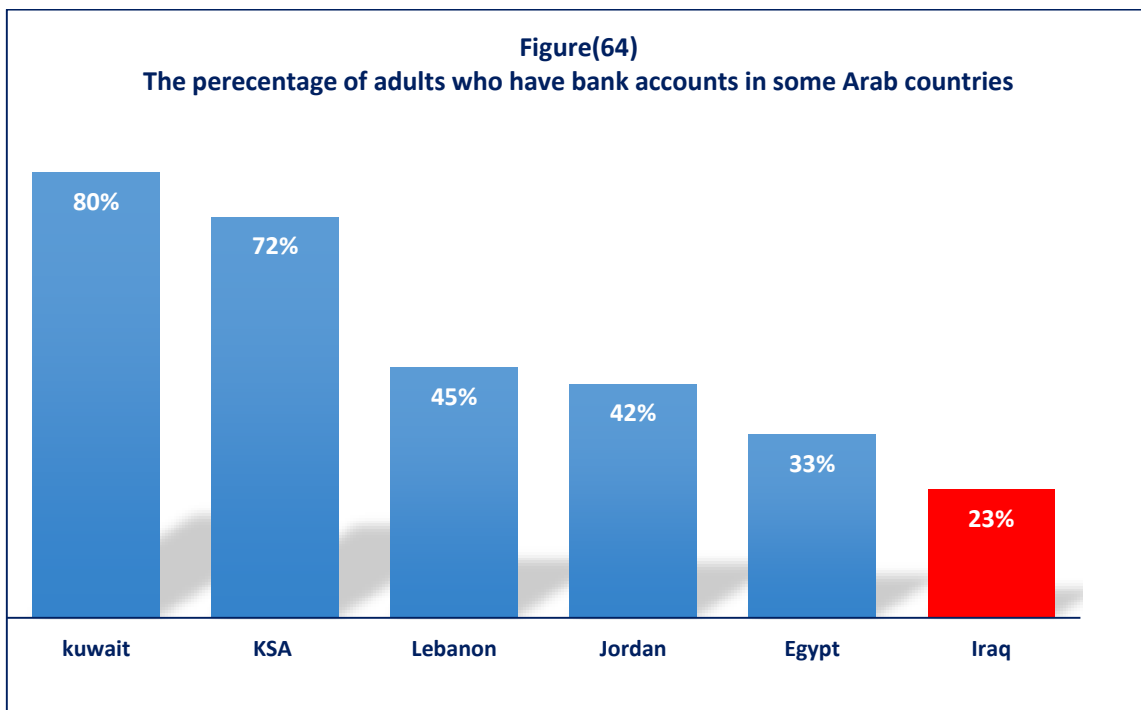
devices because this culture does not spread, and this process is still vague to most shop owners, especially in popular and remote areas. As for (ATM), its spread is limited to Malls, commercial centers, some government departments and bank branch headquarters. There are no devices deployed in public areas, and the reason is due to security challenges.

And Figures (62) and (63) illustrate this, but with the continued improvement in security in Iraq, coinciding with the efforts of the Central Bank of Iraq to encourage banks to open as many ATMs as possible, this ratio is expected to increase in the coming period.



Source: Central Bank of Iraq, Payments Department.

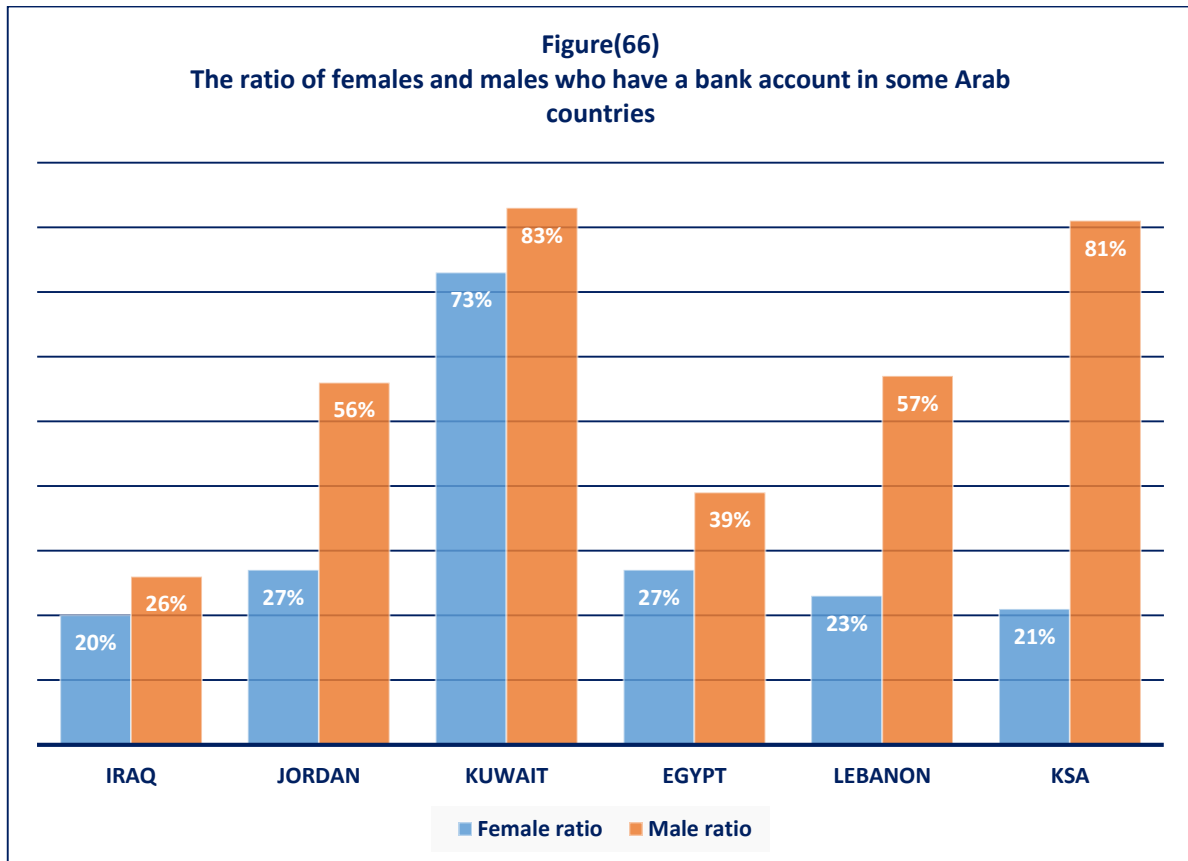
When comparing the financial inclusion indices of some Arab countries, it was noted that the ratio of adults who have bank accounts in Iraq reached (23%), which is the lowest ratio among the countries of the region, as shown in Figure (64), and the reason for this low ratio in Iraq is due to the low banking awareness. The Central Bank of Iraq is working on spreading the banking culture and urging citizens to deal with banks, as well as urging state employees to localize their salaries in approved banks, which will lead to the increase of this ratio in the future.



Source: the World Bank <http://ufa.worldbank.org/country-progress/iraq>

There are some obstacles that form a barrier for citizens to own bank accounts, including the distance between the bank and the location of residence, the cost of opening accounts, the lack of some documents regarding the account opening process, and confidence in the banking system. Through the figure (65), it becomes clear that there are (24%) of adults in Iraq hindered from obtaining a bank account due to the distance, which is the highest ratio compared to some Arab countries, as well as (42%) of adults were unable to open an account because the cost is high and, despite the presence of a large number of approved banks, which leads to increased competition and reduced costs of opening accounts, but still constitutes an obstacle to owning bank accounts, which is a significantly high rate compared to some Arab countries. While the documents required to open a bank account are a hindrance, as (23%) of adults find it difficult to open bank

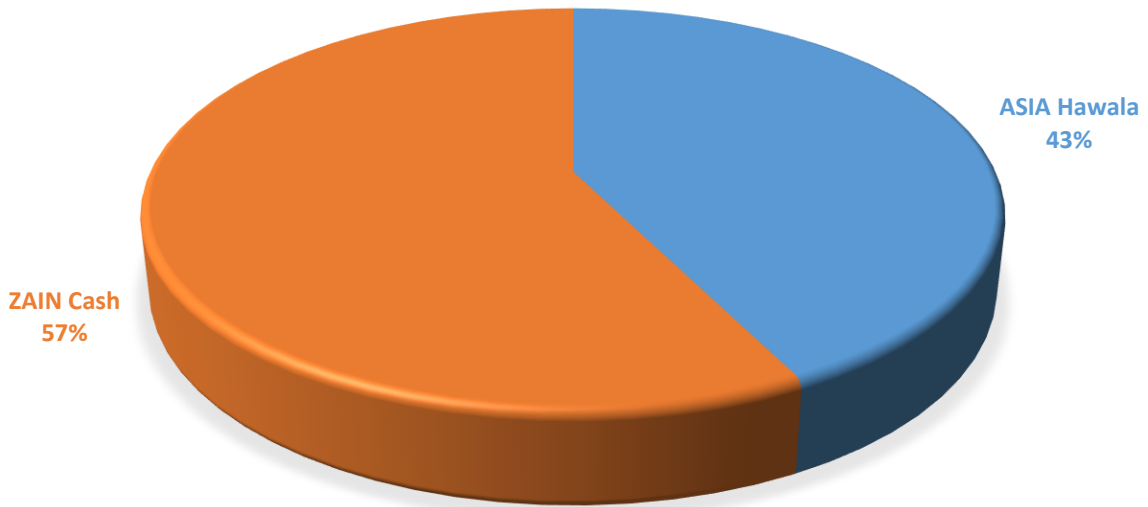
Upon looking at the ratio of females and males who have bank accounts, it is noted that some Arab countries have a higher ratio of males than the ratio of females in owning bank accounts, as is the case with regard to Iraq, the ratio of males who own bank accounts reached (26%) while the ratio of females reached (20%), which calls for caring to encourage women to own bank accounts and use official financial services and empower them financially, as shown in Figure (66).



Source: the World Bank <http://ufa.worldbank.org/country-progress/iraq>

As for electronic payment services, the ratio of adults who use electronic payment tools in Iraq reached (19%), which is a good ratio considering that this activity is new therein, but it still represents the lowest ratio among some Arab countries and requires a lot of financial institutions to raise this ratio, and the transformation to use electronic payment services instead of using cash as shown in Figure (67).

FIGURE(68)
MARKET SHARE FOR PAYMENT OPERATHONS VIA MOBILE FOR 2018



Source: Central Bank of Iraq, Payments Department

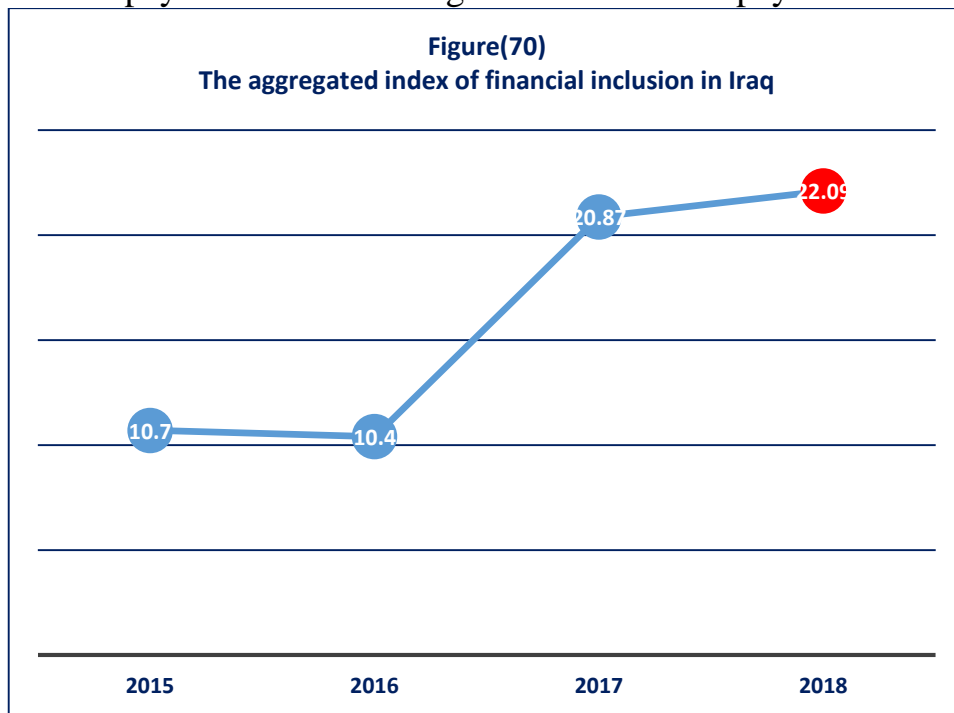
As for the spread of service at the level of customers, Asia Hawala Company obtained a ratio of (92%) of the customers, and the ratio of its customers' participation in Baghdad reached (22%) while Zain Cash Company customers' ratio reached (7.3%) to the total number of subscribers in the service, of whom (20%) are in Baghdad.

6-2-3 Banking Depth Index

The Banking Depth Index shows the level of development of banking intermediation through easy access to banking services, low costs, and expansion in various banking institutions and instruments, which contribute to supporting the investment and economic development process. This index was measured using two variables. The first is the ratio of private sector loans to GDP. The second: the ratio of private sector deposits to GDP. Figure (69) indicates that this index has decreased from 2015 to 2018, due to an increase in the rate of GDP growth at rates of growth that exceed the growth rates of both credit and deposits of private sector, where the private sector deposits and credit to the private sector witnessed an increase during the period 2015 – 2018.

The results in Figure (70) indicate an increase in the value of the aggregated index of financial inclusion from (20%) in 2017 to (22%) in 2018, and this reflects the success of the Central Bank of Iraq's policies in encouraging financial inclusion, increasing the confidence and interaction of individuals with the formal financial sector. This increase in the value of the financial inclusion index is due to the noticeable increase in the number of bank accounts as a result of the salary localization policy, as well as the noticeable increase in the number of ATMs and POSs that have increased in the last period.

In spite of this clear and desirable increase in the level of financial inclusion in Iraq, the Central Bank of Iraq continues its policies towards achieving its important strategic goals, including increasing the level of financial inclusion, and adopting electronic tools to settle payments and exchanges instead of cash payment.



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