



**Central Bank of Iraq
Statistics and Research
Department
Monetary and Financial
Stability Division**



Early Warning Report for The Banking Sector

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Statistics and Research Department

Monetary and Financial Stability Division

**Early Warning Report for the Banking Sector
(Q4 2023)**

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Early warning: is an index that gives a clear picture of the reality and magnitude of the potential risks that may occur to the financial sector and economy in general. Thus, it enables decision-makers to take necessary measures and formulate policies in a timely manner to avoid financial crisis.

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Introduction:

The **Early Warning Report** of the Banking Sector is considered one of the most important direct monitoring means on the sector, through mentioned indices that can forecast imminent and potential crises in general, but not achieved, as well as by measuring potential deviations and variables affecting the banking sector. The report consists of three chapters covering most of the indices that affect the function of monetary authority.

The first chapter of the report contains an analysis of currency value stability through several indicators, notably the ratio of net foreign reserves to broad money supply (M2), as it decreased to (80.6%) for Q4 2023 compared to the same quarter of the previous year, which was (83.6%) - that is greater than the standard ratio of (20%). The decrease was due to an increase of (7.5%) to broad money supply higher than the rise of net foreign reserves, which increased by (3.7%) over the same period.

The second chapter included the analysis of bank performance indices, as the ratio of total cash credit to total deposits was (51.9%) for Q4 2023, whereas the standard ratio set by the central bank did not exceed (75%). The money multiplier ratio for Q4 2023 fell to (1.09%) from (1.16%) for the same quarter of 2022 because of the increase of banks' excess reserves at the central bank by (1.2%) with a higher percentage of bank deposits increase at banks. As regarding the index of non-performing loans to total cash credit, it fell by (12.9%) for Q4 2023 to (6.26%) from (7.19%) during the same quarter of 2022.

The third chapter dealt with the analysis of some macroeconomic indicators that have an impact on Iraq's banking system. As regarding the inflation rate, it is noted that it decreased by (9.1%) to a record (4.0%) for Q4 of 2023 from (4.4%) for the same quarter of 2022. Regarding the ratio of treasury-bills to total public debt by banks, it fell from (8.2%) for Q4 2022 to (7.2%) during the same quarter 2023, meaning a decline of public sector's crowding to private sector to access to credit. Gross domestic product (GDP) at current prices in Iraq fell by (7.3%) for Q4 2023, reaching IQD 89.3 trillion, up from IQD 96.3 trillion for Q4 2022.

Chapter One: Analysis of Currency Value Stability Indices

Analysis of currency value stability involves monitoring several indices that show an unusual pre-crisis behavior when the index exceeds a certain limit. These indices are considered as "signals" of warning to currency value crisis likelihood during the following 24 months. Among the most important are those indices that provide an accurate analysis of the value of national currency fluctuations: the ratio of net foreign reserves to issued currency, the ratio of net foreign reserves to broad money supply (M2), as well as the number of months of imports that can be covered by net foreign reserves, in addition to average change of interest rates.

First: Adequacy of Foreign Reserves

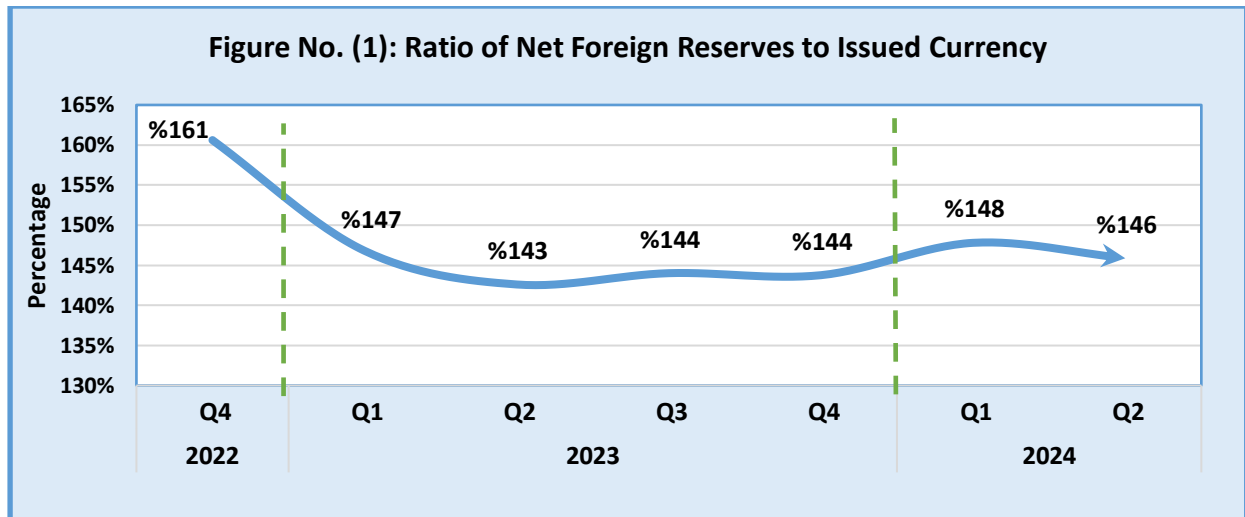
The adequacy of central banks' foreign reserves is a vital index of the stability of the financial system and its ability to meet external challenges. These reserves serve as a means of protecting the national currency from external fluctuations of the financial system and it considered one of the key indices of investors' confidence in the economy. There are several used indices to measure the adequacy of foreign reserves, including:

1. Adequacy of Net Foreign Reserves to Issued Currency Index:

Net foreign reserves are the first line of defence for national currency stability and support for the national economy by maintaining an appropriate level of reserves, ensures that the central bank can cope with fluctuations at the foreign exchange market and protect the value of the national currency. The ratio of this index reflects the relationship between the value of central bank's net foreign reserves and the value of the national currency in the financial system. The high ratio is considered a good signal in the financial and economic system, while its decline indicates problems that might negatively affect the currency's external value and the domestic economy.

Figure No. (1) shows a decrease of net foreign reserves coverage of issued currency to (144%) for Q4 of 2023 compared to (161%) for Q4 of the previous year. This decrease was attributed to defending the exchange rate because of the government's demand for dinars to finance expenditure, leading to an increase of the issued currency by (15.9%), which exceeded net foreign reserves growth of (3.7%). However, this ratio remains positive and influential as it exceeds the established standard ratio of (100%).

Coverage ratio of net foreign reserves of issued currency is expected to increase to (148%) and (146%), respectively, for Q1 and Q2 of 2024 by assuming that oil prices rise to US\$ 85.7 per barrel for March of 2024 and US\$ 87.3 per barrel for June of the same year, up from US\$ 84.0 per barrel for December of 2023.



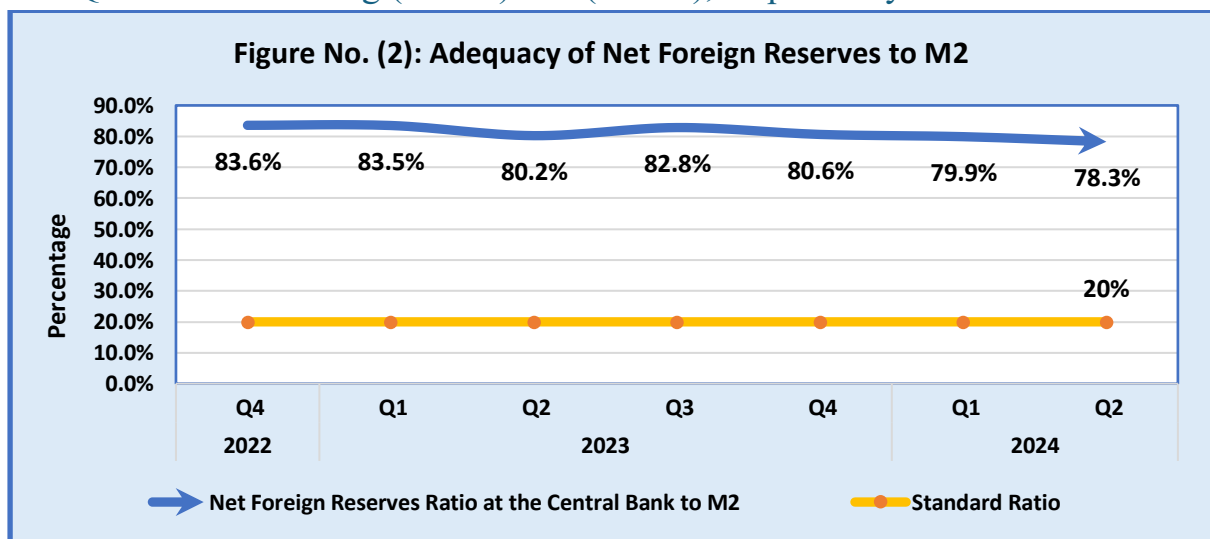
Source: Central Bank of Iraq, Statistical Website.

*Forecast Data for Q1 and Q2 of 2024.

2. Adequacy of Net Foreign Reserves to Broad Money Supply (M2) Index:

This index is measured by dividing net foreign reserves by (M2). Figure No. (2) shows that the ratio of net foreign reserves to (M2) for Q4 of 2023 was (80.6%), well above the standard ratio set at (20%), although it decreased by (3.5%) compared to the same quarter of 2022.

The ratio of this index is expected to remain above the standard ratio during Q1 and Q2 of 2024 reaching (79.9%) and (78.3%), respectively.



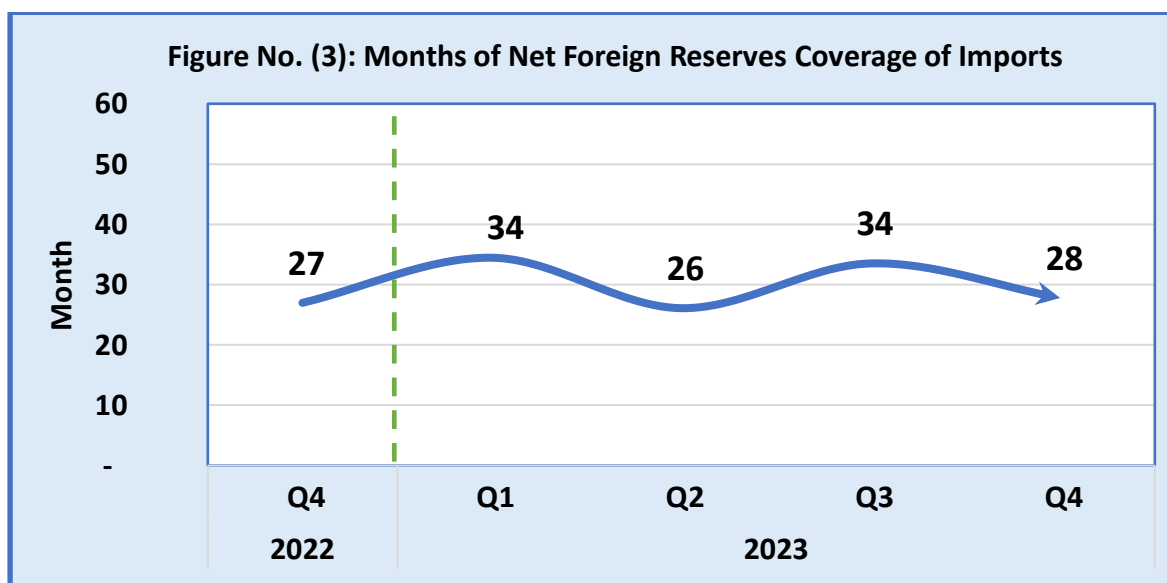
Source: Central Bank of Iraq, Statistical Website.

*Forecast Data for Q1 and Q2 of 2024.

3. Net Foreign Reserves Coverage to Total Imports Index:

This index is used to assess the quality of the country's economy and the stability of its financial system. International financial institutions such as the International Monetary Fund (IMF) and the World Bank (WB) are interested in monitoring this index to direct the necessary financial support in case of need. In some countries, the minimum limit of this index ranges from 4 to 5 months. Also this ratio varies from country to another depending on the country's economic situation. In Iraq, the minimum acceptable limit of this index is 6 months ¹.

The period of foreign reserves coverage to total imports for Q4 of 2023 increased to 28 months, up from 27 months for the same quarter of the previous year. This increase came as a result of an increase of net foreign reserves from IQD140.6 trillion to IQD 145.9 trillion during the same period. As well as an increase of the national currency value through the exchange rate compared to the same quarter of the previous year, as shown in figure No. (3).



Source: Central Bank of Iraq, Statistical Website.

¹ Ali Mohsin Al-Alaq, International Reserves and Buying & Selling Foreign Currency Window at the Central Bank of Iraq, Central Bank of Iraq, Researches and Studies, p 7.

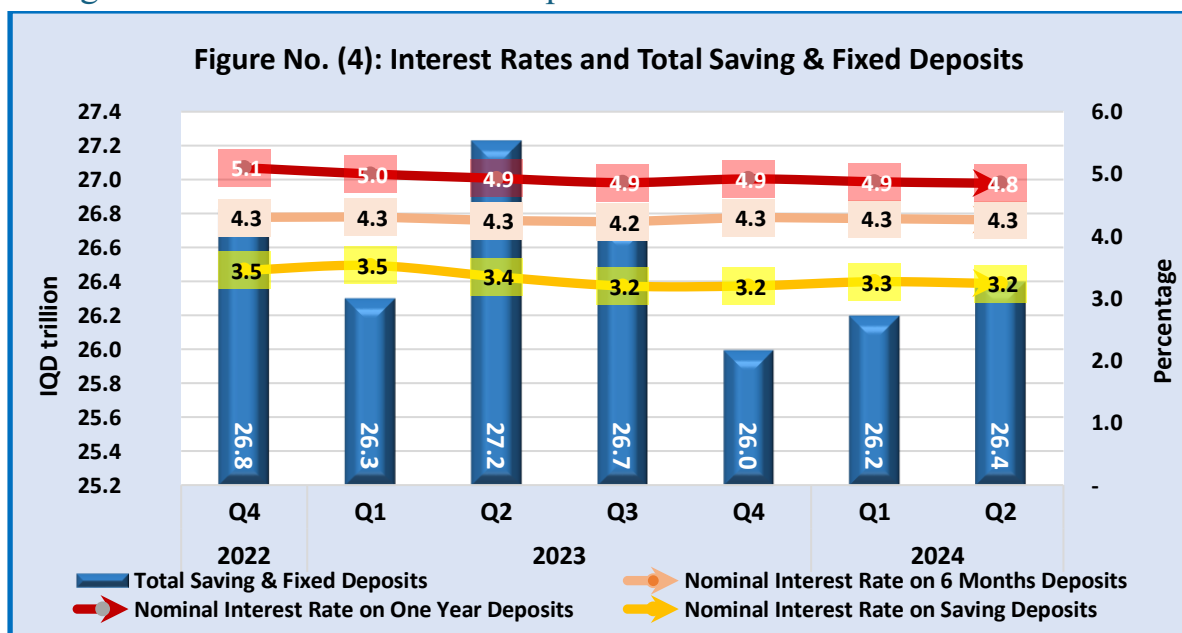
Second: Change of Interest Rates Averages

Interest rates averages is considered one of the most important factors that affect national and global economies. When deposit interest rates rise, deposit becomes more attractive to savers, and when banks lower interest rates, it encourages borrowers to invest leading to increase economic growth and reduce unemployment rates. But in some cases, this can lead to an increase of inflation when gross domestic product (GDP) does not respond at constant prices. In both cases there will be an impact on the national currency value.

1. Short-Term Interest Rates on Deposits:

The impact of interest rates on the national currency value depends on several factors, including inflation rate and domestic production volume. Figure No. (4) explains that high or low interest rates that have a weak impact on the volume of deposits, as interest rates are kept for 6 months at (4.3%) for Q4 of 2022. Also, one-year interest rates decreased from (5.1%) to (4.9%) and interest rates on saving deposits also decreased from (3.5%) to (3.2%). Despite these changes of interest rates, they did not significantly affect the volume of deposits.

The nominal interest rate on deposits for 6 months and for a year is expected to stabilize during Q1 of 2024 and then decrease on saving and one year deposits during Q2 of the same year by (0.1%) for Q1 of the same year. It is expected that the volume of deposits will increase, meaning that the impact of interest rates change is weak on the volume of deposits.



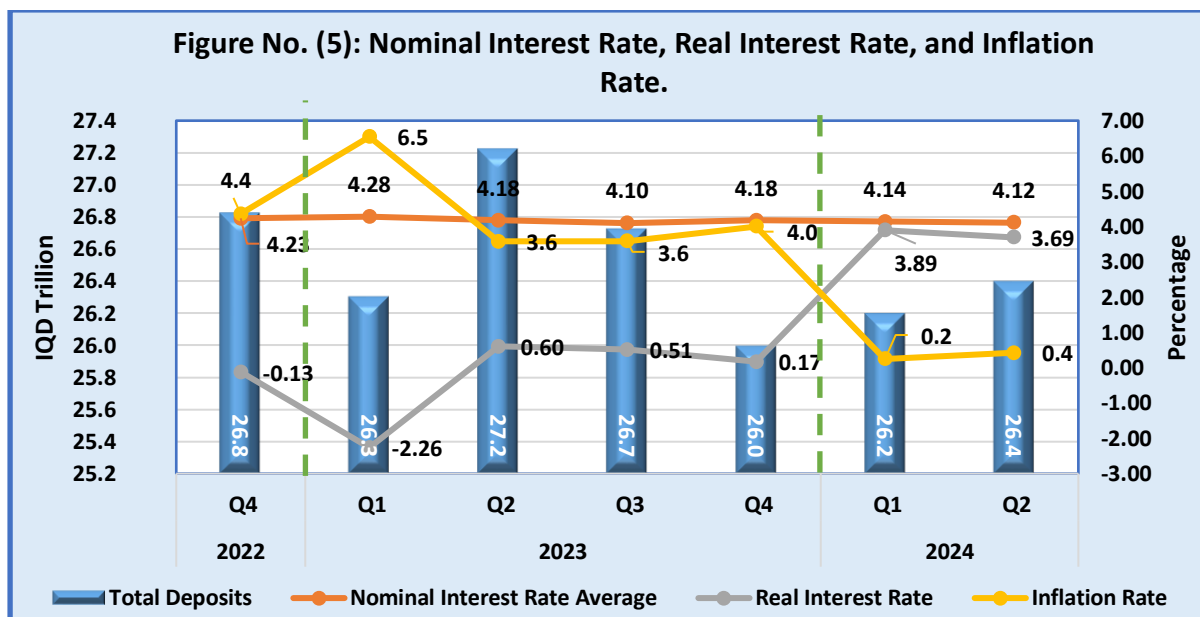
Source: Central Bank of Iraq, Statistical Website

*Forecast Data for Q1 and Q2 of 2024.

2. Real Interest Rates:

Real interest rate is considered an important index as it takes into account inflationary pressures and their effects on nominal interest rates. Figure No. (5) shows a rise of real interest rate during the Q4 of 2023 to reach (0.17%) compared to the same ratio for Q4 of 2022 of (-0.13%), as the decline of inflation rate from (4.4%) to (4.0%) during the same period had an effect on raising the real interest rate.

Real interest rate is expected to rise during Q1 and Q2 of 2024 to reach (3.89%) and (3.69%) as affected by inflation rate decline.



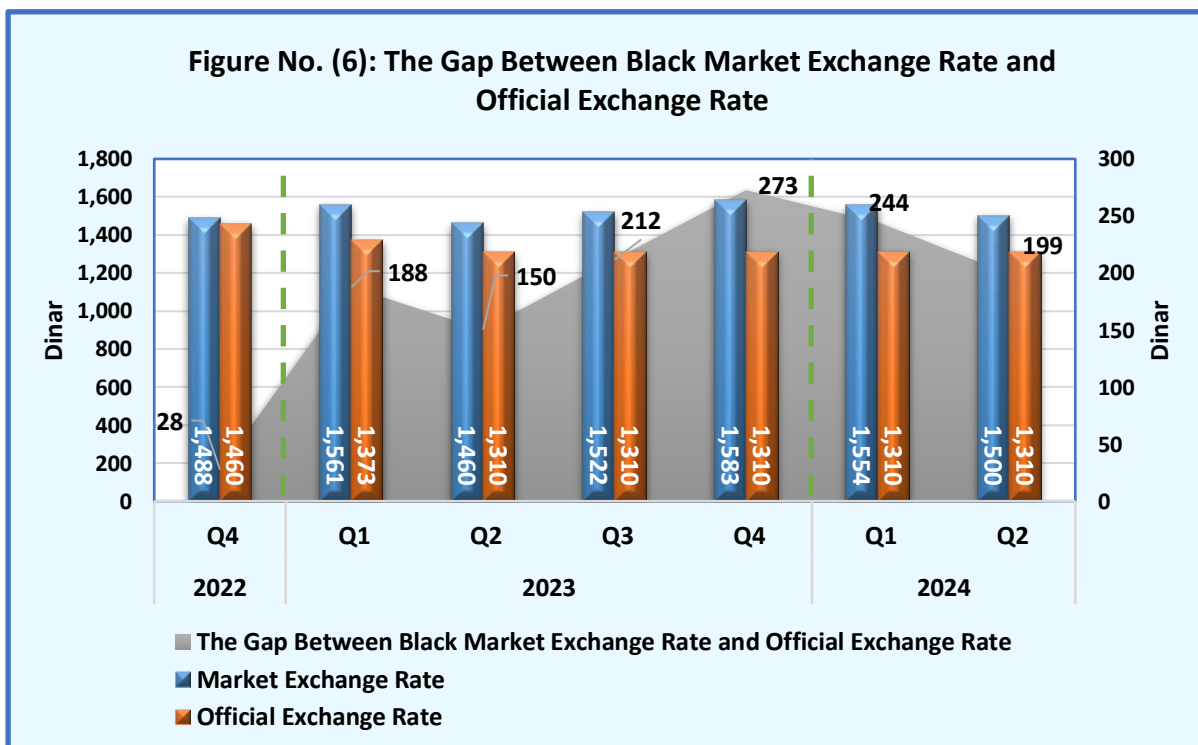
Source: Central Bank of Iraq, Statistical Website.

*Forecast data for Q1 and Q2 of 2024.

3. The Gap Between Black Market Exchange Rate and Official Exchange Rate:

Figure No. (6) shows the gap between the black-market exchange rate and the official exchange rate. It is noted that there is a widening in this gap, reaching IQD (273) during Q4 of 2023 after it was IQD (28) compared to the same quarter of 2022, this is due to the instability of demand for foreign currency which drives the Central Bank to monitor exchange rates, maintain them, and defend their stability in order to overcome this crisis by following a set of policies that would maintain the stability of the general level of prices, knowing that the exchange rate is no longer the dynamic stabilizer of inflation, because sales through the electronic platform and promotional sales constitute more than 90% and at the official price.

This gap is expected to decrease in Q1 and Q2 of 2024, reaching IQD (244) and IQD (199), respectively.



Source: Central Bank of Iraq, Statistical Website.
 - Ministry of Planning, Central Statistical Organization
 - Forecast data of Q1 & Q2 of 2024.

Table No. (1)			
Currency Value Stability Indices			
Index Name	Q4 2022	Q4 2023	Change Rate %
Net Foreign reserves at CBI (IQD trillion)	140.6	145.9	3.8
Issued Currency (IQD trillion)	87.6	101.5	15.9
Net foreign reserves at CBI to issued currency ratio (%)	161	144	-10.6
Broad money supply (M2) (IQD trillion)	168.3	181.0	7.5
Net foreign reserves at CBI to broad money supply M2 ratio (%)	83.6	80.6	-3.6
Total imports (IQD trillion)	15.6	15.8	1.3
Months of coverage of net foreign reserves for imports (months)	27	14	-48.1
Total fixed deposits and savings deposits (IQD trillion)	26.8	26.0	-3.0
Nominal interest rate on Six months Deposits (%)	4.3	4.3	0
Nominal interest rate on one-year Deposits (%)	5.1	4.9	-3.9
Nominal interest rate on savings deposits (%)	3.5	3.2	-8.6
Nominal Interest Rate Average (%)	4.23	4.18	-1.2
Real Interest Rate (%)	- 0.13	0.17	230.8

The Table was prepared by adopting data from:

- Central Bank of Iraq, Statistical Website.
- Central Bank of Iraq, Statistics and Research Department, Balance of Payments and External Trade Division.

Chapter Two: Analysis of Banks' Performance Indices

The analysis and measurement of the banking sector's performance indices can identify risks to which the banking sector may be exposed. This is done through several indices, such as total cash credit to total deposits index, non-performing loans to total cash credit index, and non-performing loans to total deposits index, to identify the efficiency of banks working in cash credit management and their role in attracting deposits. It is also possible, through the bank profitability index, the money multiplier index, and the net open foreign currency position index of banks, to indicate the extent of the management's ability in banks to achieve profits. The following are the most important indices of banks' performance:

1. Outstanding Lending Facilities to Total Banks' Liabilities:

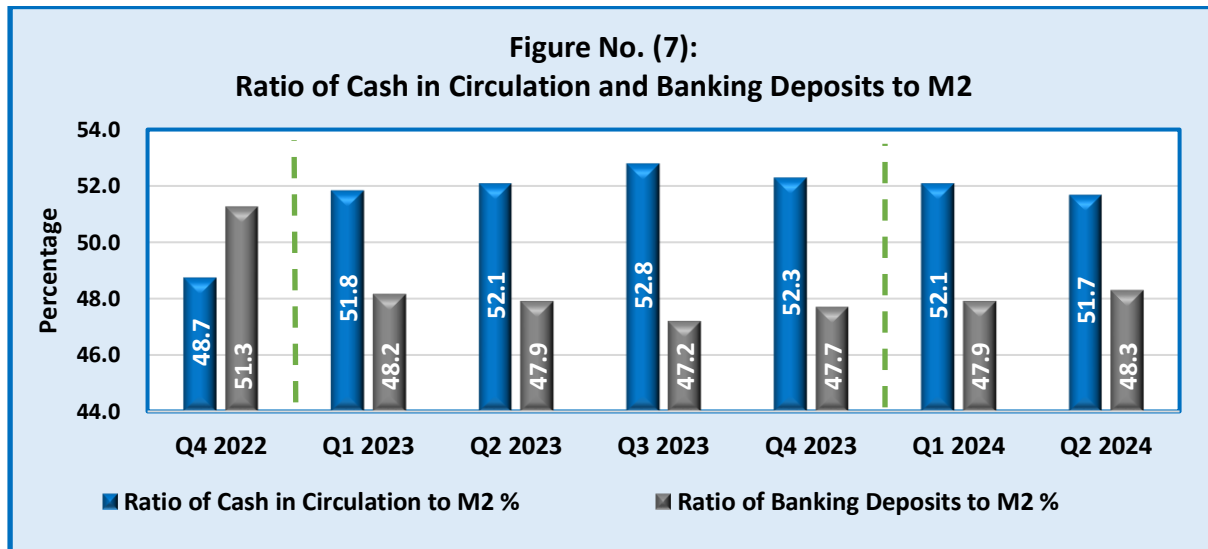
The existing lending facilities provided by the Central Bank to banks as a last resort for lending vary according to the crises to which banks are exposed to, as the facilities provide more financial support to banks. The Central Bank of Iraq Act No. 56 of 2004, in accordance with article 30, sets out the legal conditions for assisting banks in financial crisis. The Central Bank considers that banks must have sufficient liquidity to cope with their deposit withdrawals and to keep the banking system from collapse, so aid demand must be based on its need to improve liquidity, Because the liquidity crisis reflects how much the banking sector is struggling. The Central Bank of Iraq did not provide loans to banks during Q4 of 2023, because banks did not need emergency liquidity or extraordinary withdrawals, or because they did not meet the mentioned conditions.

2. Banking Deposits to Broad Money Supply (M2):

Bank deposits express the amount of financial solvency enjoyed by banks, which can be obtained by diversifying the services provided to the public in order to attract a larger number of depositors to the bank. Therefore, this index represents the public's desire to turn to banks in order to obtain services that attract the public to them. In addition, the size of deposits with a bank represents an indicator of its activity on the one hand and the extent of the spread of its banking services on the other one. This index is measured by dividing bank deposits by broad money supply (M2). Figure No. (7) shows that the ratio of bank deposits to (M2) decreased during Q4 of 2023 to (47.7%) after it was (51.3%) for the same quarter of 2022, and in contrast, the index of the ratio of cash in circulation to (M2) increased from (48.7%) in Q4 of 2022 to (52.3%) for the same quarter of 2023, this indicates that the majority of the currency issued by the

Central Bank goes towards cash in circulation and not as bank deposits as a result of the decline in banking awareness of benefiting from the financial services provided by banks, despite the gradual improvement in the use of electronic payment tools.

Expectations indicate that the ratio of bank deposits to (M2) will reach (47.9%) and (48.3%), respectively, in Q1 and Q2 of 2024, while expectations showed that the ratio of cash in circulation to (M2) will reach (52.1%) and (51.7%) respectively for the same period.



Source: Central Bank of Iraq, Statistical Website.

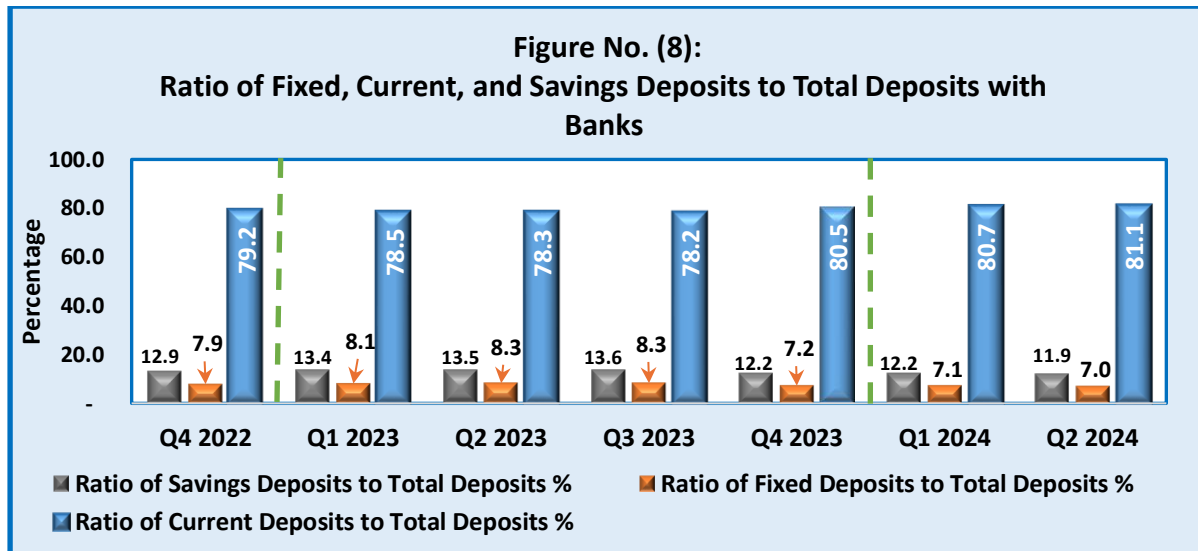
*Forecast data for Q1 and Q2 of 2024.

3. Types of Deposits at Banks in Iraq:

Given the types of deposits in active banks, it is noted that current deposits accounted for the largest proportion of banks' total deposits, as their percentage of total deposits increased to (80.5%) during Q4 2023 after it was (79.2%) during the same quarter of 2022, while the percentage of fixed deposits decreased to (7.2%) in Q4 2023 after it was (7.9%) in the same quarter of 2022. As for savings deposits, it also decreased from (12.9%) during Q4 of 2022 to (12.2%) for the same quarter of 2023, meaning that banking awareness is still low among individuals, and this requires that banks to be more effective in attracting deposits by providing more services with increased advertising showing the benefits of bank deposits. Figure No. (8) shows the volume of deposits with banks.

Forecasts indicate that the ratio of current deposits to total deposits will reach (80.7%) and (81.1%), respectively, in Q1 and Q2 of 2024. Forecasts also showed that the percentage of savings deposits in Q1 of 2024 will remain the same as in Q4 of 2023 (12.2%) and will decrease in Q2 to reach (11.9%) for the same year.

As for fixed deposits, it is expected that they will record (7.1%) and (7.0%), respectively for the same period.



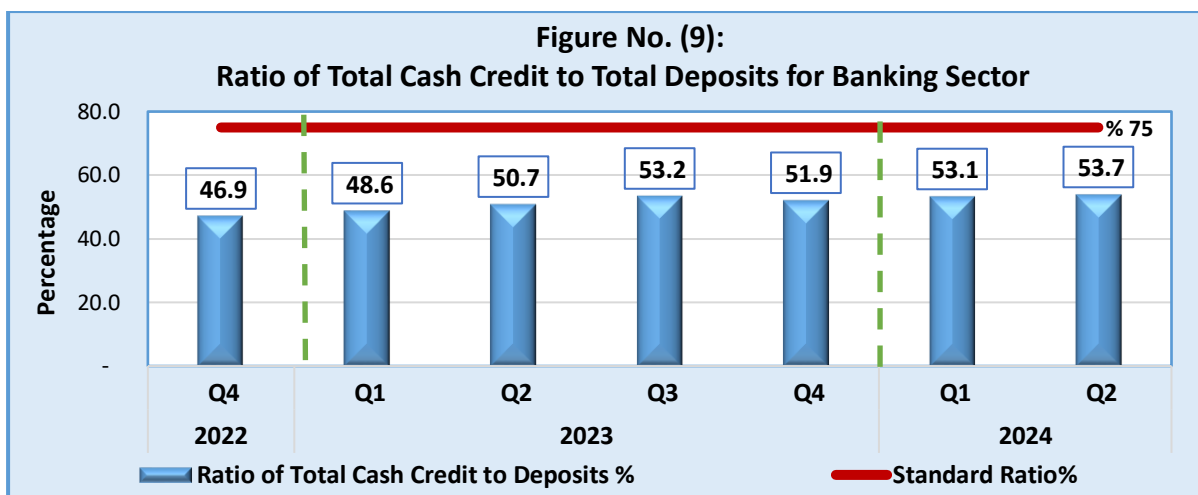
Source: Central Bank of Iraq, Statistical Website.

*Forecast data for Q1 and Q2 of 2024.

4. Total Cash Credit to Total Deposits:

This Index shows the ability of banks to use the funds obtained from deposits for meeting the credit needs of customers, The Central Bank of Iraq set this percentage at (75%) in order to maintain sufficient liquidity in banks to face customer withdrawals and conduct the bank’s financial activities, this percentage is measured by dividing the total cash credit by total deposits with banks. It expresses the long-term liquidity state of the banking sector, and Figure No. (9) shows that the ratio of total cash credit to total deposits increased from (46.9%) in Q4 of 2022 to (51.9%) in the same quarter of 2023, as it did not exceed the percentage specified by the Central Bank.

It is expected that the total cash credit to total deposits will increase to (53.1%) and (53.7%), respectively for Q1 and Q2 of 2024.

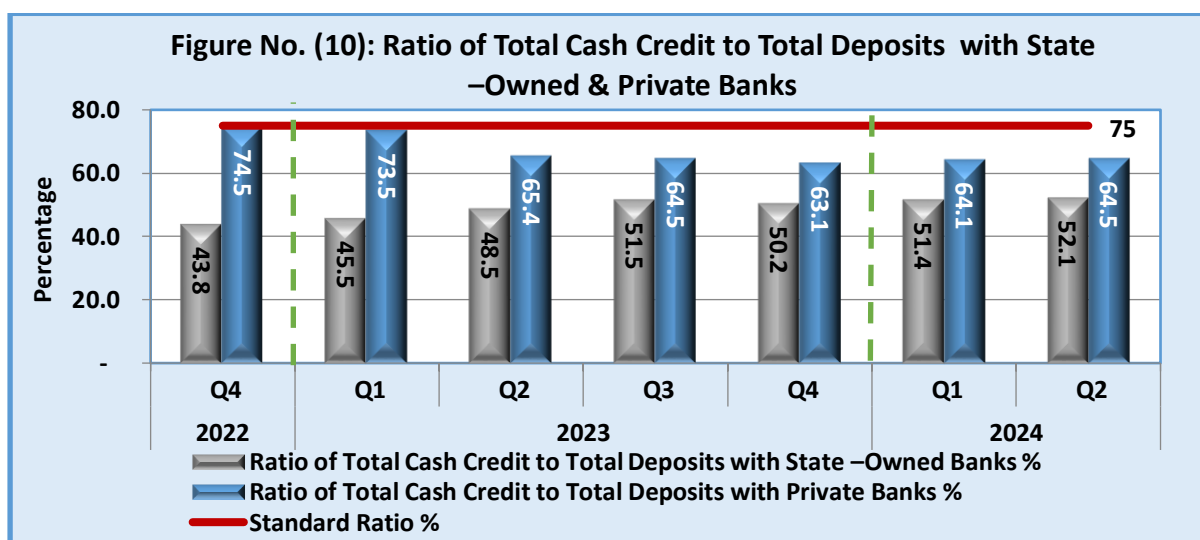


Source: Central Bank of Iraq, Statistical Website.

* Forecast data for Q1 and Q2 of 2024.

The ratio of total cash credit to total deposits with private banks is greater than that of state-owned banks, even though it recorded a decline during this quarter. Figure No. (10) shows that the ratio with private banks reached (63.1%) in Q4 2023, after it was (74.5%) for the same quarter of 2022, as a result of the increase in total deposits in private banks from IQD (13.2) trillion in the Q4 2022 to IQD (17.2) trillion for the same quarter in 2023. As to the state-owned banks, it did not exceed the specified percentage of (50.2%) in Q4 2023.

It is expected that the ratio of total cash credit to total deposits will increase for both state-owned banks reaching (51.4%) and (52.1%), respectively for Q1 and Q2 of 2024, and private banks, reaching (64.1%) and (64.5%) respectively for the same period.



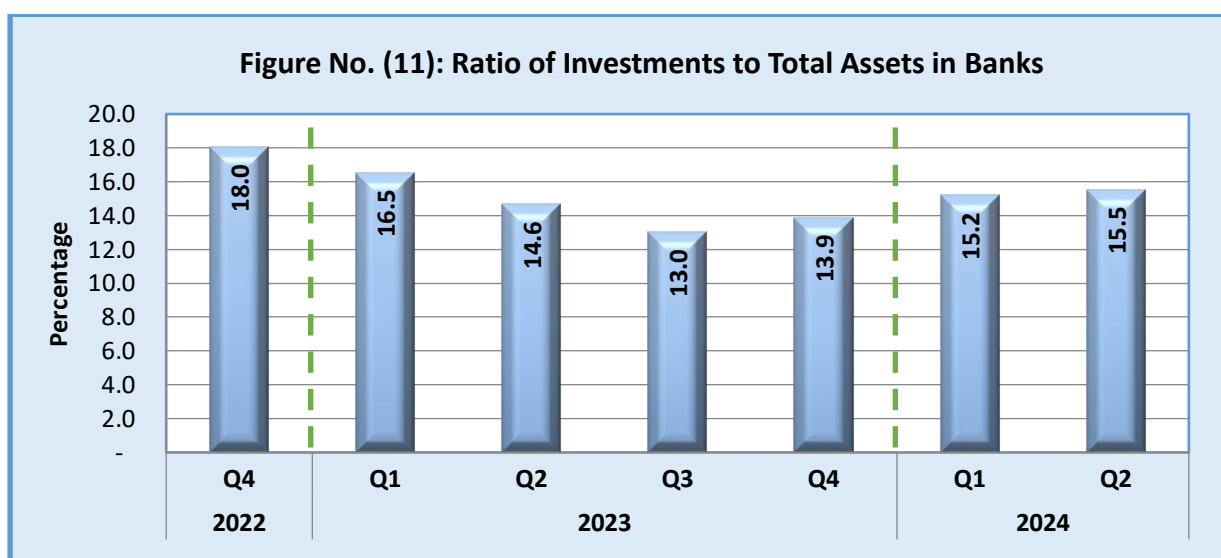
Source: Central Bank of Iraq, Statistics & Research Department, Monetary & Financial Statistics Division

* Forecast data for Q1 and Q2 of 2024.

5. Banks Investments to Total Assets:

This index is considered one of the most important indices as it shows the volume of actual investments within balance sheet of banks and highlights the importance of investments contribution in achieved bank's returns and increased profits, particularly if these investments boost economic sectors and are reflected in a positive way on real sector. The bank's capital and its available deposits within assets side of the bank's balance sheet have financed investments. Therefore, they are measured to total assets in order to know its volume with the bank. Figure No. (11) shows the decrease of investments volume to total assets in banks from (18.0%) during Q4 2022 to (13.9%) during the same quarter of 2023, this decrease was due to the decreased of investments in the state- owned Banks.

It was expected that the ratio of investments to total assets with state -owned banks for Q1 & Q2 of 2024 reached (15.2%) & (15.5%) respectively.

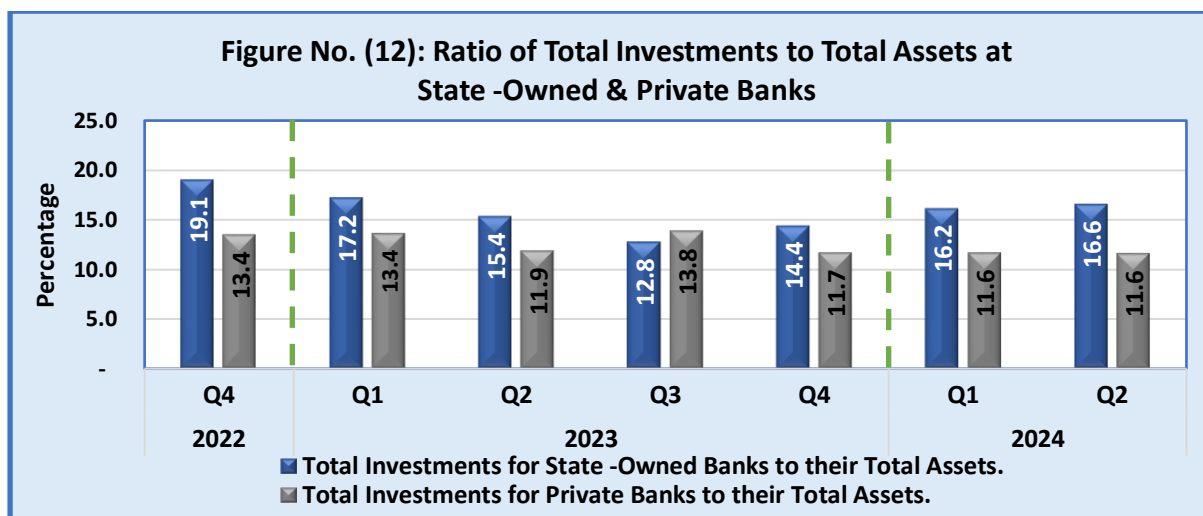


Source: Central Bank of Iraq, Statistics & Research Department, Monetary & Financial Statistics Division

* Forecast data for Q1 and Q2 of 2024.

In return to banks classification according to assets, it is noticed that the ratio of investments to assets volume at state-owned banks was higher than its counterpart in private banks. Figure No. (12) shows that the investment volume to assets at state –owned banks was decreased from (19.1%) during Q4 2022 to (14.4%) in the same quarter of 2023, as well as investments within private banks to total assets decreased from (13.4%) during Q4 2022 to (11.7%) in the same quarter of 2023. It is worth mentioning that the volume of investments at state –

owned & private banks constitute (82.0%) to total investment within banks during Q4 2023.



Source: Central Bank of Iraq, Statistics & Research Department, Monetary Financial Statistics Division

* Forecast data for Q1 and Q2 of 2024.

6. Money Multiplier:

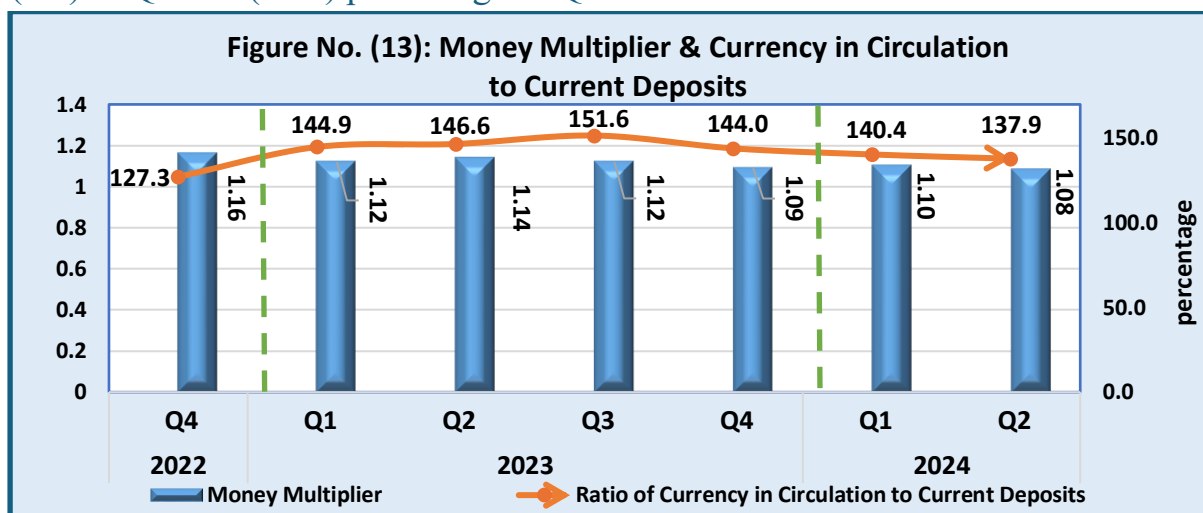
Money Multiplier recorded a decrease during Q4 2023 by(1.09) as it was (1.16) in the same quarter of 2022, due to the increase of excess reserves of banks at the central bank from IQD (48.4) trillion to IQD(49.0) trillion, by growth ratio (1.2%) in the same period, as well as the rise of cash ratio in circulation to current deposits in Q4 2023 to be (144%) after it was (127.3%) in the same quarter of 2022.

Money Multiplier:

The money multiplier is defined as the willingness and ability of banks to convert their deposits into credit. Consequently, it represents banking activity within the real sector. On one hand, it reflects the public's desire to turn to banks due to the services provided by banks and through which public trust is gained. On the other hand, it represents the bank's desire to grand credit to the public and the interest that accrues from such loan.

This reflects the conservative desire of banks to expand their financial activity with keeping a portion of their deposits with Central Bank of Iraq, as the total credit cash decreased in comparison to total deposits at private Banks to record (63.1%) after it was (74.5%) in the same period, this what effects on the decrease of Money Multiplier.

The expectations show that the percentage of Money Multiplier may record (1.1) in Q1 and (1.08) percentage in Q2 of 2024.

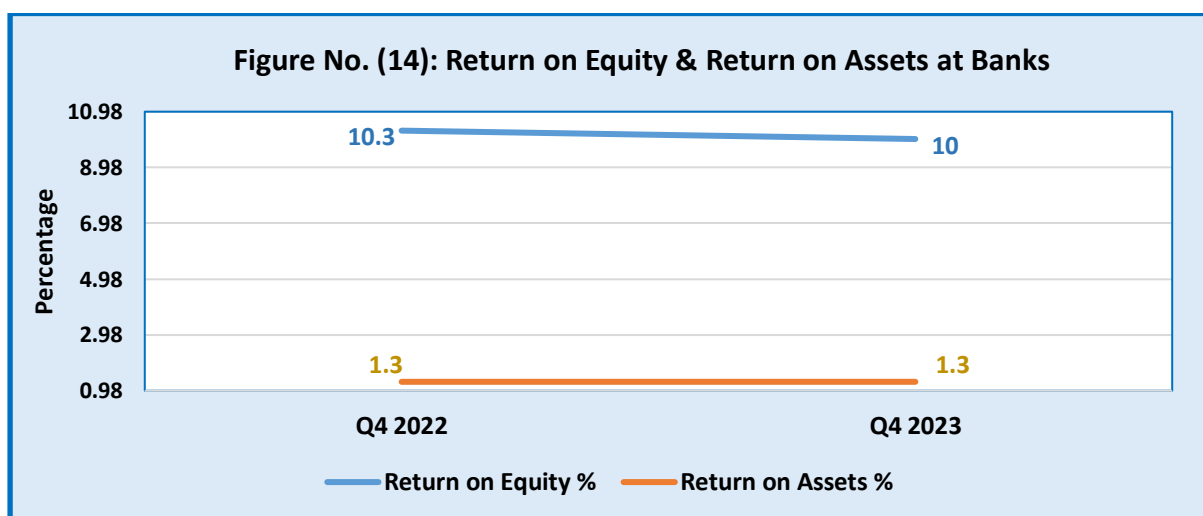


Source: Central Bank of Iraq, Statistics & Research Department, Estimates of Monetary & Financial Stability Division

* Forecast data for Q1 and Q2 of 2024.

7. Profitability of Banks:

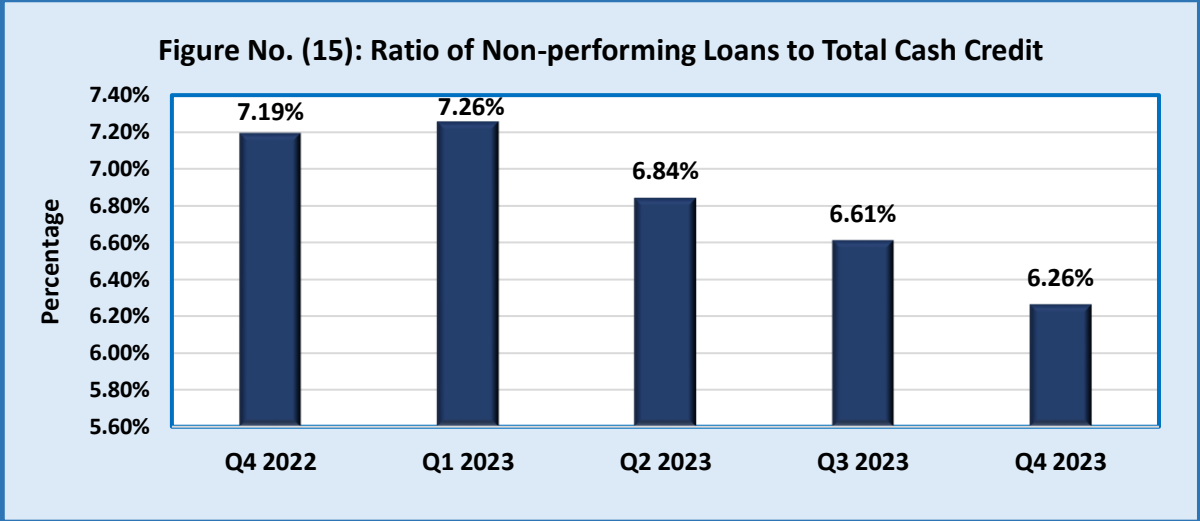
This index shows the profits or losses that may banks experience, figure No. (14) shows the return on equity and the return on assets of banks inside the financial sector, as we find a stability in the return ratio of assets due to consistency of growth in both assets & returns, and the decrease of return percentage on equity ratio due to growth of return on equity in percentage of (15%) compared to the growth of return in percentage of (10.2%), as the ratio of return on assets in Q4 2022 & 2023 in percentage of (1.3%), as the ratio of return on equity witnessed a slight decrease of (10.0%) in Q4 2023 after it was (10.3%) in Q4 2022.



Source: Central Bank of Iraq, Statistics & Research Department, Monetary & Financial Statistics Division.

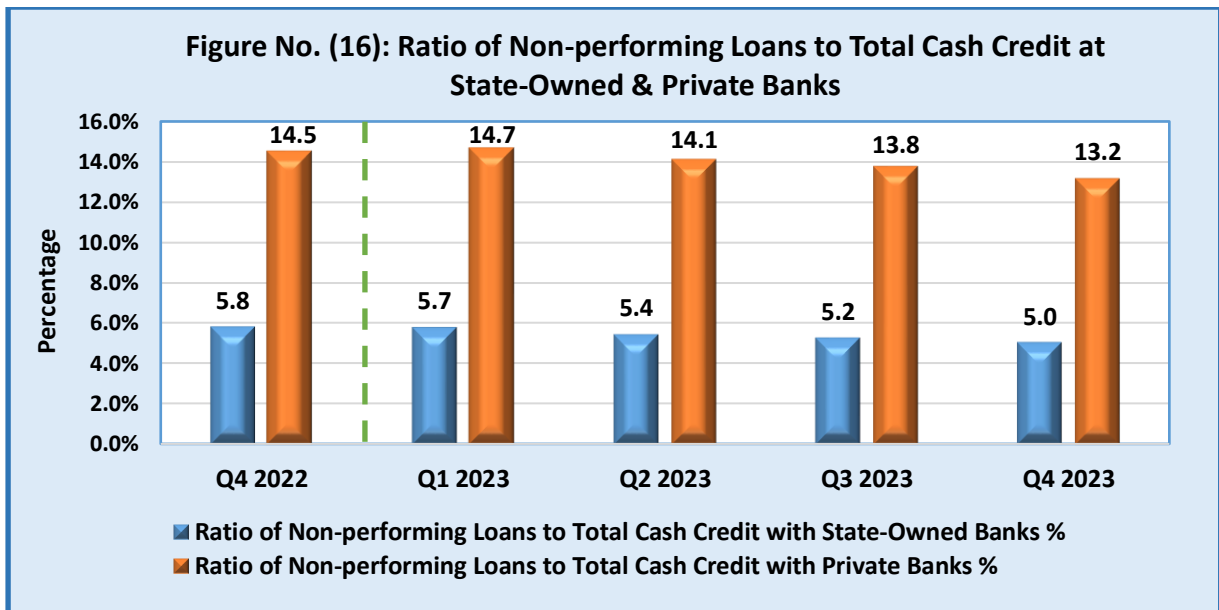
8. Non-Performing Loans to Total Cash Credit:

This index is measured by dividing non-performing loans to total cash credit. Figure No. (15) shows non-performing loans ratio to total cash credit in Q4 2023 that decreased to (6.26%) where it was (7.19%) in the same quarter of 2022, this decrease was due to the increase of granted credit, as the average of its growth reached to (14%), as well as obtaining some of non-performing loans, as its growth average decreased to (0.4%).



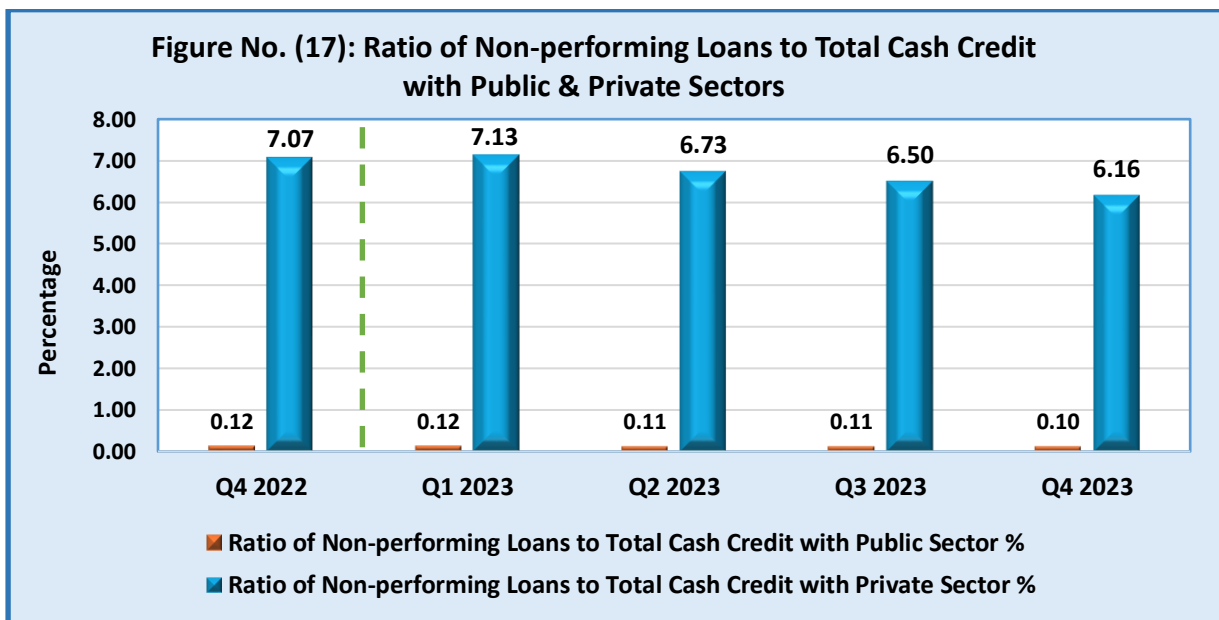
Source: Central Bank of Iraq, Statistical Website.

Considering banks' classification in terms of ownership, it is noted that the ratio of non-performing loans to total cash credit with private banks is higher than state-owned banks. Figure No. (16) shows the ratio of non-performing loans to total cash credit at private banks continues to decline to (13.2%) in Q4 of 2023, up from (14.5%) for the same quarter of 2022. Also, the allocated ratio of non-performing loans for private banks reached (83%) to their non-performing debts. As for state-owned banks, the ratio of non-performing loans to cash credit reached (5%) during Q4 2023, while the ratio of non-performing loans with state-owned banks to total non-performing debts reached (133%) during the same period.



Source: Central Bank of Iraq, Statistics & Research Department, Annual Statistical Bulletin.

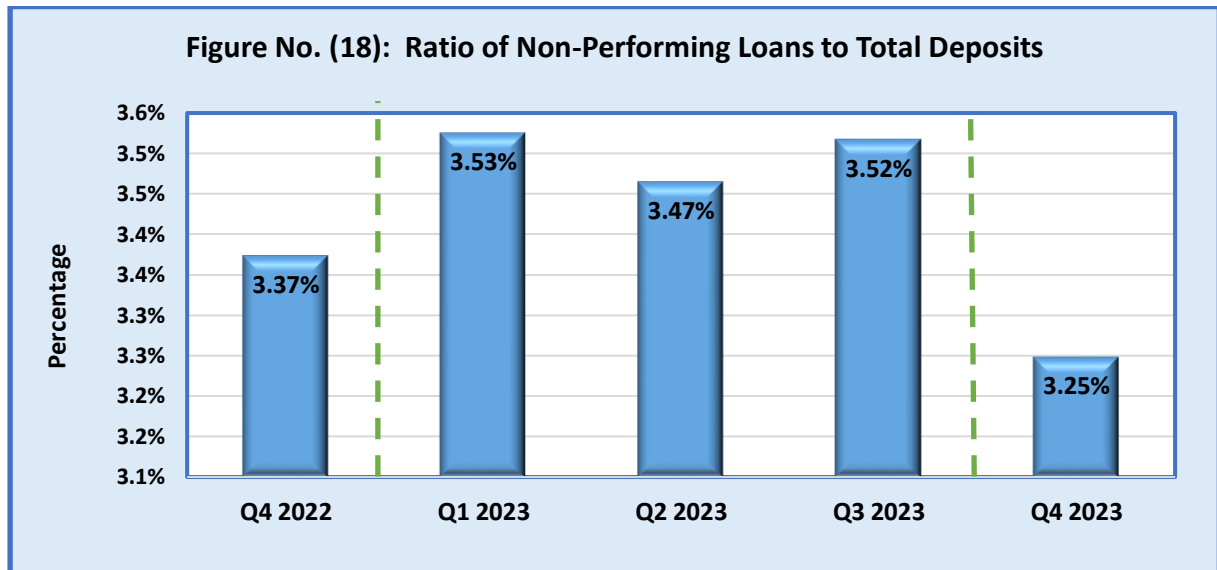
Concerning the non-performing loans for both private & public sectors, it was noted that the ratio of non-performing loans with private sector was higher than its counterpart with public sector, as the percentage reached with private sector (6.16%) during Q4 in 2023, while reached (0.10%) with public sector during the same period, figure No. (17) shows that.



Source: Central Bank of Iraq, Statistics & Research Department, Annual Statistical Bulletin.

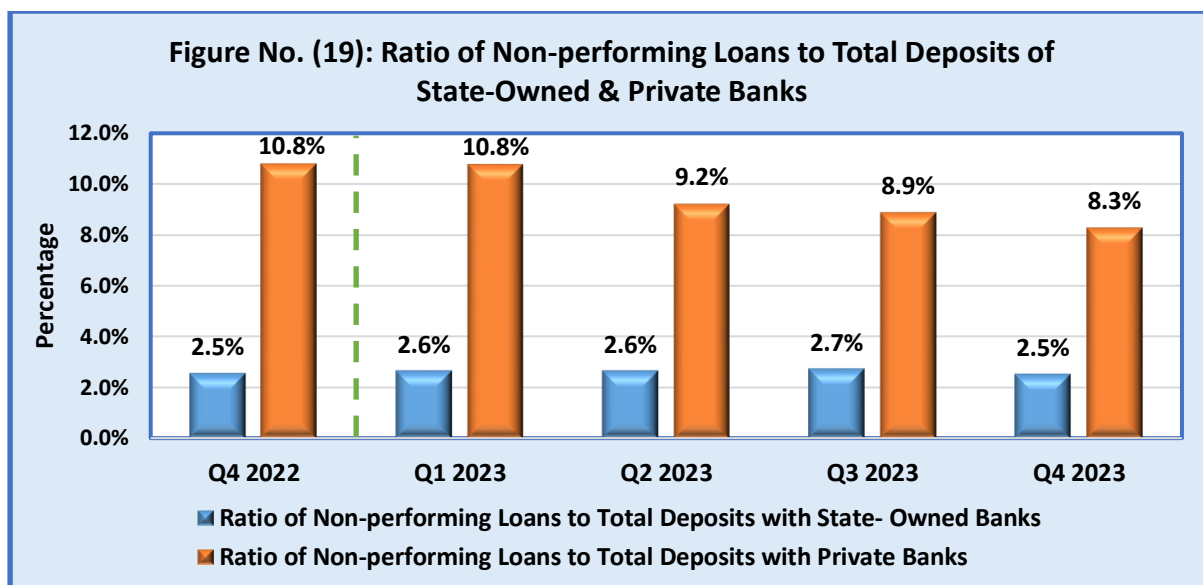
9. Non-performing Loans to Total Deposits:

This index is measured by dividing non-performing loans to total deposits with banks, figure no. (18) shows the ratio of non-performing loans to total deposits decreased to (3.25%) in Q4 2023, after it was (3.37%) in the same quarter in 2022, this index is good because the process of reducing non-performing loans enhanced depositors' confidence in the banking system, Thus, it enables banks to increase the granting of credit.



Source: Central Bank of Iraq, Statistical Website.

Returning to the classification of banks in terms of ownership, it could be found that there is a decrease in this ratio with state-owned banks. Figure (19) shows that the ratio of non-performing loans to total deposits of private banks continues to decline during the year. As it was decreased in Q4 2023 to (8.3%) after it was (10.8%) for the same quarter of 2022. While the percentage of state-owned banks reached (2.5%) in Q4 of 2022 and 2023. The difference between state-owned banks and private banks is attributed to the increase in deposits of state-owned banks, as a result of that the public tends to deposit their money at state-owned banks in a much larger percentage than at private banks.

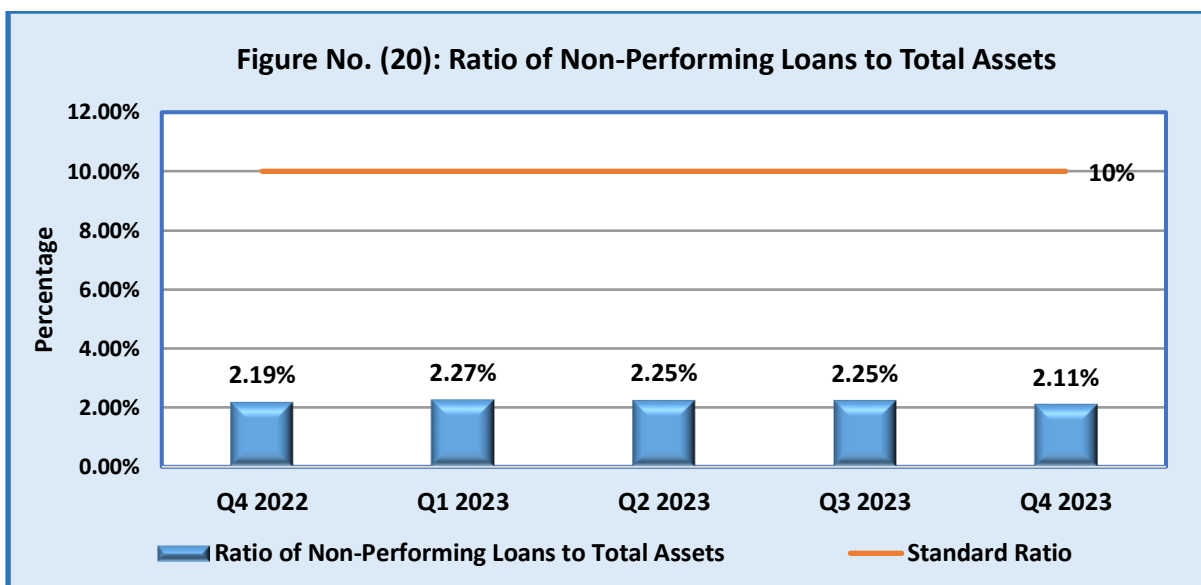


Source: Central Bank of Iraq, Statistics & Research Department, Annual Statistical Bulletin

10. Non-Performing Loans to Total Assets:

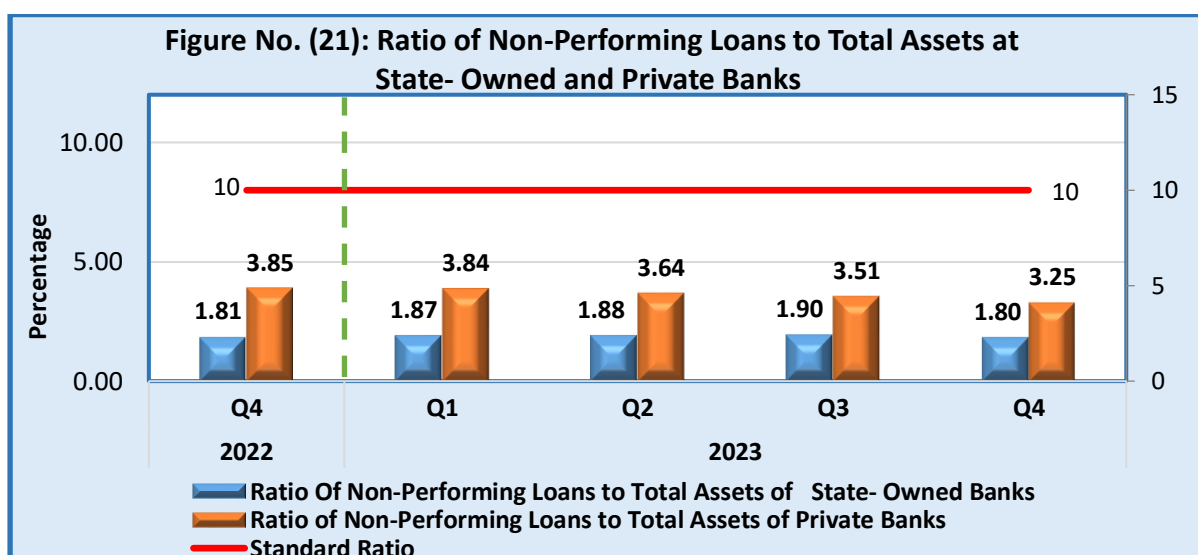
This index is measured by dividing non-performing loans to the total assets of banks, whereas the standard value for this ratio is (10%). Accordingly, when non-performing loans exceed the standard value of total assets, it portends a banking crisis¹. Figure No. (20) shows the ratio of non-performing loans to total assets of banks in Iraq. A slight decrease in this ratio is observed in Q4 of 2023, as it reached (2.11%) compared to (2.19%) for the same quarter of 2022. It should be noted that the ratio of non-performing loans to total assets did not exceed the ratio referred above, which represents as a positive index indicating that there is no possibility of a crisis affecting banks in the coming period.

⁽¹⁾ For more information, see, Central Bank of Iraq 2020, Early Warning Report for the Banking Sector, Issue Thirteen, p. 23.



Source: Central Bank of Iraq, Statistical Website.

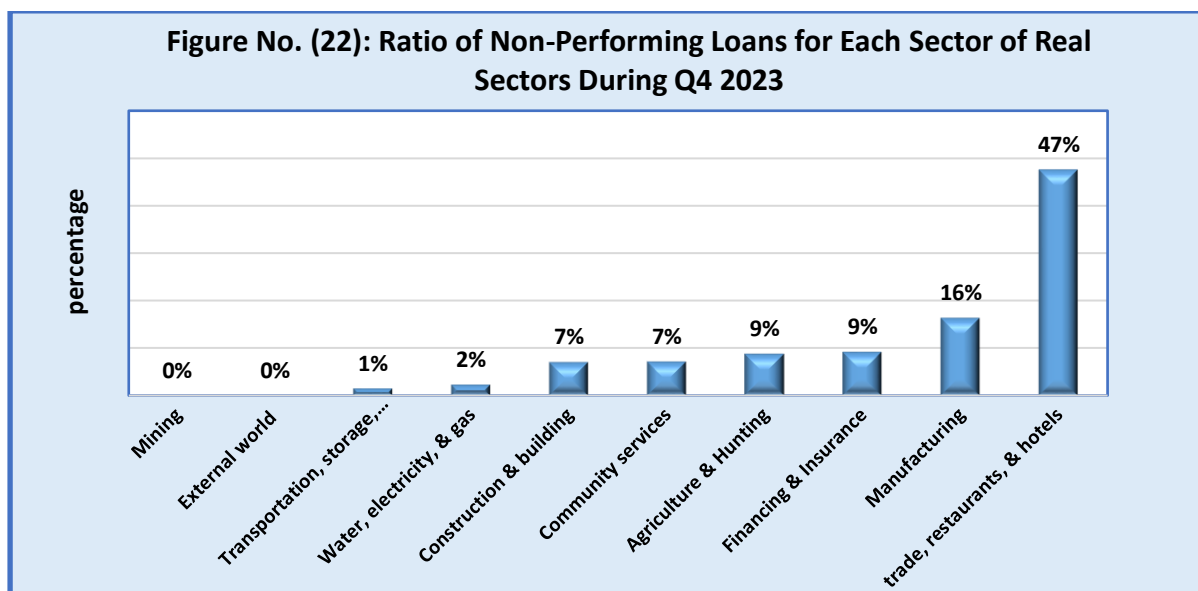
Returning to the classification of banks by ownership, it could be found that both private and state-owned banks did not exceed the percentage mentioned above. Figure No. (21) illustrates this situation, noting that this percentage is higher in private banks than their state-owned counterparts, as it reached (3.25%) in Q4 2023, while it reached (1.80%) at state-owned banks for the same period. This percentage does not raise concern regarding financial stability, since government banks account for a large percentage of the banking sector's loans.



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

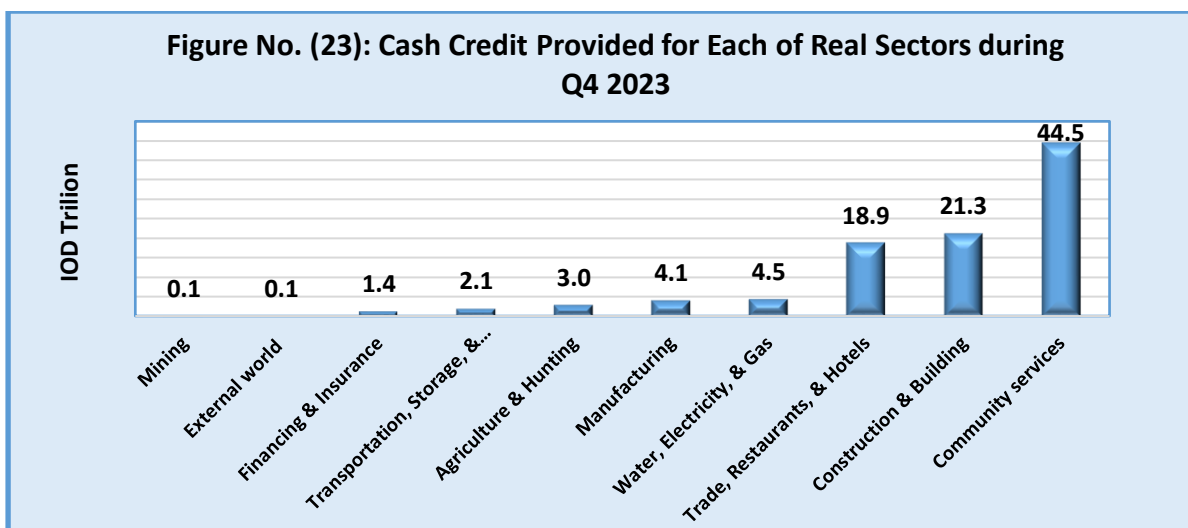
11. Sectoral Distribution of Non-Performing Loans:

This index shows the sectoral distribution of non-performing loans. Figure no. (22) shows that the trade, restaurants, and hotels sector recorded the largest percentage of non-performing loans, reaching (47%) during Q4 2024. It is followed by the manufacturing sector, with (16%) during the same period. Therefore, it is necessary for banks to be more cautious when granting credit for these two sectors, to avoid stumbling their activity and ensure the safety of depositors' funds. As well as there is a necessity to develop policies that enable these two sectors to recover and return to the correct growth path.



Source: Central Bank of Iraq/ Statistics and Research Department/ Monetary and Financial Statistics Division.

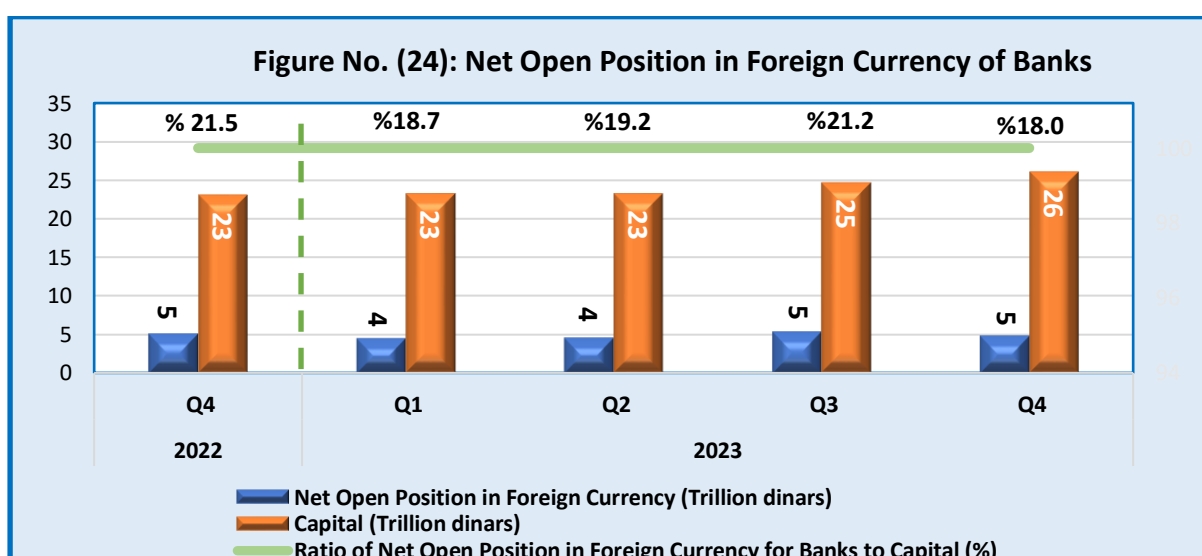
It is worth mentioning that the trade and restaurant sector does not have the largest percentage in the volume of credit granted for the real sector. Despite that, it has the largest percentage in the volume of non-performing loans. While the community services sector has the largest percentage of cash credit granted to the real sectors at a rate of (44.5%). It is followed by the construction and building sectors with a rate of (21.3%), as shown in figure (23).



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

12. Net Open Position in Foreign Currency for Banks:

This index measures the net foreign assets of banks, by calculating the difference between their foreign assets and foreign liabilities divided by capital. Subsequently, a decrease in this ratio means a decrease in the size of foreign assets of banks, and vice versa. The figure No. (24) shows a decrease in the index ratio of banks from (21.5%) in Q4 of 2022 to (18.0%) in the same quarter of 2023, as a result of a decrease in net foreign assets by (5%) with an increase in capital by (13%). This indicates an increase in capital by a greater percentage than the net open position in foreign currency.

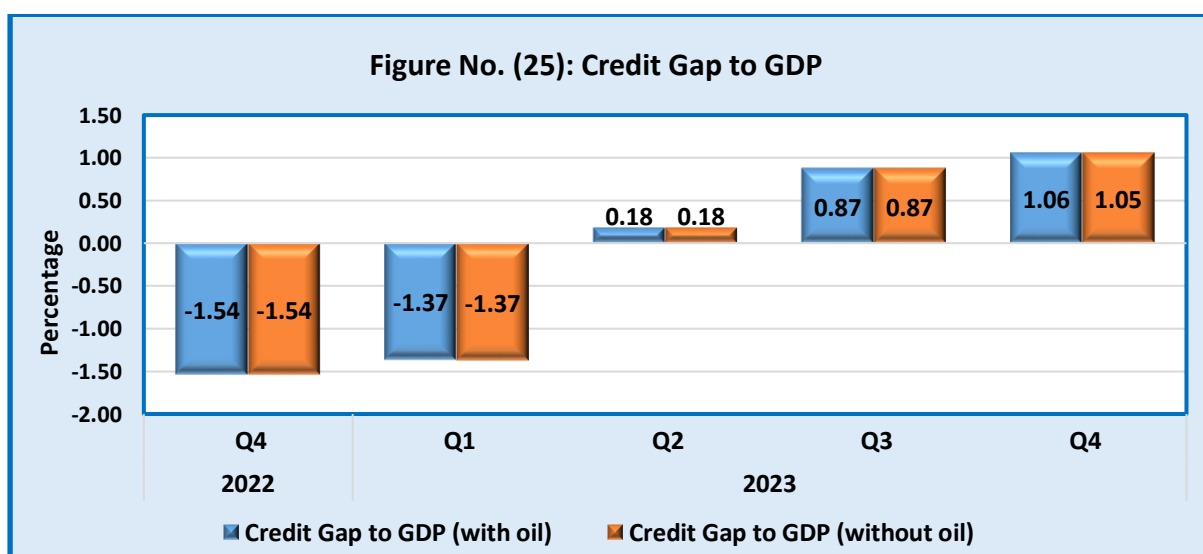


Source: Central Bank of Iraq, Statistics and Research Department, Monetary and Financial Statistics Division.

13. Credit Gap to GDP:

The credit gap is defined as the ratio of credit provided to the private sector within GDP at current prices, minus the general trend of the credit ratio (directed to the private sector) to the GDP¹. The standard value for this index ranges between (2.5% - 10%), as when the estimated percentage is closed to the standard value, the banks are required to create additional capital buffers that called buffers for cyclical fluctuations, due to the increase in credit growth at a rate greater than the increase in GDP growth. Figure No. (25) shows the credit gap to GDP with and without oil.

The gap without oil reached (1.05%) in Q4. As well as when measuring GDP data with oil, the gap reached (1.06%) in Q4. It was noted that the two gaps in Q4 of 2023 are less than the standard percentage, which means that it is possible to increase credit provided to the private sector without fear of disorder in the financial stability.



Source: Central Bank of Iraq, Estimates of Monetary and Financial Stability Division.

¹For more information on the method of calculating the output gap, see the Central Bank of Iraq, Early Warning Report, Issue 18, Q1 2020, p. 23.

Table No. (2): Indices for Analyzing Bank Performance			
Index name	Q4 2022	Q4 2023	Rate of change %
Bank Deposits to M2 (%)	51.3	47.7	-7.0
Cash in Circulation to M2 (%)	48.7	52.3	7.4
Total Cash Credit to Total Deposits (%)	46.9	51.9	10.7
Total Investment to Total Assets (%)	18.0	13.9	-22.8
Money Multiplier	1.16	1.09	-6.0
Currency in Circulation to Current Deposits (%)	127.3	144.0	13.1
Return on Equity (%)	10.3	10.0	-2.9
Return on Assets (%)	1.3	1.3	0.0
Non-performing Loans to Total Cash Credit (%)	7.19	6.26	-12.9
Non-Performing Loans to Total Deposits (%)	3.37	3.25	-3.6
Non-Performing Loans to Total Assets (%)	2.19	2.11	-3.7
Net Open Financial Position in Foreign Currency for Banks (%)	21.5	18.0	-16.3

The table was prepared based on the following data:

Central Bank of Iraq, Statistics and Research Department, Monetary and Financial Statistics Division.

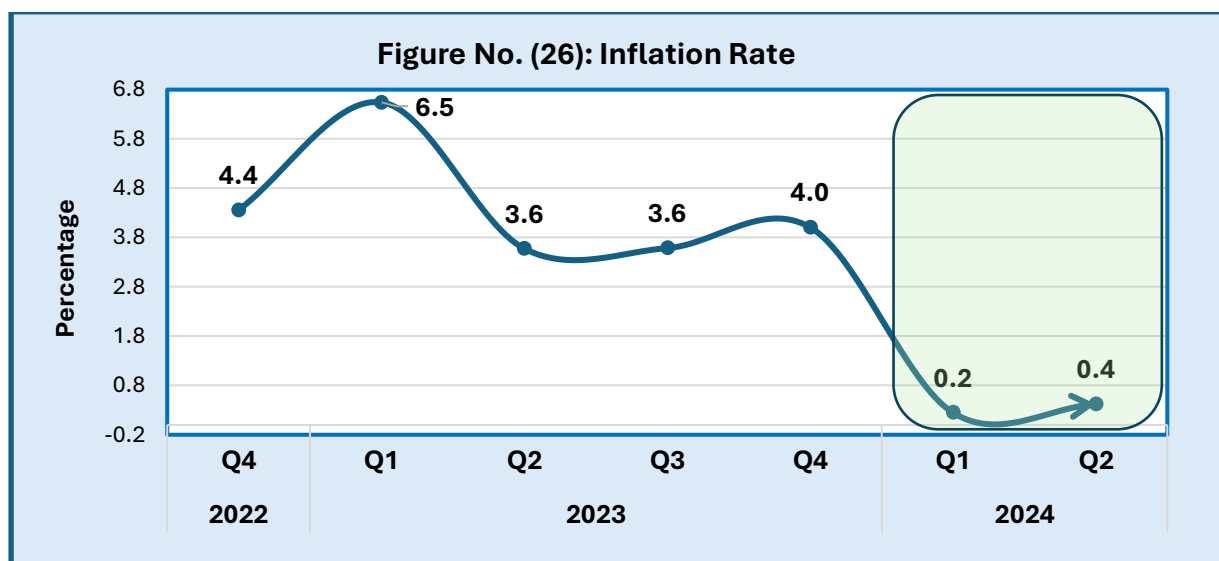
Chapter Three: Analysis of Macroeconomic Performance Indices

Macroeconomic variables are one of the most important variables affecting the financial system, and they also directly and indirectly affect the banking sector, so the early warning report analyzed the most important macroeconomic indices, including the inflation rate index, the internal public debt index, as well as calculating the implicit GDP deflator that shows the limits of production possibilities within the Iraqi economy, in addition to measuring (GDP - gap), and the following are the most important macroeconomic indices:

1. Inflation Rate:

Inflation is a quantitative measure that expresses the change in the general price level of goods and services during a specific period, as it is measured by calculating the change in the consumer price index (CPI). The inflation rate in Iraq recorded a slight decrease during Q4 2023 to record (4%) compared to the same quarter of 2022, as the percentage was (4.4%), due to the increase in foreign transfers for the purpose of import after the improvement in the windows operation, this led to a decrease in the prices of imported goods and services, which reflected positively on the inflation rate, in addition to the continuous support for most foodstuffs and oil derivatives.

The inflation rate is expected to record (0.2) and (0.4) respectively for Q1 and Q2 of 2024, and the decrease in inflation rates is due to the mechanism of changing the method of calculation through geometric moving averages, in addition to changing the base year in calculating the price index from 2012 to 2022, as announced by the Iraqi Ministry of Planning.



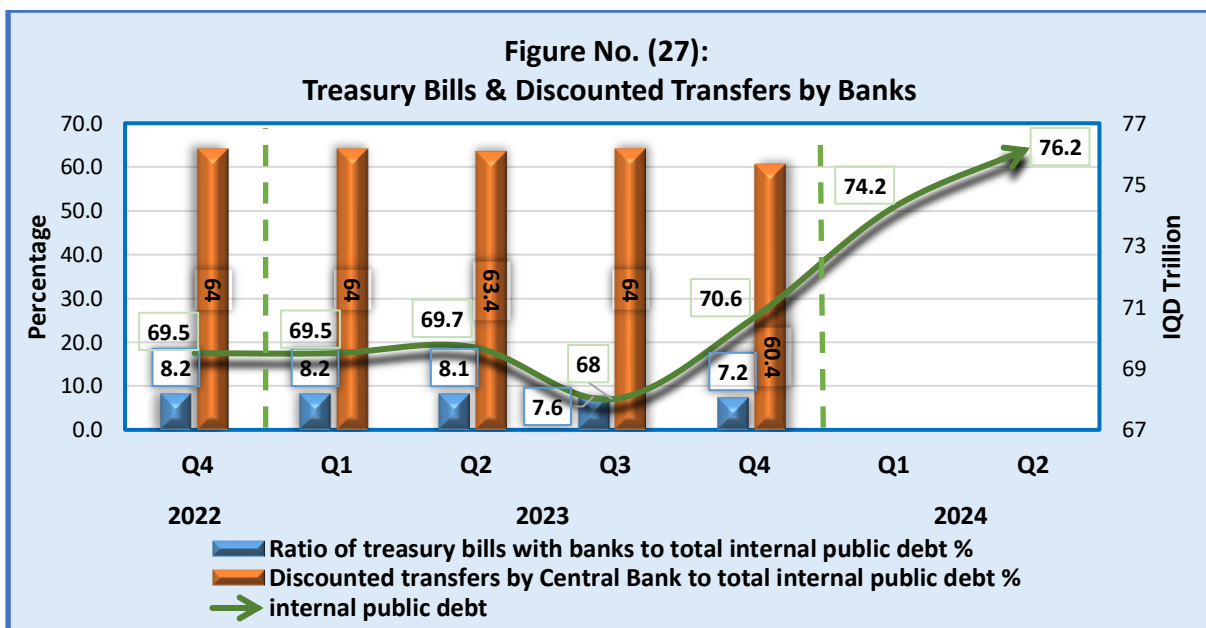
Source: Central Bank of Iraq, Basic Financial Data.

* Forecast data for Q1 and Q2 of 2024.

2. Internal Debt Growth Rate

This index reflects the government's obligations towards banks and the Central Bank, and figure No. (27) shows that the ratio of treasury bills with banks to total internal public debt decreased to (7.2%) in Q4 2023 from (8.2%) in the same quarter of 2022, as for discounted transfers by Central Bank to the internal public debt which decreased to (60.4%) in Q4 2023 after it was (64%) in the same quarter of 2022, and on the other hand, the total internal public debt increased to reach IQD (70.6) trillion in Q4 2023 from IQD (69.5) trillion in the same quarter of 2022, as a result of the increase in government borrowing from state-owned banks by IQD (3) trillion, during Q4 2023.

The internal public debt is expected to increase by (5%) and (3%) to reach IQD (74.2) trillion and IQD (76.2) trillion respectively for Q1 and Q2 of 2024.

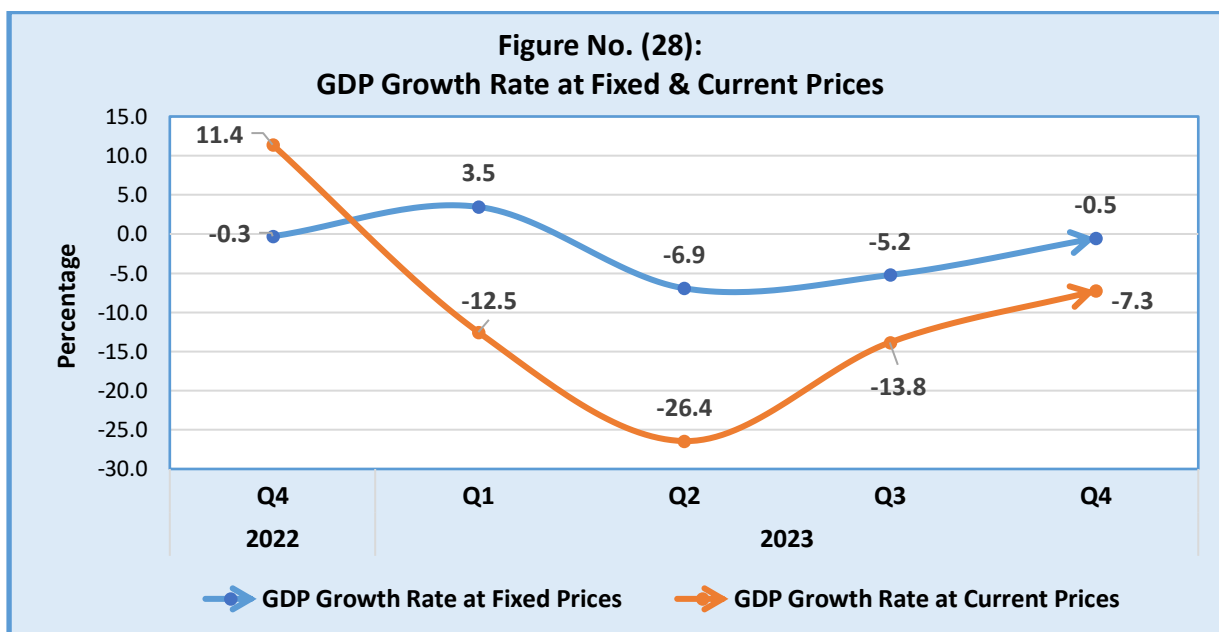


Source: Central Bank of Iraq, Statistics and Research Department.

* Forecast data for Q1 and Q2 of 2024.

3. GDP growth:

GDP represents a measure of a country's economic performance, as it expresses the level of economic activities during a certain period of time, as GDP at current prices in Iraq recorded a decrease during Q4 of 2023 by (7.3%) to reach IQD (89.3) trillion compared to the same quarter of 2022 which amounted to IQD (96.3) trillion, due to the decrease in the output of crude oil activity, as it recorded an amount of IQD (38.9) trillion, after it was IQD (51.9) trillion, and the output of mining and quarrying activity decreased to record IQD (39.4) trillion, after it was IQD (52.2) trillion during the same period, and this affected the growth of GDP at current prices negatively despite the high production of some other activities, as shown in Figure No. (28).

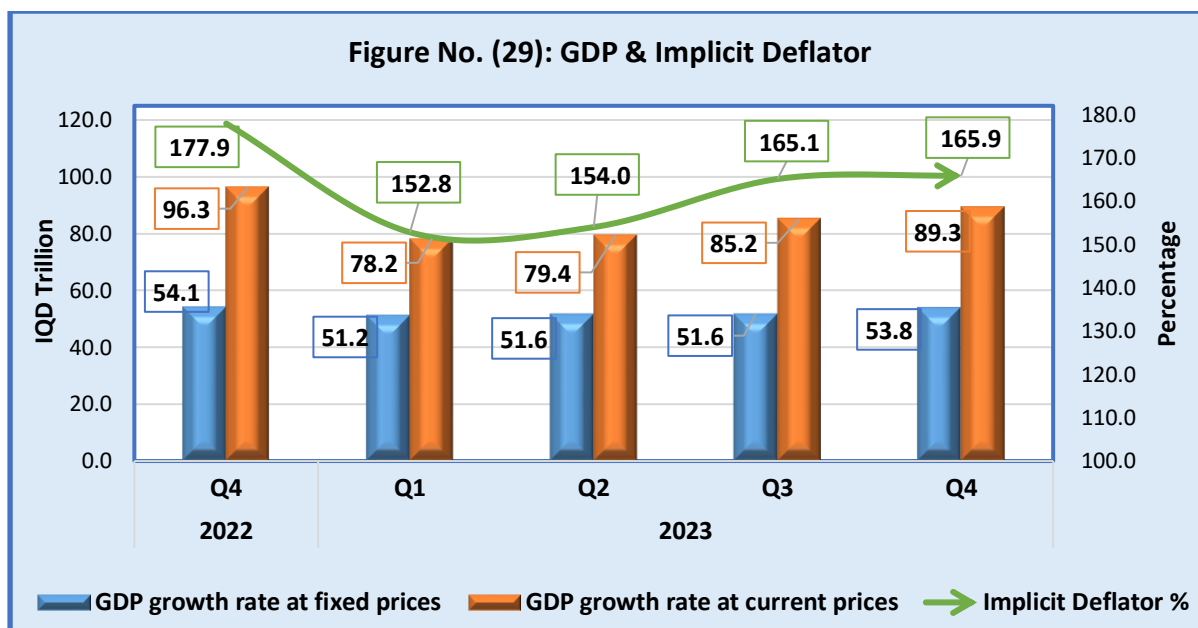


Source: Ministry of Planning, Central Statistical Organization, GDP data.

4. Implicit Prices Deflator:

The implicit deflator refers to the extent to which the value of output is affected when prices change, and can be measured by dividing the nominal GDP by the real¹ GDP, as the increase in the value of the deflator means that there is an increase in the general level of prices, and Figure No. (29) shows a decrease in the value of the implicit deflator to (165.9%) in Q4 of 2023 after it was (177.9%) in the same quarter of 2022, due to a decline in nominal GDP.

¹ For more information about the deflator see the Central Bank of Iraq, Early Warning Report, Issue Nineteen, p. 27.

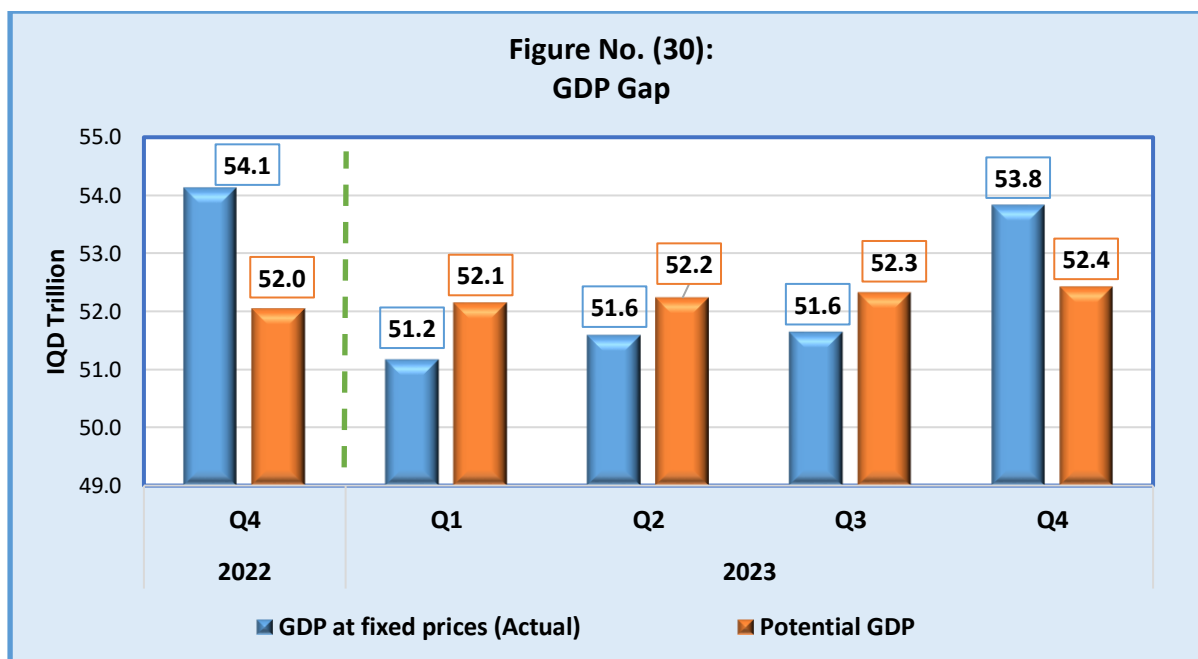


Source: Central Bank of Iraq, Statistical Website.

5. GDP Gap¹

The gap expresses the difference between the level of potential GDP and the actual GDP, when the output gap is negative, the actual GDP is higher than potential GDP, that is, the economy works beyond its capacity, and this likely will cause inflation, but if the actual GDP is less than potential GDP, the output gap is positive, this means, there is a recession in economic activity, and then there are not enough job opportunities for all those who willing to work, and Figure No. (30) shows the value of the potential GDP at IQD (52.4) trillion in Q4 2023, and that the value of the actual GDP increased to reach IQD (53.8) trillion for the same quarter of 2023, meaning that production within the economy is greater than the available capabilities.

¹It measures the difference between potential GDP and actual GDP as a percentage (potential-actual product).

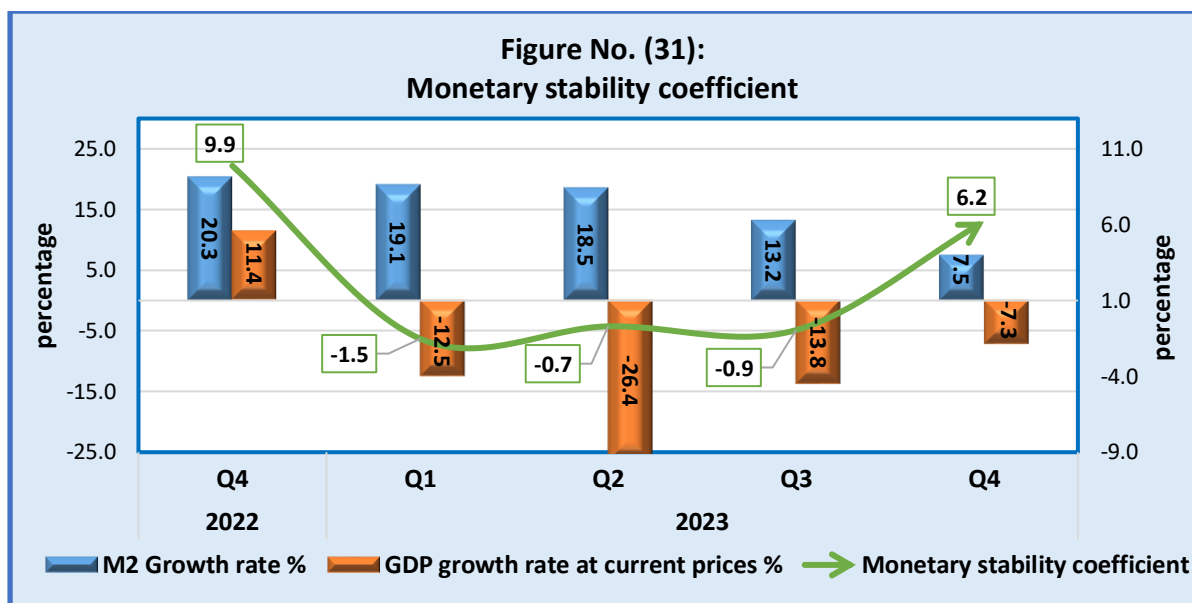


Source: Central Bank of Iraq, Estimates of Monetary & Financial Stability Division according to data from the Ministry of Planning, Central Statistical Organization.

6. Monetary stability coefficient:

The monetary stability coefficient index shows the extent of inflationary pressures faced by a country's economy, and can be reached by dividing the growth on (M2) to growth in GDP at current prices, as monetary stability is achieved when the value of this index is equal to one while the economy faces inflationary pressures (a rise in the general level of prices) when its value is greater than one, while the economy suffers deflation when its value is smaller than one.

Figure No. (31) can be used to illustrate the changes that occurred in the value of this index, as its value decreased to (6.2) in Q4 2023 from (9.9) in the same quarter of 2022, and this decrease came as a result of a decrease in the growth rate of (M2) to reach (7.5%) in Q4 2023 after it was (20.3%) in the same quarter of 2022, in addition to the decrease in the nominal GDP growth rate during the same period to reach (7.3), meaning that the inflationary pressures that the economy suffered from decreased, and this is confirmed by the inflation rate, which in turn decreased from (4.4%) to (4%) during the same period.



Source: Central Bank of Iraq, Statistics and Research Department

**Table No. (3):
Macroeconomic Performance Indices**

Index name	Q4 2022	Q4 2023	Rate of change %
Inflation rate %	4.4	4.0	-9.1
Ratio of treasury bills with banks to total internal debt %	8,2	7.2	-12.2
Ratio of discounted transfers by central bank to total internal debt %	64	60.4	-5.6
Ratio of change in GDP at current prices Amount (IQD Trillion)	96.3	89.3	- 7.3
Ratio of change in GDP at fixed prices Amount (IQD Trillion)	54.1	53.4	- 1.3
Implicit deflator for GDP	177.9	165.9	- 6.7
GDP gap amount (IQD Trillion)	- 2.1	- 1.5	40
Monetary stability coefficient	9.9	6.2	- 37.4

Source:

-Central Bank of Iraq, Statistics and Research Department.

- Ministry of Planning, Central Statistical Organization, GDP Data.

