

# Early Warning Report for Iraq's Banking Sector

**The Second Quarter  
2022**

**Twentieth  
Edition**

**Early Warning Report for the Banking Sector**  
**(The Second Quarter – 2022)**

**Central Bank of Iraq**

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**Early warning:** It is an indicator that gives a clear picture of the reality and extent of potential risks that the financial sector in particular and the economy in general may be exposed to, and thus enables decision makers to take the necessary measures and formulate policies in a timely manner to avoid a financial crisis. You can quote from the report according to the following format: Central Bank of Iraq, Early Warning Report for the second quarter of 2022, Issue 20, Baghdad, 2022.

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## Introduction

The Early Warning Indicators Report is one of the most important direct control means in forecasting, through the indicators it contains that are capable of predicting imminent and potential crises in general even if they did not Materialized, as well as measuring potential deviations that may affect the banking sector and the variables affecting it.

The first chapter of the early warning report included the analysis of currency value stability indicators through the Exchange Market Pressure Index (EMPI), which witnessed during the second quarter of 2022 stability within the upper and lower standard limits, as the stability of this indicator came as a result of the success of the policies of the Central Bank, which worked to maintain the stability of the value of the Iraqi dinar against the dollar, while the ratio of foreign reserves to broad money supply ( $M_2$ ) rose to reach (%72.2) in the second quarter 2022 compared to the same quarter of the previous year, which amounted to (%65.8), which is greater than the standard percentage (%50), and the period of covering foreign reserves to imports decreased to reach (31) months during the second quarter 2022 compared to the same quarter of the previous year, in which the period reached (33) months, due to the significant increase in the value of imports as a result of the rise in prices globally, and the increase in the volume of imports in general.

As for the second chapter, it included the analysis of banks' performance indicators, the ratio of total cash credit to total deposits reached (%54.1) in the second quarter of 2022, which did not exceed the standard ratio set by the Central Bank (%75), and the ratio of the cash multiplier in the second quarter of 2022 witnessed a decrease to reach (%1.27) after it was (%1.33) for the same quarter of 2021, also there was a decrease in the ratio of currency in trading to current deposits, as it reached in the second quarter of 2022 (%143.6) after being (%148.2) in the same quarter of 2021, as for the return on assets and return on equity indicators, it turns out that there is an increase in the return on assets and return on equity, as the return on assets increased in the second quarter of 2022 to (%0.46) from (%0.44) for the same quarter of 2021, while the return on equity ratio also increased from (%3.72) in the second quarter of 2021 to (%4.4) for the same quarter of 2022.

The third chapter, analyzed of some macroeconomic indicators that have an impact on the Iraqi banking system, when we return to consumer prices, we find that they recorded an increase during the month of June of 2022 to reach (117.2%) compared to the month of May of the same year, which recorded (116.4%). ), that is, by a change of (0.7%), representing the monthly inflation rate, and when comparing the general index for the year 2022 for the month of June, we find that it reached (117.2%) after it being (111.1%) in the month of June 2021, i.e. an increase of ( 5.5%), which represents annual inflation, while the general budget of the state achieved a surplus in the second quarter of 2022, amounting to (24%) to gross domestic product, as the total surplus in the budget

amounted to more than (26.445) trillion dinars, as for transfers with commercial banks to the total public debt, it decreased from (9%) during the second quarter of 2021 to (7.9%) during the same quarter of 2022, in other words a decrease in the intensity of competition between the public sector and the private sector in obtaining credit, Gross domestic product at current prices in Iraq showed a positive growth during the quarter for the second quarter of 2022, at a rate of (21.3%), and an amount of (110) trillion dinars, compared to the first quarter of 2022, which amounted to (90.6) trillion dinars.



## Chapter I

### Analysis of indicators of currency value stability

The analysis of indicators of the stability of the value of the currency is done by measuring the index of foreign exchange rate market pressure, which is the most important indicators that monitor changes in the value of the domestic currency, and the index of the adequacy of foreign reserves relative to  $M_2$  and the ratio of covering foreign reserves to imports, as well as measuring the rates of change in interest rates, and these indicators were selected to suit the nature of the Iraqi economy.

#### 1. Foreign Exchange Market Pressure Index ( EMPI )<sup>1</sup>

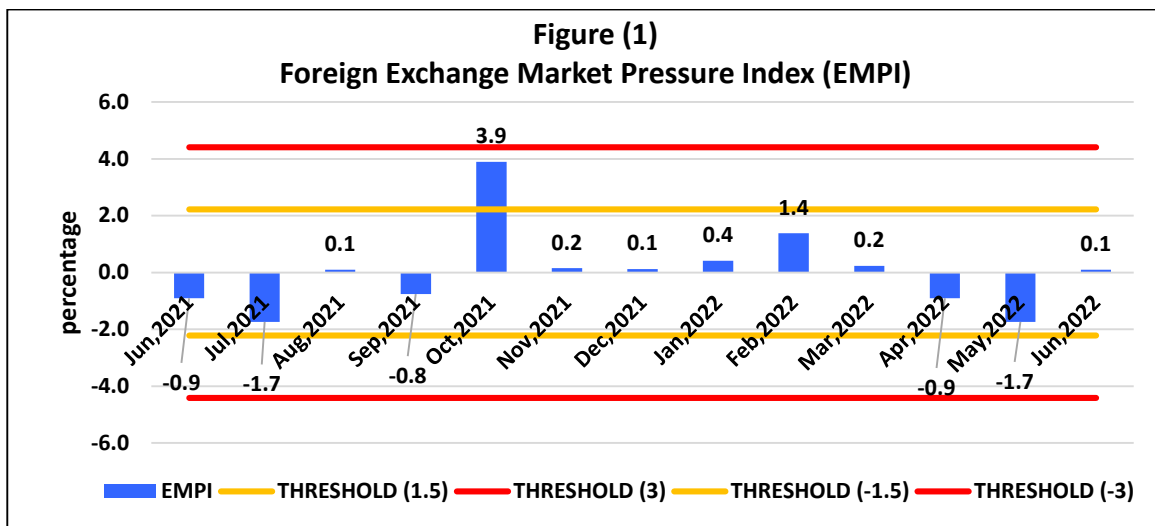
This indicator is considered one of the important indicators that monitor changes in the value of the local currency and the extent to which it is affected by the decisions of the monetary authority, and it gives the ability to decision-makers to know the effects of the decision taken regarding the domestic currency, and therefore this indicator measures the level of foreign exchange market pressure on the domestic currency, by comparing it with the standard values, as the rise in the value of the foreign exchange market pressure index (EMPI) at a level higher than the standard value (Threshold) explains the decrease in the value of the domestic currency against the US dollar in the market, as for approaching the value of this indicator to zero means that there is stability in the value of the domestic currency, and the negative value means the rise in the value of the domestic currency against the US dollar in the market, and the pressure of the foreign market is calculated by introducing net reserves with the monetary basis as two basic indicators in the exchange rate, because the exchange rate is one of the most important variables that have a direct impact on the Iraqi economy, It is noted from Figure (1) that the Exchange Market Pressure Index (EMPI) remained during the second quarter of 2022 within the upper and lower standard limits, as the stability of this indicator came as a result of the success of the policies of the Central Bank, which worked to maintain the stability of the value of the Iraqi dinar against the dollar, as the value of the foreign exchange market pressure index was recorded at (0.1) at the end of June 2022 in comparison, which is within the limits of the index.

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<sup>1</sup> For more see:

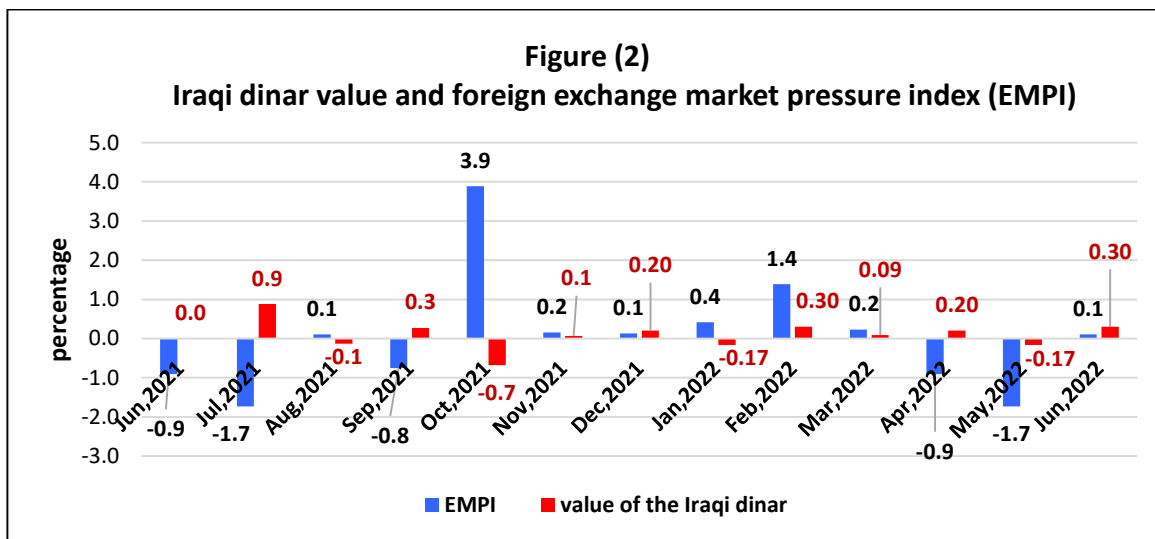
Central Bank of Iraq, Early Warning Report 2020, Issue 14, p3.





Source: Central Bank of Iraq, Estimates of the Monetary and Financial Stability Department 2022

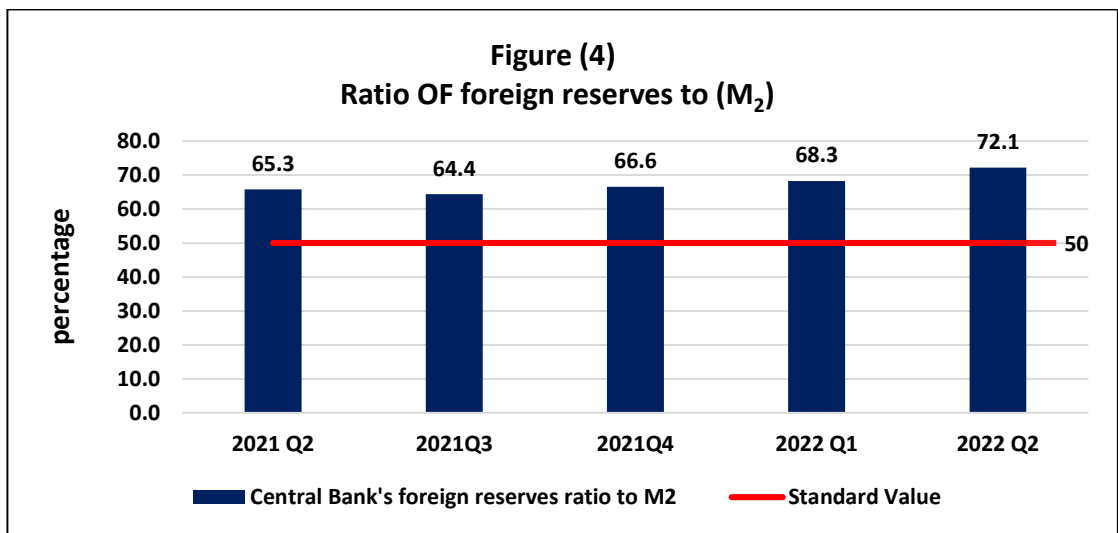
While Figure (2) shows the relationship between the exchange market pressure index and the Iraqi dinar value index, as the value of the dinar rose against the dollar from (%-0.17) at the end of May 2022 to (%0.30) at the end of June 2022 with an increase in the value of EMPI during the same period from (%-1.7) to (0.1), which shows the amount of pressure that the Central Bank was subjected to to maintain the value of the currency by sterilizing the currency within the market, which maintained stability in the rate of change in the value of the value of Currency during the second quarter of 2022.



Source: Central Bank of Iraq, Monetary and Financial Stability Section Estimates 2022.

As for the value of the dinar, it is noted that there is a gap between the exchange rate of the traded market and the exchange rate of the currency selling window, and Figure (3) shows that the gap between the market exchange price and the official exchange rate of the Iraqi dinar decreased to (19) dinars in the

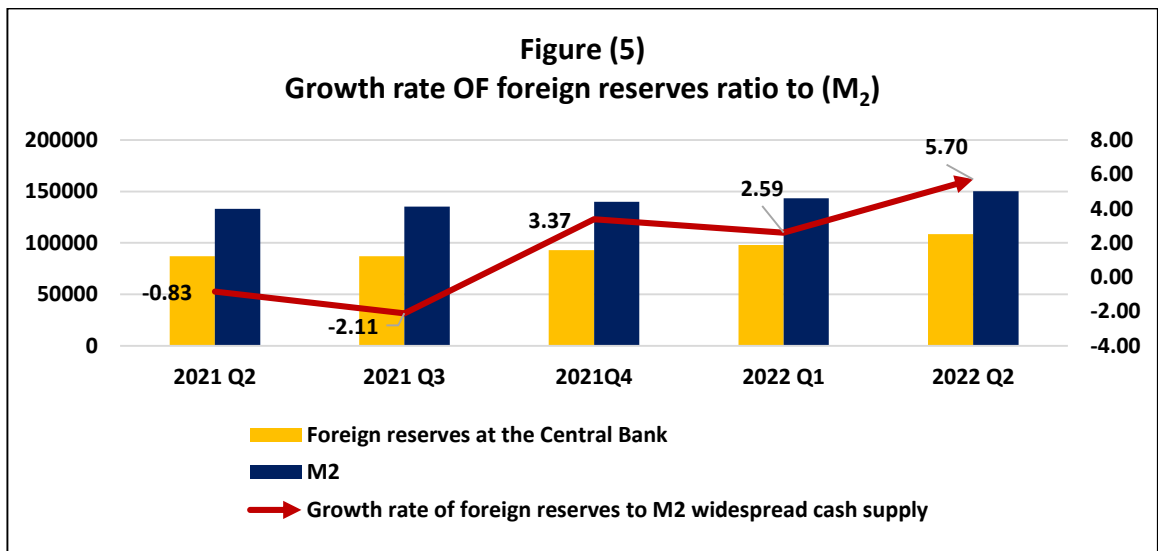




Source: Central Bank of Iraq, Statistical and Economic Website.

**B. Growth rate of the ratio of foreign reserves to broad money supply (M<sub>2</sub>)**

The ratio of foreign reserve growth to broad money supply (M<sub>2</sub>) witnessed an increase during the second quarter of 2022 to reach (%5.70) after it was (%-0.83) in the same quarter of the previous year and as shown in Figure (5) due to the increase in the volume of foreign reserves with a growth rate greater than the broad money supply (M<sub>2</sub>), as the broad money supply (M<sub>2</sub>) recorded an increase to reach (%12.8) in the second quarter of 2022 compared to the same quarter of the previous year, while foreign reserves recorded A growth rate of (%24.6) during the same period.

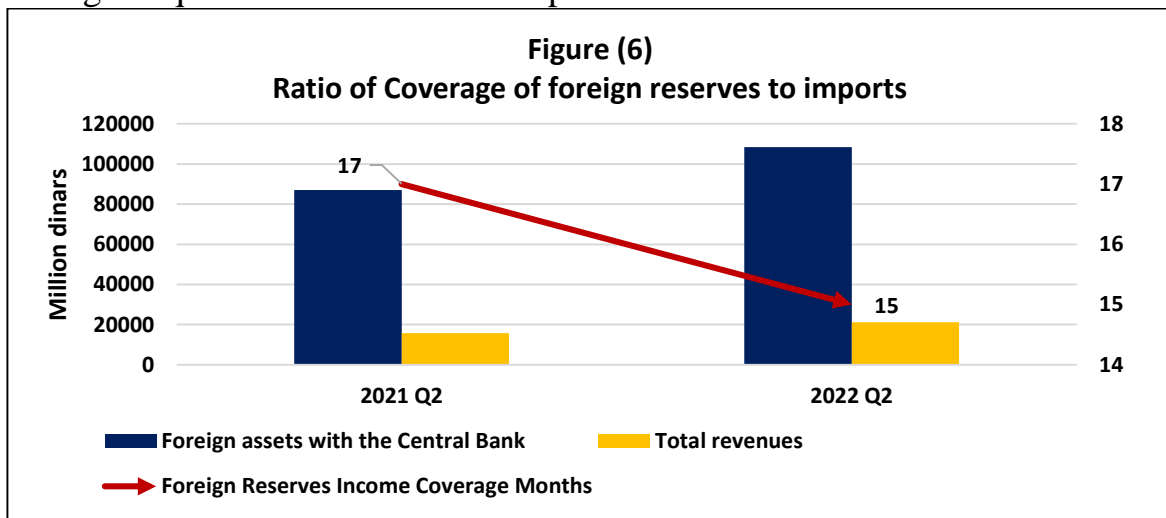


Source: Central Bank of Iraq, Statistical and Economic Website.

**C. Index coverage of foreign reserves to imports**

Iraq is considered one of the unilateral countries by relying on imports to meet most of its domestic needs, therefore foreign reserves are important in order to

cover these imports needed by the domestic economy, so this indicator measures the ratio of foreign reserves to imports assuming that there are no revenues or additions of foreign currency during the period, and this ratio may vary from one country to another according to its economic situation, and it has been estimated in some countries that the amount of reserve coverage Foreign imports between 4 or 5 months, but in the case of Iraq, it was estimated at a period of 6 months, and Figure (6) shows the decrease in the period of covering foreign reserves to imports to reach (15) months during the second quarter 2022 compared to the same quarter of the previous year, in which the period reached (17) months, and this is due to the significant increase in the value of imports as a result of the rise in prices globally, and the increase in the volume of imports in general, as the growth rate in the value of imports reached (%34) during the quarter Second 2022 compared to the same semester 2021.



Source: Central Bank of Iraq Statistical and Economic Website.

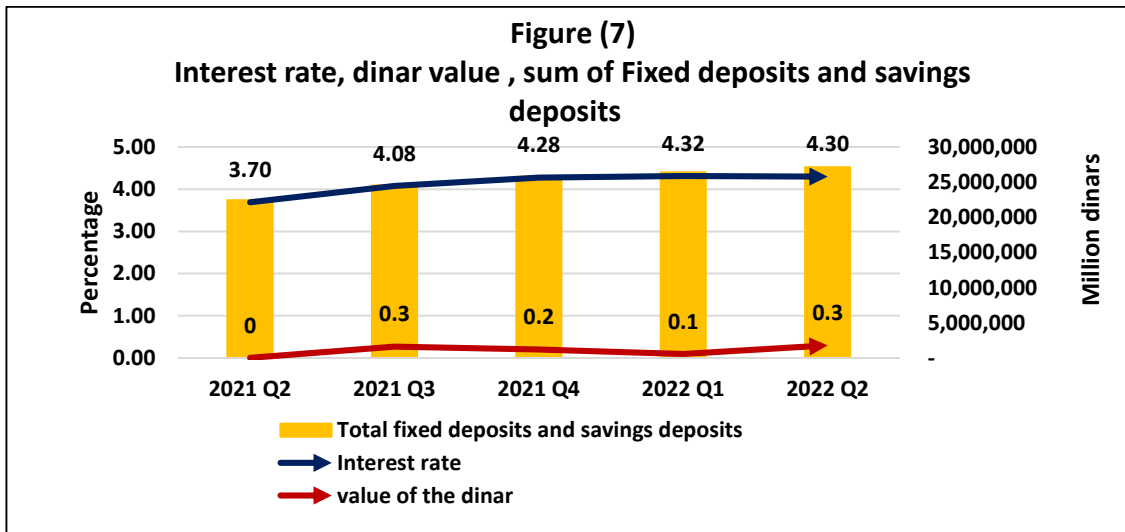
### 3. Change in interest rates

This indicator measures changes in interest rates and their impact on the value of the currency and long-term deposits, as interest rates are the main engine of economic activity in any country, and are also one of the variables that have a significant impact on the value of the domestic currency.

#### A. Short-term interest rates on deposits

This indicator shows the impact of the short-term interest rate on the volume of deposits and the value of the domestic currency, as short-term interest rates express the rate by which short-term borrowing is implemented, or the rate at which short-term government papers are issued or traded in the market, which is one of the tools that the monetary authority can use to implement its desired trends according to the economic situation that the country is going through, as it is noted from Figure (7) that there is An increase in the short-term interest rate from (%3.70) in the second quarter of 2021 to (%4.30) in the same quarter of 2022, and that there is an increase in long-term deposits, as it rose to (27.1) trillion dinars in the second quarter of 2022 compared to the same quarter of the

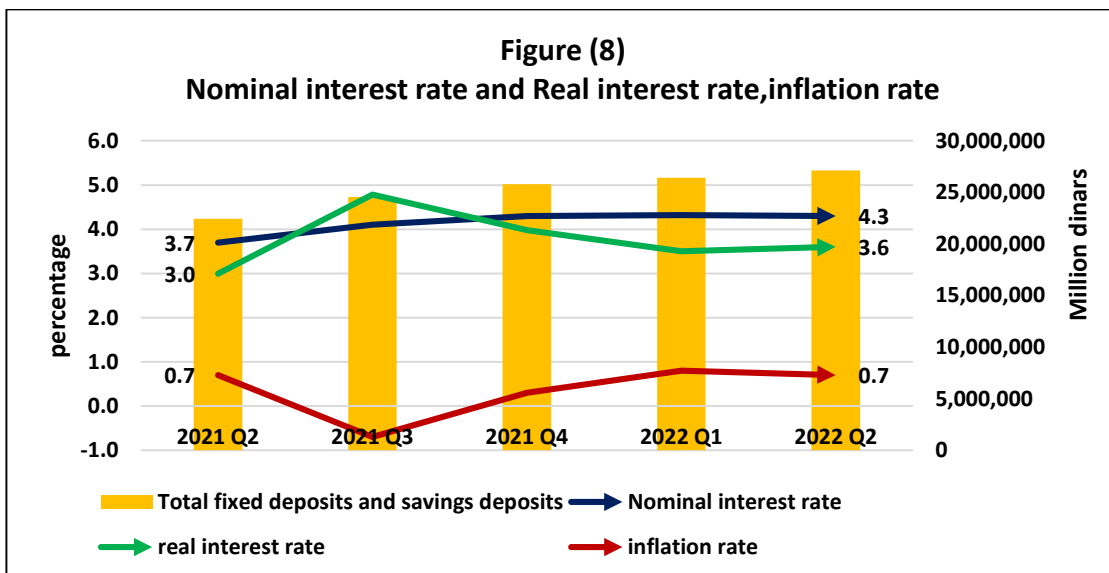
previous year, which amounted to (22.4) trillion dinars, and the figure also shows that there is a change in the value of the Iraqi dinar for the same period as a result of changes in economic conditions and not due to changes in interest rates.



Source: Central Bank of Iraq, Statistical and Economic Website.

### B. Real interest rate

The real interest rate expresses the difference between the nominal interest rate and the inflation rate, and Figure (8) shows the nominal and real interest rate and the inflation rate, and it was noted that there was an increase in the real interest rate from (%3) in the second quarter of 2021 to (%3.6) compared to the same quarter of 2022.



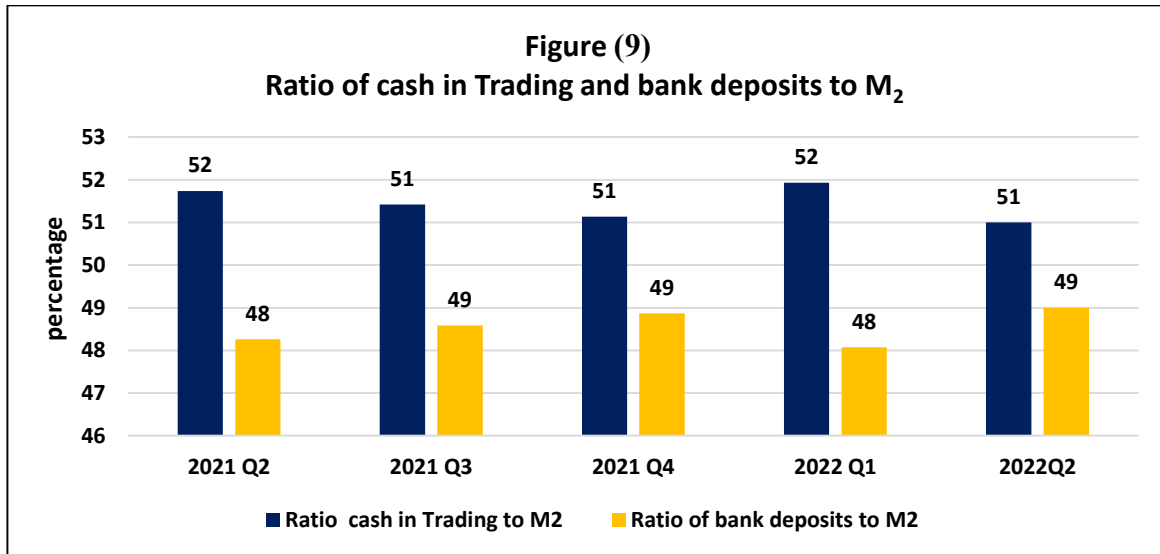
- Source: - Central Bank of Iraq, Statistical and Economic Website.  
 - the Central Statistical Organization (Consumer Price Index, March 2022.





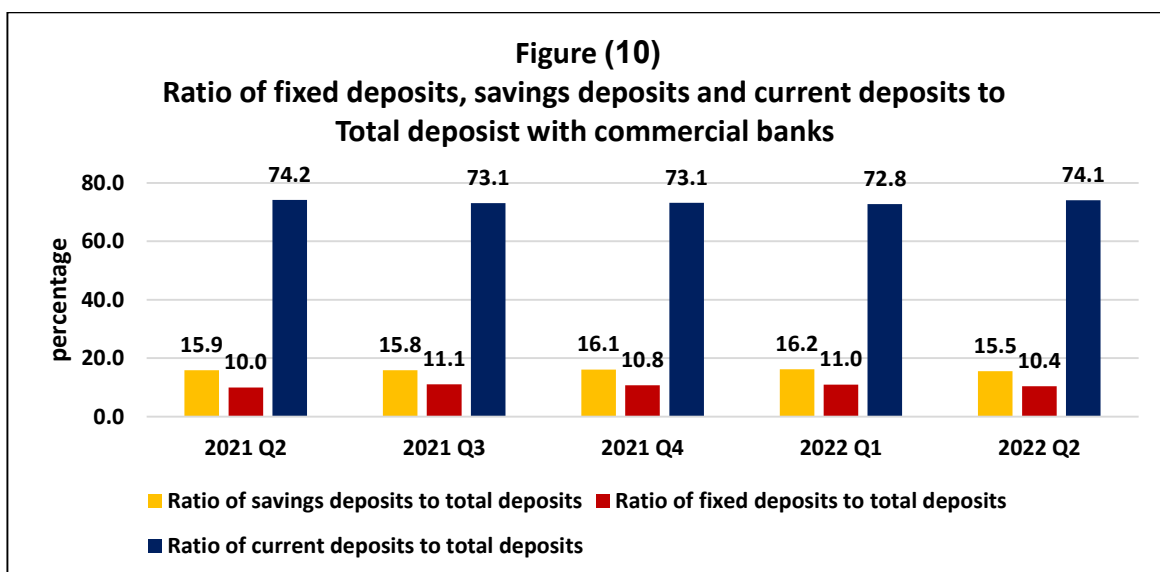


hand, the index of the percentage of cash in circulation to ( $M_2$ ) decreased from (%52) in the second quarter of 2021 to (%51) for the same quarter of 2022, and this is a positive indicator for the banking system.



Source: Central Bank of Iraq, Statistical and Economic Website.

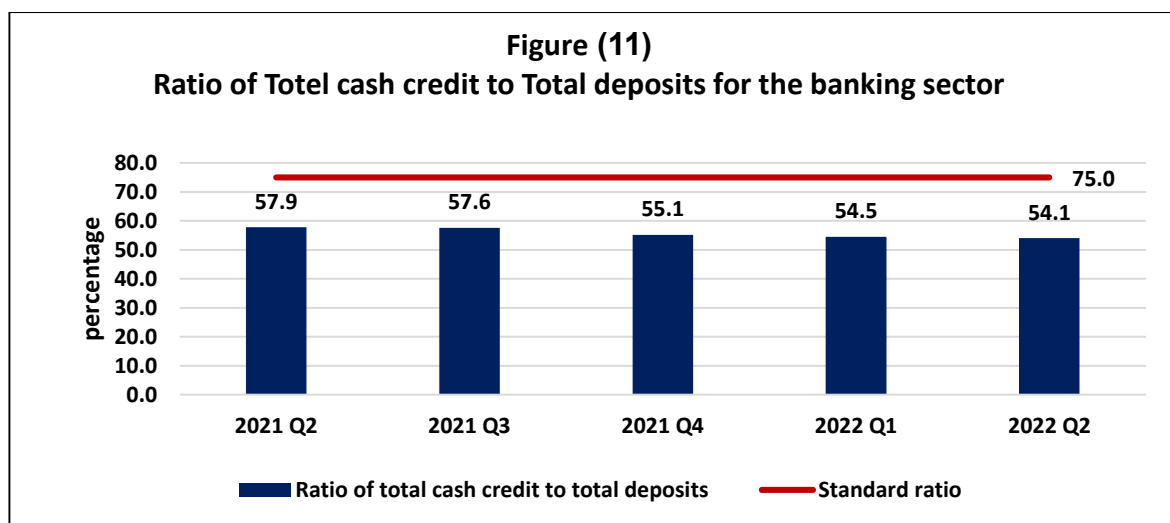
Referring to the types of deposits with commercial banks, it is noted that the percentage of current deposits is the largest percentage of total deposits with banks, as it reached (%74.1) during the second quarter of 2022 after it was (%74.2) during the same quarter of 2021, while fixed deposits increased to (%10.4) in the second quarter of 2022 after it was (%10) of the same quarter of 2021, as for savings deposits, it reached (%15.5) during the second quarter of 2022 after it was (%15.9) for the same quarter of 2021, and Figure (10) illustrates this.



Source: Central Bank of Iraq, Statistical and Economic Website.

**2. Total Cash Credit/Total Deposits**

The Central Bank of Iraq set this ratio at (%75), to maintain sufficient liquidity with banks to face customer withdrawals and conduct the bank's financial activities, and this ratio is measured by dividing the total cash credit to the total deposits with operating banks, which expresses the long-term liquidity state of the banking sector, and Figure (11) shows that the ratio of total cash credit to total deposits amounted to (%54.1) in the second quarter 2022, which did not exceed the standard ratio set by the Central Bank (%75).

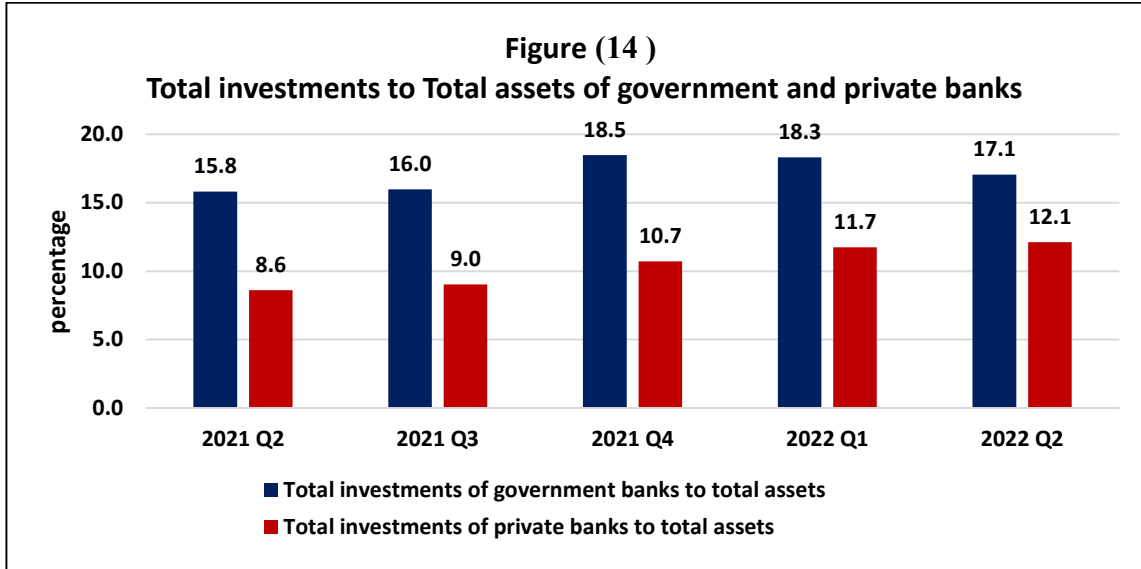


Source: Central Bank of Iraq, Statistical and Economic Website.

When returning to private banks and public banks each separately, it becomes clear that private banks have decreased this percentage and it is within the limits approved by the Central Bank. Figure (12) shows that this percentage reached (%71.8) in the second quarter of 2022 for private banks, after it was (%71.9) for the same quarter of 2021, while for public banks, it did not exceed the specified percentage as well, as this percentage reached (%51.7) in the second quarter of 2022.



investments in private banks to their total assets have increased from (8.6%) during the second quarter of 2021 to (12.1%) during the same quarter of 2022. In 2022, it is worth noting that the volume of investments in government banks constitutes (84%) of the total investments in operating banks, while the investments of private banks constitute (16%) .



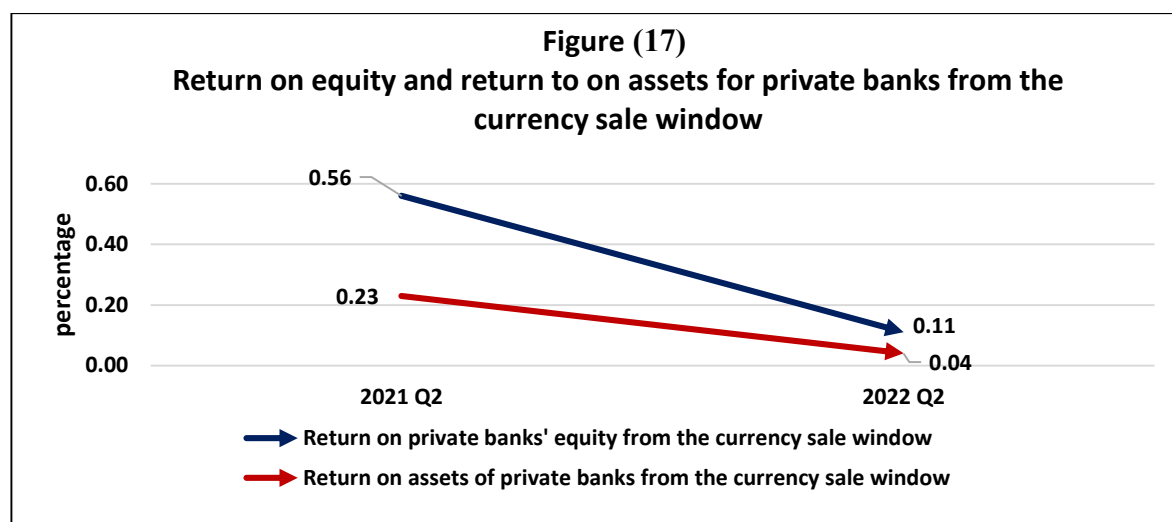
Source: Central Bank of Iraq, Department Monetary and Financial Statistics.

#### 4. Money Multiplier

The Money multiplier is defined as the desire and ability of banks to convert their deposits into credit, and therefore it represents banking activity within the real sector, as it represents on the one hand the public's desire to go to the bank as a result of the services provided by that bank, through which it gains the confidence of the public, and on the other hand it represents the bank's desire to grant credit to the public and the interest accruing to it as a result, and Figure (15) shows the ratio of the Money multiplier, which shows that there is a decrease in the Money multiplier ratio in the second quarter of 2022 to reach (%1.27) after it was (%1.33) for the same quarter of 2021, and that there is a decline in the ratio of currency in circulation to current deposits, as it reached in the second quarter of 2022 (%143.6) after it was (%148.2) in the same quarter of 2021, and this means that the desire of banks to grant credit decreased, as a result of several circumstances that the country went through during this period, which led to an increase in the volume of excess reserves, the growth rate in the volume of excess reserves of banks at the Central Bank reached (%30) during the period (Q2 2022 – Q2 2021), While the volume of growth in total cash credit during the same period reached (%12.6), which explains the decrease in the value of the Money multiplier .

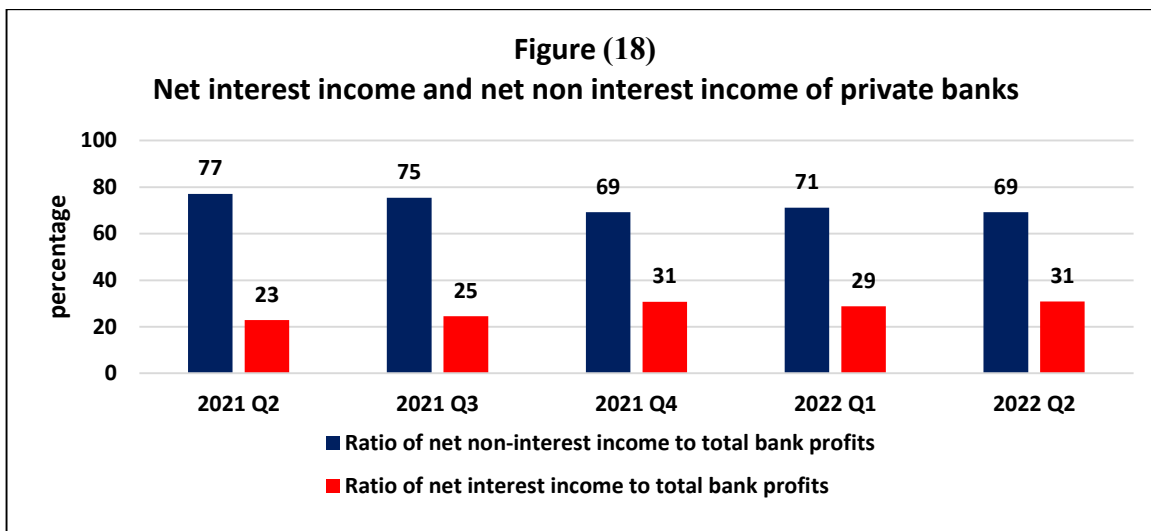


2022, as well as with regard to the return on assets, which decreased from (%0.23) to (%0.04) during the same period, this decline in the two ratios is due to the decrease in the return obtained from the sale window Currency for private banks due to the decline in sales, which achieved a negative growth of (%-79.8) during the period (2022 Q2-2021 Q2).



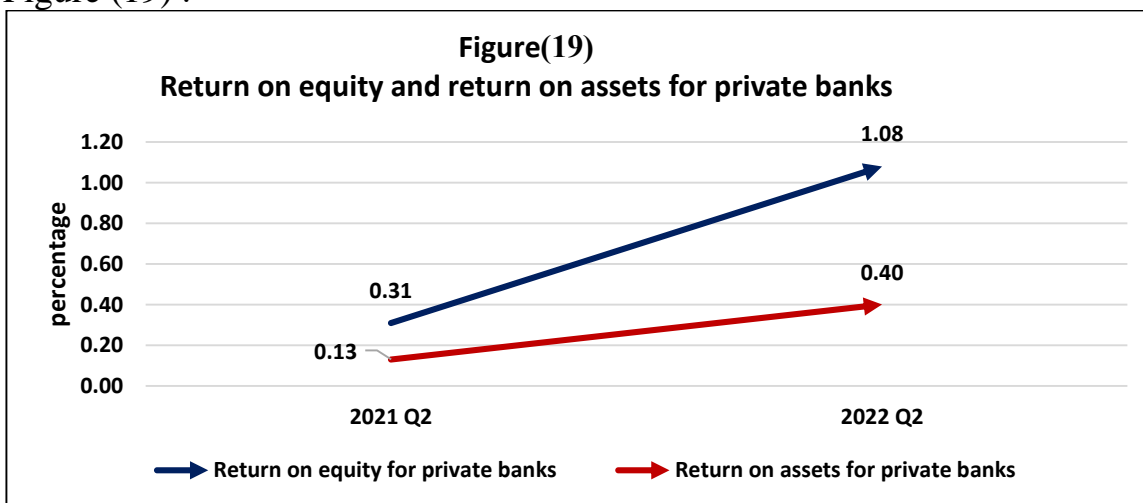
Source: Central Bank of Iraq, Department Monetary and Financial Stability Estimates 2022.

When we return to the profits of private banks obtained from banking activities represented in the interest obtained from granting credit, we find that these profits do not constitute a large percentage of the profits of banks, and Figure (18) shows the net income obtained from interest and net income derived from non-interest with private banks, and turns out that the net income obtained from non-interest with private banks constitutes (69%) of the total income with banks in the second quarter of 2022, which requires private banks to increase their activity within the real sector represented by the process of granting loans, attracting deposits and increasing the financial services provided by them, and it is worth noting that the matter is different for government banks, most of which do not enter the window of selling foreign currency or their income is very limited, as the ratio of net income from interest with government banks to total income reached (63.6%) during the second quarter 2022.



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

Returning to the return on equity and return on assets of private banks we find that there is an increase in both despite the decrease in the return obtained from the currency sale window to private banks during the period (Q2 2021 - Q2 2022), as the return on equity increased from (%0.31) during the second quarter 2021 to (%1.08) during the same quarter of 2022, as well as the return on assets, as it increased from (%0.13) to (%0.40) during the same period. As shown in Figure (19) .

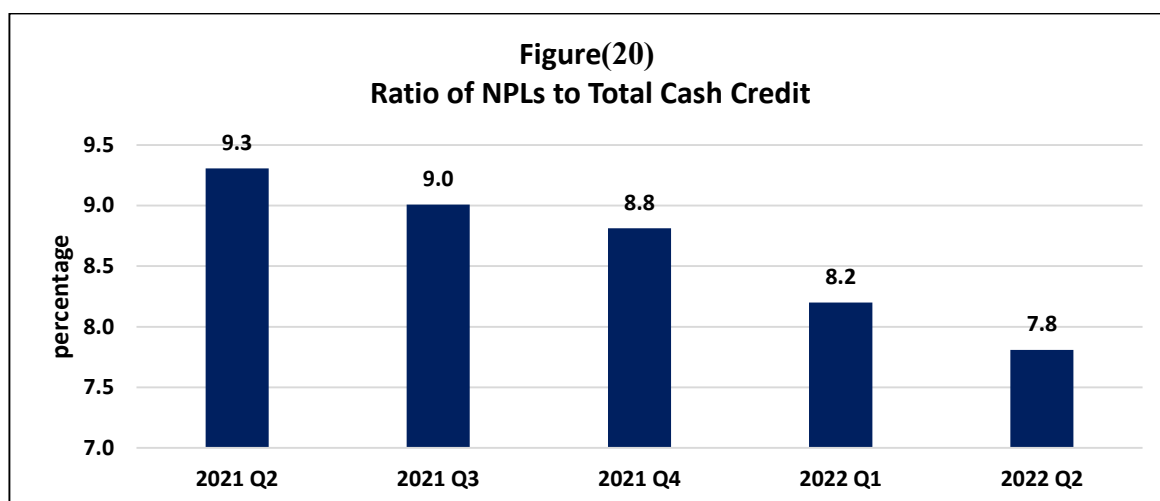


Source: Central Bank of Iraq, Department of Statistics and Research.

### 8.Non-performing Loans / Total Cash Credit

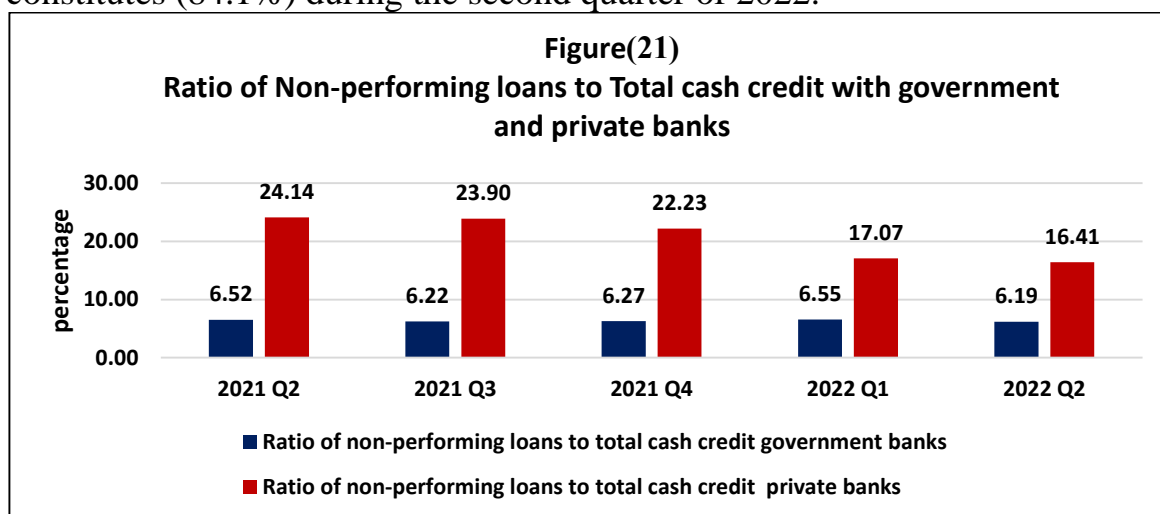
This indicator is measured by dividing non-performing loans by total cash credit, and Figure (20) shows that the ratio of non-performing loans to total cash credit in the second quarter of 2022 has decreased to (%7.8) from (%9.3) for the same quarter in 2021, meaning that there is a decrease in the growth rate of non-performing loans, knowing that this ratio represents the total operating banks.





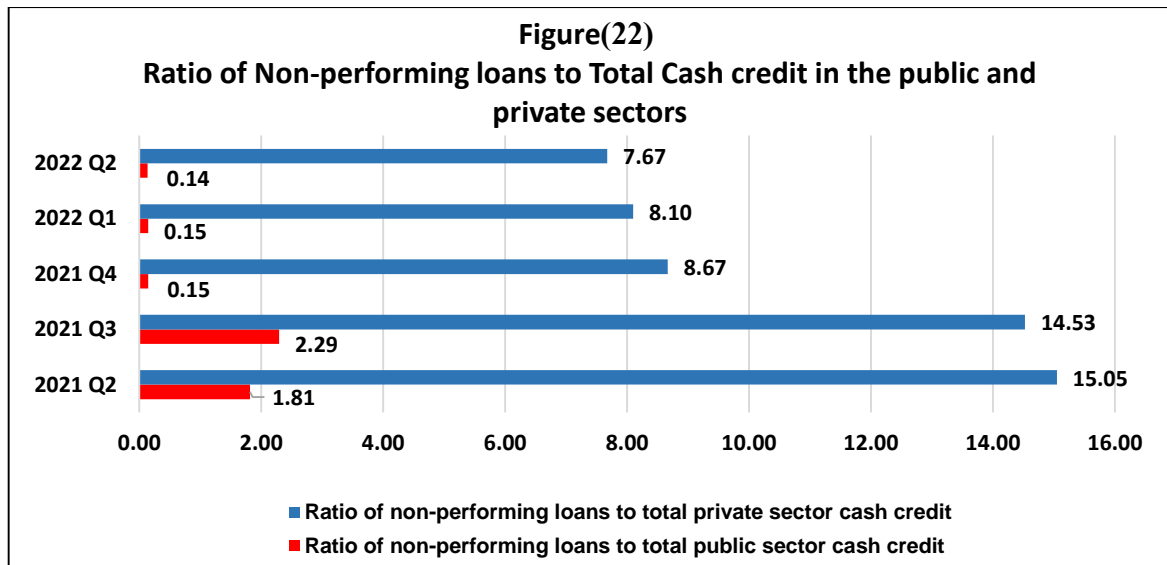
Source: Central Bank of Iraq, Department of Statistics and Research.

Returning to the classification of banks in terms of ownership, we find that the ratio of non-performing loans to total cash credit with private banks is more than that of public banks, and Figure (21) shows that the ratio of non-performing loans to total cash credit at private banks has decreased to reach this ratio (16.41%) in the second quarter of 2022, after it was (24.14%) for the same quarter of 2021, as for public banks, there is a decrease in this ratio from (6.52%) in the second quarter of 2021 to ( 6.19%) during the same quarter of 2022, noting that the ratio of cash credit granted by public banks to total credit constitutes (84.1%) during the second quarter of 2022.



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

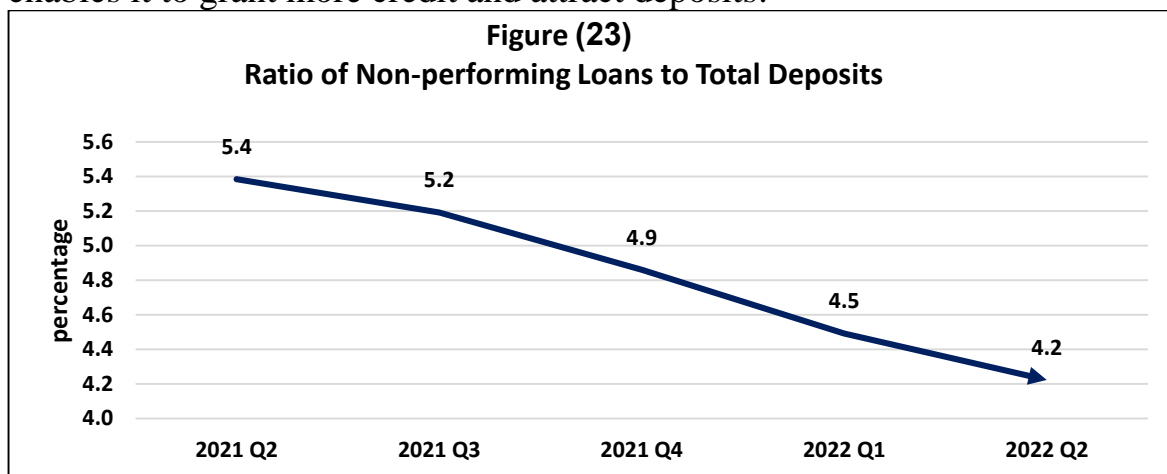
As for non-performing loans in both the private sector and the public sector, we find that the volume of non-performing loans in the private sector is greater than that in the public sector, as the ratio of non-performing loans to total cash credit in the private sector reached (7.6%) during the second quarter of 2022, while this ratio reached (0.14%) in the public sector during the same period, and Figure (22) shows this.



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

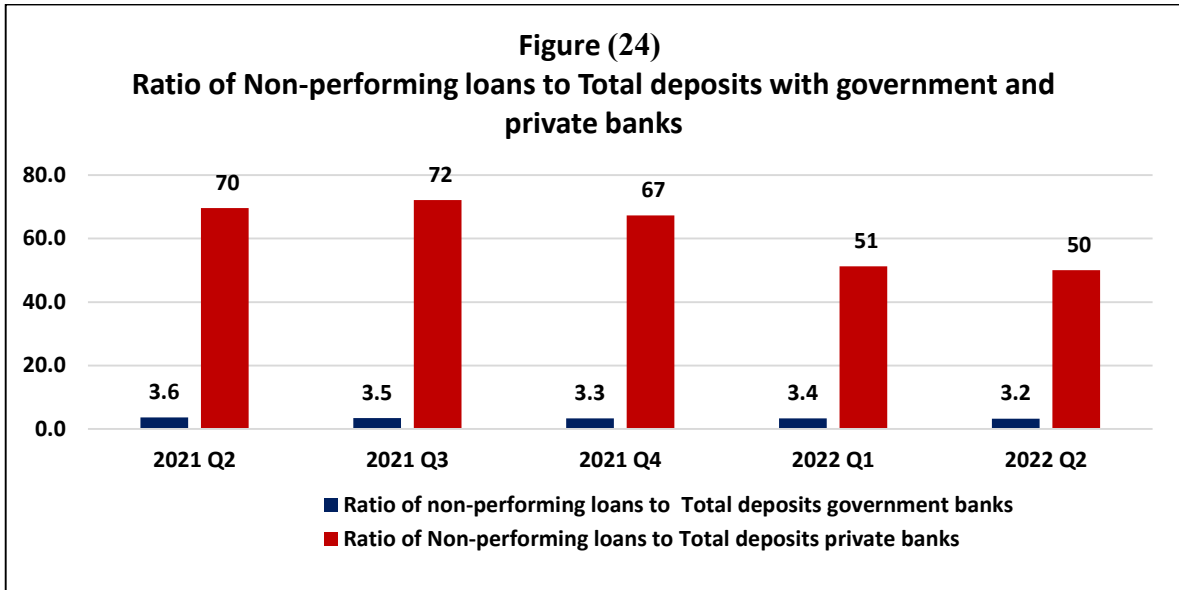
### 9. Non-performing Loans / Total Deposits

This indicator is measured by dividing non-performing loans by total deposits with banks, and Figure (23) shows that the ratio of non-performing loans to total deposits has decreased from (5.4%) in the second quarter of 2021 to (4.2%) for the same quarter of 2022, which is positive for the banking system, which enables it to grant more credit and attract deposits.



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

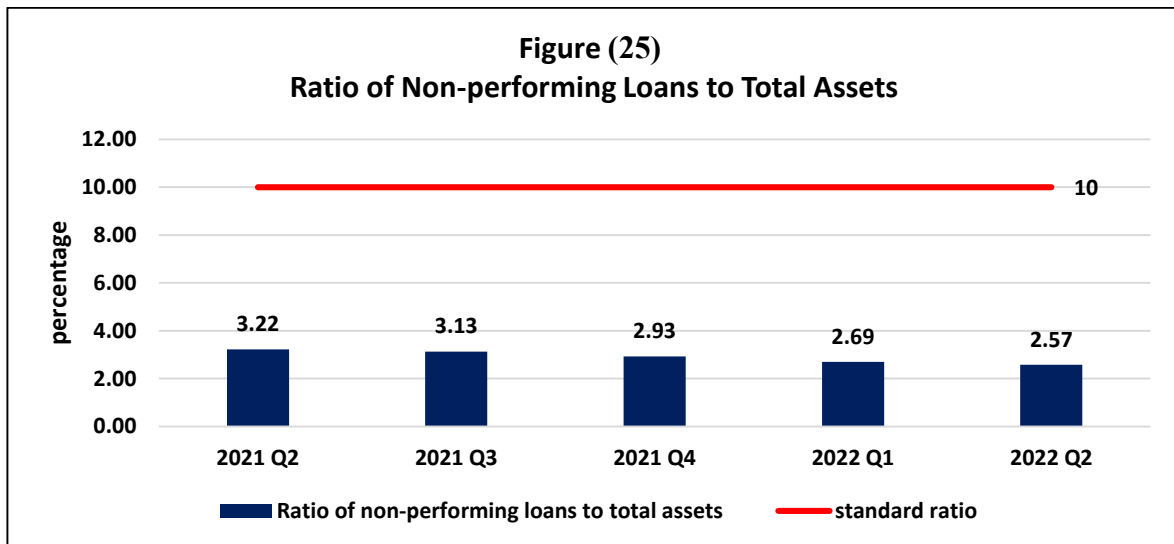
Returning to the classification of banks in terms of ownership, we find that there is an increase in this ratio for private banks despite the decrease in their ratio to total deposits, and Figure (24) shows that the ratio of non-performing loans to total deposits with private banks is high if compared to public banks, as it reached in the second quarter of 2022 (50%) after it was (70%) for the same quarter in 2021, meaning that there is a decrease in the volume of non-performing loans with private banks, while this The percentage of government banks reached (3.2%) during the second quarter of 2022.



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

### 10. Non-performing Loans /Total Assets

This indicator is measured by dividing non-performing loans by the total assets of banks, the standard value of this ratio is (10%), and Figure (25) shows the ratio of non-performing loans to total assets with banks operating in Iraq, as it is noted that the ratio decreased to (2.57%) in the second quarter of 2022 after it was (3.22%) for the same quarter in 2021, and thus the ratio of non-performing loans to total assets did not exceed the standard ratio if measured to the total banks.

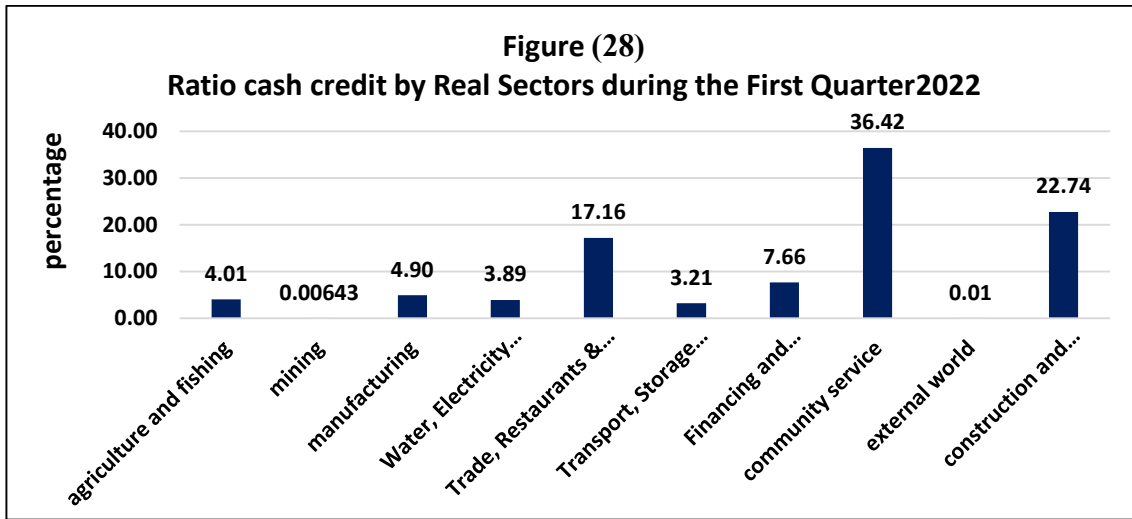


Source: Central Bank of Iraq, Department of Statistics and Research.

Returning to the breakdown of banks by ownership, we find that both private and government banks did not exceed the standard ratio. Figure (26) shows that the ratio of non-performing loans to total assets of private banks or public banks did not exceed the standard ratio (10%), but this ratio is higher for private



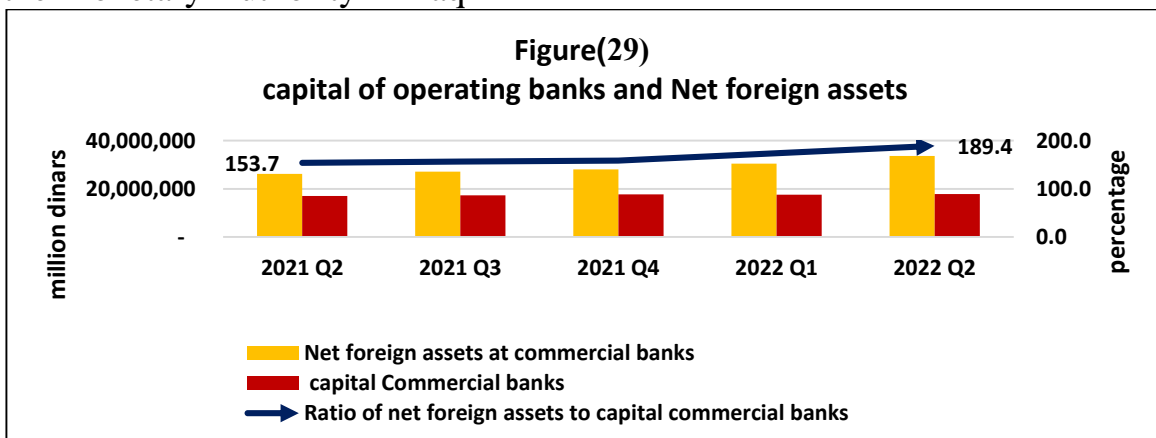
the largest percentage in the volume of non-performing loans , and that the community services sector has the largest percentage of cash credit granted to real sectors by (36.42%), followed by the construction sector by (22.74%), as shown in Figure (28).



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

### 12. Net foreign assets with banks / Operating Capital of Banks

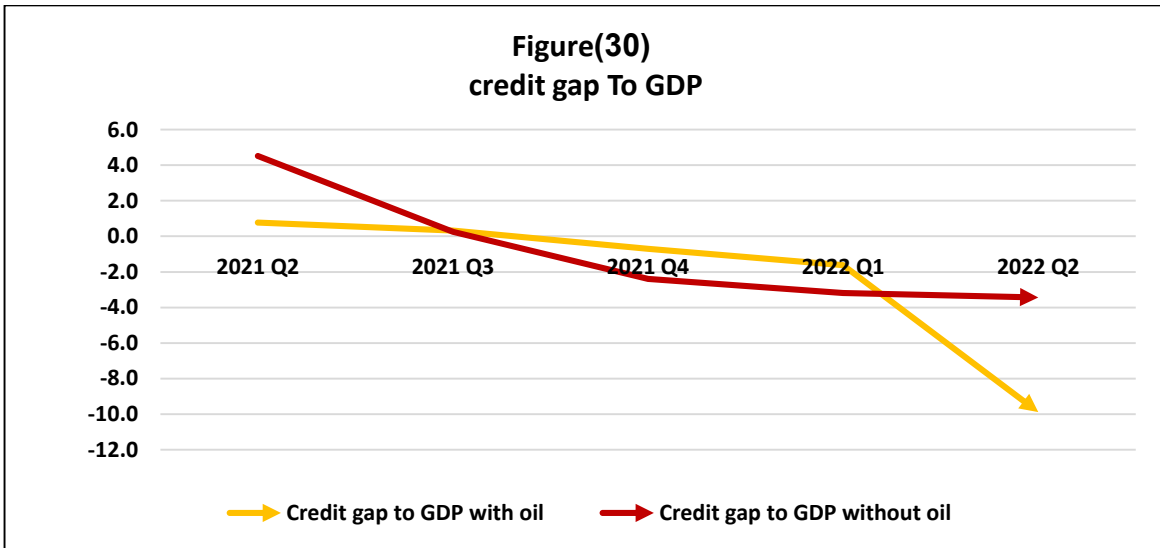
This indicator is measured by dividing the net foreign assets of operating banks by their capital, and Figure (29) shows this ratio, which shows the retention of foreign currency with commercial banks in the event that the national currency is exposed to sharp fluctuations, and it is clear that the percentage of net foreign assets with commercial banks has increased from (153.7%) during the second quarter of 2021 to (189.4%) during the same quarter of 2022, it is worth noting that the source of foreign assets in the banking sector is an internal source, and The Central Bank's retention of sufficient ratios of foreign assets parallel to the money supply in the broad sense, as the ratio of foreign assets to the money supply in the broad sense reached (72%) in the second quarter of 2022, makes the increase in the ratio of foreign assets to the capital of banks controlled by the Monetary Authority in Iraq .



Source: Central Bank of Iraq, Statistical and Economic Website.

### 13. Credit gap to GDP

The credit gap to output is defined as the ratio of credit provided to the private sector to GDP minus the general trend of the credit ratio (directed to the private sector) to GDP, and the standard value of this indicator ranges between (%2 - %10), and whenever the estimated percentage approaches the upper limited, Capital buffers must be put in place to meet this growth in credit, but if this ratio exceeds the upper limit, this indicates the presence of excessive credit with banks, and the figure ( 30) This shows that this gap stabilized at a negative value, whether with or without oil data, as it reached (%-3.4) in the case of adopting GDP data without oil, and it reached (%-9.9) in the case of adopting data with oil, which means the possibility of increasing credit provided by banks to the private sector.



Source: Central Bank of Iraq, Department Monetary and Financial Stability Section estimates.





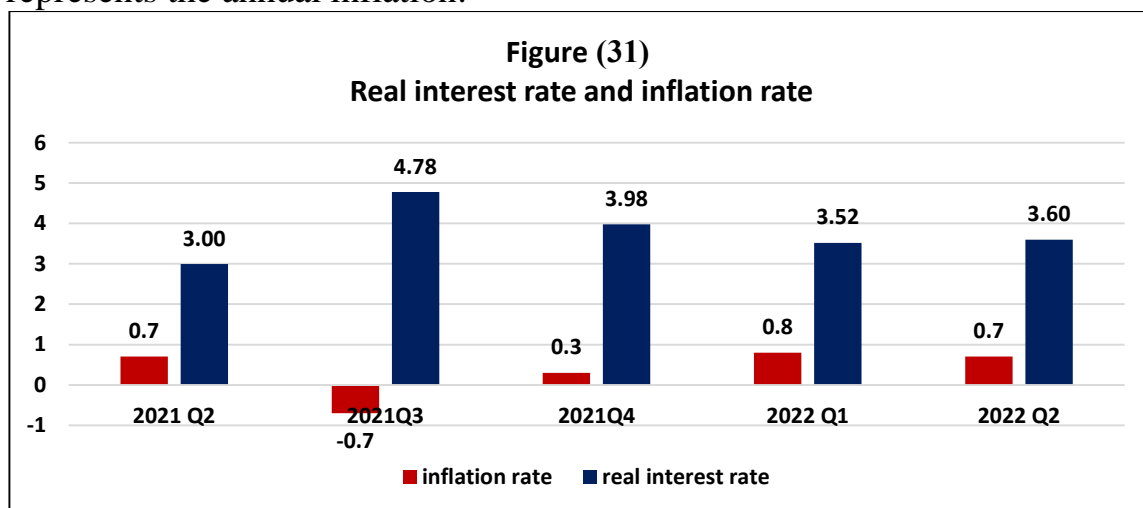
### Chapter III Analysis of Macroeconomic Performance Indicators

Early warning analyzes the most important macroeconomic indicators and predicts them through the inflation rate, the real interest rate, the index of the ratio of surplus or deficit in the general budget to GDP, as well as calculating the implicit reducer of GDP, which shows the limits of production possibilities within the Iraqi economy, in addition to measuring the GDP gap (GDP – gap), which are as follows:

#### 1. Inflation Rate

The inflation rate is a quantitative measure that reflects of the rise or fall in the price level within the economy during a certain period of time. The purchasing power of the country's currency decreases or rises depending on the circumstances surrounding the economy and the factors of supply and demand. This is reflected in financial and banking indicators, including real interest rates

‘Figure (31) shows that consumer prices in Iraq recorded an increase during June of 2022 to reach (%117.2) compared to May of the same year, recording (%116.4) , That is, by a change of (% 0.7), which represents the monthly inflation rate, as the clothing and footwear section recorded an increase by (%0.1), the housing section recorded an increase by (%3.8), and the health section also recorded an increase by (%0.4), and when comparing the general index for the year 2022 for the month of June, we find that it reached (%117.2) after it was (%111.1) in June 2021, That is, with an increase of (%5.5), which represents the annual inflation:

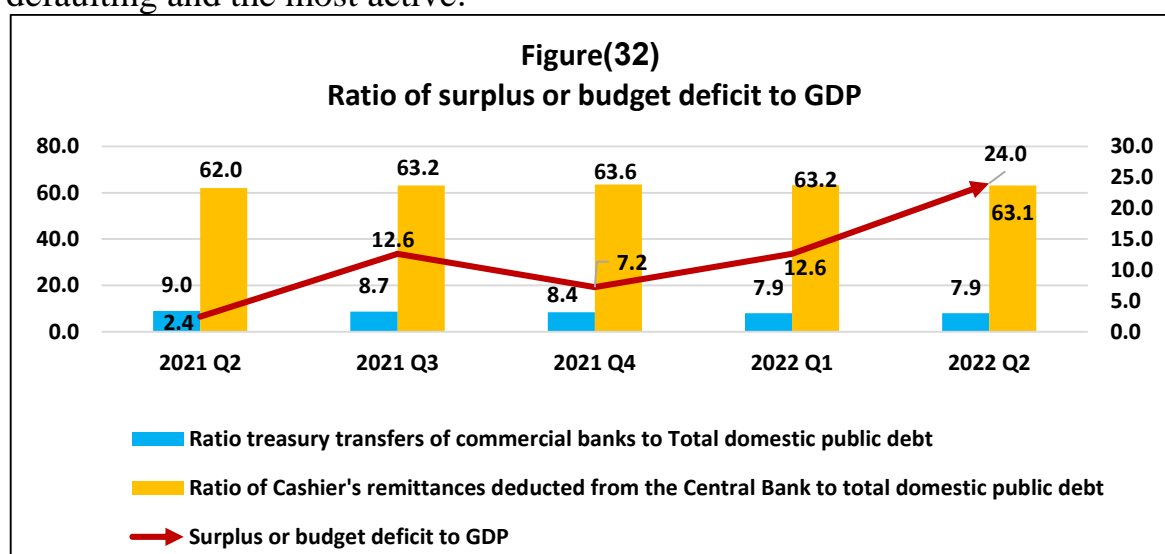


Source: Central Bank of Iraq, Statistical and Economic Website.  
- Ministry of Planning, central statistical organization Iraq, Consumer Price Indices Report, June 2022.

#### 2. Ratio of surplus or deficit in the public budget to GDP

This indicator shows the percentage of change that occurs in the general budget, whether positively (surplus) or negatively (deficit) and its reflection on the public sector's crowding out of the private sector in obtaining credit from the

banking system, and Figure (32) shows that the general budget of the state has achieved a surplus in the second quarter of 2022 that has reached (%24) to GDP, as the total budget surplus amounted to more than (26.445) trillion dinars, as for treasury transfers with commercial banks to Total public debt , they decreased from (%9) during the second quarter of 2021 to (%7.9) during the same quarter of 2022, meaning a decrease in the intensity of the public sector's competition with the private sector in obtaining credit, on the other hand, the ratio of discounted remittances from the Central Bank to the internal public debt increased to (%63.1) during the second quarter of 2022 after it was (%62) for the same quarter of 2021, which is an opportunity for the banking sector to direct credit to the private sector and according to the sectors, the least defaulting and the most active.



Source: Central Bank of Iraq, Statistical and Economic Website.

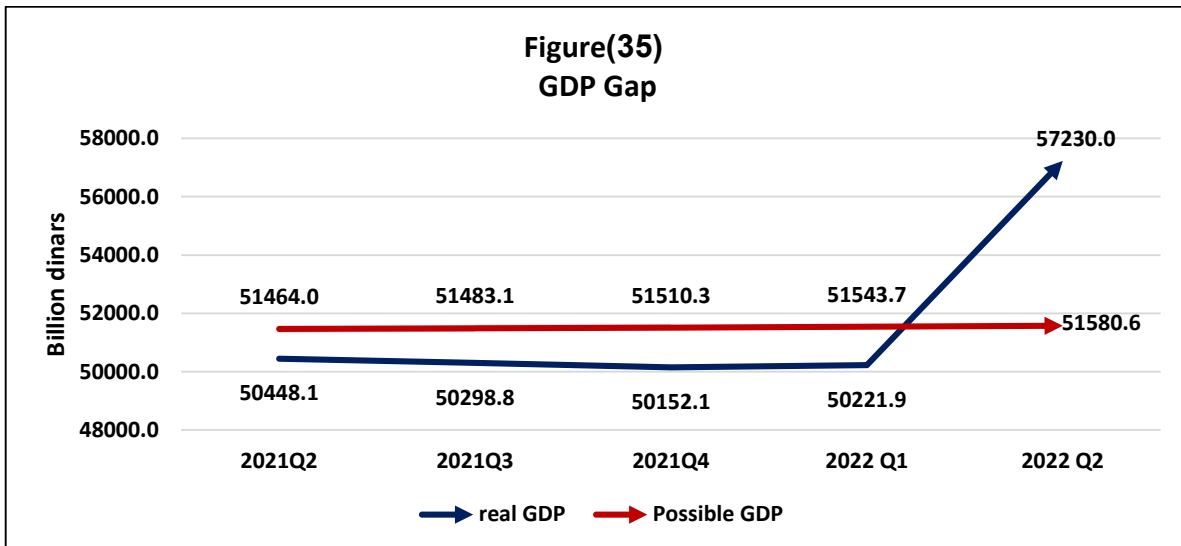
### 3. Rate of change in gross domestic product (GDP)

GDP is the measure of a country's economic performance, reflecting economic activities during a certain period of time. It provides information on the soundness or vulnerability of the local economy, as the positive growth rate indicates the economy's ability to expand and reduce unemployment levels and thus increase income. GDP at current prices in Iraq recorded positive growth during the second quarter of 2022 at a rate (%21.3) with an amount of (110) trillion dinars compared to the first quarter 2022 which amounted to (90.6) trillion dinars, as shown in figure (33).



### 5. GDP Gap<sup>(1)</sup>

The gap expresses the difference between the level of real GDP and possible GDP<sup>(2)</sup> when the output gap is positive, real GDP is higher than possible. That is, the economy works beyond its capacity, and inflation is likely to be generated if the increase in real output is due to an increase in demand, but if real GDP is less than possible, the output gap is negative, that is, there may be deflation, and then failure to create sufficient job opportunities for all those wishing to work, and Figure (35) shows that there is an increase in the value of real GDP from (50) trillion dinars during the second quarter 2021 to (57) trillion dinars During the same quarter of 2022, while the possible GDP recorded stability at (51) trillion dinars during the same period, and the output gap ranged at (5) trillion dinars during the second quarter in 2022, meaning that production within the economy is higher than the available capabilities due to the high value of real output.



Source: Central Bank of Iraq, estimates of the Financial and Monetary Stability Department according to data from the Ministry of Planning, Central Statistics organization for the years 2021, 2022.

<sup>(1)</sup> This gap was measured by measuring time series of real GDP through a filter (Hodrick-Prescott, HP).  
<sup>(2)</sup> For more on measuring the output gap, see, Central Bank of Iraq 2021, Early Warning Report, Issue Eighteen, p. 30.



