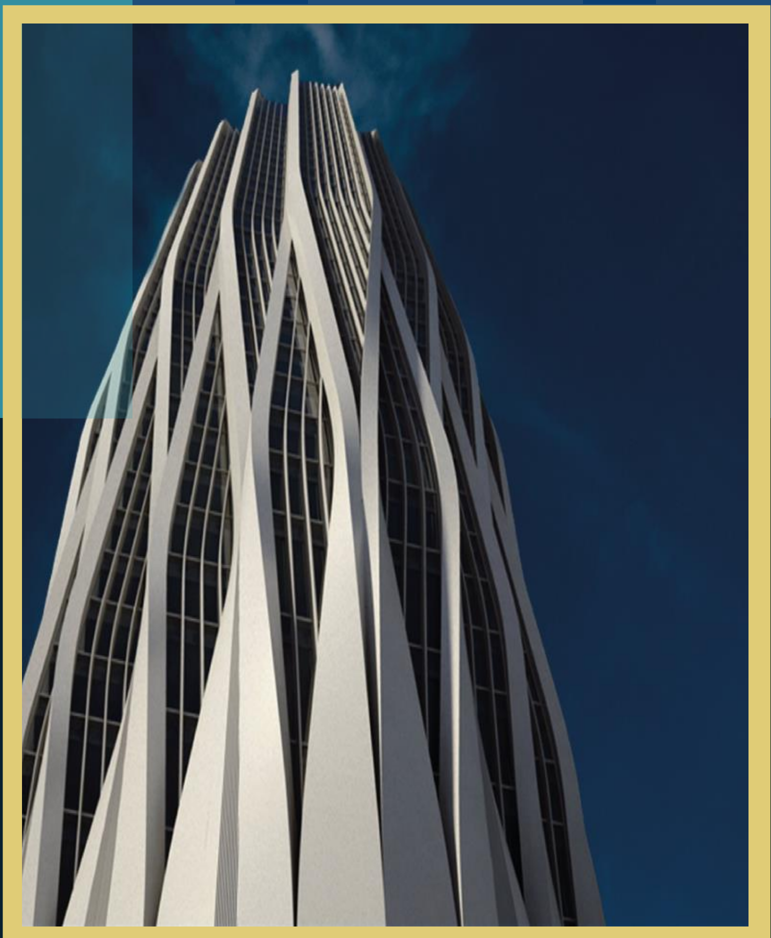
Central Bank of Iraq

Statistics & Research Department

Monetary Policy Report of Central Bank of Iraq 2023



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Monetary Policy Report of The Central Bank of Iraq 2023

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ECONOMIC EXPERT

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Introduction

The year of 2023 witnessed relative economic stability after many developments, including the Russian-Ukrainian war which directly affected energy and food prices due to the disruption of supply chains, and then a rise in global inflation. As the Federal Reserve continued to raise interest rates several times during 2023 in order to tighten its control over inflation, which slowed with difficulty after changes in interest rates. It is expected that the Federal Reserve will stabilize and then reduce interest rates, relying on changes in inflation rates.

The factors above directly and indirectly affected the Iraqi economy and its monetary policy, as the Central Bank of Iraq followed a strict monetary policy during the 2023 to confront inflationary pressures. The Central Bank of Iraq raised the policy rate and the mandatory reserve ratio during 2023. In addition, foreign reserves increased, but at a lower rate than in 2022, which witnessed a rise in global oil prices, compared to 2023, in which oil prices declined after absorbing the shock of the Russian-Ukrainian war.

Monetary indices witnessed several developments during 2023, as follows:

- The monetary base (M0) balance recorded an increase of (13.7%) at the end of 2023 compared to the previous year, while the narrow money supply (M1) recorded an increase of (9.4%) at the end of 2023 compared to the previous year, and the balance of the broad money supply (M2) also recorded an increase by (7.5%) compared to the previous year. This increase is attributed to the growth of surplus reserves, which caused an increase in the monetary basis (M0) and to the expansionary effect of net foreign assets because of the increase in government spending for 2023. The monetary stability factor also reached a percentage of (2.6%).

The money multiplier recorded (1.10) in 2023 compared to (1.16) in 2022, while the balance of foreign reserves at the end of 2023 recorded an increase of (3.7%) over the previous year to reach IQD (145.3) trillion compared to IQD (140.1) trillion at the end of 2022.

- The general inflation rate at the end of 2023 was (4.4%), and the base inflation rate after excluding both petroleum derivatives (oil and gas) and the two groups (fruits and vegetables) was (4.6%).

- At the level of monetary policy, the Central Bank of Iraq continued to adopt the interest rate (monetary policy rate) of (4%) until mid-2023 before raising it to (7.5%), while the mandatory reserve ratio on current deposits (all banks) was raised from (15%) to (18%), term deposits (traditional banks) from (10%) to (%13), and term deposits (Islamic banks) from (5%) to (8%).

The Central Bank of Iraq activated CBI's bills for a period of (14) days in June 2023 at an interest rate of (7.5%) after stopping the use of monetary policy tools (CBI's bills and Islamic Certificates of deposit) with their various terms.

- In the field of financing the fiscal deficit for the 2023 budget, the Central Bank of Iraq, in coordination with the Ministry of Finance, issued national bonds to the public that are capable of being listed and traded on the Iraq Stock Exchange. The Central Bank of Iraq also issued circulars to banks (state-owned and private) to promote these bonds to encourage the public to deal with them.

Concepts Guide

1- **Monetary Policy**: list of measures and tools used by the monetary authority represented by the Central Bank to implement a set of goals.
2- **Operating Banks in Iraq**: It includes all national (state-owned and private) and foreign banks operating in The Republic of Iraq that are licensed and subject to the supervision of the Central Bank of Iraq, including commercial, specialized and Islamic banks, licensed to conduct their business in accordance with the provisions of the Central Bank Law No. 56 of 2004, Article 40, Section Eight, Banking Law No. 94 of 2004, Article 4, and Islamic Banks Law No. 43 of 2015.
3- **Banking System**: Consists of the Central Bank of Iraq and Operating Banks in Iraq.
4- **Issued Currency**: cash issued by the Central Bank for Circulation except for money held in Central Bank's vaults.
5- **Currency Outside Banks** :represents the cash issued into circulation (excluding cash in the vaults of the central bank) minus the cash held in the vaults of commercial banks.
6- **Deposits**: It includes all types of economic sector deposits with banks operating in Iraq.
7- **Monetary Base** (M0): represents issued cash (currency outside banks + currency in banks) plus excess and mandatory reserves, current accounts of commercial banks at the Central Bank of Iraq (in dinars and dollars).
8- **Narrow Money Supply** (M1): represents cash outside banks, in addition to deposits of a current, transferable nature with commercial banks (in dinars and dollars).
9- **Broad Money Supply** (M2): It represents the narrow money supply plus other deposits of all economic sectors (except the central government sector) with commercial banks in dinars, dollars, and postal savings deposits.
10- **Money Multiplier** (M): It is the ability of banks to create money in the economy, and it is the result of dividing the broad money supply by the monetary basis (M0).
11- **Foreign Assets** (net): Includes foreign assets in the banking system, minus foreign liabilities on the banking system represented by the Central Bank and banks operating in Iraq.
12- **Domestic Assets** (net): represent the sum of net debts on the government, debts on the private sector and other sectors, and net of other items.
13- **Reserve Requirements**: A percentage of the total deposits with banks operating in Iraq of all types that are kept at the Central Bank, current deposits, savings deposits, and fixed deposits.
14- **Official Exchange Rate**: It is the price determined by the Central Bank of Iraq.
15- **General Consumer Price Index**: It measures the general level of prices of a fixed basket of goods and services consumed by Iraqi families in Iraq, with a specific base year (100 = 2012) and is prepared by the Authority of Statistics and Geographic Information Systems, Directorate of Indices.
16- **Base Inflation**: Base inflation is calculated after excluding some commodities with fluctuating prices, which are the two groups of fruits and vegetables in the food and non-alcoholic beverages section, in addition to (oil and cooking gas) in the housing section, and it is prepared by the Authority of Statistics and Geographic Information Systems, Directorate of Indices.
17- **Spread Coefficient** represents the difference between the average deposit interest rate and the average lending interest rate.

Chapter One

Global Developments of Monetary Policy

The year of 2023 witnessed a clear turning point in interest rate policies, after central banks began to take less stringent decisions, including maintaining interest rates after a series of rapid increases in 2022. In addition to signs of reducing interest rates starting next year that issued by the US Federal Reserve for the first time at its meeting in December 2023. As a result of the US Federal Reserve's tightening policy, the value of the dollar began to rise against international currencies.

The report will address the following in this chapter:

First **Global Developments of Monetary Policy**

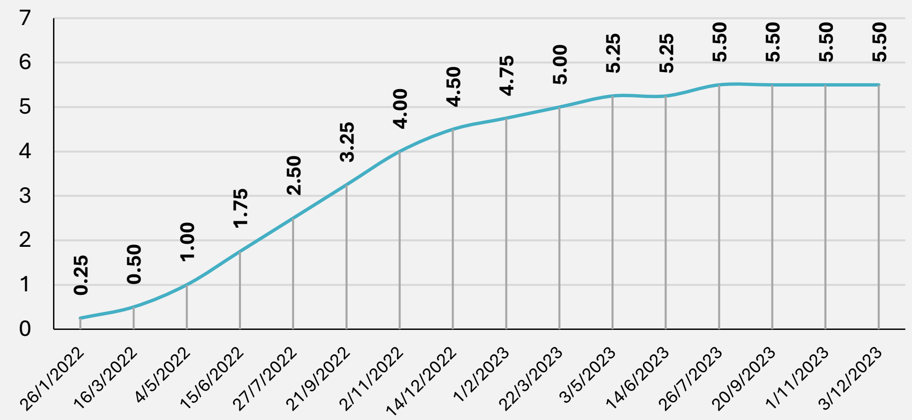
Second **Arab Monetary Policy Developments**

Third **Global Monetary Policy Outlooks**

First: Global Developments of Monetary Policy

Since the outbreak of the Russian-Ukrainian crisis, several central banks around the world have been inclining to combat inflation by raising interest rates, at the expense of economic growth. The United States raised interest rates (11) times from March 2022 until December 2023. Many central banks during 2023 began to take less tight decisions, as they kept interest rates after raising them several times during 2022 unlike China, which has moved towards lowering the interest rate to support economic growth, and many central banks have entered stages of contraction during the current year in exit strategies to get rid of unconventional monetary policies. This development comes in light of the recovery of economies from the effects of the Corona pandemic and the new reality of inflation caused by the Russian-Ukrainian crisis.

Figure No. (1): US Federal's Decisions on Interest Rate (%) 2022-2023



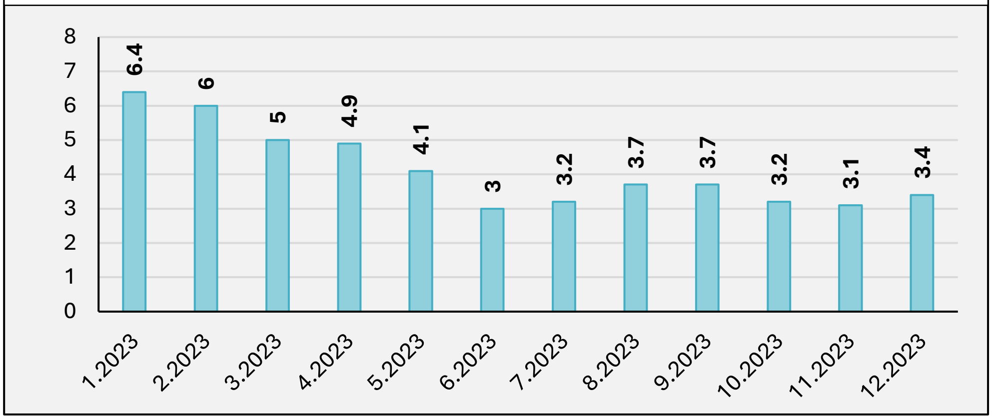
1. Advanced Countries

1.1 United States

US Federal Reserve began to reduce the pace of raising interest rates, as it raised the interest rate three times during this year after a series of rises during the previous year, where the interest rate reached (5.5%) before fixing it at this level in December 2023, which led to a major collapse that is the most severe since 2008 for major US banks, as happened to the Bank (Silicon Valley) as a result of the decrease in liquidity due to the decline in the value of government bonds purchased by deposits funds it has. As well as increase in the rate resulted in a decrease in the annual inflation rate from (6.4%) in January 2023 to (3.4%) in December 2023.

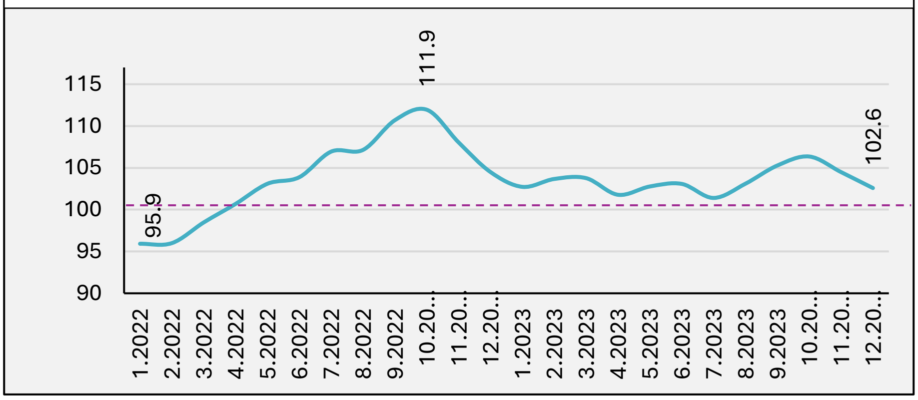
Inflation data of United States showed a slowdown at the beginning of 2023, as the inflation rate decreased from (6.4%) in December 2023 to (3%) in June 2023 before reaching (3.4%) in December 2023, because of the decline in energy prices globally. In addition to the decrease in the Food Price Index of Food and Agriculture Organization by (13.3%) for 2023 compared to the previous year.

Figure No. (2): Inflation rates (%) for United State 2023



The United States dollar depreciated against the currency basket, according to the US Dollar Index (DXY), prior to the federal rate hike beginning in 2022. As the US Federal Reserve continues to raise the interest rate, the US dollar's value has trended upward to its highest value in October 2022 to (111.9), but as the European Central Bank continues to raise interest rates, along with several central banks that make up this index. The value of this index has fallen (but still above 100), as the euro forms the highest relative weight among the used currencies in this index.

Figure No. (3): The US Dollar Index (DXY) 2022-2023



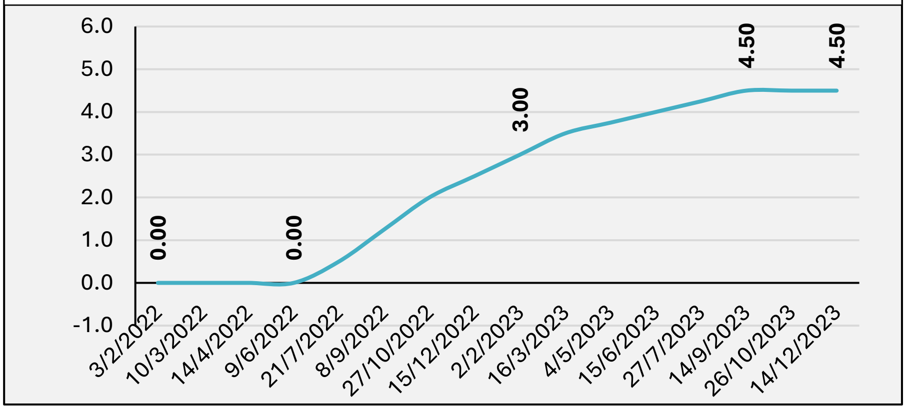
Box No. (1)

The United States Dollar Index (DXY): is an index of a value of the United States dollar for a basket of foreign currencies (Euro, Japanese yen, sterling, Canadian dollar, Swedish krona, Swiss franc), often referred to as trading partners' currency basket. If the value of the index was (110), the value of the dollar increased by (10%), while if the value of the index was (90), the value of the dollar decreased by (10%).

1.2 – Eurozone

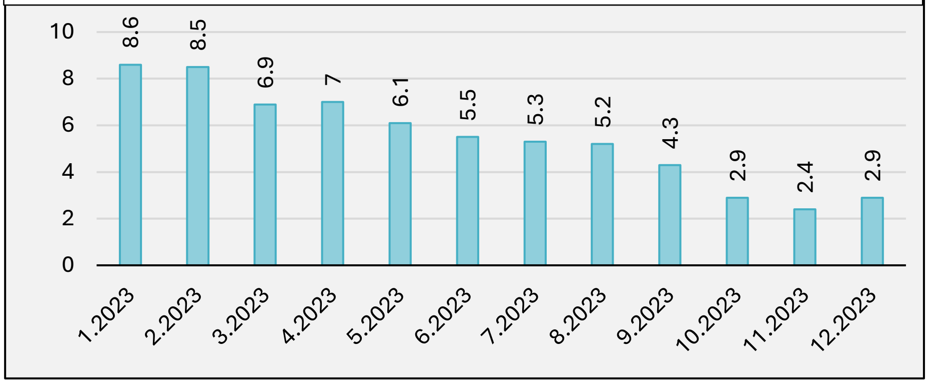
Higher energy and commodity prices and supply bottlenecks led to strong inflation in the eurozone and high inflation differences among eurozone countries. As a result, after several months of the Russian-Ukrainian crisis outbreak, the European Central Bank raise the interest rate from (0%) in July 2022 to (4.5%) in December 2023. Noting that the European Central Bank raised interest rates, but at a slower pace than the US Federal Reserve.

Figure No. (4): The European Central Bank's Decisions about Interest Rate (%) 2022-2023



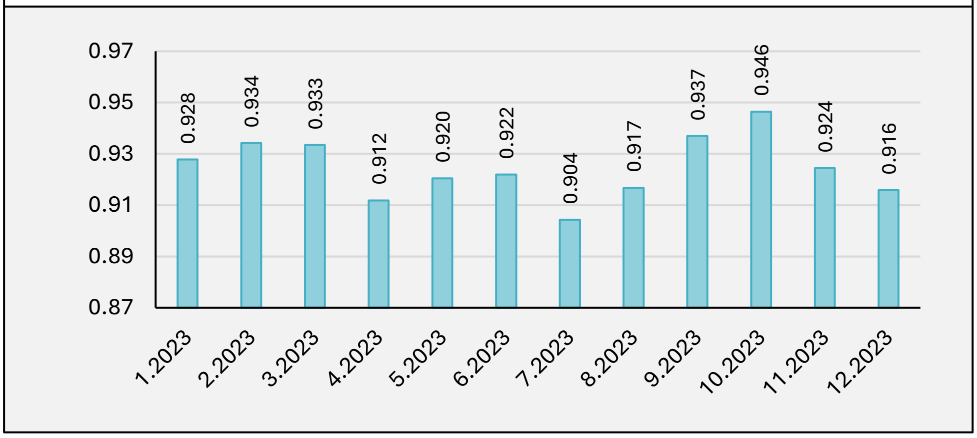
After inflation rates witnessed high levels for eurozone countries during 2023, with Slovakia recording the highest inflation rate (5.9%) to Italy's lowest rate (0.6%), in December 2023, the high inflation environment is mainly due to negative supply shocks associated with increased energy and commodity prices, supply bottlenecks, and the effects of reopening the economy after the pandemic. As a result of the European Central Bank's interest rate hikes, lower energy prices and low food prices, the inflation rate for the eurozone countries decreased from (8.6%) in January 2023 to (2.9%) in December of the same year. However, it remained above the inflation target of (2%).

Figure No. (5): Inflation Rates (%) for Eurozone 2023



On the other hand, the European Central Bank's interest rate hike led to the recovery of the value of the euro that it lost during 2022 due to the rise in the value of the US dollar after the interest rate hike by the US Federal Reserve.

Figure No. (6): Exchange Rate of Dollar against Euro 2023



Note from the above figure that the exchange rate of the euro against the dollar reached its highest level during 2023 in October, which coincided with the interest rate rise by the European Central Bank to reach (4.5%).

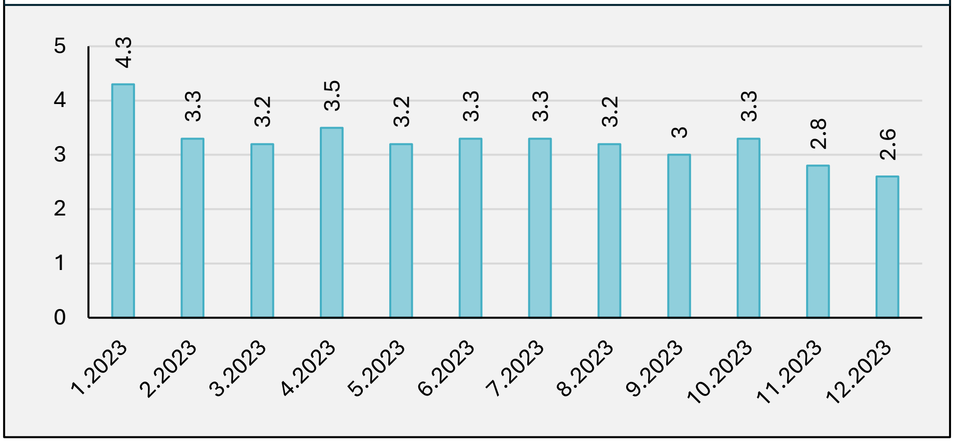
1.3 Japan

Bank of Japan has maintained a negative interest rate for 2023 of (-0.1%) since the beginning of 2016 as part of its accommodative policy.

Bank of Japan decided at its policy board meeting held on 28/7/2023 to maintain the yield curve control (YCC) policy, but with easing its implementation, as the yield curve control policy has been applied since 2016 but has been criticized for distorting markets by preventing long-term interest rates from rising.

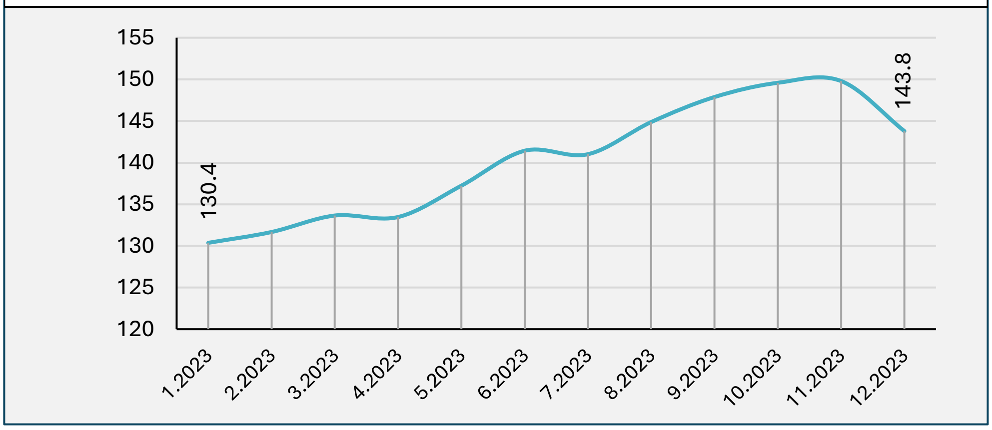
The annual inflation data of consumer showed a decline in annual inflation rates from (4.3%) in January 2023 to (2.6%) in December 2023, but the core consumer inflation in Japan reached a level of (2.3%) in December 2023. Bank of Japan aims an inflation level of (2%). According to the Bank of Japan, inflation is caused by cost factors, as a result of rising wages.

Figure N0. (7): Inflation Rate (%) of Japan 2023



While the monthly average value of the Japanese yen against the US dollar decreased during this year from (130.4) yen per dollar in January 2023 to (143.8) yen per dollar in December 2023 as a result of the US Federal Reserve raising the interest rate, which led to a rise in the value of the dollar against global currencies, including the Japanese yen.

Figure No. (8): Exchange Rate of Dollar Against Yen 2023



Box No. (2)

In 2016, the Bank of Japan decreased the interest rate below zero in an effort to stimulate the country's stagnant economy. Interest rates are negative, meaning that individuals pay to deposit money in the bank, to encourage individuals to spend their money instead of putting it in the bank, and this policy has been used by many countries. The Bank of Japan law states that the bank's monetary policy should "aim at achieving price stability, thus contributing to the sound development of the national economy." Price stability is important because it provides the basis for economic activity in the country. In a market economy, individuals and firms make decisions about consumption or investment, based on the prices of goods and services. When prices fluctuate, individuals and businesses find it difficult to make appropriate consumption and investment decisions, and this can hinder the effective allocation of resources in the economy. Unstable prices can also distort income distribution. On this basis, the Bank has set a price stability target of (2%) in terms of annual rate change in the consumer price index in January 2013 and has committed to achieving this target year-on-year as soon as possible.

2- Emerging Markets

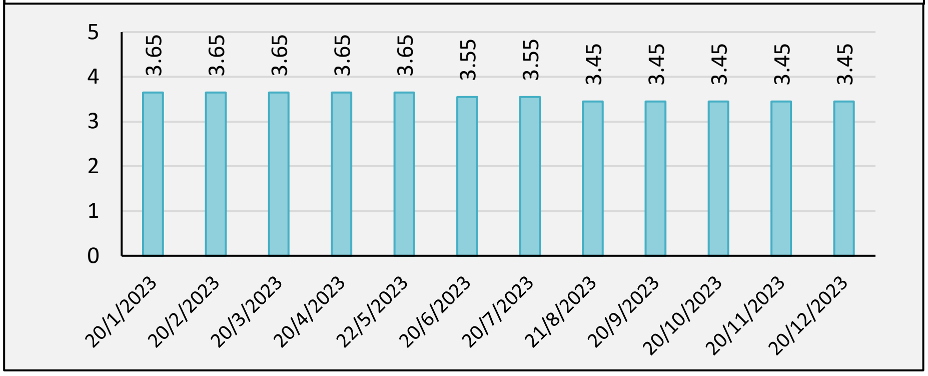
1.2 China

The People's Bank of China implemented what it is called "sound monetary policy in a targeted and effective manner" and steadfastly stood in contributing to the overall recovery of the economy. China's financial markets worked smoothly, liquidity was maintained at a sufficient and reasonable level, and Yuan exchange rates remained generally stable at an adjustive and equilibrium level.

Unlike central banks, the People's Bank of China has tended to reduce the interest rate twice during this year[1], which indicates the stability of the yuan exchange rate, as the value of the yuan increased by (5.4%) from (7.16) yuan per dollar in July 2023 to (6.79) yuan against dollar in December of the same year, but it is noted that the interest rate remained unchanged for the last five consecutive sessions of this year. In October 2023, the People's Bank of China strengthened liquidity support for the banking system while extending medium-term policy loans but kept the interest rate unchanged.

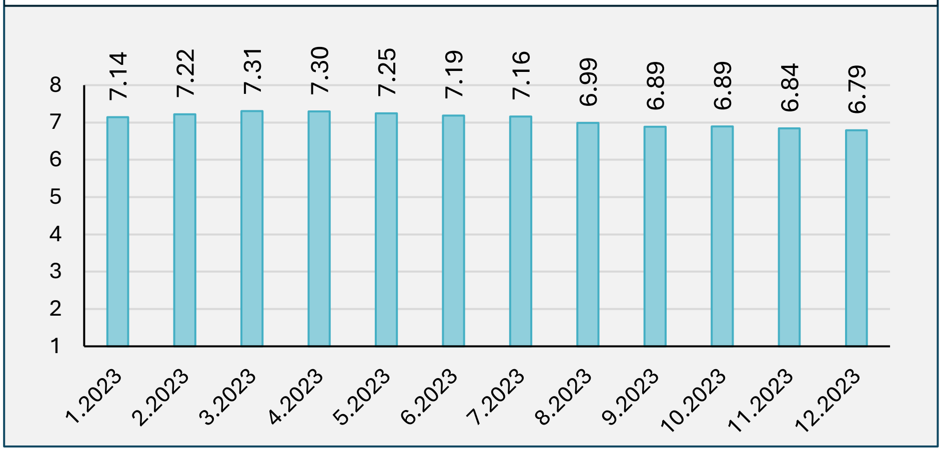
[1] The People's Bank of China announced that starting August 20, 2019, the main lending rate will be calculated using a new calculation mechanism. Based on what the banks have provided on pricing - it is done by adding a few key points to the rate of interest for open market operations (mainly referring to the medium-term lending facilitation rate, what is known as MLF) - The main lending rate is now calculated by the National Finance Centre, which acts as a reference for bank lending pricing.

Figure No. (9): Interest Rates (%) of China 2023



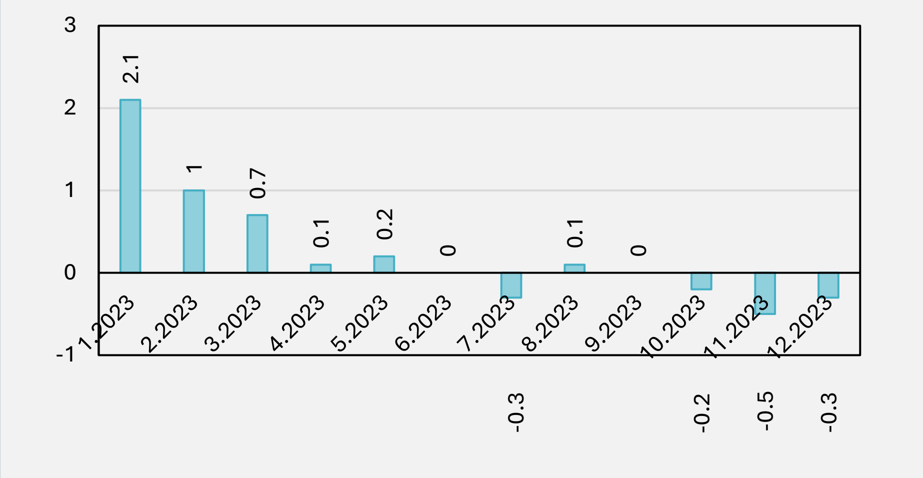
Based on the policies adopted by the People's Bank of China, the Yuan exchange rate stabilized during 2023. As previously reported, the Yuan exchange rates remained generally stable at an adjustment and balance level.

Figure No. (10): Exchange Rate of Dollar against Yuan2023



China's inflation rates recorded a decline from (2.1%) in January 2023 to (0.3%), reflecting weak domestic demand, which is expected to continue to weigh on inflation expectations. China's low inflation is supposed to contribute to the global inflation slowdown process.

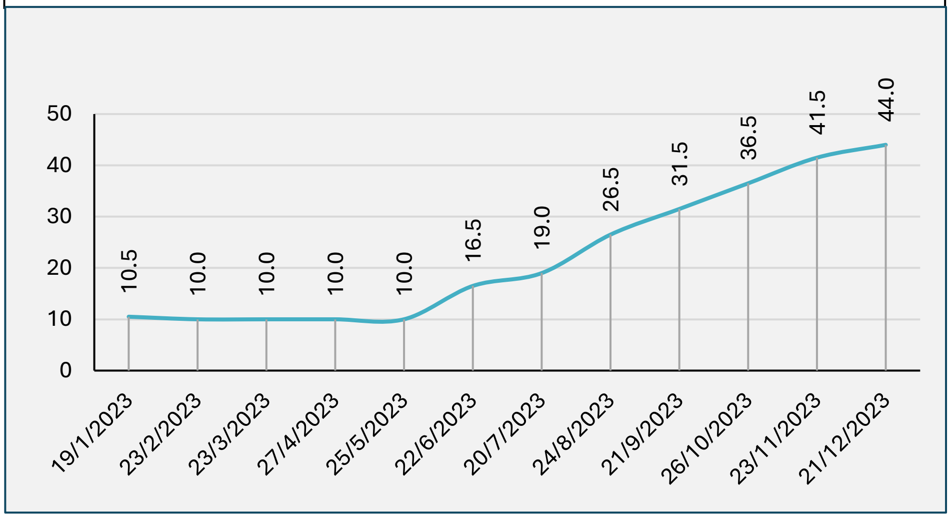
Figure No. (11): Inflation Rates (%) of China 2023



2.2 Turkey

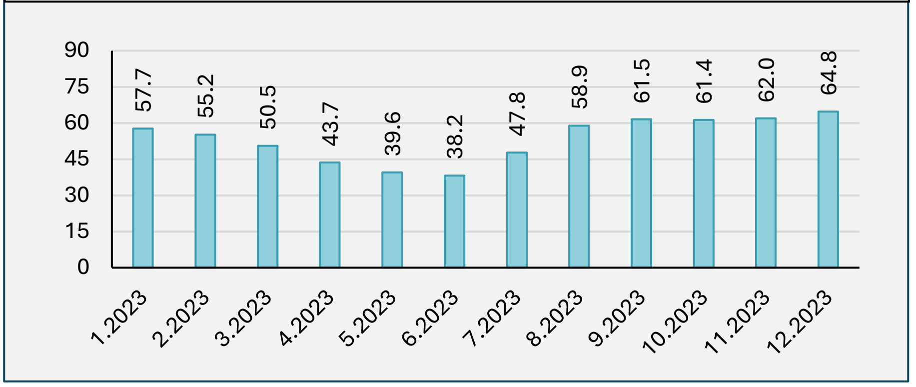
In June 2023, Turkey's Central Bank tended to tighten monetary policy, raising the interest rate seven times and at high rates from (10%) in June 2023 to (44%) in December of the same year. This tightening was a result of high inflation rates, along with the depreciation of the Turkish lira.

Figure No. (12): Interest Rates (%) of Turkey 2023



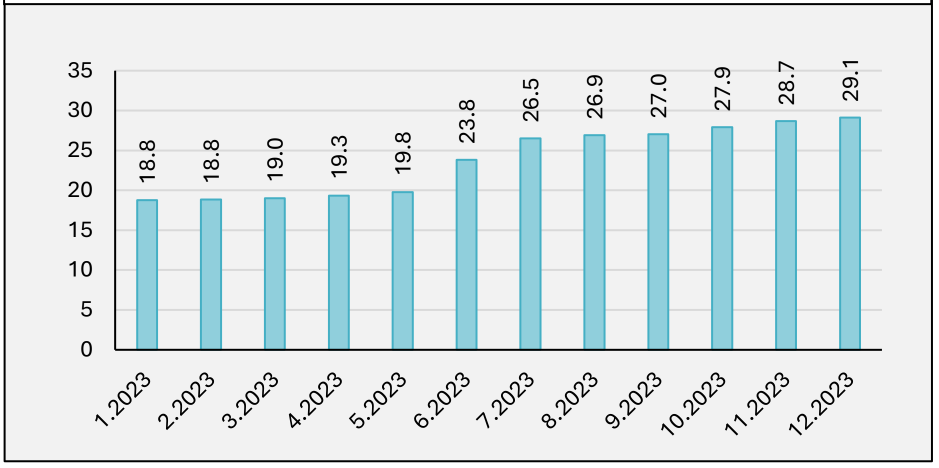
The annual inflation rate began to decline during the first and second quarters, declining from (57.7%) in January 2023 to (38.2%) in June 2023 due to decrease of global energy prices, as well as decrease of prices for basic commodities globally. It increased from (38.2%) in June 2023 to (64.8%) in December of the same year, due to raise of energy prices in Turkey because of tax adjustments, exchange rates and wages.

Figure No. (12): Interest Rates (%) of Turkey 2023



Although the Central Bank of Turkey raised the interest rate at this pace of increases, inflation did not respond, meaning that inflation became outside the control of the Central Bank of Turkey, after the significant depreciation of the Turkish lira against US dollar.

Figure No. (14): Exchange Rate of Dollar against Turkish lira 2023

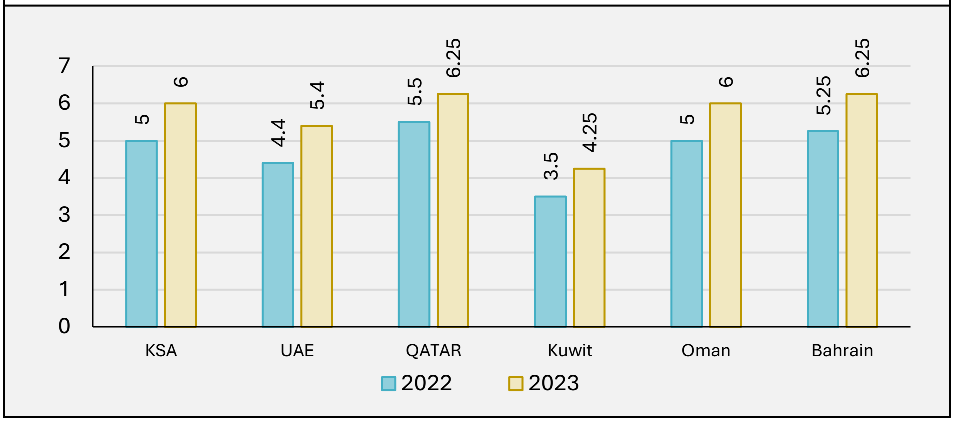


Second: Arab Monetary Policy Developments

1- Gulf Cooperation Countries (GCC)

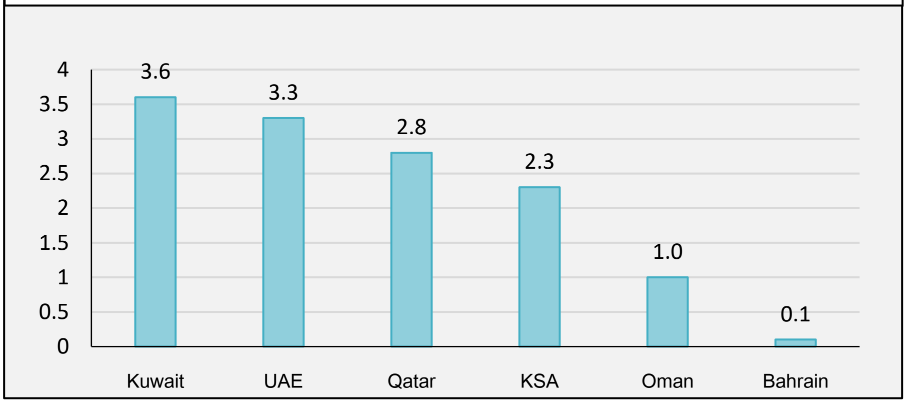
Gulf central banks (KSA, UAE, Qatar, Bahrain, Kuwait, Oman) raised interest rates in 2023 in line with the US Federal Reserve which raised interest rates several times in 2023. The change did not exceed (1%) in 2023 for Gulf central banks.

Figure No. (15): Interest rate (%) for (GCC) 2022- 2023



Although GCC countries rely on imports to cover their domestic needs, higher prices for trading partners are reflected locally. However, the GCC countries achieved low annual inflation rates, ranging from (0.1%) to (3.6%) in 2023. Kuwait recorded a rate of (3.6%), the highest among the GCC countries, while Bahrain's annual inflation rates reached (0.1%) in 2023, indicating an economy contraction.

Figure No. (16): Inflation Rates (%) for GCC Countries2023



Box No. (3)

Central banks of the Gulf Cooperation Countries (GCC) and the United States Federal Reserve Bank are closely linked, as the GCC countries rely on the dollar peg to their currencies, except for Kuwait, that linked its currency to a basket of currencies since 20 May 2007. Therefore, GCC central banks kept up with the Federal Reserve Bank regarding interest rate changes, as raising interest rates for the Federal Reserve Bank increases the value of the dollar and thus the value of GCC currencies.

2- Arab Countries Outside GCC

GCC oil producing countries differ from Arab oil producing countries outside GCC countries in terms of interest rate decisions. As GCC countries tended to raise interest rates in the same way as central banks that made decisions to raise interest rate in 2003, while Libya and Algeria did not raise interest rates and kept them at (3%) in 2023.

The monetary policy implemented by the Central Bank of Algeria of raising the legal reserve requirement rate from (1%) to (3%) mid 2023 absorbed banking liquidity, while the steering rate[2] applied to major refinances was maintained at (3%) for 2023.

The Algerian Central Bank also approved the Algerian Digital Dinar in early 2023, to enable the Algerian Central Bank for conducting a better control over the volume of cash in circulation among banks. The Central Bank of Algeria has implemented a targeted liquidity absorption process with the value of Algerian dinars (300) billion to absorb the source of potential inflationary surplus liquidity. This action came as a completion of an adjustment of the exchange rate of Algerian dinars between the end of July and September 2022, which rose by (4.1%) against the dollar, but the value of the Algerian dinar fell by (1.3%) at the end of 2023 compared to the beginning of the year. As a result of the above actions, Algeria's annual inflation rate fell from (9.9%) in January 2023 to (4.1%) in December 2023.

Figure No. (17): Dollar Exchange Rate Against the Algerian Dinar 2023

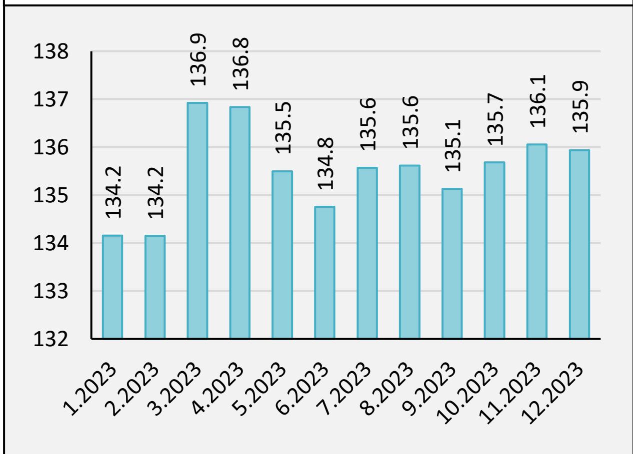
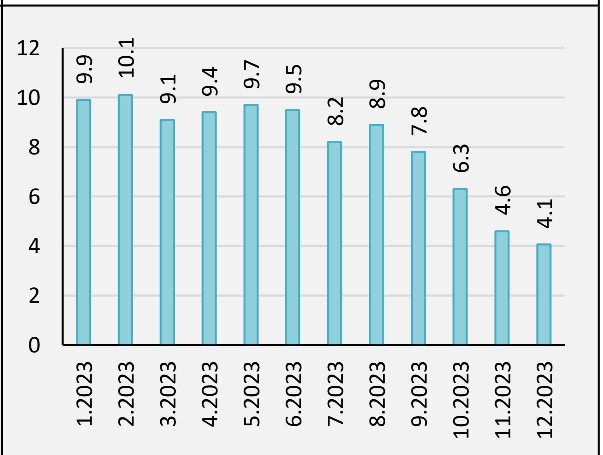


Figure No. (18): Inflation Rate of Algeria 2023

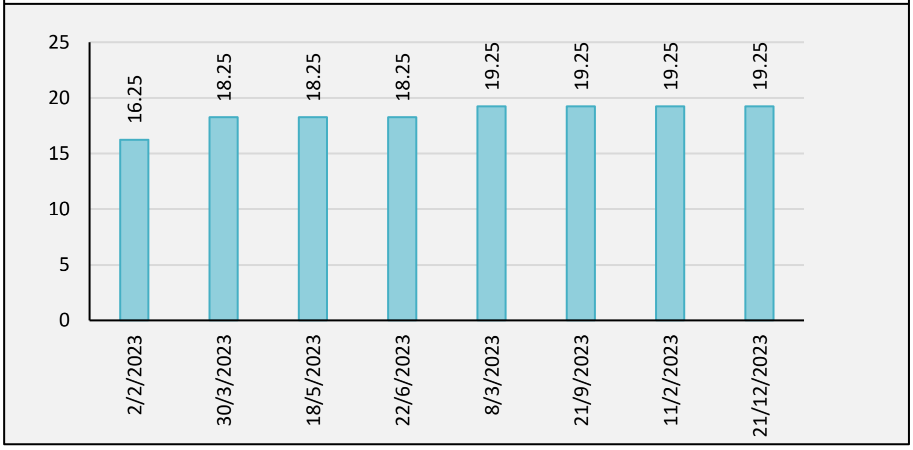


[2] It is the interest rate that is applied to major refinances, as it is a signal of monetary policy orientation with the primary objective of maintaining price stability.

3- Oil Importing Arab Countries

Unlike the oil-exporting Arab countries, the monetary policy of the oil-importing Arab countries witnessed changes of interest rates, exchange rates and annual inflation rates in 2023. During 2023, Egypt experienced a financial and economic crisis represented by a lack of foreign liquidity as Egypt resorted to borrowing from the International Monetary Fund (IMF) to raise the value of the Egyptian pound, which fell in the parallel market due to a lack of dollar liquidity.

Figure No. (19): Interest Rates (%) as per Decisions of the Egyptian Central Bank 2023



Inflation rates of Egypt rose from (25.8%) in January 2023 to (38.0%) in September 2023 due to the decline of Egyptian pound’s exchange rate at the parallel market, before falling to (33.7%) in December 2023 for many reasons, including:

- Cash supply increase (domestic liquidity) by (24.7%) in July 2023 compared to July of the previous year.
- The emergence of the black market has created a significant difference between the official exchange rate and the market exchange rate, which is reflected on imported commodity prices and then inflation rates during this year. As a result of Egypt's acquisition of dollar funding from IMF and other international institutions during fiscal year 2022-2023, as well as raising interest rate by the Central Bank of Egypt, which led to a rise of the pound’s exchange rate at the market. The Central Bank of Egypt moved towards floating the pound in January 2023, which is the third floating in two years and the fourth since the first floating in 2016, where it was decided to reduce pound’s exchange rate from (24.7) per dollar to (32) per dollar with a decline of (30%).

Figure No. (20): Inflation Rate of Egypt 2023

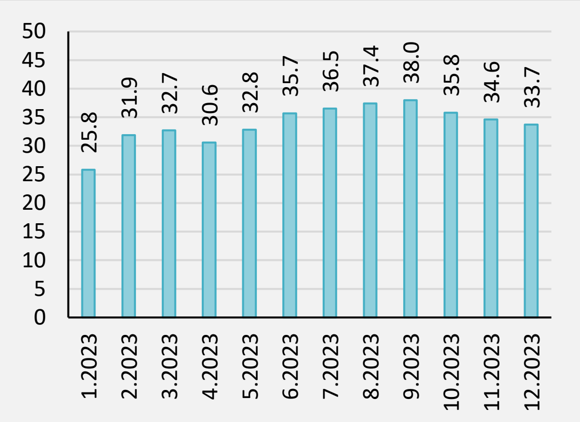
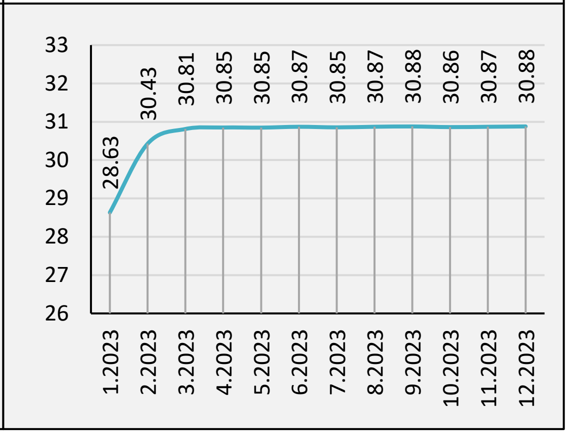


Figure No. (21): Dollar Exchange Rate Against Egyptian Pound 2023



Third : Global Monetary Policy Outlook

Inflation is expected to continue to decline as central banks maintain a tightened stance. As many countries approach the peak of monetary policy tightening cycles, there is no justification for further monetary tightening. However, premature monetary easing would squander the achieved gains. Once inflation reduction is strongly on track and inflation's near-term expectations diminish, then adjustment of interest rate towards reduction will allow real interest rate to remain unchanged until inflation targets are close.

Global inflation is expected to decline faster than expected in most regions of the world, with a decline in supply-side problems and tightened monetary policy. Expectations indicate the decline of global total inflation to (5.2%) of 2024, resulting from lower fuel and commodity prices due to weak global demand.

Also **advanced countries'** annual inflation is expected to fall to (3.0%) in 2024. Regarding the **United States**, the Federal Reserve Bank is heading to reduce interest rate three times during 2024.

The Federal Reserve’s shift from restrictive monetary policy to normal monetary policy following its unprecedented procedures to raise interest rates is now on the horizon, indicating a real decline of inflation. The Federal Reserve’s challenge is to achieve a precise balance.

If it eases interest rates too early, it risks keeping inflation above the (2%) target, and if it moves too slowly to reduce interest rates, it risks the economy surrendering to the burden of high interest rates and potentially shrinking the economy.

Regarding **the Eurozone,** inflation is expected to average (2.3%) in 2024 and inflation expectations excluding energy and food have been revised down to an average of (2.6%) for 2024. Experts have adjusted their 2024 expectation for growth by reducing it to (0.6%), with economic activity to remain weak in the near term. The European Central Bank is determined to ensure that inflation returns to its medium-term target of (2%) at a proper time. The European Central Bank also considers that its key interest rates are at levels that would contribute significantly to achieve this goal, as they have been maintained long enough. Future European Central Bank decisions will ensure that interest rates are set at sufficiently restricted levels for as long as necessary.

In **emerging markets and developing countries**, inflation is expected to register a rate of (7.8%) in 2024 and investors expect interest rates to be reduced in some emerging markets faster than in advanced economies. Thus, capital may encourage the abandonment of emerging market assets and preference for advanced market assets. Moreover, quantitative tightening in major advanced economies continues to draw liquidity from financial markets, which could lead to additional repercussions on capital flows in emerging markets.
Global interest rates continue to fluctuate as investors become more cautious about sudden changes in economic data - as a reaction to central banks' emphasis on the importance of data dependence.

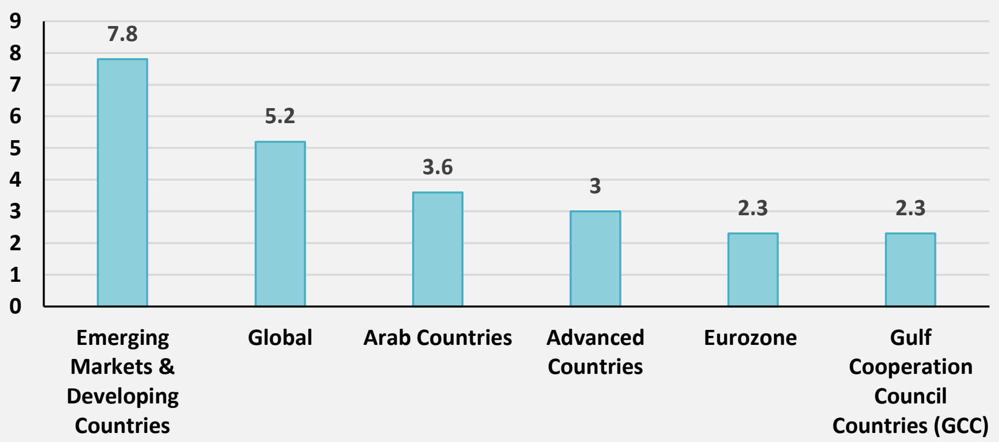
Emerging markets face risks because of markets' expectations of sharp rate cuts by central banks in advanced markets this year. If these expectations proved to be wrong, investors may again assume that high interest rates will continue to apply for longer time, which will negatively reflect on high-risk asset prices, including stocks and bonds in developing markets.

Arab countries' inflation outlook will be determined by key commodity prices, interest rate levels and exchange rate changes, as large part of Arab countries rely on imports to cover their consumption needs, which resulted in affecting the imported inflation on Arab countries' domestic inflation. According to Arab Economic Outlook (November 2023), Inflation in Arab countries is expected to fall to (3.6%) in 2024.

Inflation in **Gulf Cooperation Council countries (GCC)** is expected to register a rate of (2.3%) in 2024, as price levels for these countries are linked to imports prices. Control of inflation rates in the GCC countries is the result of governments providing support for inflation control, along with several gulf central banks conducting a tightened monetary policy.

Regarding **Arab countries outside the Gulf Cooperation Council**, these countries are also vulnerable to imported inflation due to global economic changes, as exchange rate fluctuations in these countries increase the cost of imports and hence the inflation rate. **Algeria's** inflation rate is expected to record (5.7%) in 2024, as government seeks to provide subsidies to control inflation rates. Whereas **Egypt**, which is ranked among the oil importers Arab countries of highest inflation rate, as high inflation rates in Egypt are linked to exchange rate pressures and a scarcity of foreign currency.

Figure No. (22): Global Inflation Expectations 2024



The Central Bank of Egypt is raising interest rates to curb inflation rates while controlling the depreciation of the Egyptian pound. The World Bank expects Egypt's inflation rate to decline to (26.7%) in 2024.

Chapter Two
Developments of Monetary Policy Indices and Instruments

Monetary policy seeks to achieve several key objectives designed to promote economic stability. One of the most prominent objectives is prices stability, as central banks use monetary policy to control inflation (general prices increase) or deflation (general prices decline). Maintaining low and steady inflation rates is critical to economic stability.

One of the main objectives of Central Bank of Iraq is to ensure stable domestic prices and enhance a stable competitive financial system.

The Central Bank of Iraq is responsible for:

- Maintaining price stability.
- Implementation of monetary policy (including exchange rate policy).
- Management of foreign reserves.
- Issuance and management of currency.
- Regulate the banking sector to promote a competitive and stable financial system.
- Contribution to economic growth.

The report will address the following in this chapter:

First — **Developments of Key Monetary Indices**

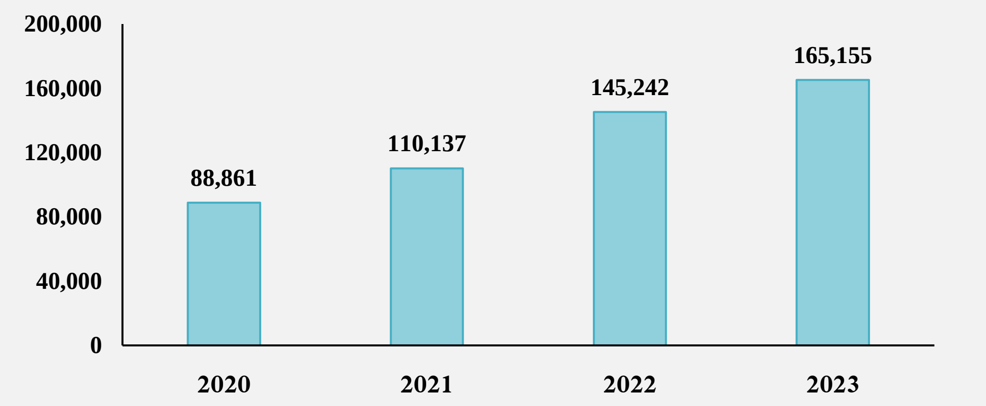
Second — **Developments of Indirect Monetary Policy Instruments**

First: Developments of Key Monetary Indices

1- Cash Basis (M0)

Monetary base balance witnessed an increase of (13.7%) to record IQD (165.2) trillion in 2023 against IQD (145.2) trillion in 2022 due to an increase of net foreign and net domestic assets at the central bank by (3.7%) and (323.8%), respectively. As well as an increase in currency out of the banks and bank reserves by (15.3%) and (12.3%), respectively.

Figure No. (23): Balance of Cash Basis (M0) & Monetary Base for 2020-2023 (IQD billion)

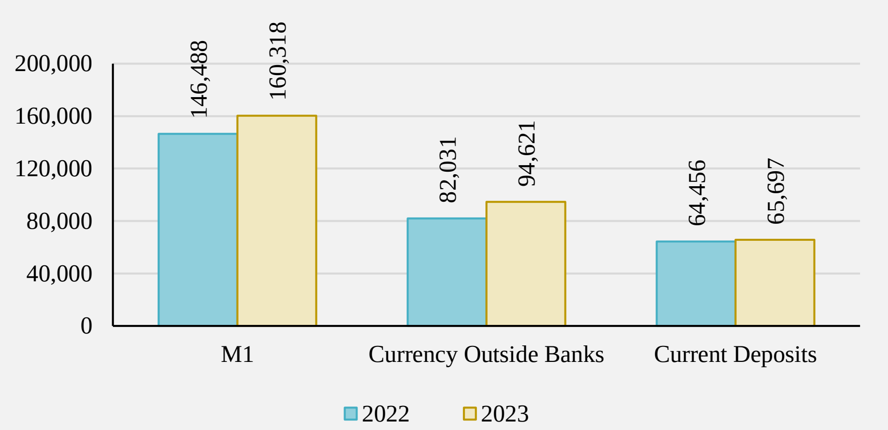


2- Narrow Money Supply (M1)

Narrow money supply (M1) recorded an increase of (9.4%) by the end of 2023 compared to 2022, reaching IQD (160.3) trillion against IQD (146.5)trillion for last year. This increase is mainly attributed to growth of currency outside banks (15.3%) to record IQD (94.6) trillion against IQD (82) trillion in 2022; to constitute (59%) of narrow money supply (M1) in 2023 against (56%) in 2022. Current deposits increased by (1.9%) to reach IQD (65.7) trillion against IQD (64.5) trillion in 2022; to constitute (41%) of narrow money supply (M1) in 2023 against (44%) in 2022 as shown in table No. (1). Through the analysis of narrow money supply (M1) structure, it is noted that there is an increase of currency outside banks' contribution to current deposit account in 2023. It continues to constitute a high contribution ratio due to non-development of the banking system in a form that facilitates domestic cash transactions and the shift towards electronic payment, while the use of currency notes poses many risks, including forgery, theft, and others.

Table No. (1): Narrow Money Supply (M1) for 2022-2023 (IQD billion)		
Components	**Dec. 2022**	**Dec. 2023**
Narrow Money Supply M1	146,488	160,318
Growth Rate (%)	22.1	9.4
Current Deposits	64,456	65,697
Ratio of Current Deposits to M1(%)	44.0	41.0
Currency Outside Banks	82,031	94,621
Ratio of Currency Outside Banks to M1 (%)	56.0	59.0

Figure No. (24): Narrow Money Supply (M1) for 2022-2023



3- Broad Money Supply M2 (Domestic Liquidity)

Broad Money supply (M2) (Domestic Liquidity) recorded at the end of 2023 an increase of (7.5%) compared to 2022, it reached IQD (181.0) trillion against IQD (168.3) trillion in 2022 and constituted (54.8%) of GDP at current prices, as shown in table No. (2).

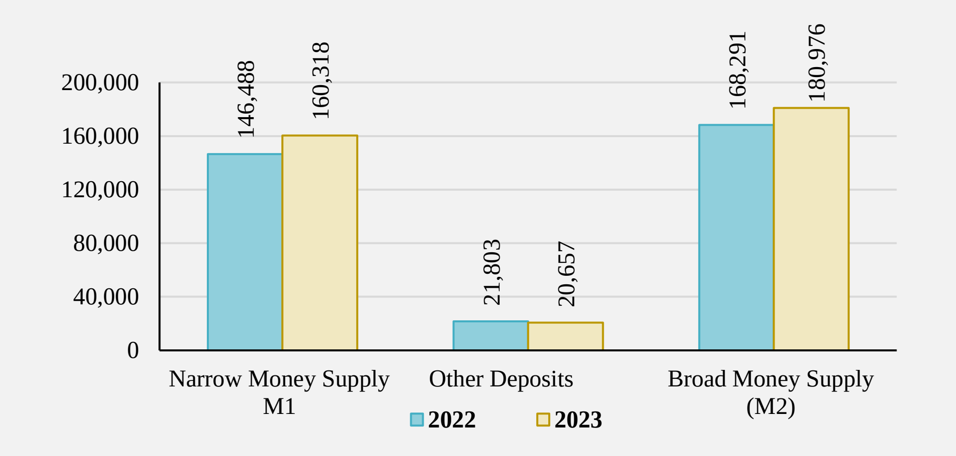
Table No. (2): Domestic Liquidity Components (M2) for 2022-2023

(IQD billion)

Components	**Dec-2022**	**Dec-2023**	**Growth**
Narrow Money Supply M1	146,488.0	160,318	9.4
Other deposits	21,803.4	20,657	-5.3
Broad Money Supply M2	168,291.4	180,976.0	7.5

The increase in the domestic liquidity (M2) occurred as a result from growth of narrow money supply (M1) by (9.4%), despite the reduction of other deposits (current deposits, saving, postal & insurances) by (5.3%) to record IQD (20.7) trillion in 2023 against IQD (21.8) trillion in 2022. It was noted that other deposits are still constitute low percentages, as it reached (11.4%) of total (M2) in 2023 against (13.0%) in 2022, while currency outside Banks is constantly growing at the expense of deposits contribution, whether it was current or other deposits, due to the raise of the issued currency that results from the growth of public expenditure after the implementation of the general budget .

Figure No. (25): Broad Money Supply (M2) for 2022-2023



4- Factors Affecting Money Supply

The expansionary factors represented by (net government debts, private sector debts) have a clear role in the growth of money supply during 2023, as the government debt rose from IQD (76.0) trillion in 2022 to IQD (77.7) trillion in 2023.

Government deposits also decreased by IQD (9.4) trillion from the previous year in addition to the decrease of other deposits of IQD (1.1) trillion, in contrast, private sector debts increased by IQD (3.2) trillion, and the budget item decreased by IQD (2.7) trillion. Thus, the total of expansionary factors amounted IQD (18.3) trillion,

While net assets represented all contraction factors amounted IQD (4.5) trillion.

Table No. (3): Money Supply & Influencing Factors in 2022-2023

(IQD billion)

Items	Dec-2022	Dec-2023	Change rate from previous year	Growth rate (%)
Net Foreign Assets in The Financial Sector (CBI + Other Banks)	182,641	178,135	-4,506	-2.5
Debts on the Private Sector & Other Sectors	42,777	45,997	3,220	7.5
Government Debts	76,035	77,679	1,645	2.2
Total Assets	301,453	301,811	358	0.1
Narrow Money Supply (M1)	146,488	160,318	13,830	9.4
Currency Outside Banks	82,031	94,621	12,589	15.3
Current Deposits	64,456	65,697	1,241	1.9
Other Deposits	21,804	20,657	-1,147	-5.3
Government deposits	77,541	68,252	-9,289	-12
Budget item	(55,620)	(52,584)	-3,036	-5.5
Total Non-financial Liabilities	154,965	141,493	-13,472	-8.7
Total Liabilities	301,453	301,811	616	0.11

Figure No. (27): Money Supply & Influencing Factors (Assets side) for 2022-2023

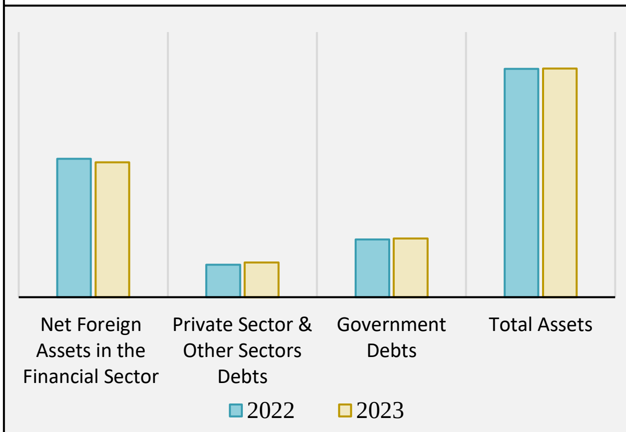
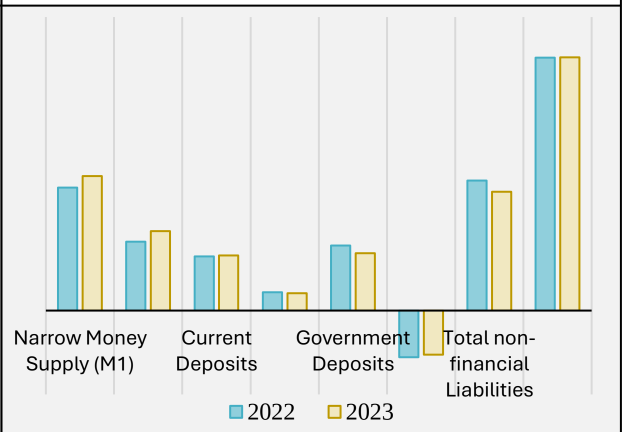


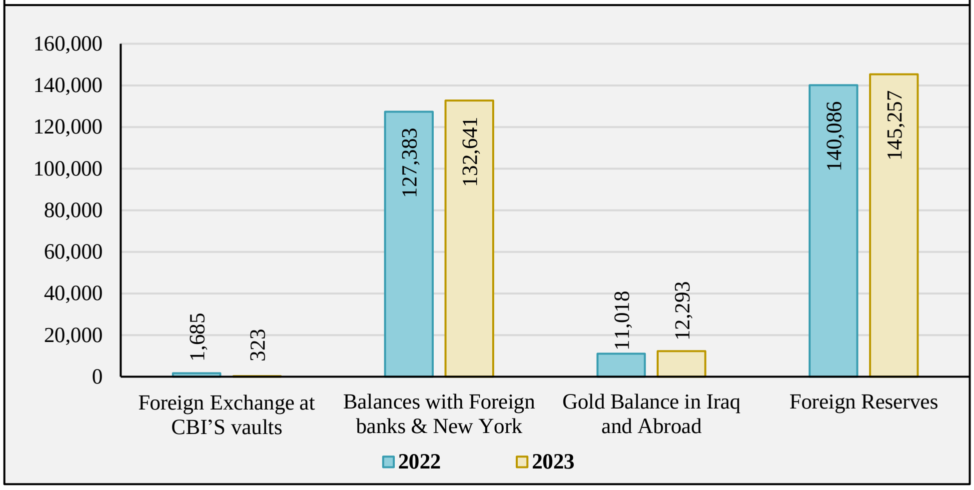
Figure No. (26): Money Supply & Influencing Factors (Liabilities side) For 2022-2023



5- Foreign Reserves at The Central Bank of Iraq

The balance of foreign reserves recorded an increase of (3.7%) at the end of 2023 compared to the previous year to reach IQD (145.3) trillion compared to IQD (140.08) trillion at the end of 2022, as shown in table No. (4).
This rise is mainly attributed to the (4.1%) increase in foreign exports abroad, reaching IQD (132.6) trillion in 2023, against IQD (127.3) trillion in the previous year. Gold stock in Iraq and abroad rose by (11.6%), amounting to approximately IQD (12.3) trillion at the end of 2023, compared with IQD (11) trillion at the end of 2022, due to the new quantities of gold that were purchased by CBI, in order to achieve greater stability and resilience to local and global changes. Yet foreign exchange balance in Central Bank's vaults decreased by (80.8%) to record IQD (0.323) trillion in 2023 against IQD (1.6) trillion in 2022.

Figure No. (28): Main Components of Foreign Reserves at the end of 2022-2023 (IQD billion)



(BOX No. 4)

The Central Bank of Iraq carried out purchases of new amounts of gold during 2023, approximately (34) tons, an increase of (35%) in its holdings. This increase came within the framework of the Central Bank's strategy to manage its assets to achieve higher levels of stability and ability to face local and international economic changes.
It is noteworthy that gold is one of the most important assets held by central banks and international financial institutions and considered as a safe haven in the absence of uncertainty due to its acceptability at the international level.

Table No. (4): Main Components of Foreign Reserves
at the end of (2022-2023)

(IQD billion)

Items	2022	2023	Growth rate (%)	Contribution (%)
Cash in CBI vaults	1,685	323	-80.8	0.2
Balances at foreign banks & New York	127,383	132,641	4.1	91.3
Gold balance in Iraq and Abroad	11,018	12,293	11.6	8.5
Foreign reserves	140,086	145,257	3.7	100.0

Second: Developments of Indirect Monetary Policy Tools

1- Selling & Buying Foreign Currency Window

The official exchange rate recorded an increase of (10.3%) during 2023 after the decision to change the exchange rate from IQD (1450) to (1300) dinar per dollar.

The quantities of dollars sold in the selling & buying foreign currency window at the Central Bank (in cash, enhancing banks accounts abroad) for the year 2023 recorded a decrease of (28%) compared to the year 2022, to record (33.5) billion dollars compared to (46.8) billion dollars for the year 2022, as a result a decrease in both cash sales by (8%) in 2023 as a result of the application of the new mechanism (electronic platform) to enhance bank balances abroad and cash sales, in order to keep pace with the latest global practices, and dollar sales for the purposes of strengthening banks accounts for remittances abroad decreased by (35%). As for the appropriations, they increased by (9.5%).

On the other hand, CBI's sales of foreign currency were divided into US$ (23.6) billion to enhance the balance of banks abroad, US$ (1.5) billion to enhance the balance of banks for credits abroad, and US$ (8.3) billion in cash, as sales of remittances and credits formed to enhance balances abroad (70.5%) and (4.6%), respectively, and cash sales (24.9%) of the total quantities sold.

As for the Central Bank's purchases of US dollars from the Ministry of Finance, recorded an increase of (20.0%) to reach US$ (64) billion during 2023, compared to US$ (53.3) billion in 2022, due to the increase in public spending during 2023 after the approval of the public budget law for the fiscal years (2023, 2024, 2025), and then the government's increase in dinar purchases from the Central Bank of Iraq .

(Box No. 5)

The Central Bank of Iraq built an electronic platform for selling the dollar in coordination with international bodies for the purpose of regulating and organizing the operations of the selling & buying foreign currency window and ensuring the effectiveness of its control. A specialized international company was commissioned to build it and connect the banks with the Central Bank through it, to limit the process of fraud, terrorism financing and raise the level of performance of the banking sector, which is welcomed by all regulatory and supervisory authorities in the world as it has a high degree of compliance with international requirements and knowledge of the real beneficiary.

Figure No. (29): Sales and Purchases of the US$ in (2022-2023)

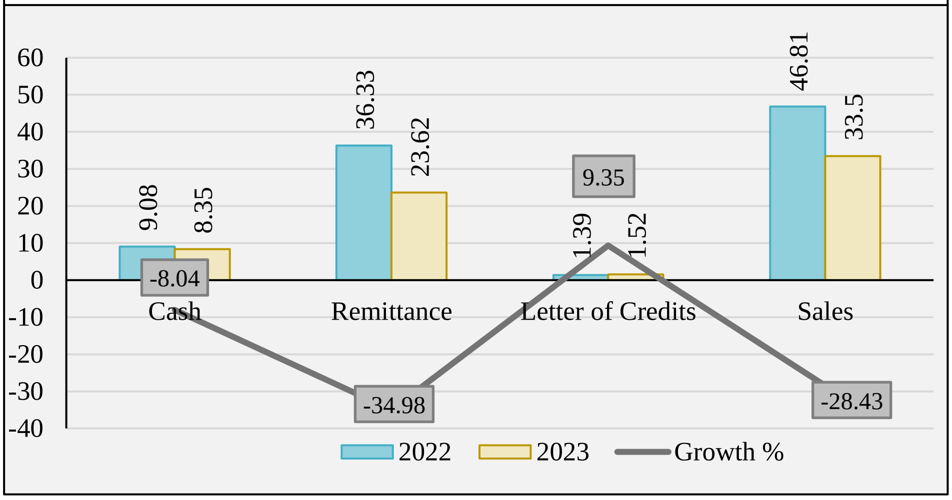


Table No. (5): Sales and purchases of the US$ Through Selling and Buying of the Foreign Currency Window (Cash, Enhancement of Balances Abroad) and the purchased quantities in (2022-2023)

(US$ billion)

	Cash	Remittance	Letter of Credits	Sales (1)	Purchases (2)	Gap (1-2)
2022	9.08	36.33	1.39	46.81	53.36	6.55
2023	8.35	23.62	1.52	33.50	64.0	30.50
Growth Rate (%)	**-8.04**	**-34.98**	**9.35**	**-28.43**	**19.94**	

2- Outstanding Facilities

During this year, The Central Bank of Iraq has adopted the annual Monetary Policy rate of (7.5%), in order to control domestic inflation rates. **Outstanding Deposits Facilities** Invested amounts for (30) days recorded an increase to (42.1%) in 2023 to be IQD (2.091) million against IQD (1.471) million in 2022, as the invested amounts for (90.182.364) days reached to IQD (732.49.336) million respectively.

The Islamic deposits certificates in Iraqi Dinar reach to:

- (91) days in the amount of IQD (254.710) million at (5.0%).
- (182) days invested amounts records reduction of (42.9%) in 2023 to record IQD (113.000) million against IQD (198.000) million in 2022 at (6.0%)
- (364) days in the amount of IQD (150.000) million at (8.0%).

All products have been discontinued in middle of 2023, keeping only CBI remittances (14) days that amounted IQD (5.619) billion. Islamic deposits certificates (14) days amounted IQD (11.166.800) million at (7.5%).

Regarding the Outstanding Lending Facilities, The Central Bank of Iraq continued operation with this tool as an implementation of the objectives of its monetary policy aiming at extending credit to banks, ensuring Control on the bank liquidity, and affect it through interest rates (price signals) **that were set for each type according to the following:**

-Initial credit (9.5%) annually.

- Secondary credit (10.5%) annually.
- Loan of last resort (11.0%) annually.

None of the state-owned or private banks provided any of these credits during 2023.

(BOX No. 6)

On June 26, 2023, The Central Bank of Iraq decided the following:

- Raise the monetary policy rate from (4%) to (7.5%).
- Stop working with monetary policy tools (Remittances of Central Bank of Iraq and the Islamic deposit certificates) with their various maturities and keeping only one short-term instrument for (14) days with an interest rate of (7.5%).

3- Reserve Requirement

In line with the direction of monetary policy and its high flexibility adopted to support the process of economic development and control liquidity, and maintain the stability of the banking sector, the reserve requirement ratio for government and private deposits, which was calculated in April was raised, to reduce the inflationary pressures witnessed in 2023.

Reserve Requirement recorded an increase of (45.6%) to reach IQD (18.6) trillion in 2023, compared to IQD (12.8) trillion in 2022, attributed to the increased volume of reserve requirements on deposits with private banks by (73.3%) to reach IQD (2.6) trillion compared to IQD (1.5) trillion in 2022, Reserve requirement on deposits at government banks increased by (42.5%) to reach IQD (16.1) trillion compared to IQD (11.3) trillion in 2022. On the other hand, deposits subject to the foreign currency reserve decreased by (27.8%), and deposits subject to reserve (in dinar) increased by (40%).

(Box No. 7)

In light of the procedures taken by the Central Bank of Iraq aimed at preserving the soundness of the banking sector and based on the board of directors' decision no. (60) of 2023, the following was decided:

Raising the reserve requirement on deposits received by banks in IQD & US$ to be (18%) instead of (15%) for current deposits and (13%) instead of (10%) for forward deposits of commercial banks and (8%) instead of (5 %) for forward deposits for Islamic banks.

Chapter Three
Prices

The inflation rate is calculated as the average of increase in the prices of a basket of selected goods and services over a period of one year. High inflation means that prices are rising quickly, while low inflation means that prices are rising more slowly. Inflation can be compared to deflation, which occurs when prices fall and purchasing power increases. On the other hand, there is a strong relationship between inflation rates and interest prices, which are the most important cost factors for banks and individuals, as inflation affects real interest, whether credit or debit, through its relationship with nominal interest.

Iraq, like other countries, is affected by several drivers of inflation rates, such as the inflation rates of trading partners, since it imports commodity needs from abroad.

The report will address the following in this chapter:

First	Trends of General Consumer Price Index
Second	Developments of Inflation rates by Commodity Groups in 2023 Compared to 2022
Third	General Inflation (Monthly and Annual)
Fourth	Implicit Deflator of GDP Prices for 2023 Compared to 2022
Fifth	Import Standard Index (Imported inflation)
Sixth	Interest Rate (Nominal and real)

First: Trends of Consumer Price Index

The consumer prices index in Iraq this year as an index of inflation showed a decrease in its growth rate to reach (4.4%) compared to (5%) for the previous year. Accordingly, it recorded (122.2) points in 2023 compared to (117.0) points in 2022. While the consumer prices index after excluding (oil derivatives (oil and gas) and the group of vegetables and fruits)) recorded (123.9) points in 2023 compared to (118.5) points in 2022. Subsequently, the basic inflation decreased from (4.8%) in 2022 to (4.6%) in 2023, due to the improvement of inflation dynamics in Iraq, and thanks to the tight monetary policy of the Central Bank of Iraq. In addition to the decline in global food prices, as the Food and Agriculture Organization's Food Price Index for 2023 decreased by (13.8%), as Iraq is affected by price movements (decline and increase) with trading partners and external shocks, which are resulting from fluctuations in oil prices and the rise in some basic commodities, especially (food, iron and transportation costs) in global markets. When comparing the main components of the consumer basket for 2023 with the previous year, it is noted that most groups of the standard index increased, except for the groups (housing, water, electricity and gas) and (communication). The following analysis is presented in detail regarding the developments of inflation rates for 2023 compared to 2022 according to the commodity groups.

Second: Developments of Inflation Rates According to Commodity Groups In 2023 Compared to 2022

The food and non-alcoholic beverages group recorded an increase of (5.9%) as a result of the rise in all items of this group, which includes (food, bread and grains, meat and fish), which constitute the highest relative weight of (29.6%). The transportation group increased by (8.3%), which comes in third place in relative weight, which constitutes (15.2%) of the consumer basket. The household equipment and supplies group also increased by (7.7%), as a result of the increase in the prices of furniture, equipment and household appliances. The clothing and footwear group recorded an increase of (6.6%), whereas the miscellaneous goods and services group increased by (6.9%), and the health group by (5.4%).

The entertainment and culture, restaurants and hotels, and education groups recorded an increase of (7.9%), (7.6%), and (3%) respectively.

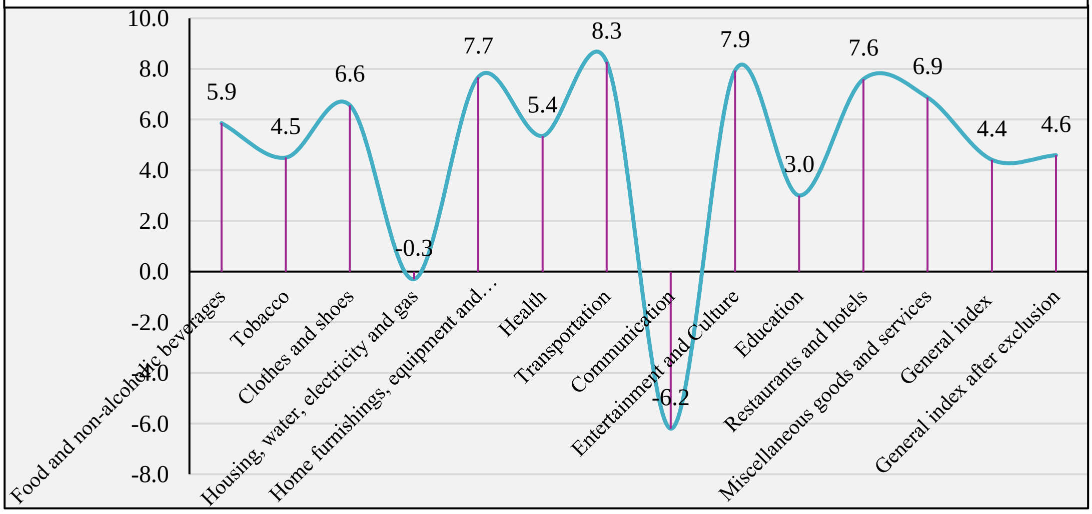
While the (housing, water, electricity and gas) group recorded (0.3%) as a result of the decrease in the water and electricity supply item by (16.5%). The communications group also recorded a decrease of (6.2%) as a result of the Council of Ministers' decision that canceled the (20%) tax on mobile recharge card, and the Ministry of Communications' decision in which internet price was reduced by (20%) as well.

Table No. (6): Consumer Price Index for 2022 compared to 2023 (100=2012)

S	group	Average of 2022 (point)	Average of 2023 (point)	Inflation Average 2023(%)of
1	**Food and non-alcoholic beverages**	108.6	115.0	5.9
2	**Tobacco**	140.9	147.3	4.5
3	**Clothes and shoes**	109.4	116.6	6.6
4	**Housing, water, electricity, gas**	121.3	120.9	-0.3
5	**Home furnishings, equipment and maintenance**	108.4	116.8	7.7
6	**Health**	149.3	157.3	5.4
7	**Transportation**	113.4	122.8	8.3
8	**Communication**	118.6	111.3	-6.2
9	**Entertainment and Culture**	107.5	116.0	7.9
10	**Education**	155.1	159.7	3.0
11	**Restaurants and hotels**	125.3	134.8	7.6
12	**Miscellaneous goods and services**	142.9	152.8	6.9
13	**General index**	117.0	122.2	4.4
14	**General index after exclusion**	118.5	123.9	4.6

Source: Ministry of Planning, Authority for Statistics and Geographic Information Systems.

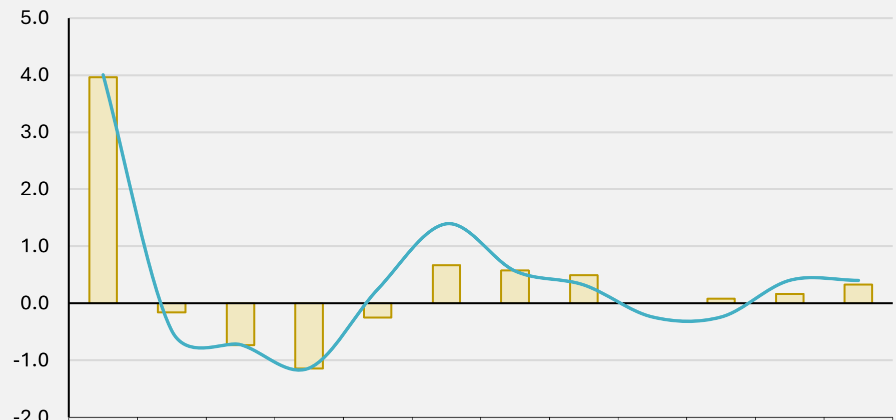
Figure No. (30): Annual Inflation Rate (%) 2023



Third: General Inflation (monthly)

Monthly inflation rates during 2023 recorded monthly fluctuations, as a result of the fluctuations in the exchange market, so that the consumer price index rose by (4%) for January 2023. While it decreased for the following four months, before rising again for the rest of the months of 2023. The groups of (food and non-alcoholic beverages), (housing, water, electricity and gas) and (transportation) affected the inflation path for the year 2023, as these groups represent a relative weight of about (70%) of the total consumer basket.

Figure No. (31): General and Basic Monthly Inflation Average for 2023 (%)



	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Monthly Inflation (%)	4.0	-0.2	-0.7	-1.1	-0.2	0.7	0.6	0.5	0.0	0.1	0.2	0.3
Inflation after exclusion (%)	4.0	-0.5	-0.7	-1.1	0.2	1.4	0.6	0.3	-0.2	-0.2	0.4	0.4

Fourth: Implicit Deflator of GDP Prices (Implicit Index) for 2023 Compared to 2022

The implicit deflator is a measure of the extent of change in GDP based on changes in prices. This index is more comprehensive, because it depends on everything produced within the country, and not just on a basket of goods and services.

The GDP deflator witnessed a decrease this year, which recorded (159.3%) compared to (194.7%) in 2022, indicating that the output has contracted by (15.5%). Accordingly, it is less than the rate of change without excluding the effect of prices, which is (-20%), indicating that there is a decrease in the prices of goods and services produced domestically.

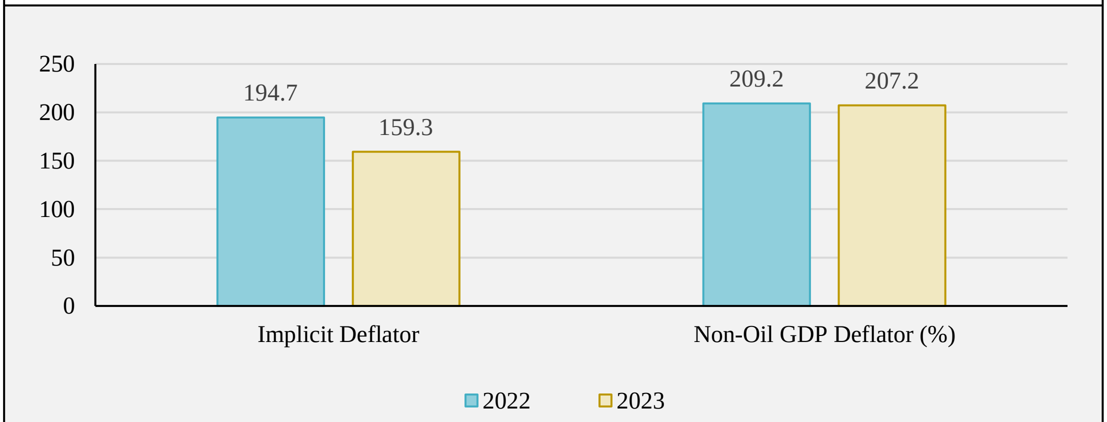
While the implicit deflator of non-oil GDP decreased from (209.2%) to (207.2%), meaning that the output declined by (1%). It is less than the decrease in GDP at current prices without excluding the effect of prices, which amounted to (3.4%). This indicates that the oil sector is the most affected one by the decrease in prices, due to its connection to the external sector that is exposed to shocks.

Table No. (7): Implicit deflator for 2022-2023

	2022	2023
GDP (IQD billion)		
At current prices	415,628.5	330,046.4
At constant prices	213,490.5	207,223.4
GDP deflator (%)	194.7	159.3
Non-Oil GDP (IQD billion)		
At current prices	175,858.9	181, 904.9
At constant prices	84,065.9	87,793.9
Non-Oil GDP Deflator (%)	209.2	207.2

Implicit deflator = GDP at current prices / GDP at constant prices * 100

Figure No. (32): Implicit Output Deflator (%) 2022-2023



Fifth: Imports Index (Imported Inflation)

Imported inflation refers to the rise in the prices of goods in a particular country as a result of the increase in the prices of goods imported from another country, since Iraq imports its local needs from abroad. Accordingly, it is affected by the inflation rates of its trading partners, which negatively affects the Iraqi economy, as it bears the cost of inflation of other countries.

The imported inflation rate decreased from (1.7%) in 2022 to (1.2%) in 2023. It is attributed to the decrease in both imports and global inflation by a greater percentage than the decrease in the gross domestic product. It was reflected in the inflation rate in Iraq, which decreased from (5%) in 2022 to (4.4%) in 2023.

Table No. (8): Imports Index for 2022-2023

	2022	2023
Global Inflation (%)	8.7	6.9
Imports (US$ billion)	55.2	43.7
GDP at Current Prices (US$ billion)	284.7	253.9
Imported Inflation (%)	1.7	1.2

Imported inflation = Imports / GDP at current prices * World inflation.

Sixth: Interest Rate (Nominal and Real)

The data indicates that the average nominal interest rate on short-term lending and deposit decreased in 2023 to reach (11.4%), (4.9%) compared to (11.6%), (5.1%) respectively. While the real interest rate on lending and deposit increased in 2023 to reach (7.0%), (0.5%) compared to (6.6%), (0.1%) respectively, as a result of the decrease in the inflation rate during 2023, which reached (4.4%).

As for the spreading coefficient, it maintained a rate of (6.5%) in 2023 compared to the previous year, which is considered a high rate compared to the standard rate of (3-4%). This difference is an obstacle to the objectives of monetary policy in achieving price stability and supporting economic growth. Although the Central Bank raised the policy rate in June 2023 from (4%) to (7.5%), but banks moved towards maintaining the spreading coefficient, relying on the low inflation rate, which guaranteed them a higher real interest rate in 2023 compared to 2022.

As for the average short-term lending interest rate in dollars, it reached (11.7%) for the years 2022 and 2023, while the average interest rate on one-year deposits in dollars decreased from (2.9%) in 2022 to (2.8%) in 2023.

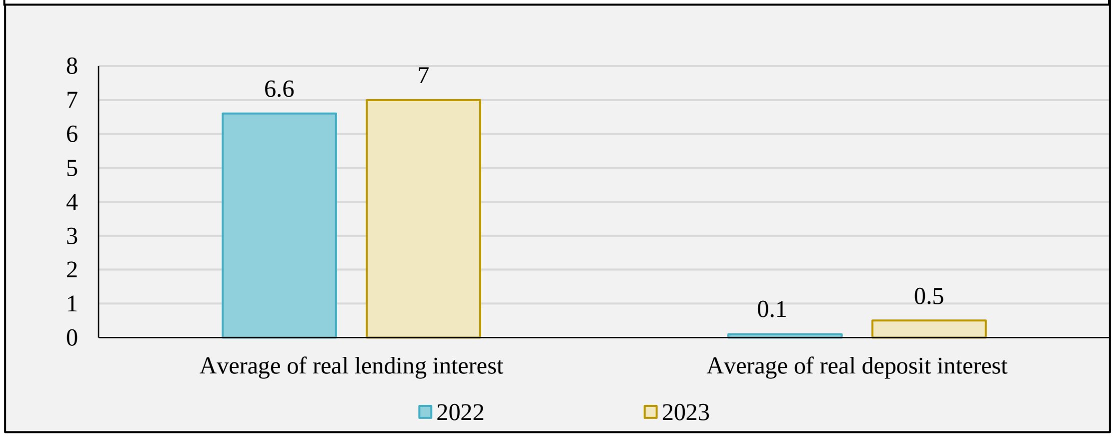
Table No. (9) indicates that the average interest rate on one-year deposits in dinars is higher than the average interest rate on one-year deposits in dollars, which leads to a reduction in demand for the dollar against the dinar, and then this reduces pressure on the exchange rate in the local market. While the average lending interest on the dollar is greater than the average lending interest on the dinar. This policy increases demand for the local currency in a manner that affects the exchange market. The spreading coefficient increased from (8.8%) in 2022 to (8.9%) in 2023, which is also higher than the standard rate mentioned above.

Table No. (9): Real Interest Rate on Lending and Deposits (%) 2022-2023

Items	2022	2023
Average of short-term lending interest in dinars	11.6	11.4
Average of one-year deposit interest in dinars	5.1	4.9
Average of interest the spreading coefficient in dinars	6.5	6.5
Average of real lending interest	6.6	7.0
Average of real deposit interest	0.1	0.5
Inflation rate	5.0	4.4
Average of short-term lending interest in dollars	11.7	11.7
Average of interest on one-year deposits in dollars	2.9	2.8
Average of spreading coefficient interest in dollars	8.8	8.9

Average of real lending interest = Average of short-term lending interest – Inflation rate.
Average of real deposit interest = Average of one-year deposit interest – Inflation rate.

Figure No. (33): The Average of Real Interest Rate on Lending and Deposits 2022-2023



CHAPTER 4
DEVELOPMENTS OF MONETARY POLICY PERFORMANCE

The Central Bank of Iraq aims to achieve stability in domestic prices in accordance with the Central Bank of Iraq Law No. (56) of 2004, and based on that, the Central Bank worked to achieve this objective and thus achieve the stability of inflation rates, especially since the Iraqi economy depends heavily on imports to meet its needs, which means the transfer of high prices of imported goods to the domestic economy, which creates imported inflation.

Within the framework of the above objective, the Central Bank raised the value of Iraqi dinar against US dollar in early 2023, in addition, monetary policy in Iraq moved to tightening in mid-2023, through monetary policy tools, as the Central Bank raised the policy rate and the reserve requirements within the framework of withdrawing domestic liquidity and thus maintaining the general level of prices.

This year witnessed the achievement of a high level of official reserves that meet international standards, and acceptable inflation rates, despite the challenges that originated during this year represented by the launch of the electronic platform for foreign transfers.

The report will address the following in this chapter:

First	**Analysis of Official Reserves' Adequacy Indices at The Central Bank**
second	**Velocity of Money Circulation**
Third	**Monetary Stability Coefficient**
Fourth	**Excess Cash Ratio**
Fifth	**Purchasing Power**
Sixth	**Money Multiplier**
Seventh	**Monetary Sterilization**

First: Analysis of The Official Reserves' Adequacy Indices at The Central Bank of Iraq

Official reserve adequacy indices are a measure of the optimal use of reserves on one hand and the state of the economy on the other.

The data indicate a decrease in the ratio of reserves to the issued currency from (159.9%) in 2022 to (143.2%) in 2023, as a result of the growth of issued currency by a greater rate than the growth of official reserves, as the issued currency reached IQD(101.5) trillion for the year 2023 against IQD (87.6) trillion and a growth rate of (15.9%), while reserves recorded a growth of (3.7%) to reach IQD (145.3) trillion this year compared to IQD (140.1) trillion in 2022. Despite this decline, it is still higher than the standard ratio of (100%), meaning that the Iraqi dinar is fully covered.

As for the ratio of official reserves to the broad money supply (M2), it exceeded the standard ratio of (20%), despite the decrease in this ratio from the previous year to record (80.3%) in 2023 compared to (83.2%) in 2022, resulting from the increase in broad money supply (M2) by a greater percentage than the increase in official reserves as shown in **Table No. (10).** The import index also exceeded the standard set at (6) months, as it recorded (30.7) months for 2023 compared to (21.0) months for 2022, as a result of the increase in official reserves and the decrease in imports, and this indicates that official reserves exceeded the global standard ratio, which means loss of an alternative opportunity to invest them on one hand, and to increase hedging on the other hand, since the Iraqi economy depends on crude oil, which is affected by external shocks.

Box No. (8)

Almost all economies, whether advanced, emerging, or developing, seek prudent reserves management, which can bring significant benefits, reduce the likelihood of balance-of-payments crises, and help maintain economic and financial stability in the face of pressures on exchange rates and erratic market conditions. While reserves have these important benefits, they also bear the opportunity cost - from reserves that achieve a lower rate of return than they can if invested. These costs are an important consideration when countries decide on the appropriate level of their reserves for preventive purposes.

Figure No. (34): The Official Reserves' Adequacy Indices 2022-2023

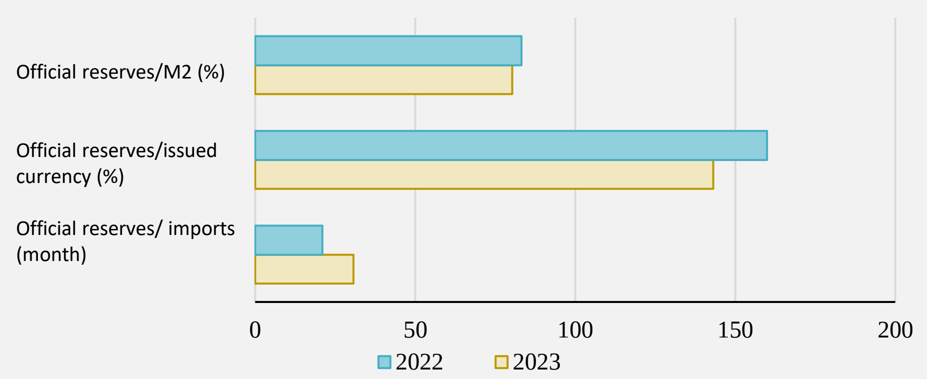


Table No. (10): The Official Reserves' Adequacy Indices 2022-2023 (IQD Trillion)		
	2022	**2023**
Official Reserves	140.1	145.3
M2	168.3	181.0
Issued Currency	87.6	101.5
Official reserves/m2 (%)	83.2	80.3
Official reserves/issued currency (%)	159.9	143.1
Reserves/ Imports Months (month)	21.0	30.7

Second: Velocity of Money Circulation

The data indicate a decrease in the velocity of money circulation from (2.8) times in 2022 to (2.1) times in 2023, and this indicates a decrease in the number of times one Iraqi dinar is spent during the year, due to the decrease in GDP at current prices in 2023, with the continued rise in the narrow money supply, which indicates a slowdown in economic activity. As shown in **Table No. (11).**

Table No. (11): Velocity of Money Circulation and Factors Affecting it 2022-2023

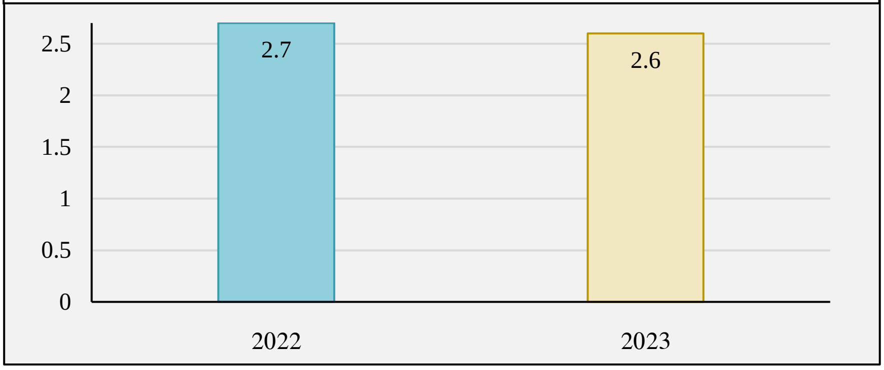
(IQD billion)

Year	GDP at current prices (1)	Money supply (M1) (2)	velocity of money (1/2)circulation
2022	415,628.5	146,488	**2.8**
2023	330,046.4	160,318	**2.1**

Third: Monetary Stability Coefficient (Inflationary Pressure Gauge)

Monetary stability coefficient reached (2.6%) in 2023 compared to (2.7%) in 2022, as the GDP growth rate at constant prices for 2023 decreased by (2.9%), and the stability coefficient indicates that there is a trend towards economic deflation due to GDP deflation.

Figure No. (35): Monetary Stability Coefficient 2022-2023



BOX No(9) .

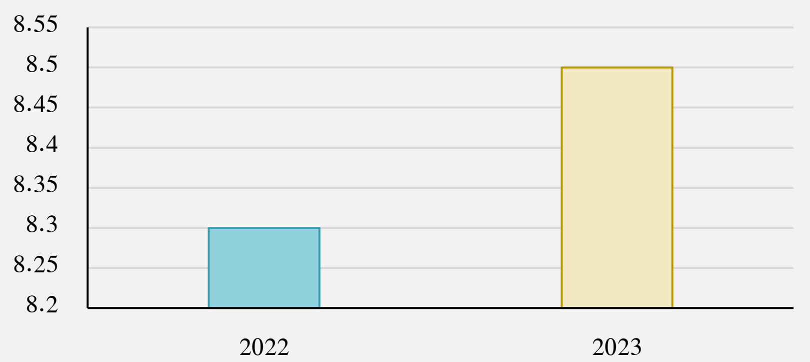
Monetary stability coefficient (B) clearly explains the extent of inflationary pressures (inflationary gap) that economy suffers from, and the essence of this measure is that the disproportion between the increase in the amount of money with the increase in GDP will lead to an imbalance between the monetary stream and the current of supply of goods and services, which pushes prices towards continuous rise. The closer the indicator (B) to one the state of monetary stability in the country has increased and whenever its value is equal to one, this means monetary stability, but if the rate exceeds one, it means that there are inflationary pressures and possible rises in prices, and if the rate is less than one, it means that inflationary pressure fades and enters the economic contraction zone.

Fourth: Excess Cash Ratio

Achieving stability in the general level of prices in long term can only be achieved by determining the optimal size of the amount of money, that is, the change in the share of the unit produced from the amount of money is what causes the change in the level of prices, that is, inflationary forces are attributed to the high share of the unit produced from the amount of money from its optimal size, which results in Excess cash leads to a rise in prices.

Excess cash increased from (8.3%) in 2022 to (8.5%) in 2023, because of the high broad money supply (M2) and the decline in GDP at constant prices, but there is still a surplus of liquidity for the economy, which led to a rise in the general level of prices.

Figure No. (36): Excess Cash Ratio 2022-2023



Fifth: Money Purchasing Power

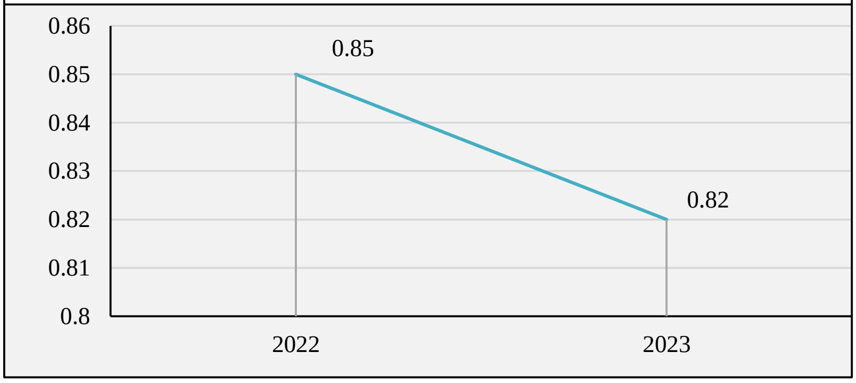
Money purchasing power decreased slightly from (0.85%) in 2022 to (0.82%) in 2023, because of the high level of inflation by (4.4%) in 2023, because of the Central Bank's policy supporting the value of the dinar, in addition to the Council of Ministers' s decision to increase the provided materials to those included by social welfare.

It was also found that the dinar purchasing power when using the index after exclusion (base inflation) also decreased slightly from (0.84%) in 2022 to (0.81%) in 2023, as a result of the increase in the level of basic inflation by (4.6%), and therefore money purchasing power is still at acceptable levels despite the fact that the country is witnessing a rise in the general level of prices.

Table No. (12): Money Purchasing Power 2022-2023

year	Index after exclusion based on (100=2012)	Money Purchasing Power %	Price Index based on (2012=100)	Money purchasing power %
2022	118.5	0.84	117.0	**0.85**
2023	123.9	0.81	122.2	**0.82**

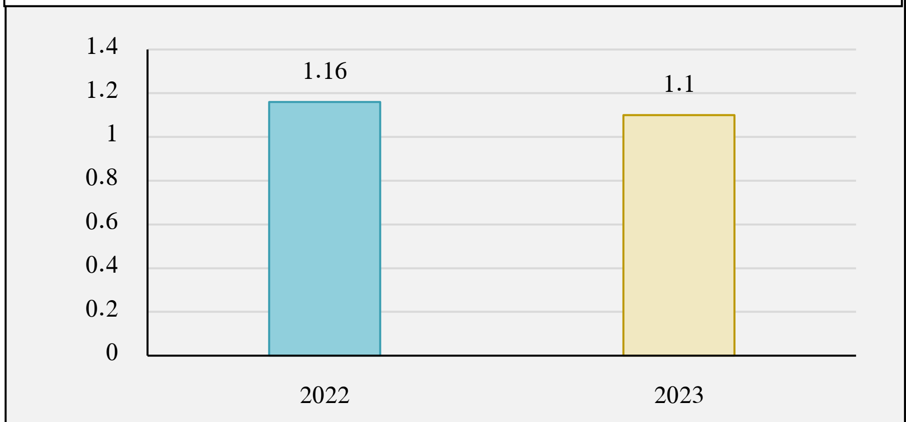
Figure No. (37): Money Purchasing Power (%) 2022-2023



Sixth: Money Multiplier (M)

It measures the ability of banks to create money and influence its size within the national economy and this is done through the process of creating deposits, and it represents the ratio of money supply (M2) to the monetary base, and when the value of money multiplier is greater than (1), the money supply is greater when the monetary basis is fixed or changed by less than the change in the size of money supply. Money multiplier recorded an amount of (1.10) in 2023 compared to (1.16) in 2022 and a decrease of (5.4%), this decrease is due to higher growth on the monetary basis (13.7%), which exceeds the increase in the broad money supply of (7.5%) and this is due to the increase in net foreign assets and net domestic assets at the Central Bank by (3.6%) and (323.8%) respectively, in addition to the higher reserve rate of banks than the growth rate of deposits derived from money multiplier.

Figure No. (38): Money multiplier 2022-2023

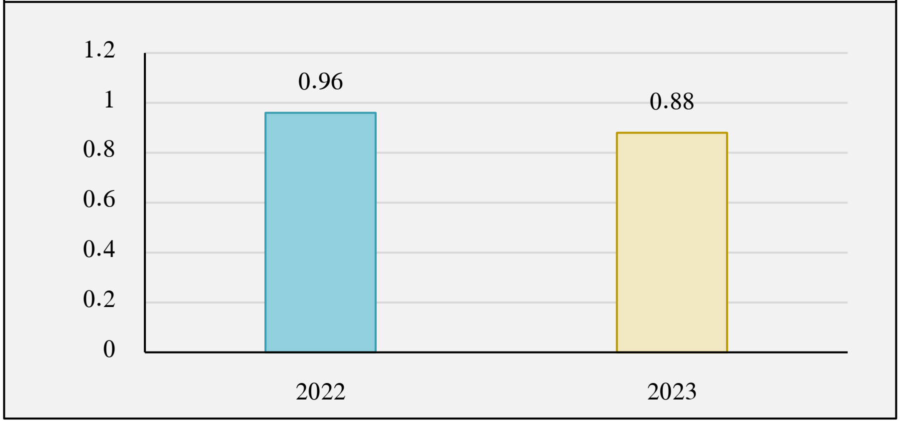


Seventh: Monetary Sterilization

The Central Bank of Iraq follows monetary sterilization policies to eliminate the harmful effects of foreign inflows by drawing from foreign reserves to keep the monetary basis stable for contribute to improving some stability indices and internal and external economic balance in the short term.

The degree of sterilization decreased from (0.96) in 2022 to (0.88) in 2023, which indicates a decrease in the activity of the sterilization process, as a result of the increase in net domestic assets by a greater percentage than the net foreign assets of the Central Bank. **Figure No. (39).**

Figure No. (39): Monetary Sterilization 2022-2023



BOX No. (10)

Sterilization is a monetary measure used by central banks in order to stop the negative effects arising from capital inflows or outflows from a country's economy. Classic sterilization involves central banks conducting buying and selling operations in open markets. The degree of sterilization is between zero and one, where one indicates complete sterilization, while zero indicates the lack of sterilization.