

Central Bank of Iraq Statistics & Research Department



Monetary Policy Report of Central Bank of Iraq 2022



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Introduction

Early months of 2022 witnessed many quick & sudden developments represented by the Russian – Ukrainian war that directly affected food & power prices due to supply chains disruptions as Russia & Ukraine ranked first on wheat & oil production. All these events led to a rise of global inflation the matter that required intervention of central banks to address inflationary waves as the Federal Reserve Bank raised interest rates many times in order to constrain the curbed household demand that was high after the pandemic receded & world recovery. All these events affected the Iraqi economy and its monetary policy directly & indirectly. At the time when the country faced inflation due to supply shortage, foreign reserves recovered due to the rise of global oil prices influenced by the Russian – Ukrainian war; all these factors were reflected on the monetary indicators and therefore on the pursued monetary policy.

- -The monetary basis balance (M0) recorded a rise of (31.9%) at end of 2022 compared to the previous year, while narrow money supply (M1) recorded a rise of (22.1%) at end of 2021. Also broad money supply (M2) recorded a rise of (20.2%) compared to the previous year due to the growth of narrow money supply (M1) and the expanding effect of net foreign assets. Also monetary stability coefficient reached (2.9%) and cash multiplier recorded (1.16) against (1.27) in 2021. Foreign reserves balance recorded a rise of (51.4%) of the previous year to reach IQD (140.1) trillion compared to IQD (92.5) trillion at end of 2021.
- -General inflation rate for this year recorded (5.0%), while core inflation rate recorded (4.8%) after excluding all oil derivatives (oil & gas) and (fruits & vegetables groups).
- -As regarding monetary policy, CBI continued to adopt a policy rate of 4% and re-operation with the investment deposits for (30) days maturity in Iraqi dinar during 2020 after it had ceased operation since 2020/6/14 until a further notice. In addition to re-operation with issuance of Islamic deposit certificates with maturities of (182 & 364) days and CBI treasury bills during this year, while it restored the reserve requirement ratio to (15%) instead of (13%) for state-owned & private current deposits which were calculated in June 2021 with the improvement of economic & social situation after Covid-19 crisis.
- Monetary policy activated banking sector & financial institutions roles to secure financial system stability and ensure its efficiency reaching a free of crisis financial system within the best international standards for banking supervision. CBI provided banking facilities through rescheduling banking loans with the

private sector, especially loans that were overdue on small & medium enterprises SMEs, in addition to extend settlement maturities for future standing loans related to most exposed sectors to the spillovers of COVID-19 and reduce borrowing costs.

- As regarding funding financial deficit of the public budget 2021, CBI issued, in cooperation with MOF, National Bonds for the public entitled "Sanadat Binaa" with the value of IQD 1 trillion and IQD 2 trillion to be listed & circulated in "Iraq Stock Exchange". It also issued a circular to state-owned & private banks to promote those bonds and encourage the public to deal with

Concepts Guide

Monetary Policy: is a group of measures & instruments used by monetary authority represented by the central bank to achieve a group of targets.

Commercial Banks: include all national (state-owned & private) and foreign banks operating in Iraq that are licensed & subject to CBI supervision, including specialized & Islamic banks. All these banks are licensed to operate according to CBI Law & Banking Law provisions (CBI Law No. 56 of 2004 – Article 40 8th Section, Banking Law No. 94 of 2004 Article 4 and Islamic Banks Law No. 43 of 2015).

Banking System: includes Central Bank of Iraq (CBI) and Commercial Banks operating in Iraq.

Issued Currency: is cash issued by CBI to circulation except cash with CBI vaults.

Currency Outside Banks: is cash issued by CBI to circulation (except cash with CBI vaults) minus existing cash with the commercial banks vaults.

Deposits: include all types of economic sector deposits with the commercial banks.

Monetary Basis (M0): represents issued cash (Currency outside banks+ Currency with banks) plus current balances of commercial banks with CBI vaults (in Iraqi dinar & US dollar).

Narrow Money Supply (M1): represents issued cash outside banks plus transferable deposits with commercial banks (in Iraqi dinar & US dollar).

Broad Money Supply (M2): represents money supply (M1) plus other deposits for all economic sectors (except central government sector) with commercial banks (in Iraqi dinar & US dollar) and postal saving deposits.

Money Multiplier (m): is the ability of banks to create money in the economy; it is the outcome of dividing broad money supply (M2) by monetary basis (M0).

Foreign Assets (net): include foreign assets with the banking system minus foreign liabilities on the banking system represented by CBI & operating banks in Iraq.

Domestic Assets (net): represent total net debts on government, private sector, other sectors and net other items.

Reserve Requirement: is a percentage of total deposits of all types with commercial banks held at the CBI representing: (15%) of current deposits in Iraqi dinar & US dollar, (10%) of saving & fixed deposits in Iraqi dinar & US dollar for commercial banks and (5%) for Islamic banks.

Exchange rate of Iraqi dinar against US dollar: is the price set by CBI through foreign exchange selling window at the CBI.

General Consumer Price Index: measures the general level of prices of a fixed basket of goods & services consumed by an Iraqi family with a certain base year (100=2012) - calculated by Central Statistical Organization CSO/ Indexes Dept.

Core Inflation: is calculated after excluding some goods of fluctuating prices related to fruits & vegetable groups/ food & non-alcoholic drinks item, in addition to oil & cooking gas/ housing item - calculated by Central Statistical Organization CSO/ Indexes Dept.

Spread Coefficient: represents the difference between interest rate on deposits and interest rate on loans.



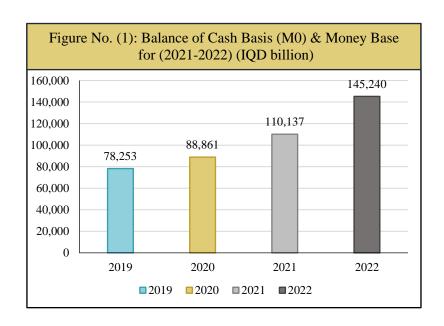
CHAPTER ONE

Money Supply Developments and Monetary Policy Instruments

First: Money Supply Developments

1. Monetary Basis (M0)

The balance of the monetary basis recorded an increase of (31.9%) to record an amount of IQD (145.2) trillion in 2022 against IQD (110.1) trillion in 2021 due to the increase of foreign assets with the CBI by (51.1%).



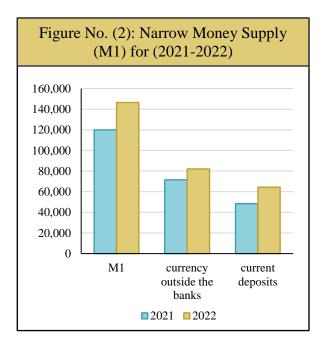
2. Narrow Money Supply (M1)

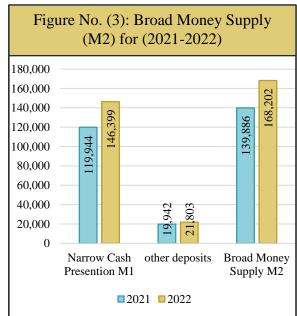
Narrow Money supply (M1) recorded a rise of (22.1%) at the end of 2022 compared to 2021, to reach IQD (146.4) trillion against IQD (119.9) trillion in 2021. This rise is mainly attributed to the growth of the currency outside banks by (14.7%) to record IQD (82) trillion against IQD (71.5) trillion in 2021 to constitute (56.0%) of money supply (M1) in 2022 against (59.6%) in 2021. While current deposits recorded a rise of (33.0%) to reach IQD (64.4) trillion against IQD (48.4) trillion in 2021 and constitute (44.0%) of money supply (M1) in 2022 against (40.4%) in 2021 - as shown in **Table No. (1).** By analyzing the structure of the money supply (M1), we note an increase in the contribution of current deposits to the account of currency outside banks in 2022. However, currency outside banks still constitutes high contribution ratios due to the lack of development of the banking system in a way that facilitates domestic monetary transactions and the shift towards Electronic payment, at a time when the use of paper currencies poses many risks, including forgery, robbery, and others.

Table No. (1): Narrow Money Supply (M1) for (2021-2022)

(IQD billion)

Components	Dec. 2021	Dec. 2022
Narrow Money Supply (M1)	119,944	146,399
Growth Rate %	16.1	22.1
Current Deposits	48,418	64,374
Current Deposits Ratio to Money Supply (M1)	40.4	44.0
Currency Outside Banks	71,526	82,025
Ratio of Currency Outside Banks to Money Supply (M1) %	59.6	56.0





3. Broad Money Supply (M2) (Domestic Liquidity)

Broad Money Supply (M2) (Domestic Liquidity) recorded a rise of (20.2%) at the end of 2022 compared to 2021. It recorded IQD (168.8) trillion against IQD (139.9) trillion in 2021 to constitute (43.9%) of GDP at current prices, as shown in **Table No. (2).**

Table No. (2): Components of Domestic Liquidity for 2021-2022

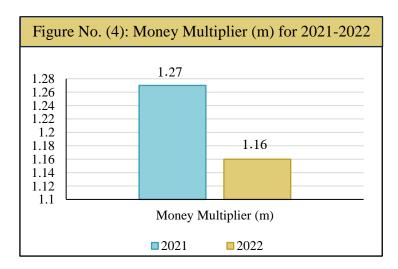
(IOD billion)

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Components	Dec. 2021	Dec. 2022	Growth Rate
Narrow Money Supply (M1)	119,944.0	146,399.0	22.1
Other Deposits	19,942.8	21,803.7	9.3
Broad Money Supply (M2)	139,886.0	168,202.0	20.2

The increase in domestic liquidity (M2) came as a result of the growth in narrow money supply (M1) by (22.1%) and the increase in other deposits (fixed, savings, postal, and insurance deposits) by (9.3%) to record IQD (21.8) trillion in 2022 against IQD (19.9) trillion in 2021. It is noted that other deposits still constitute a low percentage reaching (13.0%) of total (M2) in 2022 against (14.3%) in 2021. As currency outside banks is constantly rising at the expense of deposits contribution, whether current or other types of deposits since banks did not pursue serious policies that attract deposits. The matter that required CBI to follow some policies and procedures that motivate banks to move towards attract deposits and control the mass of cash outside the banking system that limited the efficiency and effectiveness of monetary policy during crises.

4. Money Multiplier (m)

It measures the ability of banks to create money and affect its size within the national economy. This is realized through the process of creating deposits, which represented the ratio of money supply (M2) to monetary base. Whenever the value of the money multiplier is greater than (1), the greater money supply when monetary basis remains fixed or changed by less than the change of money supply volume. Money multiplier recorded (1.16) in 2022 against (1.27) in 2021 with a decrease of (-8.7%) attributed to growth rise of monetary basis by (31.9%), which exceeded the increase of broad money supply that amounted (20.2%) due to the rise of net foreign assets.



5. Factors Affecting Money Supply

The expansionary factors represented by (net foreign assets within the banking system, net government debts, private sector and other sectors debts) had a clear role in increasing money supply during 2022. As balance

of net foreign assets increased from IQD (121,205) billion at the end of 2021 to IQD (182,589) billion at the end of 2022 with an increase of (50.6%) to constitute (61.9%) of total expansionary factors that amounted IQD (99,232) billion. As for net government debts, which represented the difference between (extended credit to the government in the form of drafts, loans and deposits), it also represented an expansionary role. As the expansion amounted IQD (31,105) billion with a contribution rate of (31.3%) due to the increase of government debts by (4.8%) because of the increase in borrowing to finance budget deficit when oil prices decreased and the rise of government deposits by (80.5%). Private sector's and other sectors' debts also had an expansionary role in increasing money supply; as it increased by (18.7%). it was attributed to the increase in the volume of lending to the public, whether from banks or from CBI's initiatives. In particular, after increasing the amounts allocated for the IQD (5) trillion initiative. This item represented (6.8%) of total expansionary factors, while both items - the budget and other deposits constituted a deflationary factor on money supply, as deflationary factors amounted IQD (10,567) billion and both aforementioned items accounted for (82.4%) and (17.6%) respectively, of total deflationary factors, as detailed in **Table No. (3)**.

Table No. (3): Money Supply and Factors Affecting It for 2021-2022

(IQD billion)

Statement	Dec. 2021	Dec. 2022	Amount of Change from Previous Year	Growth Rate
Net Foreign Assets with the Banking System (the Central Bank + Banks)	121,205	182,589	61,384	50.6
Private Sector and Other Sectors Debts	36,035	42,778	6,743	18.7
Government Debts	72,562	76,035	3,473	4.8
Total Assets	229,802	301,402	71,600	31.2
Money Supply (M1)	119,944	146,399	26,455	22.1
Currency Outside Banks	71,526	82,025	10,499	14.7
Current Deposits	48,418	64,374	15,956	33.0
Other Deposits	19,942	21,804	1,862	9.3
Government Deposits	42,963	77,541	34,578	80.5
Budget Item	(46,953)	(55,658)	(8,705)	(18.5)
Total Non-Monetary Liabilities	109,860	155,003	45,143	41.1
Total Liabilities	229,802	301,402	71,600	31.2



6. Foreign Reserves with the Central Bank

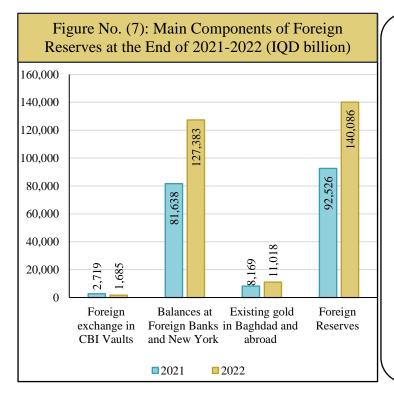
At the end of 2022, balance of foreign reserves recorded an increase of (51.4%) of the previous year to reach IQD (140.1) trillion against IQD (92.5) trillion at the end of 2021, as shown in **Table No. (4).**

This increase is mainly attributed to the increase of foreign investments abroad by (56%) to reach IQD (127.4) trillion in 2022 against IQD (81.6) trillion for the previous year. Gold balance in Baghdad and abroad increased by (34.9%); amounted about IQD (11) trillion at the end of 2022 against IQD (8.2) trillion at the end of 2021 due to CBI purchase of new quantities of

gold. However, foreign exchange balance at CBI vaults decreased by (-38%) to record IQD (1.7) trillion in 2022 against IQD (2.7) trillion in 2021.

Table No. (4): Main Components of Foreign Reserves at the End of (2021-2022)

Item	2021	2022
Foreign Exchange at CBI Vaults	2,719	1,685
Balances at New York & Foreign Banks	81,638	127,383
Existing Gold in Baghdad and abroad	8,169	11,018
Foreign Reserves	92,526	140,086



Box No. (1)

Purchase of new quantities of gold had been made; approximately amounted (34) tons with an increase rate of (35%) for the first time through direct trading on electronic platforms and obtaining best available offers. Thus, Iraq advanced a sequence of 10 ranks globally and enlisted within the table of countries with the most possession of precious metal reserves in the world. According to World Gold Council (WGC) report, Iraq advanced 8 ranks regarding total possession of gold and occupied 30th rank globally & 4th rank on Arab countries after Saudi Arabia, Lebanon and Algeria in 2022 – after it ranked 38th out of 100 countries listed in the International Financial Statistics for World Gold Reserves.

Second: Developments of Indirect Monetary Policy Instruments

1. Foreign Currency Selling Window

Sold amounts of US\$ at CBI foreign currency selling window (cash & enhancing banks' balances abroad) for 2022 increased by (26.1%) of 2021 to record US\$ (46.8) billion against US\$ (37.1) billion for 2021. The increase was due to the rise in foreign exchange sales by (37.9%) in 2022 because of increasing demand from individuals for travel or medical treatment abroad after the gradual increase of transportation between countries. US dollar sales increased for the purposes of enhancing banks' balances abroad by (23.6%), that is attributed to the increase of Iraq's imports by (35.1%) due to the lifting of COVID-19 travel restrictions and to absorbing the shock of exchange rate change that led to a rise of imported goods prices, on one side. On the other side, CBI sales of foreign currency were distributed to US\$ (37.7%) billion to enhance banks' balances abroad, and US\$ (9.1) billion in cash, as sales of drafts to enhance balances abroad accounted for (80.6%) and cash sales (19.4%) of the total sold amounts.

As for CBI purchases of US dollar from the Ministry of Finance, it recorded an increase of (16.1%) to reach US\$ (53.4) billion in 2022 against US\$ (46) billion in 2021. This increase was due to the rise of government revenues from crude oil as a result of the increase in Brent and West Texas Intermediate (WTI) crude oil prices by (5.70%) and (4.24%), respectively. It was an outcome of the increase in energy demand witnessed by the world by (2.31%) despite the increase of oil production by OPEC by (7.73%) and non-OPEC countries by (2.87%). The matter that led to an increase in public spending during the year 2022 after the adoption of Emergency Food Security Law, and thus an increase in its purchases of dinar.

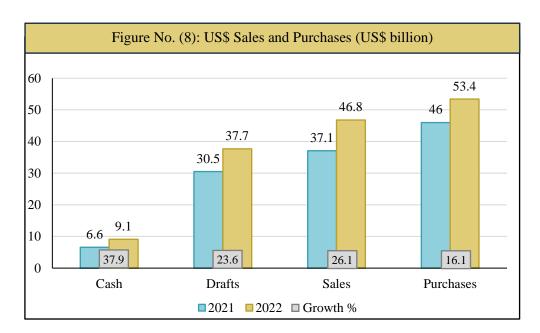
With regard to **exchange rates**, the price of selling dollar to banks has maintained its value of (1460) dinar per dollar.

Box No. (2)

Central Bank of Iraq created an electronic platform through which banks send their customers' requests, as CBI proceeded to develop this platform in coordination with international agencies for the purpose of regulating and organizing the operations of buying and selling foreign currency through the window to ensure effective control. A specialized international company was assigned to create the platform and link banks with the Central Bank; it required providing information about customers requesting transfer operations, beneficiaries, correspondent banks, etc., in order to reduce fraud & terrorist financing, raise performance level of the banking sector and comply with Anti-Money Laundering and Counter-Terrorism Financing Law No. 39 of 2015.

Table No. (5): Sold Amounts of US\$ Through Selling Foreign Currency Window (Cash, Enhancing Banks' Balances Abroad) and Purchased Amounts for (2021- 2022)

	Cash	Drafts	Sales	Purchases	Gap (1-2)
2021	6.6	30.5	37.1	46.0	8.9
2022	9.1	37.7	46.8	53.4	6.6
Growth Rate %	37.9	23.6	26.1	16.1	



2. Standing Facilities

During this year, CBI continued to adopt a monetary policy rate of (4%) annually and resumed operation with financial products under CBI decision according to circular No. (6/6/1866) dated 31/5/2022; it resumed operation with deposits for (30) days in Iraqi dinars with an interest rate of (1%) starting from June 2022. The invested amount was IQD (210,000) million in response to economic activity. Also operation with Islamic Deposit Certificates of in Iraqi dinars had resumed for (182, 364) days.

Box No. (3)

CBI operation with investment windows were suspended for (7&30) days according to the Board of Directors' decision No. 6/5/929 dated 14/6/2020 in order to provide liquidity with banks to counter the effects of COVID-19 crisis.

It also continued to suspend.

It also continued to suspend operation with all financial products in US\$ (deposits, drafts, and Islamic deposit certificates) according to circular No.6/6/1930 dated 1/8/2019 because of weak response of banks in diversifying their investment portfolios in a way that achieve the required goals for the mentioned period, with continued maturities of the principal amount with interests.

As for the standing lending facilities, CBI continued operation with this instrument in implementation of its monetary policy objectives with the aim of extending credit to banks in a way that ensures control over banking liquidity and affect it through interest rates (price signals) that were set for each type of them according to the following:

- Initial credit (6%) annually.
- Secondary credit (7%) annually.
- Last resort loan (7.5%) annually.

None of the state-owned or private banks applied for any of these credits during 2022.

3. Reserve Requirement

In accordance with the adopted the monetary policy trends with its high resilience to support economic development process and control liquidity, the reserve requirement ratio was restored to (15%) instead of (13%) for government and private current deposits. It was calculated in June 2021, as the economic and social situation improved after Corona crisis, to limit the inflationary pressures witnessed in 2022 resulting from the Russian-Ukrainian war and the disruption of supply chains.

The reserve requirement recorded an increase of (16.4%) to record IQD (11) trillion at the end of 2021 against IQD (12.8) trillion in 2022. This is due to the rise of reserve requirement volume on deposits with private banks by (7.1%) to record IQD (1.5) trillion against IQD (1.4) trillion in 2021, and the rise of reserve requirement on deposits with state-owned banks by (17.7%) to record IQD (11.3) trillion against IQD (9.6) trillion in 2021.

On the other hand, amounts of deposits that were subject to reserve requirement ratio (in FX) increased by (93.9%) and amounts of deposits subject to reserve requirement ratio (in IQD) increased by (7.2%).

Box No. (4)

In the context of implementing its monetary policy, through its instruments, aiming to enhance the Iraqi dinar value, regulate banking sector liquidity and diversify investment opportunities through operation of investment windows. Thus CBI decided, in the light of economic developments and measures of the world's central banks, to raise interest rates and returns of investment financial products on 28/12/2022 so that private banks (traditional & Islamic) operating in Iraq can invest their surplus liquidity with the Central Bank and open investment windows for (90, 182 and 364) days.

The monetary policy rate maintained the same level of (4%). As for the interest on initial credit, it amounted (6%), while the interest on secondary credit amounted (7%) and the interest on the lender of last resort amounted (7.5%).



CHAPER TWO

The Prices

Chapter Two The Prices

1. Consumer Price Index (CPI) Trends

Iraq's consumer price index for this year showed a decline of growth rate, as an indicator of inflation, to record (5.0%) against (6%) for the previous year to score (117.0) points in 2022 against (111.5) points in 2021.

Meanwhile, consumer Price index recorded (118.5) points in 2022 against (113.1) points in 2021, after excluding (Oil derivatives (oil and gas) and (vegetables & fruits group). Thus, the base inflation declined from (6.4%) in 2021 to (4.8%) in 2022. It was attributed to overcoming the shock resulting from devaluating the Iraqi dinar against the US dollar in order to face the double crises (decline of revenues & health crisis) that the country experienced in 2020. On the other hand, Iraq is affected by price movements (downward and upward) with trading partners, external shocks caused by oil price volatility and high prices of basic commodities, in particular for (food, iron and transport wages) at global markets. When comparing the main components of the consumer basket's commodities for 2022 with the previous year, it is noted that most groups of the index had increased except for tobacco group; the following is a detailed analysis of inflation rates developments for 2022 compared to 2021 by commodity groups.

2. Developments of Inflation Rates by Commodity Groups for 2022 Compared to 2021

(Miscellaneous Goods & Services) group recorded a rise of (10.9%) as a result of higher global prices since a large proportion of consumer and food items were imported from abroad. While (Restaurants & Hotels) group recorded an inflation rate of (7.6%) due to the general reopening of businesses after the COVID-19 pandemic, which had led to an increase of tourists' number and a rise of demand for hotels. (Food & Non-Alcoholic Beverages) group recorded (6.8%) because of the rise of all its components except for milk, cheese and egg. (Household Appliances & Equipment) group recorded an inflation rate of (6.0%) due to higher prices of household appliances, furniture and equipment by (7.1%) and (3.9%) respectively.

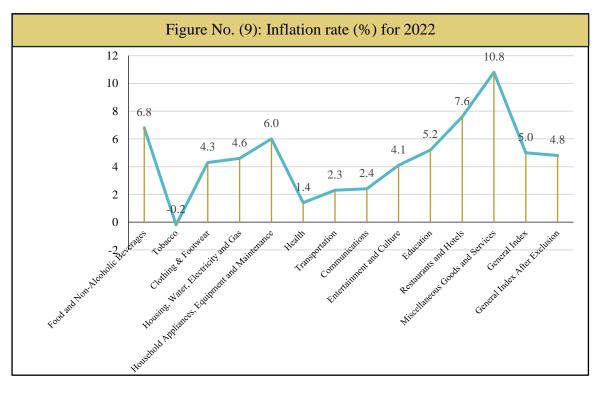
(Education) group recorded a rise of (5.1%) because of charging prices & installments of private schools and universities at their previous levels before the pandemic. The prices of (Housing, Water, Electricity and Gas) group and (Clothing & Footwear) group recorded a rise of (4.6%) and (4.3%), respectively. The (Entertainment & Culture) group recorded a rise of (4.0%), which was attributed to the return of tourism and recreational

facilities after the relaxation of preventive measures related to COVID-19 pandemic, while the rest of the periods recorded a rise ranging between (2.4%) and (1.4%). As for (**Tobacco**) group, it recorded a decrease of (-0.2%).

Table No. (7): Consumer Price Index in Iraq for 2022 Compared to 2021

No.	Groups	Average of 2021	Average of 2022	Inflation Rate for 2022 %
1	Food and Non-Alcoholic Beverages	101.7	108.6	6.8
2	Tobacco	141.2	140.9	-0.2
3	Clothing & Footwear	104.9	109.4	4.3
4	Housing, Water, Electricity and Gas	116.0	121.3	4.6
5	Household Appliances, Equipment and Maintenance	102.3	108.4	6.0
6	Health	147.3	149.3	1.4
7	Transportation	110.8	113.4	2.3
8	Communications	115.8	118.6	2.4
9	Entertainment and Culture	103.3	107.5	4.1
10	Education	147.5	155.1	5.2
11	Restaurants and Hotels	116.5	125.3	7.6
12	Miscellaneous Goods and Services	129.0	142.9	10.8
	General Index	111.5	117.0	5.0
	General Index After Exclusion	113.1	118.5	4.8

Source: Ministry of Planning/ Central Statistical Organization.



Box No. (5)

Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27) witnessed pledges and initiatives by heads of states around the world, especially members of G 20 to promote climate action. The conference included two points: (reducing greenhouse gas emissions other than carbon dioxide and methane, accelerate efforts to reduce coal power) as the accelerated trend of these states to implement the directives had led to a negative impact, represented by the significant increase in fuel prices worldwide as a result of the decline in investments in exploration and extraction. The change of energy prices led to shifts in the domiciliation of energy industries. As increased total demand by investing in green alternatives for fossil fuels, the proposed actions to reduce emissions, implementing carbon-pricing policy and emissions trading system had led to high green inflation rate that could add another factor to support the upward inflation rates that the global economy suffers from.

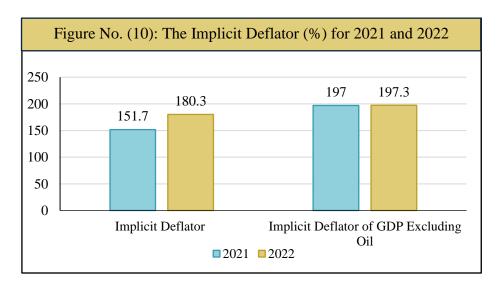
3. (Implicit Index) the Implicit Deflator of GDP Prices in Iraq for 2022 Compared to 2021

The GDP deflator witnessed an increase from (151.7%) in 2021 to (180.3%) in 2022, as the GDP increased at current prices by (27.2%) for 2022, which was mainly attributed to the rise in crude oil prices. The average price of crude oil per barrel recorded US\$ (95.6) in 2022 compared to US\$ (68.4) in 2021, while GDP increased at constant prices by (7.0%) due to the increase in oil quantities under OPEC+ agreement by (12.1%), to reach (1628.7) million barrels in 2022 against (1453.4) million barrels in 2021.

Also the implicit deflator of GDP without oil increased from (197.0%) in 2021 to (197.3%) in 2022. This means that the price changes in non-oil output were much less than the output with oil due to changes in crude oil prices.

	2021	2022
GDP (IQD billion)		
At Current Prices	301,152.8	383,064.2
At Constant Prices	198,496.5	212,408.7
GDP Deflator (%)	151.7	180.3
Non-Oil GDP (IQD billion)		
At Current Prices	163,556.1	163,710.6
At Constant Prices	83,010.9	82,984.1
GDP Deflator (%)	197.0	197.3

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



4. The Import Index (imported inflation)

Iraq suffered from a shortage in the supply of domestic commodities, which pushed it to import to cover domestic demand the matter that affected the country by the inflation of its trading partners; that is known as (imported inflation). It is negatively reflected on the economy of Iraq, as it bears the cost of inflation of other countries. Inflation of the main trading partners is considered one of the most important long term inflationary determinants, as the imported inflation rate for 2022 reached (182.5%) compared to (92.3%) for 2021. The rise was due to the increase of both imports and GDP on the one hand and the rise of global inflation on the other hand, which greatly affected the prices of imported goods.

Table No. (9): The Index of Imports

	2021	2022
Global Inflation (%)	4.7	8.75
Imports (US\$ billion)	40.8	55.1
GDP at Current Prices (US\$ billion)	207.7	264.2
Imported Inflation (%)	92.3	182.5

Imported inflation = imports / GDP at current prices * global inflation * 100

5. The Real Interest Rate

The data indicated that the average real interest on lending and deposits increased in 2022 to reach (6.7%) & (0.6%) against (5.8%) & (-1.3%), respectively due to decline of inflation rate during 2022 as it reached (5.0%). At the same time, lending interest rate decreased to reach (11.6%) for 2022 against (11.8%) for 2021. While interest on deposits increased to (5.1%) in 2022 against (4.7%) in 2021 to compensate for the decrease on real interest

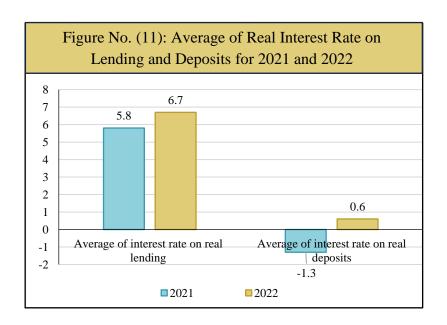
in 2021 that resulted from high inflation that matter that prompt depositors to withdraw their deposits and invest them in more profitable products.

As for the spread coefficient, it recorded (6.1%) which is considered high compared to the standard rate of (3-4%). This difference is considered an obstacle to the objectives of monetary policy in achieving price stability and supporting economic growth.

Table No. (10): Average Real Interest Rate on Lending and Deposits (%) for (2021-2022)

Items		2022
Average of Interest Rate on Short Term Lending in IQD	11.8	11.6
Average of Interest Rate on Deposits for One Year in IQD	4.7	5.1
Spread Coefficient of Average Interest Rate	7	6.1
Average of Real Lending Interest Rate	5.8	6.7
Average of Real Deposit Interest Rate	-1.3	0.6
General Inflation Rate %	6	5.0

Average of real lending interest rate = average of short term lending interest rate- inflation rate Average of real deposit Interest rate = average of interest rate on deposits for a year - inflation rate



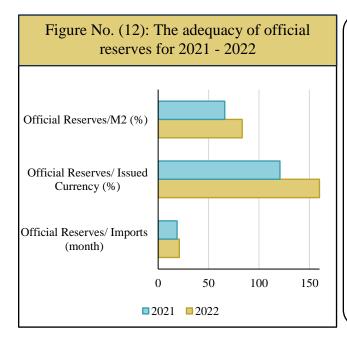


CHPTER THREE

Development of Monetary Policy Performance

1. Analysis of Official Reserves Adequacy Indicators

Data indicated an increase of issued currency by (14.4%) to record IQD (87.6) trillion in 2022 against IQD (76.6) trillion in 2021, due to discounted treasury bills to cover the budget deficit. As well as to the high volume of initiatives presented to the private sector to move the wheel of economic activity. On the other hand, official reserves increased by (51.4%) to reach IQD (140.1) trillion in 2022 against IQD (92.5) trillion of the previous year, due to the improvement of oil revenues after the lifting of the general closure and the return of global transport movement. In addition to the increase of oil quantities produced according to OPEC + agreement, which led to an increase in the percentage of official reserves to the issued currency to reach (159.9%) in 2022 against (120.8%) for 2021. This percentage is higher than the standard one, which is (100%), due to the increase of reserves because of increased oil revenues, in addition to CBI precautionary policy that kept the balance of foreign reserves at high levels. As for the percentage of official reserves to broad money supply (M2), it had exceeded the standard percentage of (20%), as this percentage increased from (66.1%) in 2021 to (83.3%) in 2022 due to the increase of official reserves by a greater rate than the increase in broad money supply (M2), as shown in **Table No.** (11). also the index of import months had exceeded the specified standard of (6) months, as it recorded (18.7) months for 2021 and (21.0) months for 2022; it indicated that the official reserves exceeded the standard global percentage, which meant missing an alternative investment opportunity.



Box No. (6)

The percentage of official reserves to issued currency is an indicator of official reserves adequacy with the Central Bank, in addition to other standard indicators:

- The percentage of reserves to the broad money supply (M2) (20%).
- The percentage of reserves to import months (6 months).
- The percentage of reserves to short-term external debts (12-months maturity).
- The aggregate standard of the International Monetary Fund.

Table No. (11): Official Reserves Ratio to Issued Currency for 2021 and 2022 (IQD trillion)

	2021	2022
Official Reserves	92.5	140.1
M2	139.9	168.2
Issued Currency	76.6	87.6
Official Reserves / m2 (%)	66.1	83.3
Official Reserves/Issued Currency (%)	120.8	159.9
Reserves/ Months of Imports (month)	18.7	21.0

2. Velocity of Money Circulation

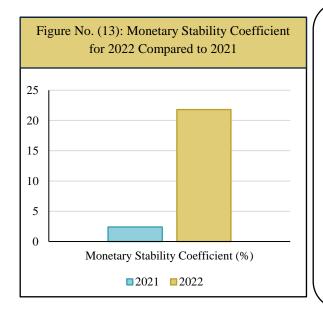
The data indicated an increase in the Velocity of money circulation from (2.5) times in 2021 to (2.6) times in 2022, which indicated an increase in the number of times that one Iraqi dinar is spent during the year. It referred to an improvement of economic activity level and the gradual exit of the economy from prevention and closure measures that were witnessed in 2020 and 2021, in addition to the increases of public spending after the adoption of the emergency food security law, as shown in **Table No. (12).**

Table No. (12): Velocity of Money Circulation and Factors Affecting It for 2021-2022

Year	GDP at Current Prices	Money Supply (M1)	Velocity of Money Circulation
2021	301,152.8	119,944	2.5
2022	383,064.2	146,399	2.6

3. Monetary Stability Coefficient (gauge of inflationary pressure)

Monetary stability coefficient reached (2.9%) in 2022 against (10.5%) in 2021 as domestic liquidity growth rate increased by a larger percentage than GDP growth rate. Broad money supply balance (M2) (domestic liquidity) recorded an increase of (20.2%) by the end of 2022 while annual growth rate of GDP at constant prices recorded (7.0%) in 2022. It indicated the existence of an inflationary trend in the domestic economy and that high domestic liquidity led to an increase in demand for consumption goods more than demand for investment goods because of weak production base of the country.



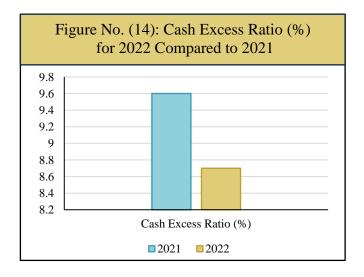
Box No. (7)

Monetary stability coefficient (B) clearly explains the extent of inflationary pressures (inflationary gap) that the economy suffers from. The essence of this measure is that the disproportion between the increase in the amount of money with the increase in domestic product will lead to an imbalance between the monetary flow and the flow of supply of goods and services, which drives prices toward a continuous rise.

The more indicator (B) approaches one - the more monetary stability increase in the country; whenever its value equals one - this means that monetary stability has been realized. If the average rate increase over one - this means that there are inflationary pressures with possible increases of prices. If the average rate is less than one - this means that inflationary pressures has disappeared.

4. Excess Cash Ratio

Achieving stability at the general level of prices on the long term is achieved only through determining the optimal volume of money; meaning that the change in the share of a producing unit of money amount is what induces the change at price level. Meaning that inflationary forces are attributed to the increase of the producing unit share of money amount more than its optimal size; which results in excess cash leading to a rise of prices. Cash excess decreased by (-2.9%) in 2022 compared to the previous year, as it reached (9.2%) in 2022 against (9.6%) in 2021. However, still there is an excess of liquidity over the need of the economy, which has led to an increase in the general level of prices.



5. Purchasing Power of Money

Purchasing power of money decreased slightly from (0.90%) in 2021 to (0.84%) in 2022 because of an increase in inflation level by (4.9%) in 2022. This slight increase is due to monetary policy flexibility in defending the exchange rate.

It was also found that the purchasing power of the dinar when using the index after excluding (general inflation) did not differ much from its value when using the general index, as it decreased from (0.88%) in 2021 to (0.85%) in 2022.

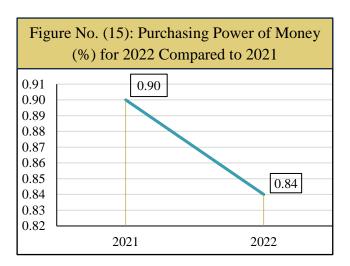


Table No. (13): Purchasing Power of Money for 2022 Compared to 2021

Year	Index After Exclusion	Purchasing Power	Price Index Based	<u> </u>
	Based on $(2012 = 100)$	of Money %	on $(2012 = 100)$	of Money %
2021	113.1	0.88	111.5	0.90
2022	118.5	0.84	117.0	0.84

Outlook for Some Economic Variables

The year 2022 witnessed a state of uncertainty due to the accelerating pace of political, economic and technological developments, which led to an increased interest regarding the outlook in order to serve as a guide for decision-makers in drawing-up economic policies. The Central Bank of Iraq is concerned with the issue of expectations, especially since the country is heavily dependent on oil resource, which is susceptible to external shocks. In 2023, macroeconomic environment in Iraq is expected to remain positive in general. The improvement in the political environment and the continued rise of oil prices will allow the country to achieve positive growth in real GDP by (2.4%).

The following is the outlook for the most important economic variables:

It is expected that **gross domestic product GDP** will grow by (2.4%) in 2023 with the continued increase of oil barrel price and OPEC+ decisions concerning the voluntarily reduction of the produced oil quantities by (220) thousand barrels per day; from (4,651) million barrels per day to (4,431) million barrels per day. This reduction could lead to an increase of prices and by turn increase public revenues, which will be directed towards investment spending. In addition, the increase in government spending and rapid lending growth partly supported by CBI lending initiatives will drive non-oil growth in 2023.

It is expected that **inflation rate** will decrease to (1.5%) for 2023 due to prices stability of some basic commodities, especially (food & non-alcoholic beverages, transport, and fuel) in global markets, as central banks' trends affect towards raising interest rate, which may lead to slow global growth that casts a shadow over the prices of imported goods to Iraq. According to CBI policy, it is expected to continue adopting the exchange rate as a nominal anchor to control inflation, as well as foreign reserves are expected to grow by (7.2%) in the light of continued rise of oil prices, in addition to the rise of gold prices at the investment portfolio.

The continued Russian-Ukrainian crisis and the accompanied rise of commodity prices, in addition to the entry of the Iraqi economy into a wave of imported inflation, will expand the subsidy item in the public budget for the benefit of supporting fragile & poor segments. It also will address the manifestations of inflation by means of

supportive fiscal policy, including support of food ration card and the reduction of some taxes' aspects.

With regard to **exchange rates**, it is expected that the window exchange rate will continue to be (1320) dinars per US dollar for 2023. A combination of the government's and central bank's measures will be able to stabilize the continuous declining pressures on the Iraqi dinar, as the gap widened between the window exchange rate and the domestic market (parallel) exchange rate since December 2021.

As for the **broad money supply** (M2), it is expected to grow by no less than (12.1%) for 2023 due to the continued disbursement of the allocation through CBI's initiatives aimed at supporting economic growth. In addition to the expected growth of net foreign assets as a result of the expected rise of exported oil prices. Hence, the country's reliance on the first government resource from oil revenues has made the monetary basis (issued currency for the circulation and the of banks' reserves with the central bank) affected by basic macroeconomic variables, especially gross domestic product and oil.

Table No. (14): Outlook for Some Economic Variables

	2022	2023
	Actual	Expected
Core Inflation Rate (%)	4.8	1.5
Interest Rate (%)	4	4
Foreign Reserves Growth (%)	51.4	7.2
GDP Growth at Constant Prices (%)	7.0	2.4
GDP Growth (Non-Oil) (%)	-0.03	4.2
Window Exchange Rate (Dinar per Dollar)	1460	1310
Broad Money Supply Growth (%)	20.7	12.1