

THE EFFECT OF ECONOMIC SHOCKS ON MONETARY POLICY IN IRAQ FOR THE PERIOD (2003-2020)

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ABSTRACT

The research seeks to analyze the trends of internal and external economic shocks, and their impact on the relative growth of monetary policy variables in Iraq for the period (2003-2020), based on the premise that “economic shocks have different effects on the growth of monetary policy variables in Iraq, the impact of the shock may have an impact Positive for the relative growth of the variables of this policy, or this effect has a negative impact, which will lead to a deterioration in the relative growth of these variables.” .

The research concluded that Iraq was subjected to a number of internal and external economic shocks during the study period, to affect the directions of monetary policy and its variables. The annual growth rate of these variables, although the shock was positive, increased the annual growth rate of the variables. Therefore, it is necessary to reduce dependence on the oil sector to obtain foreign currency, by strengthening the local productive sectors such as agriculture and industry, which contributes to feeding the Iraqi economy with the needs of real goods and foreign currencies that achieve stability in the economic and monetary aspect.

Keywords: *Internal Economic Shocks, External Oil Shocks, Money Supply, Foreign Currency Window, Foreign Exchange Rates.*

INTRODUCTION

The shocks faced by economies are among the important topics that researchers and scholars of the economic aspect have been interested in since the seventies of the last century. The economist Gerald A. Pollack may have been one of the first to pay attention to this topic through his analysis of the oil price shock in the seventies and its effects on oil economies. As for the Iraqi economy, after 2003, it faced a number of economic shocks of internal origin, such as shocks of changing the country's economic philosophy and unstudied trade openness, security and political shocks due to political change and terrorist attacks, and a number of external shocks, especially oil shocks resulting from changing oil prices in global markets And the shock of the COVID-19 pandemic, which all of the above led to effects on monetary policy, in terms of affecting the relative growth of the narrow and broad money supply, the volume of US dollar purchases and sales within the currency window, and the official and parallel foreign exchange rate trends.

The Importance

This importance comes from the need to study the situation of the Iraqi economy in light of the multiple economic shocks that the country is exposed to and exposed to, especially after 2003, and the impact of these shocks on monetary policy.

Problem

The Iraqi economy has passed through many circumstances and crises, making it one of the fragile economies that is easy to be exposed to any economic shock, whether of internal or external origin, leading to sudden changes affecting monetary variables, to have positive or negative consequences for the annual rates of change related to these variables, and according to the direction of the shock and the extent of its impact on the Iraqi economy.

Objective

The research seeks to achieve the following goal: Analyzing the impact of economic shocks on monetary policy in Iraq for the period from 2003 to 2020, which came as a result of security, political and economic instability, and as a result of external oil shocks.

Hypothesis

It stems from the hypothesis that “economic shocks have different effects on the growth of monetary policy variables in Iraq. The shock effect may be positive for the relative growth rate of the variables of this policy, or the impact of the shock may be negative, which will deteriorate the relative growth of these variables.”

Methodology

In order to reach the goal of the research and test its hypothesis, the descriptive analytical method will be relied upon, by describing the economic shocks that Iraq was subjected to during the selected study period in terms of their directions and origin, and then clarifying the effects of these shocks on the direction of monetary policy.

THE FIRST AXIS: AN ANALYTICAL STUDY OF THE SHOCKS FACED BY THE IRAQI ECONOMY AFTER 2003

1-1- The Internal Economic Shocks

The process of political transformation after 2003 had economic consequences, as this transformation led to a philosophical change of the political system in Iraq, so the new system moved from dictatorship to democracy, so that the new system adopted the philosophy of the market mechanism based on the private sector. The war of change in 2003 also led to the US occupation of Iraq and the destruction of many facilities belonging to different sectors, which led to the country bearing huge

economic burdens. The costs to the Iraqi economy as a result of the recent Gulf War were estimated at about 134 billion dollars. (Wallsten, 2005: 2-19)

Also, the uncontrolled economic and commercial openness and the high levels of unemployment, as a result of the economic, political and security conditions that Iraq faced after 2003, and the bad investment climate that affected local investment as well as foreign investment, and the destruction of some industrial, public and economic projects and infrastructure was reflected in the weakness and deterioration of The production base in the country, which was basically weak before 2003, as well as the local products facing foreign competition, which was the prominent feature after the sudden trade openness (trade shock), which caused the closure of many local projects, increased unemployment and the spread of many economic and social problems, and that this The transformation as it did not take place properly, deliberately, and suddenly, and with a political dimension more than it is, and a studied economic orientation or based on a scientific method, and it did not take into account the accumulations of the past and its economic consequences, as the effects of past government trends that spread among the majority of society dependence on the government to provide its economic needs and obtaining its income through the sectors directly or indirectly affiliated with the government and Its public institutions (Al-Jubouri, 2020), which led to the suddenness of the reform measures (shocks) as part of a problem through their economic consequences and the changes that accompanied them, both in the financial orientation of the government after 2003.

And between the years (2006-2008) Iraq faced a security shock with economic effects, as security conflicts with terrorist groups were accompanied by political tension at the time, and the net value resulting from security conflicts in the face of terrorism was estimated at about 306 billion dollars (Wallsten, 2005: 2-19). . The security shock has consequences for the stability of the country and for impeding the movement of economic development due to the flight of local investments and difficulties in the flow of foreign investments into the country, given the fears of the possibility of destroying investment projects and as a result of the destruction of the basic infrastructure necessary to make investments and the development of production processes inside the country (Mohammed, 2013: 428).

In the middle of 2014, the Iraqi economy faced a double economic shock represented by the occupation of vast lands by terrorist groups (ISIS) an internal security shock, as well as the shock of the sharp drop in crude oil prices in global markets (external oil shock), in addition to the political instability in the country. Internal shock where the country went through political tension as a result of the results of the elections at the time, The previous shocks had negative effects on the economy, as the growth of weakness and structural imbalance in the sectors of the economy, the decline in consumption and investment rates in the private sector, and the decrease in government spending (especially investment spending), and the increase in the poverty rate. This rate increased in the provinces controlled by ISIS to a rate of %22.5 of that in 2014 (Iraqi Ministry of Planning, 2014: 4), and the number of displaced persons and displaced persons registered in the statistical survey of the Iraqi Ministry of Migration and Displacement reached about 2.5 million displaced people, spread over 500 sites in various regions of the interior of Iraq (Iraqi Ministry of Migration and Displacement, 2015: 5). Estimates of the damage and losses that were affected by the Iraqi economy as a result of the security shock in that year indicate that

the losses of the total value of assets amounted to about 34.654 trillion dinars, for 8,373 economic units of different sizes (Iraqi Ministry of Planning, 2017: 10).

1-2- External Oil Shocks

Oil shocks are sudden changes that occur in the oil market that cause a sharp rise or fall in oil prices during a short period of time. These sudden changes result from factors related to the forces affecting the oil market represented by the forces of supply or demand for oil or both. Together, as in the inability of the oil supply to meet the global market's need for crude oil, or regional conflicts and crises in oil-producing countries (such as the first and second Gulf wars against Iraq) that affect oil supplies, which changes the direction influencing the turmoil in oil prices, in addition to The attempts of crude oil consuming countries to search for alternative energy sources for oil, and other factors (Rodriguez, 2004: 5).

In order to analyze the direction of the oil shocks to which the Iraqi economy was subjected, Table (1) has been prepared, which shows the nominal and real prices for the sale of crude oil in the global markets as follows:

Table (1): The Nominal and Real Prices for the Sale of Crude Oil in the Global Markets during the period (2003 - 2020)

Years	Nominal Price (dollars/barrel)	Annual Rate of change (%)	Real Price (2000 = 100) (dollars/barrel)	Annual rate of change (%)
2003	28.2	—	26.8	—
2004	36.0	27.7	33.6	25.2
2005	50.6	40.6	46.2	37.6
2006	61.0	20.6	54.6	18.1
2007	69.1	13.3	60.5	10.8
2008	94.4	36.6	81.0	34.0
2009	61.0	-35.4	52.0	-35.9
2010	77.4	26.9	65.4	25.8
2011	107.5	38.9	89.6	37.0
2012	109.5	1.9	90.1	0.6
2013	105.9	-3.3	86.1	-4.5
2014	96.2	-9.2	77.1	-10.4
2015	49.5	-48.5	39.2	-49.2
2016	40.8	-17.6	32.0	-18.4
2017	52.4	28.4	40.5	26.6
2018	69.8	33.2	53.0	30.9
2019	64.0	-8.3	48.4	-8.7
2020	41.2*	-35.6	—	—

Source:

- Organization of Arab Petroleum Exporting Countries (OAPEC), the annual report of the Secretary-General during the period (2003 - 2019), Kuwait.

*** Organization of Arab Petroleum Exporting Countries (OAPEC), (2021), Monthly Bulletin on Petroleum Developments in Global Markets (January 2021), Kuwait.**

According to Table (1), the nominal selling price of oil increased from 2003 to 2008, rising from 28.2 dollars per barrel to 94.4 dollars per barrel, at different rates that ranged between (%13.3 - %40.6), and the real price increase from 26.8 dollars per barrel to 81 dollars per barrel, at rates ranging between (%10.8 - %37.6), the reason for the rise in nominal and real prices is due to the change in geopolitical factors at the world level, and the growth in demand for oil in America, China and India, as well as the increase in the level of speculation in future markets, as well as the decrease in the level of stocks The American strategist (Arab Monetary Fund, 2005: 83), the rapid growth of Asian economies that led to an increase in their consumption of oil, security turmoil in Nigeria, Venezuela, and Iraq, the crisis of the Iranian nuclear file and the aggression against Lebanon (Arab Monetary Fund, 2006: 98), and the outbreak of the crisis Global finance, which caused global economic downturn and recession, reduced demand for oil and significantly deteriorated price levels (OPEC, 2010: 24). Then, oil prices fell sharply in 2009, reaching a nominal price of 61 dollars per barrel, with a rate of decline of %-35.4, and a drop in the real price to 52 dollars per barrel, at a rate of %-35.9, due to the low level of strategic reserves in the industrialized countries. With the emergence of signs of economic recovery, especially during the second half of 2009, the demand for crude oil witnessed an increasing growth until the last quarter of the year 2009, to witness a rise in oil prices from 2010 until 2012, with the nominal price rising from 77.4 dollars per barrel to 109.5 dollars per barrel. Annual rates ranged between (%1.9 - %38.9), and the real price rose from 65.4 dollars per barrel to 90.1 dollars per barrel, and rates ranged between (%0.6 - %37). Then prices witnessed a sudden change with a sharp decline under the influence of the increase in the supply of oil production, especially the exceptional increase achieved in the US production of shale oil by 1.5 million barrels, in addition to the increase in production of conventional crude oil in Iraq, Libya, Russia, Canada and Saudi Arabia (Arab Monetary Fund, 2016: 111), and prices continued to decline to reach the nominal prices from 2013 to 2016, where prices reached between 40.8 dollars per barrel and 96.2 dollars per barrel, with rates of decline ranging between (%48.5 - %9.2), as well as the real prices decreased From 86.1 to 32 dollars per barrel during those years, with rates of decline ranging between (%-49.2 - %-10.4), the reason for these declines is due to the decline in global demand for crude oil resulting from the slowdown in economic growth in major consuming countries such as China, India and the Union The increase in the production of shale oil, which competes with conventional oil, and the excessive production by OPEC countries is another reason that led to a surplus in the oil market estimated at about 2 million barrels in 2015, which formed a pressure factor on Prices to drop to this level (Arab Monetary Fund, 2016: 111). With the world facing the COVID-19 pandemic, most countries, including Iraq, made strict protective measures to protect their citizens by preventing them from travel, quarantine, closing borders and preventing flights, where this effect extended to The oil-producing industries that depend on it to reduce the global demand for oil, as well as the decline in production activities in the manufacturing industries at levels not seen before (OAPEC, 2019: 21 - 22), so the nominal prices for 2019 and 2020 fell to 64 and 41.2 dollars per barrel (respectively), with a decrease of %-8.3 and %-35.6, respectively, and real prices fell in 2019 to 48.4 dollars per barrel, a decrease of %-8.7.

SECOND AXIS: THE EFFECT OF ECONOMIC SHOCKS ON THE RELATIVE GROWTH OF MONETARY POLICY IN IRAQ

2-1-The Effect of Economic Shocks on the Money Supply

Monetary policy uses the variable money supply to achieve stability in the monetary and economic aspect, so the Central Bank of Iraq directed its monetary policy to serve the monetary and financial reality in order to build an integrated economic system, by controlling the money supply and the foreign exchange rate and strengthening Foreign reserves, managing these reserves properly, and addressing the effects of economic shocks on the monetary and economic reality in Iraq (Annual Monetary Policy Report 2020: a). His monetary policy has been affected by the volume of oil revenues through the use of foreign revenues from the sale of crude oil to achieve its monetary goals, and the monetary policy orientations in Iraq were also affected by internal economic shocks, especially the shock of changing government trends that affect its spending based on what is obtained from dollar resources derived from the sale of oil, to be also influential in the money supply, derived from external oil shocks.

In order to analyze and study the impact of economic shocks on the money supply and its relationship to the development of net foreign assets in Iraq during the period (2003 - 2020), the following table (2) has been prepared:

Table (2): The Money Supply (Narrow and Wide) and Net Foreign Assets in Iraq during the period (2003 - 2020)

Years	Narrow Money Supply (M1) (million dinars)	Growth Rate (%)	Wide Money Supply (M2) (million dinars)	Growth Rate (%)	Net Foreign Assets (million dinars)	Annual rate of change (%)
2003	5773601	—	6953420	—	-1465349	—
2004	10148626	75.8	12254000	76.2	3447443	335.3
2005	11399125	12.3	14684000	19.8	2583789	-25.1
2006	15460060	35.6	21080000	43.6	19733616	663.7
2007	21721167	40.5	26956076	27.9	43374860	119.8
2008	28189934	29.8	34919675	29.5	66041021	52.3
2009	37300030	32.3	45437918	30.1	62142941	-5.9
2010	51743489	38.7	60386086	32.9	68139347	9.6
2011	62473929	20.7	72177951	19.5	79045754	16.0
2012	63735871	2.0	77187497	6.9	93883760	18.8
2013	73830964	15.8	89512076	16.0	109512184	16.6
2014	72692448	-1.5	92988876	3.9	101767422	-7.1
2015	69613150	-4.2	84527272	-9.1	78178894	-23.2
2016	75523952	8.5	90466370	7.0	64783242	-17.1
2017	76986584	1.9	92857047	2.6	72617001	12.1
2018	77828984	1.1	95390725	2.7	91422878	25.9
2019	86771000	11.5	103440475	8.4	102068978	11.6
2020*	103353665	19.1	119906385	15.9	96884150	-5.1

Compound Growth Rate (%)	18.5	—	18.2	—	**23.2	—
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Source:

- Central Bank of Iraq, Annual Statistical Bulletins for the period (2003 - 2019), the General Directorate of Statistics and Research.

* Statistical website of the Central Bank of Iraq:

<https://cbiraq.org/SubCategoriesTable.aspx?SubCatID=92>

** The compound growth rate of net foreign assets has been calculated for the period (2004 - 2020), due to the presence of a negative value in 2003.

It is noted from Table (2) that the trend of the narrow and broad money supply is a relatively upward trend during the period (2003-2020), and the compound growth rate for both types reached %18.5 and %18.2, respectively, so the narrow money supply started with about 5773601 million dinars. That was in 2003, to rise in the following year to 10148626 million dinars, with an annual change rate of %75.8, as well as the broad money supply, which rose from 6953420 million dinars to 12254000 million dinars, with an annual growth rate of %76.2, as a result of a change in the policy of the Central Bank of Iraq. The result of the shock of the philosophical change of the government, and because of the oil shock, which led to an increase in the net foreign assets of the Central Bank from -1465349 million dinars to 3447443 million dinars, with an annual growth rate of %335.3.

The money supply for both types continued to rise relative with fluctuating annual growth rates during the period (2005-2013), so the narrow money supply rose during that period from 11399125 million dinars to 7383964 million dinars, with volatile growth rates that ranged between (%2 - %40.5), as well as The broad money supply increased during the same period from 14684000 million dinars to 89512076 million dinars, with fluctuating growth rates that ranged between (%6.9 - %43.6), and this is due to several factors, the most important of which is the impact of oil price fluctuations on the flow of foreign currencies to Iraq, as this affected the volatility The relative annual rates of change of the net currencies of these currencies, during the same period, the net of these currencies rose from 2583789 million dinars to 109512184 million dinars, with fluctuating annual rates of change that ranged between (%-25.1 - %663.7), as well as the effect of fluctuation in government trends that came as a reflection To influence the trends of the political forces in the country, and the security situation during that period.

As for the years 2014 and 2015, the narrow and wide money supply decreased, the narrow supply decreased to 72692448 and 69613150 million dinars, respectively, and by negative rates of %-1.5 and %-4.2, respectively, while the broad money supply decreased for both years to 9298887 and 845272732 million dinars, respectively, and with positive and negative rates of %3.9 and %-9.1 respectively. The main reason for this is that Iraq was subjected to a double shock represented by the security shock (ISIS), which affected all real and monetary indicators in the Iraqi economy, and to the shock of declining Oil prices, which affected net foreign assets. During 2014 and 2015, the net decreased to 10176422 and 78178894 million dinars, with negative rates of %-7.1 and %-23.2. To return the money supply for both types to rise

from 2016 to 2020, the narrow money supply increased from 75523952 million dinars to 103353665 million dinars, with an annual growth rate that ranged between (% 1.1 - % 19.1), and the broad money supply increased from 90466370 million dinars to 119906385 million dinars, with annual rates ranging between (%2.6 - % 15.9), and this is due to the rise in oil prices, which amounted in 2017 and 2018 to an increase in prices, which is reflected in the increase in net foreign assets in that year, which amounted to 72617001 and 91422878 million dinars, respectively. With two positive annual changes, they were % 12.1 and % 25.9, respectively. As well as the rise in the money supply is due to the government's adoption of decisions aimed at absorbing the impact of popular protests by granting the unemployed social grants, and the government's attempt to take a set of measures and measures aimed at confronting the health shock represented by the COVID-19 shock, so the government attempted to provide medical supplies, rehabilitate hospitals, and grant families during The period of the comprehensive ban amounts of money to help them cope with the health shock.

2-2- The Effect of Economic Shocks on Transactions in the Foreign Currency Window

The foreign currency is obtained as a result of selling crude oil to enter the account of the Ministry of Finance abroad and managed by the Central Bank of Iraq after 5% is deducted in favor of Kuwait's compensation, then the money is divided into two parts: (Abdul Al-Majid, 2019: 343)

A- Government imports are purchased in dollars.

B- The remaining dollars are bought and paid in dinars by the people of the Central Bank of Iraq for the benefit of the Ministry of Finance, in order to finance the general budget. This exchange process takes place through the foreign currency sales window on a daily basis in order to finance imports, and the remainder of the dollar is added to the foreign reserves of the Central Bank of Iraq.

In order to study and analyze foreign currency trends in the currency window through the annual changes of purchases and sales of the Central Bank of Iraq of this currency, the following table (3) has been prepared:

Table (3): Purchases and Sales of Foreign Currency in the Currency Window in Iraq during the period (2003 - 2020)

Years	Central Bank Purchases of Foreign Currency (million dollars)	Annual Rate of Change(%)	Central Bank Foreign Currency Sales (Million Dollars)	Annual Rate of Change(%)
2003	900	—	293	—
2004	10802	1100.2	6008	1950.5
2005	10600	-1.9	10463	74.2
2006	18000	69.8	11175	6.8
2007	26700	48.3	15980	43.0
2008	45500	70.4	25869	61.9
2009	23000	-49.5	33992	31.4
2010	41000	78.3	36171	6.4
2011	51000	24.4	39798	10.0
2012	57000	11.8	48649	22.2

2013	62000	8.8	55,678	14.4
2014	47515	-23.4	54,463	-2.2
2015	32450	-31.7	44304	-18.7
2016	25653	-20.9	33,524	-24.3
2017	40355	57.3	42,201	25.9
2018	52229	29.4	47,133	11.7
2019	5890	-88.7	4261	-91.0
2020*	3070	-47.9	4070	-4.5
Compound Growth Rate (%)	7.5	—	16.7	—

Source:

- Central Bank of Iraq, Annual Statistical Bulletins for the period (2003 - 2019), the General Directorate of Statistics and Research.

* Statistical website of the Central Bank of Iraq:

<https://cbiraq.org/SubCategoriesTable.aspx?SubCatID=92>

** The compound growth rate of net foreign assets has been calculated for the period (2004 - 2020), due to the presence of a negative value in 2003.

It is noted from Table (3) that the compound growth rate of foreign currency purchases amounted to %7.5 during the period (2003-2020), and these purchases were relatively volatile during the study period due to their association with oil price fluctuations in global markets. Years of escalation in purchases of this currency were recorded. Like the years 2004, 2006, 2007 and 2008, purchases amounted to 10802, 18000, 26700 and 45500 million dollars, with annual rates of change of %1100.2, %69.8, %48.3 and %70.4, respectively, except for the year 2005, where purchases of currency decreased to 10600 million dollars. , with a negative rate of %-1.9, which is due to the decline in oil revenues. Then, after these years, purchases decreased in 2009 to 23000 million dollars, with a negative rate of %-49.5, as a result of the impact of the global financial crisis on all markets, including the oil market, which led to a decrease in oil imports into the country. After this year, purchases of foreign currency tended to rise relative during the period (2010-2013), so currency purchases increased from 41000 million dollars to 62000 million dollars, with positive annual rates of change that ranged between (%8.8 - %78.3), due to the rise in oil prices. In global markets which increased the dollar oil imports. After the double shock in 2014, purchases recorded a successive decline in the years 2014, 2015 and 2016 to 47515, 32450 and 25653 million dollars, respectively, with negative annual rates of %-23.4, %-31.7, and %-20.9 respectively. Then, during the period (2017-2020), foreign currency purchases fluctuated between (3070-52229) million dollars, and positive and negative rates ranged between (%88.7 - %57.3), due mainly to fluctuations in oil prices in global markets, and the effects of internal trauma.

As for foreign currency sales, their compound growth rate reached %16.7 during the period (2003 - 2020), and these sales at the beginning of the study period were heading towards an upward trend until 2014, after which negative annual rates of change were recorded. Sales increased during the period (2003 - 2013) from 293 million dollars to 55678 million dollars, at annual rates ranging between (%6.4 - %1950), due to the increase in imports after the lifting of economic sanctions on Iraq, trade openness, and the lack

of real control over border crossings, especially those in the Kurdistan Region . In the years 2014, 2015 and 2016, foreign currency sales decreased to 54463, 44304 and 33524 million dollars (respectively), with successive negative rates of %-2.2, %-18.7 and %-24.3, due to the effect of the double shock, which also affected the import activity of the private sector, which was reflected in the demand for the dollar to pay the payments for goods and services imports. After that, sales from foreign currency increased and then decreased. Sales in 2017 and 2018 amounted to about 42201 and 47133 million dollars, with two positive percentages, which amounted to %25.9 and %11.7, respectively, as a result of the relative improvement in the security situation. Then in 2017 and 2018, sales of foreign currency decreased, respectively, to 4261 and 4070 million dollars, with negative rates of %91 and %4.5, due to the decline in economic activity as a result of popular protests in 2019, accompanied by the closure of international borders as a result of the COVID-19 pandemic, which It affected the import activity of the private sector to be reflected in the demand for the dollar.

2-3- The Effect of Economic Shocks on Foreign Exchange Rates

The Central Bank of Iraq adopted a policy of managed flotation of foreign exchange through foreign currency trading operations within the currency window, in order to reduce fluctuations in the value of the Iraqi dinar against the US dollar, and work to achieve convergence between the real and nominal exchange rate, but the policy of The flotation of the foreign exchange rate later turned towards the policy of price stabilization through the Central Bank of Iraq's management of the dollar supply, as a result of the Iraqi economy's suffering from a shortfall in the volume of incoming foreign currencies, most of which come from the sale of crude oil, leading to a deterioration in the value of the Iraqi dinar in the event that the bank The Central Bank of Iraq lifted its control over the foreign exchange rate as a result of its stability dependent on oil prices in the global market (Abdul Majid, 2019: 341 - 345).

In order to study and analyze the impact of official and parallel foreign exchange rates in Iraq on economic shocks during the period (2003 - 2020), the following table (4) has been prepared:

Table (4): Official and Parallel Exchange Rates in Iraq during the period (2003 - 2020)

Years	Official Exchange (dinars per dollar)	Annual Rate of Change(%)	Parallel exchange (dinars per dollar)	Annual Rate of Change(%)
2003	1896*	—	1936*	—
2004	1453	-23.4	1453	-24.9
2005	1469	1.1	1472	1.3
2006	1467	-0.1	1475	0.2
2007	1255	-14.5	1267	-14.1
2008	1193	-4.9	1203	-5.1
2009	1170	-1.9	1182	-1.7
2010	1170	0.0	1185	0.3
2011	1170	0.0	1196	0.9
2012	1166	-0.3	1233	3.1
2013	1166	0.0	1232	-0.1
2014	1188	1.9	1214	-1.5
2015	1190	0.2	1247	2.7
2016	1190	0.0	1275	2.2
2017	1190	0.0	1258	-1.3

2018	1190	0.0	1209	-3.9
2019	1190	0.0	1196	-1.1
2020*	1320	10.9	1234	3.2

Source:

- Central Bank of Iraq, Annual Statistical Bulletins for the period (2003 - 2015), the General Directorate of Statistics and Research.

* The 2003 exchange rate reflects the exchange rate for the last months of the same year.

** Central Bank of Iraq, Monetary Policy Report of the Central Bank of Iraq for the year 2020, Department of Statistics and Research.

It is noted from Table (4) that the direction of the official foreign exchange rates at the beginning was fluctuating from 2003 until 2009, and the foreign exchange rates on the parallel market accompanied it, where the official exchange rates at the beginning (in 2003) amounted to 1896 dinars per dollars, and then decreased in the following year to 1453 dinars per dollar, with a decrease of % -23.4, as well as the parallel exchange rates decreased from 1936 dinars per dollar, with a decrease rate of % -24.9, as a result of the intervention of the Central Bank of Iraq in the foreign exchange market in an attempt to achieve Stability in this market, as well as commercial openness without imposing customs duties on the entry of goods into the Iraqi economy, that is, one of the reasons for the decline in foreign exchange rates is a supply shock. Then the official and parallel foreign exchange rate rose in 2005, reaching the official price of 1469 dinars per dollar, with an increase of % 1.1, and the parallel price amounted to 1472 dinars per dollar, at a rate of % 1.3, then the official and parallel prices tended to decrease relative during the period (2006-2009), it decreased from 1467 to 1170 dinars per dollar, with rates of decrease ranging between % 14.5 - % 0.1, while the parallel exchange rate decreased from 1267 to 1182 dinars per dollar, and rates of decrease ranged between (% -1.7 - % 14.1), except for the year 2006, when the parallel exchange rate rose to 1475 dinars per dollar, with an increase of % 0.2, the increase in foreign reserves as a result of the increase in imports of foreign currency resulting from the sale of foreign oil, meaning that the positive shock of the oil shock was reflected in the reduction of foreign exchange rates (official and parallel). The rise in foreign exchange rates in 2005 is due to the impact of the movement of imports on the internal conditions and the trends of aggregate demand, which will affect the demand for the dollar, as well as a result of rumors and speculation that take place in the commodity market by Iraqi traders, and because of the security situation in the country, which was reflected in the change in demand The dollar has therefore increased in value.

Then the monetary policy followed the policy of stabilizing the official exchange rate during the period (2009-2011) at a price of 1170 dinars per dollar, to decrease this rate in the years 2011 and 2013 to 1166 dinars per dollar, with a decrease of % -0.3, to reflect on the fluctuation of exchange rates During the period (2009-2013), it ranged between (1182 - 1233) dinars per dollar, and fluctuation rates ranged between (% 1.7 - % 3.1), due to several factors, including the local, regional and global economic conditions as a result of the global financial crisis In 2008, which had economic repercussions on the real and monetary changes in that year and the next, as a result of the increase in speculation in the foreign exchange market, which led to an increase in demand for the dollar in 2012, and external transfers to cover commodity imports, the relative instability of the security and political situation, and the spread of the dollarization

phenomenon In the Iraqi economy, as the security component of storing personal wealth in the dollar, in addition to the reflection of the instability of the economic and security conditions in neighboring countries (such as Syria) on the internal situation in Iraq.

In 2014, the official exchange rate rose to 1188 dinars per dollar, with an increase of %1.9, but the parallel price fell to 1214 dinars per dollar, with a decrease of %-1.5. On the collapse of the oil price, the turmoil of the local market and speculation in the foreign market as a result of ISIS' control of Iraqi lands.

After this year (during the period from 2015 to 2020), the monetary policy continued by fixing the official exchange rate at 1190 dinars per dollar until 12/17/2020 by adopting a new official rate at 1450 dinars per dollar, according to what was agreed between the Central Bank of Iraq and the Ministry of Finance According to the letter of the Department of Financial Operations and Debt Management No. 6/1/2440 dated 12/20/2020, as a result of the economic shock that the Iraqi economy has experienced and is going through, represented by the spread of the COVID-19 pandemic and the decline in crude oil prices, as the previous price is not commensurate with the effects of this shock and trends The government is in the process of economic reform by presenting the white paper (Annual Monetary Policy Report 2020: 9), to reflect on the average official price in 2020, which amounted to 1320 dinars per dollar, with an increase of %10.9. But the parallel exchange rate during the period (2015-2020) tended towards relative fluctuation, ranging between (1196 - 1247) dinars per dollar, and rates that ranged between (%3.2 - %3.9), as a result of fluctuations in commodity imports due to the internal conditions in Iraq, including them. Security and political instability, which leads to fluctuating demand for the dollar, and the repercussions of economic shocks on monetary and real indicators. For example, the recent shock led to a decrease in the sale of foreign currency through the currency window, a decrease in the number of Iraqi travelers and the suspension of international transport, which will lead to a decrease in demand for the dollar.

CONCLUSIONS

- 1- The dominance of the oil sector over the Iraqi economy, which exposes it to many external oil shocks, due to fluctuations in oil prices in global markets, and the economy's dependence on what is sold of oil to obtain the foreign currency used by the Central Bank of Iraq in its monetary policy, which makes the objectives and tools of the bank The central bank is subject to fluctuations in oil prices.
- 2- Iraq was subjected to a number of internal and external economic shocks during the study period, which led to violent tremors in the real and monetary aspect, which were reflected in the directions of monetary policy and the impact of its variables. In the currency window, if the shock is negative, the annual growth rate of these variables deteriorates, and if the shock is positive, the annual growth rate of the variables increases.
- 3- The use of monetary policy in Iraq for the foreign currency window to achieve stability in foreign exchange rates has led to burdens borne by the Iraqi economy, through smuggling this currency abroad, which increases the imbalances of the Iraqi economy in its real and monetary aspects.

- 4- The Central Bank of Iraq adopted a policy of floating and stabilizing the foreign exchange rate during the study period, and the connection of this policy with the shocks to which the economy is exposed, whether from the inside or the outside, or both.
- 5- The Iraqi economy after 2019 was subjected to a four-way shock, represented by two internal economic shocks, the popular demonstrations and political tensions, and two external shocks, namely the shock of the Corona pandemic and the drop in oil prices. These shocks affect the monetary policy variables, as most of the growth rates of these variables recorded negative rates.

RECOMMENDATIONS

- 1- Work to reduce dependence on the oil sector to obtain foreign currency, by strengthening the local productive sectors such as agriculture and industry, in a way that contributes to feeding the Iraqi economy with the needs of real goods and foreign currencies that achieve stability in the economic and monetary aspect.
- 2- Directing the dollar surpluses resulting from the sale of Iraqi oil towards a sovereign fund that helps achieve economic stability, and mitigates the negative effects of external oil shocks resulting from low oil prices, which are reflected on the monetary side in Iraq.
- 3- Restoring the independence of the Central Bank of Iraq, which in the last two years became dependent on the directions of the government, as an attempt to address the effects of internal and external economic shocks in 2019 and 2020, which led to the monetary variables being affected, especially the official and parallel exchange rates.
- 4- Reducing the negative effects of the impact of sudden changes of government policy on the economic and financial side, which were reflected in the growth of the money supply, and this is done by strengthening coordination between the fiscal and monetary policies in their future directions and objectives and their consistent use of financial and monetary tools.
- 5- Working on diversifying the foreign exchange basket that helps the Central Bank of Iraq achieve its monetary goals, mitigates the negative effects of economic shocks, and removes the dominance of the US dollar on the Iraqi economy, in order to strengthen and strengthen monetary policy in the face of sudden future changes.

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