The Role of Sterilization Policy in Addressing the Impact of Public Expenditures in Iraq During the Period (2003-2017)

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ABSTRACT

The transitional situation experienced by the Iraqi economy after 2003, and the shift in the ideology of the Iraqi economy from a socialist to a market economy, necessitated a shift in the work of monetary policy, which leads to the independence of the Central Bank based on Law 56 of 2004, which led the monetary authority to use modern tools that meet the requirements of moving towards the market system on the one hand, and the specificity of the Iraqi economy in light of the structural imbalance suffered by it as well as underdevelopment of the financial and banking system on the other.

Achieving economic stability should be accompanied by a good monetary policy that keeps pace with the transition to a market economy. The monetary sterilization policy, which means the intervention of the central bank through the tools at its disposal, working to reduce the negative side effects of fiscal policy through monetary policy (open market operations, Legal reserve ratio, discount rate) or foreign exchange policy (currency selling window).

The success of the currency window instrument was on the pressure on the international reserves at the Central Bank in light of the large consumption expenditure by the government, in return for the decline in oil revenues, which is the only source of foreign currency supply, making the future exchange rate is also unable to maintain stabilizing prices and reducing inflation, where we note the Central Bank of Iraq follows two methods of exchange rate, first followed by the managed exchange rate and the second fixed exchange rate after 2009, thus the Iraqi currency becomes threatened with collapse, but this effective tool remains the only tool of the monetary authority under the special circumstances of Iraqi economy.

INTRODUCTION

Iraq has witnessed fundamental changes in the political and economic structure in 2003. As a result of the significant transformation of the Iraqi economy and its orientation towards a market economy, the monetary authority in Iraq sets a set of bases and rules and took many measures at the monetary level as a result of the economic reform programs. One of the main measures that taken for this purpose is granting the Central Bank of Iraq its independence in accordance with Law No. (56) (2004)) one of its objectives is to maintain the stability of domestic prices and address the rising rates of inflation and increase the purchasing power of the Iraqi dinar through the measures taken especially in the areas of interest rates and the exchange rate of the Iraqi dinar, which enabled him to control the levels of liquidity and its management based on the rules of economic stability and mechanisms, as well as government revenues from foreign currency becomes independent from the reserves of the Central Bank of Iraq, and based on the function of the Central Bank as a government bank, government revenues have become from foreign currency, which is a direct income of the general budget, is recorded in items outside the balance sheet of the Central Bank.

The monetary authority pursued the policy of targeting inflation in order to maintain monetary stability in the country and its incubator for future growth, and used in order to achieve its objective the fixed exchange rate nominally Nominal Anchor, due to the rent of the economy and financial fragility "Shallowness" and the separation of the real sector from the monetary, which makes the traditional channels of policy transition Monetary (interest rate) is largely ineffective, as the monetary authority succeeded through the use of the currency selling window in controlling the exchange rate and reducing the exchange gap between the official rate and the parallel rate, thus maintaining a relatively stable exchange rate for the period 2003-2017 and thus stability of prices and purchasing power in the economy.

While the currency selling window is one of the indirect means of monetary policy influencing the monetary basis of the country in order to control the aggregate demand and face inflationary pressures, this mechanism is part of the open market operations, but it follows a different way that is to influence the exchange rate as a tool of policy transition monetary to the economy in the case of ineffective financial intermediation in the economy and the economy depends on imports to a large extent to cover domestic demand for goods and services.

The CBI is working to sterilize the negative effects of government expenditure to achieve internal and external monetary stability. The first is connected with the stability of domestic prices in conjunction with achieving a desirable growth rate and high operating levels. The second is connected with the balance of payments balance and the stability of the value of the Iraqi dinar. The central bank works to stabilize inflation rates and to increase employment opportunities by affecting the general liquidity ratios through the available tools, especially the exchange rate mechanism or the so-called (currency window) through the sale and purchase of foreign currency.

Research importance:

The Central Bank of Iraq has taken various mechanisms to sterilize the effects of public expenditure, including this foreign currency selling window as a means to ensure the stability of the dinar exchange and gave a greater role for government banks to buy and sell dollars.

Research problem:

Maintaining the stability of the general level of prices in the hope of stimulating the macroeconomic and creating a stable environment for the formulation of appropriate development policies, and a clear vision for the advancement of economic reality using the intermediate objective of the exchange rate, to sterilize the effects of public expenditure through the currency selling window.

Research hypothesis:

The currency window has played an important role in influencing the exchange rate, money supply, and inflation rates to sterilize the effects of public expenditure in Iraq for the period 2003 – 2017.

Research goals:

- What are the effects of using the currency selling window to sterilize the effects of public expenditure?
- State the effects of using the currency selling window on the exchange rate and inflation.

RESEARCH METHODOLOGY

The study relies on the analytical approach, using all data and information, to determine the effect of window price fluctuations on the parallel price, money supply, and exchange gap and its impact on the stability of the economy by sterilizing the effects of public expenditure.

First: The concept of monetary sterilization policy and its types and determinants:

The concept of cash sterilization and its types: -

We note the intervention of most monetary authorities in many countries of the world, whether developed or developing, in order to maintain the stability of the exchange rates of their currencies, as there has been an increase in lending operations, part of which went to finance the chronic trade deficit of many countries, which means that there are surpluses in the balance of payments. On the basis of a fixed exchange rate system, it has become very difficult, which means disturbances in the countries that adopt this system as a basis for stabilizing the exchange rate, especially during the nineties, so most of the central banks intervened in response to reduce the effects of these flows on increasing the money supply, which will lead to inflation by sterilizing those cash flows.

Based on the above, monetary sterilization is a monetary measure that the Central Bank uses to minimize the impact of cash inflows and outflows on money supply, sterilization on a large scale as the monetary process by which net foreigners are increased and offset by a decrease in net domestic assets. Thus the monetary base is kept constant, and sterilization can be divided into two types, internal sterilization, and external sterilization as follows:

Internal sterilization:

The policy of internal monetary sterilization means the intervention of the Central Bank through the sale or purchase of financial assets with foreign currency against assets in local currency to avoid prejudice to the monetary base to reduce the inflationary impact of flows and their impact on the cash basis.

Cash sterilization is broadly defined as the monetary process by which a rise in net foreign assets is compensated by a decrease in net domestic assets, thereby maintaining the stability of the monetary base.

In other words, the policy of monetary sterilization is the ability of the monetary authority to tighten domestic credit to limit the expansion of the monetary base as a result of the accumulation of foreign reserves.

A balance in a central bank is achieved when there is parity between the change in monetary reserves (monetary base) or monetary liabilities with the sum of the change in the domestic credit (DC) and the net foreign assets (FA) of the central bank.

The change in the monetary basis, the change in the net domestic credit, the change in the net foreign assets.

External sterilization:

It means the action taken by the Central Bank to counter changes in the money supply resulting from the surplus or deficit in the balance of payments and it relates to the open market operations adopted by the Central Bank to neutralize the effects of foreign exchange operations.

Financial flows to and from the country have many positive and negative effects. The positive effects of financial inflows are to increase investment levels in various economic sectors and increase the economic growth rate of the country, to reduce the disparity in the distribution of capital among the countries from countries of relative surplus funds to countries with capital deficits. The balance of payments flows is shown in the paragraph of capital transfers to the balance of payments. If they are credit items, they are monetary outflows, but if they are debit, they are monetary inflows into the country. It may reduce the competition of exports due to high prices and raise the local currency exchange rate, as well as may increase inflation cases, which leads to the growth of the monetary base without an increase in production so the use of monetary sterilization policy is equivalent to the impact of flows temporary foreign monetary inflows in order to eliminate the above negative effects.

The balance of payments is achieved when the total current account and the capital account are equal with the change in the net foreign assets of the Central Bank.

The current account refers to the capital account, which indicates the change in net foreign assets.

To illustrate how the balance of payments imbalance occurs, the flow of foreign capital will create upward pressure on exchange rates and foreign currency holders will shift to acquire the local currency and the local currency value will be raised. If the central bank wants to prevent the rising of the local currency, it will intervene in the foreign exchange market by buying foreign currency to sterilize the incoming monetary balances, but if the central bank does not intervene, the exchange rate will rise freely to the level where the flow of funds becomes unprofitable.

The vicious cycle of sterilization policy:

The continued application of the policy of sterilizing capital flows, whether in or out of the country in the long term, makes them spin in a vicious circle, in the case of money flow into the country as a result of higher interest rates and this rise in interest rates will attract new monetary flows, here another sterilization should be undertaken by rising or maintaining the interest, in the case of monetary outflows the interest rates will be reduced to address liquidity shortages and low-interest rates which will lead the capital to go out. Thus sterilization should be undertaken to keep the stability of a monetary basis by reducing or maintaining the interest rates to provide liquidity, which means the drawing down of the reserves of the Central Bank.

Second: Cash Sterilization Tools:

There are several tools for sterilization either through monetary policy or exchange rate policy, as follows:

- **Monetary policy:** This is done through several methods, the most important of which are:
- **The open market operations tool:** which is based on the sale of treasury bills by the central bank and can reduce the local components of the monetary base? Here we have to indicate to the open market operations, which are one of the quantitative methods of the monetary policy adopted by the central bank to face many difficulties that may limit their efficiency. Open market operations cannot be applied indefinitely, for example, increasing the balance of treasury transfers that sold in the open market to the extent that the domestic market is unable to absorb them or that domestic markets are small and underdeveloped as in developing countries. Thus so many central banks have reached important conclusions regarding open market operations that they may not only be just expensive, but also inefficient, because they may work to raise interest rates, and thus attract more inflow of capital to the interior ().

Discount Rate and Direct Lending Tool: This policy increases lending costs or restricts access to credit from the central bank.

Mandatory Reserves tool: This is a tool to raise the percentage of legal reserves that commercial banks must hold with the Central Bank. This method enables the restriction of credit granted by banks.

Currency selling window: It is a mechanism used by some central banks as one of the methods of intervention in the exchange market, in order to cover the gap of domestic demand for foreign currency and then the stability of the exchange rate (), and can be defined as one of the direct tools used by developing economies of medium or weak financial depth to intervene in the exchange market, in order to maintain the stability of the exchange rate and the general level of prices (), if the currency selling window is one of the affecting indirect monetary policy means that affecting the monetary basis of the country in order to control aggregate demand and counter inflationary pressures ().

Exchange Policy:

The Central Bank influences local currency exchange rates by making purchases or selling foreign currency. This method can be used similarly to the open market process. The Central Bank sterilizes monetary flows by selling and buying foreign exchange. When the monetary flows come in, the Central Bank sells foreign currency so that there is a balance of foreign currency with banks and banks, in turn, lend those currencies to the public or allow them to invest abroad, which creates a parallel cash flow abroad and vice versa, and this method will work to make the CB incurs losses on the price difference (buy and sell) as it is possible that the foreign currency can be sold again in the economy, causing the desired effect to not be achieved. This method, unlike open market operations, does not require a large stock of securities. The CB can restrict the return of such inflows to the country upon maturity by encouraging capital and interest from overseas investment portfolios to reinvest in foreign markets.

Third: The independence of the Central Bank: Over the past three decades, economists and policymakers have focused on the independence of the central bank, which originated mainly due to the high inflation in the 1970s and 1980s, so monetary policy reforms in many countries have been manifested by strengthening the independence of central banks, which in the medium and long term are working to reduce inflation. Through more autonomy of central banks, this allows a more efficient focus on the main objective of monetary policy, the most important of which is to stabilize prices, without undue government interference.

Central bank independence (CBI) means the ability of the central bank to control monetary instruments; on the other hand, CBI can also be considered a set of restrictions on the government to prevent it from influencing the management of the monetary policy of the central bank.

Many economists argue that monetary policy would be more effective if implemented by the central bank independently of the government, the independence means freedom to decide on the interest rate that limits inflation and is called (operational independence) or it means the independence of the objectives and tools and called here (Full independence) ().

The process of monetary sterilization is a process intended to sterilize the negative effects of the various economic policies, whether monetary, financial or commercial, so the issue of monetary sterilization is closely related to the independence of the Central Bank, which has been the concern of many economists and different policymakers despite the great controversy between the concept of independence and independence which expresses one meaning, and logically, the central banks are independent without being independent of the government.

Fourth: - The independence of the Central Bank of Iraq

Iraq witnessed radical changes in the political and economic structure in 2003. As a result of the significant transformation of the Iraqi economy and its orientation towards a

market economy, the monetary authority in Iraq has set a set of bases and rules and has taken many measures at the monetary level as a result of economic reform programs and the aim was to promote economic stability. The main objective of the CBI was to maintain price stability and to create a competitive financial system based on a market economy. Sustainable growth. One of the most important measures taken in this regard is to grant the independence to the Central Bank of Iraq in accordance with Law No. (56) (2004), which granted the Central Bank the right to be independent in its decisions and the law prevented the Central Bank from lending to the government or any state-owned body with exception to the purchase of government securities in the framework of open market operations, the government revenue of foreign currency became independent from the reserves of the Central Bank of Iraq, and based on the function of the central bank as a government bank, the government revenue from foreign currency, which is a direct income of the balance General recorded within items outside the balance sheet of the Central Bank (), as stated in Article (4) of the Law of the Central Bank of Iraq, that the formulation and implementation of monetary policy in Iraq in order to achieve economic stability, is one of the tasks of the Central Bank of Iraq, as well as the acquisition of international reserves and its management, which has strategic objectives, is of interest to the country's best interest.

The Ministry of Finance obtains oil revenues with foreign currency and uses part of that revenue to settle its foreign obligations directly in foreign currency. While the internal liabilities need to be settled with local currency, which pushes the Ministry of Finance to sell part of the foreign currency of oil revenues to the central bank in exchange for the local currency. there is a swap between items within the central bank balance sheet and items outside the bank balance sheet) The internal public debt is restructuring due to the interest of the Central Bank of Iraq, where the Ministry of Finance repay the accumulated debts during the nineties in an annual installment over 7.5 years) started from 31/03/2006 and the debt is also subject to annual interest rate of 5%)) ().

The private sector is the main source for the formation of international reserves in the normal model, as the private sector exchanges foreign currency through exports against the local currency of the Central Bank. In the Iraqi model, the government is the main source of international reserves.

According to the Central Bank of Iraq Law No. 56 of 2004 and to achieve the goal of monetary stability has followed several monetary policy tools are as follows: -

Open market operations:

The Law of the Central Bank of Iraq No. (56) for the year 2004 authorized the Central Bank to achieve its objectives to perform open market operations with commercial banks or financial intermediaries who have been authorized by him, and the Central Bank to provide licensed financial facilities for commercial banks through () :

- Direct sale and purchase (immediate or deferred) following the repurchase agreement or similar financial contracts or securities issued by the Central -Bank or the Government bearing market returns.
- Buy and sell (immediate or deferred) foreign exchange.
- A discount of promissory notes and bills.
- Providing loans secured by mortgage guarantee.
- Accepting deposits from banks pay interest on them.

Changing the mandatory reserve ratio:

The building of the Iraqi reserves of these monetary wealth in foreign currency and good management of the monetary authority, clearly provides its financial capabilities and the strength of its sovereignty and political unity toward the outside world, where the Iraqi dinar, along with other components of sovereignty, aligns in a homogeneous national formation, as aspired by modern nations to establish its national entity through monetary unity and stability, which reflects the country's political and economic unity as a single sovereign power. Therefore, the importance of the reserve the Central Bank of Iraq of foreign currency and as a cover for the Iraqi dinar, which depends on its stability as a force for that reserve, this makes the strength of the local currency consistent with other components of national sovereignty within the rights guaranteed by the Constitution for the Iraqi people to sanctify their property and assets, especially the national currency to be strong and stable ().

Re-discount rate policy:

This means that the Central Bank provides loans to commercial banks as it is the only source of national currency. These loans take the form of direct loans by guaranteeing their securities or through rediscounting the securities held by commercial banks. Rediscounting is the commercial banks selling their securities to the central bank to obtain the liquidity to consolidate its monetary position against the interest rate imposed by the Central Bank on commercial banks called (discount rate) and it should be mentioned that the discount rate is older than the function of the central bank as a last resort for lending ().

The Central Bank of Iraq follows a set of tools to control the monetary base, including the following ():

- **Foreign Currency Window**: To satisfy the demand of the dollar, the dollar is sold in two ways:

The first is international transfers, which means the transfer of the dollar to external accounts of banks that participate in the selling of foreign currency window to cover mainly private sector imports.

Second: cash sales of the dollar, as the dollar is sold in cash to banks for the purpose of financing several needs such as travel and treatment abroad and others.

The results of the foreign exchange window can be summarized as follows:

- Stabilizing the exchange rates of the dinar versus the dinar.
- Stabilizing investment climate.
- Reducing the dollarization phenomenon and increasing the attractiveness of the Iraqi dinar as a store of value.
- Revitalize the secondary cash market by increasing the buying and selling of currencies between banks.
- Finding deeper coordination of external transfers and cash operations through the interrelationship between the exchange rate and the interest rate.
- Working to reduce rates.
- Improving the dinar exchange rate of 40% in comparison with 2003.

Existing facilities: - These facilities aim to provide banks with the safety to manage their liquidity surplus within a moderate percentage of interest rates, which fall within the objectives of monetary policy related to interest rates as the Central Bank adopted the bank rate (policy rate) as an indicative price and these facilities carry interest rates linked to the bank rate until the development of the level of dealing in the securities of the Ministry of Finance in the cash market and the development of the secondary market between banks, especially these facilities include the following: -

Existing lending facilities

Existing deposit facilities

Sixth: - currency selling Window as a way to sterilize the effects of public spending in Iraq

One of the functions of the Central Bank is to maintain the stability of the external value of the Iraqi dinar through intensive intervention in the management of the sale and purchase of foreign currency by the monetary authority, which turned into (buying and selling foreign currency window), which was adopted in 4/10/2003 in the light of the monetary policy data which sees inflation expectations as a source and basis for inflation in the country, enabling monetary policy to impose a stable exchange rate that has led to lower inflationary expectations and inflation through daily intervention in the exchange market and counter any quantities required by the market and derived from the needs of financing the trade of the Iraqi private sector.

The nature of government revenues and the method of financing government spending as well as ways of financing foreign trade and the deficit in the balance of payments are all reflected on the mechanism of sale and purchase of foreign currency in the Iraqi economy, as the revenues of the Iraqi government in dollars, which is the price of oil, while government expenditures are in Iraqi dinars, Therefore, the Ministry of Finance sells the dollar to the Central Bank of Iraq, which in turn resold it to the private sector to meet the demand for the dollar, especially for financing private sector imports, and when the demand for the dollar less than the Central Bank obtains. The surplus will be added to the foreign currency reserves, in contrast, if the demand for dollar more than what the central bank obtains, the deficit is financed by foreign reserves and thus the number of reserves fluctuates up and down to keep the Iraqi dinar exchange rate .

The increase in government revenues from foreign currency as a result of the rise in crude oil prices is being sold to the Central Bank. This sale involves two trends: first, the expansion of the monetary base by an amount equal to the value of the foreign currency sold by the government to the Central Bank; and the second, the reduction of the monetary base by the private sector purchases of foreign currency. The difference between them is added to the net foreign assets of the Central Bank in return for increasing the cash base, so in order to reduce the large liquidity in the economy, the Central Bank sterilizes part of it through the window of deposit banks with the Central Bank for interest or by selling its transfers to banks, as the amount of government debt to short-term is low in comparison with the size of government spending, and there is a monetary expansion and surplus liquidity in banks is not suitable for the open market operations ().

Year	Actual public expenditure (Million Dinar)	Dollar selling window (Million dollar)	The growth rate of public expenditure	The growth rate of dollar selling	Window exchange price	Market exchange price	The difference between the two prices	Inflation rate
2003	9233000	293	---	---	---	---	---	33.6
2004	32117491	6108	247.9	1984.6	1453	1453	0	27
2005	26375175	10462	17.9-	71.3	1469	1475	6	37
2006	38076795	11175	44.4	6.8	1467	1475	8	53.2
2007	39031232	15980	2.5	43.0	1255	1267	12	19.3
2008	59403375	25869	52.2	61.9	1193	1203	10	13
2009	52567025	33990	11.5-	31.4	1170	1182	12	18
2010	70134201	36171	33.4	6.4	1170	1186	16	7.26
2011	78757666	39798	12.3	10.0	1170	1185	26	6.54
2012	105139576	48649	33.5	22.2	1166	1233	67	6.1
2013	119127556	55678	13.3	14.4	1166	1232	66	3.14
2014	112192125	54463	- 5.82	2.2-	1188	1214	26	2.44

2015	82813611	44304	- 26.19	18.7-	1190	1247	57	1.65
2016	73571003	33524	- 11.16	24.3-	1190	1275	85	0.81
2017	75490115	42206	2.61	25.89	1190	1258	68	0.77

The process of cash sterilization carried out by the Central Bank to maintain the exchange rate of the Iraqi dinar as the bank enters as a seller of foreign currency at times and as a buyer of foreign currency at other times, but the dominant feature is the entry of the bank as a seller of foreign currency, the central bank did not make any purchases of foreign currency through the currency window , it is also noted that the Central Bank of Iraq bear significant burdens to maintain the value of the currency, which reflects the depletion of foreign currency reserves at the Central Bank through the policy of sterilization.

Table (1) shows that there are years in which public spending decreased, but that the Central Bank's sales increased as in 2005 and 2009, as the relationship between the growth rate of public spending and the Central Bank's sales was inverse, which means that other factors affect the exchange rate other than public expenditure factors related to supply and demand factors and the most important factors affecting the exchange rate are the security situation and the lack of fuel supplies and smuggling of currency abroad as well as speculation in the currency.

Table (1) Currency Window and its Relation to Actual Public Expenditure, Exchange Rate and Inflation Rates (2003-2017)

Source: - Central Bank of Iraq, General Directorate of Statistics and Research, annual economic report, different years.

• Ministry of Planning, Central Statistical Organization, National Accounts, for different years.

As can be noted in Table (1) that there is a difference between the official exchange rate and the parallel exchange rate (market rate), which means there is a weakness in the process by the Central Bank in controlling the dollar exchange rate as the difference between the exchange rate of the window and the exchange rate the market became (85) dinar per dollar in 2016, the difference between the exchange rate of the window and the market exchange rate reached (68) dinars per dollar in 2017. In this light of that, the difference between the official exchange rate and the parallel exchange rate of about (2%) is considered within the limits of stability in the exchange rate (), especially as we know that there is a commission charged by the Central Bank for currency sales (13) dinars per dollar for cash sales and transfer ().

Table (1) shows the relationship between the growth rate of public expenditure and the rate of growth of sales of the Central Bank of dollars and the rate of growth of the exchange rate. It is noted that there is a strong relationship between both sales of the Central Bank of dollars and the rate of growth of the official exchange rate, which reflects the sterilization procedures undertaken by The central bank as a result of the increase in public expenditure, noting that whenever the growth rate of public expenditure changes the rate of growth of both the sales of the central bank as well as the rate of growth of the official exchange rate in the same direction for most years of study, which reflected on the relative stability in inflation rates.

Table (2) shows the difference between purchases and sales of the Central Bank of the dollar and the change in the reserve of the Central Bank, as it is noted that most of the years the Central Bank purchases from the Ministry of Finance of the dollar more than sales through the currency window, which means an increase in the reserves of the bank, but in years the sales of Central Bank exceeded the purchases of the dollar from the Ministry of Finance, in 2009 the difference between sales and purchases of the bank (-10992), which reflected on the reduction of reserves of the bank by (5769.2) million, but in the years 2014, 2015, 2016, the central bank's sales were also larger than its purchases from the Ministry of Finance which required the use of cash reserves to meet the demand for the dollar and compensate the shortage of supply except in 2017, but it is noted in these years that the decline in the number of reserves was greater than the shortfall between the supply and demand of the currency and this is evident in 2014 as the difference between purchases of the Bank from the Ministry of Finance and its sales of currency about (-6948) million dollars on the one hand, on the other hand, the decline in reserves of the Central Bank amounted to (-11378.6).

The Ministry of Finance is governed by the amount of revenue it receives from the sale of oil and is therefore subject to oil prices. The Ministry of Finance may stop selling dollars to the Central Bank when its balance of dollars runs out, only enough to pay its external payments of compensation, contracts and so on. Then the Ministry of Finance borrows from the Central Bank by issuing remittances purchased by the Central Bank and placing the equivalent of their value in the current account of the Ministry of Finance in this way will increase the cash basis by the number of remittances, and when the Ministry of Finance spend those amounts will generate demand in the private sector for foreign currency. This means that the Central Bank's foreign currency balance is decreased in the monetary base by the number of Central Bank's sales.

Table (2) Difference between Central Bank Purchases and Sales and Cash Reserves for the Period (2004-2017) (the US $ Million)

Year	Central Bank purchases from the Ministry of Finance of the dollar	Bank sales of dollars in the window	The difference	Central bank reserves of foreign currency	Reserve change
2004	10352	6108	4244	7906.7	--------
2005	14854	10462	4392	12200.8	4294.1
2006	18000	11175	6825	20051.7	7850.9
2007	26700	15980	10720	31458.7	11407

2008	45500	25869	19631	50101.8	18643.1
2009	23000	33990	- 10992	44332.6	-5769.2
2010	41000	36171	4829	50622.1	6289.5
2011	51000	39798	11202	61033.1	10411
2012	57000	48649	8351	70327.1	9294
2013	62000	55678	6322	77747.2	7420.1
2014	47515	54463	-6948	66368.6	- 11378.6
2015	32450	44304	- 11854	53463.8	- 12904.8
2016	25653	33524	-7871	44885.8	-8578
2017	40355	42206	1851-	51618.7	6732.9

Source: The work of researchers based on:

- Central Bank of Iraq, General Directorate of Statistics and Research, annual economic report, different years.
- *The World Bank (in terms of reserves) is available at https://data.worldbank.org/indicator/FI.RES.TOTL.CD* Table (3) shows the relationship between dollar sales within the window of selling foreign currency and private sector imports, as the bulk of the window of selling currency is intended to cover the private sector demand for the dollar, especially to finance private sector imports as well as for the purpose of travel and treatment expenses, as shown in table (3) that in most years of study (except 2004 because the dollar was not fully controlled by the Central Bank as most government salaries were paid in dollars and not in Iraqi dinars) sales of selling foreign currency window was more than the value of private sector imports, on the one hand its analysis would be logical, the window of selling foreign currency is not only for the purpose of meeting imports but for the purpose of meeting the demand for dollars for travel, treatment and so on. The big difference between the sales of the foreign currency window and the private sector imports is an indication of the loss of a large part of the foreign currency, whether through smuggling operations or hoarding the dollar for the purpose of speculation at exchange rates since 2014 the difference has become very large to reach the highest level during the years of study to (21532.1) million dinars, but the difference decreased during (2016-2017).

Table (3): The Relationship Between the Foreign Currency Selling Window and Government and Private Sector Imports (US $ Million)

Year	Dollar selling in window	Government imports (1)	Private sector imports (2)	The total of imports (1)+(2)=(3)	The difference between the dollar selling by the bank and the private sector
2004	6108	12405.7	8896.6	21302.3	2788.6-
2005	10462	16295.2	7236.8	23532	3225.2
2006	11175	11583.8	9308.2	20892	1866.8
2007	15980	9531.2	11985	21516.2	3995
2008	25869	13382.3	22113.7	35496	3755.3
2009	33990	11935.4	26501.6	38437	7490.4
2010	36171	11241.5	32673.8	43915.3	3497.2
2011	39798	12925.5	34877.5	47803	4920.5
2012	48649	21414.5	34819.2	56233.7	13829.8
2013	55678	21556.2	37239.7	58795.9	18438.3
2014	54463	20246.1	32930.9	53177	21532.1
2015	44304	8897.6	30147.5	39045.1	14156.5
2016	33524	5445.8	28834.0	34279.8	4790
2017	42206	6615.1	32150.6	38765.7	10055.4

Source: The work of researchers based on: Central Bank of Iraq, Directorate General of Statistics and Research, annual bulletins for different years.

CONCLUSIONS AND RECOMMENDATIONS

First: Conclusions

Accepting the research hypothesis of the role of the window of selling the currency in stabilizing the exchange rate, and sterilize the effect of public spending in order to reach the stability in the general level of prices.

- Monetary policy in Iraq is based on the exchange rate that fixed nominally under the policy of targeting inflation (due to the almost complete dependence on imports to meet domestic demand for goods and services and weak domestic supply), and used the window of sale of currency as a mechanism to control the exchange rate because of its direct impact on it.
- The follow-up of the mechanism of the sale of currency by the monetary policy since the end of 2003 and until now in one direction (sales only), and this is due to the nature of the Iraqi economy rent and monopoly of foreign currency by the government and the sale of crude oil.
- The currency selling window works to finance private sector imports or for tourism, treatment and study purposes.
- The money supply in Iraq is dependent on the general government expenditure, as the general budget affects both parts of the central bank budget structure, as oil revenues represent the cash basis in the central bank budget. Even if government revenues decline as in 2009, the window remains on the volume of sales as long as government spending doesn't change, this is because of the government's ability keeps its expenditure through domestic and foreign borrowing.

Second: Recommendations

- The window managed to achieve monetary stability in the economy, by sterilizing the impact of public spending, but at the cost of the depletion of foreign reserves at the Central Bank.
- Developing the work of the currency selling window from the second direction by purchasing foreign currency through developing the real sector and providing facilities for the private sector to work inside the country as a producer of goods.
- following the policy of reducing currency sales, so that foreign reserves can be rebuilt when oil prices return to rise.
- Limiting the expansion of government spending, which is the main reason for increasing the money supply and work to direct the increase in spending towards the investment side, as operating expenditure occupies the largest part of the budget as it is a catalyst for inflationary pressures?
- The need to revitalize the real sector to reduce imports from abroad, which is the main outlet for foreign currency leakage, as well as to perfect the success of monetary policy in maintaining the stability of the general level of prices requires the next stage to move towards revitalization the real sector.

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