

# THE TRANSMISSION MECHANISM IMPACT OF MONETARY POLICY ON SOME MACROECONOMIC VARIABLES IN IRAQ FOR THE PERIOD 2004-2020

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## ABSTRACT

*This study dealt with the channels through which the impact of monetary policy is transmitted to the macro economy in Iraq, explaining precisely each channel and its effects, through a set of tools used by the monetary authority through the mechanism of transmission of the impact of monetary policy in Iraq to some macroeconomic variables, and the actions taken by the authority The monetary policy to reduce the gaps inflationary (the difference between expected and actual the inflation) and the output gap (the difference between real and the potential GDP), and this is illustrated by targeting inflation through the exchange rate by the daily foreign exchange window, and the reason for using the exchange rate as a nominal stabilizer is due to deteriorating The financial situation that the Iraqi economy suffers from and the separation of monetary behaviour from the real behaviour in the economy, as well as the absence of focus on the direction of the potential output (the level of the natural unemployment rate), which led to the weak influence of the Iraqi Central's tools on macroeconomic variables without monetary variables, and this is what made the authority Monetary adherence to the policy of selling foreign currency window due to its ability to control liquidity levels and sterilize the economy from uncontrolled economic policies in managing the macroeconomics in Iraq.*

*Keywords: monetary policy, Transmission mechanism, impact of monetary, transfer of monetary policy effect.*

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## INTRODUCTION

Monetary policy plays its role in economic life through the effect it has on aggregate demand in the economy, and the term transmission mechanism is used to denote “the mechanism or how changes decided by monetary policy in the nominal money supply or in the nominal short-term interest rate can effect On real variables such as production and employment (Ireland, 2005, p. 1) This definition implicitly requires price stability, or slow change, in order to ensure that monetary policy in general and the interest rate in particular have an important influence and role in the movement of the real economy, and in light of such a hypothesis, the change in the nominal values of the monetary variables (base, money supply and interest rate) will necessarily be reflected in the change in their real values. However, some find that the hypothesis of price stability or slow change of monetary policy loses one of its important goals of securing the stability of domestic

commodity prices, and they prefer to use the term transition mechanism “To denote the set of channels through which monetary policy can transfer its impact to macroeconomic variables, often after long, variable and unpredictable periods. Accurately supply it, (European Central Bank, 2010, p. 43) or to indicate the process by which monetary policy decisions are able to influence the economy in general and the general level of prices in particular [14-17].

Monetary policy is one of the most important tools that can significantly affect the course of macroeconomic variables, especially those related to the real aspect, if they are directed effectively and efficiently. On macroeconomic variables [18-20], and from this field, the great importance of an accurate understanding of the channels through which the impact of monetary policy is transmitted to macroeconomic variables, the degree of influence for each channel may vary depending on many factors, including those related for structural aspects, financial markets and the degree of their development, the productive base of the economy and the tools available for policy Monetary and Economic Openness of a Country (European Central Bank, 2010, pp. 85-98).

### **1-1 Channels of Transmission of The Impact of Monetary Policy on The Economy in Iraq FfThe Period 2004-2020.**

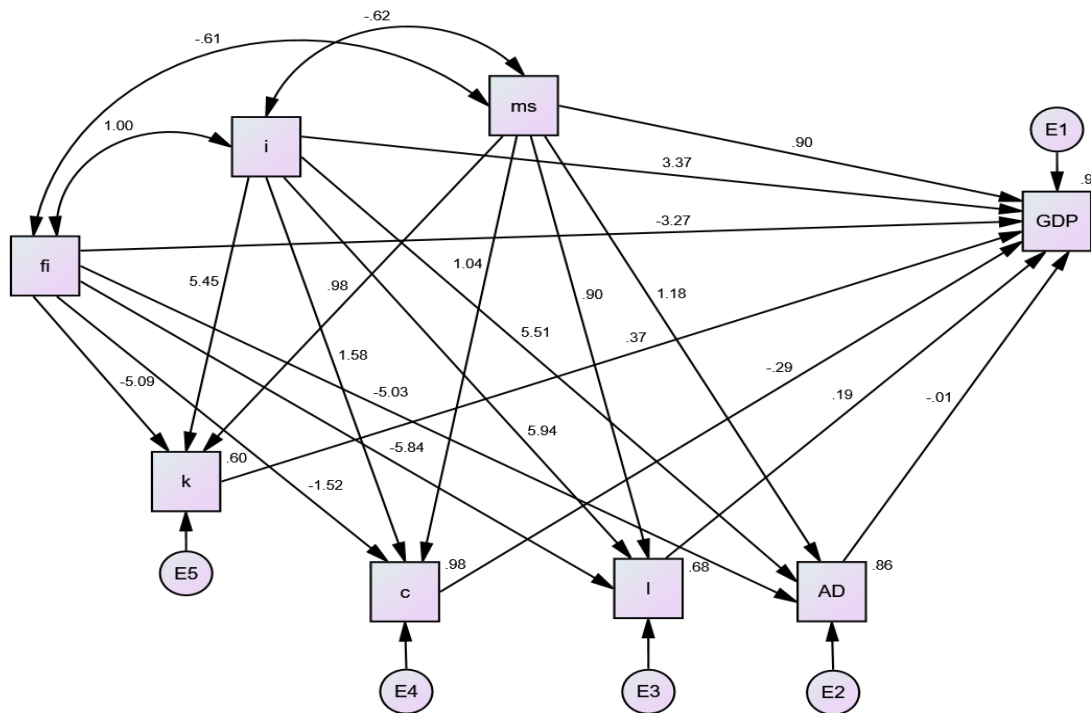
#### **1-1-1 Interest Rate Channel**

The interest rate channel, according to the Keynesian model (IS-LM), is one of the most important channels that transfer the impact of monetary policy to macroeconomic activity (Al-Mashat & Billmeier, 2007, p. 6), because it represents the link between the financial sector and the real sector of the economy. Through its impact on investment and spending at the same time, stemming from the real impact on the cost of capital used (borrowing) that affects the market for borrowed funds for the private sector (Irelan, 2005, pp. 3-4), and from the foregoing, Table (16-2) The mechanism of transferring the impact of monetary policy through the interest rate channel to some macroeconomic variables in Iraq, as follows:

Figure (33-2), which shows the analysis of the transmission path of the influence of the traditional interest rate channel to the economy and from there to GDP, the direct effect of money supply (MS) on (GDP) was (0.9%), and it is noted that the effect of (MS2) on policy interest (i) [21-24]. It reached a negative value of (-0.62), which means that an increase in the money supply by one unit will lead to a decrease in the value of the policy interest by (-0.62%), as well as the case for the primary credit interest (FI) which is the opposite effect of (0.61%). On GDP, it is also noted that the indirect effect of investment on GDP amounted to (0.19%), while the indirect effect of consumption on GDP was a negative (inverse) value of (-0.29%) and the reason for this is that most consumer spending is met through consumption, the indirect effect of investment (I) on GDP was (0.19%), which means that an increase in investment by one unit will lead to an increase in GDP by (19%), as it is noted after estimating the value of aggregate demand (AD) and measuring its effect on output The gross domestic product (GDP) reached a negative percentage of (-0.14%), meaning that the effect of increasing aggregate demand on the gross domestic product is negatively

reflected on the Iraqi economy. The reason for this is that the majority of the aggregate demand is fed by imported foreign goods, which means the exit of capital to pay the bill of imported goods from foreign countries, as illustrated by Chart No. (33-2) and Table No. (17-2), in addition to that, the percentage of (97%) of changes in GDP are explained by the variables of the conventional interest rate channel mentioned in Table 16-2, and only 3% for other factors outside the model.

**Figure. 1 Transferring the impact of monetary policy through the interest rate channel for the period 2004-2020**



The outputs of the statistical programming language (R) and the AMOS statistical program and the data of the numbered table (1-1).

**Table (1-1)**

**Size of the direct and indirect impact of the transfer of monetary policy impact through the interest rate channel in Iraq for the period 2004-2020**

Relationship form	Estimated effect	Critical value	P value	Relationship form	Estimated effect	Critical value	P value
<i>MS2</i> → <i>K</i>	0.975	4.643	0.0000	<i>MS2</i> → <i>GDP</i>	0.897	2.631	0.0000
<i>i</i> → <i>K</i>	5.451	1.706	0.0088	<i>I</i> → <i>GDP</i>	3.366	2.748	0.0062
<i>fi</i> → <i>K</i>	5.087-	0.611-	0.07	<i>I</i> ← <i>GDP</i>	3.269-	2.765-	0.0060
<i>MS2</i> → <i>C</i>	1.038	22.550	0.000	<i>K</i> → <i>GDP</i>	0.367	5.797	0.0000
<i>fi</i> → <i>C</i>	1.524-	2.203-	0.0200	<i>C</i> → <i>GDP</i>	0.293-	1.014-	0.0300

<i>MS2</i> → <i>AD</i>	1.183	9.398	0.0000	<i>AD</i> → <i>GDP</i>	0.014-	0.128-	0.898
<i>i</i> → <i>AD</i>	5.514	2.880	0.0041	<i>i</i> → <i>GDP</i>	0.191	2.688	0.0070
<i>fi</i> → <i>AD</i>	5.033-	2.660-	0.0080	<i>MS2</i> → <i>i</i>	0.901	4.821	0.0000
<i>i</i> → <i>C</i>	1.577	2.252	0.024	<i>i</i> → <i>I</i>	5.940	2.090	0.0370
<i>fi</i> → <i>I</i>	5.845-	2.081-	0.0370				
<b>R<sup>2</sup></b>							<b>%0.97</b>

The source is the output of the statistical programming language (R).

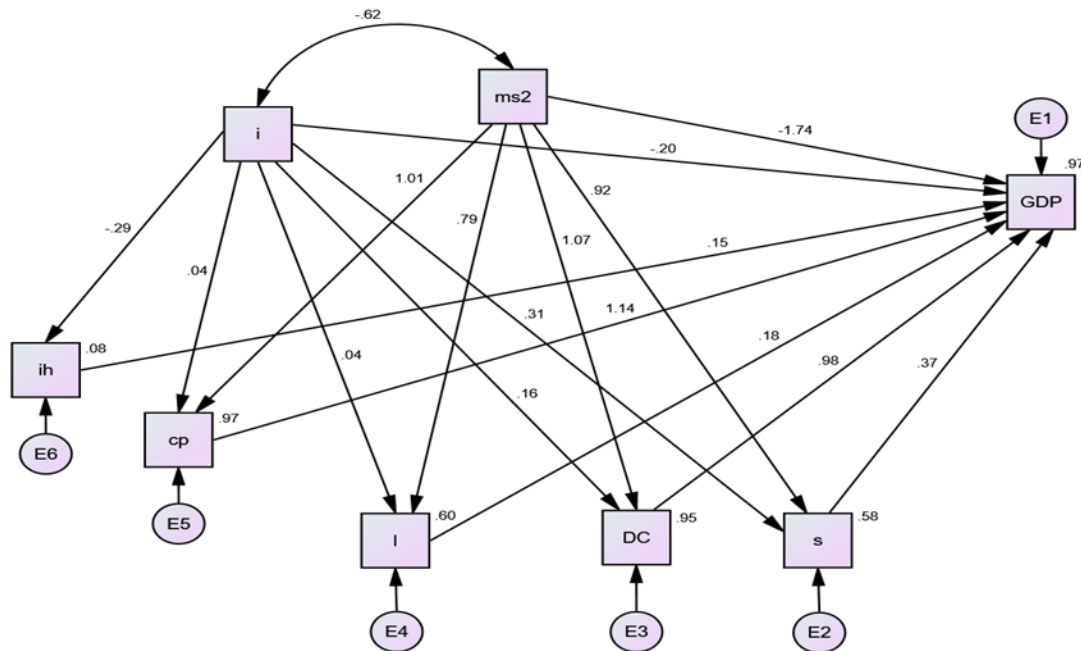
### 1-1-2: - The Channel of Savings and Investment

In the economically world the change in interest rate is accepted resulting from a change in policy interest stimulate or inhibit saving and investment. Low deposit interest rates reduce the incentive to save, and increase the family sector's incentive to spend on goods and services. Lower lending interest rates stimulate the sector Household borrowing for lower cost, and may drive increased home purchases eg Lower interest lending stimulates investment spending by business units on equipment and capital goods (Bernanke & Goertley, 1995, p. 13).

And the table (1-1) shows the mechanism of transmission of the impact of monetary policy to the Iraqi economy for the period 2004-2020.

Table (18-2) shows the direct impact of the saving and investment channel variables on GDP, as the direct effect of the money supply (MS2) on GDP was (-1.74) an inverse relationship between (MS2) and (GDP), as well as the direct effect between the policy rate (i) on GDP by (-0.20%) and this is consistent with the economic theory that the increase in the interest rate will lead to a decrease in investment and in the end negatively affect the value of GDP, in addition to that the reciprocal effect between (MS2, i), It is a negative effect. When the money supply is increased by one unit, this will lead to a decrease in the interest rate by (-0.62%) and the reason for this is that the increase in money supply during the study period created price pressures on all prices, including the interest rate, in a negative way. The indirect channel of savings and investment on GDP. It is noted that the effect of household consumption on GDP amounted to (1.14%), and this confirms that the Iraqi society has an excessive consumer tendency that has a significant impact on macroeconomic variables, especially on GDP. It is also noted that the direct impact of the broad money supply (MS2) on current deposits (DC) is very high, amounting to (1.07%), which is What explains the success of monetary policy in transferring its impact on the monetary sector without the real sector, while the effect of current deposits (DC) on GDP reached (96%), which is an indirect effect. (97%) which explains Iraq's GDP.

**Figure . 1**Transferring the impact of monetary policy through the savings and investment channel in Iraq for the period 2004-2020



**Table (1-2)**

Size of the direct and indirect impact of the transfer of monetary policy effect through the saving and investment channel in Iraq for the period 2004-2020

Relationship form	Estimated effect	Critical value	P value	Relationship form	Estimated effect	Critical value	P value
<i>MS2 → ch</i>	1.010	19.97	0.000	<i>I → HI</i>	0.291-	1.218-	0.223
<i>i → ch</i>	0.038	0.745	0.456	<i>MS2 → GDP</i>	1.740-	-4.697	0.000
<i>MS2 → I</i>	0.795	3.912	0.000	<i>i → GDP</i>	0.200-	-2.809	0.005
<i>MS2 → S</i>	0.918	4.447	0.000	<i>CP → GDP</i>	1.136	4.068	0.000
<i>i → S</i>	0.315	1.524	0.128	<i>I → GDP</i>	0.181	2.609	0.009
<i>MS2 → DC</i>	1.070	15.411	0.000	<i>S → GDP</i>	0.370	5.413	0.000
<i>i → DC</i>	0.164	2.358	0.018	<i>DC → GDP</i>	0.983	4.828	0.000
<i>i → I</i>	0.038	0.186	0.853	<i>HI → GDP</i>	0.152	3.290	0.001
<b>R<sup>2</sup></b>							<b>%0.97</b>

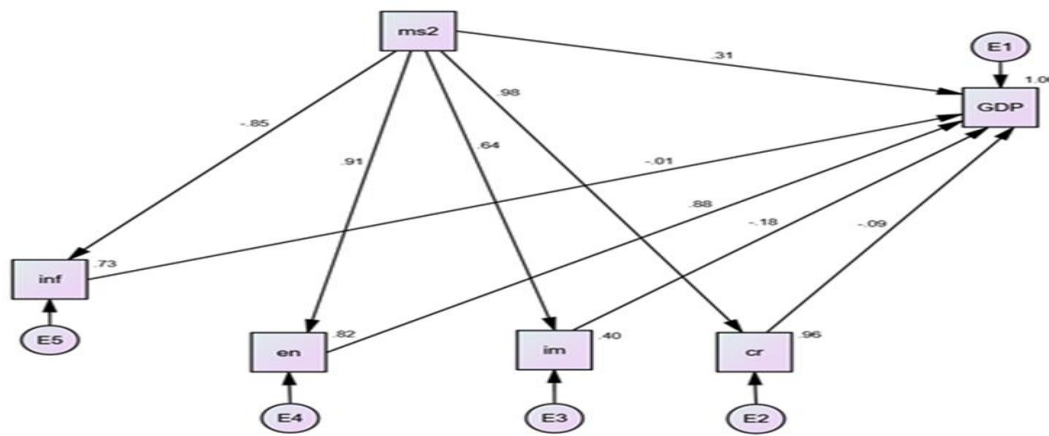
### **1-1-3: - Cash Flow Channel**

Changes in interest rates affect the decisions of consumers and investors about the rates of cash they spend on goods and services. A decrease in lending interest rates reduces interest payments on debt, and in turn increases the amount of cash available for families and investors to spend (Ignazio, Kashyap, & Mojon, 2003, p. 12).

Some opinions go to calling this channel the money channel or the direct effect of the transfer of monetary policy towards the money in the possession of individuals. Table (20-2) takes into account the transmission of the effect as follows:

Graph (1-3) illustrate the transmission of the impact of monetary policy through the cash flow channel to the overall economy in Iraq for the period 2004-2020, where it appears that the direct impact of money supply (MS2) on GDP within this channel has reached ( 0.31%), and the direct effect of inflation on the GDP was a negative rate of (-0.1%), which means that an increase in the inflation rate by one leads to a negative impact on GDP with the negative impact of inflation on the output, the indirect effect of spending National (EN) on GDP ratio (0.88%) with a significant level (0.000) and this shows the significant impact that national spending (EN) has had on (GDP), and the reason for this is the high tendency consumer income and also the Iraqi economy is rentier consumer economy largely. most of which is financed through salaries and subsidies received by citizens in return for their services in the government sector. The indirect effect of the general index of the stock market (IM) on GDP was a negative percentage of (-0.18%), and in the same case, the effect of the currency in circulation was represented by Liquid money has a negative (inverse) ratio of (-0.09%), which indicates the presence of The negative impact of some of the variables that make up the cash flow channel on the gross domestic product, and some of them contradict the economic theory of the great separation experienced by the monetary, real and financial economic variables. Trade policies are not excluded due to the structural imbalances suffered by the Iraqi macro economy and the political and economic mismanagement of the country. The coefficient of determination has reached in the model (1.00%), which is a high percentage that indicates the backwardness of the banking system and the public in dealing with banknotes and the resort of most citizens to dealing with liquid money without other securities (Clarida, Gali, & Gertler, 2000, p. 175).

**Figure. 3 Transmission of monetary policy impact through the cash flow channel for 2004-2020**



**Source:** The outputs of the statistical programming language R and the Amos program.

**Table (1-3)**

**Size of the direct and indirect impact of the transfer of monetary policy impact through the cash flow channel in Iraq for the period 2004-2020**

Relationship form	Estimated effect	Critical value	P value	Relationship form	Estimated effect	Critical value	P value
<i>INF ← MS2</i>	-0.852	- 6.518	0.000	<i>GDP ← INF</i>	-0.006	-0.188	0.851
<i>EN ← MS2</i>	0.906	8.556	0.000	<i>GDP ← EN</i>	0.877	21.803	0.000
<i>CR ← MS2</i>	0.980	19.576	0.000	<i>GDP ← CR</i>	-0.086	-1.010	0.312
<i>IM ← MS2</i>	0.636	3.295	0.000	<i>GDP ← IM</i>	-0.180	-0.8160	0.000
<i>GDP ← MS2</i>	0.314	3.219	0.001				
<b>R<sup>2</sup></b>				<b>%1.00</b>			

**1-1-4: - Asset Prices Channel**

The classical theory of asset prices states that the price of an asset is equal to the present value of the net future returns expected to be generated by the asset (Robert & Muttin, 2000, p. 3). This simply means that the price of an asset depends not only on the path of net returns expected to flow in the future, but also on The discount rate used to calculate the present value of these flows. Accordingly, changes in interest rates also affect the prices of securities such as bonds and shares

and some real assets such as real estate. Interest rates exercise their influence on asset prices through discount rates that are used to calculate net future returns flows, and accordingly, the price of the asset changes inversely with the change in the interest rate: it rises with the fall of the interest rate and decreases with its rise (The Monetary Policy Committee, 2012, p. 3).

What is meant by assets here are the securities owned by the banking system and various financial institutions (Al-Taher, 2004, p. 341), and this channel is divided in two sub-channels: (Mishkin, 2019, p. 158).

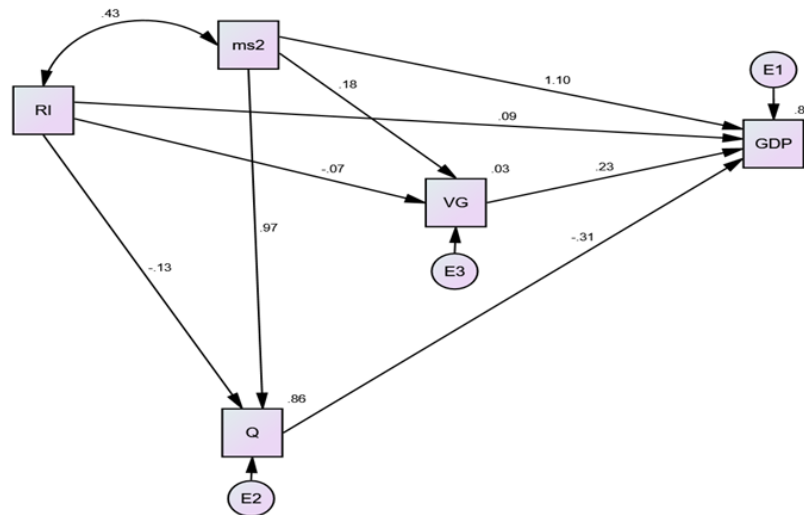
### **1-1-5: - Tobin effect**

The impact of this channel can be shown in its focus on the stock market, which determines a certain value for the unpaid shares of companies and institutions, it shows the role that monetary policy can leave in influencing macroeconomic variables through its impact on the fluctuations in company stock prices. For the existence of a causal relationship between investment and the market value of stock prices (Dabat, 2015, p. 114), in Iraq, Table (22-2) shows the Tobin effect (q), on GDP:

The mechanism of transmission of the impact of monetary policy on the gross domestic product and some macroeconomic variables in Iraq, and Figure (1-4) shows the direct effect of money supply and the real interest rate on the market value of shares (Tobin effect) and then the effect is transferred to GDP. The direct effect of (MS2) on (Ri) the real interest rate was (0.43%), while the direct effect (MS2) on the market value of shares (q) was (0.97%) with a significant degree of (0.000) Which indicates that the variables of the Iraqi stock market are greatly affected by monetary policy measures, and this confirms the success of monetary policy in transferring its impact on the monetary sectors without the real sectors due to the structural imbalance in the real economic sectors. The indirect effect of the market value (q) on GDP was (-0.31%), so it confirms the aforementioned structural imbalances in the real economic sectors in Iraq. In addition to the positive relationship between trading volume (VG) and gross domestic product (GDP), as the impact of the volume of trading in the Iraqi stock market on GDP amounted to (31%). , which is a modest percentage if compared with some developed countries and the impact on the size of the industry to be reflected on the overall productivity of the economy and aggregately on the gross domestic product, so the value of the coefficient of determination in the Tobin effect channel model, in general, reached (87%) with a significant level of (0.000). This is illustrated by the numbered graph (36-2).



**Figure. 4 Transmission of the monetary policy effect through the asset price channel (Tobin effect) for the period 2004-2020**



Source: The outputs of the statistical programming language R and the Amos program.

**Table (1-4)**

**Size of the direct and indirect impact of the transfer of monetary policy impact through the asset price channel (Tobin effect) in Iraq for the period 2004-2020**

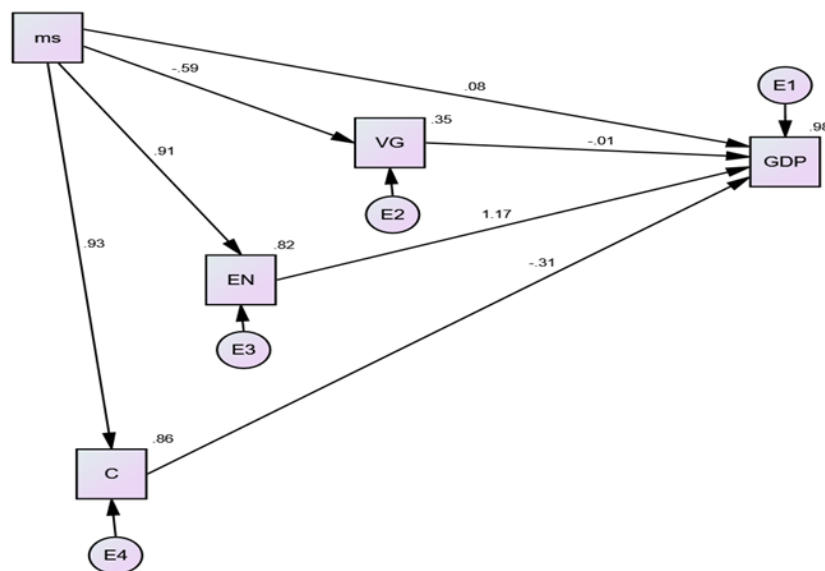
Relationship form	Estimated effect	Critical value	P value	Relationship form	Estimated effect	Critical value	P value
<i>MS2</i> → <i>Q</i>	0.972	9.238	0.000	<i>MS2</i> → <i>GDP</i>	1.103	4.408	0.000
<i>Ri</i> → <i>Q</i>	-0.126	-1.199	0.230	<i>Ri</i> → <i>GDP</i>	0.095	0.914	0.361
<i>MS2</i> → <i>VG</i>	0.179	0.658	0.511	<i>Ri</i> → <i>GDP</i>	-0.312	-1.323	0.186
<i>Ri</i> → <i>VG</i>	-0.074	-0.272	0.786	<i>VG</i> → <i>GDP</i>	0.229	2.517	0.012
<b>R<sup>2</sup></b>							<b>%0.87</b>

**1-1-6: -The Effect of Wealth**

John Keynes tackled the role that monetary policy can play in economic activity in his theory of the effect of wealth increase on consumption (Mishken, 2001, p. 20), As this sub-channel transmits the effect of monetary policy to the macro economy by changing consumption through influencing the level of income of the people, Where income includes physical capital and financial wealth, which represent exclusively stocks, its largest components, and the scenario of transferring the impact of this channel will be clarified.

The mechanism of transferring the impact of monetary policy to the wealth channel on the GDP and some macroeconomic variables in Iraq, and Figure (1-5) shows the direct effect of money supply on GDP, as the direct effect of (MS2) on (gdp) was ) by (0.76%), and the direct effect (MS2) on the trading volume of the name (VG) was (0.93%) and a significant degree amounted to (0.003) indicating that the variables of the Iraqi stock exchange are significantly affected by monetary policy variables, and this confirms the success of Monetary policy in transferring its impact to the monetary sectors, not to the real sectors due to the structural imbalance in the real economic sectors, as well as the direct impact of money supply (MS2) on (c) total consumption rate (0.93%), and this means that money supply is linked to a strong direct relationship with total consumption through the correlation of money supply in Iraq with the government spending policy in Iraq, and this is another evidence of the effectiveness of the monetary sterilization policy carried out by the monetary authority, which was explained in paragraph (3-2-6), in addition to the positive and strong relationship between national spending ( EN) and GDP, the effect is Which leaves national spending in GDP by (1.7%), with a statistical significance of (0.000), which is a high percentage and a very strong impact of national spending on GDP, the value of the coefficient of determination in the wealth impact channel model in general reached (98%) with a significant level of (0.000) as shown in the graph No. (37-2).

**Figure. 5 Transferring the impact of monetary policy through the asset price channel (wealth effect) for the period 2004-2020**



**Source:** The outputs of the statistical programming language R and the Amos program.

**Table (1-5)****Size of the direct and indirect impact of the transfer of monetary policy impact through the asset price channel (wealth effect) In Iraq for the period 2004-2020**

Relationship form	Estimated effect	Critical value	P value	Relationship form	Estimated effect	Critical value	P value	
<i>MS2</i> → <i>TC</i>	0.929	10.056	0.000	<i>TC</i> → <i>GDP</i>	-0.313	- 3.598	0.000	
<i>MS2</i> → <i>VG</i>	-0.592	- 2.937	0.003	<i>VG</i> → <i>GDP</i>	-0.011	- 0.266	0.790	
<i>MS2</i> → <i>EN</i>	0.906	8.556	0.000	<i>EN</i> → <i>GDP</i>	1.170	15.416	0.000	
<i>MS2</i> → <i>GDP</i>	0.076	0.672	0.502					
<b>R<sup>2</sup></b>							<b>%0.98</b>	

**1-1-7: - Channel Exchange Rate**

The exchange rate expresses the price of the local currency measured in foreign currency; It is defined as the amount of local currency needed to purchase one unit of foreign currency. Thus, it is a tool for linking local prices with international prices, and the coefficient by which the foreign commodity price system is converted into prices in the local currency. This characteristic of the exchange rate qualifies it to play an important role in economic activity. Its effect is the increasing direct and indirect dependence of the local commodity supply on imports, on the one hand, and on the other hand, the same function also gives it a pivotal role in determining the relative price structure between local commodities and foreign commodities, or in simpler terms, in determining the prices of national commodities in world markets and the prices of foreign commodities. In the local markets, and through this role, the exchange rate contributes to determining the competitiveness of national production in both foreign markets and local markets, or in other words, the competitiveness of imports in local markets and exports in foreign markets. Reducing the exchange rate (it's means improving the value of the dinar against foreign currencies) lowers the prices of imports in local markets and raises the prices of exports in global markets, which enhances the competitiveness of imported goods in local markets and weakens the competitiveness of exports in global markets, and thus encourages a change in the structure of domestic demand in favor of Imported goods and pushes the structure of external demand in foreign markets to change away from national exports, and the escalation of the exchange rate (it's means reducing the value of the dinar against foreign currencies) would raise the prices of imports in the local markets and reduce the prices of exports in foreign markets, such a price shift enhances the competitiveness of locally produced goods in national and foreign markets. Weakens the competitiveness of imported goods in national markets, encourages a change in the structure of domestic demand in favor of locally produced goods, and pushes the structure of external demand in foreign markets to change in favor of national exports. To the high exchange rate as an important tool and means to protect national production, and the exchange rate channel is one of the most important channels of

transmission of influence on macroeconomic variables in Iraq, and the role of this channel has emerged through the (IS-LM-BP) model, and as mentioned in (1- 3-2) From the first chapter, and from this point of view, the researcher will try to explain the mechanism of transmission of the impact of the exchange rate channel on the macroeconomic variables in Iraq .

Illustrates the path analysis of the mechanism of transmission of the impact of monetary policy through the exchange rate channel to the Iraqi economy for the period 2004-2020. When tracing the transmission path of the exchange rate channel effect through the direct effect of exchange (EX) on GDP.

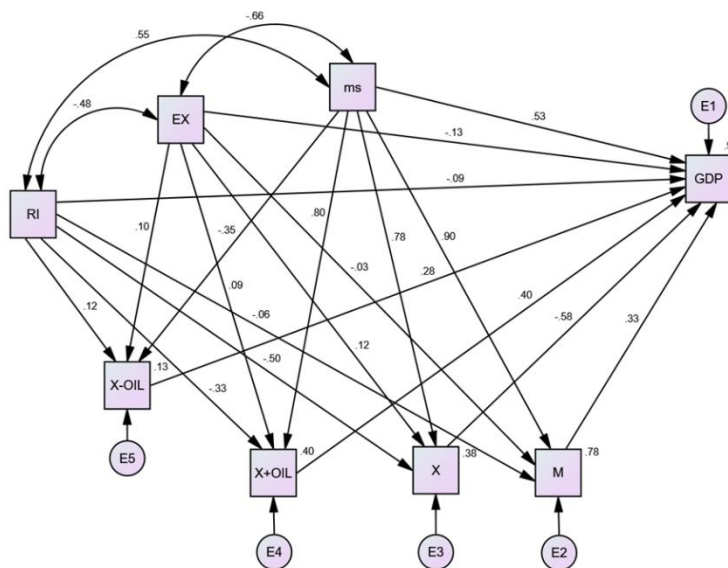
And the indirect effects of the rest of the macroeconomic variables that carry the overall effect on GDP, it is noted that the direct impact ratio of (MS2) on GDP is (0.53%), which is a direct effect that MS2 has on GDP when it changes by one unit annually, in addition to that, the exchange rate leaves an impact directly (13%) of GDP.

When the exchange rate of the dollar changes against the Iraqi dinar, because the Iraqi economy is a largely rentier economy, offset by the import of most goods from abroad, the exchange rate has a significant impact on the overall economy in Iraq, especially in the aspect of sterilization policies provided for public spending, as well as non-oil exports (X-OIL) Indirectly on GDP by (0.28%), in front of total exports with oil (X+OIL), it leaves an indirect effect of (40%), in GDP. This confirms that the large rentierism of the Iraqi economy and the dependence on oil rents to motivate and finance total spending in Iraq during the period 2004-2020.

In line with the current situation of the Iraqi economy and through the graph (38-2), it is noted that the effect of real interest (Ri) on GDP has a negative effect of (-0.09), which means that an increase in the average real interest rate by one interest unit reduces the value of the output Domestically, by (0.09%), imports (M) also leave a positive impact on GDP by 33%, because most of the domestic demand for goods and services is covered by imports from the outside world. The overall interpretation coefficient of the exchange rate channel model is (96%), which means that each of the direct and indirect effects within the exchange rate channel is explained (96%), and the rest of it (4%) is due to variables outside the model.

The previous analysis clarifies an important fact (the inability of monetary policy to influence real economic variables, for the monetary behavior is separated from the real behavior, as well as the success of monetary policy in controlling price fluctuations (inflation) through its tools, especially the exchange rate tool through the exercise of the sterilization mechanism for government spending Through the foreign currency window, the graph (1-6) as well as the table (1-12) shows the size - of the direct and indirect impact of the mechanism of transferring the impact of monetary policy through the exchange rate channel for the period 2004-2020.

**Figure 6. Transferring the impact of monetary policy through the exchange rate channel for the period 2004-2020**



Source: The outputs of the statistical programming language R and the Amos program.

**Table (1-6)**

**Size of the direct and indirect impact of the transfer of monetary policy influence through the exchange rate channel in Iraq for the period 2004-2020**

Relationship form	Estimated effect	Critical value	P value	Relationship form	Estimated effect	Critical value	P value
$M2 \rightarrow X - oil$	-0.348	-1.054	0.292	$Ri \rightarrow X$	-0.503	-2.089	0.037
$EX \rightarrow X - oil$	0.099	0.316	0.752	$EX \rightarrow X - oil1$	0.090	0.34	0.730
$Ri \rightarrow X - oil$	0.119	0.419	0.675	$M2 \rightarrow GDP$	0.528	3.705	0.000
$M2 \rightarrow X - oil1$	0.804	5.296	2.937	$EX \rightarrow GDP$	-0.134	-1.929	0.054
$Ri \rightarrow X - oil1$	-0.327	-1.389	0.165	$Ri \rightarrow GDP$	-0.091	-1.232	0.218
$M2 \rightarrow M$	0.895	5.355	0.000	$X - oil2 \rightarrow GDP$	0.278	5.089	0.000
$EX \rightarrow M$	-0.031	-0.194	0.046	$X - oil1 \rightarrow GDP$	0.400	6.057	0.000
$Ri \rightarrow M$	-0.063	-0.439	0.060	$M \rightarrow GDP$	0.327	0.557	0.002
$X \rightarrow M$	0.783	2.801	0.005	$X \rightarrow GDP$	-0.582	0.021	0.000
$EX \rightarrow X$	0.123	0.464	0.642				
<b>R<sup>2</sup></b>							<b>%0.98</b>

Source: The outputs of the statistical programming language R and the Amos program, based on the data of Table (1-11).

## CONCLUSIONS

- 1- The continuing rise in the consumerism of the Iraqi individual throughout the research period and that consumption is positively related to government spending, and government spending depends on rentier revenues as a result of the export of crude oil, and in a way that exceeds more than 70% of financing public spending in the general budget for the period 2004-2020.
- 2- Despite the great importance of saving globally in financing many investments, the Iraqi economy suffers from weak savings and their devaluation, and the reason is due to the underdevelopment of the banking public and the poor performance of the borrowing market, represented by weak banking awareness and weak monetary tools that attract savings in Iraq.
- 3- The continuation of monetary policy by monetizing the dollar in favor of the Ministry of Finance in return for a commission agreed upon between the fiscal and monetary policies, which was reflected in the continued increase in the rate of growth of money supply in Iraq, except for some years that witnessed a decrease in government revenues, which constituted a restriction on public spending during the research period from 2004-2020.
- 4- The analysis proved that the exchange rate is the internal nominal stabilizer that the Central Bank of Iraq relies on in order to confront and control price fluctuations. The partial sterilization mechanism of money supply in Iraq through the foreign currency sale window.
- 5- The weak effectiveness of monetary policy in transferring its impact to real macroeconomic variables, due to the separation between monetary and real variables, and the main reason for this distorted relationship is that the real economic sectors are weak in response as they are dilapidated and distorted work.

## RECOMMENDATIONS

- 1- The development of the interbank currency exchange market as well as the Forex units, consider it the beginning of the emergence of interbank flows, which will later ensure the work of the policy interest with the rest of the benefits.
- 2- The need for monetary policy to control the affecting monetary variables, and for monetary policy to work on developing the financial and monetary markets to work on absorbing their indirect procedures, especially activating the work of the short-term interest rate to target price volatility, as well as the monetary policy to work to increase banking awareness and encourage credit. domestic and reduce credit risk to prevent money from fleeing abroad.
- 3- Continuing the monetary policy by sterilizing the dinar block by means of the foreign currency sale window and its tools (credits, remittances and cash sales), in order to control

the growth of the monetary mass, especially after the devaluation of the Iraqi dinar against the peg currency (the dollar) to control inflationary pressures and increase aggregate demand financed by government spending.

- 4- Facilitating the task of delivering meaningful economic discourse to others requires moving from trying to focus on what is monetary to what is real, and by that we mean the commodity and service sectors, which have ended contemporary economic policies even what is existing from them, and shifting the financial authority to the attention of the exhausted Iraqi society towards promises The luxury ended with the first market transformation of oil from an upward market in its prices to a declining market, and the problem is that the promises were based on a monetary trend and captivated eternal expectations for the strength of the national currency, derived from their bet on the perpetuation of high oil prices, and there is no doubt that building real sectors and establishing their growth policies is more difficult than resorting to reserves A growing foreign country, but it is more feasible in achieving the sustainability of the real growth of the Iraqi economy.

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