Pakistan Journal of Life and Social Sciences
www.pjlss.edu.pk

RESEARCH ARTICLE

The Effect Of The Interaction Of Financial And Monetary Policies On The Exchange Rate In Iraq

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ARTICLE INFO	ABSTRACT
  *Corresponding Author: Rawarawaa649@gmail.com	Coordination between monetary and financial policy in oil-exporting countries including Iraq is very important due to the role of exchange rate in their balance of payments and as a result their export portfolio. In this country, the interaction between monetary and financial policies can affect the direction of the exchange rate. For this purpose, in this study, the interaction between monetary and fiscal policy and how they affect the exchange rate fluctuations in Iraq from 1980 to 2022 was investigated. The analysis and estimation of the research model were done using time series patterns and autoregressive distribution with extended intervals (ARDL). The results of the model estimation show that these policies and their different instruments have different effects on the exchange rate fluctuations and the value of the Iraqi dinar against the US dinar, and the interaction between fiscal and monetary policies can neutralize or reduce each other's effects.

INTRODUCTION

The exchange rate and the factors affecting it are one of the main axes of macroeconomic policies. The effect of exchange rate changes on macroeconomic variables has been one of the most important discussions and challenges raised in developed and developing countries. Exchange rate changes affect the price of domestic goods in the foreign market as well as the price of imported goods and services in the domestic market. For this reason, the exchange rate is one of the most important factors affecting exports and imports, balance of payments, foreign exchange reserves, economic growth, and employment (Ceylon, 2014; Kanval et al., 2024). Considering the importance of the exchange rate in the economic progress and development of any country, it is necessary to examine the factors affecting it. Many factors such as economic, political, and psychological factors affect the exchange rate. Among the economic factors affecting the exchange rate are financial and monetary policies adopted by its economic brokers. Monetary policy is effective on the exchange rate through changes in the money volume, changes in the growth of the money volume and interest rates, or the terms of granting financial facilities. The purpose of monetary policies in advanced industrial countries and developing countries is somewhat different. In industrialized countries, the aforementioned goal is to eliminate inflation, eliminate recession, and achieve full employment. For developing countries, the main goal of monetary policy has been economic growth and increasing government revenues and total supply. Monetary and financial policies and exchange rates are a set of measures that manage economic activities and pursue economic goals such as employment, price stability, economic growth, trade balance, etc. Achieving these goals simultaneously is possible due

to the conflict between these goals through the coordination of monetary, financial, and exchange rate policies (Mohamed Abdel-Haleim, 2016:934)).

Therefore, a suitable combination of monetary and financial policies and exchange rates should be formulated and implemented to achieve macroeconomic goals. How the financial and monetary policies interact has been the focus of economists in the last few decades. The interaction between these policies plays a very important role in determining the trend of macroeconomic variables, including price stability and economic growth. The importance of coordination of monetary and financial policies, due to the occurrence of financial crises in the last decade, has increased even more and has prompted countries to adopt coherent and coordinated policy combinations to deal with the adverse effects of crises on the economy. Nayyar, 2011:340) Therefore, coordination between monetary and financial policies means that these policies, despite having different targeting priorities, move in one direction and strengthen each other's positive effects, on the other hand, in the field of politics, or at least reduce each other's effectiveness. Don't neutralize monetary and financial policies, problems including the difference in the effective time of these two policies It is discussed. In general, financial policies need more time to show their effects compared to monetary policies. Therefore, the lack of coordination between monetary and financial institutions and neglecting this issue will ultimately lead to the failure of monetary and financial policies to achieve the optimal level of their goals (Tavaklian et al., 2018: 196). Therefore, it can be observed that financial and monetary policies, along with foreign economic policies, including exchange rates, to achieve macroeconomic goals, require coordination to strengthen each other's effects or at least prevent them from neutralizing each other's effects. For this purpose, this study tries to investigate the effect of monetary and financial policies on the real exchange rate in Iraq.

2- THEORETICAL FOUNDATIONS OF RESEARCH

2-1- Monetary and financial policy and exchange rate

Currency policies as one of the powerful tools among the economic policies of the Boh government that can have significant effects on macroeconomic variables. Empirical evidence confirms that if the decrease in the nominal value of money is accompanied by appropriate economic policies; It increases the external power of the country and improves the state of the foreign economy (Ghalami Jafarabadi and Fitras, 2015 (based on the Dornbush model, 1979) monetary shocks in the short term cause the exchange rate to deviate from the long-term equilibrium. For example, if the amount of money increases; the real money supply increases and the domestic interest rate decreases to compensate for the domestic interest rate, but the exchange rate has a jump over the equilibrium value The reason is that people continue to withdraw capital until the profit they get from this work is equal to zero domestic and foreign interest rates. These conditions form a short-term equilibrium and with time the prices start to increase therefore the interest rate increases and the exchange rate decreases until they reach a new equilibrium level (Hosseinzadeh and Haqit, 2012 (. Today, the debates related to the adoption and implementation of appropriate foreign exchange policies in developing countries are expanding, and most of these debates are focused on the degree of exchange rate fluctuations in the face of internal and external shocks. Because exchange rate fluctuations in a country show the performance of that country's economy. Exchange rate fluctuations affect the overall demand of the economy through exports, imports, and demand for money, as well as the supply side of the economy through the costs of imported intermediate goods. In the market of goods and services, positive exchange rate shocks lead to an increase in the price of imported goods and a decrease in the price of export goods, which leads to an increase in demand for domestic goods (Samti and Khanzadi, 2019; Rashid et al., 2023). Macroeconomics Open New (Dornbush, 1979) shows that the factors affecting real exchange rate volatility are divided into two categories: monetary and non-monetary. The low adjustment speed of the goods and services market causes monetary shocks to have a very strong effect on the exchange rate (Calderon, 2004). The stability of monetary shocks is

only one of the factors affecting exchange rate fluctuations, and other non-monetary factors such as productivity shocks, exchange rate shocks, and government expenditures can also affect real exchange rate fluctuations.

2-2- Mutual effects of monetary and financial policy tools and exchange rate

Currency policies as one of the powerful tools among the economic policies of the Boh government that can have significant effects on macroeconomic variables. Empirical evidence confirms that if the reduction in the nominal value of money is accompanied by appropriate economic policies; It increases the foreign power of the country and improves the state of the foreign economy (Gholami Jafarabadi and Fitras, 1395). Based on the model of Dorniush (Dormbush, 1979) shock Money in the short term causes the exchange rate to deviate from the long-term balance, for example, if the amount of money increases; Immediately, the real supply of money increases and to compensate for the excess supply in the money market, the domestic interest rate decreases. A decrease in the domestic interest rate causes capital outflow and an increase in the exchange rate. But the exchange rate has a jump more than the equilibrium value and the reason is that people continue to withdraw capital until the profit they get from this work becomes zero. This happens when the exchange rate exceeds the equilibrium level and creates expectations that equal the difference in domestic and foreign interest rates. These conditions form a short-term equilibrium and with time the prices start to increase therefore the interest rate increases and the exchange rate decreases until they reach a new equilibrium level (Hosseinzadeh and Haqirat, 1392).

Nowadays, the debates related to the adoption and implementation of appropriate foreign exchange policies in developing countries are expanding, and most of these debates are focused on the degree of exchange rate fluctuations in the face of internal and external shocks, because the exchange rate fluctuations in a country show From the performance of that country's economy, exchange rate fluctuations affect the demand of the entire economy through export, import, and demand for money, as well as the supply side of the economy through the costs of imported intermediate goods. In the market of goods and services, positive exchange rate shocks lead to an increase in the price of imported goods and a decrease in the price of export goods, which leads to an increase in demand for domestic goods (Samti and Khanzadi, 2009: 37) based on the new topics of open macroeconomics (New Open Macroeconomics) factors affecting real exchange rate volatility are divided into monetary and non-monetary categories. Theoretically, Dormbush (1979) shows that unexpected monetary shocks through the overshooting effect can lead to severe fluctuations in the exchange rate. The low adjustment speed of the goods and services market compared to the financial market causes monetary shocks to have a very strong effect on the exchange rate in the short term. (Dormbush, 1979:20) Calderon (2004, Calderon) has proposed that the stability and sustainability of monetary shocks are only one of the factors affecting exchange rate fluctuations and other non-monetary factors such as productivity shocks, shocks of the exchange rate and government expenditures can also affect Real exchange rate fluctuations are effective (Calderon, 2004). Also, according to Frenkel and Mussa (1985), the continuous increase in government spending leads to an increase in the equilibrium exchange rate in the long term, and therefore net foreign assets increase. Also, government spending can have a positive effect on the real exchange rate in the short term by influencing the demand side of the economy. This is even though in the long run, more government spending will lead to the instability of the domestic currency and thus hurt the fluctuations of the real exchange rate. Cocin (2007) also considers the interest rate to be another variable influencing exchange rate fluctuations. Based on macroeconomic discussions, changes in interest rates cause changes in inflation rates and exchange rates, so it is expected that with an increase in interest rates, the inflow of foreign capital will increase and, as a result, the value of the domestic currency will increase (the exchange rate will decrease).

Traditional views and theories show that the policy of devaluation of the national currency leads to the expansion of production, but new theoretical discussions emphasize the creation of some contractionary effects. If the condition of Marshall Lerner (1923 Marshall Abba Lerner) is not fulfilled, then the devaluation of the domestic currency will cause a decrease in the level of production. Depreciation of the national currency assuming the existence of an initial trade deficit in the economy causes a decrease in the real national income and therefore leads to a decrease in total demand. in a situation where the trade balance is balanced and the exchange rate does not change; It can be expected that these price changes will compensate each other, but if the import is more than the export; A reduction in real income will be its net effect. Therefore, in the market of goods and services, a positive shock in the exchange rate (decrease in the value of the national currency) causes the price of imports to increase compared to exports, and in this case, the competitiveness between companies increases, and as a result, the demand for domestic goods also increases. This increase in demand will increase the level of production and prices, and a negative shock in the exchange rate will have the opposite effect on the market Money A positive shock in the exchange rate causes companies' demand for money to increase, and this increase in money demand causes an increase in interest rates.

The exchange rate and the factors affecting it are considered one of the main axes of macroeconomic policies. Exchange rate changes on macroeconomic variables are one of the most important debates and challenges raised in both developed and developing countries, as well as countries that have maintained their fixed exchange rate system after the 1970s. Considering the importance of the exchange rate in the economic progress and development of any country, it seems necessary to examine the factors affecting it. Many factors such as economic, political, and psychological factors affect the exchange rate. Among the political factors, we can mention people's expectations of the future economic and political situation, and among the economic factors, we can mention the liquidity interest rate of national income and national gross growth. Among the economic factors that can affect the exchange rate is liquidity, which is created by monetary policies.

The exchange rate jump is considered one of the most important wide-ranging debates in terms of policymaking. Usually, in developing countries, the volume of liquidity and the increase in the level of prices and inflation do not move in the same direction. One of the most important reasons for the decline in GDP is the significant increase in the inflation rate, the implementation of contractionary monetary and financial policies to curb inflation, the decrease in the competitiveness of domestic producers against foreign competitors in the domestic and foreign markets due to the decrease in the real exchange rate and the increase in imports. Finally, the occurrence of the global financial and economic crisis and its recessionary effects on the economy of developing countries pointed out that the exchange rate is affected by internal and external shocks; Therefore, this index has more fluctuations. The jump in the exchange rate affects the demand of the entire economy through import, export, and demand for money, as well as the supply of the economy through the channel of the cost of imported intermediate goods. In general, in the goods market, positive exchange rate shocks decrease the value of currency, making goods more expensive. Imported and cheaper exported goods will increase the demand for domestic goods as a result. On the other hand, with the increase in the printing of unbacked money and the decrease in the value of the national currency, the demand for liquidity of economic enterprises has increased, and hence it causes an increase in the demand for money. Also, the occurrence of negative shocks in the amount of liquidity causes a decrease in the price level and all these factors cause a jump in the real exchange rate. Financial facilities are provided. The objective of monetary policies in advanced industrial countries and developing countries is somewhat different. In industrialized countries, the main goal is to eliminate inflation, eliminate recession, and achieve full employment, while for developing countries, the main goal of monetary policy is economic growth and increasing government revenues and total supply. In this way, a brief look at Iran's situation in the international economic scene indicates the importance of

the policies adopted during this period. Now the situation is such that it is no longer clear that Iran's economy can bear the burden of allocation and distribution costs of wrong policies. On the other hand, the increase in competition in the international trade scene due to the presence of some competitors such as East Asian countries has narrowed the space for an effective presence in the international trade scene. If the economy is continuously exposed to unexpected monetary expansion, the exchange rate will exceed its long-term trend in the short term and return to its long-term level in the long term. The jump in the exchange rate is a short-term phenomenon that is formed due to the price stickiness in the short term the high adjustment speed in the financial market and the slow adjustment in the real sector of the economy.

Targeting the real exchange rate and the inflation rate, the theory of exchange rate jumps and its relationship with monetary policy and its consequences were first proposed by Dornbush (1982) and other researchers such as Penti (1995), Adams and Gross (1986) and Guillermo (1994)) investigated this relationship. Dornbush (1982) believed that targeting the real exchange rate would affect the stability of production and prices in two ways. On the one hand, the stability of the nominal and real exchange rates will create stability in the total demand, and on the other hand, the exchange rate will affect the price level through the supply sector, because the nominal exchange rate will affect the prices through the cost of imported intermediate goods. In other words, stay away He believed that following the rule of exchange rate would create stability in production on the one hand, and the other hand, it would destroy the stability in prices. Penti (1995) believed that the real exchange rate should be stable for two reasons, on the one hand, fluctuations in the exchange rate will cause the reallocation of resources between production sectors, and due to the low mobility of production resources, the allocation of resources will be costly, and on the other hand, Exchange rate fluctuations will impose external restrictions on the domestic policies of the economy, because the shocks originating from the economy will spread to other sectors of the economy. Therefore, for the above reasons, he believes in the stability of the exchange rate, but he accepts that to stabilize the nominal exchange rate, the prices will lose their stability, and finally he concludes that according to the economic requirements of a country, it is possible to follow from the rule of nominal exchange rate, it should be considered as a suitable policy and at other times it is not a suitable policy. Therefore, the evaluation of the foreign exchange market and foreign exchange policies of Iran during the years 1370 to 1397, which is carried out in this study from the perspective of the exchange rate jump, is necessary to understand the disturbances of this market, which during this period, the economy was repeatedly affected by the monetary expansion and inflation caused by it and also the exchange rate has jumped. The increase in the volume of money and monetary expansions can affect different sectors of the economy, in other words, an expansionary monetary shock) apart from nominal variables such as the exchange rate, interest rate, and the general level of prices, it can also affect real variables such as the relative prices of imports, exports, and production. to affect Therefore, the main purpose of the current research is to examine the relationship between monetary policy impulses and exchange rate jumps in Iran by using the Dornewish launch model and the monetary model with sticky prices and by applying the SVAR vector autoregression model as factors of economic insecurity, which in the theoretical foundations and the research method is examined in detail. Many studies that exist about intervention in the foreign exchange market have focused on the choice between two modes of non-intervention and full intervention in the form of floating and fixed exchange rate regimes. But what emerges from the careful examination of the theoretical issues is that none of these two extreme cases, i.e. a completely floating system or non-intervention and a fixed exchange rate system, which means complete intervention in the market, are not considered optimal exchange rate policy. A suitable intermediate state should be chosen to intervene in the currency market. Here, the question of the degree of flexibility of the exchange rate and the extent of its management by the monetary authorities is raised. In Iran, taking into account that the managed exchange rate system is currently applied and only two decades have passed since the implementation of this policy, the necessity of discussing how and to what extent the exchange rate

management and the government's optimal intervention in this market should be is obvious. In Iran, many studies have been done about the exchange rate. Due to the lack of studies in the field of exchange rate jumps using the Dornbush launch model and monetary model with sticky prices, this study tries to collect comprehensive theoretical literature on monetary policies and exchange rate jumps in the Iranian economy to understand the macroeconomic effects. Monetary policies and exchange rate jumps should be investigated.

3- PREVIOUS STUDIES

In this part of the research, the previous studies in the field of the research topic are reviewed

Table 1- Summary of previous studies

The authors	The period	The sample under investigation	The research method, the results
Farahani and (1400) colleagues	1398-1368 Iran	NARDL& GARCH	Uncertainty in economic policies in the form of monetary policy shock and financial has led to increased instability in the exchange rate in the country. The analysis of shocks showed that the impact of negative shocks on the exchange rate was stronger than positive monetary and financial shocks.
Mir Mohammadi and (2019) colleagues	1370-1397 Iran	Dornbush launch model	The conclusion shows that monetary and financial policies should be used to control the exchange rate instead of policy making
Elham Hosseini and (2019) colleagues	1357-1396 Iran	VAR & GARCH	In the long run, the instability of monetary policies affects the instability of financial policies
Mazini and Ghorbani (2018)	1360-1394 Iron	Dynamic stochastic general equilibrium (DSGE) model to simulate the behavior of equilibrium real exchange rate	The results indicate that during this period, due to a variety of policies adopted in the market, the real exchange rate has deviated significantly in three periods. The first deviation is related to the peak years of the war until 1367. The second deviation occurred in a relatively limited way during the period of 1373-80, and the third deviation, which was the most

writers	The period and sample examined	Research Methodology	Results
			severe exchange rate imbalance during the period under review.
(2017) Oabari et al	Iran	From Hodrick-Prescott filtering method	The results showed that the effect of the monetary impulses of the exchange rate on them is negative and the hypothesis cannot be rejected.
Homeshand et al. (2019)	1338-1386 Iran	Self-explanatory method and distributive breaks	In the long term, monetary policies have been positive and meaningful
writers	The period and sample examined	Research Methodology	Results
Fan Wang et al(2023)	2005-2015 Jenn	SVAR model	The findings show that increasing US monetary policy uncertainty worsens RMB exchange rate volatility.
Ignacio Lozano-Espitia (2023)	2003-2019 Columbia	From identification of proxy-SVAR with respect to VAR	The way to deal with economic shocks is to oppose financial and monetary policies, which will lead to exchange rate fluctuations
Laurent Ferrara et al(2021)	1980-2016 America	Autoregression	Empirically examines the effects of government spending shocks on real exchange rates and inflation using data from the United States and shows the positive effects of fiscal policies in controlling uncertainty.
Ingmar Roevekamp (2020)	1997-2007 United States of America	Data panel	It shows a significant negative effect of US monetary surprises on ADR abnormal returns for countries with managed exchange rates.
Rashad Ahmed (2020)	2000-2017	Data panel	There is a negative correlation between total public debt levels and interest rates in the United States, which causes the exchange rate to grow.
Precious Wedaga Allor(2020)	1970-2017 Ghana	Autoregression (ARDL)	There was a short-term effect of monetary policy on the exchange rate and a one-way causality relationship between

			monetary policy and exchange rate
Ingmar Roevekamp(2019)	United States of America	VAR	Monetary policy is measured by innovations in the federal funds rate and non-borrowing reserves, by narrative indicators, and by event studies of Federal Reserve policy changes.
Philip Ifeakachukwu Nwosa(2017)	1980-2015 Nigeria	Ordinary Least Squares (OLS)	It shows that fiscal policy variables are significant determinants of exchange rate movements in Nigeria.
Philip Ifeakachukwu(2017)	1980-2015 Nigeria	OLS	The findings indicate the need for prudent management of income, expenses and debt to reduce the exchange rate and ensure the stability of the exchange rate.
Laura Barbosa de Carvalho et al (2016)	Brazil	VAR	The result shows that there is a need for better coordination between monetary and financial policies to control the exchange rate in Brazil
Laurent Ferrara et al(2021)	2001-2010 Selected developing countries	Panel model and GMM estimation	The research results reflect the exchange rate dynamics over time. In addition, the results of this study show that the effect of the liquidity variable as a monetary policy indicator on the exchange rate is positive and significant. Also, gross domestic product (GDP), inflation, and exports of goods and services have negative, positive, and negative effects on the exchange rate, respectively, and all are statistically significant. More attention to the exchange rate and optimal control of liquidity in the economy is suggested as a policy recommendation in this research.
Ingmar Roevekamp (2020)	1990-2009 Iran	multiple regression	The government should control the currency price with

			the help of monetary and financial policies.
Rashad Ahmed (2020)	4-2-2000 Iran	OPTCON algorithm	The optimal values of macroeconomic policies are different from what was proposed in the third five-year development plan in Iran. In this way, the deviations in the variables of government current expenses, government tax revenues, and government oil revenues are low, but the deviations in the variables of government capital expenditures and the amount of money as a monetary policy are high.

Source: Collection of authors

Iraq is one of the developing countries that needs correct policy-making in monetary and financial fields to achieve the goals of economic development in this country. Considering the experience of neighboring countries such as Iran, since the exchange rate has important effects on other macroeconomic variables, it is very important to examine the factors affecting it to achieve the economic goals considered by the government. Therefore, since this issue has not been addressed in the experimental studies conducted in Iraq, this study tries to examine the effect of financial and monetary policies on the exchange rate in Iraq. An important point that should be noted after reviewing the empirical research literature is that most of the studies conducted in this field in countries Other than Iraq, have focused on investigating the effect of monetary or fiscal policy variables separately on exchange rate movements or exchange rate fluctuations. The methods used mainly include linear regression (OLS), cointegration, error correction model (vector error correction), and Granger causality test. In addition, most of the studies in this area have been conducted until 2018, which means that the period after that has not been covered, while some changes in the exchange rate have occurred in recent years, and investigating this issue with data new ones are needed and this study has tried to solve this existing gap by extending the period until 2022. To fill this gap and improve innovation in the subject under review, the effect of monetary and fiscal policies should be examined simultaneously to identify the need for coordination of monetary and fiscal policies in exchange rate management.

4- Presentation of research model and variables

This part of the research investigates the impact of the interaction of monetary and financial policies on the exchange rate in Iraq, according to the theoretical foundations and previous empirical studies such as Nwosa (2017) and Ndubuisi, et al. (2017), the following equations are used.

$ECHR_t = (Monetary Policy_t, Fiscal Policy_t)$ (1)

According to the above function, the exchange rate is a function of fiscal policies and monetary policies at time t. According to the previous studies and the theoretical foundations of the factors affecting monetary and financial policies, it is considered as follows:

{(Monetary Policy=f(LOG(M2GDP) RR LOG(EXPGDP)(GDPG)INF LOG(OILRENT)LOG(IMPGDP)) @@Fiscal Policy=f(LOG(G) LOG(TAXGDP) LOG(GENDEBT) LOG (EXPGDP) (GDPG) INF LOG(OILRENT) LOG(IMPGDP)))} (2)

Considering the various factors affecting monetary and financial policies and to investigate the impact of the interaction of these policies on the exchange rate, equation (3) is used in this research:

LOG(ECHR) = C (1) + C (2) *LOG(EXPGDP)t + C (3) *GDPGt + C (4) *INFt + C (5) *LOG(OILRENT)t + C (6) *LOG(IMPGDP)t + C (7) *RRt + C (8) *LOG(M2GDP) t + C (9) *LOG(TAXGDP)t + C (10) *LOG(GENDEBT)t + C (11)) *LOG(G)t + μt (3)

Using the above equation, the impact of the interaction of monetary and financial policies on the exchange rate in Iraq can be estimated. In this equation C (1), the constant coefficient of the model and other C coefficients indicates the effect of the explanatory variables on the exchange rate in Iraq.

ECHR is the dependent variable of the research and represents the exchange rate in the country of Iraq, where the exchange rate between the dinar and the Iraqi dinar is used as the exchange rate. The two monetary policy instruments used in this model are the interest rate (RR) and the money supply. M2GDP indicates the volume of money supply to GDP and is used as one of the monetary instruments used in this research to investigate the impact of monetary policies on the exchange rate. Money supply can be defined in two ways: one is a narrow definition (M1) which includes cash (coins and bills) in the hands of people and non-banking private institutions, in addition to demandable demand deposits in commercial banks and it is a depository institution. The broader definition (M2) in addition to elements M1 includes money market funds, savings deposits, and short-term deposits. This broader definition is provided to identify sources of money that can be used for economic and financial activities. In general, the definition of M1 refers to cash in circulation and deposits that can be easily withdrawn, while M2 includes resources that are less liquid and associated with longer periods. In this study, M2 is used as monetary policy. The effect of monetary policy on the exchange rate is ambiguous, meaning that an expansionary monetary policy increases the exchange rate and a contractionary monetary policy decreases the exchange rate.

Based on previous studies and existing theoretical foundations, other variables affecting the exchange rate such as export, import, inflation rate, economic growth rate, and oil revenues have been used in the model. EXPGDP represents the value of Iraq's exports of goods and services based on the constant price of 2015 in terms of US dinars to GDP. GDPG represents the economic growth rate and is equal to the annual growth rate of Iraq's gross domestic product at constant 2015 prices in dinars. INF indicates the inflation rate obtained from the calculation of changes in the consumer price index. Theoretically, the increase in the general level of prices has a negative relationship with the exchange rate. OILRENT indicates oil rent. Oil rent refers to the income or profit that a country or government earns from the extraction and sale of its oil resources, over and above the costs of extracting, producing, and distributing the oil. In other words, oil rent is the difference between the value of extracted oil and the costs associated with its production and sale. IMPGDP represents the value of imports of goods and services to Iraq based on the constant price of 2015 in terms of US dinars to GDP. Log represents the natural logarithm and μ is the error term of the regression equation. Fiscal policy instruments used in this model are total government public expenditures (G) at time t, total government tax revenues (TAXGDP) at time t, and total public debt (GENDEBT) at time t. TAXGDP represents the total government tax revenues to GDP in dinars.

1-4- Descriptive statistics of research variables

A summary of the most important descriptive statistics of the variables used in this research is shown in Table (2).

Table 2- Summary of descriptive statistics of model variables

	Export	GDP Growth	General government spending	General government Debt	Tax GDP ratio	Real interest rat	M2 GDP Ratio	Import	Exchange rate	OIL rent	Inflation
Mean	36.61	6.46	6.62E+11	29.86	1.66	6.76	29.4	32.4	1625.4	37.72	34.48
Median	37.68	4.65	3.69E+11	29.72	1.61	-0.97	25.51	29.82	1902.27	38.92	14.19
Maximum	77.9	57.82	2.36E+12	35.86	2.69	60.88	55.6	76.84	2002.41	65.16	396.44
Minimum	0.01	-64.05	2.60E+10	27.39	0.91	-16.52	20.25	0.02	0.36	9.43	-30.2
Std. Dev.	22.83	19.6	6.85E+11	1.14	0.24	16.13	7.74	19.52	452.65	15.29	78.67
Skewness	0.11	-0.46	0.62	3.17	1.34	1.5	1.58	0.22	-1.14	0.06	3.22
Kurtosis	2.31	6.93	2.1	20.21	10.46	4.72	4.95	2.69	4.62	2.02	13.99
Sum	1574.05	277.62	2.84E+13	1284.01	71.2	290.53	1264.16	1393.2	69892.19	1621.82	1482.58
Observations	43	43	43	43	43	43	43	43	43	43	43

Source: The merits of research

As can be seen, the above table shows a summary of the descriptive statistics of the variables used in the research related to Iraq in the period from 1980 to 2022. In this study, two tools of monetary policy, i.e., interest rate and volume of liquidity to GDP, and three tools of financial policy, i.e., total government expenditures, tax revenues, and total government debt, have been examined to investigate the impact of monetary and financial policies on the exchange rate. The real interest rate is considered an important monetary policy tool. The average rate for Iraq during the period from 1980 to 2022 is equal to 6.76, which indicates a relatively positive environment for investment. However, the standard deviation of 16.13 shows that the real interest rate has fluctuated significantly over the years. These fluctuations may be due to changes in monetary policy, economic conditions, or external factors such as changes in global markets. The volume of liquidity to GDP is considered as an important indicator to determine the money supply in the economy. The average of this ratio is 29.4, which indicates a suitable level of liquidity in the economy. However, the standard deviation of 7.74 shows that this ratio is also associated with fluctuations. High liquidity usually leads to a depreciation of the domestic currency, as it indicates a greater supply of money in the economy. This can negatively affect the exchange rate. Total government expenditure represents government spending in the economy. The average of this variable indicates a high level of government spending. Its standard deviation also indicates extreme fluctuations in government spending. An increase in government spending can stimulate the economy, but at the same time, it may lead to an increase in public debt and, as a result, a depreciation of the currency. The government tax to GDP variable shows the share of tax revenues from the GDP. The average of this variable is 1.66, which indicates a relatively low level of tax revenues in the Iraqi economy. The standard deviation of 0.24 shows that this ratio is associated with less volatility. High tax revenues may indicate a more stable economy

and can have a positive effect on exchange rate stability. The average value of public debt of the government is 29.86, which indicates a relatively high level of public debt. A standard deviation of 1.14 indicates that public debt is less volatile, but a skewness of 3.17 and a skewness of 20.21 indicate a tendency toward higher values and greater dispersion. An increase in public debt may depreciate the currency, as it indicates an increase in risk in the economy. Based on these descriptive statistics, it can be said that monetary and financial policy tools play an important role in determining the exchange rate in Iraq. Fluctuations in interest rates and liquidity can have a direct impact on the value of the domestic currency. Also, changes in government spending and public debt can lead to exchange rate fluctuations. Tax revenues are relatively more stable, but the level is low, indicating the need to increase tax revenues to support a more stable economy. This analysis shows that to achieve the stability of the exchange rate, there is a need for coordinated and balanced monetary and financial policies.

The average exchange rate during the reviewed period is 1625.4, which indicates relatively low levels in the value of the dinar compared to the US dinar. This indicates that the Iraqi dinar has traded at a relatively lower value during this period. This amount has occurred due to various factors such as economic fluctuations, political instability, and external influences. The standard deviation of 452.65 shows that the exchange rate has faced a lot of fluctuations during these years. This relatively high standard deviation indicates volatility in the value of the Iraqi dinar, which can be caused by changes in monetary and fiscal policies, oil prices, or political factors. The maximum exchange rate is 2002.41 and the minimum is 0.36, which indicates significant changes in the value of the dinar during this period. This large difference between the minimum and maximum shows that the exchange rate has been affected by various economic and political shocks. The negative skewness of 1.14 shows that the exchange rate distribution tends towards lower values. This can indicate that the exchange rate has been at a relatively lower level in most periods. The kurtosis of 4.62 indicates that the exchange rate distribution has more dispersion than the normal distribution, which could be due to some periods with very high exchange rates.

The average export to GDP in Iraq during the period under review is 36.61, which indicates different levels of export in the Iraqi economy. The standard deviation of 22.83 shows that exports fluctuated significantly during this period. The positive skewness of 0.11 indicates that export values tend to be higher, but this tendency is not high. The kurtosis of 2.31 shows that the export distribution tends towards the normal distribution. This fairly balanced distribution with moderate volatility indicates Iraq's export potential, but with volatility that can be caused by economic or political factors.

The average growth of Iraq's GDP during the period under review is 6.46. which indicates relatively favorable economic growth. However, a standard deviation of 19.6 indicates very large fluctuations in the growth rate. These fluctuations can be caused by economic or political changes in the country. A negative skewness of 0.46 indicates that the data tends toward lower values, which may indicate periods of stagnation or declining growth. The kurtosis of 6.93 shows that the distribution of GDP growth has high dispersion and volatility. The average inflation rate is 34.48, which indicates a high level of inflation in the Iraqi economy. The standard deviation of 78.67 shows that inflation is associated with extreme fluctuations. The positive skewness of 3.22 and skewness of 13.99 indicate that the distribution of inflation is strongly inclined towards higher values and has a large dispersion. These features indicate severe instability in the Iraqi economy, which may have been caused by economic or political factors.

In general, the descriptive statistics of the variables examined in this research show that the Iraqi economy has faced severe fluctuations and significant dispersion during the years 1980 to 2022. Variables such as GDP growth, public debt, real interest rates, and inflation indicate economic instability, while variables such as exports and government spending indicate relatively more stable

levels. This analysis shows that the Iraqi economy needs stable economic policies and reduced volatility to achieve sustainable growth and reduce inflation.

2-4- Estimation of the model and analysis of the results

1-2-4- Examining the significance and descriptive statistics of the variables

In the analysis of time series, before estimating the model and performing causality and cointegration tests, the significance of the variables is tested and investigated. In estimating the model using the ARDL Bounding test method, the basic assumption is that the investigated variables are either accumulated from order zero or accumulated from order one or accumulated from order one and zero and none of the variables are accumulated from order two. Sons and colleagues, 2001). If one of the used variables is cumulative of the 2nd order, in this case, performing the joint F test presented by Posran et al.).

The unit root tests used in this research can be divided into two categories: conventional unit root tests and unit root tests considering structural failure. Conventional unit root tests include the generalized Dickey-Fuller test, Phillips Perron, Witkowski et al.

(KPSS), Dickey-Fuller normalized least square test (DF-GLS) provided by Elliott et al. (1996) and Ng-Perron unit root test. The Ng-Perron unit root test provides better and more reliable results than other tests in studies with small sample sizes and is stronger and more appropriate compared to other unit root tests such as ADF, DF-GLS, KPPS, etc. Mohammad Shahbaz, 2012).

The results of the Ng-Perron unit root test can only be skewed and unreliable if there is a structural failure in the investigated variables (Mohammed Shahbaz, 2012). To ensure the results obtained from conventional unit root tests and to more accurately examine the degree of accumulation of the research variables, detrended structural failure unit root tests of Ziot-Andrews and Clement et al. were also performed. Both mentioned tests are more reliable and powerful than the Ng-Perron unit root test. The Ziot-Andrews unit root test has information related to one structural break in the time series, while the Clement et al. unit root test considers information related to two structural break points in the time series.

The results of unit root tests mentioned in Table (3) are presented for all research variables. As can be seen, the degree of accumulation of variables based on DF-GLS, Ng-Perron, and KPSS tests is shown in separate columns. According to the results of conventional unit root tests, all research variables are at the same level or with a significant difference.

Table 3- unit root test of variables

متغیر	Ng-Perron آزمون						DF-GLS آزمون			Kwiatkowski-آزمون Phillips-Schmidt-Shin		
	وقفه بهی نه	MZa	MZt	MSB	MPT	درجه انباشتگی	DF-GLS statistic	وقفه بهین ه	درجه انباشتگی	KPSS	وقفه بهینه	درجه انباشتگي
LOG(EXPGDP)	0	0.13631	0.08239	0.57035	23.1766	I(0)	-0.301159	0	I(1)	0.777365	3	I(0)
GDPG	0	-3.99632	-1.20365	0.33544	6.25466	I(0)	-1.959028	0	I(0)	0.760513	3	I(0)
INF	0	1.42342	0.66713	0.47561	21.4327	I(0)	0.445105	0	I(1)	0.529878	2	I(0)

LOG(OILRENT)	0	-4,75134	-1.53940	0.33354	5.10229	I(0)	-2.019353	0	I(0)	0.128036	2	I(1)
LOG(IMPGDP)	0	-2.44657	-1.01705	0.42456	9.51531	I(0)	-1.541584	0	I(1)	0.662436	3	I(0)
RR	1	-2.40812	-1.12847	0.45859	9.82270	I(0)	-1.360216	1	I(1)	0.408770	3	I(0)
LOG(M2GDP)	0	-0.17596	-0.13482	0.75158	3.30973	I(0)	-0.968154	0	I(1)	0.515398	3	**(0)**I
LOG(TAXGDP)	0	-12.8526	-2.48490	0.10376	2.14527	I(0)	-4.546064	0	I(0)	0.183872	3	**(1)**I
LOG(GENDEBT)	0	-2.64657	-1.01705	0.45456	9.51531	I(0)	-1.641584	0	I(1)	0.678436	2	I(0)
LOG(G)	0	-3.44632	-1.36365	0.36744	3.25466	I(0)	-1.849028	0	I(0)	0.660513	3	I(0)

According to the results of the unit root tests, none of the variables investigated in this research have the second-order degree of accumulation and all the variables are at the level or with a mean difference, considering the width from the origin and the time trend. Therefore, without fearing the unreliability of boys' F-statistics, it is possible to estimate and check the models in this research using the ARDL method.

2-2-4- Determining the number of optimal breaks, the results of the co-accumulation test, and other diagnostic statistics

According to Sims's idea, in vector autoregression system models, determining suitable variables to be present in the system and determining the number of interruptions is extremely important. Due to the large number of parameters in this type of model, the optimal interval should be determined based on the principle of economy. Information criteria are the best tools for choosing the optimal interval in system models (Lutkepehl, 2006 & 1991 and Brooks, 2008). The selection criteria examine and compare the benefits of using more intervals against the cost of losing more degrees of freedom in regression models based on reducing the variance of the remaining components. The selection criteria used to choose the optimal interval are Akaike's Information Criterion (AIC), Schwartz Information Criterion (SBC), and Hanan-Quinn Information Criterion (HQC).

After examining the degree of co-accumulation of variables, to estimate the ARDL bounding test model and to find the long-term relationship between variables, it is necessary to select the optimal system interval. Among the information criteria mentioned for choosing the optimal interval, Akaik's criterion in high-volume samples and Schwarz-Bayesin's criterion in low-volume samples will not provide reliable results. The Hanan-Quinn criterion is also between these two methods. Considering the limited period studied in this part of the research (1353-1391) and the superiority of Akaike's criterion in small samples compared to other criteria, this criterion was used to select the optimal interval of the model (Aghaei, 2015). After performing the tests related to the significance of the variables and after making sure that the variables are not accumulated from the second order, in this part of the research, to choose the optimal interval, to perform the test of the long-term relationship between the variables and also other diagnostic statistics to ensure that the stability of each model is discussed. The first column of table (5) shows the estimated relationship and direction of causality between the variables. The second column shows the optimal interval of each variable, which is selected based on the Akaik criterion. The third column shows the values of the F test for boys to investigate the presence or absence of long-term relationships between variables. As can be seen in Engdol, the long-term relationship between the variables in both research models is confirmed at a

high confidence level of 95% based on the boys' borderline test. To ensure the results of the boys' F test in detecting the long-term relationship between variables, Gregory and Hansen tests were also performed.

has been This test is more powerful than other cointegration tests based on residual components and examines the presence or absence of a cointegration relationship according to the presence of structural failure. Based on the results of this test shown in Table (4), the existence of a long-term relationship between the research variables is also confirmed. The other columns of this table show the diagnostic statistics of the models to check the classical assumptions and validity of the estimated models, based on these tests, the obtained results are confirmed for interpretation and review.

Table 4- The results of the long-term relationship test and other diagnostic statistics

Gregory Hansen test statistic	R-Bar-Squared	F-stat	DW-statistic	Code clearance test	Autocorrelation test	Heterogeneity variance test statistic	Normality test	F statistics for boys	The optimal length of the break	Estimated model
5/69**	9/719	/81 799	2/504	2/264 (/332 0)	3/652(0/708)	12/44(2) 0/12	5/6833(0 /007)	3/46**	(1,1,1,0,1,1, 0,1,0,0,1)	LOG(ECHR) =f [LOG(EXPGDP) GDPG INF LOG(OILRENT) LOG(IMPGDP) RR LOG(M2GDP) LOG(TAXGDP) LOG(GENDEBT) LOG(G)]

Source: research calculations (*, **, and *** indicate significance at the error level of 1, 5, and 10%, respectively.)

3-2-4- Estimation of short-term and long-term coefficients

In this part of the research, after estimating the presented model, the results are interpreted and the research hypotheses are tested.

Table 5- Examining the short-term and long-term relationship between the exchange rate, the interaction of monetary and financial policies, and other factors affecting the exchange rate.

برآورد رابطه كوتاه مدت				
متغيرها	ضريب	انحراف خطاي استاندارد	آماره t	احتمال
LOG(ECHR(-1))	0.002116	0.011493	0.184088	0.8555
LOG(EXPGDP)	-0.037460	0.047477	-0.789007	0.4378
LOG(EXPGDP(-1))	0.163365	0.051234	3.188603	0.0039
GDPG	0.000602	0.000779	0.773007	0.4471
GDPG(-1)	-0.000945	0.000729	-1.295608	0.2074
INF	0.000528	0.000247	2.135801	0.0431
LOG(OILRENT)	0.006377	0.044084	0.144663	0.8862

LOG(OILRENT(-1))	-0.142872	0.045708	-3.125742	0.0046
LOG(IMPGDP)	0.027927	0.056928	0.490570	0.6282
LOG(IMPGDP(-1))	-0.211317	0.057077	-3.702307	0.0011
RR	0.000885	0.001231	0.719046	0.4791
LOG(M2GDP)	0.025494	0.135819	0.187710	0.8527
LOG(M2GDP(-1))	-0.156457	0.120353	-1.299988	0.2060
LOG(TAXGDP)	0.099319	0.107219	0.926315	0.3635
LOG(GENDEBT)	-0.002324	0.380033	-0.006116	0.9952
LOG(G)	0.069490	0.020569	3.378381	0.0025
LOG(G(-1))	0.059861	0.022862	2.618369	0.0151
C	5.003184	1.471701	3.399593	0.0024
)1CointEq (-	-0.214560	0.014369	-14.93214	0.0000

CE=LOG(ECHR(-1))+(0.126172*LOG(EXPGDP(-1))-0.000344*GDPG(-1)+0.000529*INF-0.136784*LOG(OILRENT(-1))+0.183779 *LOG(IMPGDP(-1))-0.000887*RR-0.131240*LOG(M2GDP(-1)) - 0.099530*LOG(TAXGDP) - 0.002329*LOG(GENDEBT) - 0.129625 *LOG(G(-1)) + 5.013792)

Estimation of long-term relationship				
Variables	**coefficient**	**Standard error deviation**	**t statistic**	**Possibility**
LOG(EXPGDP(-1))	-0.126172	0.054908	-2.297862	0.0285
GDPG(-1)	-0.000344	0.001222	-0.281241	0.7804
INF	0.000529	0.000248	2.135184	0.0408
LOG(OILRENT(-1))	-0.136784	0.039730	-3.442803	0.0017
LOG(IMPGDP(-1))	0.183779	0.062905	2.921504	0.0064
RR	-0.000887	0.001233	-0.719016	0.4775
LOG(M2GDP(-1))	0.131240	0.108168	1.213301	0.2342
LOG(TAXGDP)	0.099530	0.107581	0.925159	0.3620
LOG(GENDEBT)	0.002329	0.380839	0.006116	0.9952
LOG(G(-1))	0.129625	0.015485	8.371008	0.0000
C	5.013792	1.472664	3.404573	0.0018

Source: Research calculations

Monetary and financial policies and exchange rates are a set of measures that manage economic activities and seek to achieve goals such as employment, price stability, economic growth, and trade balance. Achieving these goals at the same time, considering the contradictions between them, is only possible through the coordination of monetary, financial, and exchange rate policies. Therefore, an appropriate combination of monetary and financial policies and exchange rates should be formulated

and implemented to achieve macroeconomic goals. The interaction between financial and monetary policies has attracted the attention of many economists in the last few decades because this interaction plays a very important role in determining the trend of macroeconomic variables such as price stability and economic growth. The importance of the coordination of monetary and financial policies has increased even more due to the recent financial crises, forcing countries to adopt coherent and coordinated policy combinations to deal with the adverse effects of crises on the economy. Therefore, coordination between monetary and fiscal policies means that these policies, despite having different targeting priorities, should move in the same direction and reinforce each other's positive effects, or at least avoid neutralizing each other's effects. On the other hand, in situations where monetary and financial policies are inconsistent, problems arise such as the difference in the effective time of these two policies. In general, fiscal policies need more time to show their effects compared to monetary policies. For this reason, the lack of coordination between monetary and financial institutions and neglecting this issue possibly leads to not achieving the optimal goals of monetary and financial policies. Therefore, it can be seen that financial and monetary policies as well as foreign economic policies, including the exchange rate, need coordination to achieve macroeconomic goals so that they can strengthen each other's positive effects. or at least prevent these effects from being neutralized. In the meantime, the issue of uncertainty in policies can complicate the conditions of forecasting and adopting necessary and appropriate measures.

The results obtained in the interaction model of financial and monetary policies also show the sensitivity of the simultaneous application of these policies. As can be seen in Table (4-7), the effect of public expenditure and public debt on the government is still positive, but their significance has changed. This lack of significance may be due to the mutual effects between fiscal and monetary policies. For example, if monetary policies in the hybrid model have the effect of devaluing the domestic currency, this may offset the positive effect of public spending and public debt on the exchange rate. Also, the inclusion of other policy variables may reduce the impact of these financial instruments. In separate models, the amount of money M2 had a positive and significant effect on the exchange rate, while the effect of the interest rate was negative but insignificant. The positive effect of M2 shows that an increase in liquidity leads to an increase in the exchange rate (a decrease in the value of the Iraqi dinar). This can be caused by expansionary monetary policies that increase inflation and depreciate the domestic currency. In the interactive model, the effect of the volume of money on the exchange rate is positive, but its significance has disappeared. This may be due to interactions between fiscal and monetary policies. If fiscal policies lead to deflation or strengthening of the domestic currency, the positive effect of the M2 money supply on the exchange rate may be reduced or become insignificant.

In general, it can be said that the interaction between fiscal and monetary policies can neutralize or reduce each other's effects. These significant changes may be due to the mutual effects of monetary and fiscal policies, as well as the effects of other economic factors. Therefore, to achieve more accurate results, policymakers need to pay attention to the complex interactions between policy instruments and adopt more coordinated policies to control the exchange rate and reduce volatility.

4-2-4- Model stability test

It is very necessary to check the stability of estimated parameters in ARDL estimation to ensure the obtained results. To test the stability of estimated parameters, the sum of regression residuals (CUSUM) and the sum of squared regression residuals (CUSUMSQ) tests of regression residuals of the models were used. Based on the results of these tests, there is no parameter instability in the estimated model, and the estimated parameters have the necessary stability to adopt policy recommendations.

Chart (1): stability test of CUSUM and CUSUMSQ coefficients in estimating the relationship between the interaction of monetary and financial policies, exchange rate, and other factors affecting the exchange rate in Iraq.

5- CONCLUSION AND RECOMMENDATIONS

Exchange rate fluctuations are one of the most important economic policy issues that are often discussed and challenged in developing countries. Usually, in these countries, liquidity and inflation do not go hand in hand. Among the reasons for the decrease in GDP, we can mention the sharp increase in the inflation rate, the implementation of contractionary monetary and financial policies to control inflation, the decrease in the competitiveness of domestic producers against competitors due to the decrease in the real exchange rate, and the increase in imports. These factors can ultimately lead to global financial and economic crises and economic stagnation in developing countries. The exchange rate is affected by internal and external shocks and this causes more fluctuations in this index. A jump in the exchange rate can affect the aggregate demand of the economy through imports, exports, and demand for money, as well as affect the supply of the economy through an increase in the cost of imported intermediate goods. In general, positive shocks in the exchange rate (depreciation of the currency) lead to an increase in the price of imported goods and a decrease in the price of export goods, which will increase the demand for domestic goods. On the other hand, the increase in the printing of unsupported money and the decrease in the value of the national currency led to an increase in the demand for liquidity in economic sectors. Also, negative shocks in the volume of liquidity may lead to a decrease in the price level, all of which ultimately cause a jump in the real exchange rate.

Monetary and financial policies are carried out through various tools such as changes in the volume of money, changes in liquidity growth, changes in interest rates or conditions for granting financial facilities, changes in public debt, government expenditures, and taxes. The purpose of implementing monetary and fiscal policies in industrialized countries is mainly to control inflation, deal with recession, and achieve full employment, while for developing countries, the main goal is economic growth and increasing government revenues. Considering the state of Iraq's economy during the years 1980 to 2022, it is necessary to study the factors affecting the exchange rate and to be aware of the fluctuations in this market and the variables affecting it to understand the problems of this market. During this period, the Iraqi economy has faced monetary expansion and the resulting inflation, as well as numerous jumps in the exchange rate. The increase in money supply and monetary expansion can affect different sectors of the economy, and monetary (expansionary) shocks affect not only nominal variables such as exchange rates, interest rates, and the general level of prices, but also real variables such as relative prices, imports, export, and production are also affected. Exchange rate stability is essential for healthy macroeconomic management, and achieving it is a prerequisite for a prosperous economy. Therefore, policy options are concentrated to achieve the goal of exchange rate stability. The exchange rate and its influencing factors are one of the main axes of macroeconomic policies. The effect of exchange rate changes on macroeconomic variables is one of the most important and challenging issues in developed and developing countries. Exchange rate fluctuations not only affect the prices of domestic goods in foreign markets but also affect the prices of imported goods and services in domestic markets. Therefore, the exchange rate is one of the main factors affecting exports and imports, balance of payments, foreign exchange reserves, economic growth, and employment.

Considering the key role of the exchange rate in the economic development of any country, it is necessary to examine the factors affecting it. For this purpose, in this study, the interaction between monetary and financial policy and how they affect the exchange rate fluctuations in Iraq from 1980 to 2022 was also investigated. Monetary policy tools used in this research included interest rate and money supply volume; While fiscal policy variables included total government expenditures,

government tax revenues, and public debt. Analysis and estimation of research models were done using time series patterns and autoregressive distribution with extended intervals (ARDL). Summarizing the results of estimating the impact of financial and monetary policies on the exchange rate in Iraq shows that these policies and their various tools have different effects on the fluctuations of the exchange rate and the value of the Iraqi dinar against the US dinar.

The combined model of the effect of fiscal and monetary policies on the exchange rate showed that the effect of some instruments may be affected by the mutual influence of other policies. For example, the effect of public expenditure and public debt in this model is positive, but its significance has changed. This may be due to the mutual effects of monetary and fiscal policies. The effect of the volume of money (M2) is also positive in the combined model, but its significance has disappeared. These results show that the interaction between fiscal and monetary policies can neutralize or reduce each other's effects.

These results show that financial and monetary policies have significant effects on the exchange rate in Iraq. To achieve exchange rate stability, policymakers should pay attention to the interactions between fiscal and monetary policies and create more coherent policy combinations. Also, the existence of oil rent and the effect of economic growth on the exchange rate show that managing oil resources and stimulating economic growth can help stabilize the exchange rate and strengthen the value of the domestic currency. Paying attention to these factors and adopting appropriate policies can help reduce exchange rate fluctuations and achieve economic stability in Iraq.

Based on the results obtained in this research, policy recommendations for Iraq should be aimed at reducing exchange rate fluctuations, controlling inflation, and strengthening the value of the domestic currency. These recommendations should focus on coordinated and efficient fiscal and monetary policies, as well as on oil resource management and economic growth. Below are some policy recommendations for Iraq according to the results of the research:

-Controlling public debt and government spending

Considering the positive and significant effect of public debt and government spending on the increase in the exchange rate, it is recommended that the Iraqi government have more control over its public debt. Policymakers should Avoid excessive increases in public debt, as this could increase pressure on the exchange rate and devaluation of the domestic currency. Also, government spending should be planned efficiently and purposefully to prevent its negative effects on the exchange rate. Investing in manufacturing and infrastructure sectors can help government spending lead to economic growth and exchange rate stabilization.

-Liquidity management and monetary policies

Considering the positive and significant effect of the amount of money (M2) on the exchange rate, it is recommended that Iraqi monetary policymakers have more control over liquidity and monetary policies. Expansionary monetary policies can lead to increased inflation and devaluation of the domestic currency. Therefore, the central bank should adjust monetary policy tools such as interest rates and open market policies in such a way that the volume of liquidity is controlled and inflation is reduced.

-Strengthening economic growth

Economic growth has a negative and significant effect on the exchange rate reduction, so it is recommended that the Iraqi government focus on increasing economic growth. This can be done by encouraging domestic and foreign investment, supporting productive sectors, and boosting exports. Sustainable economic growth can help to lower the exchange rate and strengthen the value of the domestic currency.

-Management of oil resources

Oil rent has a negative and significant effect on the exchange rate, which shows that increasing oil revenues can help stabilize the exchange rate. It is recommended that the Iraqi government manage oil resources efficiently and use oil revenues to support economic growth and stabilize the exchange rate. This can be done by building foreign exchange reserves, investing in infrastructure, and reducing dependence on foreign debt.

-Reduce inflation

Considering the positive and significant effect of inflation on the increase of the exchange rate, it is recommended that the Iraqi government adopt policies to reduce inflation. These policies can include liquidity control, government spending management, and economic stabilization. Decreasing inflation can help strengthen the value of the domestic currency and reduce the exchange rate.

-Coordination between fiscal and monetary policies

The results show that the interaction between fiscal and monetary policies can neutralize or reduce each other's effects. It is recommended that Iraqi policymakers adopt a coordinated approach between financial policies and monetary policy to strengthen the positive effects of both policies on the exchange rate. Coordination between these two policies can help reduce exchange rate fluctuations and strengthen the value of the domestic currency.

These recommendations can help the Iraqi government adjust its financial and monetary policies in such a way that the exchange rate is stabilized and the value of the domestic currency is strengthened. By implementing these recommendations, Iraq can achieve economic stability and sustainable growth. Based on the results of this study, with an expansionary monetary policy of increasing the exchange rate,

It means that the value of the national currency has decreased. Therefore, to reduce the negative effects of monetary policy on the value of the national currency, it is suggested that appropriate policies and executive tools

It should be designed and implemented by the government so that with proper management, it can be obtained with the income

of oil to be placed in the path of economic activities in society. On the other hand, the country of Iraq is dependent on abundant foreign exchange income derived from oil, knowing other factors that affect the exchange rate is important. Therefore, it is suggested that other factors, apart from monetary policy and scientific management, will increase the value of the national currency in the future. Considering the process of the effects of currency devaluation in recent years and its impact on the real production level of the country, it is recommended that economic policymakers, along with the implementation of these policies, prevent the aggravation of inflationary conditions in Iraq by implementing some parallel policies that are not inflationary. In this way, the positive effects of this policy on economic efficiency and optimal allocation of resources can be prevented. Due to the high expansionary effects of the policy of increasing the volume of money on the exchange rate, the government should use other financing methods instead of borrowing from the central bank to implement its expansionary policies. Another proposed method is for the government to activate this market by placing the shares of state-owned companies in the stock market. With this work, a part of the capital and the stray liquidity in the society, which causes inflation, has been collected, and this work also provides the necessary capital to create as many production projects as possible.

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