

Monetary Effects of Fiscal Policy in Iraq for the Period 2003-2020

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Abstract

The rapid developments, especially in the global economy, and the profound transformations experienced by the financial and banking industry were major factors affecting economic policies from the monetary effects of fiscal policy.

On this basis and through this study, we tried to reach the monetary effects of the financial policy by addressing the concepts, tools and stages of the development of financial policy and its relationship to monetary policy, as well as addressing the monetary effects resulting from the application of financial policy, and finally this was projected on the Iraqi economy for the period (2003- 2020), and using the OLS least squares method, the equation was estimated, and the results showed that the value of R² was (84%, 77%, 41%) and (92%, 90%, 61%), and this indicates that The independent variables (public expenditures) and (budget deficit) explain the changes in the dependent variables (money supply, interest rate, and exchange rate) at a ratio of (84%, 77%, 41%) and (92%, 90%, 61%) respectively.



Fiscal policy is characterized by having a significant impact on economic activity, as it has intertwined relations with the rest of economic policies, and for this reason, countries adopt fiscal policy through their tools to achieve stability in their economies. As any change in the government's fiscal policy, whether spending or revenue, leaves clear effects on the structure of production and income and its redistribution, in addition to its impact on the volume of effective demand, and then the rise in the general level of prices in light of the weak flexibility of this production apparatus on the one hand, but from On the other hand, the government's financing of the budget deficit or the use of the surplus in it leaves important effects on the amount of assets available in society, whether monetary or non-monetary.

The fiscal and monetary policies are also effective means of general economic control, and these two policies overlap in influencing the general economy, and this overlap arises from an important fact related to the monetary effects of fiscal policy, which are particularly reflected in the money supply, which is originally caused by a deficit or surplus. In the general budget, and how the budget deficit is financed and the use of money supply, the relationship between fiscal and monetary policy contributes greatly to influencing the course of the economy. This impact on the economy according to the different sources of financing this deficit, and then the fiscal policy has become a double burden on monetary policy through the accumulation of government debt and the budget deficit, which negatively affects the objectives of monetary policy in terms of stability in the general level of prices.

In this context, the importance of this study comes to shed light on the Iraqi economy after the Central Bank obtained its independence after the year 2003, in an attempt to analyze the most prominent monetary effects of the fiscal policy for the period 2003-2020.

The study Problem :

The problem that this study focused on is due to the fact that the fiscal policy in Iraq during the period 2003-2020 suffered from imbalances in its tools represented in the increase in the unilateralism of public revenues as well as the decrease in the productivity of public expenditures, and with the large increase witnessed by these expenditures, the fiscal policy generated monetary effects. negatively affected its effectiveness.

Study hypothesis:

The study starts from the hypothesis that there are monetary effects of the fiscal policy during the period 2003-2020 caused by the inefficient use of the budget surplus generated by the oil sector.

the importance of studying :

The study acquires its importance by examining the monetary impact of the fiscal policy as it represents one of the results of the imbalance of the general budget in terms of positive (surplus) and negative (deficit) on the one hand, in addition to the sources of financing the deficit and methods of using the surplus on the other hand.

Purpose of the study :

This study aims to present a theoretical research on financial policy and its tools, with a focus on its monetary effects on the Iraqi economy during the period 2003-2020.

Time and place limits for the study:

The study adopted Iraq as a spatial scope.

While the temporal scope of the study is set for the period (2003-2020).

Study structure:

The study was divided into two axes:

The first axis / the path of fiscal policy and the evolution of the general budget in the Iraqi economy for the period 2003-2020.

First: The path of public expenditures in the Iraqi economy for the period 2003-2020. Second: The path of public revenues in the Iraqi economy for the period 2003-2020 Third: Analysis of the net public budget in the Iraqi economy for the period 2003-2020.

The second axis / measuring the monetary effects of the fiscal policy in the Iraqi economy for the period (2003-2020), which is divided into turn to:

First: the description of the standard model.

Second: the results of applying the standard model.

The first axis / the path of fiscal policy and the development of the general budget in the Iraqi economy for the period 2003-2020.

In this axis, we will try to address the most important changes that occurred in the variables of fiscal policy in Iraq for the period 2003-2020 and the net general budget resulting from these changes, through the following table.

Table No. (1)

The path of fiscal policy and the development of the general budget in the Iraqi economy for the period 2003-2020

(million Iraqi dinars)

the year	Total revenue	Total expenses	Deficil or surplus	Deficit or surplus growth rate	GDP	Deficit or Surplus/GDP
2003	2146346	1982548	163798	—	29585788,6	0,55
2004	32982739	32117491	865248	428,24	53235358,7	1,62
2005	40502890	26375175	14127715	1532,79	73533598,6	19,21
2006	49055545	33487877	15567668	10,19	95587954,8	16,28
2007	54599451	33545144	21054307	35,24	111455813,4	18,89
2008	80252182	59403375	20848807	-0,97	157026061,6	13,27
2009	55209353	52567025	2642328	-87,32	130643200,4	2,02
2010	69521117	64351984	5169133	95,62	162065565,5	3,18
2011	99998776	69639523	30359253	487,31	217327107,4	13,96
2012	119466403	90374783	29091620	-4,17	254225490,7	11,44
2013	113767395	106873027	6894368	-76,30	273587529,2	2,51
2014	105386623	83556226	21830397	216,64	266332655,1	8,19
2015	66470252	70397515	-3927263	-117,98	194680971,8	-2,01
2016	54409270	67067437	-12658167	222,32	196924141,7	-6,42
2017	77335955	75490115	1845840	-114,58	221665709,5	0,83

2018	106569834	104158183	2411651	30,65	268918874	0,89
2019	107566995	133107616	-25540621	-1159,05	276157867,6	-9,24
2020	63199689	148606809	-85407120	434,39	219768798,4	-38,86

Source / table from the researcher's work based on:

- Central Bank of Iraq, Statistical website, different years, <https://www.cbi.iq>.
- Columns (4, 5, 7) the student's work based on the data of columns (2, 3, 6).

First: the path of public expenditures for the period 2003-2020.

Public expenditure reflects the role of the state in economic life, as it has become the main tool for fiscal policy in the context of achieving its objectives. Public expenditures are defined as the sum of money spent by public authorities in order to achieve general social and economic goals and objectives, or in other words, the state or its affiliates pay an amount of money to provide and achieve a public benefit (Al-Obaidi, 2011:56)

When reviewing the development that took place in expenditures during the study period and as shown in Table (1), we note that the growth rates during the period 2003-2013 continued to rise, rising from (1982548 million dinars) in 2003 to (106873027 million dinars) in 2014. It achieved the highest positive growth rate in (2004), (2008) and (2012), with growth rates of (1520.01 %), (77.08 %) and (29.77 %), respectively, the impact of the noticeable increase in Public revenues, with the exception of the years (2005) and (2009), in which expenditures decreased from (26,375175) and (5,256,7025) with negative growth rates of (-17.78 %) and (-11.50 %) respectively. The decline in public expenditures in 2009 led to the global financial crisis in 2008, which led to a decline in oil prices, which is the main source of revenue in Iraq, as well as Iraq's entry into the ISIS war in 2014 and this also led to the prevention of oil exports from the occupied cities, as well as Weakness of the oil-producing structures.

As for the period 2014-2020, where this period also witnessed a high increase in total expenditures in general, specifically the increase in military expenditures, which was represented in providing the army with weapons and increasing employment in the security apparatus significantly, which resulted in the allocation of new salaries (current expenses), which affected Negatively on investment expenditures, and upon examining the data contained in Table No. (1), we note that the

growth rates during the period 2014-2020 took a rise, as it rose from (83,556,226 million dinars) in 2014 to (148,606,809 million dinars) in 2020, achieving the highest level in It has a positive growth rate in 2017, 2018 and 2019 with growth rates of (12.55 percent), (37.97 percent) and (27.79 percent), respectively, and this shows the size of the huge increase in spending during this period, with the exception of In 2014, 2015 and 2016, expenditures decreased from (83556226), (70397515) and (67067437), with negative growth rates of (-21.81%), (-15.74 percent) and (-4.73 percent).) respectively, and the reason for the decline in public expenditures for 2014, 2015 and 2016 is due to the prevention of oil exports from some cities due to the conflict with other organizations This led to a decrease in the exported quantities of oil transported through the territories of these countries.

Second: The path of public revenues in the Iraqi economy for the period 2003-2020.

Public revenues are defined as the sources from which the state derives the funds necessary to cover its various expenses in order to meet the public needs necessary for society (Taqqa and Al-Azzawi, 2007: 75), as public revenues represent the second tool within the financial policy and this tool has become one of the important financial policy tools that have an impact It is clear on economic and social activity, as it is a tool to prevent some unwanted activities, as well as direct investment, and the revenue policy can be divided into two main branches: (Allawi, 2016: 434).

The importance of analyzing the path of public revenues comes from being one of the pillars of the general budget, which in turn determines the features of the path of the government's economic program and its objectives on the one hand, as well as the relationship between the sources of revenues and their potential monetary repercussions according to their nature on the other hand.

It is noted from Table No. (1) that the path of public revenues has been on the rise during the period 2003-2020, as public revenues rose from (2,146,346 dinars) in 2003 to about (113,677,395 million dinars) in 2013, as public revenues continued to rise, but declined within a year 2009 to (55,209,353 million) dinars, as it achieved a negative growth rate of (31.20-percent) as a result of the global financial crisis in 2008 and the accompanying drop in oil prices in the international market, to rise again during the years 2010, 2011 and 2012, as shown In Table No. (1), they amounted to (69521117 million dinars), (999998776 million Iraqi dinars) and (119466403 million

dinars), with varying growth rates of (25.92% dir), (43.83%) and (19.46). %), but during the year 2013, public revenues declined, reaching (113,767395 million Iraqi dinars), with a negative growth rate of (4.77-7%), to continue that decline in the years 2014, 2015 and 2016, reaching (105386623 million Iraqi dinars) and (66,470,252 million dinars) and (54,409,270 million dinars), with negative growth rates, respectively (-7.36%), (-36.92 percent) and (-18.14%). In 2017, it rose again, reaching (77,335,955 million dinars) with an annual growth rate of (42.13 per cent), to continue to rise in 2018 and 2019 as it reached (106569834 million dinars) and (107566995 million dinars), with similar growth rates of (37.80% dirhams and 0.93%. In 2020, public revenues declined significantly, amounting to about (63,99689 million dinars), with a negative growth rate of (-41.24%).

Third: Analysis of the net general budget in the Iraqi economy for the period 2003-2020.

The general budget is of great importance in economic policy, and its impact, directly or indirectly, on many variables of the economy as a whole, and here the study of the general budget in Iraq gained great importance in terms of addressing in detail the years of deficit and surplus during the study period and its direct or indirect impact, The Iraqi budget was characterized by a surplus as a result of the continuous rise in the public revenues in Iraq approved mainly on the oil side, and as a result of the importance of these committees of the financial policy and to determine the actual reality of the deficit or surplus in the general budget. Its relationship to the gross domestic product and will be explained in detail, successively, as follows:

We note through Table No. (1) that the average growth rate of the surplus for the period 2003-2013 of the general budget amounted to (242.06%), because after the third Gulf War in 2003 and the lifting of the economic embargo imposed on Iraq, Iraq's oil revenues increased, which led to Increasing public revenues despite the decline in other revenues (tax and non-tax), at a time when public spending focused mainly on current expenditures. The increase in public revenues exceeded the increase in public expenditures, which led to a surplus in the public budget in 2003 amounting to Its value is (163798 million dinars), and that the surplus during this period was the result of an increase in the revenues of one source only. The value of the surplus in 2005 amounted to (14,127,715 million dinars), with a growth rate of (1532.79 per cent), and the ratio of the surplus to the gross domestic product amounted to 19.21 per cent, and the reason for this was the increase in

public revenues, especially oil. Public expenditures declined, and the state of surplus continued to decline. It continued for the following years 2006, 2007 and 2008 with a value of (15567668 million dinars), (21054307 million dinars) and (20848807 million dinars), after which the surplus decreased in 2009 to (2642328 million dinars), as it achieved an annual growth rate in those years. The period (-87.32 percent), and the surplus as a percentage of the GDP declined to (2.02%), and that the reason for the surplus's decline was as a result of the collapse of oil prices as a result of the financial crisis during that period, as it fell to its lowest level and from. Then the decline in oil revenues.

It also recorded the largest surplus in the general budget in 2011, amounting to (3,0359,253 million dinars), with a growth rate of (487,31%), and the surplus to GDP was (13.96%), and the reason for this was the increase in oil revenues, which led to that. To increase the general revenue of the country.

The amount of the surplus at current prices decreased in 2012 to (29091620 million dinars), with a negative growth rate of (-4.17 percent).

The year 2013 witnessed a deficit in the general budget, so the value of the deficit amounted to (6894,368 million dinars) with a negative growth rate (-76.30 percent dirhams), and its percentage of the gross domestic product amounted to (2.51% dirhams). The reason for this deficit is the decrease in public revenues as a result of. Decline in oil export revenues due to the drop in international oil prices.

When extrapolating the financial situation of the general budget for the period 2014-2020, we note that the average deficit for this period amounted to (-69.66 percent), and it becomes clear to us through Table No. (1) that the size of the surplus during this period remained continuous for the year 2014, as the general budget recorded a surplus. Financially, in 2014 it amounted to (2183,0397 million dinars), with a growth rate of surplus of (216.64 percent) and a surplus to GDP (8.19 percent), but soon a deficit occurred in the general budget in 2015 with an amount of (-3927263 million dinars). With a negative growth rate of (-117.98 per cent), and a deficit to GDP ratio of -2.01%, this deficit continued in 2016 at (-12658,167 million dinars) and a growth rate of (222.31 per cent), with a percentage of. Of the gross domestic product, it was negative, amounting to (6.42-6%), while during the years 2017 and 2018, the budget returned to a surplus state, with an amount of (1845840 million dinars) and (2411651 million dinars), respectively, and with a percentage of

GDP that amounted to (0) 3.83%) and (0.89%), while the deficit existed for the years 2019 and 2020 at (-25540621 million dinars) and (-85407120 million dinars), respectively, with a deficit growth rate of (-1 159.05 percent and (434.39 percent) respectively, which is the worst since 2016 due to the decline in resources, the rise in debt costs, war and current expenditures, and a growth rate in the general budget deficit (-9.24 percent) and (-38.86 percent).) of the gross domestic product, as it is clear that the state of the general budget in the Iraqi economy was and still has been linked mainly to oil revenues, which are determined in light of international oil prices (external factor) and the amount of domestic oil production (internal factor), so the changes of these factors will Its impact is directly reflected on the state's general budget.

The second axis / Measuring the monetary effects of the fiscal policy in Iraq for the period 2003-2020.

After studying and analyzing the development of means of payment and the factors affecting them, in this topic, the monetary effects of the fiscal policy will be estimated by measuring the impact of independent variables {public expenditures (x1), public revenues (x2), budget deficit (x3) { on the approved variable} money supply. , Y2 window exchange rate, Y2 interest rate Y3 {Through standard models that illustrate this, the regression method will be used.

First :the description of the standard model:

In this aspect, the standard model will be described based on the economic phenomenon to be studied and in line with economic and financial theory. The standard model consists of an equation or a set of equations. In this research, the model will be described as follows:

First model:

The first model is represented by the public expenditure variable as an explanatory or independent variable, and the money supply variable in the broad sense as a dependent or dependent variable.

deltoid relationship

Depending on the above description, the functional relationship between the independent variables and the dependent variable will be as follows

$$y_1 = \beta_0 + \beta_1 x_1 + u$$

Since: y1 the money supply, M2 and X1 represents the general expenditures

β_0 : constant limit

β_1 : coefficient of influence of the independent variable on the dependent variable

second model:

The first model is represented by the overhead variable as an interpreted or independent variable, and the window exchange rate variable as a dependent or approved variable

deltoid relationship

Depending on the above description, the functional relationship between the independent variables and the dependent variable will be as follows

$$y_2 = \beta_0 + \beta_1 x_1 + u$$

Since: y_2 is the window exchange rate and X_1 represents overheads

β_0 : constant limit

β_1 : coefficient of influence of the independent variable on the dependent variable

Third form:

The first model is represented by the public expenditure variable as an explanatory or independent variable, and the interest rate variable as a dependent or dependent variable

deltoid relationship

Depending on the above description, the functional relationship between the independent variables and the dependent variable will be as follows:

$$y_3 = \beta_0 + \beta_1 x_1 + u$$

Since: y_3 is the interest rate and X_1 represents public expenditures

β_0 : constant limit

β_1 : coefficient of influence of the independent variable on the dependent variable

Fourth form:

The first model is represented by the public revenue variable as an explanatory or independent variable, and the money supply variable in the broad sense as a dependent or dependent variable

deltoid relationship

Depending on the above description, the functional relationship between the independent variables and the dependent variable will be as follows

$$y_1 = \beta_0 + \beta_1 x_2 + u$$

Since: y_1 the money supply, M_2 and X_2 represents the general revenue

β_0 : constant limit

β_1 : coefficient of influence of the independent variable on the dependent variable

Fifth form:

The first model is represented by the general revenue variable as an interpreted or independent variable, and the window exchange rate variable as a dependent or approved variable
deltoid relationship

Depending on the above description, the functional relationship between the independent variables and the dependent variable will be as follows:

$$y_2 = \beta_0 + \beta_1 x_2 + u$$

Since: y_2 is the window exchange rate, and X_2 represents the general revenue

β_0 : constant limit

β_1 : coefficient of influence of the independent variable on the dependent variable

Sixth form:

The first model is represented by the public revenue variable as an explanatory or independent variable, and the interest rate variable as a dependent or dependent variable
deltoid relationship

Depending on the above description, the functional relationship between the independent variables and the dependent variable will be as follows:

$$y_3 = \beta_0 + \beta_1 x_2 + u$$

Since: y_3 the interest rate and X_2 represents the general revenue

β_0 : constant limit

β_1 : coefficient of influence of the independent variable on the dependent variable

Seventh form:

The first model is represented by the budget deficit variable as an explanatory or independent variable, and the money supply variable in the broad sense as a dependent or dependent variable
deltoid relationship

Depending on the above description, the functional relationship between the independent variables and the dependent variable will be as follows

$$y_1 = \beta_0 + \beta_1 x_3 + u$$

Since: y_1 the money supply, M_2 and X_3 represents the budget deficit

β_0 : constant limit

β_1 : coefficient of influence of the independent variable on the dependent variable

Eighth form:

The first model is represented by the budget deficit variable as an interpreted or independent variable, and the window exchange rate variable as a dependent or approved variable

deltoid relationship

Depending on the above description, the functional relationship between the independent variables and the dependent variable will be as follows:

$$y_2 = \beta_0 + \beta_1 x_2 + u$$

Since: y_2 is the window exchange rate, and X_2 represents the budget deficit

β_0 : constant limit

β_1 : coefficient of influence of the independent variable on the dependent variable

Ninth form:

The first model is represented by the budget deficit variable as an explanatory or independent variable, and the interest rate variable as a dependent or dependent variable

deltoid relationship

Depending on the above description, the functional relationship between the independent variables and the dependent variable will be as follows:

$$y_3 = \beta_0 + \beta_1 x_3 + u$$

Since: y_3 is the interest rate, and X_3 represents the budget deficit

β_0 : constant limit

β_1 : coefficient of influence of the independent variable on the dependent variable

Second: Results of estimating the impact of independent variables (public expenditures, public revenues, budget deficit) on the approved variables (money supply, window exchange rate, interest rate):

A) Estimating the effect of the independent variable overhead on each of the approved variables (money supply, window exchange rate, interest rate) using the regression model, as it was

concluded that the best model for estimation for the above three models is the double logarithmic model, and the results shown in the following table were reached :

Table No. (2)

The effect of the independent variable overhead on (money supply, window exchange rate, interest rate)

R²	Sig.	F	Sig.	T test value	parameter value	Parameter	dependent variable
0.84	0	86.54	0.338	0.99	1.698	B0	Logy1
			0	9.3	0.897	B1	
0.77	0	51.98	0	31.67	9.237	B0	Logy2
			0	-7.21	-0.1118	B1	
0.41	0.006	10.51	0.002	3.77	13.279	B0	LogY3
			0.006	-3.24	-0.634	B1	

Source / prepared by the researcher based on the outputs of the Eview program (12)

We note from table (2) the following:

1- The value of the fixed term B0 in the first estimated model is not significant under the level of significance (0.05), because the probability value of the t-test for the fixed limit of (0.338) is greater than the level of significance (0.05), that is, we accept the null hypothesis that states that the fixed limit is not significant, We also deduce the significance of the variable coefficient (Logx1) below the level of significance of 0.05, because the probability value of its t-test of (0.006) is less than 0.05. Therefore, we reject the null hypothesis which states that there is no significant effect of the public expenditures variable on the money supply LogY1 and we accept the alternative hypothesis that states that The existence of a moral effect, and this is consistent with the first hypothesis, which states that there is a morally significant impact relationship between public expenditures and money supply, and then through the foregoing, we conclude that there is an impact relationship of public expenditures on the money supply, and that this relationship is a positive relationship so that the change In public expenditures by one unit leads to a change in the money supply by 0.897, we

also note the significance of the value of F calculated below the level of significance (0.05), because the probability value for it has reached (0.006), which is less than (0.05), and this means that the estimated model as a whole is significant. Also, the value of the coefficient of determination (R^2) reached (0.84), which means that the independent variable explains (84 percent) of the changes in the money supply, which is a large value. As for the remaining percentage (16%), it is due to factors found within the error Random.

2- The value of the fixed term B_0 in the second estimated model is significant below the level of significance (0.05), because the probability value of the t-test for the fixed limit of (0.000) is less than the level of significance (0.05), i.e. we reject the null hypothesis that states that the fixed limit is not significant. We accept the alternative that states its significance, as well as deduce the significance of the variable coefficient ($\text{Log}x_1$) below the level of significance of 0.05, because the probabilistic value of the t-test of (0.000) is less than 0.05. The $\text{Log}Y_2$ window and we accept the alternative hypothesis that states the existence of the moral effect, and this is consistent with the first hypothesis which states that there is a morally significant effect relationship between public expenditures and the window exchange rate, and then through the foregoing, we conclude that there is an impact relationship for public expenditures on the exchange rate. The window, and that this relationship is a negative relationship so that a change in public expenditures by one unit leads to a change in the window price by 0.1118, we also note the significance of the calculated F value below the level of significance (0.05), because its probabilistic value has reached (0.000), which is less than (0.05), and this means that the estimated model as a whole is significant, and the value of the coefficient of determination (R^2) amounted to (0.77), which means that the independent variable explains (77%) of the changes in the window exchange rate, which is a large value, either the percentage. The remaining (23%) are due to factors found within the random error.

3- The value of the fixed term B_0 in the third estimated model is significant below the level of significance (0.05), because the probability value of the t-test for the fixed limit of (0.002) is less than the level of significance (0.05), i.e. we reject the null hypothesis that states that the fixed limit is not significant. We accept the alternative that states its significance, as well as deduce the significance of the variable coefficient ($\text{Log}x_1$) below the level of significance of 0.05, because the probability value of the t-test of (0.006) is less than 0.05, so we reject the null hypothesis that states that there is no significant effect of the public expenditures variable on the interest rate $\text{Log}Y_3$ and

we accept the alternative hypothesis that states the existence of the moral effect, and this is consistent with the first hypothesis which states that there is a significant effect relationship between public expenditures and the interest rate, and therefore through the above, we conclude that there is an influence relationship of public expenditures on the interest rate, and that this The relationship is negative, so that a change in public expenditures by one unit leads to a change in the interest rate by 0.634. We also note the significance of the calculated F value below the level of significance (0.05), because its probabilistic value has reached (0.000) which is less than (0. 05) This means that the estimated model as a whole is significant, and the value of the coefficient of determination ((R2) was (0.41), and this means that the independent variable explains (41%) of the changes in the

The interest rate is a large value. The remaining percentage (59%) is due to factors that are within the random error.

B) Estimating the impact of the independent variable on public revenues on each of the approved variables (money supply, window exchange rate, interest rate) using the regression model, as it was concluded that the best estimation model for the above three models is the double logarithmic model, and the results shown in the following table were reached :

Table No. (3)

The effect of the independent variable on public revenues on (money supply, window exchange rate, interest rate)

R²	Sig.	F	Sig.	T test value	parameter value	Parameter	dependent variable
0,69	0,000	36,45	0,393	0,88	2,247	B0	Logy1
			0,000	6,04	0,862	B1	
0,84	0,000	81,93	0,000	36,64	9,475	B0	Logy2
			0,000	-9,05	-0,131	B1	
0,60	0	23,61	0	21,78	#####	B0	Logy3
			0,000	-4,86	-0,0001	B1	

Source / prepared by the researcher based on the outputs of the Eview program (12)

We note from Table (3) the following:

1- The value of the fixed limit B_0 in the first estimated model is not significant under the level of significance (0.05), because the probability value of the t-test for the fixed limit of (0.393) is greater than the level of significance (0.05), that is, we accept the null hypothesis that states that the fixed limit is not significant, We also deduce the significance of the variable coefficient (Logx_2) below the level of significance of 0.05, because the probability value of its t-test of (0.000) is less than 0.05. Therefore, we reject the null hypothesis which states that there is no significant effect of the public revenue variable on the money supply LogY_1 and we accept the alternative hypothesis that states that The existence of a moral effect, and this is consistent with the first hypothesis, which states that there is a significant significant effect relationship between public revenues and money supply, and then through the foregoing, we conclude that there is an influence relationship of public revenues on the money supply, and that this relationship is a positive relationship so that change In public revenues by one unit, it leads to a change in the money supply by 0.862. We also note the significance of the calculated F value below the level of significance (0.05), because the probability value for it has reached (0.000) which is less than (0.05), and this means that the estimated model As a whole, the value of the coefficient of determination (R^2) reached (0.69), which means that the independent variable explains (69%) of the changes in the money supply, which is a large value. As for the remaining percentage, which is (31%), it is due to factors found within the error Random.

2- The value of the fixed term B_0 in the second estimated model is significant below the level of significance (0.05), because the probability value of the t-test for the fixed limit of (0.000) is less than the level of significance (0.05), i.e. we reject the null hypothesis that states that the fixed limit is not significant We accept the alternative that states its significance, as well as deduce the significance of the variable coefficient (Logx_2) below the level of significance of 0.05, because the probability value of the t-test of (0.000) is less than 0.05, so we reject the null hypothesis that states that there is no significant effect of the public revenue variable on the exchange rate The LogY_2 window and we accept the alternative hypothesis that states the existence of the moral effect, and this is consistent with the first hypothesis which states that there is a significant effect relationship between public revenues and the exchange rate of the window, and then through the foregoing, we conclude that there is an influence relationship of public revenues on the exchange rate window, and that this relationship is negative so that a change in public revenues by one unit leads to a change in the window price by 0.131. 000), which is less than (0.05), which means that the

estimated model as a whole is significant, and the value of the coefficient of determination (R^2) amounted to (0.88) . This means that the independent variable explains (88%) of the changes in the exchange rate of the window, which is a large value, either the ratio. The remaining (12%) are due to factors found within the random error.

3- The value of the fixed term B_0 in the first estimated model is significant below the level of significance (0.05) , because the probability value of the t-test for the fixed limit of (0.000) is less than the level of significance (0.05) , i.e. we reject the null hypothesis which states that the fixed limit is not significant, as well. We conclude the significance of the variable coefficient (x_2) below the level of significance of 0.05 , because the probability value of its t-test of (0.000) is less than 0.05 . Therefore, we reject the null hypothesis which states that there is no significant effect of the public revenue variable on the interest rate Y_3 and we accept the alternative hypothesis that states that there is a significant effect, and this is consistent with the first hypothesis which states that there is a significant effect relationship between public revenues and the interest rate, and therefore through the foregoing, we conclude that there is an impact relationship of public revenues on the interest rate, and that this relationship is a negative relationship so that a change in revenues. The general model by one unit leads to a change in the interest rate by 0.0001 , we also note that the calculated F value is not significant below the level of significance (0.05) , because the probability value for it has reached (0.000) which is less than (0.05) , which means that the model is significant. It is estimated as a significant whole, and the value of the coefficient of determination (R^2) amounted to (0.60) , which means that the independent variable explains (60%) of the changes in the interest rate, which is a good value. The remaining percentage (40%) is due to factors found within the error. Random.

C) Estimating the impact of the independent variable, the budget deficit on each of the approved variables (money supply, window exchange rate, interest rate) using the regression model, as it was concluded that the best estimate model for the above three models is the inverse model, as it was imposed:

$((w=1/x_3, z_1=1/y_1, z_2=1/y_2, z_3=1/y_3))$ and the results shown in the following table were reached:

Table No. (4)

The effect of the independent variable budget deficit on (money supply, window exchange rate, interest rate)

dependent variable	Parameter	parameter value	T test value	Sig.	F	Sig.	R²
Z1	B0	0.0000002	3.24	0.000	195.10	0.000	0.92
	B1	0.659	13.97	0.000			
Z2	B0	0.0000001	3.35	0.000	295.43	0.000	0.90
	B1	0.471	4.69	0.000			
Z3	B0	0.008	55.91	0.000	24.92	0.000	0.61
	B1	-49.848	-4.99	0.000			

Source / prepared by the researcher based on the outputs of the Eview program (12)

We note from Table (4) the following:

1- The value of the fixed term B0 in the first estimated model is significant below the level of significance (0.05), because the probability value of the t-test for the fixed limit of (0.000) is less than the level of significance (0.05), that is, we accept the null hypothesis that states that the fixed limit is not significant, as well. We conclude the significance of the coefficient of the variable (w) below the level of significance of 0.05, because the probability value of its t-test of (0.000) is less than 0.05. Therefore, we reject the null hypothesis which states that there is no significant effect of the budget deficit variable on the money supply Z1 and we accept the alternative hypothesis that states that there is The moral effect, and this is consistent with the first hypothesis which states that there is a significant significant effect relationship between the budget deficit and the money supply, and then through the foregoing, we conclude that there is an influence relationship of the general budget on the money supply, and that this relationship is a positive relationship so that any

change In the general budget by one unit that leads to a change in the money supply by 0.659, we also note the significance of the calculated F value below the level of significance (0.05), because its probability value has reached (0.000) which is less than (0.05), which means that the estimated model as a whole is significant, as well as The coefficient of determination (R^2) reached (0.92), which means that the independent variable explains (92%) of the changes in the money supply, which is a large value. As for the remaining percentage, which is (8%), it is due to factors found within the random error.

2- The value of the fixed term B_0 in the second estimated model is significant below the level of significance (0.05), because the probability value of the t-test for the fixed limit of (0.000) is less than the level of significance (0.05), i.e. we reject the null hypothesis that states that the fixed limit is not significant We accept the alternative that states its significance, as well as deduce the significance of the variable coefficient (W) below the level of significance 0.05, because the probabilistic value of its t-test of (0.000) is less than 0.05, so we reject the null hypothesis which states that there is no significant effect of the budget deficit variable on the exchange rate Window Z_2 and we accept the alternative hypothesis that states the existence of the moral effect, and this is consistent with the first hypothesis which states that there is a significant significant effect relationship between the budget deficit and the window exchange rate, and then through the above, we conclude that there is a relationship of the effect of the budget deficit on the exchange rate The window, we also note the significance of the calculated F value below the level of significance (0.05), because the probability value for it has reached (0.000), which is less than (0.05), and this means that the estimated model as a whole is significant, and the value of the coefficient of determination (R^2) reached (0.90). This means that the independent variable explains (90 %) of the changes in the window exchange rate, which is a large value. As for the remaining percentage, which is (10%), it is due to factors found within the random error.

3- The value of the fixed term B_0 in the first estimated model is significant under the level of significance (0.05), because the probability value of the t-test for the fixed limit of (0.000) is less than the level of significance (0.05), that is, we reject the null hypothesis that states that the fixed limit is not significant, as well. We conclude the significance of the coefficient of the variable (W) below the level of significance of 0.05, because the probability value of its t-test of (0.000) is less than 0.05. Therefore, we reject the null hypothesis which states that there is no significant effect of

the budget deficit variable on the interest rate Z_3 and we accept the alternative hypothesis that states On the existence of the moral effect, and this is inconsistent with the first hypothesis which states that there is a significant significant effect relationship between the budget deficit and the interest rate, and therefore through the foregoing, we conclude that there is no relationship to the effect of the budget deficit on the interest rate, as well as the impermanence of the calculated F value. Below the level of significance (0.05), because the probability value for it has reached (0.000) which is less than (0.05), which means that the estimated model as a whole is significant, and the value of the coefficient of determination (R^2) reached (0.69) and this means that the independent variable explains (69 %) of changes in the price of alpha It is a good value. The remaining percentage (31%) is due to factors found within the random error, while we note that there is no autocorrelation of errors as the value of (D.W = 0.59) (because it lies between 2 and 4-du).

Conclusions and Recommendations:

First: the conclusions

1- The government budget constraints are one of the most important reasons that require coordination between the fiscal and monetary policies, and one of the most important of these constraints is the annual deficit constraints in the general budget.

2- The budget deficit is due to the large increases in public spending, and the decrease in the internal flexibility of revenues, and that financing the budget deficit in particular through monetary issuance leads to a significant increase in the money supply and thus an increase in the rate of inflation.

3- Fiscal policy plays a key role in determining how to manage monetary policy and the goals that this policy aims to achieve.

4- The estimated standard model proved that public expenditures, public revenues and the budget deficit play an important role in influencing the money supply variable through the positive relationship between them and as reflected by the parameters of the independent variables.

5- We conclude through the application of the standard model that there is an impact relationship for public expenditures on the money supply, and that this relationship is a positive relationship so that a change in public expenditures by one unit leads to a change in the money supply by 0.897, as for public revenues we conclude that there is an impact relationship for public revenues on the money supply, and that this relationship is a positive relationship so that a change in public revenues by one unit leads to a change in the interest rate by 0.862, while we conclude that there is an influence relationship of the general budget on the money supply, and that this relationship is a positive relationship so that any change in the budget The general public by one unit leads to a change in the money supply by 0.659.

Second: Recommendations

1- The level, priorities and pattern of public spending in Iraq need a comprehensive review in light of the continuing budget deficit and the high share of current spending, which calls for restructuring and organizing public spending, especially current spending, in a manner that enhances the productivity of public spending and reduces the price effects of this type of spending as a result The lack of flexibility of the production system, as well as achieving coherence and consistency between spending and revenues in the budget, and government spending programs should not be just urgent measures for emergency situations.

2- The incompatibility between the general budget deficit and total funding calls for a review of the government's borrowing policy, in a way that limits the excess of borrowing, especially external in light of the low deficit and the achievement of a budget surplus, and linking the volume of government borrowing to the need for additional financial resources to implement development plans.

3- Coordination between the fiscal and monetary policies in a way that contributes to reducing the inflationary effects of the spending policy on the one hand and enhancing the efficiency of achieving macroeconomic goals on the other hand.

4- The importance of encouraging the development of the financial market and the extent to which it keeps pace with the institutional frameworks used in developed countries, as it is considered one of the necessities of general balance and economic growth.

5- Adopting the principle of transparency and the comprehensive future vision when preparing the budget, as transparency consists in disclosing information related to the general budget, and therefore the society recognizes its role, especially when there is a budget deficit and public debt. As for the future vision, it is based on the use of economic efficiency standards from in order to achieve budget goals.

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