Measuring the impact of fiscal policy on some macroeconomic variables in Iraq for the period (2004-2020)

Ali Fahem Jafar(1)

alswedyali84@gmail.com

Economics Department College of Administration and Economics University of Al-Qadisiyah , Iraq Assist prof. Dr. Fadhil Abbas Kadhim(2) <u>fadhil.abbas@qu.edu.iq</u>

Abstract

Financial policy occupies an important position among other policies, because it can play a major role in achieving the multiple goals sought by the national economy, thanks to its multiple tools, which are among the most important tools for managing economic resources in achieving economic development and eliminating problems that impede stability and economic balance. And one of the economic policies that have a significant role in influencing economic activity. The research aims to demonstrate the impact of fiscal policy on economic variables in Iraq in light of the evolution of the structure of fiscal policy during the research period, and some macroeconomic variables will be studied, expressed in (GDP, inflation Unemployment by focusing on two main aspects of fiscal policy, namely (public spending and public revenue), and fiscal policy derives its importance from its tools as public expenditures affect national economic activity, as they affect consumption, savings, and investment, and revenues represent the resources they obtain. The state is to cover its expenses, and the more the state's revenues and investment increase, the greater the state's economic growth.

Key words: - Fiscal policy, macro variables, spending, revenues, domestic debt

An introduction:-

The Iraqi economy has received great attention from economic researchers, as its economy has suffered from structural and economic imbalances, which have led to a decline in economic performance in general, an increase in the budget deficit, and a rise in inflation and unemployment rates. Therefore, fiscal policy and through its tools constitute a system for economic stability, and because of the position that fiscal policy occupies in the modern era and the more important role it has in practice, it has become a major tool of economic policy in directing the economic path, and addressing what is exposed It has economic crises, and striving to achieve general economic balance and its development through some macroeconomic variables. Rather, the fiscal policy has to balance the state's finances in a manner consistent with the balance of the national economy, and thus the impact of the fiscal policy becomes multifaceted and its importance increases In terms of the trend from quantity to type, and this is the focus of this research.

The Research problem:

The research problem starts from the following question: Is there an impact of fiscal policy on some macroeconomic variables in Iraq for the period (2004-2020)?

The Research hypothesis :

The research starts with the hypothesis that :

1. The role of fiscal policy had a clear impact on output, inflation and unemployment.

2. The existence of a direct relationship between the variables of fiscal policy and some variables of the Iraqi macroeconomic, we find the effect of fiscal policy on the output and the rate of inflation represented by the public spending variable.

The goal of the research :

This research aims to know the most important financial policy developments in the Iraqi economy, and to evaluate their descriptive and quantitative effects on the macroeconomic policy variables to achieve economic and social stability.

The Research Methodology :

This research deals with the descriptive and applied econometric aspect to demonstrate the impact of fiscal policy on some Iraqi macroeconomic variables through the use of modern methods in studying the relationship between economic variables, as well as identifying the characteristics of the time series of these variables,

Static tests, VAR model and ADF and Phillips-Perron (P-P) tests were applied.

Research structure

In order to achieve the objective of the study, it was divided into two main topics. The first topic dealt with the theoretical and conceptual framework of the study the concept, importance and tools of fiscal policy as well as the framework of the relationship between financial policy and some macroeconomic variables, while the second topic dealt with analyzing the results of measuring financial policy on some macroeconomic variables in Iraq for the period (2004-2020).

The theoretical aspect :

Smoothing

The first requirement: Fiscal Policy concept

The fiscal policy is part of the economic policy included in the economic system and is of importance to the state. Fiscal policy is the use of public revenues, public expenditures and public debt to achieve balance between the two sides of the countries 'public budget and to achieve high levels of total output and prevent economic inflation (¹).

Arthur and others defined it as the set of changes that occur in both taxes and government spending that would affect the gross domestic product $(^2)$, and it was also known as the use of expenditures and taxes to change the overall economic output $(^3)$.

Fiscal policy was also defined as the government's role in using the tools of fiscal policy represented in taxes and public spending to achieve economic goals (⁴), or it is the government's use of taxes and public spending to influence aggregate demand and change macroeconomic outputs (⁵).

We conclude from the foregoing concepts that all agree that fiscal policy is the state's tool for influencing economic activity in order to achieve the economic, social and political goals that it seeks to achieve.

Second Requirement: Fiscal Policy Targets

Through the point of view of politicians and economists, the objectives of the fiscal policy are considered an effective tool for achieving the goals of economic and social policies, as they assume the greatest burden in achieving the goals and overall goals, and this importance came from the expansion of the scope of their influence, which extended to include aspects of economic and social life. Whereas, the fiscal policy aims to achieve a set of objectives, namely:

1- Achieving the optimal use of economic resources and achieving economic efficiency by using financial means in order to achieve economic and social welfare (⁶).

2- Achieving the state of economic stability and addressing the unemployment problem by increasing job opportunities in the public sector or by encouraging the private sector, as well as addressing the problem of inflation.

3- Achieving high economic growth, which is expressed in the per capita gross domestic product, which is an indicator of economic progress among countries and which reflects the level of economic wellbeing of individuals (7).

4- Achieving full employment of the economic resources and production capacities available within the country, and then the government has a catalytic role in the event of a shortage in aggregate demand (8).

5- Achieving economic development as the fiscal policy plays a role in achieving economic development by mobilizing all financial, human and material resources and providing all the necessary requirements to achieve this goal (9).

The Fiscal Policy Tools :

The financial policy relies on a set of tools in order to achieve its basic objectives that are consistent with the economic, social and political aspirations of the state and to play an important role in influencing economic activity. These means and tools are as follows:

First: public revenues:

The role of the state's evolution and its transfer from the guardian state to the intervening state and then to the producing state led to the development of the theory of public revenues and the multiplicity of its forms. Public revenues are defined as a group of monetary amounts or funds obtained by the state for the purpose of covering public expenditures and putting the state's financial policy into effect (10).

Second: Public Expenditures: -

The public expenditure can be defined as a monetary amount that a public person spends with the intention of achieving a public benefit. Through the aforementioned definition, "the elements of public spending can be defined as a cash amount and not in kind. A public person is responsible for spending (the state or one of its institutions) (¹¹).

Third: The General Budget: -

As the general budget is among the most important financial policy tools adopted by the government to implement its economic and financial policy, and through it determines how to obtain public revenues and how to use them in order to ensure the regulation of public spending and achieve economic stability.

Fourth: Internal public debt: Public debt is another source of financing public expenditures, but it is sometimes considered an exceptional source. In order to cover this deficit, the state resorts to borrowing from natural and legal persons inside the country and accordingly, the internal public debt is defined as the money obtained by the state through resorting to the public or commercial banks or other financial institutions in return for its commitment to pay a specified annual interest. For the sums paid and for recovering the value of these sums in one payment or in installments according to the terms of the debt $\binom{12}{2}$.

The second requirement: the framework of the theoretical relationship between fiscal policy and some macroeconomic variables

We will address here the framework of the relationship between the financial policy in terms of its impact on the macro variables, as follows:

First - the effect of fiscal policy on inflation: - There are several economic reasons through which inflation can arise, including attracting demand (positive demand shock) or due to cost payment (negative supply shock). The optimism of businessmen, for example, will increase their demand on the

factors of production, thus raising their price, as well as that individuals' access to high incomes will increase their demand for consumer goods, and the expansionary economic policy (financial) also leads to the occurrence of inflation when the economy is in a state of full employment $(^{13})$.

Whereas, the contractionary fiscal policy is used to confront inflation through the use of its tools, including government spending, as the financial authority reduces its spending, which is one of the components of aggregate demand, and accordingly, this demand will decrease and then prices decline (¹⁴). Taxes can also be used to treat inflation, as the financial authority increases the tax rate and then decreases disposable income for consumers, and then their consumption spending will decrease, and overall demand will decrease and prices decrease (¹⁵). It is also possible to reduce government spending while increasing taxes together, which will lead to lower aggregate demand and hence prices.

Second - The effect of fiscal policy on the gross domestic product: Fiscal policy is one of the important economic policies and affects the gross domestic product through its economic tools, as the fiscal policy is influenced by the public spending policy on the gross domestic product, as it showed the Keynesian analysis through the use of Government spending as a tool of fiscal policy is considered an effective means of influencing the level of economic activity, through the effect of this spending policy on the level of demand and thus the effect on the size of the gross domestic product. Keynes explained the relationship between Public spending and GDP growth in the short term, given that public spending is an external variable, and through the Keynesian model, the reduction in public spending negatively affects demand and the size of income directly and creates a negative multiplier effect that leads to a decrease in the volume of employment, and we may find a negative relationship between public spending and output growth In some countries, due to several reasons, foremost of which is the predominance of military spending over other types of spending and directing public spending to nonproductive sectors does not contribute to increasing the rate of output growth, and through the state's contribution to aggregate demand in order to achieve economic stability, it increases public spending. In times of deflation and limiting it in times of expansion and prosperity, so that the government intervenes through the policy of public spending in the economy in two ways. An inflationary gap, which is due to aggregate demand greater than supply, the government cuts public spending to reduce aggregate demand, bringing GDP back to the full employment level $(^{16})$.

As for the effect of tax on GDP, its role is limited to achieving financial resources to cover expenditures only, but recently we find that the state is interfering in economic life by imposing taxes, such as using it to affect the efficiency of resource use by influencing the relative prices of products and production factors as Changing prices upward may be related to taxation. The tax system must take into account the ability of individuals to satisfy various needs, i.e. ensuring the level of consumption, as well as maintaining their ability to carry out capital accumulation processes for the production process. Taxes can negatively affect the ability of individuals to work, by reducing their productive capacity, and this occurs in the event that taxes deprive individuals of a part of their income and thus reduce their necessary consumption. The effect of fiscal policy on GDP is through management Public debt, as the high ratio of this debt to the gross domestic product has a negative impact on economic activity, which pushes the government through its fiscal policy to raise taxes to finance it, as the public debt increases pressure on it and raises real interest rates and the government competes with private investment.

Third - The effect of fiscal policy on unemployment:

The Fiscal policy played a large and important role in influencing unemployment, as the role of fiscal policy was through public spending, which is one of the most important tools of fiscal policy that is used to influence economic activity, as many economists prefer to detail these Tools due to the effectiveness of this tool in achieving development in addition to its limited negative effects on the economy compared to other tools, and Keynesian economic theory believes that this is the most appropriate means to raise the level of economic performance and achieve high operating levels, and therefore in cases of deflation an increase in the level of public spending To stimulate effective demand which contributes to the high level of consumption, production and employment. The state can avoid the occurrence of the phenomenon of unemployment through public spending policy, as the presence of increasing unemployment means a decrease in effective aggregate demand, which affects the producer's desire to expand production due to the decrease in prices. It may also lead to stopping some production plans, which enters the economy in a vicious circle of unemployment and a decline in aggregate demand, and here the expansionary public spending policy is capable of achieving economic recovery, and therefore the public spending policy plays an important role in addressing labor market imbalances. Economists agree that there is an inverse relationship between public spending and unemployment rates, meaning that the high rate of government spending, especially investment, reduces the level of unemployment $(^{17})$.

As for the impact of taxes on unemployment, which is one of the main components of holistic medicine, and one of the most important means that the government uses to stimulate and restrict economic activity, and the use of this tool does not differ much from the tool of public spending in dealing with the problem of unemployment. By reducing the income tax, which would contribute to increasing the level of consumer demand, then investment, and thus an increase in employment.

The Practical aspect :

Analyzing the results of measuring the fiscal policy on some macroeconomic variables in Iraq for the period (2004-2020)

First . Characterization and formulation of the standard form

To demonstrate the effect of fiscal policy on some Iraqi macroeconomic variables, we use the (VAR) model, which is based on studying the dynamic effects between the model variables, which are as follows:

(Gdp): Gross Domestic Product, Ep: Public Expenditure, Ind: Domestic Debt, Pr: Public Revenue, Inf: Rate of Inflation, Um: Unemployment Rate)

The general model for vector autoregressive (VAR) is as follows:

As:

(Yt): vector of endogenous variables (Gdp, pe, ind, pr, inf, um)

(a0): constant term vector (nx1)

(): The matrix of transactions representing short-term variables (nxn).

(Γ): Matrix of transactions for long-run (nxn) variables

(U) The random error vector.

Second: Description of the form data.

The statistical data were obtained from separate sources for (non-oil GDP (Gdp), government spending (ep), internal public debt (ind), public revenues (Pr), unemployment rate (um) and inflation rate (inf).

The model was estimated in the period (2004-2020) with quarterly data by (65) views. Table (1) shows the results of describing the variables used in the model under study. It can be seen from The table below, that the gross domestic product (Gdp) reached its highest value (273587) points during the fourth quarter of (2017) and its lowest value (53,235 points during the first quarter of the year (2004), and the arithmetic mean (187399), and the median (203511.3), the standard deviation (66639.46), and with a probability less than (0.05), reaching 0.036). While government spending (ep) had its highest value (119127) points during the second quarter of (2013) and its lowest value (29246) during The third quarter of 2004 and its arithmetic mean (117709.6), the median (88585.5), and the standard deviation (66639.46, with a probability less than (0.05), amounted to (0.039).

		Table (1)			
the statistical description of the	e financial and m	nacro variable	es for the peri	od (2004-20)20)

Gdp	Ер	Pr	Ind	Inf	Um	
187399	117709.6	63367.22	18734.68	110.84	13.89	Mean
203511.3	88585.5	60935.25	8304.5	109.52	12.58	Median
273587	39031	109607.0	47678	148	26.8	Maximum

53235	26375	10656	4455	36.4	10.6	Minimum
66639.46	93717.65	2728.76	830.3	28.87	3.44	Std. Dev.
-0.49	2.06	-0.117	0.722	-0.914	1.77	Skewness
1.95	6.20	2.35	1.67	3.34	6.01	Kurtosis
5.61	74.1	1.26	10.43	9.37	58.66	Jarque-Bera
0.036	0.000	0.0035	0.0023	0.0042	0.000	Probability
12180	76511	41188	12177	7204.9	903.0	Sum
2.84	5.62	4.76	1.82E+10	53376.5	758.95	Sum Sq. Dev.
65	65	65	65	65	65	Observations

As for the internal public debt (ind), its highest value was (47678) points during the first quarter

From the year (2017) and its lowest value (32142) points in the first quarter of the year (2015), with an arithmetic mean (18734.68), a median (8304.5), a standard deviation (830.3) and a probability of less than (0.05) amounting to (0.0023).

The highest value of public revenues was (109607.0) during the first quarter of 2012 and the lowest value (10656) during the first quarter of 2018 with an account mean (63367.22) and a mediator.60935.25), a standard deviation (2728.76), with a probability less than (0.05) of (0.0035).

While the inflation index (inf) was its highest value (148) points during the first quarter of (2015) and its lowest value (36.4) points during the first quarter of (2004), with an arithmetic mean (110.8), the median (109.2), and the deviation The standard (28.27), with a probability less than 0.05, as it reached (0.0042). As for the unemployment rate index (um), its highest value was (26.8) points during the first quarter of 2004 and its lowest value (10.6) points during the first quarter of 2014. , And with my mean (13.89), the median (12.58), the standard deviation (3.44), and zero probability.

Third: Unit root tests:

Before estimating, the time series was tested with respect to the presence of the unit root in the variables of the basic model and equation. By applying the tests of both developed Dicky Fuller -Extended - (ADF), and Phillips - Peron (PP), at level (level) and at the first and second difference (Differences: 1,2) and under hypotheses without a categorical, interrupted, interrupted, and temporal direction . Table (2) and (3) illustrate the statistical results extracted through the application of (ADF) and PP test), the critical value and at a significant level (1%), (5%), (10%), and the dormancy of the variables was categorical and time trend.

Variabl e	Level		1 st Difference	Critical value			
	ADF test	Prob.	ADF test	Prob.	1%	5%	10%
Gpd	-2.2522	0.4519	-3.6260**	0.0368	-4.1372	- 3.4952	-3.176
ер	-1.8230	0.3657	-3.4140*	0.0148	-3.5574	-2.9165	-2.5961
ind	- 3.6289* *	0.0367			-4.1408	- 3.4969	-3.1775
pr	-2.9324	0.1615	-4.7779*	0.0016	-4.1408	-3.4969	-3.1775
inf	-2.9566	0.1538	-4.1215**	0.0115	-4.1756	-3.5130	-3.1868
um	-0.8871	0.7856	-3.499**	0.041	-4.1213	-3.4878	-3.1723

Table (2)ADF test results for unit root for financial variables for the period (2004-2020) (quarterly)

Source: E-views results 10. *: 1% significance level. **: significance level 5%. ***: morale level 10%.

The results obtained from the ADF test showed that the time series of the variable (Gdp) was not static at its original levels, as the estimated value of it was greater (or the absolute value smaller) than the critical value, which means accepting the H0 null hypothesis that the variables are not static at their levels, i.e. It contains the root of the unit. Therefore, the test was performed by taking the first difference

and using all the first hypotheses, and it becomes clear to us that the estimated value of the variable (Gdp) of (-3.6260) is smaller than the (critical) tabular value of (-3.4952) at a level of significance (5%) and with a probability less than (0.05) reached (0.036).

As for the variable series (ep), it was also unstable at the level, as the estimated value was greater than the tabular value, i.e. accepting the hypothesis of the existence of a unit root in the time series. When taking the first difference, it was found that the estimated value of government spending, amounting to (-3.4140), is smaller than the critical value of (-2.9165) at a significant level (1%) and with a probability less than (0.05) amounting to (0.014).

While the variable (ind) series was stable in its original levels, which means rejecting the null hypothesis of the existence of a unit root and accepting the alternative hypothesis that the series stability of the internal public debt

As the estimated value was (-3.6289) smaller than the critical value of (- 3.4969) at a significant level (5%) and with a probability less than (0.05) amounting to (0.036).

As for the variable (pr) series, it was non-static at the level and in the first difference as well as the estimated value was greater than the critical value at the first level and difference. In other words, the acceptance of the null hypothesis of the existence of a unit root in the net general budget series. When taking the second difference for the series, the estimated value was (-4.7779), which is smaller than the critical value of (-4.1408) at the level of significance (1%). That is, accepting the alternative hypothesis saying the stability of the time series of the variable.

The estimated value of the variable (inf) of (-4.1215) was smaller than the tabular value of (-3.5130) and at a significant level (5%). With a probability less than (0.05), it was (0.011).

The estimated value of the variable (um) of (-3.499) was smaller than the tabular value of (-3.487) and at a significant level (5%) with a probability of less than (0.05) amounting to (0.045). Which means accepting the alternative hypothesis: H1, which says that the variables are still in their first differences.

Given the lack of integration of the time series for the model variables at the same level, To support the results of the ADF test, the (P-P) test was adopted in testing the static time series of the model variables, because of its better and accurate statistical dynamic ability, especially in small-sized samples.

It is evident from the results of the Phillips-Peron test that the time series of the model variables: (Gdp, ep, ind, inf, um) are not static in the level and with all assumptions, as the calculated values for these series were greater than the tabular values at significant levels (1%, 5%). (10%), which means that the null hypothesis (H0) is accepted with the presence of the unit root.

Table (3)

Results of (P-P) test of the unit root for financial and macro variables for the period (2004-2017) (Quarterly)

Variable			1 st 2 ^{end} Difference	Critical value			
	P-P test	Prob.	P-P test	Prob.	1%	5%	10%
Gpd	-1.7445	0.7177	-3.6699**	0.033 1	-4.1372	-3.4952	-3.1766
Ер	-1.4587	0.8317	-6.3018**	0.004 0	-4.1408	-3.4969	-3.1775
ind	-1.2776	0.8831	-8.3019*	0.000 0	-4.1408	-3.4956	-3.1775
pr	- 4.9170*	0.0010			-4.1338	-3.4936	-3.1756
Inf	-1.3939	0.8 519	-8.4084*	0.000	-4.1408	-3.4969	-3.1775
Um	-1.8415	0.6728	-3.5270**	0.045	-4.1104	-3.4827	-3.1693

Source: E-views results 10.

*: 1% significance level.

**: significance level 5%.

***: morale level 10%.

While the time series of public revenues (pr) was static at the level - as the calculated value for this series (-4.9170) was smaller than the tabular value of (4.1338) at a significant level (1%) with a probability less than (0.05) amounting to (0.0010).

When performing the test (PP) by taking the first difference of the first three variables and using all the first hypotheses, it becomes clear that the estimated value of the variable (Gdpwo) of (-3.6699) is smaller than the tabular value of (-3.4952) at the level of significance (5%) and with a probability less than (0.05) reached (0.0331).

As for the estimated value of the variable (ep), greater than the critical value, and when taking the second difference, the estimated value of (-6.3018) was smaller than the tabular value -4.1408) at a significant level (1%), with a probability close to zero (0.040).

While the estimated value of the variable (ind) is greater than the tabular value at the first difference and after taking the second difference of the series, it became clear that the estimated value of the variable at the second difference, which amounts to (-8.3019), is smaller than the tabular value (-4.1408) and at the level of significance (1%) and with probability Zero (0.000). As for the estimated value of the variable (inf) which is (-4.4084), it is smaller than the tabular value of (-1.4408) and at the level of significance (1%) and with zero probability. The estimated value of (um) variable (-3.5270) was smaller than the tabular value of (-3.4827) at a significant level of (0.05) with a probability of (0.045).

The Conclusions and recommendations :

The Conclusions :

1- The modern trends of the fiscal policy did not work on the approach of finding various sources of financial return, but rather continued on the old approach represented by the oil source as a main pillar of the financial return, which made the general budget lose the flexibility to confront fluctuations in the oil financial return and concentrated high percentages of the GDP with the oil commodity Neglect of public resources and funds from taxes, which made the fiscal policy lose the technique of self-stability.
2- The stability results of the financial and macro variables model showed that the general revenue series was static at the level while the rest of the financial variables were not static in the level and upon taking the first difference, the output and public spending series became static at the first difference. Whereas, the public debt series remained unstable with the first difference and became static when the second difference was taken.

3-The causal results of the financial and macro variables model showed the existence of a one-way causal relationship of public spending and internal public debt to output and inflation, and the absence .of a causal relationship between them and the unemployment rate

4- By studying the results of the Phillips-Peron test, it becomes clear that the time series of the model variables: (Gdp, ep, ind, inf, um) are not static in the level and with all assumptions, as the calculated values for these series are greater than the tabular values at significant levels (1 %, 5%, 10%), which means that the null hypothesis (H0) is accepted with the presence of the unit root.

The Recommendations :

In light of the conclusions, recommendations were reached, represented by: -

1- The need for the government, when formulating spending plans in the federal budget, to link the government spending ceiling to the growth rate of GDP, and to reduce the planned and actual fiscal deficit to its lowest levels, as the period in question proved the existence of a closely related relationship between public spending in order to reduce problems In the link.

2- Diversifying the structure of public revenues in preparation for the exit of the Iraqi economy from the rentier pattern, in order to protect the economy and the public budget from large or sudden fluctuations in the revenues obtained from oil, which achieves stability in the levels of government spending and enhances its efficiency on the one hand and to tighten the screws on the channel that transmits the repercussions of crises and shocks Economic.

References :

1- Mustafa Salman, 2000, Principles of Macroeconomics, 1st Edition, Dar Al Masirah for Publishing and Distribution, Amman, Jordan, p. 267.

2- Arthur Ossulfan and et al , Macroeconomics, First Edition, Goldsmith Publishers, Beirut, 2014, p.:256

3- Bradley R. Schiller, The macro economy today, 9th Ed, McGraw-Hill Irwin, Boston, 2003, p: 171

4- Bassam Al-Hajjar and Abdullah Rizq, Macroeconomics, First Edition, Lebanese Dar Al-Manhal for Studies, Beirut, 2010, p. 285

5- Bradley R. Schiller. The Macro Economy Today12 th Edition, McGraw - Hill, New York, 2010, P225

6- Taher Fadel Al-Bayati and Khaled Tawfiq Al-Shammari, Introduction to Economics, Micro and Macro Analysis, Second Edition, Wael Publishing House 2011, p. 380

7- Muhammad Taqah and others, (Fundamentals of Micro and Macroeconomics), second edition, Athraa Publishing House and University Library, Jordan, 2009, p. 365

8- Haydar Yunus Al-Mousawi, Modern Thought for Economic Policies, First Edition, Karbala Center for Studies and Research, Karbala, 2010, p.

9- Tariq Muhammad Al-Hajj, Public Finance, First Edition, Safaa Publishing House, Amman, 2009, p.206

10- Yunus, Mansour Milad, "Principles of Public Finance", The Technical Corporation for Printing and Publishing, 2004, p. 53.

11- Yunus, Mansour Milad, previous source, p.20.

12- Adeel Falih Al-Ali, Public Finance and Financial Legislation, University Publishing and Distribution House, Mosul, 2002, p.: 153

13- Rashad Al-Assar and Riyadh Al-Halabi, Money and Banks, First Edition, Safaa Publishing House, Amman, 2010, pp. 164-164.

14- Haytham Al-Zoghbi and Hassan Abu Al-Zayt, Foundations and Principles of Macroeconomics, First Edition, Dar Al-Fikr for Printing and Publishing, Amman, 2000, p. 205.

15- Arthur O Sullivan and others, op. cit, p214.

16- Walid Abdel Hamid Aayeb, Macroeconomic Effects of Government Expenditure Policy, AnApplied Standard Study of Economic Development Models, Hassan Egyptian Library, First Edition,Lebanon, 2010, pg 73.

17- Walid Abdel-Hamid Al-Ayeb, Macroeconomic Effects, Government Expenditure Policy, Hussein Al-Omariya Library, Beirut, 2010, pp. 161-162