

Effectiveness of Fiscal and Monetary Policies On the Egyptian Investments

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Abstracts: At comparing between fiscal and monetary policies, the results showed that fiscal policy is much effective than monetary policy because the government expenditure multiplier was 2.45, and is greater than the money supply multiplier that was 0.77 only. Applying fiscal policy let the government of Egypt has to keep the interest rate at minimum level in order to overcome what we call it crowding out phenomena reduction in the level of investment as the government expenditure increase. Most of the results obtained from table (2) adequate with the principle of macro economic theory, especially, the demand of money which is divided into two kinds transaction (phillip curve) and speculative demand for money equation (11) and the trade off between inflation and unemployment levels equation (10) also the relation between consumption and tax rate equation (4) it shows that the reduction in tax will has positive effect on aggregate demand through the increment in consumption.

Key words: Monetary policies, fiscal policy, general equilibrium model

INTRODUCTION

Economic demand management policies (Fiscal and Monetary) analyze the effect of changing in government expenditure and/or tax rates (fiscal policy), and money supply (monetary policy) on equilibrium output.

Since 1990 the fiscal and monetary reform include working out to reform the financial management, follow up the modernization of fiscal regulations and legislations in order to increase domestic resources, lower general budget deficit, follow up a monetary policy that preserves the exchange rate stability in accordance with the change into market mechanisms, making several important policies to handle the structural and monetary defects such as: the liberalization of the exchange rate, the interest rate, establishment of foreign exchange free market, implementation of privatization programs and the liberalization of the public sector and foreign trade.

Egypt has done several efforts to transfer from the managed economy into the free economy, a matter which reduces budget deficit and inflation rate to less than 3% and stabilizes the exchange rate. It helps as well liberalize its trade, overcome the barriers and restrictions on investment, privatize more than 50% of the public sector companies, so as the growth rate increased to 5%. During the period from 1991 till 1997, Egypt has succeeded in the economic reform program and the Egyptian economy has started to move towards further success. However, it has faced some difficulties due to the impacts that affected the world economy since 1997 because of the East Asian economic crisis which indulged the world economy in a slowdown period. Since that year the Egyptian economy has faced a collection of challenges represented in higher ratios of budget deficit, higher credit rates, reduced foreign exchange from oil revenues. Despite all such challenges, the Egyptian government has controlled the budget deficit through several economic procedures and legislative reforms in the field of customs, taxation and some important economic laws.

Research Problem:

Egypt, as a developing country, is currently suffering from many economic disturbances and was forced to reduce the rate of growth from 6% in 2007 to 4% in 2009. Moreover, the rate of unemployment has increased from 13.9% in 2007 to 14.2% in 2009, the inflation rate has increased from 2.9% in 2007 to 3.0% in 2009, and that of course has had its negative effect on the level of investment and balance of trade. According to the above statistical issues, the government of Egypt started to adopt the demand management policies (increase government expenditure and increase money supply in order to overcome these negative effects on investments.

Research Objective:

Objective of the research is to test the following null hypothesis by applying the government fiscal and monetary policies. This will not have a positive effect on Gross Domestic Product, and other economic variables in the Egyptian economy such as investment, consumption, wage rate, inflation, net exportation, and employment.

Methodology:

In order to achieve the above objective, the research will focus on the structure of the demand management fiscal and monetary policies, by using general equilibrium model, to measure the effect of each policy and that was through the effect of the multipliers concept (government expenditure and money supply) on Gross Domestic Product (GDP) and other economic variables in the Egyptian Economy. According to the results of the analysis it can be accept or reject the null hypothesis and if it rejected this means that, a good strategy can be build, to reduce the negative effects on increasing the Egyptian investments.

Fiscal and monetary policies are generally thought of demand management policies (affecting the demand side) through both product and money markets. The effect of these tools on GDP will be measured through multipliers. As the government increases its expenditure or money supply, the GDP will be positively affected, while increasing the tax rate, the GDP will be negatively affected. In addition, if the government increases its expenditure and tax by the same amount, we will have what we call the balance budget multiplier and nothing will happen to GDP.

Description of General Equilibrium Model:

Structure of the general equilibrium model consists of 12 Behavioral equations and 3 Identity Equations, as follows:

- 14 Endogenous Variables: GNP, GDP, NNP, INV, CON, LD, LS, LPD, W, WL, TAX, INF, MD, MS
- 8 Exogenous Variables: EXP, IMP, IR, ER, UN, TCN, GOV, POP.
- 3 Identity Equations: GDP, GNP, NNP.

Structural Equations of GEM:

$$GNP_t = \beta_{10} + \beta_{11} Gov_t + \beta_{12} Inv_t + \beta_{13} Ms_t + \beta_{14} Exp_t - \beta_{15} Imp_t$$

$$GDP_t = \beta_{20} + \beta_{21} Ld_t + \beta_{22} Inv_t + \beta_{23} Tcn_t$$

$$Inv_t = \beta_{30} + \beta_{31} GNP_t - \beta_{32} IR_t - \beta_{33} ER_t$$

$$Con_t = \beta_{40} + \beta_{41} NNP_t + \beta_{42} WL_t + \beta_{43} Ms_t - \beta_{44} Tax_t$$

$$Ld_t = \beta_{50} + \beta_{51} GNP_t + \beta_{52} Inv_t + \beta_{53} Inf_t \pm \beta_{54} Tcn_t - \beta_{55} W_t$$

$$Ls_t = \beta_{60} + \beta_{61} Pop_t + \beta_{62} GNP_t + \beta_{63} W_t - \beta_{64} Inf_t$$

$$W_t = \beta_{70} + \beta_{71} Lpd_t + \beta_{72} Inf_t - \beta_{73} Un_t$$

$$WL_t = \beta_{80} + \beta_{81} GNP_t + \beta_{82} Inv_t \pm \beta_{83} Tcn_t$$

$$Tax_t = \beta_{90} + \beta_{91} GNP_t + \beta_{92} WL_t$$

$$Inf_t = \beta_{100} + \beta_{101} WL_t - \beta_{102} Ms_t - \beta_{103} Un_t - \beta_{104} IR_t$$

$$Md_t = \beta_{110} + \beta_{111} GNP_t - \beta_{112} IR_t$$

$$Ms_t = \beta_{120} + \beta_{121} GNP_t - \beta_{122} IR_t$$

$$\text{Identity: } \begin{cases} GDP_t = Inv_t + Con_t \\ GNP_t = Inv_t + Con_t + Gov_t \\ NNP_t = GNP_t - Tax_t \end{cases}$$

Where:

GNP = Gross National Product	Billion L.E
NNP = Net National Product	Billion L.E
GDP = Gross Domestic Product	Billion L.E
Inv = National Investment	Billion L.E
Con = National Consumption	Billion L.E
Gov = Government Expenditure	Billion L.E
Tax = Taxes	Billion L.E
Exp = Exports	Billion L.E
Imp = Imports	Billion L.E
Md = Money Demand	Billion L.E
Ms = Money Supply	Billion L.E
WL = Labour Wages	Billion L.E
W = Labour Wage	Thousand L.E.
Lpd = Labour Productivity	Thousand L.E.
Ld = Labour Demand	Million Labours
Ls = Labour Supply	Million Labours
Pop = Population	Million Persons
Un = Unemployment Rate	(%)
Inf = Inflation Rate	(%)
IR = Interest Rate	L.E / US \$
ER = Exchange Rate	(%)
Tcn = Technology	Time

Economic Relationships' Nature in General Equilibrium Model:

Below is an illustrative interpretation of the exogenous variables' impact on the endogenous variables in each equation:

1. Gross National Product Function: the increase of government expenditure, investments, money supply and exports leads to the increase of Gross National Product, while the imports increase leads to decrease the Gross National Product.
2. Gross Domestic Product Function: the increase of labour demand, investments and level of technology advancement leads to the increase of Gross Domestic Product.
3. Investments Function: the increase of Gross National Product leads to the increase of investments, while the rising of both interest rate and exchange rate decreases investments.
4. Consumption Function: the increase of the net Gross National Product, labour wages and money supply leads to the increase of consumption, while the rising of taxes decreases consumption.
5. Labour Demand Function: the increase of Gross National Product, investments and inflation rate leads to the increase of labour demand, while the rising of labour wage decreases the labour demand. In addition, the technology advancement level may increase or decrease the labour demand in the case of the existence of integrative or alternative relationship between business and capital respectively.
6. Labour Supply Function: the increase of population, Gross National Product and labour wage leads to the increase of labour supply, while the inflation rate decreases the labour supply.
7. Labour Wage Function: the increase of labour productivity and inflation rate results in the increase of labour wage, while the increased unemployment rate decreases the labour wage.
8. Labour Wages Function: the increase of Gross National Product and investments leads to increase the wages value, while the increase of technology advancement level may increase or decrease the wages value.
9. Taxes Function: the increase of Gross National Product and labour wages leads to the increase of taxes.
10. Inflation Function: the increase of labour wages leads to the increase of inflation rate, while the increase of money supply, unemployment rate and interest rate decreases inflation rate.

11. Money Demand Function: the increase of Gross National Product leads to the increase of money demand, while the rising of interest rate decreases money demand.
12. Money Supply Function: the increase of Gross National Product leads to the increase of money demand, while the rising of interest rate decreases money supply.

Revealing the measurement problems that face the model's estimation were taken into account, i.e., Autocorrelation is tested by "Box-Pierce-Ljung test", which follows up Chi-square test ($X^2=3.84$), Heteroscedasticity is tested by "Engel test" with Chi-square ($X^2= 3.84$), and the Non-Normality by using "Jarque-Bera test" with Chi-square ($X^2= 5.99$).

Such of these problems were handled whenever they exist by using the method of "Newey-West" in accordance with the method of "Generalized Method of Moments" (GMM).

RESULTS AND DISCUSSION

Table (1) indicates to the criteria of goodness of fit measures for general equilibrium model, i.e, coefficient of determination (R^2) which shows the impact of independent variables on the dependent variable. The table

shows as well adjusted coefficient of determination (\bar{R}^2) and (F-test) for each equation, which indicates the statistic significance of all model equation at 0.01.

Table (1) shows also, (LM-Tests) for measuring statistical problems, which indicate Autocorrelation between equations (3) and (9) regarding the function of National Investment and Taxes residuals. It shows as well the problem of Heteroscedasticity in equations (9), (10) regarding the function of Taxes and Inflation. However, non-normality problem does not exist in any of the model's equations.

Table 1: Goodnes of Fit Criteria of and Tests of GEM in Egypt.

Endogenous Variable	Eq.	R^2	F	LM - Tests			
				Test	LMa	LMh	LMn
Gross National Product	1	0.873	0.802	12.4**	2.14	2.14	1.03
Gross Domestic Product	2	0.912	0.888	38.0**	3.01	1.08	0.43
National Investment	3	0.783	0.724	13.2**	5.15*	0.66	2.04
National Consumption	4	0.961	0.945	61.6**	2.44	1.74	2.66
Labour Demand	5	0.956	0.932	39.1**	0.41	3.11	2.09
Labour Supply	6	0.897	0.856	21.8**	1.59	1.12	3.45
Worker wage	7	0.923	0.902	44.0**	2.69	2.22	4.33
Wages of labours	8	0.873	0.838	25.2**	1.26	0.74	0.95
Taxes	9	0.854	0.83	35.1**	4.85*	4.77*	2.39
Inflation	10	0.777	0.688	8.7**	1.59	5.95*	1.77
Money demand	11	0.912	0.897	62.2**	2.88	0.54	2.58
Money supply	12	0.846	0.82	33.0**	0.46	1.61	3.33

R^2 = coefficient of determination.

\bar{R}^2 = adjusted coefficient of determination.

(*) under (LM-Tests) refers to existence of a problem in the equation.

Since the previous equations suffer from the measuring problems in line with simultaneous Equations model, the problems of Autocorrelation and Heteroscedasiticity were handled by using the (GMM) at the entire level of the model according to the method of "Newey-West". It is noted that the Endogenous and Exogenous variables in each equation are less than the exogenous variables at the entire level of the model. Therefore, all equations of the general equilibrium model are over identification. Thus, the model was estimated via three stages least squares (3SLS) method.

Table (2) shows the results of measuring estimation of the general equilibrium model. The overall results came in accordance with the economic rationale. The most important economic results that have been concluded are as follows:

1- Gross National Product Function:

Equation (1) in table (2) shows estimation of Gross National Product function, where the government expenditure, investment, money supply, exports and imports explain about 87.3% of the changes happened in Gross National Product according to criterion of the coefficient of determination, while other changes were

associated to other immeasurable factors by the function.

Table 2: 3SLS General Equilibrium Model in Egypt (1995-2009).

No.	Function						
1	GNP _t =	5.76 (2.12)*	+ 2.45 Gov _t (4.12)**	+ 1.12 Inv _t (2.25)*	+ 0.77 Ms _t (2.36)*	+ 0.25 Exp _t (3.19)**	- 0.15 Imp _t (-2.42)*
2	GDP _t =	218.1 (0.96)	+ 55.2 L _t (2.18)*	+ 2.07 Inv _t (3.25)**	+ 1.78 Tcn _t (2.96)**		
3	Inv _t =	73.6 (1.12)	+ 0.24 GNP _t (3.63)**	-2.36 IR _t (-2.44)*	- 1.15 ER _t (-4.16)**		
4	Con _t =	2.17 (2.17)*	+ 0.13 NNP _t (2.88)**	+ 1.88 WL _t (3.56)**	+ 0.63 Ms _t (1.99)*	- 0.46 Tax _t (-2.63)*	
5	Ld _t =	6.44 (0.84)	+ 0.14 GNP _t (2.38)*	+ 0.11 Inv _t (3.98)**	+ 0.07 Inf _t (2.63)*	+ 0.17 Tcn _t (3.96)**	- 0.47 W _t (-2.46)*
6	Ls _t =	2.39 (1.66)	+ 0.14 Pop _t (3.73)**	+ 0.07 GNP _t (3.88)**	+ 0.89 W _t (3.25)**	- 0.06 Inf _t (-2.49)*	
7	W _t =	4.87 (0.99)	+ 0.12 Lpd _t (2.96)**	+ 0.04 Inf _t (4.78)**	- 0.15 Un _t (-2.33)*		
8	WL _t =	16.74 (2.36)*	+ 0.04 GNP _t (2.58)*	+ 0.26 Inv _t (3.84)**	+ 0.48 Tcn _t (3.36)**		
9	Tax _t =	4.55 (1.17)	+ 0.15 GNP _t (2.66)*	+ 0.74 WL _t (4.55)**			
10	Inf _t =	10.25 (0.74)	+ 1.15 WL _t (3.16)**	+ 0.29 Ms _t (2.55)*	- 2.02 Un _t (-2.16)*	- 1.33 IR _t (-3.22)**	
11	Md _t =	125.9 (2.22)*	+ 6.25 GNP _t (4.69)**	- 126.5 IR _t (-4.55)**			
12	Ms _t =	25.36 (1.22)	+ 4.26 GNP _t (3.67)**	- 8.62 IR _t (-2.58)*			

(*), (**), (***) refer to statistic significance at 0.05, 0.01 and 0.10 respectively. Numbers in brackets () refer to the (t) calculated values.

The results show a billion L.E. increase of government expenditure, investments, money supply and exports leads to an increase in Gross national product estimated by 2.45, 1.12, 0.77 and 0.25 billion L.E. respectively. It also shows a billion L.E. amounted increase of imports leads to the reduction of Gross national product estimated 0.15 billion L.E.

Generally, the results indicate to the fiscal policy's effectiveness; it shows the gross national product's response to government expenditure is higher than that of money supply. Thus, an expanding fiscal policy could be used to increase the government expenditure or reduce the taxes in order to increase the aggregate demand.

The state has endeavoured in the recent years to reduce the general budget's deficit by rationalizing and controlling government expenditure, developing the public fiscal resources and achieving tax equity. Thus, the fiscal policy was led to be restricted on certain fundamental components that determine the gross national product and increase the unemployment rates.

Remarkably, whenever the economy goes through a condition of stagnation, it is preferred in such a case to follow up an expanding fiscal policy by reducing taxes and increasing the government expenditure by way of circulated money or debt, because of the political difficulty on the part of government to reveal its desire to increase taxes or reduce its expenditure during the inflation.

It could be said that achieving full employment level entails an adequate rate of national government expenditure to absorb all goods and products available in the market. Whereas the declined government expenditure leads to the unemployment problem resulted from the weakness of economic boom, cases of depression and stagnation in the markets. On the contrary, the great increase of government expenditure means the pressure on the markets by increasing consumption and domestic demand, a matter which leads to the emergence of inflation problems. Here the state's role becomes prominent in facing these economic problems to ensure the realization of economic stability.

2- Gross Domestic Product Function:

Equation (2) in table (2), shows estimation of Gross Domestic Product function, where labour, investments and technology level explain nearly about 91.2% of the changes happened in Gross Domestic Product according to criterion of coefficient of determination, while other changes were associated to other immeasurable factors by the function.

The results show that, an increase in labour and investments by a billion L.E. and the technology level by one unit leads to increase in Gross Domestic Product by 55.2, 2.07 and 1.78 billion L.E. respectively.

3- Investment Function:

Equation (3) in table (2), shows estimation of investment function, where Gross Domestic Product, interest rate and exchange rate explain almost 78.3% of the changes happened in investment, according to coefficient of determination, while other changes were associated to other immeasurable factors by the function.

The results show, a billion L.E. increase of Gross National Product leads to increase in investments by 0.24 billion L.E. While an increase in interest rate and exchange rate by one unit leads to reduction in investments by 2.36, 1.15 billion L.E respectively.

In the last year, a diminished monetary policy applied by raising the interest rate, reducing the national currency value and using the credit ceilings. At the beginning of the economic reform program in Egypt, the interest rate was liberalized. The banks have the freedom to determine the interest rates on deposits, loans and borrowings. This step led to the interest rate increase, so as it almost approached the inflation rate. That is the initial emergence of the positive interest rate. It opened the field before the open market processes by a way of issuing short-term treasury bonds in order to finance the general budget's deficit, curb the monetary expansion and absorb liquidity. The reserve ratio was adjusted by not less than 15% of the total deposits, the liquidity ratio was adjusted by the minimum of 20% for the local currency (the Egyptian Pound) and 25% for the foreign currencies and the exchange rate was liberated and unified.

In the framework of planning various tax policies to activate investment such as reduction of companies' tax rates and provision of investment-tax exemption, several laws and decisions, which act on encouraging the private investment, have been reissued like law no. 8 for 1997. This law acknowledges the investor's right to possess lands and properties necessary for starting the agricultural activity. The law also stipulates tax-exemption for the agricultural projects in order to increase their exports and reduce their imports. The issuance of a unified law, for investment and companies, means that there is a unification of laws which organize investment in Egypt at the levels of private and public sectors. Thus, such laws pave the way for convenient investment environment for the Egyptian economy.

During economic reform policy and the Egyptian economic liberalization, the privatization policy applied so as the state is no longer the only investor and its role is based on indicative planning and direct implementation of general investments necessary for the socioeconomic development, which mainly relies on the infrastructure projects. As the privatization policy is considered as a main component of the economic reform's components, its program was based on special mechanisms aim to qualify the Egyptian economy for the process of privatization through the restructure of the economic institutions and the restoration of necessary equilibrium for the fundamental economic variables while adopting the policies that have contributed and paved the way for the private sector to reinforce its participation in the economic activity.

The tax law imposed on the financial firms to encourage all types of investments through a large package of tax-exemptions, while deferring the completion of society's right to subject these firms income to the tax system for varied periods of time ranged from 5-20 years according to their geographic location. At the end of such periods of time, all such incomes will subject to the tax-system. In accordance with the world approach of attracting local and international investments, an overall development of the tax, imposed on the income of the firms' profits, was carried out with four fundamental dichotomies: the facilitation of production and investments processes; the provision of successive resources of public revenues; the encouragement of technology transfer and the reduction of its cost and the easement of the firms' burden of providing the necessary funding and the activation of the tax equity principles.

4- Consumption Function:

Equation (4) in table (2), shows estimation of consumption function, where Net National Product, labour wages, money supply and taxes explain almost 96.1% of the changes happened in consumption, according to coefficient of determination, while other changes were associated to other immeasurable factors by the function. The results show a billion L.E. increase of Gross National Product, labour wages and money supply lead to the increase of consumption by 0.13, 1.88 and 0.63 billion L.E respectively. The results also indicate to a billion L.E. increase in taxes leads to reduction in consumption by 0.46 billion L.E.

These results prove effectiveness of fiscal policy, as the increase of taxes has curbed consumption. Since labour demand is, in fact, a derived demand from goods and services demanded, so an expanding fiscal policy could be used by a way of reducing taxes in order to increase consumption and, subsequently, increase income and employment rates as a means of lessening the unemployment rates. It could be said that if consumption

was less than income, an expanding fiscal policy could be used by a way of increasing the government expenditure and decreasing taxes as a means of activating the economy during the period of stagnation in order to increase the aggregate demand, incomes and job opportunities because the reduction of taxes leads to the increase of prices level and the decrease of the labour real wage.

Consequently, the increase of aggregate demand leads to the increase of Gross national product and labours' full employment. However, if the taxes reduction was little, there would be an increase of Gross national product and labours but not at a full employment rate. In addition, a diminished fiscal policy could be used whenever consumption is higher than income by a way of reducing the government expenditure and increasing taxes.

5- Labour Demand Function:

Equation (5) in table (2), shows estimation of labour demand function, where Gross National Product, investments, inflation, technology level and the labour wage explain almost 95.6% of the changes happened in labour demand, according to coefficient of determination, while other changes were associated to other immeasurable factors by the function.

The results show an increase in Gross National Product, investments, inflation, and technology level by one unit lead to increase in labour demand by 0.14, 0.11, 0.07 and 0.17 million labour respectively. Also an increase in labour wage by one-thousand L.E. leads to reduction in labour demand by 0.47 million labour.

6- Labour Supply Function:

Equation (6) in table (2), shows estimation of labour supply function, where population, Gross National Product, labour wage and inflation explain almost 89.7% of the changes happened in labour supply, according to coefficient of determination, while other changes were associated to other immeasurable factors by the function.

The results show an increase by a million-person in population, leads to increase in labour supply by 0.14 million labours. and an increase in Gross National Product by billion L.E. leads to increase in labour supply by 0.07 million labours, and an increase in labour wage by a thousand-pound leads to increase in labour supply by 0.89 million labours. Finally, an increase in inflation by one unit leads to reduction in labour supply by 0.06 million labour.

7- Labour Wage Function:

Equation (7) in table (2), shows estimation of labour wage function, where labour productivity, inflation and the unemployment rate explain almost 92.3% of the changes happened in labour wage, according to the coefficient of determination, while other changes were associated to other immeasurable factors by the function.

The results also indicate to an increase by a thousand increment of labour wage and inflation by one unit lead to increase in labour wage by 0.12 and 0.04 thousand-pound respectively. While an increase in unemployment rate by one unit leads to reduction in labour wage by 0.15 a thousand-pound.

Remarkably, the implementation of expanding fiscal policy by a way of government expenditure and taxes and the implementation of expanding monetary policy by a way of nominal money supply might be used as an effective means of curbing the delinquency of sharp structural unemployment, increasing the aggregate demand necessary for production increase and achieving the full employment.

Unemployment usually emerges from inadequate demand; the structural economic changes resulted from the changing technology and the final demand composition on the goods and services. Consequently, the old functions and skills vanished due to the existence of new functions. If the labour, who was deprived of his work because of these circumstance, is able and qualified to meet the necessary skills and education of the new jobs' requirements and it is possible to place him in a new position if necessary, then the structural unemployment problem will be overcome.

8- Labour Wages Function:

Equation (8) in table (2), shows estimation of labour wages function, where Gross National Product, investments and technology level explain almost 87.3% of the changes happened in labour wages, according to coefficient of determination, while other changes were associated to other immeasurable factors by the function.

The results show an increase in Gross National Product, investments, and technology level by one unit lead to increase in labour wages by 0.04, 0.26, and 0.48 billion L.E. respectively.

It is worthy to point out the increment minimization of the employees' salaries at the general state's budget and the diminishment of increasing wages' allocations by a way of reducing appointment rates, encouraging unpaid leaves and early retirement are among the aspects of the fiscal policy immediately after the economic reform. This fiscal policy helped reduce the general budget's deficit by decreasing the government expenditure, but at the same time led to the misdistribution of government expenditure between the rural and urban communities, a matter which negatively affected the labour market equilibrium through unsystematic employment and, consequently, led to increasing rates of internal immigration from the rural community to the urban community.

9- Taxes Function:

Equation (9) in table (2), shows estimation of taxes function, where Gross National Product and labour wages explain almost 85.4% of the changes happened in the taxes, according to coefficient of determination, while other changes were associated to other immeasurable factors by the function.

The results indicate to an increase in Gross National Product and labour wages by one unit, lead to increase in taxes by 0.15 and 0.74 billion L.E. respectively.

It can be said that, increasing in the public revenues came from taxes outcome and the replacement of general sales taxes to the consumption taxes and expanding its imposition on capital and intermediate goods. Thus, the government was able to multiple the taxes outcome for several times, because the large portion of its income is usually directed to the government in the shape of taxes. At the beginning of the economic reform program, the transformation into the general sales taxes to replace the specific consumption taxes, in a way that led to the tax system stability and implanted its concepts within the society.

As to the tax law no. 91 effective since 2005 and its executive regulation, it reflects a new way of thinking in the relationship between the tax system and the financiers. The law represents a specific movement and new trend in the Egyptian economic policy as it contributes to the reduction of taxes categories to almost 50% or less. All public and those who work in the field of economic activity will benefit out of this law due to its privileges, particularly, tax exemption, tax reconciliation, elimination of administrative complications and establishment of mutual confidence bridges between the state and the financier so as to help encourage foreign and domestic investments in Egypt.

10- Inflation Function:

Equation (10) in table (2), shows estimation of inflation function, where labour wages, money supply, unemployment rate and interest rate explain almost 77.7% of the changes happened in the inflation, according to coefficient of determination, while other changes were associated to other immeasurable factors by the function.

The results indicate to a billion L.E. increase in labour wages and money supply lead to increase in inflation by 1.15% and 0.29% respectively. While an increase in unemployment rate and interest rate by one unit lead to reduction in inflation rate by 2.02% and 1.33% respectively.

11- Money Demand Function:

Equation (11) in table (2), shows estimation of money demand function, where Gross National Product and interest rate explain almost 91.2% of the changes happened in money demand, according to coefficient of determination, while other changes were associated to other immeasurable factors by the function.

The results indicate to a billion L.E. increase in Gross National Product leads to 6.26 billion L.E. increase in money demand, and an increase in interest rate by one unit leads to 126.5 billion L.E. amounted reduction in money demand.

12- Money Supply Function:

Equation (12) in table (2), shows estimation of money supply function, where Gross National Product and interest rate explain almost 84.6% of the changes happened in money supply, according to coefficient of determination, while other changes were associated to other immeasurable factors by the function.

The results indicate to a billion L.E. increase in Gross National Product leads to 4.26 billion L.E. increase of money supply, and an increase in interest rate by one unit leads to the 8.62 billion L.E. amounted reduction of money supply.

Conclusion and Recommendations:

The general equilibrium model showed that, the fiscal policy's effectiveness in the function of Gross national product as the response of Gross National Product to the government expenditure was higher than money supply. Therefore, an expanding fiscal policy could be used by a way of increasing government expenditure or reducing the taxes in order to increase the aggregate demand. Subsequently, increase the Gross National Product and consumption and, thus, create new job opportunities and handle the unemployment problem.

At comparing between fiscal and monetary policies, the results showed that fiscal policy is much effective than monetary policy because the government expenditure multiplier was 2.45, and is greater than the money supply multiplier that was 0.77 only.

Applying fiscal policy let the government of Egypt has to keep the interest rate at minimum level in order to overcome what we call it crowding out phenomena reduction in the level of investment as the government expenditure increase.

Most of the results obtained from table (2) adequate with the principle of macro economic theory, especially, the demand of money which is divided into two kinds transaction (phillip curve) and speculative demand for money equation (11) and the trade off between inflation and unemployment levels equation (10) also the relation between consumption and tax rate equation (4) it shows that the reduction in tax will has positive effect on aggregate demand through the increment in consumption.

Finally Analysis of general equilibrium model leads to the following recommendations:

1. Implementation of an expanding fiscal policy based on the reduction of taxes in order to increase consumption, activate the investments and, subsequently, increase and create further job opportunities and also increase the government expenditure in order to increase the aggregate demand and, hence, increase the production of goods and services necessary for pushing forward the economic development's wheel.
2. Implementation of an expanding monetary policy based on the reduction of the interest rate in order to encourage the investment necessary for pushing forward the economic development's wheel.
3. Linking between the plans of socioeconomic, educational and training development in order to ensure the general structural equilibrium of the national economy.
4. The coordination between fiscal and monetary policy, and avoidance of their separation in order to achieve the economic policy's objectives in the framework of the state public plan.
5. Working out to adopt a clear strategy aims to increase exports, curb imports and encourage the domestic production.
6. Expansion of domestic investment, further attraction of foreign investments to curb the exacerbation of unemployment and the increase of the economic growth rates.

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