The Effect of Financial Sector Development on the Public Sector of Nigeria

1986-2012

OMOFA M.N.G Research Scholar, Department of Economics Kogi State University Anyigba, Nigeria

Abstract—The ever growing fiscal deficit of most developing countries including Nigeria has made fiscal balance become a major task for policy makers. With the worsening fall in the price of crude oil and the concomitant fall in the value of Naira as well as the development in both the money and capital markets has brought the question of the role of financial sector in this regards to the fore front of researchers. This work is situated within the Keynesian framework that assigns roles of economic responsibilities to the public sector. 3 Stage Least Square was used to estimate the two macroeconomic equations. The results showed that development stocks and grants have significant impact on government revenue while treasury bills and exchange rates have significant impact on government expenditure. The simulation results showed that shocks in the financial sector especially the foreign exchange market, affects government revenue more than government expenditure. It is therefore suggested that bilateral trade agreement with countries other than America who is the major trading partner of Nigeria be sought in order to mitigate the need to further devalue Naira against Dollar. This trade agreement will make use of other international currency such as China Lhira. This will help to stabilize naira against dollar as it reduces the demand for dollar yet focusing attention on diversifying the economic base of Nigeria.

Keywords—Financial Sector Development, Fiscal Blalnce, Public Sector, government Revenue, Government Expenditure, Simulation, Theil index, 3 Stage Least Square, Money Market, Capital Market, Foreign Exchange Market and Market Capitalization

I. INTRODUCTION

The performance of a national economy can be measured by broad economic aggregates such as GDP, unemployment, inflation fiscal balance, international trade and balance of payment. The determination of such broad economic aggregates fall within the purview of the study of macroeconomic aggregates thus the stability of such macroeconomic aggregates becomes the gauge with which the health of any economy could be measured.

One of the most difficult questions to answer is "What are the shocks that cause fluctuations in those macroeconomic aggregates especially in the public sector?" Available literatures (Bernake etal 1999, Dixit and Stildlitz 1977, Altig etal 2004, Gali etal 2004 and Smarts and Walters 2003) identified oil price shocks, technological shocks, fiscal policy shocks and monetary policy shock. However, many of those authors laid emphasis on the monetary factors in determining macroeconomic fluctuation which include fiscal balance. They argued that even though technology shocks may be important, monetary factors play an important role in building a nation's economy as it has been pointed out that financial sector stability could create macroeconomic stability.

Stability of the public sector in terms of achieving fiscal balance has been a long standing problem in Nigeria as government expenditure as percentage of GDP was on the increase. Even when overall fiscal deficit became more entrenched in the nation's fiscal system, Nigeria's fiscal deficit kept on getting worse as the overall budget position was not only perpetually in deficit but was also erratic while showing strong upward tendencies in magnitude. The external reserve was low and unpredictable while public expenditures as percentage of GDP decreased between 1986 and 1999.

Since 1999, it could be said that the central focus of macroeconomic reform was to stabilize the Nigerian economy, to improve budgetary planning and execution and to provide a platform for sustained economic diversification and non-oil revenue and growth. A major challenge was to delink public expenditure from oil revenue earnings by introducing an appropriate fiscal rule.

The introduction of an oil price based fiscal rule was to ensure that government expenditure is based on a prudent oil price benchmark. Any revenue that accumulated above the reference price was saved in a special excess crude oil account. Towards the latter part of the period, government budget has been on conservative oil price of \$25per barrel in 2004, \$30/barrel in 2005, and \$35/barrel in 2006. Despite higher realized prices of \$38.3, \$54.2 and \$68 in 2004, 2005 and 2006 respectively. The adoption of this rule was to ensue government expenditure de-links from oil revenue earnings thereby limiting the transmission of external shocks into the domestic economy. However this was short-lived as the international oil price began to fall below the conservative benchmark used in budgetary planning culminating in high fiscal deficit as revenue of government fall short of its expenditures. The Nigeria's fiscal deficit growth rate from 1999 to 2012 ranged between 13.5 and 95.3 percent reducing only in the following years 2003 by 48.7 percent and in 2004 by 17.5 percent. By 2005, fiscal deficit further declined by about 70 percent. By 2014, the international oil price further nose-dived to \$..... While on the average naira depreciates.

It is in the light of the above that it becomes necessary to find out what is the effect of development in the financial sector on the fiscal balance of Nigeria from 1986 to 2014.

The paper is divided into five sections. The preceding section contains introduction while section two contains literature and theoretical nexus. Section three deals with methodology while section four contains empirical results. Section five summarizes, concludes and gives recommendations.

II. LITERATURE AND THEORETICAL NEXUS

The importance of the public sector or the role of government in an economy has been a long standing debate primarily between the Classical Economists and the Keynesian Economists. The roles assigned by these two extreme schools of thoughts are based on their philosophy and ideology. While the classical adhere to the capitalist ideology, Keynesianism canvassed for welfares.

The Classical believe in the invisible hands to operate and direct the economy. The prevailing ideologies and philosophies of the classical was that of laissez faire which advocated that government should interfere as little as possible in economic affairs and leave economic decisions to the private hands. Minimizing the role of the public sector was championed by Adam Smith. To him, the public sector role was conceived to be limited to the provision of essential public works, maintenance of law and order, defense of the country and guaranteeing property rights and political freedom of induvial. It therefore cast doubt on the ability of government to solve social and economic problems pointing out public beauracracy and political problems that may emanates from it as some limitations on the part of government (Mansfield and Behravesh, 1992).

The consequent failure of the market system and the world depression of 1930s brought a new thinking amongst the economist that the inefficiencies of the market system could be handled by the state. This Keynesian thinking which emerged in the 1930s was used to justify an expansion the role of the government in an economy. In light of this government activities then tend to feature in modern market economies relates to producing certain goods and services, including infrastructure and defense; transfer of income; collecting of taxes which alters economic behavior; and regulating economic activity.

In the light of the foregoing, Obadan (2013) summarized the functions of government from Samuelson, (1992); and Aly, (2008) as four-thronged pillar below.

- Increasing efficiency by promoting competition, curbing externalities like pollution and providing public and quasi-public goods. Thus public investment is inevitable especially in areas where the private sector is unwilling to go into at the initial stage of development.
- Providing the economy with a legal structure which requires the government to ensure property rights, provide enforcement of contracts, acts as referee and impose penalties for foul play.
- Promoting equity by using tax and expenditures programs to redistribute income towards particular groups.

• Promoting growth and macroeconomic stability. This entails fighting inflation and unemployment and promoting economic growth through fiscal, monetary and other policies.

Thus government could be seen as of necessity to be greatly involved in economic activities as a catalyst for development and financing such development activities requires a lot of financial resources which the government needs to mobilize. However, most of the developing countries which are very much in need of resources are least in a position to mobilize enough both internally (private savings, taxation, money and capital markets, surpluses of public enterprises and deficit financing) and externally (foreign aid, foreign borrowing, migrant remittances and debt relief. This brings the question of fiscal balance to the fore front and beam light of researchers.

III. MODEL SPECIFICATION

In the public sector block, the broad analytical frameworks of the fiscal and monetary policy present the linkages. Following standard of government block macroeconomic model, the monetary policy effects are modeled from both the revenue and expenditure sides. This is because rising fiscal deficit has been a dominant feature of the Nigerian economy notably since 1986. At the level of theory, it has been argued that fiscal deficits are required during economic depression. However Alayande (2007) seems to suggest that fiscal deficits adversely affect efficiency and economic growth. While the argument here is not about the desirability of fiscal deficits, it is certainly concerned with how financial markets influence it.

The government or national debt/surplus is the accumulated total of all its deficit or surpluses. If the country is running a net debt it is funded by borrowing on which interest rate must be paid. Likewise if the country is running surpluses, it is effectively a net lender and will receive interest payment. Therefore over time, the dynamics of a national debt are not just accumulated deficits and surpluses from the government budget but also include the associated interest payments in servicing the debt/surplus (Graeme 2006).

(1)

FIB= G<mark>RE</mark>-GEX

The above equation is an identity equation.

Where,

FIB = Fiscal Balance (fiscal deficit),

GRE = Government Revenue,

GEX= Government Expenditures.

Fiscal balance implies that FIB=0 but when FIB< 0, it connotes fiscal deficit and when FIB > 0, it implies fiscal surplus. The stochastic equations of GRE and G EX are stated thus;

According to Komolafe (1999;283), the internal sourcing of fiscal deficit were treasury bills and development stock while holdings were by the CBN, the commercial banks, merchant banks and the non-bank public. However the ways and means advances by the CBN dominated internal source. Interest rates influence the amount of revenue that government can borrow either internally or externally to improve its revenue condition over time.

$$\label{eq:GRE} \begin{split} & \textbf{GRE=C_1+C_2TRB+C_3ROT+C_4DVT+C_5GRT+C_6FRS+C_7} \\ & \textbf{GDP_{t-1}+C_8PDA+U_t} \end{split} \tag{2}$$

Where,

GRE = Government revenue

TRB= Treasury Bills,

ROT = Rate of Interest

DVT= Development stock holding of government,

GRT= Total Grants from International agencies,

FRS= Foreign Reserve

GDP_{t-1} = Lagged values of Gross National Product

PDA= Public debt amortization

Government's total nominal expenditures are made up of government total spending on consumption and capital investment plus debt service payments which is determined by the rate of interest. The creation of public debt also created debt service burden that had to be financed. Indeed, in most cases, debt amortization meant both further taxes and greater money creation. The profile of public debt shows that both internal and external debts have been rising. Public debt therefore would make the economy open to external shocks due to either an increase or decrease in foreign financial flows. Government current expenditure is assumed to be positively related to total revenue, amount of treasury bills purchased by the government from the public and the interest rate. Exchange rate is one of the factors that determine government capital expenditures as most of the purchases by government are import dependent. This is based on the fiscal response to financial flow literature which argues that depreciation of naira to foreign currencies is a constraint to government expenditure (Heller, 1975; Mosley et. al, 1987; White, 1993 and 1994; and Gang and Khan, 1999). Thus the specification of the government sector is done as follows.

$GEX=C_9+C_{10}ROT+C_{11}TRB+C_{12}EXR+C_{13}CGV+C_{14}IGV +C_{15}GDP_{t-1}+C_{16}GRE+C_{17}GPL +U_t$ (3)

Where

GEX= Aggregate government expenditure,

ROT = Rate of Interest

- TRB = Treasury Bills
- EXR = Exchange Rate

CGV = Consumption by Government

IGV= Capital investment by government

GDP_{t-1}= Lagged values of Gross Domestic Product

GPL_t= General Price Level

Equations 2 and 3 becomes the equations of estimate using the three stage least square method (3SLS).

IV. EMPIRICAL RESULTS

The public sector comprised of two equations which are equations 3.2.8 and 3.2.9 representing government revenue (GRE) and government expenditure (GEX) respectively. These equations look at the financing of fiscal deficit since the government budget has persistently been in deficit. The deficit financing is done through some financial variables such as treasury bills (TRB), development stocks DVT), foreign reserves (FRS), interest rate (ROT) and grants (GRT). The results are contained in Table I.

 TABLE I.
 Empirical Results for Public Sector

GRE =- 7693471 -	0.048TRB	– 8778.24ROT	+ 32.39DV	T + 0.0003GI	RT - 0.384FRS +
Pr (0.0000)	(0.77)	(0.83)	(0.06)	(0.0019)	(0.0000)
25.18GDP - 4.13PI	DA				2
(0.000) (0.08))				
$R^2 = 0.92$					
$\dot{R}^{2} = 0.90$					
GEX = 2791127 + '	71138.65R	OT- 0.206TRB	- 10656.88	EXR - 1.03C	GV + 0.97IGV -
Pr (0.003)	(0.0004)	(0.04)	(0.0020)	(0.0000)	(0.20)
15.32GDP _{b-1} + 1.12	GRE + 460	98.53GPL			3
(0.0000) (0.0	000) (0.0000)			
$R^2 = 0.97$					
$\dot{R}^2 = 0.96$					

For the revenue equation (GRE), all the independent variables are correctly signed with the exception of treasury bills (TRB) and foreign reserves (FRS) which are wrongly signed. The wrong sign of TRB is explained by the fact that people are losing confidence in Nigeria's financial market due to the dwindling profits to owners/holders of financial instruments. Rather than holding financial assets people prefer to hold their money in physical assets. The wrongly sign of FRS can be adduced to the crises in the Niger Delta areas which hinder the smooth flow of production process of crude oil. It must be noted here that crude oil serves as the major source of accretion of foreign reserves in Nigeria. Besides, it is the depletion of foreign reserves that would release fund for the government. Otherwise, the fund is just stacked in the reserves against rainy days. The coefficients of all the variables were high except that of TRB and grant (GRT). The contributions of all the independent variables to GRE were statistically significant with the exception of TRB and rate of interest (ROT). The overall fit showed that about 92% of the variations in revenue are explained by the independent variables.

In the Government expenditure equation (GEX), with the exception of TRB, all the financial sector variables were correctly signed and with high coefficients. Also, all the financial variables' impact on GEX is statistically significant. Other non-financial sector variables were correctly signed except CGV and they were all statistically significant except investment by government (IGV). This was not unconnected with the privatization program of the government that led to government de-investment. The overall fit of the equation shows that about 97% of the variation in dependent variable is explained by the independent variables. Therefore it is a good fit.

In this sector, the focus is to stimulate government revenue and reduce government expenditure in other to reduce government deficit. In this sector there are two equations; government revenue (GRE) and government expenditure (GEX). Financial sector variables that have positive and significant impact on government revenue in Nigeria are government holding of development stock (DVT) and grant (GRT). These variables have significant impacts on the economy over the study period. Financial sector variables that have reducing effect on government expenditure are TRB and EXR. While EXR has high coefficient, the coefficient of TRB is low. However they both have statistically significant impact on GEX.

V. MODEL EVALUATION

The theil inequality coefficients and proportions were used to test the forecasting power of the model. It is normal that the Theil's inequality coefficients should lie between zero and one. The decision rule is that for a model to have a good forecasting power, the Theil's inequality should be less than unity. The results for GRE is 0.106126 while that of GEX is 0.051123. These are well close to zero. This implies that the models have a very good forecasting power.

Furthermore, the Theil's coefficients analysis is required to evaluate the model's ability to replicate turning points. The partial inequality coefficients are standard indices in this measurement. As expected, the partial inequality coefficients were used to trace the size of the error between the predictions (simulated values and realizations in the means, variance and covariance of the estimated models. The results of the bias and the variance proportions of the error between the predicted and estimated values for GRE are 0.013549 and 0.114649 while that of GEX are 0.0000 and 0.00524 respectively. These show that the difference between the means of the simulated values and the means of the actual data series (bias proportion) and between the variance of the simulated values and the variance of the actual data series (variance proportion) are actually near zero. This implies that the models have very strong ability to replicate turning points in the actual data series with respect to each of the macroeconomic variables. The results of the covariance proportion which measures how predicted or forecasted values are closely correlated with the actual values of the macroeconomic variables are very close to unity. The covariance proportion for GRE is 0.871802 while that of GEX is 0.994976. These show that the forecasted values are closely correlated to the actual values.

VI. SIMULATION RESULTS OF BASELINE EXPERIMENTS

One of the objectives of this work is to establish a relation between developments in the financial sector development and Government Revenue and Government Expenditure variables. Eight scenarios of some key policy effort variables were simulated to track their impacts on these two dependent variables namely:-Government Revenue and Government Expenditure. The independent variables were money supply and interest rate for the money market, market capitalization for the capital market and exchange rate for the foreign exchange market. The variables were subjected to both increase and decrease with the following results.

TABLE II. SIMULATION EXPERIMENT RESULTS OF MONEY MARKET

	MONEY MARKET		
S/NO	EXPERIMENTS	RESULTS	

1	A decrease in Money Supply (MS) by 10%	GRE will decrease by 7.55% GEX will increase by 0.88%
2	An increase in Money Supply (MS) by 10%	GRE will decrease by 1.21% GEX will reduce by 0.10%

	MONEY MARKET CONTINUATION		
S/NO	EXPERIMENTS	RESULTS	
3	Decrease in Rate of	GRE will increase by 1.98%	
	Interest (ROT) by 10%	GEX will increase by 0.004%	
4	An increase in Rate of	GRE will decrease by 1.94%	
	Interest (ROT) by 10%	GEX will increase by	
		0.0004%	

^{a.} Computed from the base line simulation Money Market.

It is common knowledge from the literature that the structure of Nigerian banking system is oligopolistic with about 10 banks out of the existing 25 banks controlling over 70% of the loanable funds in the system. The major sources of funds for the banks include savings mobilized through an extensive branch network and deposits from large public institutions. There was apathy towards long-term credit by all banks to the real sector of the economy. With the tight monetary policy of reducing money supply by 10%, government expenditure will increase by 0.88% while government revenue reduced by 7.55%. When money supply was increased, both revenue and government expenditure reduced by 1.1% and 0.1% respectively.

With the reduction in interest rate, both government revenue and expenditure increased by 1.98% and 0.004% respectively. When interest rate was increased by 10%, government revenue decreased by 1.94% while government expenditure merely increased by 0.0004%. These implied that financial shocks from the money market had significant effects only on government revenue either by increasing or decreasing it in Nigeria. On government expenditure it has little or no effects in Nigeria.

VII. CAPITAL MARKET

TABLE III. SIMULATION EXPERIMENT RESULTS OF CAPITAL MARKET

	CAPITAL MARKET		
S/NO	EXPERIMENTS	RESULTS	
5	A Decrease in Market Capitalization (MCAP) by 10%	GRE will decrease by 3.21% GEX will decrease by 0.73%	
6	An increase in Market Capitalization (MCAP) by 10%	GRE will increase by 3.31% GEX will increase by 0.73%	

b. Computed from the baseline simulation.

This study found out that the capital market played a key role in long term investment in Nigeria up till 2007. The increased awareness by the public and the privatization program of the Federal government coupled with the raising of public bonds by the three tiers of government at the market expanded the activities of the market. The domestic bond market catered for public and private bonds. The market allows the public sector to place non-inflationary government debt instruments. It also provides the baseline for assessing credit worthiness and interest rates, thereby facilitating rational pricing of private debt issues. In this regards, a liquid public bond market is essential for the development of a private bond market. In Nigeria, the private bond market is not very active while the relative level of transaction in public bond market, comprising mainly development stocks issued by the Federal, State and Local Governments are low. It was found that the cost of going public, raising additional equity from the capital market was very high. Such costs were brokerage fees, stamp duties and other charges imposed by the stock brokers and Security Exchange Commission (SEC). Also, the fraudulent declaration of profit and sharp practices by companies made the public to lose confidence in the private market. Finally, the market could not attract much foreign investors needed for the economy to grow and expand. Therefore, the global economic meltdown and the poor performance of the national economy made the market vulnerable to both domestic and international shocks. This was why the decrease in market capitalization led to the decrease in GRE variable by 3.21% and GEX decreased merely by 0.73%.

When market capitalization was increased by 10%, the results showed that both government revenue and expenditure increased by 3.31% and 0.73% respectively. These implied that financial shocks from the capital market had significant effects on government revenue than government expenditure variables in Nigeria.

VIII. FOREIGN EXCHANGE MARKET

TABLE IV. SIMULATION EXPERIMENT RESULTS OF FOREIGN EXCHANGE MARKET

	FOREIGN EXCHANGE MARKET		
S/NO	EXPERIMENTS	RESULTS	
7	Decrease in	GRE will increase by 2.24%	
	Exchange Rate (EXR) by 10%	GEX will increase by 0.63%	
8	An increase in Exchange rate (EXR) by 10%	GRE will decrease by 1.94% GEX will decrease by 0.0004%	

^{c.} Computed from the Baseline Simulation Results for Foreign Exchange Market.

This study found that exchange rate was an important price variable in the economy which has contributed significantly to attainment of macroeconomic instability. The Nigerian's experience in exchange rate management was mixed in terms of regimes and effectiveness. Various exchange rate systems (regimes) existed. They included adjustable peg system, the crawling peg system, and managed floating system before a market-determined exchange rate system emerged as the only efficient way of allocating foreign exchange resources. The major problem in the market include supplying constraints, the skewness of supply with CBN dominating the market, a high demand structure and speculative activities of the market operators.

With a decrease in exchange rate, GRE increased by 2.24% while GEX increased merely by 0.73%. When foreign exchange rate was increased by 10%, GRE reduced by 1.94% while GEX reduced merely by 0.0004%. These implied that financial shocks from the foreign exchange market had more effects on GRE than GEX in Nigeria.

With the outcome of the policy simulation exercise, it is imperative that some measures of controlled be pursued on money supply, interest rate and exchange rate. These imply that the Federal government should not print or release money into the economy as she likes. It called for fiscal discipline on the part of the government. Also the Federal government should intervene in the determination of interest rate and exchange rates when necessary and should not be left completely to the forces of the market especially where the major source of government revenue is from crude oil sales whose value is equally affected by the variation in exchange rates. Alternatively the export processing industry should be encouraged to diversify the economy of Nigeria or seek other means of averting the continuous depreciation of naira against the major currency (Dollar) by trading with other countries that accept other currencies than Dollars.

IX. SUMMARY, COCNLUSION AND RECOMENDATION

This work empirically shows that,

- Development stocks (DEVT) and grants (GRT) are the financial sector variables that have positive impact on government revenue (GRE) over the study period and they are significant.
- Treasury bills (TRB) and exchange rate (EXR) are the only financial sector variables that have a reducing effect on government expenditure (GEX) over the study period. They are highly statistically significant.

Financial markets play important role in influencing the public sector activities in Nigeria. Three components were analyzed in the study. They are the money market, the capital market and the foreign exchange market. The three are connected and interrelated since investors often moved from one market to the other depending on their investment desire for short or long term or both. Simulation results showed that,

• Money market instruments such as Money Supply (MS) and Rate of Interest (ROT) had more effects on Government Revenue (GRE) than Government Expenditure (GEX).(ii) that market capitalization has more effects on GRE than GEX. And lastly (iii) Exchange Rate (EXR) has more effects on GRE than GEX.

From the foregoing, it can be concluded that the development in the financial sector is very essential for the realization of the nation's public sector objectives. The results of the analyses of this study show that in spite of the challenges in the Nigerian financial sector, the sector made significant positive impacts on the public sector. With the goodness of fits for the model, it was concluded that developments in the financial sector were strong determinants of fiscal balance in Nigeria.

In view of the above, this work therefore recommends that in the money market, the contractionary monetary policy should be encouraged to reduce inflation which is one of the objectives of the public sector. Also interest rate should be reduced as it reduces cost of domestic borrowing for government and this will enhance government revenue. An increase rate of interest has a dampening effect on government domestic borrowing.

In the capital market, increase market capitalization is a signal for investors to invest more. It shows prosperity in the capital market. Thus increase market capitalization should be pursued vigorously. This will enable government to raise development stocks in the capital market as activities in the capital market would be attractive.

Finally, the Federal government should intervene in the determination of interest rate and exchange rates when necessary and should not be left completely to the forces of the market especially where the major source of government revenue is from crude oil sales whose value is equally affected by the variation in exchange rates. Alternatively the export processing industry should be encouraged to diversify the economy of Nigeria or seek other means of averting the continuous depreciation of naira against the major currency (Dollar) by trading with other countries that accept other currencies than Dollars. Thus, the Buharis' government pursuance of a bilateral agreement with China is a welcome idea as this would help in stabilizing Naira against her major trading partner's currency (Dollar) without necessarily devaluing Naira. This is because the demand for dollars against Naira will reduce as other international currencies like the Chinese Lhira will now be used.

REFERENCES

[1] Alayande B.A. (2007) "Financial Sector Liberalization and Economic Growth in Nigeria" Paper presented at Nigerian Economic Society's conference in Abuja, 22-24th August.

- [2] Altig, David, Lawrence J. Christiano, Martin Eichenbaum, and Jesper Linde "Firm-Specific Capital, Nominal Rigidities and the Business Cycle," mimeo, Northwestern University, 2004.
- [3] Aly H.Y. (2008) "The Role of Government in a Market Economy" MariomStar.com [Online] http://www.ohio-state.edu/.../the 20%role 20% of %20 government (Acessed February 15th 2016).
- [4] Bernanke, Ben, Mark Gertler and Simon Gilchrist "The Financial Accelerator in a Quantitative Business Cycle Framework," Handbook of Macroeconomics, edited by John B. Taylor and Michael Woodford, Amsterdam, New York and Oxford: Elsevier Science, North-Holland, 1341-93: 1999.
- [5] Dixit, Avinash and Joseph Stiglitz ."Monopolistic Competition and Optimum Product Diversity," American Economic Review, 67: 297– 308, 1977.
- [6] Gang R and Khan C (1999) cited from Nwaobi, G.C.(2006) Modern Econometric Modelling for Developing Economies II. QERB, Aba ,Nigeria.
- [7] Graeme, C.L. (2006) Macroeconomics, Thompson Learning Ltd, Britain.
- [8] Heller J. (1975) cited from Nwaobi, G.C.(2006) Modern Econometric Modelling for Developing Economies II. QERB, Aba, Nigeria
- [9] Komolafe, S.O. (1999) Measurement and Financing of Fiscal deficit in Nigeria in Komolafe S.O.(eds) Fiscal Policy Planning and Management in Nigeria, Ibadan, NCEMA
- [10] Mansfield, E. and Behravesh N. (1992), Economics. New York; ww.Norton. [Online] https://www.mhhe.com/economics/Samuelson 17/students/chapter 2. Acessed February 15th 2016.
- [11] Mosley Y (1987) cited from Nwaobi, G.C.(2006) Modern Econometric Modelling for Developing Economies II. QERB, Aba, Nigeria.
- [12] Obadan M.I. (2013) "General Introduction" in Obadan M.I and Akpankpan E. (Eds) Tax Administration and Government Revenue Performance in Nigeria. National Institute for Legislative Studies (NILS) National Assembly, Abuja
- [13] Samuelson P (1992) Economics New York. WW. Norton. [Online] https://www.mhhe.com/economics/Samuelson 17/students/chapter 2. Acessed February 15th 2016New York.
- [14] Smarts, F, and Walters R (2003) "An Estimated Dynamic Stochastic General Equilibrium Model of the Euro Area," Journal of the European Economic Association 1: 1123-1175, 2003.
- [15] White K (1993) cited from Nwaobi, G.C.(2006) Modern Econometric Modelling for Developing Economies II. QERB, Aba ,Nigeria.(1994) cited from Nwaobi, G.C.(2006) Modern Econometric Modelling for Developing Economies II. QERB, Aba ,Nigeria.