

# Implications of Government Expenditure for Economic Growth: A Case of Nigeria Experience

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## ABSTRACT

*This research work is on the implications of Government Expenditure on Economic growth in Nigeria. Noting that Government Expenditure is of the core of economic stabilization, it is important to examine carefully how it influences the economic growth so that it will be in consonance with other macro economic objective. The Keynesian aggregate expenditure is adopted as a frame work to explain the role of Government spending on output. The Johansen's integration test was applied to verify the long run relationship between the variables and the Granger causality test was employed to determine the existence and direction of causation between government expenditure and economic growth. The autoregressive distributed log (ARDL) methodology was employed to examine the relationship between the independent variables and dependent variables. The analysis and the finding revealed government expenditure (both capital and recurrent) is positively and statistically significant on economic growth. The study therefore recommends that for Nigeria, the policy of increasing spending to promote economic growth will be appropriate. However, Government should give priority to the capital component that is more productive which can better induce rapid economic prosperity. However the expenditure should be adequately monitored to achieve effective influence on economic growth.*

## Keywords

*Government expenditure, Fiscal policy, Economic growth, Macro Economic Indicators*

## 1. INTRODUCTION

Government expenditure is a term used to describe money that government spends in an economy. Government expenditure occurs on every level of government, from local councils to federal organization. Government intervention in resource allocation arose due to the failure of the market mechanism to effectively and efficiently allocate these resources. The Nigeria economy operates a

mixed economy, which is the interaction between the private and public sector in an economy.

Economists classify government expenditure into three main types. Government purchases of goods and services for current use which is also referred to as government consumption. Government purchase of goods and services intended to create future benefits such as infrastructure investment or research spending which is referred to as government investment. Government expenditures that are not directly purchases of goods and services, they are also referred to as transfer payment. The structure of Nigeria government expenditure can broadly be categorized into capital and recurrent expenditure. The recurrent expenditure are government expenses on administration such as wages, salaries, interest on loans, whereas capital expenditure are expenses on capital project like roads, airports, education, telecommunication, electricity generation. One of the main purposes of government spending is to provide infrastructural facilities. The general view is that public expenditure either recurrent or capital expenditure, notably on social and economic infrastructure can be growth-enhancing

Economic growth refers to the increase in a country's GDP, although this differs depending on how national income has been measured. In a developed economy, in order to break the vicious of poverty, economic growth must be sustained. In a developing economy usually make use of fiscal policy to achieve accelerated growth. Tanzi (1994) observes that fiscal policy applies to the use of fiscal instruments (taxation and spending) to influence the working of the economic system in order to maximize economic welfare with the overriding objective of promoting long-term growth of the economy.

The growth in government expenditure in Nigeria, according to Buhari (1993) as cited by Ogwuru (2009), is due to, among other factors, rising income level, urbanization of the population, technological and innovative advancement change in political and bureaucratic structures, and the productivity lag. Nigeria public expenditure accounts for over 20 per cent of the gross domestic product (GDP) (Adubi and Obioma 1999).

Nigeria government was able to maintain high levels of government expenditure in the late 1970s and late 1980s because of the gains gotten from petroleum sector. This encouraged the massive intervention of the federal government in the 1970s however Government began to enlighten up in the 1980s when the fall in the prices of commodities in the world market resulted to an extreme reduction in government earnings. The decline in government earnings (from N2815.2 million in 1978 to N2031.6 million in 1979 and from N3949.5 million in 1982 to N2922.0 million in 1984) from non-oil revenue (CBN, 1994) with limited domestic savings narrowed the revenue base for financing public sector operations. The Government resorted to borrowing for financing large government budgetary deficit Public sector borrowing from the domestic credit market also tended to crowd out private sector investment (Adubi and Obioma 1999).

In Nigeria, government activities sometimes produce misallocation of resources and hinder the growth of national output. Increasing the government expenditure may result into reduction in the performance of the economy due to the fact that the government increases tax of individuals which leads to reduction in productivity. This study has raised a research question of how government expenditure imparts economic growth in Nigeria and which of capital expenditure or recurrent expenditure stimulates growth in Nigeria. The remaining part of this study is divided as follows: section two provides the review of relevant literature, section three gives the methodology, section four shows the presentation of result while section five provides the conclusion and recommendation.

### Statement of the Problem

In the last decade, Nigeria's economy has metamorphosed from the level of millions or billions of naira and postulating to trillions naira on the expenditure side of the budget. This will not be surprising if the economy is experiencing surplus or equilibrium on the records of balance of payment (Jelilov, Gylych; Musa, Muhammed; 2016). Better still, if there are infrastructures to improve commerce with the system or social amenities to raise the welfare of the average citizen of the economy. All these are not there, yet we always have a very high estimated expenditure. This indicates that something is definitely wrong either with the way government expands budget or with the ways and manners, it has always been computed (Jelilov, 2016).

Unfortunately, the rising government expenditure has not translated to meaningful growth and development, as

Nigeria ranks among the poorest countries in the world. In addition, many Nigerians have continued to wallow in abject property, coupled with this, is the dilapidated infrastructure (especially roads and power supply) that has led to the collapse of industries, with high level of unemployment (Nurudeen and Usman 2010). In fact, macroeconomic indicators like the balance of payment, import obligations, inflation rate, exchange rate, and national saving problems reveal that Nigeria has not fared well since the 2000.

### Research Questions

Against the above identified problems in the Nigerian economy, the following research questions are raised for this research work to answer.

- i) What are the government expenditure patterns in Nigeria?
- ii) Is there a significant relationship between government investment expenditure and economic growth in Nigeria?
- iii) What are the ways forward to stimulate economic growth in Nigeria?
- iv) What are the factor influencing the level of economy growth in Nigeria?

### Objectives of the Study

The broad objective of the study is to examine the relationship between government expenditure and economic growth in Nigeria. The specific objectives are:

- i) To study the government expenditure patterns in Nigeria.
- ii) To investigate if there is a significant relationship between government investment expenditure and economic growth of Nigeria.
- iii) To develop an econometric model that would serve as a guide to policy – makers in a bid to articulate government expenditure so as to stimulate economic growth in Nigeria.
- iv) To discuss the various factors influencing the level of economic growth in Nigeria.

### Statement of Hypothesis

The Null hypothesis is tested against the alternative hypothesis in this research work as stated below:

H<sub>0</sub>: There is no significant relationship between government expenditure and economic growth in Nigeria.

H<sub>1</sub>: There is a significant relationship between government expenditure and economic growth in Nigeria.

H<sub>0</sub>: Fiscal Policy has a significant impact on the Nigerian economic Growth.

H<sub>1</sub>: Fiscal Policy has a significant impact on the Nigerian economic growth.

### Scope of the Study

The area of the study is Nigeria. The period of study is 25years, which is 1991 – 2016.

### Limitation of the Study

The study is conducted with a number of limitations; one of such limitations is time constraint as the research is carried out with other academic work. Another problem encountered during the course of the study is shortage of finance. Finally, the fundamental limitation of most research work in the developing countries, concerns the poor quality and inadequacy of data.

## 2. LITERATURE AND THEORETICAL REVIEW

Since 1959, when Richard Musgrave (1989) published *The Theory of public Finance*, it has been a tradition for economists to classify governmental functions in three classes of allocation, stabilization and redistribution as proposed by Musgrave . The pursuit of the other three functions was assumed to automatically generate a natural long-run rate of growth. However in recent decades, growth has acquired great prominence in many countries. As a consequence, various policies that do not easily fit into Musgrave's categories have been introduced. It is high time to recognize economic growth as an explicit, fourth objective to be added to Musgrave's trio (Musgrave, 1989).

Indeed, if appropriately managed and utilized, government expenditure has significant positive effect on real GDP growth, especially in less developed infrastructural facilities and where private sector is not mature enough to play the expected role in the economy. The government action to the economic growth may be beneficial and at the same time be detrimental. The beneficial side of government action can result in: The use of fiscal policies like income taxes and transfer payment which can lead to more equitable redistribution of income; The supply of pure public goods which may constitute a sizeable component of aggregate demand ; Government often acts

as facilitator in the markets with asymmetric and imperfect information (Husnainet al., 2011). The action of the state may impede economic growth. This is possible as a result of competition between the less efficient public sector and the private sector in the credit market which may increase interest rate thereby dislocating private investment and eventually reducing economic growth. Also, taxes imposed by the state can equally distort market prices and effective resources allocation (Husnainet al., 2011).

Determination of total government expenditure and its patterns is complex and may include many factors. Such as fiscal conditions and political, cultural, demographic and economic factors. Most governments have continued to rely on external assistance to finance some of their public expenditures. A stronger association of aid with higher government consumption rather than with public investment would suggest both a "flypaper effect" and fungibility. This may imply that aid recipient governments view foreign aid like any other source of revenue and consequently use it for increased consumption , tax reductions or reduced fiscal deficits (future tax obligations) (Hindriks, 2004).

### Expenditure Growth Models

Development models of government expenditure growth are best represented by works of Musgrave and Rostows. Their views are generalization gleaned from examination of a large of different historical trends of developed economies. In the early stages of economic growth and development, public sector investment as a proportion of total investment of the economy is found to be high since public capital formation is of particular importance at this stage. The public sector is therefore seen to provide social infrastructure overheads such as roads, transportation systems, sanitation systems, law and order, health and education and other investments. This public sector investment, it is argued, is necessary to increase productivity and to gear up the economy for take \_off into the middle stages of economic and social development. In the middle stage of growth, the government continues to supply investment goods but this time public investment is complementary to the growth in private investment. During all the stages of development, market failures and information asymmetry exist which can frustrate the push towards maturity. Hence, the increase in government involvement in order to deal with these market failures. Rostow's claims are that once the economy reaches the maturity stages the mix of public expenditures will shift from expenditures on infrastructure to increasing expenditures on education, health and welfare services. In the mass consumption stage, income maintenance

programs, and policies designed to redistribute welfare, will grow significantly relative to other items of public expenditure and also relative to GDP (Brown and Jackson 1996).

According to the Solow (1956) model, other things being equal; saving/ investment and population growth rates are important determinant of economic growth. Higher savings/investment rates lead to accumulation of more capital per worker and hence more output per worker. On the other hand, high population has a negative effect on economic growth simply because a higher fraction of saving in economies with high population growth has to go to keep the capital – labour ratio constant. The principal conclusion of Solow (1956) model is that the accumulation of physical capital cannot account for either the vast growth over time in output per person or the vast geographic differences in output per person. The model predicted technological progress typically assumed to grow at a constant ‘steady state’ – is what determines most output growth.

The Armeij Curve can be expressed in a simple quadratic form, as follows:

$$RGDP = a + \beta G - \delta G^2 + \gamma T$$

The positive sign on the linear term, G (government expenditure), is designed to show the beneficial growth (Real GDP), while the negative sign for the squared term means the variable measures any adverse effects associated with increase government size. Since the squared term increase in value faster than the linear term, the presence of negative effects from government spending eventually will outweigh the positive effect, producing downward-sloping portion of the Armeij Curve. To control for factors unrelated to government spending, Vedder and Gallaway (1998) introduced the time variable T. therefore, the faster and greater the expenditure increases, the greater the probability of diminishing returns and ineffective use (Leach, 2002).

### Empirical Review

Nworji and Oluwalaiye (2012) employed investigative and empirical methods to analyze the relationship between government spending on road infrastructure and economic growth in Nigeria. The variables used in the study include GDP which is a proxy for economic growth and it is the explained variable, while the explanatory variables include expenditure on defense, transport and communication used as a proxy for road and inflation rate. Multiple regression analysis was employed to analysis the parameter estimate.

The a priori expectation of the study is to have positive signs for the parameters. The estimate value of the partial regression coefficient in the study is that expenditure on defense, transport and communication expenditure and inflation rate correlate positively with economic growth. The model exhibited a very high explanatory power.

Loto (2011) examined the relationship between government spending and growth in a linear form using the OLS method. The time series were tested for the order of integration of the individual series by conducting unit root test for stationarity. The study employed on each of the variable the standard Dickey – fuller test. The essence of using the technique is to identify the relationship between government spending on the chosen sector and economic growth in Nigeria. The variables used include GDP growth rate, Education spending, Health spending, Agriculture, Transport and communication. The outcome of the result revealed the existence of equilibrium condition that keeps the variables in proportion to each other in the long run.

In Devarajan S. et al (1996), the study focused on the link between the level of public expenditure and growth, a condition was derived in which a change in the composition of expenditure leads to higher strategy – state growth rate of the economy. The condition not just depends on the physical productivity of the different components of public expenditure but also on the initial shares. Using the data from 43 developing countries over 20 years, they showed that an increase in the share capital expenditure has positive and statistical significant growth effect. The result implies that developing country governments have been misallocating public expenditure in favour of capital expenditure at the expense of recurrent expenditure. The study by Khalifa (1997) the empirical analysis found no consistent evidence that government spending can increase Saudi Arabia’s per capital output growth. Therefore, a fiscal policy aiming the control of the budget deficit in Saudi Arabia has to consider shrinking the size of the government and limiting its role in the economy. A time series analysis was conducted with particular intention given to the causal pattern in the context of Vector Auto Regression (VAR) in Saudi Arabia.

Benjamin and Tin (1997) examined the causality between government expenditure and economic growth along with money supply in a trivariate framework by applying VAR techniques to South Korea data for the period 1954-1994. The study found that there is bidirectional causality between government expenditure and economic growth in South Korean. It also found out that money supply affects

economic growth as well. The findings supports that both the conventional Keynesian framework that causality runs from government expenditure to national income and the Wagnerian theory that national income causes government expenditure.

Baro and Sala Matins (1992) as well as Easterly and Rebelo (1993) emphasized the importance of government policy (activity) in economic growth. They laid emphasis on the composition of public expenditure rather than its level and in that vein felt that the productive government expenditure has an effect while the unproductive government expenditure has no effect. But the problem is to identify which government expenditure is unproductive before the spending. This implies that government expenditure and composition of government expenditures are important determinants of growth. On the other hand, there seems to be a direct link between budget policy and growth, and this has primarily been associated with tax policy. The structure of taxation could have important implication for growth. The empirical evidence of the impact of various aspect of tax policy on growth has so far been mixed. Easterly and Rebelo (1993) pointed out that a major difficulty in isolating the impact of tax on growth arises because key non-tax variables such as public expenditure that are often not independent of tax policy can also affect growth.

Anderson, Renzio and Levy (2006) study the role of public investment in poverty reduction. The paper examined the linkage between public investment, growth and poverty reduction, with the aims of providing overall view of existing theories, evidence and methods, and of examining the ways to provide better guidance to policy makers in the use of available techniques and information to set priorities for public investment. These are several channels through which public investment might affect the economy. They review the theory behind these channels, distinguishing the macro from effects.

According to Olugbenga and Owoeye, 2007 cited in Amassoma, Nwosa and Ajisafe (2011) who examined the relationship between government expenditure and economic growth for a group of 30 OECD countries during the period 1970-2005. The result shows that there is long run relationship between government expenditure and economic growth. The result reveals that there was a unidirectional causality from government expenditure to growth for 16 out of the total countries and this supported the Keynesian hypothesis. Causality test was said to run from economic growth to government expenditure in 10 countries which confirmed the Wagner's law.

Omoke (2009) investigated the direction of causality between Government expenditure (GE) and National Income (NI) in Nigeria using annual data. The research employed the co-integration a Granger Causality tests for the period 1970 – 2005. The result showed that no long-run relationship existed between government expenditure and National income Nigeria. The Granger causality test revealed that causality ran from government expenditure to national income thus concluding that government expenditure ply's a significant role in promoting economic growth in Nigeria.

Usman. A et al (2011 pp 104-113), in their study, they explained how public expenditure is used as proxy for public capital which is further decomposed by sector. This helps to investigate the impact of each sector on economic growth. A multivariate time series framework is used. Augmented Dickey Filler test indicated that two of the variables are stationary at levels. Philip Peron test show that three are stationary at level and others at first different. Result of the regression show that in the short run public spending gas no impact on growth. However, co integration and VEC results shows that there is long run relationship between public expenditure and growth.

Ogbole, Amadi and Essi (2011 pp 401-417) adopted a growth model; they however made some adaptations to suit their study. The study was during 1970-2006. The study involved comparative analysis of the impact of the fiscal policy on economic growth in Nigeria regulation and deregulation periods. The result obtained showed that there is different in the effectiveness of fiscal policy in the stimulation economic growth during and after regulation, than in the regulation period. The focus of the study is the differential in the fiscal policy effectiveness in promoting economic growth in the two broad periods. The main variable is fiscal policy. They used Federal Government spending as a proxy policy.

Nkwatoh. L. S (2012) study analysed the relationship and direction of causality between government expenditure and economic growth in Nigeria using annual data from 1961 to 2009. Using co integration and Toda – Yamamoto Granger causality test. The analysis was both at the bivariate (aggregated) and multivariate (disaggregated) system. The result of the Johanse bivariate/multivariate co integration revealed that there was no long run relationship among the stationary variables. Government expenditure causes economic growth at a bivariate level supporting Keynes Hypothesis that increase government expenditure amplifies economic growth.

The study by Bakare (2012) was based on assessing the role of government spending for sustainable growth using annual data from 1975 - 2008. In the study, ordinary least square multiple regression was used and the Harrod-Domar growth model was analyzed. The study found out that increase in government expenditure does not contribute to sustainable growth in Nigeria. The findings demonstrated that, the allocation of public expenditure does not fulfill the pareto optimal criterion. The study examined that there is a long run and significant relationship between public spending and sustainable growth in Nigeria.

Omojimate, B. U showed that there is co-integration between public expenditure and education, primary school enrolment and economic growth. The test revealed that there is bi-directional causality between public recurrent expenditures on education and economic growth. No causal relationship was established between capital expenditure on education and growth.

### 3. METHODOLOGY

This paper is on government expenditure and its effect on economic growth for the period 1991-2016. The data used for this study was a secondary and was obtained from World Bank. The data will be analysed and interpretation will be made so as to draw a conclusion on the impact of the independent variables on the dependent variables.

#### Model Formulation

For the purpose of this analysis, two model are specified; the first is the where government expenditure is taken as a lump while the second is when the government expenditure is disaggregated into its recurrent and capital components. The models are set as Autoregressive Distributed Lag (AEDL) specifications.

$$GDP=f[GDP(-1), GDP(-2), GOV, GOV(-1), GOV(-2), NV INV(-1), INV (-2)]$$

Where GDP stands for Gross Domestic Product; GOV for government expenditure and INV Investment

The model consist of Gross Domestic Product which is a proxy used for calculating economic growth in Nigeria, Total government expenditure investment which is also a proxy for gross capital formation in Nigeria. The explanatory variable stated above is expected to have positive relationship.

Furthermore, the total government expenditure in Nigeria can be divided into capital government expenditure and recurrent government expenditure. The two types of government expenditure can be used to determine which has more impact on economic growth in Nigeria. It can be modeled as:

$$GDP=f[(GDP(-1), GDP(-2), TREC, TREC(-1), TREC(-2), TCAP, TCAP(-1), TCAP(-2))]$$

Where TREC is Total recurrent e expenditure and TCAP is Total capital expenditure.

## 4. DATA ANALYSIS AND INTERPRETATION

Table 4.1 Unit root test

Variables	Augmented Dickey-Fuller Test Statistics	Phillip – Perron Test statistics	Order of Integration	Max No. of Lags
GDP	-4.012759	-4.012759	1(1)	7
GOV	-7.159771	-6.976486	1(1)	7
INV	-3.697693	-3.558430	1(1)	7
TCAP	-5.660589	-5.652449	1(1)	7
TREC	-7.975949	-8.065964	1(1)	7

Source Authors' computation

Table 4.2: Cointegration result (a)

Trend assumption: Linear deterministic trend.

Series: GDP GOV INV

Unrestricted cointegration Rank Test (trace)

Lags interval (in first difference): 1 to 1			
Eigen value	Trace value	5% critical value	No. of CE's
0.847699	82.62526	29.79707	None*
0.455944	28.05021	15.49471	At most 1*
0.301303	10.39782	3.841466	At most 2*
Trace test indicates 3 cointegrating eqn(s) at the 0.05 level			
*denote rejection of the hypothesis at the 0.05 level			
**Mackinnon-Haug-Michelis (1999) P – values			

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Eigen Value	Mas-Eigen Statistics	0.05 critical value	No. of CE's
0.847699	54.57504	21.13162	None *
0.455944	17.65240	14.26460	At most 1*
0.301308	10.39782	3.841466	At most 2*

Max-eigen value test indicates 3 cointegrating eqn. (s) at the 0.05 level

\*denotes rejection of the hypothesis at the 0.05 level

\*\* Mackinnon – Haug-Michelis (1999) P-values

**Table 4.3 Regression Result (a)**

Variables	Coefficient	Standard error`	t-statistic	Probability
C	5.337038	2.210052	2.414893	0.0237
LNGDP(-1)	0.944916	0.212534	4.445959	0.0002
LNGOV	0.339385	0.150765	2.251089	0.0338
LNINV(-1)	0.00.6003	0.091554	0.065570	0.9483
LNGDP(-2)	-0.299370	0.203505	-1.471074	0.1543
LNGOV(-2)	0.038524	0.147986	0.260325	0.7968
R-square	0.996371	Adjusted R <sup>2</sup>	0.995615	
Prob (F.statistics)	0.000000	D-W statistics	2.296987	

Source: Authors' computation from result

Table (4.1), it is observed that the variables are cointegrated. The existence of cointegration implies that there is long-run equilibrium relationship between the states variables.

From the result stated, given the value of adjusted R<sup>2</sup> that the independent variables in the model statistically explains the changes in the position of the gross domestic product in Nigeria. 99% changes of the dependent variables are attributed to the independent Variable. The model is statistically significant given the value of the F-statistic implying that the relationships estimated in the model is appropriate and the Durbin-Watson statistics is also significant having a value of 2.296987, it allows us to conclude that there are no problems of autocorrelation between the variables.

From the model stated, the GOV at the current period has a positive relationship to GDP and it is statistically significant at 5% level of significance. Also GOV when lagged by two periods has a positive relationship but not statistically significant relationship with GDP. Therefore the a priori expectation is confirmed, that government expenditure will rise in the same direction as GDP in Nigeria. In this model, INV in the first period has a positive relationship to the dependent variable but it is not statistically significant.

**Table 4.4 Granger Causality**

Pairwise Granger Causality Tests

Date: 07/08/13 Time: 23:50

Sample: 1980 2011

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
LNGOV does not Granger Cause LNGDP	30	1.73301	0.1973
LNGDP does not Granger Cause LNGOV		3.98410	0.0315
LNINV does not Granger Cause LNGDP	29	0.11136	0.8951
LNGDP does not Granger Cause LNINV		1.55055	0.2326
LNINV does not Granger Cause LNGOV	29	2.37425	0.1146
LNGOV does not Granger Cause LNINV		0.94906	0.4012

Table (4.4) examines the direction of causation between the macroeconomic Variables. The significance causality determines the rejection of the Null hypothesis of no difference, the alternate hypothesis will be accepted. In the causality between government expenditure and the gross domestic product, Government expenditure does not granger cause gross domestic product to be significance, in this case the null hypothesis is accepted. Gross domestic product does not granger cause government expenditure produces a significant result and the conclusion will be to reject the null hypothesis and therefore accept the alternate hypothesis that gross domestic product granger causes government expenditure. This granger causality identifies a unidirectional causality.

The causality between investment and gross domestic product are not significant and in this situation the null hypothesis will be accepted. It implies that investment does not granger cause gross domestic product likewise, gross domestic product does not granger cause investment. There is no causal relationship between the two variables. The causality between investment and government expenditure are not significant and in this situation the null hypothesis is accepted which implies that none of the variables granger causes the other. It can be stated as investment does not granger cause government expenditure does not granger cause investment

**Table 4.5: Cointegration result (b)**

Trends assumption: Linear deterministic trend

Series: GDP TCAP TREC

Unrestricted Cointegration Rank Test (trace)

Eigen Value	Trace Value	5% critical value	No. of CE's
0.936444	112.0463	29.79707	None *
0.510858	29.37109	15.49471	At most 1*
0.231975	7.91800	3.841466	At most 2*

Trace test indicates 3 cointegrating eqn. (s) at the 0.05 level

\*denotes rejection of the hypothesis at the 0.05 level

\*\* Mackinnon – Haug-Michelis (1999) P-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Eigen Value	Max – Eigen statistics	0.05 critical value	No. of CE's
0.936444	82.67522	21.13162	None *
0.510858	21.45309	14.26460	At most 1*
0.231975	7.918000	3.841466	At most 2*

Max-eigen value test indicates 3 cointegration eqn(s) at the 0.05 level

\*denotes rejection of the hypothesis at the 0.05 level

\*\* Mackinnon – Haug-Michelis (1999) P-values

**Table 4.6: Regression result (b)**

Variables	Coefficient	Standard error	t-statistic	Probability
C	5.499331	2.225095	2.471504	0.213
LNGDP(-1)	0.943785	0.241815	3.902923	0.0007
LNGOV	0.023481	0.105230	0.223137	0.8254
LNINV(-1)	0.238128	0.099548	2.392090	0.0253
LNGDP(-2)	0.058198	0.130698	0.445290	0.6603
LNGOV(-2)	-0.287916	0.188560	-1.526919	0.1404
LNTCAP(-1)	0.041405	0.100973	0.410056	0.6856
R-square	0.996834	Adjusted R <sup>2</sup>	0.996008	
Prob (F.statistics)	0.000000	D-W statistics	2.192883	

Author's computation

This model identifies total capital expenditure and total recurrent expenditure independent variables. It is observe that there is existence of long – run relationship of the variables. Table (4.6) gives the adjusted R2 the independent variable statistically explains the changes in the dependent variable. 99% changes of the dependent variable are attributed to the independent variables. The model is statistically significant given the F-statistics and the Durbin-Watson statistics shows no indication of autocorrelation. From the model, TCAP coefficient in the current period and the first period are positively related. This result is related to the study of Muritala and Taiwo (2011) who also found that there is positive relationship between GDP against TCAP.

TREC variable shows that in all the periods the coefficients are positive. TREC in the current period is statistically significant while TREC in the first period is not significant; this is related to the study conducted by Modebe, Regina, Onwumere and Imo (2012). The a priori expectation of TREC having a positive relationship to GDP is correct. In Nigeria, recurrent expenditure contributes a large percentage to the gross domestic product. The analysis above on the impact of the lump sum government expenditure, recurrent expenditure and capital expenditure shows that the independent variables are positively related to economic growth.

## 5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### Summary

This study has modeled and estimated the aggregate expenditure for Nigeria in order to examine the long run relationship between the variables influencing economic growth in Nigeria. The study also examines the impact of the components of government expenditure on economic growth in Nigeria. It is shown in this study that increase in government expenditure over the years primarily drives economic growth. Government expenditure is positively related to economic growth and it is statistically significant. This study has contributed to the research effort since it empirically measures the impact of government expenditure on economic growth. The analysis revealed that there is relationship between government expenditure and economic growth. The aggregated effect of government expenditure on economic growth is statistically significant. This study adopts the Keynesian model (1936) of government intervention in the economy.



The study also shows the impact of each component of government expenditure on the Nigeria economy. The result of the total capital expenditure is not significant but is positive while the total recurrent expenditure is positively related and is significant. Recurrent expenditure grows at a higher rate while the capital expenditure grows at a slower rate. The Consequence of this is that the country takes the risk of not meeting her aspiration. One of the major problems of the economy is corruption and this affects the expenditures allocated to different sectors. In order to obtain economic growth it will require high level of transparency, accountability and integrity of the government on the expenditure at various sectors of the economy. Also, there is need for adequate planning of the government expenditure to achieve the desired aspirations.

Generally, the model's performance is good since its significance was shown by F-statistic, R – square (coefficient of determination) and coefficient of correlation (R) during the period of study. Therefore the research work has succeeded in showing that fiscal policy has a significant impact on the Economic Growth in Nigeria. Modeling Gross Domestic Product (GDP) against Government Expenditure, Interest rate and money supply, the result shows that the impact of Government expenditure, Interest rate and economic growth in Nigeria is statistically insignificant while money supply is positively and statistically significant to economic growth.

### Conclusion

Economic growth, which can be defined as sustainable growth in real GDP, is the overriding objective of Nigerian Government in their effort to minimize poverty levels and achieve sustainable economic development. Fiscal instruments are deemed to be essential in creating opportunities for widening the base at which developing countries could grow. Among fiscal instruments, government spending, which is the focus of this study, is very important for these countries. It follows that to achieve accelerated economic growth and sustainable development, government spending should be such that it creates a conducive environment for the private sector development and repairs market failures. In this case, the empirical study of the effects of government spending on economic growth has paramount importance to draw important policy implications.

### Recommendations

Based on the findings, the recommendations from the research are as follows:

1. The government should concentrate its spending on capital expenditure when the choice is between recurrent and capital expenditure.
2. Effort should be geared toward eradicating corruption and corrupt practices in the economy. This will likely ensure that financial allocations are channeled appropriately. When this is done, the impact of government expenditure on the economy will be better felt, and more precisely assessed.
3. Finally, further studies should be conducted to investigate other major influences on the economic growth in Nigeria, Which would aid fiscal policy making and implementation.

Finally, although the focus of this research was solely on measuring the effect of government expenditure on growth, an important issue to address in future studies is what determines governments' budget allocation for various sectors and in particular, the role of demographic factors and the nature of the political process.

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