# Government Expenditure and Economic Growth Nexus: Empirical Evidence from Nigeria (1970-2012)

Jibir Adamu, Babayo Hajara

Department of Economics, Faculty of Arts and Social sciences, PMB 127, Gombe State UniversityGombe, Nigeria. Economics Unit, School of Basic and Remedial Studies, PMB 127, Gombe State UniversityGombe, Nigeria.

Abstract: This study has examined the impact of public expenditure on economic growth in Nigeria using time series data for the period 1970-2012. Secondary data were sourced from the CBN, NBS, journals, text books etc. The adopted model was fitted with three variables: real GDP, capital and recurrent expenditure. The tools of analysis were the ADF unit root test and ordinary least square multiple regression accompanied by pairwise Granger causality test. The major objective of this study is to analyse the impact as well as direction of causality between the fiscal variables and economic growth. All the variables included in the model are stationary at level. Empirical findings from the study show that there is positive and insignificant relationship between capital expenditure and economic growth while recurrent expenditure had a significant positive impact on economic growth. Also, Granger causality test demonstrates a unidirectional causality running from the fiscal variables to economic growth in validation of the Keynesian theory. Consequently, the study recommended more allocation of resources for recurrent purposes as well; government should establish the body that will monitor contract awarding process of capital projects closely, to guard against over estimation of project cost and stealing of public funds.

Keywords: Capital expenditureEconomic growth, Granger causality, andRecurrent expenditure.

# I. Introduction

In almost all economies today, governments intervene in undertaking fundamental roles of allocation, stabilization, distribution and regulation especially where or when market proves inefficient or outcome is socially unacceptable. And also governments particularly in developing countries intervene to achieve macroeconomic objectives such as economic growth and development, price stability, full employment and poverty reduction (Usman et al, 2011).

In Nigeria for instance, a country characterized by low saving and investment, inadequate social services, insecurity etc, experience has shown that market forces alone perform below expectation leading to fluctuation in income, employment and prices. This gives birth to business cycle and the need to anti-cyclical measures to be adopted in order to curtail the situation. The deficiency can be reduced through the manipulation of government expenditure in establishing the basic infrastructures and other fiscal measures.

Theoretically, both Keynesians and neoclassical economists provided varieties of policies and tools of government intervention, which are broadly grouped into fiscal and monetary. The choice of a policy or tool depends on how relatively effective it is, in achieving the set of macroeconomic objectives based on theory or evidence. Thus, it is important to carry out country specific study so as to identify the efficacies of different policy instruments (Usman et al, 2011).

Over the last decades, the public sector spending has been increasing in geometric terms through government various activities and interactions with its Ministries, Departments and its Agencies (MDA's), (Niloy et al, 2003). This will not be surprising if the economy is experiencing surplus or equilibrium in the balance of payment, better still, if there are infrastructure to improve the industrial sector and the general welfare of the citizens in the country. All these are not there, yet government expenditure has continued to rise especially between 1970s and beyond due to the huge revenue generated from the oil boom as well as the excess proceeds of crude oil prices in the world market and the increase demand for public utilities in the country.

The government however, invested the funds in the areas of oil companies, banking and insurance, sea and air transport, hotel and tourism, cement and fertilizer plants, public utilities etc which accounted for high expenditure. Public spending had, therefore, been increasing with increase scope of government. As public expenditure kept increasing, the overall performance of the Nigerian economy on the other hand was low as the economy was characterized by little growth especially in the non-oil sectors of the economy. The stunted growth of the economy gave rise to unemployment, inflation, insecurity and inadequate public utilities. Estimates have shown that growth in the Nigerian economy has been fluctuating as it falls on average from 8.3% in 1999-2007 to 6.3% in 2008-2010 (CBN Statistical Bulletin, 2010). Government expenditure on these and other services or sectors would be expected to generate a corresponding growth trend in the economy.

Economic growth on the other hand refers to the increase in output of an economy's capacity to produce goods and services needed to improve the welfare of the citizens of the country. Growth is seen as a steady process which involves rising of output of goods and services in the economy. Growth is meaningful when the rate of growth is much higher than population growth because it has to lead to improvement in human welfare. Therefore, growth is seen as a steady process of increasing the productive capacity of the economy and hence, of increasing national income being characterized by higher rates of increase of per capita output and total factor productivity, especially labour productivity (Balami, 2006).

The relationship between public expenditure and economic growth has continued to generate series of debate among scholars (Akpan, 2005). Government performs two functions defense (security) and provision of public goods. Protection function consists of the creation of rule of law and enforcement of property right, this helps to minimize risk of criminal activities, protect life and property and the nation from external aggression, while provision of social or public goods includes road, education, electricity, water etc. Some scholars like Okwu et al, (2012) argue that increase in government expenditure on socio-economic and physical infrastructures encourages economic growth. For example, government expenditure on social services raises the productivity of labour and increase the growth of national output. Similarly, expenditure on economic infrastructures such as road, communication, power etc reduces production costs, increases private sector investment and profitability of firms, thus fostering economic growth and development. Supporting this view, some scholars conclude that expanding public expenditure contributes positively to economic growth of a country.

However, some scholars like Babatunde (2007) did not support the claim that increasing government expenditure promotes economic growth rather he asserted that increasing government expenditure slows down the overall performance of the economy. For instance, in an attempt to finance rising expenditure, government may increase taxes and or borrowing. Higher income tax discourages individual for working longer hours or even searching for jobs. This in turn reduces income and aggregate demand. In the same vein, higher profit tax tends to increase production costs and reduces investment expenditure as well as profitability of firms.

Furthermore, if government increases borrowing (especially from the financial institutions) in order to finance its expenditure, it will compete (crowds-out) away the private sector, thus, reducing private investment. Furthermore, in a bid to gain popularity and ensure that they continue to remain in power, politicians and government officials in Nigeria sometimes increase expenditure and investment in unproductive projects or in goods that the private sector can produce more efficiently (Abu and Abdullahi, 2010). The questions then are what has become of the huge amount of budgetary allocation to the economy over the years and the rhetoric sweet promises of past leaders and what has been the growth implication of such spending on the nation's economy? This study seeks a compositional analysis of the impact of government spending on economic growth for a period 1970 to 2012.

The rest of the study is organized as follows: section two contains review of Literature followed by methodology in section three. Section four contains results and discussions accompanied by conclusion and recommendations in the last section.

#### 2.1 Empirical Review

# II. Review Of Literature

There have been quite a number of empirical studies analyzing the relationship between public expenditure and economic growth so far. The results however, are varied as different analysis, techniques and data samples are adopted.

Khosravi and Karimi (2010) examined the relationship between government expenditure and economic growth using auto-regressive distributed approach of co-integration between 1960 and 2006 indicate the existence of long run relationship between public expenditure and economic growth in Iranian economy.

Cooray (2009) employed an econometric model that incorporates government expenditure and quality of governance in a cross-sectional study of the relationship between government expenditure and economic growth in 71 countries. The result showed that the size and quality of governance correlated positively with economic growth.

Similarly, Komain et al (2007) employed the Granger causality test, examined the relationship between government expenditure and economic growth in Thailand and found that government expenditure and economic growth were not co-integrated. The result also suggested that a unidirectional relationship, as causality runs from government to growth. However, the result indicated a significant positive effect of government spending on economic growth.

Abu Badaer and Abu Qarn (2003) investigated the causal link between government expenditure and economic growth for Egypt, Israel and Syria. The study found bidirectional causality from government spending to economic growth but with a negative long term relationship between two variables. At the sectoral level, it was also found that military burden negatively affects economic growth for all the three countries and that civilian has a positive growth effects in Egypt and Israel. The review of the relationship between fiscal policy and economic growth in three North African countries of Egypt, Morocco and Tunisia by Mansouri (2008) shows positive correlation between the two variables and that one percentage rise in public expenditure led to 1.26 increase in the real GDP in Morocco 1.15 percent in Tunisia and 0.56 percent in Egypt. The result also affirmed existence of long run relationship for all the three countries.

Bose et al (2003) also examined the effect for a panel of 30 developing countries covering a period of 1970-1990 with a particular focus on sectoral expenditure and employed regression techniques. Their results revealed that capital expenditure is positively and significantly related to economic growth while recurrent expenditure is negatively related to growth.

In their empirical analysis of the relationship between government expenditure and economic growth, Folster and Henrekson (2001) employed various econometrics approaches to study a sample of wealthy countries for the period 1970-1995. Based on their findings, they opined that more meaningful and reliable results are generated as economic problems are addressed.

Mwafaq (2011) investigated the impact of public expenditure on economic growth using a time series data on Jordan for the period 1990 - 2006 and found that the government expenditure at an aggregate level has positive impact on the growth of GDP which is attuned with the Keynesian's theory.

In another study using time series data for the period of 1962-2009 for Lebanon and applied johansen co-integration techniques to examine the nature of government expenditure and its impact on economic growth, Saad and Kalakechi (2009), found that government spending has a positive impact on short run, while expenditure on defense and health are negatively correlated in the long run and insignificant in the short run. Finally, expenditure on agriculture is found to be insignificant in both cases.

Chih-Hung Liu, et al. (2008), investigated the causal relationship between GDP and public expenditure for US federal government covering the time series data 1974 to 2002, they found in their study that total expenditure affect economic growth positively, which is inconsistent with the Keynesian theory. However, the growth of GDP does not cause the increase in total public expenditure which is inconsistent with Wagner's Law.

A study by Ranjan and Sharma (2008) showed that government expenditure exerted significant positive impact on economic growth in India during the period 1950-2007, and that the two set of variables are co-integrated.

Jiranyankul and Brahmasrene (2007) investigated the relationship between government expenditure and economic growth in Thailand for the period 1993 to 2006 and employed standard Granger Causality test and Ordinary Least Square (OLS) method. The results showed a unidirectional causality from government expenditure to economic growth without feedback. Furthermore, estimation from the ordinary least square confirmed the strong positive impact of government expenditure on economic growth during the period of investigation.

In Nigeria also, there are mixed findings on the relationship between government expenditure and economic growth, the determinants of public expenditure growth as well as its impact on Nigerian economy. For instance, Muritala and Taiwo (2011) examined the trends and effects of government expenditure on the growth rate of real GDP in Nigeria between 1970 and 2008 using ordinary least square techniques. The finding shows that there is a positive relationship between real GDP and government capital and recurrent expenditure.

In addition, thirty two (32) years time series data from 1977 to 2008 was reviewed by Nuruddeen and Usman (2010) in analyzing the impact of government expenditure on economic growth in Nigeria. The study revealed that total capital expenditure has negative effect on economic growth. Comparing the relative effectiveness of fiscal versus monetary policy on economic growth in Nigeria, Adefeso and Mobolaji (2010) suggest that the effect of monetary policy is dominant than fiscal policy on economic growth in Nigeria. This result was arrived at having utilized annual time series data during the year 1970 to 2007.

Koeda and Kramarenko (2008) evaluated the swift scaling-up of expenditure followed by quick scaling down of Azerbaijan government expenditure due to upsurge in the crude oil production. The research which relied on the neo-classical growth model suggests that the sharp variations in the fiscal policy pose significant threat to sustainable economic growth.

Adetomobi and Ajanwale (2006) examined education expenditure trend, higher education student enrollment and linkage with unemployment and economic growth in Nigeria. The result shows that government funding is unstable and unpredictable, capital and recurrent funding since 1970 are only a very small fraction if the government budget, total enrollment contrasts sharply with the level of employment because government could adequately cater for and the proportion of GDP that goes to education is still low.

## 2.2 Theoretical review

The theory of public expenditure may be discussed in the context of increasing public expenditure, the range of public expenditure and/or in terms of the division of a given amount of public expenditure into different items like recurrent and capital expenditure. The latter of the two parts may also be conceived in terms of allocation of the economy's resources between providing public goods on the one hand and private goods on the other.

Of all economists who discussed the relationship between public expenditure and economic growth, Keynes was among the most famous and noted with his apparently contrasting view point on this relation. Keynes regards public expenditures as an exogenous factor which can be utilized as a policy instruments to promote economic growth. From the Keynesian thoughts, public expenditure can contribute positively to economic growth. Hence, an increase in government consumption is likely to lead to an increase in employment, profitability and investment through multiplier effect on aggregate demand. As a result, government expenditures augments the aggregate demand, which provokes an increased output depending on expenditure multipliers.

Wagner's Law is a principle named after a German economist Aldolph Wagner (1835-1917). The law predicts that the development of an industrial economy will be accompanied by an increased share of public expenditure in gross national product. Musgrave and Musgrave (1989) opined that as progressive nations industrialize, the share of the public sector in national economy grows continually. The theory states that there is a functional relationship between the growth of an economy and the growth of the government activities; so that the government sector grows faster than the economy (Musgrave, 1969). Thus, all kinds of government irrespective of their level of intentions (peaceful or war), and size, indicate the same tendency of increasing public expenditure. In other words, Wagner's law states that, as per capita income of an economy grows, the relative size of public expenditure grows along with it. As the economy grows, there will be increase in the number of urban centers, with the associated social services such as; crime, which requires the intervention of government to reduce activities to barest minimum, large urban centers, also requires internal security to maintain law and order. These interventions by the government have cost, leading to increase in public spending in the economy.

The third thesis dealing with the growth of public expenditure was put forth by Wiseman and Peacock in their study of public expenditure in UK for the period 1890-1955. The main thesis of the authors is that public expenditure does not increase in a smooth and continuous manner, but in jerks or step like fashion. At times, some social or other disturbance takes place, creating a need for increased public expenditure. While earlier, due to an insufficient pressure for public expenditure, the revenue constraint was dominating and retraining an expansion in public expenditure, now under changed requirements such as retrain gives way. The public expenditure increased and makes the inadequacy of present revenue quite clear to everyone.

The movement from the older level of expenditure and taxation to a new and higher level is the "displacement effect". The inadequacy of the revenue as compared with the required public expenditure creates an "inspection effect". The government and the people review the revenue position and the need to find a solution of the important problems that have come up and agree to the require adjustments to finance the increased expenditure. They attained a new level of tax tolerance. They are now ready to tolerate a greater burden of taxation and as a result the general level of expenditure and revenue get stabilized at a new level till another disturbance occurs to cause a "displacement effect". Thus each major disturbance leads to the government assuming a larger proportion of the total national economic activity. In other words, there is "concentration effect". The concentration effect also refers to the apparent tendency for central government economic activity to grow faster than that of a state and local governments. Moreover, this aspect of concentration effect is also closely connected with the political set up of the country.

On the face of it, Wiseman – Peacock hypothesis look quite convincing. But, we must remember that they are much emphasizing the recurrent of abnormal situations which cause sizeable jumps in public expenditure and revenue. In all fairness to the historical facts, we must not forget that on account of advancement of the economy and the structural changes therein, there are constant and regular increments in public expenditure and revenue. Public expenditure has a tendency to grow on account of a systematic expansion of the public activities as also an increase in their intensity and quality. Increasing population, urbanization and an ever-increasing awareness of the civic rights on the part of the public expenditure. To an extent public expenditure gets financed by an ever-increasing revenue which is made possible through the expansion and structural changes in the economy. Thus, Wiseman-Peacock hypothesis is still a description of a particular tendency and does not isolate all the relevant causes at work.

## III. Methodology

Building on the existing theoretical and empirical literature, this study perceives a causal relationship between government expenditure and economic growth in Nigeria. Therefore, exploratory causal study design is adopted to investigate the impact of government expenditure on economic growth within the context of Nigerian economy. Empirical econometric approach is adopted in analyzing data considered relevant components of government expenditure and economic growth.

The researcher make use of secondary data which will be sourced from Central Bank of Nigeria (CBN) publications, National Bureau of Statistics (NBS), Federal Office of Statistics (FOS), journals, books, term papers etc. based on the perceived causal relationship between the identified variables of the research interest, a multiple regression model which is stochastic in nature is specified to forge a link between government expenditure and economic growth. Estimation of the model is via the Ordinary Least Square (OLS) techniques facilitated by the application of E-Views software. The regression output includes other relevant statistics that enhance further analysis and evaluation.

#### IV. Results And Discussions

This section deals with presentation and interpretation of the results of ADF unit root test of individual series, then, OLS regression output which is also followed by pair wise-Granger causality test results.

#### 4.1 Testing for Unit Root Test

It is a well known phenomenon that most of the economic variables are non-stationary. Presence of a non-stationary variable in regression model estimated via Ordinary Least Square (OLS) produces spurious results. Therefore, it is important to test variables in order to rule out the possibility of the presence of non-stationary among the variables. To examine the existence of stochastic non-stationary in the series, several procedures for the test of order of integration have been developed in which the most popular one is the Augmented Dickey-Fuller (ADF) Test. The ADF test relies on rejecting a null hypothesis of unit root (the series are non-stationary) in favour of the alternative hypothesis of stationarity. ADF test has been used to determine the degree of integration of each variable in the analysis. The result in table 1, below shows that all the variables including real GDP, capital expenditure and recurrent expenditure were found stationary at the level.

Table 1: ADF	Unit-root test	result at	the level
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Variables	ADF test statistics	Mackinnon critical values				
RGDP	4.999049*	-2.621185				
CAP	-5.953314**	-2.933158				
REC	5.951751*	-3.596616				

Source: Author's calculation using EVIEWS software

Note: \*, \*\* Denote rejection of the null hypothesis at 1% and 5% level of significance.

4.1 Model Formulation and Specification

 $GDP = \beta_{o} + \beta_{1}CAP + \beta_{2}REC + U_{t}$ 

GDP = Gross Domestic Product

 $\beta_{\rm o} =$ Intercept

 $\beta_1$  and  $\beta_2$  are parameters

CAP = Capital expenditure

REC = Recurrent expenditure

U<sub>t</sub> = Error term at period t. (With a prior expectation of  $(\beta_0, \beta_{1 \text{ and }} \beta_2) > 0$ ).

In this section, the estimates of the parameters in our formulated model as obtained running a multiple regression analysis with the use of ordinary least square (OLS) method will be given below.

Table 2 OLS Regression Result, rear ODT as the dependent variable.						
Variables	Coefficient	Std. Error	T-Statistics	Probability		
С	160136.9	18215.27	8.791353	0.0000		
CAP	0.014342	0.014472	0.990988	0.3276		
REC	0.241704	0.018057	13.38538	0.0000		
R-Squared	0.836466					
Adj R-square	0.828289	MeanDepVar	295077.4			
S.E of REG	100505.5	S.D DepVar	242544.1			
Sum squared	4.0411					
Log likelihood	-554.7321	F-stat	102.2985			
Durbin Watson T-test	2.192266	Prob (F-stat)	0.49000			

 Table 2 OLS Regression Result, real GDP as the dependent variable.

Source: author's calculation using EVIEWS Econometric Software

$$\begin{split} &GDP = 160136.9 + 0.014342 + 0.241704 + U_t \\ &(SEE) \ (18215.3) \ (0.140145) \ (0.01806) \\ &t^* \qquad (8.79135) \ (0.99099) \ (13.3854) \\ &R^2 = 0.836466 \\ &R^2 = 0.828289 \\ &F^* = 102.2985 \\ &DW = 2.192266 \end{split}$$

In Nigeria from 1970 to 2013, the estimated parameters of RGDP (Real Gross Domestic Product), CAP (capital expenditure) and REC (recurrent expenditure) are 160136.9, 0.014342 and 0.241704 respectively. The result of the estimated regression shows that the slopes of the coefficient are in line with our prior expectation. All the coefficients are positive. It is very clear that a unit increase in CAP (capital expenditure) increases the GDP by 0.014342 and a unit increase in REC (recurrent expenditure) increases the GDP by 0.241704. This implies that changes in the dependent variable (GDP) depend on changes on the explanatory variables (capital and recurrent expenditure).

Result of the analysis also shows that the explanatory variables included in the model explains about 84% variation in the explained variable. This implies that within the context of the model, government expenditure explained about 84% variability in economic growth during the study period. While the remaining 16% account for the error term (U). The high value of  $R^2$  shows that the model is a good fit, and that these components of government expenditure are important determinants of economic growth in Nigeria.

 $R^2$  is the adjusted coefficient of the multiple determination and from our result presented above it shows that 0.828289 that is approximately 83% of the variation in GDP is explained by variation in the independent variables capital and recurrent expenditure while the remaining 17% account for the stochastic error term (U). The implication of this is that, they help to explain the fact that explanatory variables included in the model account to a large extent for changes in the model.

Standard error test enables us to determine the degree of confidence in the validity of the estimated parameters. Given our null hypothesis  $H_0$  and alternative hypothesis  $H_1$  as:

$$H_0: \beta_1 = 0$$

$$H_1: \beta_{1\neq 0}$$

Therefore, we start by testing for  $\beta_1$  by showing whether  $S\beta_1$  is greater than or less than  $\beta_1/2$  that is,  $(S\beta_1 < \beta_1/2)$  or  $(S\beta_1 > \beta_1/2)$ , where  $S\beta_1$  is the calculated standard error value of the parameter  $\beta_1$  and  $\beta_1$  is the value of the parameter.  $S\beta_1=0.014472$  and  $\beta_1=0.007171$ . Therefore, 0.014472 >0.007171; we then accept the null hypothesis H<sub>0</sub> and conclude that capital expenditure is statistically insignificant.

In the case of recurrent expenditure ( $\beta_2$ ), S $\beta_2$ =0.018057 and  $\beta_2$ =0.120852. This implies (0.018057 < 0.120852). Recurrent expenditure ( $\beta_2$ ) is statistically significant and is in conformity with our prior expectation therefore, we reject the null hypothesis H<sub>0</sub> and accept the alternative hypothesis H<sub>1</sub>.

In the case of t-test, given 5% level of significance, the estimated t value is compared with the tabulated t-value taking into consideration the degree of freedom (n-k), where n is the sample and k is the number of explanatory variables in the model.

The value of t-statistics of 0.990988 indicate that CAP is statistically and individually insignificant at 5% significant level since the value of t-statistics is less than its corresponding theoretical value of 1.68 at 5% level of significance; the t-statistics also suggest that REC (recurrent expenditure) is statistically and individually significant at 5% level of significance. This is because t-statistics of 13.38536 is greater than the t-theoretical of 1.68 at 5% level of significance.

Furthermore, D-W statistics, we test the existence of serial correlation between the variables. DW is equal to 2.1922; this implies the absence of serial correlation. This is because the closer the DW value is to two (2), the better the evidence of the absence of serial correlation.

For the F-statistics, we formulate our hypothesis as:

$$H_0: \frac{\beta}{\beta} = 0$$

$$H_1: P_{1\neq 0}$$

Given our calculated f-value as 102.2985 and f-tab value at 5% level of significance with  $V_1 = (k - 1 = 2 - 1 = 1)$  and  $V_2 = n - k = 41$ , degree of freedom as 4.08. Thus, (102.2985 > 4.08) we then reject the null hypothesis and accept alternative hypothesis that there is positive relationship between government spending

(capital and recurrent) and economic growth despite the fact that CAP is statistically and individually insignificant.

## 4. Testing for Causality

One of the objectives of this study is to examine the causal relationship between fiscal variables (capital and recurrent expenditure) and economic growth in Nigeria for the period 1970 to 2013. In this study, Pair-wise Granger causality was applied to measure the direction (influence) of the dependent and independent used in the study. The result of the Pair-wise Granger causality is presented in table 3 below:

Lag 2			
Null hypothesis	OBS	F-statistics	Probability
CAP does not Granger cause RGDP	41	5.04091	0.9600
RGDP does not Granger cause CAP		2.38810	0.1062
REC does not Granger cause RGDP	41	6.34928	0.2722
RGDP does not Granger cause REC		1.78497	0.1823

 Table 3: Pair wise Granger causality test

Source: Extracted from E-VIEWS econometric software.

The Granger causality in table 3.above shows the direction of causality between the variables. Therefore, F-statistics was used to measure the causality at 0.05 level of significance. The results show a unidirectional causality running from capital expenditure to real GDP, likewise, there exist a unidirectional causality between recurrent expenditure and real GDP. This can be interpreted to mean that there is a causal relationship between the fiscal variables and economic growth. This shows that growth in capital and recurrent expenditure will lead to a corresponding growth of the Nigerian economy. Therefore, we accept our alternative hypothesis that says there is causality between government expenditure (capital and recurrent) and economic growth in Nigeria.

With respect to our estimated regression line, the equation and the model with their respective coefficient have conformed to our expectation.

From our result, real GDP is taken as a proxy to economic growth. The findings show that there is positive and insignificant relationship between capital expenditure and economic growth and also, there is positive and significant relationship between government recurrent expenditure and economic growth. This implies that government spending in recurrent is growth enhancing in the Nigerian economy. Thus, recurrent public expenditure has impacted significantly on economic growth and development in Nigeria during the period of study. The conclusion is drawn specifically from the high value of  $R^2$ , the t-test and the statistical significant of the parameter (REC) used in the study. It can therefore be said that the higher the government spending on recurrent expenditures, the higher the level of economic growth and development. This supports the Keynesian (1936) view of government active intervention in the economy using various policy instruments.

Unlike recurrent expenditure, capital expenditure shows positive and insignificant relationship with economic growth. However, the aggregated effect of public expenditure on economic growth is statistically significant as indicated by the computed f-statistics and its probability.

This implies that capital expenditure has little impact on economic growth of Nigeria. This can be as a result of high level of corruption, inefficiency and poor implementation of capital projects leading to overall death of infrastructures, unemployment, and insecurity among others in Nigeria. The aforementioned problems must be checked if Nigeria is to achieve any significant progress and meet the so called Vision 2020.

This indicate that the empirical findings of the research rejects the null hypothesis of there is no significant relationship between public expenditure and economic growth.

The findings of this study is in line with the findings of Okwu et al (2012), Usman et al (2011), Taiwo and Muritala (2011), Fajingbesi et al (1999), among others that there is positive and significant relationship between government expenditure and economic growth in Nigeria. On the other hand, the findings is in contrast with that of Babatunde (2007), Essian (1997), Nuruddeen and Usman (2010) and Okiakhi (2010) that there is no significant positive relationship between public expenditure and economic growth in Nigeria.

Moreover, the Granger causality test used in the study shows a unidirectional causality running from the fiscal variables (capital and recurrent expenditure) to real GDP (economic growth). This shows that the findings of this study is in support of Keynesian theory (1936) view of government active intervention in the economy using various policy instruments, and in contrast with the famous Wagner's (1813) law of Ever Increasing State Activity. This means that public expenditure (capital and recurrent) are important fiscal instruments that can be used to achieve various macroeconomic objectives in Nigeria. Also, available statistics from Central Bank of Nigeria has shown that government expenditure is on increase due to the fact that extra budgetary expenditures have been rising so fast and resulting in ever bigger fiscal deficit hence over period of 44 years (1970-2013), the fiscal operations of Nigeria have resulted in surplus in only six years, specifically these surpluses occurred in 1971, 1973, 1974, 1979, 1995 and 1996 (CBN, 2012).

More so, for Nigeria to be ready in its quest to become one of the largest economies in the world by the year 2020, holistic application of the findings and recommendations of this study is paramount as a strategy to fast track growth in the nation's economy.

## V. Conclusion And Recommendations

This study primarily dwells on the expenditure side of public finance. It examined the impact of public expenditure on economic growth in Nigeria. The output of the regression line indicated that capital expenditure have positive and insignificant relationship with economic growth while recurrent expenditure have positive and significant impact on the real GDP (economic growth). This implies that recurrent expenditure have strong positive impact on economic growth of Nigeria than capital expenditure. This could be as a result of missing expenditure between release and execution of capital projects in Nigeria especially during this democratic dispensation where corruption has eaten deep into the fabric of Nigerian society. The result might also be as a result of misplacement of priority and inefficiency in the use of public funds by politicians in Nigeria. Moreover, the study reveals unidirectional causality that runs from public expenditure (capital and recurrent) to real GDP (economic growth) in support of Keynesian (1936) view of government active role in the economy using various policy instruments. This implies that the study contradict famous Wagner's Law (1813) postulate of Ever Increasing State Activity. Thus, empirical findings of the study reject the null hypothesis that says there is no causality between public expenditure and economic growth in Nigeria.

The study further concluded that REC (recurrent expenditure) is a significant determinant of economic growth in Nigeria whereas CAP (capital expenditure) has little impact on economic growth. The components of government expenditure considered in this study are important variables in explaining economic growth in Nigeria.

Based on the findings drawn from the empirical analysis, the study proffers the following recommendations.

- a. The existence of a relationship between government expenditure and economic growth necessitates the continued use of fiscal policy instruments to pursue macroeconomic objectives in Nigeria.
- b. Government should establish a body that will monitor the contract awarding process of capital projects closely, to guard against over estimation of project cost, abandoning and stealing of funds meant for capital projects. This will bring about a significant impact of public capital expenditure on economic growth of Nigeria.
- c. Government consumption spending should be well coordinated at all arms of government, to prevent "crowding out" effect on government investment. Likewise, there should be high degree of transparency and accountability of government spending in various sectors of the economy in order to prevent the channeling of public funds into private account of government officials and workers. This can be achieved through giving autonomy to the existing anti-graft or anti corruption agencies like the Economic and Financial Crime Commission (EFCC), the Independent Corrupt Practice Commission (ICPC), and the Code of Conduct Bureau.
- d. Considering the insignificant relationship between capital expenditure and economic growth (real GDP), government should intensify effort to ensure that resources are properly managed and invested in productive sectors as well as diversification of the economy so as to raise the level of productive activities and most importantly raise economic growth.
- e. Government should collaborate with private sector in the provision of social services and the use of Public-Private Partnership (PPP) should be encouraged to deliver better returns in the area of provision of infrastructural facilities like railway, schools, hospitals, power etc.
- f. A critical review of the incremental budgetary system is basic to budgetary control and management. Existing government projects and programmes are hardly reviewed and evaluated thoroughly. In this case, the budgetary system unjustifiably raises the outlays of ministries and parastatals.

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