Editorial and Advisory Board

Editors at Large

IMPACT OF GOVERNMENT EXPENDITURE ON ECONOMIC GROWTH IN NIGERIA (1986 - 2016)

Ogwuche David D.	Department of Economics, PMB, 005, Bingham University, Karu davidogwucherccg@gmail.com
J.M. Ibbih	Department of Economics, Nasarawa State University, Keffi jmibbih@gmail.com
Aigbedion I. Marvelous	Department of Economics, PMB, 005, Bingham University, Karu marvelousaigbedion@gmail.com

Abstract

There is the belief that the continuous rising government expenditure may have not translated to meaningful economic growth and development since Nigeria still ranks among the poorest countries in the world. Consequently, there is a mixed feeling depicting whether increasing government spending induces economic growth in Nigeria or not, hence, the need for this paper. It analyzes the effects of government expenditure on economic growth in Nigeria and examines the direction of causality between the dependent and independent variables. Using annual time series data from 1986-2016 from the CBN statistical bulletin, the paper employed econometric tools, by adopting the ordinary least square (OLS) multiple linear regression techniques and the granger causality procedure. The unit root test showed that all variables are stationary at first difference. The granger causality test result showed that unilateral causality exists among the variables of interest. Both government capital and recurrent expenditures can be used to determine the value of real gross domestic product while the value of real gross domestic product cannot be used to determine government capital and recurrent expenditures. Also, the paper revealed that, there is a positive relationship between government expenditure and economic growth. In fact, the magnitude of the direct relationship showed that a percentage increase in government capital expenditure would cause the real gross domestic product to increase on average by about 0.16%. The paper therefore recommends that government should direct its expenditure towards the productive sectors like agriculture and manufacturing as it would increase productivity, also revenue base should be expanded, and government should ensure proper channeling of its expenditures so as to translate to meaningful output growth that can create jobs, wealth and reduce poverty in the economy.

Keywords: Capital Expenditure, Recurrent Expenditure, Economic Growth, Pairwise Granger causality

INTRODUCTION

Many developing countries are currently undergoing macroeconomic adjustments. It is not clear how such programs are affecting government expenditures and hence longer-term economic growth and poverty reduction. Thus, it is important to monitor trends in the levels and composition of government expenditures, and to assess the causes of change over time. It is even more important to analyze the relative contribution of various expenditures to production growth and poverty reduction, as this will provide important information for more efficient allocation of these limited financial resources in the future. One may distinguish between two opposing views: On the one hand, there is the Keynesian approach according to which government spending is an important policy tool to be used to ensure a reasonable level of economic activity; correct short-term cyclical fluctuations in aggregate expenditure (Singh and Sahni, 1984); and secure an increase in productive investment, thus providing a socially optimal direction for growth and development (Ram, 1986). The opposite view; on the other hand is that excessive state intervention in economic life affects growth performance in a negative way for two reasons: first, because government operations are often conducted less efficiently, they reduce the overall productivity of the economic system, second, because excessive government expenditure (usually accompanied by high taxation levels) distorts economic incentives and results in sub-optimal economic decisions (Barro, 1990).

However, vital for the progress of any society is the existence of a government to run its affairs. However, citizens would perceive government as a burden when its expenditure is repeatedly higher than the rate of growth which is expected to impact positively on the economy, especially in the areas of employment generation, investment and other activities that induce growth. It is also an open secret that public expenditure in Nigeria is one of the highest in the world. Costs associated with governance have increased dramatically over the years such that an increasingly reduced proportion of public revenue is available to support and implement the primary functions of government (CBN, 2016).

Consequently, the major purpose of government which is to improve productive activities as a driving force for economic activities has not been achieved. Capital expenditure, which accounts for the higher proportion of the total Federal Government expenditure incurred in acquiring assets that will provide economic benefits over several accounting periods, has a major effect on economic growth.

Two main functions were attributed to the government: maintaining law and order and provision of social amenities, but according to Ofanson (2007) the functions have shifted in modern times to include attainment of full employment, maintain price stability, promote economic growth and development, maintenance of balance of payment equilibrium, and promotion of equitable distribution of income and wealth, and to achieve all these there is need for government expenditure.

Amassoma, Nwosa, and Ajisafe (2011) opined that in Nigeria, government expenditure has continuously increased due to factors such as the increased demand for public goods such as; roads, communication, power, education, health and security. Unfortunately, this 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 poverty, while more than 50 percent live on less than US$2 per day. Couple with this, is dilapidated infrastructure (especially roads and power supply) that has led to the collapse of many industries, including high level of unemployment (Nurudeen and Usman, 2010).This simply means that there is need to investigate whether the rising public expenditure has been accompanied by rising output in the economy. The question is, from the various budgetary

expenditures on security, to the budgetary allocations to capital projects and the high level of poverty and low per capita income in the country coupled with the expenditures to fund governance with high level of corruption in the economy, can we say that public expenditures both present and past have impacted on the Nigerian economy positively? Other question is to what extent are public expenditures causing output changes in Nigeria?

To this end, the paper is targeted at determining the effects of public expenditure on output growth in Nigeria and examining the causality between public expenditure and economic growth in Nigeria.

However, in spite of the increased academic interest in the subject under investigation, some issues relating to the government expenditure and economic growth relationship remain hitherto unsettled. The controversy is whether or not public sector spending increases the long run steady state growth rate of the economy or not, hence the need for this paper.

The paper focuses specially on the post SAP era up to the era of economic recession (1986 - 2016). Thus, it is an empirical attempt to cover this gap. It takes into consideration in its analysis, two key public expenditure variables like recurrent and capital expenditures and it is the belief of the authors that its outcome will be original and a contribution to knowledge. Lastly, the study will be an added value to the already existing knowledge in the field of public sector economics as scholars, who are researching in this area will find this work very valuable.

On the above note, we divide the paper into five sections. After this introduction, section two provides clarification to key concepts and presents the theoretical framework. Section three deals with methodology of the study, section four analyses the data and discusses the results while section five concludes and proffers policy recommendations.

LITERATURE REVIEW
Conceptual Clarifications
The concept of government expenditure or public expenditure is an important instrument for government in controlling the economy. This concept arises from the thinking that expenditures undertaken by the government is public. Okoro (2015) defines government expenditure as the value of goods and services provided through the public sector. Meanwhile, the size of public sector is measured by the ratio of government total expenditures to the total national output. It can also be defined as the expenses incurred by the government in the provision of public goods and services. Government expenditure can be broadly categorized into capital and recurrent expenditures. Capital expenditure refers to expenses or constructions undertaken by the government on capital projects like roads, airports, health centers, education, electricity generation, military installations, etc. Capital expenses are usually aimed at increasing the assets of a state and they give rise to recurrent expenditure. Recurrent expenditure refers to government expenses on administration, security, maintenance of public goods, interest payment on loans, etc. They are expenditures or purchases of stationeries, wages and salaries of workers, fuel, electricity bills and other bills.

Economic growth is an important macro-economic objective because it enables improved standard of living and job creation as well as poverty reduction. A fast-rising growth rate not only commands international recognition, it also paves a way for development. Economic growth implies the expansion of a country's productive capacity. It refers to an increase in the amount of goods and services produced in a country over a period of time. Economic growth indicators include Gross Domestic Product (GDP), inflation rate and employment rate. Gross Domestic Product (GDP) is considered the broadest economic growth indicator. It represents the market

value of all goods and services produced in an economy during a given period usually a year. The relationship between government expenditure and economic growth is particularly important for developing countries. This is due to the need to extract themselves from the jaws of abject poverty and set them in the path of rapid development. Governments of developing countries have embarked on various spending programs in order to achieve this goal. Unfortunately, economic theories do not automatically generate strong conclusions about the effect of government expenditure on economic growth. Indeed, it has generated a series of controversy among scholars.

Empirical Review

Nurudeen and Usman (2010) studied the impact of government expenditure on economic growth by disaggregating the government expenditures into capital expenditure, recurrent expenditure, defence, education, health, transport and communication and fiscal balance, using cointegration method. They found that total capital expenditure (TCAP), total recurrent expenditure (TREC), expenditures on transport and communication (TRACO), education (EDU), and health (HEA), including inflation (IFN) and overall fiscal balance (FISBA) are statistically significant in explaining changes in economic growth. However, expenditures on defense (DEF) and agriculture (AGR) are not significant in explaining economic growth.

Muritala and Taiwo (2011) used the Ordinary Least Squares (OLS) technique to see how public expenditure causes growth in the real GDP. The result also proves a positive relationship between real GDP and recurrent and capital expenditure which is consistent with the Keynesian theory.

Amassoma, Nwosa, and Ajisafe (2011) used the error correction model to study the impact of government expenditure disaggregated into agriculture, education, health, transport, and communication on the Nigerian economy with data from 1970 to 2010. They concluded that only agricultural expenditure had a significant impact on economic growth. Others had insignificant influence on economic growth.

Loto (2011) studied the effects of government expenditures on security, health, education, transport, communication, and agriculture on the economy using error correction test. He opined that expenditures on agriculture negatively impact the economy. Education was both negative and non-significant to the economy. Expenditures on health positively impacted the economy while security, transport and communication though positive, were non-significant to the economy.

Also, in a similar research estimating the impact of government expenditure on economic growth for the period (1961-2010), the research used causality test and co-integration method and found out that governmental capital expenditure translates to higher economic growth and any reduction in capital expenditure would have a negative consequences on economic growth (Nasiru, 2012).

Modebe et al (2012) examined the impact of government capital and recurrent expenditure on the Nigerian economy from 1987 to 2010 using three variables multiple regression model. While capital expenditure had a negative and non-significant impact on the economy, recurrent expenditure had a positive and no significant impact on the same economy.

Okoro (2013), using a simple growth modeling framework and time series data, however, finds evidence of differential impacts of public spending on the growth performance of developed and developing economies – favorable for the latter and inconsequential for the former. His study

also finds support for the hypothesis that an effective role for the state was directly linked with the state of backwardness of the economy: the more backward, the more critical the role of the state. According to him, since the LDCs suffer many of the "backwardness" syndromes, they seem to require more of the crutches of government support than their developed counterparts.

An empirical investigation of government expenditure in Nigeria (1960-2010) was done by employing a single equation estimation approach and found out that inflow of foreign aid leads to a rise in recurrent expenditure on administration as against capital expenditure (Aregbeyen, 2013).

Onakoya and Somoye (2013) used the three stage least squares and the macro econometric model of simultaneous equations to look at the impact of public capital expenditure on different sectors of the Nigerian economy. They concluded that public capital expenditure impacts positively on the Nigerian economy.

THEORETICAL FRAMEWORK
i. The Wagner's Law/Theory of Increasing State Activities
Wagner's law is a principle named after the German economist Adolph Wagner (1835-1917). Wagner advanced his 'law of rising public expenditures' by analyzing trends in the growth of public expenditure and in the size of public sector. Wagner's law postulates that: (i) the extension of the functions of the states leads to an increase in public expenditure on administration and regulation of the economy; (ii) the development of modern industrial society would give rise to increasing political pressure for social progress and call for increased allowance for social consideration in the conduct of industry; (iii) the rise in public expenditure will be more than proportional increase in the national income (income elastic wants) and will thus result in a relative expansion of the public sector.

Regularly known as Wagner's law (1883), it states that demand for government services tends to rise as countries become richer (Motu, 2003). This is corroborated by the finding of a positive correlation between government share and national income (Kolluri et. al., 2000). This indicates that change in national income can cause change in government expenditure Musgrave and Musgrave (1988), in support of Wagner's law, opined that as progressive nations industrialize, the share of the public sector in the national economy grows continually. The theory of government expenditure cannot be discussed without the mention of Wagner (1883)'s discussion on this. He said that there are inherent tendencies for the activities of different levels of government to increase both intensively and extensively.

The long-run relationship between real output and public expenditure has attracted considerable attention in economic research. One of the frequently quoted stylized facts of public sector economics is that of "Wagner's Law" about the long-run tendency for public expenditure to grow relative to some national income aggregate such as GDP. In this case, the causality runs from national income to public expenditure. This implies that public expenditure can be treated as an outcome, or an endogenous factor, rather than a cause of growth in national income. Within this framework, public expenditure is treated as a behavioral variable, similar to private consumption.

ii. The Keynesian Theory
Of all economists who discussed the relation between public expenditures and economic growth, Keynes was among the most notable ones with his apparently contrasting viewpoint on this relation. Keynes regards public expenditure as an exogenous factor which can be utilized as a policy instruments to promote economic growth. From the Keynesian thought, public

expenditure can contribute positively to economic growth. Hence, an increase in the government consumption is likely to lead to an increase in employment, profitability and Investment through multiplier effects on aggregate demand. As a result, government expenditure, according to Keynes (1936) augments the aggregate demand, which provokes an increased output depending on expenditure multipliers.

METHODOLOGY

This paper employs secondary data. This is because the data required is found in documented form. The relevant data used were sourced from Central bank of Nigeria's Statistical Bulletins, 2016. In order to assess the role of public expenditure on economic growth situation in Nigeria, a simple functional relationship is assumed between economic growth and the factors that determine government expenditure. Specifically, using non-stationary variables, real gross domestic product (RGDP) is regressed against capital expenditure (CAPEX) and recurrent expenditure (RECEX). The technique of analysis employed in the paper is multiple regression models. Also, ADF unit root test and granger causality were employed. The model was adopted from Keynesian economic theory, which believes that increase in government spending should promote economic growth. This is expressed as follows: Thus,

$$RGDP = f(CAPEX, RECEX)$$

Taking the natural logs of these variables and introducing the expected coefficients in the linear stochastic form, the above equation is re-written as:

$$RGDP = \beta_0 + \beta_1 CAPEX + \beta_2 RECEX + \mu t$$

A direct relationship is specified between both explanatory variables and RGDP. For instance increases in CAPEX and RECEX in Nigeria are expected to increase RGDP.

DATA PRESENTATION AND ANALYSIS

In this paper, the authors specified a model with a dependent variable (RGDP) and two explanatory variables (capital expenditure - CAPEX) and recurrent expenditure - REC) so as to investigate the extent to which these explanatory variables determine the level of output growth in the economy between the period under review. The data set used is presented in the appendix.

Unit Root Test for the Variables Used

Table 4.1: Traditional Unit Root Test Results (Trend and Intercept)

Variables	ADF Unit Root Test t-statistics	Critical Values	Order of Integration
RGDP	-2.930	-2.655**	I(2)
REC	-3.509	-3.030**	I(2)
CAP	-3.142	-3.012*	I(0)

Source: Authors' Computation, (2018)
NB: * Indicates stationary at the 5% critical value, ** Indicates stationary at the 10% critical value.

Unit root test was conducted to test for the stationarity or non-stationarity of the variables used in the model. The purpose of conducting the unit root test was to avoid spurious regression which comes from regressing one non-stationary variable upon another non-stationary variable. The test for unit root was carried out before the estimation of the coefficients of the exogenous

variables. The Augmented Dickey Fuller test was used to check for unit root. The null hypothesis states that there is unit root. That is, the time series is non-stationary. The alternative hypothesis states that there is no unit root. That is, the time series is stationary. The Augmented Dickey Fuller (ADF) test rejects the null hypothesis if after statistical testing, the computed absolute value of the statistics exceeds the critical values; otherwise we do not reject it. In the event of non-stationarity, the time series would be differenced to make them stationary. From the test results above, Capital Expenditure (CAPEX) is stationary at level I(0) at 5 percent level of significance while Recurrent Expenditure (RECEX) and Real Gross Domestic Product (RGDP) are stationary at second difference I(2) at 10 percent level of significance.

Trend Analysis of Variables

Figure 1: Trend of Real Gross Domestic Product (1986-2016)
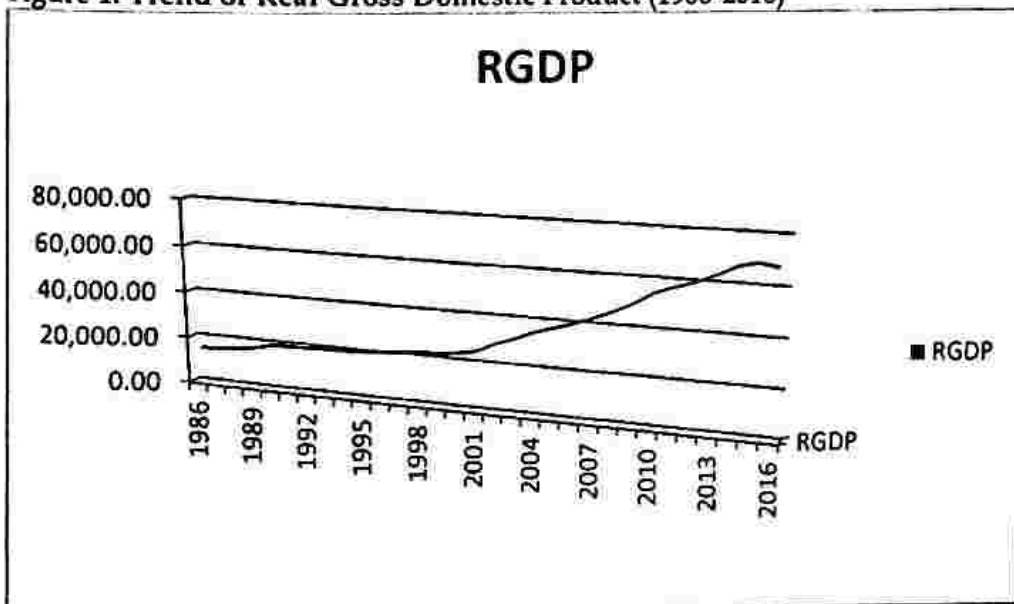
The graphical presentation above shows the trend of real gross domestic product in Nigeria from 1986-2016. The diagram shows that real gross domestic product of Nigeria has been on an increasing rate from 1986 to 2014, it can be seen that there was a slight reduction in real gross domestic product in 2015; this reduction was as a result of the recent crisis faced by the Nigerian economy.

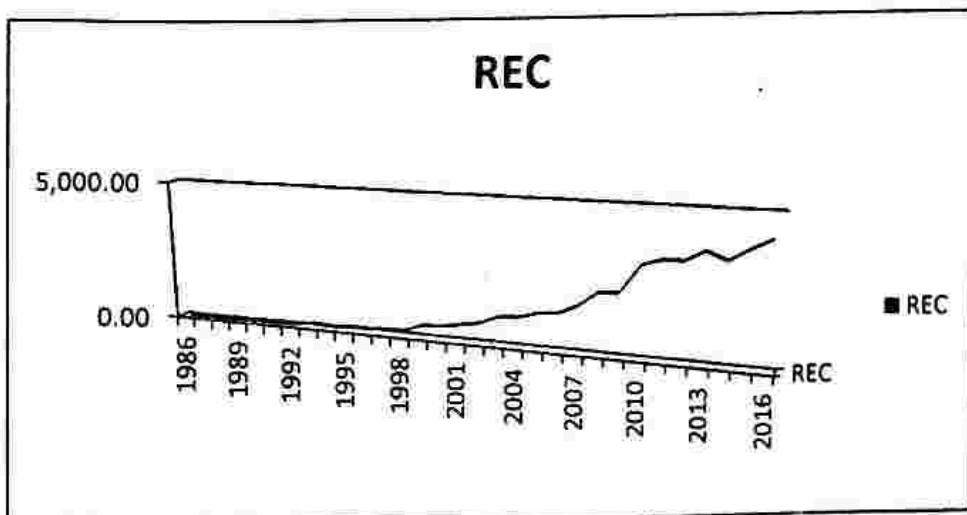**Figure 2: Trend of government recurrent expenditure (1986-2016)**

Figure 2 show the trend of government recurrent expenditure in Nigeria from 1986-2016. The graph indicates that government recurrent expenditure has been fluctuating but still on an increasing rate. It can be noted that government recurrent expenditure actually started from a very low rate but rose in the year 1992, but from 1995 the graph shows that there was government interference in payment of workers salary, maintenance of government properties etc.

Figure 3: Trend of government capital expenditure (1986-2016)
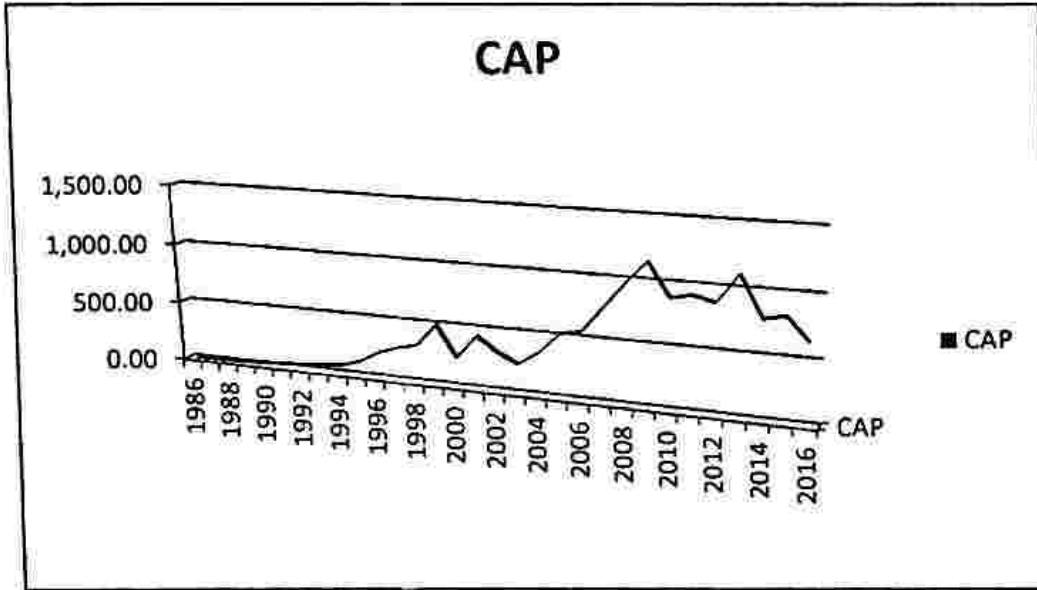
Figure 3 shows the government capital expenditure in the country from 1986 to 2016. It is observed from this graph that there was a very low record for government capital expenditure in the country from 1986 to 1994, as that was the era of Structural Adjustment Programme (SAP), but from 1995 there was more government participation through provision of power, water, public transportation, telecommunication, roads, schools and health facilities as well as other infrastructures, though minimal, but steadily rising till 1999. It slightly rose again in 2001, 2005 up to the peak in 2008, but from 2013, capital expenditure kept falling up to 2016 as a result of the fall in oil price in the world market.

To determine the relationship between government expenditure and economic growth a multiple linear regression analysis was conducted on real gross domestic product and government expenditure variables. The result of the regression analysis is presented and explained in table 4.2 below.

Table 4.2: Result of Regression Analysis

Variables	Coefficients	t-Statistics	p-values
RGDP	8.933	95.905	0.00
RECEX	0.384	8.360	0.00
CAPEX	0.169	9.107	0.00
R^2: 0.92; Adjusted R^2: 0.91			
DW: 0.68; F-Statistic: 157.32; Prob (0.00).			
Adjusted R^2			
No of Observations: 30			
Method: Ordinary Least Squares (OLS).			

Source: Authors' Computation, (2018)

The paper revealed that there is a positive relationship between government recurrent expenditure and real gross domestic product as shown with the value of the parameter estimate (0.38) which implies that increase in government recurrent expenditure will lead to increase in real gross domestic product. This could be explained on the ground that government recurrent expenditure has significant effect on the economy because such expenditures will increase the income and investment which in turn will stimulate real gross domestic product.

However, there is significant statistical relationship at 5% level of significance using t-test and standard error as shown above; the t-calculated is (8.35) which is greater than the t-tabulated (2.04) and the standard error is (0.045) which is less than half of the parameter estimate (1/2 *0.383 = 0.191). Since the t-calculated is greater than t-tabulated and standard error of the parameter estimate is less than half of the parameter estimate, there is sufficient reasons to conclude that there is statistical significance between government recurrent expenditure and real gross domestic product.

The result of the analysis showed that there is a positive relationship between government capital expenditure and real gross domestic product. This showed that increase in government capital expenditure would increase real gross domestic product. This could be justified on the ground that government will improve productivity and efficiency, thereby increasing the stock of human capital development in the country which also increase the real gross domestic product. However, the magnitude of the direct relationship showed that a percentage increase in government capital expenditure would cause the real gross domestic product to increase on average by about 0.16%.

This indicates that there is an increasing effect of government capital expenditure on real gross domestic product. This is also statistically significant at 5% level using t-test and standard error for decision making; the t-calculated is 3.10 while the t-tabulated is 2.04 also the standard error of the parameter estimate is (0.054) while the half of the parameter estimate (½*0.169 = 0.084). Since the t-calculated is greater than the t-tabulated and the standard error is less than half of parameter estimate there is sufficient evidence to accept that there is statistical significance between government capital expenditure and real gross domestic product.

Granger Causality Test

Table 4.3: Granger Causality Test Result

Null Hypothesis:	Prob.
RECEX does not Granger Cause RGDP	0.07545
RGDP does not Granger Cause RECEX	0.0039
CAPEX does not Granger Cause RGDP	0.0021
RGDP does not Granger Cause CAPEX	0.8459
CAPEX does not Granger Cause RECEX	0.0040
RECEX does not Granger Cause CAPEX	0.7465

Source: Authors' Computation, (2018)

The result of Pairwise Granger causality among real gross domestic product, government recurrent expenditure and government capital expenditure shows that unilateral causality exists among RECEX, CAPEX and RGDP, this shows that the change that occur in RECEX and CAPEX could be explained by its lagged value and also the lagged value of RGDP but change that occur in RGDP cannot be explained by the lagged values of RECEX and CAPEX, i.e., RECEX and CAPEX do granger cause RGDP to change but RGDP does not granger cause RECEX and CAPEX to change. The result implies that government recurrent expenditure and government capital expenditure can be used to determine the value of real gross domestic product while the value of real gross domestic product cannot be used to determine government recurrent expenditure and government capital expenditure.

Discussion of findings

From the parameter estimates, government capital expenditure has a great link with gross domestic product which boosts economic growth. This indicates that the increase in the rate at which government allocates funds for building infrastructural facilities, investing in the real sector of the economy and the general nation building. This, no doubt increases employment generation leading to economic growth; this is in consonance with (Nwaeze et.al, 2014).

Also, availability of funds to the labour force by the government would increase their earnings such as wages, salaries and allowances thereby boosting the standard of living of the populace. On the long run, this benefit enhances the productivity of other sector of the economy therefore fostering the economic growth. This however negates the findings of (Nworji, 2012) who confirmed that government recurrent expenditure has negative impact on economic growth.

The paper discovered that government expenditures are not properly managed in a manner that can raise the nation's agricultural, manufacturing, industrial and service production capacities so as to accelerate economic growth. This is because of high level of corruption prevalent in all sectors, as funds meant for expenditures in key sectors are not judiciously appropriated to the right beneficiaries. Also, it is however noted that government spends more on recurrent expenditure than capital projects and investments in the economy. Nigerian political leaders lack adequate political will and control measures or techniques to ensure that funds allocated to the different sectors are judiciously utilized so as to promote overall growth and development. This

is in consonance with Ekpo (1995), Abu and Abdullah (2010), whose findings show that capital expenditures on transport and communication, agriculture, health and education, if properly utilized will positively influence and enhance growth of the overall economy. Finally, it was discovered that capital and recurrent expenditures on economic services are not consciously directed to productive economic activities. This however discourages activities in the economic sectors.

CONCLUSION AND RECOMMENDATIONS

This paper undertakes the investigation of effects of public expenditure on economic growth in Nigeria and the determination of direction of causality between public expenditure and output growth for the period of 1986 to 2016. Time series data was used with tabular and graphical representations of data to show the trends and analysis. The ordinary least square technique and granger causality test were used for the analysis. The summary of estimated result from the ordinary least squares shows that there is a positive relationship between government recurrent expenditure and real gross domestic product as shown with the value of parameter estimate (0.38) which implies that increase in government recurrent expenditure will lead to increases in real gross domestic product. The result also shows that there is a positive relationship between government capital expenditure and real gross domestic product with the parameter estimate of 0.16. The estimated results of granger causality test shows that government recurrent expenditure and government capital expenditure can be used to determine the value of real gross domestic product, but RGDP cannot be used to determine the RECEX and CAPEXP (indicating a unilateral causality). The paper therefore concludes that public expenditure has a positive effect on economic growth, but increase in public expenditure did not lead to proportionate or expected change in output growth. Government recurrent expenditure and government capital expenditure accounts for about 91.2% of the variation in real gross domestic product while the remaining 8.8% are linked to other factors not captured in the model, but represented by the error term. Public expenditure has significant effect on the economy because such expenditure will increase the income and investment which in turn increase real gross domestic product.

The paper therefore recommends that government should direct its expenditure towards the productive sectors like industry and agriculture, as it will increase productivity and raise the standard of living of the poor ones in the country. More social infrastructures should be provided to create avenues for private sector investment to thrive. Efforts should be made to increase government funding on agriculture to curtail the low level of productivity. Revenue base should be expanded; government should ensure that capital expenditure and recurrent expenditure are properly managed in a manner that can raise the nation's productive capacity. All these measures will no doubt translate to economic growth.

REFERENCES

Abu, N. and Abdullahi, U. (2010). Government expenditure and economic growth in Nigeria, 1970 – 2008: a disaggregated analysis." *Business and Economics Journal, Volume 4*

Amassoma, D., Nwosa, P. and Ajisafe, R. (2011). "Components of government spending and economic growth in Nigeria: an error correction model." *Journal of Economics and Sustainable Development, Volume 2*

Aregbeyen, O. (2006). "Cointegration, causality and Wagner's law: A Test of Nigeria, 1970-2003.

Barro, R. (1990). Government spending in a simple model of endogeneous growth. *Journal of Political Economy, Volume 98(5)*

Central Bank of Nigeria, (CBN) (2016). Statistical, bulletin, various issues.

Ekpo, A.H. (1994). Public expenditure and economic growth in Nigeria, 1962 – 1992. Final Report, *African Research Consortium (AERC)*, Nairobe, Kenya

Keynes, J.M. (1936). General theory of employment, interest and money, London: Macmillan.

Kolluri, B.R., Panik, M. J. and Wahab, M. S. (2000). "Government expenditure and economic growth: evidence from G7 countries". Applied economics, 32, 1059-1068

Loto, M.A. (2011). Impact of government sectoral expenditure on economic growth, Journal of Economics and International Finance, 3(11) pp. 646-652

Modebe, N.J., Regina, G.O., Onwumere J.U.J. and Imo, G.I. (2012). "Impact of recurrent and capital expenditure on Nigeria's economic growth", European Journal of Business and management, 4(19)

Motu, A. G. (2003). "Economic growth and the size & structure of government: implications for New Zealand, department of economics", university of Waikato, July (revised version).

Musgrave, R.A. and Musrave, P.B. (2004). Public finance in theory and practice. New Delhi, Tata McGraw Hill Publishing Company Ltd.

Muritala, T. and Taiwo, A. (2011). "Government expenditure and economic development: empirical evidence from Nigeria". *European Journal of Business and management, 3(9)*

Nasiru, I. (2012). Government expenditure and Economic growth in Nigeria: cointegration and causalitytesting, *Academic Research International, Volume 2(3)*

Nurudeen, A. and Usman, A. (2010). "Government expenditure and economic growth in Nigeria, 1970- 2008: a disaggregated analysis" *Business and Economics Journal, Volume 4(2)pp.22-34*

Nworji, I.D., Okwu, A. T., Obiwuru, T.C. and Nworji, L.O. (2012). Effects of public expenditure on economic growth in Nigeria: a disaggregated time series analysis, International Journal of Management Sciences and Business Research, 1(7).

Ofanson, E.J. (2007). Public sector finance. *Bobpeco Publishers, Benin City.*

Okoro, A.S. (2013). Government spending and economic growth in Nigeria: 1980 – 2011. *Global Journal of Management and Business Research, Economics and Commerce, 13(5).*

Onakoya, A.B. and Somoye, R.C. (2013). "The impact of public capital expenditure on economic growth in Nigeria", *Global Journal of Economics and Finance, 2(1) pp. 1-11*

Ram, R. (1986). Government size and economic growth: a new framework and some evidence from cross-section and time series data. An Economic Review 76: 191-203.

Singh, B. and Shani, B.S. (1984). Causality between public expenditure and national income. *Review, Economic Statistics, 66(4): 630-644.*

Wagner, A. (1883). The nature of the fiscal economy, classics in the theory of public finance, 1958, Macmillan, pp.1-8, London.

APPENDIX I
Table 4.1: Time Series Data for Regression Analysis

Year	RGDP (N' Billion)	Recurrent Expenditure (N' Billion)	Capital Expenditure (N' Billion)
	RGDP	REC	CAP
1986	15,237.99	7.70	8.53
1987	15,263.93	15.65	6.37
1988	16,215.37	19.41	8.34
1989	17,294.68	25.99	15.03
1990	19,305.63	36.22	24.05
1991	19,199.06	38.24	28.34
1992	19,620.19	53.03	39.76
1993	19,927.99	136.73	54.50
1994	19,979.12	89.97	70.92
1995	20,353.20	127.63	121.14
1996	21,177.92	124.29	212.93
1997	21,789.10	158.56	269.65
1998	22,332.87	178.10	309.02
1999	22,449.41	449.66	498.03
2000	23,688.28	461.60	239.45
2001	25,267.54	579.30	438.70
2002	28,957.71	696.80	321.38
2003	31,709.45	984.30	241.69
2004	35,020.55	1,032.70	351.30
2005	37,474.95	1,223.70	519.50
2006	39,995.50	1,290.20	552.39
2007	42,922.41	1,589.27	759.32
2008	46,012.52	2,117.36	960.89
2009	49,856.10	2,127.97	1,152.80
2010	54,612.26	3,109.38	883.87
2011	57,511.04	3,314.51	918.55
2012	59,929.89	3,325.16	874.83
2013	63,218.72	3,689.06	1,108.39
2014	67,152.79	3,426.90	783.12
2015	69,023.93	3,831.95	818.37
2016	67,931.24	4,178.59	634.80

Source: CBN Statistical Bulletin, 2016 Edition