The Contribution of Government Expenditure to Promote Economic Growth in Nigeria

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Abstract: The research investigate the contribution of government expenditure to promote economic growth in nigeria using annual time series data and employed ADF and PP for the unit root, Johansen cointegration, ordinary least square and Granger causality tests as the means of statistical inference. The result revealed that both the series are cointegrated of order one except the LGDP that bestow the combination of stationary at level value and Johansen revealed cointegration of the series at 5 percent significant level while government expenditure were found to be negatively affect the economic growth and private investment and exchange rate are positively relate. The result of Granger causality indicates unidirectional causality running from government expenditure, private investment and exchange rate. To this end, the study recommends that, government should give emphasis on capital expenditure through the provision critical infrastructure and to provide appropriate measures that can aid stimulate private investment potentials and attract foreign direct investment.

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I. INTRODUCTION

The study conducted to assess the impact of public expenditure and economic growth in Nigeria. As a country (Nigeria) which experiences series of developmental plan right from her independent to date that lead by reprehensible management of the economy and too much regulation (which brings about huge burden in terms of public spending). The major variables employed are economic growth to be proxy by GDP, total government expenditure, private investment and exchange rate for the period of 1980 to 2014. The period was selected because it's coincided with several structural reforms such as Structural Adjustment Programs, Rolling Plan, National Economic Empowerment Development Strategies (NEEDs) among others that put in place after a series of developmental plans designed to achieved and stimulus growth and development in the country to be led by private sector.

Public finance as sub sect of public sector economy is a field of economics concerned with paying for collective or governmental activities, and with the administration and design of those activities. The field is often divided into questions of what the government or collective organizations should do or are doing, and questions of how to pay for those activities. Public finance in centrally Some State Owned Enterprises (SOE) generated profits that helped finance government activities. The government entities that operate for profits are usually manufacturing planned economies have differed in fundamental ways from that in market economies. and financial institutions, services such as nationalized healthcare, security, and education among others do not operate for profit to keep costs low for consumers (<u>www.wikipedia.com</u>).

Nigeria is classified as a <u>mixed economy emerging market</u>, and has already reached lower middle income status according to the <u>World Bank (State the year)</u>, with its abundant supply of natural resources, well-developed financial, legal, communications, transport sectors and stock exchange (the <u>Nigerian Stock Exchange</u>), which is the second largest in Africa. Nigeria was ranked 30th in the world in terms of <u>GDP (PPP)</u> in 2012. Nigeria is the United States' largest trading partner in sub-Saharan Africa and supplies a fifth of its oil (11% of oil imports). It has the seventh-largest trade surplus with the US of any country worldwide. Nigeria is the 50th-largest prover market for US goods and the 14th-largest exporter of goods to the US. The United States is the country's largest foreign investor. The IMF (2011) projected economic growth of 9% in 2008 and 8.3% in 2009. The IMF further projects an 8% growth.

Previously, economic development had been hindered by years of <u>military rule</u>, corruption, and mismanagement. The restoration of democracy and subsequent economic reforms has successfully put Nigeria back on track towards achieving its full economic potential. As of 2014 it is the largest economy in Africa, having overtaken South Africa

II. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

The study prioritizes Keynesian hypothesis as theory on which the study hinges due largely to a number of reasons consider more relevant to the research Question which the study intend to answer. Keynesian Theory Of all economists who discussed the relation between public expenditures and economic growth, Keynes was among the most noted with his apparently contrasting viewpoint on this relation. Keynes regards public expenditures as an exogenous factor which can be utilized as a policy instruments 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 (Emerenini and Okezie, 2014). As a result, government expenditure augments the aggregate demand, which provokes an increased output depending on expenditure multipliers. Musgrave Theory of Public Expenditure Growth This theory was propounded by Musgrave as he found changes in the income elasticity of demand for public services in three ranges of per capita income. He posits that at low levels of per capita income, demand for public services tends to be very low, this is so because according to him such income is devoted to satisfying primary needs and that when per capita income starts to rise above these levels of low income, the demand for services supplied by the public sector such as health, education and transport starts to rise, thereby forcing government to increase expenditure on them. He observes that at the high levels of per capita income, typical of developed economics, the rate of public sector growth tends to fall as the more basic wants are being satisfied. 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: The extension of the functions of the states leads to an increase in public expenditure on administration and regulation of the economy;

- 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
- 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. 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. Solow's Theory Robert Solow and T.W. Swan introduced the Solow's model in 1956. Their model is also known as Solow-Swan model or simply Solow model. In Solow's model, other things being equal, saving/investment and population growth rates are important determinants of economic growth. Higher saving/investment rates lead to accumulation of more capital per worker and hence more output per worker. On the other hand, high population growth 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-labor ratio constant. In the absence of technological change & innovation, an increase in capital per worker would not be matched by a proportional increase in output per worker because of diminishing returns. Hence capital deepening would lower the rate of return on capital (Emerenini and Okezie, 2014). The Endogenous Growth Theory The basic improvement of endogenous growth theory over the previous models is that it explicitly tries to model technology (that is, looks into the determinants of technology) rather than assuming it to be exogenous. Mostly, economic growth comes from technological progress, which is essentially the ability of an economic organization to utilize its productive resources more effectively over time. Much of this ability comes from the process of learning to operate newly created production facilities in a more productive way or more general.

Policy Implication Of The Theories

Nigeria "as a country represents the paradox of being rich while its citizens are poor and deprived" (World Bank 1996). The central fact about Nigeria according to World Bank is that the country is poor and stagnant despite huge oil revenue. Resources which should have enabled rapid economic growth and development for the wellbeing of its citizens was not been properly utilized effective and efficiently in the country nothing else other than squandering and mismanagement of the treasure through corruption. Corruption, external debt, weak macroeconomics fundamentals, the population growth among others, has shifted the Nigeria's public expenditure immensely with little impact on the economy (World Bank 1996). The Nigerian experience with regards to the above theories have been dreadful as they call for an increasing state of public expenditure but there is indeed little impact particularly on the general populace. Therefore, the reality of the Nigerian condition however according to Mahdi (2006), remains constantly low in all the economic and development indices cited by the United Nation Organization and other international organizations.

The Concept of Government Expenditure

Government expenditure and government expenditure are used interchangeably and the term is used to describe, the cost or expenses which the government incurs for its own maintenance as well as the general welfare of the society. In other word public expenditure can be seen as an outflow of resources from government to other sectors of the economy whether it is required or not, it is categorized into capital and recurrent expenditure (Lotto, 2012). Public expenditure can also be described as the cost or expenses, which the government incurs for its own maintenance as well as the general welfare of the society. In other word public expenditure can be seen as an outflow of resources, which the government incurs for its own maintenance as well as the general welfare of the society. In other word public expenditure can be seen as an outflow of resources from government to other sectors of the economy whether it is required or not, it is categorized into capital and recurrent expenditure (CBN, 2001). Public finance can also be defined as all the activities of the government in generating and allocation of resources towards ensuring efficiency of the state and the general wellbeing of the people. As indicated by the World Bank (2011) government in must underdeveloped countries has a major task to provide public goods such as education, health, roads, communication and energy. The resources of government mean for it development purpose is usually term as public finance and it is spent according to prescribe policies contains in the government budget which the Richard Musgrave suggests that public economic policy has three basic objectives:

- To establish an efficient allocation of resources;
- To attain the desired distribution of income and wealth; and
- To maintain high and stable levels of employment and output.

Components of Government Expenditure

Scholars have generally classified public expenditure into two categories (see Sahni, 1984and Samuelson and Nordhaus (1988) capital and recurrent expenditure as the major items of public expenditure component.

• **Capital Expenditure**: This constitutes the investments made in building and machineries such as office accommodation, roads, bridges, power stations, port facilities, classroom building among others. in other words, capital expenditure can be used to refers to that expenditure that brings about new institution, project, new buildings, roads, factories, railways, airports, buildings, school and equipment's. Thus, capital expenditure therefore, is the provision of physical and tangible goods the normally known as public goods in the society for the purpose of achieving specified objectives.

2. **Recurrent Expenditure**: This refers to all running cost of government for the maintenance of new and existing institution and services. Its constitutes governments spending on wages and salaries of the civil servant and the general maintenance of public service and properties as well as their general overhead expenses which includes trip and welfare packages among others. It is important to note that, the recurrent expenditure is not only the above government expenses includes, but it's also include the maintenance of new and existing properties like maintenance of railways, roads, buildings, and other services as maintenance of school. Universities and its equipment as well as ensuring the accomplishment of other related tasks and responsibilities of various government departments

Concept of Economic Growth

For over a period of time, economists and the policy makers have given much concerned on the ability of a nation to accelerate economic productivity over the years as a yard stick measures of economic growth. The term in recent time developed scholastic argument on the term economic growth as attention to freedom and wealth being ream attract serious attention. The term economic growth according Kuznets as cited Toadaro and Smith (2003) has been defined as a long term rise in capacity to supply increasingly diverse economic goods to its population, this growing capacity based on advancing technology and the institutional and ideological adjustments that it demands. All three principal components of this definition are of greater importance, that is;

- Sustained rise in national output is a manifestation of economic growth and the ability to provide wide range of goods
- Advancing technology provides the basis or precondition for continuous economic growth
- To release the potential for growth inherent in new technology, institutional and attitudinal adjustment must be made

Looking at the conceptual definition of the term, the desire objectives could not be achieved without some critical infrastructure (public investment/expenditure) such as road, electricity among other for proffer investment opportunities. Therefore, Public expenditure is the main instrument used by Governments especially in developing countries to promote economic growth which is an essential ingredient for sustainable development. Economic growth brings about a better standard of living of the people through provision of better infrastructure, health, housing, education services and improvement in agricultural productivity and food security (Loto, 2012).

2.2.3 Components of Economic Growth

Three components of economic growth are of prime importance, these are capital accumulation, growth in population and technological progress (Todaro and Smith, 2003). These can be highlighted further below;

- Capital accumulation results when some proportion of present income is saved and invested in order to
 augment future output and income. New factories, machinery, equipment, and materials increase the
 physical capital stock of a nation (the total net real value of all physically productive capital goods) and
 make it possible for expanded output levels to be achieved. These directly productive investments are
 supplemented by investments in what is known as social and economic infrastructure roads, electricity,
 water and sanitation, communications, and the like which facilitates and integrates economic activities.
- Population growth, and the associated eventual increase in the labor force, has traditionally been considered a positive factor in stimulating economic growth. A larger labor force means more productive workers, and a large overall population increases the potential size of domestic markets. However, it is questionable whether rapidly growing supplies of workers in developing countries with a surplus of labor exert a positive or a negative influence on economic progress. Obviously, it will depend on the ability of the economic system to absorb and productively employ these added workers ability largely associated with the rate and kind of capital accumulation and the availability of related factors, such as managerial and administrative skills.
- Technological Progress. It is now time to consider the third, and to many economists the most important, source of economic growth, technological progress. In its simplest form, technological progress results from new and improved ways of accomplishing traditional tasks such as growing crops, making clothing, or building a house. There are three basic classifications of technological progress: neutral, labor- saving, and capital-saving. Neutral technological progress occurs when higher output levels are achieved with the same quantity and combinations of factor inputs. Simple innovations like those that arise from the division of labor can result in higher total output levels and greater consumption for all individuals. In terms of production possibility analysis, a neutral technological change that, say, doubles total output is conceptually equivalent to a doubling of all productive inputs. By contrast, technological progress may result in savings of either labor or capital (i.e., higher levels of output can be achieved with the same quantity of labor or capital inputs). Computers, the Internet, automated looms, high- speed electric drills, tractors, mechanical ploughs—these and many other kinds of modern machinery and equipment can be classified as products of laborsaving technological progress.

Public Sector Concept

Public sector refers to the part of governmental economic policy, which finds its expression in budgetary (expenditure and revenue) measures. Public sector economy is that sector which operates in a mixed system in which public and private sector forces interact in an integral fashion. Its operation includes not only financing but has broad bearing on the level and allocation of resources use, the distribution of income and the level of economic activity, this refers to the budgetary sector of public policy (Musgrave 2006). As the market mechanism alone cannot perform all economic functions, public policy is needed to guide, correct and supplement it certain aspect. It is important to realize that, the proper size of the public sector is a significant degree on technical issues rather than ideological issue (Peggi, 2006). Therefore, public enterprises in Nigeria were established to propel socio-economic development and to guard against the control of the economy from foreign domination and exploitation. This account for why a larger proportion of the national budget has been voted for the creation and sustenance of public enterprises. In spite of this, the performance of public enterprises has been replete with varying contradictions. The public enterprise was in integral part of the Structural Adjustment Programme (SAP) in 1986. Public sector in Nigeria could be viewed as possibly the largest in sub-Saharan Africa both in term of number of enterprises as well as in the contribution to the Gross Domestic Product GDP (Lewis, (1994). Considering the above, Aigbokhan (2003) invested in the impact of government size (measured as expenditure share of GDP) on economic growth in Nigeria between 1960-1993 with focus on the effect of SAP, the results found that, government spending is capable of spurring private investment and private sector output and of cause enhancing economic growth.

III. METHODOLOGY

In try to assess the impact of public expenditure on economic growth in Nigeria. The paper employed secondary quantitative methodology using variable economic growth to be proxy by GDP along with other control variable such as Total Government expenditure, Private Investment and Exchange Rate for the period of 1980-2014 and the data were sourced from Central Bank of Nigeria (CBN) Publication of Statistical Bulletin. The following model were adopted and modified from the work of Fredrick and Okeke (2013), Abu and Abdullahi (2010) and Aruwa (2012), as expressed in linear econometric equation;

 $GDP_t = \beta 0 + \beta_1 GEXP_t + \beta_2 PINV_t + \beta_3 EXR + \epsilon_t$

Where:GDP = Gross Domestic Product GEXP = Total Government Expenditure EXR = Interest rate PINV = Private Investment = An interceptor or constant parameter $\beta_1 - \beta_3$ = the coefficient of the parameters E = Error term or stochastic disturbance t = Time trend.

IV. ANALYSIS AND RESULTS

The analyses of the result were presented in three sub- section as follows: unit root test, Johansen Cointegration, and Error correlation model.(ECM).

Result of Unit Root Test

The precondition to be considered in time series analysis is the test for stationary or otherwise (unit root tests) of the data set. The result of unit root test is presented in table 1 the table observes the null hypothesis of the unit root using ADF and PP tests (the null is the presence of the unit root). The null hypotheses were accepted at the level value (with the exception of LGDP which became stationary at both level and first difference) because the absolute table value is greater than the absolute statistical value for both the ADF and PP. That is to say, the series have unit root at their level values. Based on the results therefore, the variables became stationary at their anticipated level that is, after placing the first difference. This revealed that the series are integrated of order I (1). The optimal lag length applied in ADF was based on Schwarz Information Criteria (SIC) automatic.

Tuble 1. Result of Olite Root Test (Tuble and TT)					
Variables	Level Value		First Difference		Order of Integration
	ADF	PP	ADF	PP	
LGDP	-4.398***	-4.394***	-7.232***	-30.666***	I(0) and I(1)
	(8)	[3]	(8)	[3]	
LGEXP	-0.809	0.036	-3.132**	-7.189***	I(1)
	(8)	[3]	(8)	[3]	
LINV	-1.160	-1.081	-4.703***	-4.739***	I(1)
	(8)	[3]	(8)	[3]	
LEXR	-1.869	-1.845	-4.917***	-4.917***	I(1)
	(8)	[3]	(8)	[3]	

 Table 1. Result of Unit Root Test (ADF and PP)

Note that *** and ** indicate significant level at 1% and 5%l and the figures in parenthesis and bracket represent maximum lag selection criteria based on SIC and Newey-West automatic were selected using Bartlett Kernel for the PP test.

Result of Johansen Cointegration

Table 2: Result of Johansen Cointegration Rank Test (Trace Statistic and max-Eigen)

Hypothesized No. of CE(s)	Eigen Value	Max-Eigen Value	0.05% Critical Value	Prob.
None *	0.531	62.119	47.856	0.0013**
At most 1 *	0.435	37.157	29.797	0.0059**
At most 2 *	0.341	18.345	15.495	0.0181**
At most 3 *	0.129	4.587	3.841	0.0322

Result of Johansen Cointegration Rank Test (Maximun Eigen Value Statistics)

Hypothesized No. of CE(s)	Eigen Value	Max-Eigen Value	0.05% Critical Value	Prob.
None	0.530664	24.96238	27.58434	0.1045
At most 1	0.434515	18.81235	21.13162	0.1024
At most 2	0.340922	13.75817	14.26460	0.0600
At most 3 *	0.129762	4.586615	3.841466	0.0322

Note that * and ** indicate the rejection of the null hypothesis and significant level at 5%.

The trace test and Maximum Eigen statistics presented in table 2 The tests revealed the presence of four cointegrating equation at 5% significance of level while on the other hand, Maximum Eigen Value indicates one cointegrating vector.

Table 3: parsimonious exchange rate model(ECM)			
Null Hypothesis	Obs.	F statistic	Prob.
LGEXP does not Granger Cause LGDP	35	7.88654	0.0019**
LGDP does not Granger Cause LGEXP		0.12824	0.8802
LPINV does not Granger Cause LGDP	35	7.21194	0.0030**
LGDP does not Granger Cause LPINV		0.19084	0.8273
LEXR does not Granger Cause LGDP	35	7.92653	0.0019**
LGDP does not Granger Cause LEXR	35	0.04116	0.9597

impring analysis and model (ECM)

Finally, exchange rate (LEXR) proved to reject the null hypothesis that it does not Granger causes economic growth (LGDP) and accept the alternative which says it Granger causes as pointed out by the F-statistic of 7.92653 but economic growth (LGDP) does not cause exchange rate with reference to the F-statistics of 0.04116

V. CONCLUTION AND RECOMMANDATIONS

From the above result, the conclusion stems out from assessing the long run impact of public expenditure on economic growth revealed that, there exists negative insignificant relationship, but government expenditure Granger causes economic growth. This means that public expenditure cause the expansion of economic growth over the study period in Nigeria. Similarly on the side of the control variables private investment and exchange rate also revealed to be positively related and both also Granger causes economic and hence forth the solution to Nigerian economic growth is the cause of government expenditure, private investment and economic growth. Therefore this paper recommends that, government should give emphasis on capital expenditure through the provision critical infrastructure and, private investment exchange rate.

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