Public Budgeting And Economic Growth In Nigeria (1987-2016)

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Abstract: The study examined Public Budgeting and Economic Growth in Nigeria. The major objective of the study was to review recent issues affecting budgeting in Nigeria and to determine how they have affected the growth of the Nigerian economy over the period 1987 to 2016. Data on Economic growth (proxied by Real Gross Domestic Product), Capital Expenditure, Government Expenditures on Education, Agriculture, Health and Per Capita Income were sourced from Central Bank of Nigeria (CBN) Statistical Bulletin. The data were analyzed using the Vector Error Correction Model (VECM) technique. The result of the analysis revealed that Government Capital Expenditure, Government Expenditures on Education, Agriculture, Health and Per Capita Income are all significant determinants of economic growth in Nigeria with over 73% reliability. The study recommended that public budget provisions should focus more on the real sector as their indicators have shown that they are capable of promoting economic growth of Nigeria.

Keywords: Public Budgeting, Economic Growth, Nigeria, Human Capital, Vector Error Correction Model

I. INTRODUCTION

Governments the world over are interested in achieving reasonable economic growth. The management of the economy is therefore a major concern of managers of the economies of nations at every level. One way this is made possible basically and broadly, is through the employment of two known economic tools which are the fiscal and monetary polices. Whereas, monetary policy is fundamentally concerned with the management of interest rates and the total supply of money in circulation; fiscal policy is concerned with the broader term that describes government tax and spending polices. While the earlier generally is carried out by Central Bank of most nations, fiscal policy decisions are determined by the government. The fiscal policy is normally embedded in a statement called budget. It is basically the expression of government fiscal policy. A budget in its simplest form is a picture of government projections regarding revenue and expenditure over a period of time, mostly, annually. It serves as an alternative to price mechanism. It also offers a guide to the determination of public choice which represents proposed allocation of resources (Nnamocha, 2001). It is through effective public budgeting where resources are efficiently allocated and policy objectives properly achieved that the socio-political and economic goals of any nation can be achieved.

Following the jettisoning of laissez-fair doctrine, governments feel compelled to ensure that their economies are managed to achieve major desirable objectives of full employment, price stability, economic growth and external balance (Ohale and Onyema 2002). It was the Keynesian Economists, through the work of John Maynard Keynes in his philosophy of active involvement of government in the economy that popularized the notion of public expenditure as a stabilization tool, for ailing economies during shocks and depressions as it was the case during the period of the great depression in the 1930s. Over the years, therefore, intervention of government in the management and operation of the Nigerian economy has become more popular. Therefore the government has consistently employed the public budgeting framework through allocations of revenue and expenditure estimates to drive macroeconomic policy in order to steer the economy on the path of stable growth and development, in line with key objectives and growth indices of government. However, over time the performance of public budgets in Nigeria has been dismal and this has brought to the fore, the
debate on its impact on economic growth. Like other developing countries, a large spectrum of public debate on public expenditure (which is a major component of budgets) in Nigeria has not only focused on the output growth outcomes, but also on its effectiveness in business cycle stabilization as a fundamental aspect (Adegboye 2012).

Arising from the above, Ezebasili (2013) has it that public sector management in Nigeria since independence has failed to deliver the much expected macroeconomic stability and growth. A critical look at the trend of economic variables in this regards reveals that Nigeria is still grappling with fluctuating economic imbalances. This is evident in the inconsistent GDP growth rates, high level of inflation, unemployment, illiteracy and poverty among others. Available statistics shows that government expenditure (capital and recurrent) and its components have been on the increase in the last three decades. For instance, government recurrent expenditure increased from N4,805 million in 1980 to N36,219 million in 1990 and further to N1,589 billion in 2007 and N3,689 billion in 2013. On the other hand, government capital expenditure rose from N10,163 billion in 1980 to N24,948 billion in 1990. Capital expenditure stood at N239.450 billion and N759.323 billion in 2000 and 2007 respectively, and N1,108 trillion in 2013. However, the geometric rise in government expenditure on annual basis is yet to translate to commensurate growth and development and improvement in the performance of key macroeconomic indicators. It is disturbing to note that government expenditure seems to have not replicated same level of economic growth in Nigeria. For instance, between 1980 and 1990, while the GDP growth rate was decreasing (57.15 percent down to 2.87 percent), government expenditure growth rate was increasing (23.2 percent to 41.24 percent). Thus, there was an inverse relationship between the two periods. However, it is found that the growth rate of government expenditure in 2000 and 2010 was 15.53 percent and 2.15 percent respectively, while GDP growth rate witnessed 8.79 percent and 1.54 percent in the same period respectively. Thus, government expenditure growth rate was greater than GDP growth in the same period. The percentage of Nigerians living in abject poverty rose to 60.9 percent in 2012 as compared to 54.7 percent in 2004 as Nigeria ranked among the poorest countries in the world (Okonkwo & Egbulonu, 2015).

Iyeli (2012) agreed with this statistics when he argued that the Nigerian economy is yet to come on the path of sound growth and development despite the lofty place of fiscal policy in its management over the past decades. Ewetan (2012) also observed that in the last three decades, Nigerians have not only been contending with endangered real income but also unbearable levels of unemployment, inflation, a weak and unproductive real sector and decay in social amenities etc. However, it has been specifically observed that the major challenge to Nigerian economy is the volatile macroeconomic environment driven largely by internal term of trade shocks and the country’s large reliance on oil export earnings. Over time, various oil price developments in the world oil market has led to instability in fiscal stance and has been transmitted to the rest of the economy, with negative implications for, in particular, the real exchange rate and growth performance (Akanniwo, 2013). Furthermore, the nature of intergovernmental relations or rather lack of coordination and alignment among the different tiers of government has contributed to the growing misplacement of fiscal priorities as resources have increasingly filtered or diverted to trivial macroeconomic pursuits (Ezebasili, 2013).

Arising from the above, many researchers have conducted several researches to investigate the impact of public expenditure on economic growth in Nigeria and the results have been diverse in nature indicating the persistence of these problems. For instance, Nnamdi (2013) in his study of government expenditure on the economy of Nigeria from 1980 to 2011 using (OLS) found a positive impact whereas Egbutunde and Fasanya (2013) in their study of public spending on economic growth (1970-2010) using the Bounds test found a negative relationship. Therefore, the persistence of these problems in spite of various research efforts, coupled with the inconclusive debates, has made it necessary to further investigate the impact of public expenditure on economic growth; using Real gross domestic product, exchange rate, capital expenditure and recurrent expenditure (which are key components of public expenditure in every public budget as well as major indicators of macro-economic performance) which some earlier studies may not have captured. Besides, given the time frame of the studies the use of OLS is inadequate to explain the collinearity of the various variables, hence the adoption of other econometric techniques to broaden the study.

Researches have shown that there is a direct relationship between the amount of public sector expenditure and economic growth. Therefore, the policy makers place more emphasis on the roles of public sector expenditure as an instrument which the government can apply to restore some economic problems such as reduction in inequality, inflation, fall in exchange rate, unemployment, improve the real sector performance, and the desire to restore the economy on the part of full employment, price stability, balance of payment equilibrium and above all, increased economic growth. Maku (2009) earlier opined that economic growth is the increase in the inflation adjusted market value of goods and services produced by the economy overtime. Ideally, economic growth brings about a better standard of living of the people and this most at times is brought about by improvement in availability of infrastructure, forward and backward linkage effects between agriculture and the real sector, access to food, health, housing, education, good roads etc. These improvements are very important in stimulating economic activities as well as addressing the nation’s human capital development.

Another point of interest among scholars of Nigerian economy is that total government expenditure in terms of capital and recurrent expenditures have continued to rise over the last three decades. For example, Abu (2010), Abdullahi (2000) and Okonkwo & Egbulonu (2015) all stressed that expenditure on defense, internal security, education, health, agriculture, construction transport and communication have been rising overtime.

Many researchers differ on the impact and contribution of this multiple increase in our economy. For a developing nation, capital expenditure particularly in capital projects or infrastructural development ought to constitute significant proportion of her total public sector expenditure to lay the
foundation for economic growth and sustainable development, but this has not been the case in Nigeria.

Thus, the major objective of the study is to investigate the impact of budget performance, in terms of public expenditure allocations and implications to the real sector, on economic growth in Nigeria. The specific objectives are to examine the impact of public expenditures on the manufacturing sub sector, agricultural sub sector; human capital formation, health sector of the Nigerian economy and per capita income on Nigeria’s economic growth.

Consequently, the research questions and hypotheses centered on these key areas. The study is restricted to the assessment of government budget to economic growth using sectoral approach within the period 1987-2016.

II. LITERATURE REVIEW: AN OVERVIEW

In the past, economic literature has amongst other things, concerned itself with the research and study of the relationships between public sector and economic growth. The major consensus is public sector expenditure impacts positively on economic growth. Notable theories are Keynes (1936), Wagner (1883), Peacock and Wiseman (1983), Keynes (1936) in his hypothesis draws a link between public expenditure and economic growth and concludes that causality runs from public expenditure to income, implying the public sector expenditure is an exogenous factor and a public instrument for increasing national income. Furthermore, he held that increase in government expenditure leads to higher economic growth. Wagner, Peacock and Wiseman and many other economists have formulated different theories on public expenditure and economic growth. Wagner sees public sector expenditure as a behavioural variable that positively dictates if an economy is growing. However, the neo classical growth model developed by Solow (1956) opined that fiscal policy does not have any effect on the growth of national output. Another study by Solow (1956) further argued that intervention through fiscal policy helps to improve failure that might arise from the inefficiencies of the market. Similarly, Dar and Amir (2002) summarized that in the endogenous growth models, fiscal policy is very crucial in predicting future economic growth. Nevertheless, Barro (1990), Barro and Sali-Martins (2002) and Roux (2006) all noted that the expansion of government expenditure contributes positively to economic growth. However, Chude and Chude (2013) expressed that some researchers and policy makers do not support the claim that increasing government expenditure promotes economic growth. Instead, they asserted that higher public expenditure may slow down overall performance of the economy. For instance, in an attempt to finance rising expenditure, government may increase taxes and/or borrowing. Glomm and Ravikumma (2006) articulated that higher income tax discourages individuals from working for long hours or even searching for job. This in turn reduces income and aggregate demand. In the same vein, higher profit tax tends to increase production costs and reduce investment expenditure as well as profitability of firms.

Putting public expenditure into perspective, Pearce (2005) noted that public expenditure is associated with the public sector. The study emphasized that the phrase “public sector” could be referred to as that part of the economy, which is publicly owned as opposed to privately owned. It thus includes all government departments and agencies and all public corporations such as electricity boards, water boards etc. Here, the public sector is thus defined in terms of ownership. It should not be defined as the sector only, which produced only public goods although, typically, public goods are provided via the public sector. Afolabi (2012) viewed the public sector the same as government sector consisting mainly of the government and government owned enterprises whether local, state or federal. In his view, Afolabi (2012) stated that the public sector is an economic agent acting on behalf of everybody generally with all its economic resources commonly owned and all its activities presumably carried out on behalf of, and for the benefit of everybody.

Meanwhile, the public sector is that portion of the society controlled by national or federal, state and local governments. The public sector encompasses defense, homeland security, public protection, firefighting, urban planning, taxation and various social programs. Nweke (2012) pointed out that public ownership in key sectors of the economy were viewed as a more effective way to achieve economic growth and development since it was believed that the private sector in developing countries lacked the means (financial and entrepreneurial skill) to undertake the task of development. Anyanwu (1993) highlighted that public expenditure is usually categorized into recurrent and capital expenditure. In his view, Anyanwu (1993) noted that these are further broken down into various components.

A. CONCEPTUAL AND THEORETICAL FRAMEWORK

MEANING OF BUDGET

Ideally, a budget is a subset of a broader economic policy, which details how the government influences the economy and performs three overarching roles: Allocative, Stabilization and Distribution functions. The absence of such coordinated and clear macroeconomic policy framework raises the level of uncertainty on the direction of the economy and as such limits the movement of capital and investments in productive sectors (Mark & Johnson, 2014).

A budget for an economy therefore is an estimation of the revenue and expenses over a specified future period of time (Aminu, 2014). From an economic perspective, a national budget is a fiscal policy; it contains the package of several blueprints of the government that aims to achieve certain specific goals (Simaon, Grace M & Bilal, 2015). According to Musa (2016), the nature of a national budget at a particular regime is for stabilization. The economy of every nation fluctuates from time to time and certain abnormalities emerge also from time to time; a national budget therefore should be timely or provide the right policy response based on the performance of an economy.
TYPES OF BUDGET

a. Budget Deficit (Expansionary Fiscal Policy)

Budget deficit is an expansionary fiscal policy where government expenditure for the year exceeds projected revenue (Mack, 2007). The application of budget deficit in an economy requires tax reduction and increase of government spending. Since government expenditure must exceed the projected revenue, the gap in between has to be borrowed by the government either within the economy or from foreign countries/international financial institutions.

Budget deficit as a fiscal policy is very common in developing economies. This is because their major macroeconomic problems are low productivity, poor market condition, high rate of unemployment and poverty among others (Mack, 2007). In terms of compatibility, the application of budget deficit for an economy during a regime requires a number of conditions that prevails. As explain above, it is the economic condition that determines what type of budget to be apply; with regards to budget deficit, the monetary policy regime has to be consider otherwise it will give room for a policy conflict or conflicting objectives. If the MPR regime is pursuing increasing lending to the private sector and the interest rate is low, the application of budget deficit or expansionary fiscal policy will result ot increase of inflation which on one hand reduce the purchasing power of consumers and on the other hand will result to reduction in aggregate demand, production decline, loss of jobs among others.

IMPLICATIONS OF BUDGET DEFICIT TO AN ECONOMY

Budget deficit as an expansionary fiscal policy is geared mainly for resuscitation, revitalization and improvement of the performance of an economy (Mcmurray, 2014). In developing economies like Nigeria that is infected with different sort of macroeconomic problems such as the lack of enabling environment for private sector to operate optimally, low productivity, economic growth that is not inclusive, high rate of unemployment among others; requires an expansionary fiscal policy where capital project should have a meaningful percentage. Under this background, the likely implications of budget deficit on the economy are as follows:

✓ Government spending on capital project or infrastructure will improve the private sector performance through increase in output.
✓ Government spending on infrastructure such as electricity supply will reduce cost of production for industries.
✓ Tax reduction will also provide a space for additional capital and size of national investment.
✓ When players in the private sector aim to increase quantum of production as a result of demand by the government, it has the potential of providing additional job opportunities and poverty reduction in the economy.
✓ The ultimate implication is that such budget has the capability to spur economic growth and development.
✓ If government spending favours recurrent aspect of the budget, will also improve national output through increase of consumer demand for goods and services produce by the private sector.

b. Budget Surplus

Budget surplus is also known as contractionary fiscal policy. It is a budget where government expenditure is less than the projected revenue (Philips, 2000). Its application requires tax increase and reduction in government expenditure which provides savings for the economy, unlike budget deficit, budget surplus is apply mainly where there is anticipated inflation and overproduction or supply in an economy which is likely to result in price reduction of goods and services. According to Mack (2007), from the law of supply, when price of goods and services reduces, producers tend to reduce production as well as supply and otherwise. The implication is that when production is reducing in an economy, it is translated into loss of employment, increase rise and other related problems.

Budget surplus as a fiscal policy is not common in developing economies where their biggest macroeconomic problems are low productivity, low growth rate of the economy, lack of development, high rate of unemployment, poverty and inflation and the like (Mack, 2007). In most developing economies, budget deficit is the commonness and that is why they are the biggest borrowers or debtor of both national and international monetary institutions.

c. Balanced Budget

A balanced budget means that revenues are expected to equal expenses. When government plan to spend exactly what is projected, there would be neither savings nor borrowing by the government. In our practical world today, this type of budget is only theoretical except in private companies or individuals. Traditionally; adjustments are made from time to time to budgets based on the goals of the budgeting in an economy. According to Philips (2000), in some cases and in most economies, budget makers are happy to operate at a deficit, while in other cases, operating at a deficit is seen as financial irresponsible. This is because when a nation plans to design or implement budget deficit, it provides arbitrage opportunities for stealing public funds by failure to implement promise projects.

DETERMINANTS OF PUBLIC EXPENDITURE

Several factors have been found in theory to the responsible for public expenditure rise. These factors could be briefly discussed below:

✓ GROWTH IN PER CAPITA INCOME

Rises in the national income of economies has been found to be responsible for the increasing spate of public expenditure. This stems from the Wagner’s law of increasing state activities. As the national income rises the government spends more in order to meet up with the demands of the people. The rise in per capita income, seen in historical context, records the development of the economy from agricultural and low income state to industrial and high income state. As the economy grows and income rises, the demand for goods, including public goods will rise, which as a
consequence pushes the public expenditure (government purchases) up. With rise in per capita income, public provision of consumer goods also rises. A smaller share of consumers’ income is spent on certain goods, such as food or work clothing, and a larger share on others. As average income increases, similar changes in the consumption pattern for the economy as a whole may be expected to occur. The relationship is more observable to public provision for capital goods.

In the earliest stages of economic development, a particular need exists for the creation of overhead capital, such as roads, airports, harbours, power installations, etc (Musgrave and Musgrave, 1989). Many of these items are such that the benefits are largely external, or they require large amounts of capital the returns on which are spread over a long period of time, and thus do not lend themselves for private provision. This is the reason to expect that the public share in the provision for capital goods should be larger at the earlier stages of development. As these basic facilities are built up and capital markets develop, the path is cleared for capital formation of the manufacturing sector to go into place and for industrial development in the private sector to occur.

✓ TECHNICAL CHANGE

Technological changes can significantly affect the share of social good in an efficient product mix. Technological change in particular has a major bearing on the development of the expenditure share. As technology changes, so do the processes of production and the product mix which is efficient to produce. These changes in technology may be such that they increase or decrease the relative importance of goods whose benefits are largely external, and which must therefore be provided by the government.

✓ RELATIVE COSTS OF PUBLIC SERVICES: INFLATION

In discussing the rising ratio of expenditure to GNP, it is necessary to note that the cost of public services has risen relative to that of private goods. This increase, especially in recent times, may have reflected differential rates of inflation. The more rapid rate of inflation in the price of inputs or goods purchased by the public sector resulted in an increase in the nominal expenditure to GNP ratio ahead of that recorded by the deflated ratio.

Public services will become more costly, but it does not follow that the share of public expenditure for GNP must rise. As the relative price of public goods rises, consumers will substitute private goods. The outcome will depend on the elasticity of demand for public and private goods. Only if demand is inelastic can we predict that the public share will increase.

✓ POPULATION CHANGE

Population changes may also be a major determinant of the public expenditure share. Changes in the rate of population growth generate changes in age distribution, and this trend is reflected in expenditures for education as well as care for the aged. The growth of population has frequently been cited as a factor that contributes to the growth of public expenditures. Changes in the general population might affect some services, such as defence, police protection or fire protection, whereas in other cases it is a specific section of the population that is of importance to the provision of the service, for example the school-age population in the case of education.

Population size and other population characteristics such as age structure and population density can be thought of as a subset of the environmental variables influencing the size of public expenditure. Intuitively, it would be expected that as population increase, then the level of activity produced by the public sector would have to expand in order to serve the larger population (Brown and Jackson, 1994). As an example, as the number of children of school age expands, the number of teachers and other inputs in the education process increase also if existing class sizes and other service conditions are to be maintained with the new larger population. These increases in the derived demand for total inputs are reflected as an increase in total expenditure in the public sector budget.

✓ THE QUALITY OF PUBLICLY SUPPLIED GOODS

From the fore going, it has been implicitly assumed that the voter (median) consume a level of public goods of a given quality. That is, the quality dimension of public goods has always been held constant. Thus, a congested service (road network, for example) could be thought to be of an inferior quality to one that is less congested. Quality if difficult to define clearly, but a useful approximation to what is implied by the use of it that a good that requires the efficient use of more inputs in its production (all else being the same) is of a superior quality to one that requires less (Brown and Jackson, 1994).

An education system that has a low pupil-teacher ratio is generally assumed to be superior to one that has a high pupil teacher ratio. An education system that provides the most modern equipped classrooms is considered superior to one that has no equipment. A hospital fully equipped with capital equipment and with a low patient personnel ratio is considered superior to one that has little in the way of equipment or personnel. Products possessing different qualities are, however, different product, and that is where the problem lies. Public expenditures will rise if the consumers demand a more expensive product which is of a higher quality. Public expenditures therefore may change as a result of changes in the product.

BUDGET PERFORMANCE ISSUES IN NIGERIA

Nigeria is seen as a land of great potential. There are abundant natural and human resources, before now, the economy should have been transformed into major growth in the world and subsequently joined the league of new industrializing, medium-income countries in the world. However, over the years, the condition of things has been on the contrary, as macroeconomics performance has continued to be disappointing due to many factors including policy errors (Oluyemi, 2004).
According to Maku (2009:1); the size and structure of public expenditure will determine the pattern and form of growth in output of the economy. The structure of Nigerian public expenditure can broadly be categorized into capital and recurrent expenditure. The recurrent expenditure are government expenses on administration such as wages, salaries, interest on loans, maintenance etc., whereas expenses on capital projects like roads, airports, education, telecommunication, electricity generation etc., are referred to as capital expenditure. One of the main purpose of government spending is to provide infrastructural facilities and the maintenance of these facilities requires a substantial amount of spending. The relationship between government spending on public infrastructure and economic growth is especially important analysis in developing countries, most of which have experienced increasing levels of public expenditure overtime (World Development Report, 1994). There is need to manage the economy in a manner that will ensure full employment, price stability, external balance of payment equilibrium, growth and development. According to Oluyemi (2004:51), “One major process of achieving this is through the annual budget and, where necessary through supplementary budgeting”. Thus it could be said that budgeting is an important instrument of macroeconomic management in the economy. A budget’s performance can be viewed in terms of its relevance, effectiveness, efficiency as well as overall impact on the economy. Also very significant is the budget implementation. “Budgeting can be conceived as a process of taking deliberate measures aimed at moving the relevant economic system from its current state towards a specified desired state”. (Oluyemi, 2004:52).

Budgeting indicates government’s intention during a specified period, usually a year. The most important fiscal tool which government uses is the National budget as a yardstick to raise and allocate funds and measure this performance in a fiscal year. Akinkugbe (2004) argues that the government is the vehicle through which planning, budgeting, implementation and control are carried out worldwide. It is the focal point of reference irrespective of the type of political set up being operated. In other part of the world, the government is the catchall through which progress and development are planned and achieved, and this is what has made the difference between Europe, America, Asia and the laggard Africa in the last half century. “In Nigeria, the government has implemented budgets for forty-eight (48) years since independence in 1960. Today, we are still showing development parameters of an “Underdeveloped” country. Whereas Malaysia in 1960 was poorer than Nigeria, today, their economic and development parameters qualify them to be described as “Developed nation” like any member of OECD” (Akinkugbe, 2004:59). The difference between Nigeria and Malaysia in those 48 years is that Malaysia budget and implemented them and achieved under development. Nigeria witnessed many years of military rule, the emergence of democratic government in May, 1999 was a good omen to tackle the inherited structural problems, and to inspire confidence in the Nation’s ability to overcome its economic and socio-political problems.

To ensure a solid foundation for effective reforms and sustainable long term growth of the nation’s economy, budgets were usually adopted yearly as a fiscal tool in the hand of the government. It focuses at redressing perceived distortions in the economy and for the realization of selected policy goals during a given period.

The major task in budgetary policy is to promote growth; which can be accelerated through additional expenditures in desired sectors either through direct outlays or through an appropriate strategy of development of infrastructure that, in turn, will induce further investment. The implementation of a strategy of economic growth is reflected in the allocation of budgetary resources to those sectors whose projects and programmes have been reviewed and are considered to have an impact on growth.

There was greater recognition, over the years of the impact of the budget on the economy and the economy’s impact on the budget. Indicators of employment, prices, economic growth and balance of payments have become important in determining appropriate annual expenditures, but they have not been given the emphasis due in the traditional literature on government budgeting.

B. THEORETICAL FRAMEWORK

NEOClassical GROWTH THEORY – THE GROWTH ACCOUNTING THEORY

Growth theory is an important part of modern macroeconomics. The analysis of growth has long been based on the Solow’s (1956) “growth accounting” approach, also termed as neoclassical growth theory, which has two important predictions about growth in the long run. First, that the long-run growth rate is driven by population growth; and second, that of the rate of technical progress. Solow (1956) and Swan (1956) viewed the accumulation of physical capital, associated with a permanent level of technical progress, as the driver of economic growth. The basic assumptions of the model are: constant returns to scale, diminishing marginal productivity of capital, exogenously determined technical progress and substitutability between capital and labour. Technological progress, though important in the long-run, is regarded as exogenous to the economic system and therefore it is not adequately examined by this model (Petakos, et al., 2007). In the standard neoclassical growth model, economic growth depends on the increase in the capital and labour and the pace of technological progress.

The most basic proposition of growth theory is that in order to sustain a positive growth rate of output per capita in the long run, there must be continual advances in technological knowledge in the form of new goods, new markets, or new processes, which was demonstrated by the neoclassical growth model which shows that if there were no technological progress, then the effects of diminishing returns would eventually cause economic growth to cease (Aghion and Howitt, 1998). Public policies in general and public expenditures specifically, do not affect growth. In the extended Solow model, however, human capital is an important input to growth (Mankiw et al 1992). In the endogenous models, public policies can affect both human capital formation and technological progress and therefore public policies can also have an effect on economic growth.
Endogenous growth models such as those of King and Rebelo, (1990), on the other hand, predict that distortionary taxation and productive expenditures do affect the long-run growth rate. The Implications of endogenous growth models for fiscal policy have been particularly examined by Burro, (1990) Jones et al., (1993), Stokey and Rebozo, (1995) and Mendoza et al., (1999). In testing whether the historical evidence supports the neoclassical or the endogenous growth model, several major difficulties arise. One is that there may be only limited data on government expenditures and revenues, particularly at the required level of disaggregation, and the definition of particular expenditures as productive or unproductive, or particular taxes as distortionary or non-distortionary (Bleaney et al, 2000). Recent literature on endogenous growth theory predicts that fiscal policy changes can affect the long-term growth rate by influencing the determinants of growth (physical and human capital, technological changes, employment and savings) (Hjerpe et al, 2006). As to the government expenditure, public educational and health expenditure are two of the most important public expenditure items which can contribute to the formation of the human capital; and consequently, there is, in principle, a channel from government expenditure to economic growth. Changes in public expenditures and taxes could boost (or depress) employment and human capital accumulation and change investment externalities that then would have effects on growth rate of output. This contrasts with the basic neoclassical growth model, where fiscal policy is noble to affect the long-term growth.

The theoretical relationship between government expenditure and economic growth is well documented in the literature. There are two major divergent theories in economics concerning the relationship between government expenditure and economic growth. While conventional macroeconomic theory has generally assumed that increased government expenditure tends to lead to high aggregate demand and in turn, rapid economic growth, Wagnerian theory (1883), however leans towards the opposite view. The latter contends that an increase in national income causes more government expenditure. The relationship between government expenditure (to be proxy for government activity) and economic growth is not without controversy in the empirical literature.

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. He further maintained that there is a functional relationship between the growth of an economy and government activities (expenditure) with the result that the government sector grows faster than the economy. From the original version of the theory it was not very clear whether Wagner was referring to growth in (a) absolute level of public expenditure (b) the ratio of government expenditure to GNP, or (c) proportion of public sector in the economy (Bhatia, 2006). According to Wagner (1890), as quoted in Cheng and Lai, (1997), increased government activity and the corresponding increase in government expenditure is an inevitable result of economic growth due to (a) increased friction in society causing greater demand for government services, (b) as the society is growing richer, it requires the government to provide quality goods and services, and (c) the demand for such goods and services is highly income elastic. 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 changes in national income can cause change in government expenditure.

Nitti (1903) in his “Principi di Scienza delle Finanze” not only supported Wagner’s Law but also enunciated the theory with empirical evidence that the Law is applicable to all nations. He went down to history to explain that all governments, irrespective of the levels and types, intentions (whether peaceful or warlike), and size had exhibited the tendency of increasing public expenditure.

The long-run relationship between real output and public expenditure has attracted considerable attention in economic research. In particular, the ability of public expenditure to influence national income is questioned in two levels. First, the nature of the causality pattern is disputed: a number of public finance studies adopt the Wagner’s law approach which states that national income causes public expenditure, mainly through an increase in demand for public services. 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.

One of the earliest and probably most frequently mentioned determinants of public spending is the economic growth which is famously known as Wagner’s Law”. Wagner’s law of expanding state activity” (Wagner 1883, pp.1-8) has been elaborated by many scholars of public economics (for example, Bird (1971), Musgrave (1969) and Gupta (1968). The law argues that peoples demand for service and willingness to pay is income-elastic hence the expansion of public economy is influenced by the greater economic affluence of a nation (Cameron, 1978). In other words, the scope of government tends to improve with the greater level of income and often said to imply that the income elasticity of demand for government is larger than unity (Folster and Henrekson, (2001).

**KEYNES’ THEORY OF GOVERNMENT EXPENDITURE**

The English economist, John Maynard Keynes popularized the use of government expenditure as a stabilization tool. In his writing of the Great Depression of the 1930s, Keynes argued that output and employment were well below their potential level because there was insufficient total demand. If demand could be increased, output and employment could be expanded and the economy would return to its full employment potential. Moreover, Keynes...
believed this could be achieved with expansionary fiscal policy.

During a recession, Keynes argued that rather than balancing its budget, the government should increase its spending, reduce taxes, and shift its budget toward a deficit. According to Keynes, higher levels of government spending would directly increase total demand, further, lower taxes would increase the after-tax incomes of households and they would spend most of that additional income, which would also stimulate total demand. Thus, the Keynesian prescription to cure a recession was a larger budget deficit. In contrast, if the economy was experiencing a problem with inflation during an economic boom, Keynesian analysis called for restrictive fiscal policy to temper excessive demand. In this case, reductions in government spending, higher taxes, and a shift of the budget toward a surplus would reduce total demand and thereby help to fight inflation.

Thus, Keynes rejected the view that the government’s budget should be balanced. He argued that appropriate budgetary policy was dependent on economic conditions. According to the Keynesian view, governments should run budget deficits during recessionary times and surpluses during periods when inflation was a problem because of excessive demand. Can fiscal policy be used to reduce economic instability? The Keynesian view of fiscal policy swept the economic profession and, by the 1960s. It was also widely accepted by policy makers during that era, most economists believed that fiscal policy exerted a powerful impact on the economy and that it could be instituted in a manner that would smooth the ups and downs of the business cycle. However, this is more difficult than was initially perceived. If changes in fiscal policy are going to exert a stabilizing impact on the economy, they must be timed correctly. Proper timing of fiscal changes is difficult.

C. EMPIRICAL FRAMEWORK

Nurudeen and Usman (2010) investigated the effect of government expenditure on economic growth in Nigeria by employing disaggregated analysis from 1985-2012. Their results revealed that government total capital expenditure, total recurrent expenditure, and government expenditure on education have negative effect on economic growth. On the contrary, rising government expenditures on transport, communication and health result to increase in economic growth. The researchers therefore recommended among others that government should increase both capital expenditure and recurrent expenditure, including expenditures on education, as well as ensuring that funds meant for the development of these sectors are properly managed. Secondly, government should increase its investment in the development of transport and communication, in order to create an enabling environment for business to strive.

Okoro (2013) examined the relationship between government spending and economic growth in Nigeria using time series data of 32 years period (1980-2011). Employing the ordinary least multiple regression analysis and using Real Gross Domestic Product (RGDP) as the dependent variable and government capital expenditure (GCEXP) and government recurrent expenditure (GREXP) as the independent variables, their results showed that there exists a long-run equilibrium relationship between government spending and economic growth in Nigeria. They also found that the short-run dynamics adjusts to the long-run equilibrium at the rate of 60% per annum.

Abu and Abdullahi (2010) in their paper observes that rising government expenditure has not translated to meaningful development as Nigeria still ranks among world’s poorest countries. In their study on the effect of government expenditure on economic growth, their results revealed that government total capital expenditure, total recurrent expenditures have negative effect on economic growth in Nigeria.

Nworji, Okwu and Obiwuru (2012) examined the effect of public expenditure on economic growth in Nigeria for the period 1970 to 2009 using OLS multiple regression, their study showed that capital and recurrent expenditure on economic services have insignificant negative effect on economic growth during the study period. Also, capital expenditure on transfers had insignificant positive effect on growth. But capital and recurrent expenditures on social and community services and recurrent expenditure on transfers has significant positive effect on economic growth. They recommended that there is a critical need by the government to ensure adequate and proper channeling of its expenditures to sectors of high propensity for growth and minimize its recurrent expenditures.

Arewa and Nwakahma (2013) investigated the long-run relationship between government expenditures and a set of macroeconomic variables (GDP, consumer price index and unemployment). Their study adopted the Johansen multivariate cointegration for its estimation procedure and discovers that there is long-run relationship between government expenditure and the specified macroeconomic variables. They also found that an increase in capital expenditure improves economic growth, while recurrent expenditure is detrimental to growth. Finally, their findings showed that most of the variables do not Granger cause each other, but however, recurrent expenditure Granger cause prices, in the same vein capital expenditure does granger cause unemployment.

Egbetunde and Fasanya (2013) analyzed the impact of public expenditure on economic growth in Nigeria during the period 1970 to 2010 by employing the bounds testing (ARDL) approach. The bounds test suggested that the variables of interest put in the framework are bound together in the long-run. They also found that the associated equilibrium correction was also significant confirming the existence of long-run relationships. Their findings indicated that the impact of total public spending on growth was negative which is consistent with other past studies. Recurrent expenditure however was found to have little significant positive impact on growth. Therefore, government should increase its spending on infrastructure, social and economic activities and also check corruption.

Also Maku (2009) examined the link between government spending and economic growth in Nigeria over the last three decades. Real GDP was used as the dependent variable as a function of private investment, public investment and human capital investment. The Error Correction Model
(ECM) was used to analyze the data and the empirical results showed that public and private investments had insignificant effects on economic growth during the period reviewed.

Olugbenga and Owoye (2007) investigated the relationship between government expenditure and economic growth for a group of 30 OECD countries during the period of 1970-2015. The regression results showed the existence of a long-run relationship between government expenditure and economic growth. In addition, the authors observed a unidirectional causality from government expenditure to growth for 16 out of the countries, government expenditure in out of 10 countries, and confirming the Wagner’s Law. Finally, the authors found the existence of feedback relationship.

Okoro (2013) investigated the impact of public expenditure on economic growth in Nigeria for the period 1981-2011. He concluded that government capital spending in industries and agriculture “if properly managed” will raise the nation’s production capacity and employment, which in turn will increase economic growth in Nigeria. His study advised that government should increase its expenditure on rural roads and electricity as this will accelerate the productive sectors as well as raise the standard of living of poor citizens in Nigeria.

Chude and Chude (2013) while studying the impact of government expenditure on economic growth in Nigeria (1977-2012) found that total government expenditure on education has significant effect on gross domestic product (GDP). They suggested that government should direct its expenditure towards the productive sectors like education as it would reduce the cost of doing business as well as raise the standard living of poor ones in the country. Again, Chude and Chude (2013) concluded that government should ensure that capital expenditure and recurrent expenditure are properly managed in a manner that it will raise the nation’s production capacity.

III. METHODOLOGY

This study uses time series data covering the period from 1987 to 2016. The data were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin (2016 edition) and National Bureau of Statistics (NBS, 2016). The data properties were first pre-tested to confirm their Stationarity and Cointegration status. The data were then analyzed using the Vector Error Correction Model (VECM) technique.

A. MODEL SPECIFICATION

The model formulated in this study is adopted from the empirical works of Nurudeen & Usman (2010) and Arewa & Nwakahma (2013) which we modified to include government expenditure on human capital development as disaggregated variables. The model is stated implicitly as:

$$ GDP = f(CAPEXP, GEXPE, GEXPH, GEXPA, PCI) \ldots (1) $$

Adopting a linear econometric format, and taking logarithm of both sides of the equation, we obtain:

$$ LGDP = \beta_0 + \beta_1 LCAPEXP + \beta_2 LGEXPE + \beta_3 LGEXPH + \beta_4 LGEXPA + \beta_5 LPCI + \epsilon_i \ldots (2) $$

Where:

- RGDP = Real Gross Domestic Product (proxy for measuring economic growth)
- CAPEXP = Government Capital Expenditure
- GEXPE = Government Expenditure on Education
- GEXPH = Government expenditure on Health
- GEXPA = Government expenditure on Agriculture
- PCI = Per capita Income (Proxy for human capital formation)

The apriori expectations of the parameters of the model are such that $\beta_1, \beta_2, \beta_3, \beta_4$ and $\beta_5 > 0$ i.e. the coefficients of Government Capital expenditure, Expenditures on Education, Health, Agric and Per capita income are expected to have positive effect on Real GDP.

B. ANALYSIS OF DATA AND INTERPRETATION OF RESULTS

**Unit Root Test:** The ADF unit root test is summarized in the table below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF test statistics at First Difference</th>
<th>5% level</th>
<th>Prob. level</th>
<th>Level of integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCAPEXP</td>
<td>-5.305424</td>
<td>-2.971853</td>
<td>0.0002</td>
<td>I(1)</td>
</tr>
<tr>
<td>LGEXPE</td>
<td>-7.754610</td>
<td>-2.971853</td>
<td>0.0000</td>
<td>I(1)</td>
</tr>
<tr>
<td>LGEXPE</td>
<td>-7.098711</td>
<td>-2.971853</td>
<td>0.0000</td>
<td>I(1)</td>
</tr>
<tr>
<td>LGEXPH</td>
<td>-9.236367</td>
<td>-2.971853</td>
<td>0.0000</td>
<td>I(1)</td>
</tr>
<tr>
<td>LRGDP</td>
<td>-2.517580</td>
<td>-2.471853</td>
<td>0.0222</td>
<td>I(1)</td>
</tr>
<tr>
<td>LPCI</td>
<td>-5.812565</td>
<td>-2.971853</td>
<td>0.0000</td>
<td>I(1)</td>
</tr>
</tbody>
</table>

*Table 1: Unit Root test with the ADF Statistic*

The Augmented Dickey fuller (ADF) test above is used to test for time varying mean of the variables. The ADF test shows that the variables are all stationary at first difference meaning that they are all integrated of order I(1). This implies that we can study the series’ behavior beyond the time period under consideration. Each set of time series will not be for a particular period. As a consequence, it is possible to generalize it to other time periods using the variables of the model.

C. COINTEGRATION TEST

The Johansen cointegration test indicates that a fundamental or long run relationship exists between the variables. This can be seen in table 2 below:

Unrestricted Cointegration Rank Test (Trace)

<table>
<thead>
<tr>
<th>Hypothesized</th>
<th>Trace</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of CE(s)</td>
<td>Eigenvalue</td>
<td>Statistic</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>0.895220</td>
<td>146.4859</td>
<td>95.75366</td>
</tr>
<tr>
<td>At most 1*</td>
<td>0.608001</td>
<td>83.32088</td>
<td>69.81889</td>
</tr>
</tbody>
</table>
In the start of the equation (LRGDP (2)) error correction coefficient. It is by 2.9%. The rate of adjustment is sant as well as ent the error correction part given in the equation above. The coefficient less than 1 ensures that the system is not explosive. This year growth will r oo slow. Having the coefficient of the error correction

d. VECM MODEL ESTIMATION

\[ D(LRGDP) = -0.029310*CoinEq1 - 7.883678 + 0.04022*D(LRGDP(-1)) + 0.70246*D(LGDP(-2)) + 0.049708*(LCAPEXP(-1)) + 0.048208*D(LCAPEXP(-2)) - 0.084348*D(LGEXPA(-1) - 0.070633*D(LGEXPA(-2)) + 0.005738*D(LGEXPE(-1)) - 0.034143*D(LGEXPE(-2)) + 0.027042*D(LGEXPH(-1)) + 0.060826*D(LGEXPH(-2)) - 0.034143*D(LPCI(-1)) + 0.052735*D(LPCI(-2)) \]

The coefficient of the highlighted term in the above equations represents the error correction coefficient. It shows how much change in economic growth responds to the cointegrating error. Simply put, to ensure that the expected equilibrium between public expenditure and economic growth is maintained, in response to the past year decrease in growth, this year growth will rise by 2.9%. The rate of adjustment is too slow. Having the coefficient of the error correction coefficient less than 1 ensures that the system is not explosive.

The VECM model examines how much economic growth will change in response to a change in public expenditure. This is the cointegration part of the equation (LRGDP (-1) - 0.029310 – 7.883678), as well as the speed of change which is the error correction part given in the equation above.

The regression result shows that government capital expenditure, government expenditure on health, government expenditure on human capital are all significant determinant of economic growth of Nigeria with over 73.1% reliability.

E. TEST OF SIGNIFICANCE

Our test reveals at .05 (1.7081) critical value that government expenditure, on agriculture, education and health were significant with -2.78794, -1.79699 and 2.81619 t-statistics respectively. Per capital income and capital expenditure were found to be insignificant at 5% level.

IV. SUMMARY OF FINDINGS

The study investigated budget performance and economic growth in relation to the real sector in Nigeria. Over the years, government has shown its interest in economic activities of the country by being directly involved in matters that affect the well-being of the country. However, on a sectoral basis which has our focus, it was discovered that government expenditure has produced varying outcome; in other words its performance in the real sector has been very revealing and peculiar. It was discovered that budget performance in areas of Health, capital expenditure and human capital formation (proxied by per capita income) has been remarkably positive unlike its relation with Agriculture and Education. This implies that there is a direct significant relationship between public expenditure and economic growth in that regard. However, the result was not the same when other variables such as government expenditure on education and agriculture were inputted. The relationship was but significant as well as which supports empirical evidence in the literature review. The study also revealed that the explanatory variables jointly influence economic growth when evaluated from the joint test and also showed a goodness of fit of the model from an R² of 73%.

V. CONCLUSION AND RECOMMENDATIONS

From data analysis carried out, it is concluded that to a large extent government involvement in agriculture, real sector, human capital development have led to economic growth in relation to real gross domestic product (output). These variables individually are significant and are more impacting on the growth of the economy as supported by empirical literature in Nigeria’s peculiar case. Expenditure on education and health produced a disturbing outcome contrary to apriori expectation for obvious reasons ranging from policy inconsistency, loss of focus, emphasis on oil sector among others. Thus, it is concluded that economic growth can remain positive if the budget remains targeted on the above variables which are more impacting, lending support for budget performance in these key areas.

It can be seen that the study revealed a number of interesting results which have policy implications; hence it is recommended that:

- Government budget provision should focus more on the real sector as their indicators have shown they are capable of promoting economic growth.
✓ Government budget performance should be reviewed to assess growth trend for improvement.
✓ Government budget should be prepared taking into cognizance economic realities and forecast.

REFERENCES


