

# Government Expenditure and Economic Growth Nexus: Evidence from Nigeria

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## Abstract

The need to better the lots of citizens through government expenditure has raised questions on the impact of government expenditure on the economic development and growth of nations. It is against this background that this paper examined the antecedent effect of government spending on the Nigerian economic growth. The general objective of the study is to ascertain the relationship between government expenditure and economic growth in Nigeria; specifically, the study examined: (i) the significance influence of government capital expenditure on economic growth in Nigeria and (ii) the significance influence of government recurrent expenditure on economic growth in Nigeria. The study employed ordinary least square (OLS) multiple regression analysis in estimating the specified model, with the Gross Domestic Product (GDP) as the dependent variable, while Capital Expenditure (CAPEXP) and Recurrent Expenditure (REXP) are the independent variables. Data between 1980 – 2013 were collected from secondary sources through the National Bureau of Statistics (NBS) and Central Bank of Nigeria (CBN). Results showed that in Nigeria, there exist a significant relationship between the government expenditure and economic growth. The study therefore recommends instilling fiscal discipline in government expenditures, and putting in place structural mechanisms to act as surveillance on capital spending so as to boost the nation's human and social capital.

**Keywords:** Recurrent Expenditure, Capital Expenditure, Economic Growth

## 1. Introduction

One of the key instruments being employed by the government in controlling economic activities is public expenditure. The importance of public expenditure towards the functioning of any economy be it underdeveloped, developing or developed cannot be over emphasized. In the view of Okoro (2013), the need for efficient allocation of resources among the various arms, organs or strata of government, as conditioned by their fiscal capacity and responsibility necessitated public expenditure management.

An issue of sustained interest among academics over the decade which have led to the rise of many scholarly articles had been the understudying of government expenditure size and its antecedent effect on economic growth, and vice versa. According to Al-Yousif (2000), government performs two key functions- maintaining law and order (which include the protection and security of its citizenry) and provisions of essential amenities and infrastructures such as good roads, security, education, pipe borne water, health, electricity and so on.

Over the years, it has been argued by scholars that increasing government expenditure typically those on socio, economic and physical infrastructure fosters economic growth. For example, it is believed that expenditure on education and health will raise the level of national output through the improvement in quality of labour and productivity. In a similar view, spending on infrastructures such as roads, communications, electricity, water and so on will cause reduction in production costs and increase firms' profitability, thereby fostering economic growth (Taiwo and Agbatogun, 2011).

Another scholar supporting the above assertion is Olukoye (2009) who posit that public spending be it recurrent or capital, has the capability of enhancing nation's growth in as much as it is expended on social - economic facilities.

The determination of how effective government spending is towards the expansion of the economy and fostering rapid economic growth depends largely on whether it is productive or unproductive. The productive government

expenditure would impact the economy positively, while the unproductive expenditure would have negative effect on the economy; *ceteris paribus* (Oziengbe, 2013).

The provision of infrastructure services to meet the demands of business, households, industries, as well as other users, constitutes one of the major challenges hindering economic development in developing countries of which Nigeria is one. The antecedent of the huge receipts from the production and sales of crude oil, and the increased in the demand for social amenities like roads, communication, electricity, education, water and health has continually led to an increase in government spending in Nigeria. Day in day out, the need to provide both internal and external security for the citizenry and the nation at large is on the increased (Okoro, 2013).

Over the years, in Nigeria and as is it with many other developing economies, there have been a steady increase in government spending without an appreciable increase in economic growth and development. In Nigeria for instance, despite the huge amount of public expenditures, there is still an insignificant level of development witnessed. Public expenditure on all sectors of the Nigerian economy is expected to lead to economic growth in the sense that the increased capital and recurrent expenditure should boost the productive base of the economy which in turn will lead to growth.

However, despite the continual rise in the Nigeria government expenditure, this may not have translated to meaningful growth and development, as the country is still ranked among the world poorest nations. Consequently, many Nigerians have continued to wallow in abject poverty, with more than fifty percent of the citizens living on less than US\$1 per day. Further to that, the revelations of various macro-economic indicators which include; balance of payments, import and export obligations, exchange rate, inflation rate, and national savings show that Nigeria as a country has not fared better over the past three decades. It is thus disheartening that the level of government expenditure seems not to have been replicated with that of economic growth in Nigeria (Akpokerere and Ighoroje, 2013).

The broad objective of this study is to examine the relationship between government expenditure and economic growth in Nigeria. Specifically, the study seeks to:

- (i) examine the significance influence of government capital expenditure on economic growth in Nigeria.
- (ii) determine the significance influence of government recurrent expenditure on economic growth in Nigeria.

The study contributes to the growing literatures and serves as a reference point for further research in this field. The rest of the paper is structured as follows: The next section, section 2 introduces and discussed the concept of public expenditure, the theoretical underpinnings of the research and the empirical analysis. Section 3 discussed the methodology; presentation of result and discussion of findings were done in section 4, while Section 5 concludes

## **2. Literature Review and Theoretical Framework**

According to Barro and Grilli (1994), government spending otherwise referred to as government expenditure comprises all government consumption and investment and excludes any transfer payments made by a state. Government expenditure on one hand can be incurred to acquire goods and services meant for current use in order to satisfy the needs of an individual or those of the members of the community; and on the other hand, it could be incurred for acquisition of goods and services which are intended to create future economic benefits such as infrastructure and investment. Likewise, expenditures can represent transfers of money, such as social salaries and cost of administration.

Thus, public expenditure affects the overall aggregate resources utilized together with both monetary and exchange rate. Specifically, public expenditure could be referred to, as the value of goods and services provided through the public sector.

In the Nigerian economic context however, there are two broad categorization of public expenditure; the capital expenditure and the recurrent expenditure. The recurrent expenditures which are government expenses expensed as administrative cost; these include salaries and wages, interest on loans, assets maintenance cost, rent and rates, and expenditures on consumables (office stationery, drugs, bandages for health service etc). In other words, they are items that are used up in the process of providing goods or services, consumed and only last a limited period of time usually one year.

Capital expenditures on the other hand, are spending on tangible non-current assets. They are spent for the purchase of items that will last for many years, and are to be used time and time again in the provision of goods and services. Typical examples of government capital expenditures include: building of new classrooms, hostels, offices, hospitals, airports; the procurement of new computer, technology, machines, equipment or networks, construction of new

roads, drainages, bridges; provision of electric generating transformers, cables, meters; provision of pipe borne water, dams; and telecommunications etc (Obinna, 2003).

The principal theories as recognised by scholars in the context of government expenditure include: the Wagner's theory of increasing State activities, the Keynesian theory, Musgrave theory of public expenditure growth, the Solow's theory and the endogenous growth theory (Chude and Chude, 2013). However, this study shall adopt the Wagner's theory of increasing State activities which is thus discussed below:

### *2.1 The Wagner's Theory of Increasing State Activities*

The Wagner's theory is named after Adolph Wagner, the German economist who lived between the years 1835 to 1917. As explained by Chude and Chude (2013), Wagner analyzed the trends in the growth of public expenditure and the size of public sector in advancing the law of rising public expenditures. Wagner's theory of increasing state activities is build on three postulates, these are:

- (i) that the extension of the functions of the states do lead to an increase in public spending on administration and regulation of the economy;
- (ii) that the development of modern and industrialized society would give rise to increasing political pressure for social progress. and;
- (iii) that the rise in public expenditure will be more than proportional increase in the national income, thereby expanding relatively the public sector.

While supporting Wagner's theoretical assertion, Musgrave and Musgrave (1988), opined that the share of the public sector in the national economy grows continually in tandem with the progress in countries industrialization.

Wagner's theory acknowledged the public sectors spending as endogenous factors that are influenced by the rise in national income and not those that causes the growth in national income. The argument of the theory is that, an increase in government spending can be attributed to the growth in national income, and that it is only the rise in national income that can be used in explaining an increase in public spending. Thus, the national income drives public expenditure and not the way round. As explained by the theory, public spending is regarded as an endogenous and not an exogenous variable, and that it is the outcome of economic growth, not a factor that led to the growth of the economy (Wagner's, 1890).

### *2.2 Empirical Analysis*

There are a number of empirical literatures that have studied the effect of public expenditure on economic growth typical among which are Musgrave and Musgrave (1988), Oyinlola (1993), Fajingbesi and Odusola (1999), Usman (2010) and Oziengbe (2013).

Oziengbe (2013) investigates the impact of government capital and recurrent expenditures on Nigeria's economy between the periods 1980 to 2011. Using multiple linear regression analysis, the study proxied total government expenditure (GOVEXP) for government capital and recurrent expenditures and gross domestic product (GDP) for economic growth. Data collected from secondary sources were analysed by exploiting the cointegration and error correction mechanism and the result showed that recurrent expenditures (RECEXP) has a negative significant relationship to GDP while capital expenditures (CAPEXP) has a positive significant relationship to GDP. The study thus recommends larger portion of government expenditure to go into provision of infrastructural facilities and other capital projects.

In his study, Oyinlola (1993) examined the effects of public spending on economic growth in Nigeria. The study findings revealed that public expenditure on defense has a positive influence on economic growth. Fajingbesi and Odusola (1999) while examining the relationship between public spending and economic growth in Nigeria pointed out that recurrent expenditure had little impact on economic growth. To Akpan (2005), there is no significant association between government expenditures and economic growth. The study used disaggregated approach to study the various components of the government expenditures (capital, recurrent, administrative, economic services, social and community services and transfers) that influences economic growth.

Robinson, Eravwoke and Ukavwe (2014) examined the relationship between government expenditure and economic growth. Their study disaggregated government expenditure into public debt expenditure, expenditure on health and government expenditure on Education. Augmented Dickey Fuller (ADF) test was conducted and ordinary least square (OLS) was employed in the study. And it was discovered that government expenditure in Nigeria could increase both foreign and local investments, the study encouraged government to spend more on key macro-economic variables.

### 3. Methodology

The research design adopted by this study was ex-post facto research design, using already existed data. The data collected were analysed with the multiple regression analysis. The data used for this study were gotten mainly from secondary source obtained from the National Bureau of Statistics (NBS) data bank and Central Bank of Nigeria (CBN) statistical bulletin from 1980 – 2013. The choice of this period was because it coincides with a period of major economic reforms in Nigeria ranging from Structural Adjustment Programme (SAP), to Gradual reform, to National Economic Empowerment Development (NEEDS).

#### 3.1 Model Specification

The model for this study is stated below:

$$GDP = f(CAPEXP, REXP)$$

$$GDP = \alpha_0 + \beta_1 CAPEXP + \beta_2 REXP + \mu$$

Where

*GDP* = Gross Domestic Product (proxy for economic growth)

*CAPEXP* = Capital Expenditure

*REXP* = Recurrent Expenditure

$\alpha$  and  $\beta$  = Regression Parameters, and

$\mu$  = the error term which account for other likely factors which could influence GDP that are not already captured in the model.

The a-priori expectation or the expected behaviour of the independent variable (*CAPEXP*, *REXP*) on the dependent variable (*GDP*) in the model is the coefficients of *CAPEXP* > 0.; *REXP* > 0.

### 4. Results and Discussion

Table 1. Analysis of the Result

Variables	Coefficient	Std. Error	T-Statistic	Probability
C	0.3105	0.3242	0.9650	0.5102
LCAPEXP	-0.0372	0.0486	-0.5376	0.0463**
LREXP	0.8104	0.0773	11.6210	0.0005*
R Squared	0.7942	F-stat	1827.536	
Durbin Watson Stat Test	1.8108	Prob (F.stat)	0.0000	

Source: Authors' computation, 2016. Significant at (\*) \*\* 1% and 5% level.

The Coefficient of LCAPEXP is not in line with apriori expectations. LCAPEXP have a negative coefficient of -0.0372 significant at 5% level. However, LREXP have a positive coefficient of 0.8104, and significant 1% level. That is, a percentage change in capital expenditure will induce a 0.37% negative unit change in GDP while a percentage change in recurrent expenditure will induce a 0.81% unit change in GDP. Thus only the recurrent expenditure conforms to our a priori expectations, this implies that when recurrent expenditure increases, the GDP also increases; and this is in agreement with the work of Okoro (2013). However, capital expenditure does not conform to the a-priori expectation. Thus, capital expenditure shared a negative relationship with GDP. While the CAPEXP showed a negative significant relationship with the dependent variable (GDP), REXP showed a positive significant relationship. The coefficient of determination as revealed by R-square ( $R^2$ ) indicates that 0.81 of the variations observed in the dependent variable (GDP) were explained by variations in the independent variables (CAPEXP, REXP). The F-statistics which test the goodness of fit has a value of 1827.5. On the whole, the overall probability (F-statistics) is 0.0000 significant at 1%.

The Durbin Watson (DW) statistics is equal to 1.8; thus implying the absence of serial auto-correlation. This is because when the DW value is closer to two, it is an evidence of the absence of serial correlation.

## 5. Conclusion and Recommendations

### 5.1 Conclusion

This research studies the impact of government expenditure on the economic growth of Nigeria. It employed secondary data which was analyzed and tested using multiple regression technique. The study found out that there exist a negative significant relationship between GDP and capital expenditure, while there is a positive significant relationship between GDP and recurrent expenditure. Thus, the study aligns with the work of Oyinola (1993) and Okoro (2013) that government expenditure has a significant influence on economic growth and development. However, the negative coefficient relationship between capital expenditure and GDP indicated that the increased capital expenditure in Nigeria has not necessitated improvement in the nation's GDP as expected, and this is in tandem with the submission of Fajingbesi and Odusola (1999). Likewise, it was discovered that enhanced government expenditures will stimulate better standard of living, improve both foreign and local investment by enhancing inflow of relevant capital that will cause growth and development of an economy.

### 5.2 Recommendations

(i) There is the need to entrench fiscal discipline among all players involved in the management of government expenditures by putting in place effective internal control measures. Expenditures on all non-productive activities at all levels of government should be discouraged.

(ii) There should be efficient surveillance and monitoring of capital spending so as to boost both human and social capital. All loopholes that have enabled perpetration and misappropriation of fund, spending on white elephant project and had caused projects abandonment are to be plugged.

(iii) Government spending should be channeled to activities that will enhance economic growth and development. It is expected of government to provide enabling environment for private sector to thrive and corroborate government effort in developing the economy.

(iv) Institutions that have been developed - the Economic and Financial Crime Commission (EFCC) and the Independent Corrupt Practices and other Related Offences Commission (ICPC) should be strengthened and be made to function optimally and independently devoid of any external interferences.

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