

## NEXUS BETWEEN GOVERNMENT EXPENDITURE AND ECONOMIC GROWTH: EVIDENCE FROM NIGERIA ECONOMY (1995 – 2018)

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### ABSTRACT

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This study examined the Impact of Government Expenditure on Economic Growth in Nigerian from 1995 to 2018. The main objective is to examine the impact of government expenditure on economic growth in Nigeria. The study adopted ex-post facto research design. It used annual time series data extracted from the Central Bank of Nigeria statistical bulletin and annual report. The data collected were analyzed using multiple regression techniques of the Ordinary Least Squares (OLS) with the aid of Statistical Package for Social Sciences (SPSS). The analysis used Gross Domestic product as dependent variable. Government Capital Expenditure, Government Recurrent Expenditure and Money Supply as the independent variables. The result revealed that Government Capital Expenditure with a p-value of 0.542 which is statistically insignificant, has a negative impact on the growth of Nigerian economy. Government Recurrent Expenditure with a p-value of 0.009 which is statistically significant has a positive impact on economic growth in Nigeria. Money Supply with a p-value of 0.000 which is statistically significant, has a positive impact on economic growth in Nigeria. The study recommended that the Government should ensure that capital expenditure and recurrent expenditure are properly managed in a manner that it will raise the nation's production capacity and accelerate economic growth. Also, Government should monitor the contract awarding process of capital projects closely, to prevent against over estimation of execution cost.

**Keywords:** Government Capital Expenditure, Government Recurrent Expenditure, Money Supply, Economic Growth and Gross Domestic Product.

### INTRODUCTION

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It is obviously presumed that Government performs two basic functions- protection (and security) and provisions of certain public goods. The Protective function entails creation of rule of law and enforcement of property rights which helps to minimize risks of

criminality, protect life and property, and the nation from external attacks; while defense, roads, education, health, and power, etc. are goods provided by government (Abu&Abullahi, 2010).

The motive to improve the quality of lives of citizens through the numerous expenses of

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government has motivated the study of the impact of government expenditure on the economic growth of Nigeria. Across the world over, government spending has been on the increase without a corresponding increase in the economic development of the nations especially in developing nations. This situation has also stimulated research in the area of government spending and economic growth and development. It is in the light of the above scenario and the huge sums of money spent by the Nigerian government over the years that this study examines the impact of government expenditure on Nigeria's economic growth from 1992 to 2011.

Public expenditure theories evolved out of the perceived failure of market economic to efficiently and equitably allocate economic resources for social and economic infrastructure development. This failure necessitated that emergence of welfare economics (state intervention in economic activities) leading consequently to the rapid expansion of the government sector, and by implication, growth in public expenditure. As the public sector size continued to grow relatively, the need for an appropriate mechanism that would ensure efficiency in resource allocation arose. In order to fill this perceived gap, the budget, which contained a package of public expenditure plan and tax legislation of the government for the year readily come to be a veritable tool for controlling, monitoring and relating government expenditure plans to policies of finance and taxation.

### **Statement of the problem**

In the last decade Nigeria economy has metamorphosed from the level of Billion-Naira to Trillion-Naira on the expenditure side of the budget. Nigeria government spending over the years have sky-rocketed but the problem here is inefficient channeling of the fund to key priority areas of the economy, or the case of embezzlement. Available CBN statistical data show that total government expenditure (Capital recurrent) continued to rise over the years. A view of the growth pattern of the government spending shows that government spending has risen more proportionately than the crowding effect of growth in the economy.

The high level of corruption is posited to be the cause of this, thus this work therefore tries to answer the following questions:

- What is the relationship between government capital expenditure and the economic growth of Nigeria?
- To what extent does government recurrent expenditure affect economic growth in Nigeria?
- What is the relationship between money supply and economic growth in Nigeria?

### **Objectives of the study**

The main objective is to examine the impact of government expenditure on the economic growth in Nigeria (1995-2018). The specific objectives are:

- To examine the relationship between government capital expenditure and the economic growth of Nigeria
- To determine the effect of government recurrent expenditure on economic growth in Nigeria
- To determine if federal government capital expenditure has any significant effect on economic growth in Nigeria

### **Research Hypothesis**

In order to adequately evaluate the impact of government expenditure on the economic growth of Nigeria, the null hypotheses are as follows:

HO1: There is no significant relationship between government capital expenditure and Nigeria economic growth

HO2: Government recurrent expenditure does not affect the growth of Nigeria economy.

HO3: There is no significant relationship between money supply and economic growth in Nigeria.

### **Conceptual underpinning**

The persistent increase in crime incidences have continued to have a debilitating on society at all levels, local or internationally. Of huge importance also is the fact that crime does not distinguish between the developed and under-developed countries, as crime and criminality may occur in almost all climes. The emerging trend of crimes in Kogi state has reflected a high rate of student's involvement which may have been facilitated by some factors that are discussed in this study.

Onoge (1988) in Adebayo (2013) perceives crime as dysfunctional as it threatens the stability of the socio-economic and technological growth of the society; a problem that requires concerted efforts and solutions. Crime undermines the social fabric by eroding the sense of safety and security.

## **LITERATURE REVIEW**

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### **Concept of Government Expenditure**

Government expenditures are the costs that are usually incurred by the government for the provision and maintenance of itself as an institution, the economy and society. Government expenditures usually tend to increase with time as the economy becomes large and more developed or as a result of increase in its scope of activities. Ogboru (2010) identified recurrent and capital budget as one of the major types of budget in

an economy. It is sometimes referred to as revenue budget and it covers the current items or expenditure. The capital budget has to do with expenditures necessary to procure capital assets. As a result of the increase in the supply of goods and services couple with a rise in the aggregate demand exerts a downward pressure on unemployment and depression. In Nigeria, the federal government's expenditures are broadly divided into capital and recurrent expenditure. The recurrent expenditure consists of government expenditure on administration such as wages, salaries, interest on loans, maintenances etc. whereas the capital expenditure are on projects like roads, airport, health, education, electricity generation, telecommunication, water etc. In most cases government intervention has brought stability in income and employment in the economy. Public expenditure is therefore an important tool that brings about egalitarian society through the provision of welfare facilities (Ogba,2013). Government expenditure according to Nnamo (2008) is the expenditure of the public sector (government). It includes such expenditure on the maintenance of government itself and also for the society and the economy.

Governments have recorded continuous increase overtime in almost every country. However, according to the Central Bank of Nigeria (CBN), government expenditure is classified into four functions; Administration which includes all government expenditure on defense, general administration, internal security and national assembly; Social and Community Services such as all government expenditure on education, health and other social and community services; Economic Services to includes government expenditure on agriculture, construction, transportation and communication and other economic services; Transfers such as all government expenditure on public debt servicing, pension and gratuities, contingencies/subventions and other/other CFR charges.

Public expenditure is the expenditure incurred by public authorities like Federal, state and local governments for the provision of public goods to satisfy the collective social wants of the people. It can be referred to as the funds expended by local, state and federal government and its agencies and distinct from that of households and firm

### **Concept of Economic Growth**

Muritala and Taiwo (2011) defined a country economic growth as a long term rise incapacity to supply increasing diverse economic goods to its population, this growth capacity based on advancing technology and the institutional and ideological adjustment that is demand. In other words, economic growth refers to increase in country's potential Gross Domestic Product (GDP), although this differs depending on how national product has been measured. According to Ogundipe and Oluwatobi (2014), economic growth must be sustained for a developing economy to break the circle of poverty. Economic growth can be defined as the steady process by which the productive capacity of the economy is increased overtime to bring about rising levels of national output and income (Todaro & Smith, 2005).

Furthermore, Lipsey and Chrystal (2007) regarded economic growth as the engine for generating long-term increase in the overall standard of living. Jhinghan (2013) stated that economic growth is the quantitative sustained increase in a country's per capita output or income, accompanied by expansion in its labour-force, consumption, capital and volume of trade. While economic development is economic growth plus change. An economy can grow but may not develop. However, it is difficult to imagine economic development without economic growth. Though they differ in concept, they are sometimes used interchangeably. Economic growth is a long-term expansion of the productive potential of the economy. It means an increase in Real GDP, in other words, an increase in national output and national income. The real GDP is the market value of all goods and services produced in a nation during a specific time/ period. Real GDP measures a society's wealth by indicating how fast profits may grow and the expected return on capital. It is labeled "real" because each year's data is adjusted to account for changes in year-to-year prices. Economic growth represents the expansion of a country's potential GDP or output. For instance, if the social rate of return on investment exceeds the private return, then tax policies that encourage can raise the grow rate and level so futility. Relationship between Government Expenditure and Economic Growth.

The relationship between government expenditure and economic growth has continued to generate intense debate among scholars. To date, policy makers are still divided as to whether government expansion helps or hinders economic growth. Proponents of bigger governments are usually of the view that increase in government expenditure, especially on socio-economic and physical infrastructures, encourages economic growth. For example, government expenditure on health and education are presumed to raise the productivity of labour and increase the growth of national output. Similarly, expenditure on infrastructure such as roads, communications, power, etc. are theoretically expected to reduce production costs, increases private sector investment and profitability of firms, thus fostering economic growth.

### **Theoretical Framework:**

**The Keynesian Theory:** In the Keynesian macroeconomics, increase in government expenditure has an expansionary effect on income and employment through the multiplier effects on aggregate demand. On the other side, government expenditure crowds out private investment as a result of increase in the rate of interest and this slows down economic growth and reduces the rate of capital accumulation in the long run. Keynes regarded government expenditure as an exogenous variable that contributes positively to economic growth. Hence, an increase in government expenditure would likely lead to increase in employment, profitability and output through the multiplier effects on aggregate demand.

**Musgrave's Theory of Public Expenditure Growth:** This theory observed that with high per capitain come typical in the developed nations, the rate of public spending falls as most basic wants are being satisfied. Therefore, the theory suggested in connection to Wagner

that as progressive nations become more industrialized, the share of public sector in the national economy grows continually (Musgrave, 1988).

### Empirical Studies

Omoruyi (2000), reviewed the studies of some authors on public expenditures of developed and less developed countries. Omoruyi (2000) found out that empirical investigations had so far come up with rather conflicting results. He, however, concluded that some of the results seemed to be that total current expenditures as a percentage of national product increases with rising national income.

Cullison (2009), found that the United States government spending on education, active labour-market policies, justice and diverse benefits provided by the government boosted economic growth.

Kocherlokota and Yi (2007) analyzed how public capital (physical) and taxes affect economic growth in the United States and the United Kingdom over the period respectively. They found that public capital boost economic growth while taxes inhibited growth as opined by endogenous growth theory.

Erkin (2004) examined the relationship between government expenditure and economic growth, by proposing a new frame work for New Zealand. The empirical results showed that higher government expenditure does not hurt consumption, but instead raises private investment that in turn accelerates economic growth. They submitted that more meaningful (robust) results are generated, as econometric problems are addressed.

Liuand Hsu and Younis (2008) examined the causal relationship between GDP and public expenditure for the US data during the period 2000-2017. The causality results revealed that total government expenditure causes growth of GDP. On the other hand, growth of GDP does not cause expansion of government expenditure. Moreover, the estimation results indicated that public expenditure raises the US economic growth. The authors concluded that, judging from the causality test Keynesian hypothesis exerts more influence than the Wagner's law in US.

### METHODOLOGY

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#### Research Design

This study adopted the ex-post fact design which enables the researcher to observe variables over a long period of time. The Ordinary Least Square (OLS) technique is used to evaluate the relationship between government spending and economic growth.

### Population

The population of this study is the real Gross Domestic Product (GDP). It is used as the proxy for economic growth in Nigeria taking into consideration Government Capital Expenditure, Government Recurrent expenditure and money supply.

### Method of Data Collection

The method of data collection of this study is secondary data and it was obtained from the Central Bank of Nigeria's Statistical Bulletin covering 1995-2018, a period of 23 years. The data for this research work was from the official records, precisely published and unpublished materials which includes; financial statements of Central Bank of Nigeria within the time frame through the link available in the website, annual statistical reports, textbooks, journals, magazines, internet-web and seminars.

### Method of Data Analysis

The technique of data analysis for this study was purely quantitative method of data analysis. In this method, multiple regression model was adopted to investigate the relationship between government expenditure and economic growth in Nigeria. Data were analyzed with statistical package for social science (SPSS). Ordinary Least Square (OLS) multiple regression approach was used to estimate the coefficients of the independent variables and examine the nature of their relationships with the dependent variable. This is because the OLS is the best linear unbiased estimator (BLUE) in the classical linear regression model (CLRM).

### Model Specification

The real Gross Domestic Product (GDP) is used as the proxy for economic growth in Nigeria. The model expressed economic growth as a function of Government Capital Expenditure, Government Recurrent expenditure and money supply. To examine the effect of the independent variables on economic growth, the model was specified as follows:

$$GDP=f(GCE, GRE, MOS).$$

The transformation of the above model into regression function is given below:

$$GDP=\beta_0+\beta_1GCE+\beta_2GRE+\beta_3MOS+\mu$$

Where;

GDP = Real Gross Domestic Product GCE= Government Capital Expenditure

GRE = Government Recurrent Expenditure;

MOS = Money Supply

$\beta_0$  = The intercept term which gives the average value of GDP when government capital expenditure, government recurrent expenditure and money supply are set equal to zero.

$\beta_1$  = the coefficient of government capital expenditure which measures the mean change in GDP per naira change in government capital expenditure.

$\beta_2$  = the coefficient of government recurrent expenditure which shows the change in GDP per naira change in government recurrent expenditure.  $\beta_3$  = the coefficient of money supply which shows the change in GDP per naira change in money supply.

$\mu$  = the error term which captures the effect of other variables not included in the model on economic growth.

## DATA ANALYSIS AND INTERPRETATION

**Table -1 UNIT ROOT TEST**

Method	Statistic	Prob.**	Cross-sections	Obs
<b>Null: Unit root (assumes common unit root process)</b>				
Levin, Lin & Chu t*	5.17868	1.0000	3	143
Breitung t-stat	-1.40299	0.0803	3	137
<b>Null: Unit root (assumes individual unit root process)</b>				
Im, Pesaran and Shin W-stat	-8.73717	0.0000	3	143
ADF - Fisher Chi-square	88.6053	0.0000	3	143
PP - Fisher Chi-square	682.201	0.0000	3	157
<b>** Probabilities for Fisher tests are computed using an asymptotic Chi square distribution. All other tests assume asymptotic normality. Source: Author's computation using eview-9</b>				

The stationary test result presented in table one shows that at various levels of significance, the variables were stationary. Specifically, all the variables were stationary at first difference. Hence, the entire variables in this study are stationary.

**Table -2 OLS REGRESSION RESULT**

**Dependent Variable: RGDP**

<b>Method: Least Squares</b>				
<b>Date: 01/29/21 Time: 09:20</b>				
<b>Sample: 1995 2018</b>				
<b>Included observations: 24</b>				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.043373	0.011869	3.654270	0.0013
GCE	-0.034757	0.012175	-2.854744	0.0090
GRE	0.049768	0.016150	3.081642	0.0053



<b>R-squared</b>	0.648868	Mean dependent var	0.050884
<b>Adjusted R-squared</b>	0.526735	S.D. dependent var	0.045462
<b>S.E. of regression</b>	0.031275	Akaike info criterion	-3.859719
<b>Sum squared resid</b>	0.022497	Schwarz criterion	-3.447481
<b>Log likelihood</b>	70.75550	Hannan-Quinn criter.	-3.723073
<b>F-statistic</b>	5.312802	Durbin-Watson stat	2.067121
<b>Prob(F-statistic)</b>	0.000753		

**Source: Author's computation using eview-9**

Table above indicates that the dynamic model is a good fit. The reason is that the difference in our predictors account for 65 percent of the overall disparity in our model looking at the  $R^2$ . Put differently, the  $R^2$  value of 0.65 indicates that the variation in economic growth (proxied RGDP) explained by Government recurrent expenditure (GRE) and Government capital expenditure (GCE) is 65 percent. Therefore, the explanatory power of the model estimated is 65 percent. The Durbin Watson (DW) value of 2.067121 which is approximately 2.07, suggests no autocorrelation.

Hence, from the above multiple linear regression results, the regression equation depicting the linear relationship between RGDP, GCE and GRE can be stated as:

$$\begin{aligned}
 \text{RGDP} &= 0.043373 - 0.034757\text{GCE} + 0.049768 \text{GRE} + \text{Et} \\
 \text{S.E.} & (0.011869) \quad (0.012175) \quad (0.016150) \\
 \text{T.ratios} & (3.654270) \quad (-2.854744) \quad (3.081642) \\
 \text{Prob.} & (0.0013) \quad (0.0090) \quad (0.0053)
 \end{aligned}$$

The figures in the first set of parentheses are the estimated standard errors of the regression coefficients, the figures in the second set are estimated t-ratios, and the figures in the third set of parenthesis are the estimated probability values (p-values).

### Discussion of Findings

This result reveals that 65 percent of the total variation in the Real Gross Domestic Product (RGDP) model, was explained by Government capital expenditure (GCE) and Government recurrent expenditure (GRE). The result further revealed a high Adjusted  $R^2$  of 52 percent.

The study further revealed that Government recurrent expenditure (GRE) was rightly signed (i.e., positive) and this conforms to a-priori expectation implying a positive relationship between Government recurrent expenditure (GRE) and economic growth. In addition, the coefficient of Government capital expenditure (GCE) was wrongly signed (i.e., negative) instead of positive; implying a negative relationship between Government capital expenditure (GCE) and economic growth (RGDP) during the period of study.

## **FINDINGS, CONCLUSION AND RECOMMENDATIONS**

### **Findings**

On the basis of data analyzed above and the result therein, the following are the findings of the study:

- There is no significant relationship between government capital expenditure and Nigeria economic growth.
- Government recurrent expenditure does affect the economic growth of Nigeria.
- There is significant relationship between money supply and economic growth in Nigeria.

### **Conclusion**

Based on the findings, it revealed that government recurrent expenditure and money supplies is positive and have significant impact on Nigeria economic growth. It means that increase in government recurrent expenditure and money supply will have a significant increase in the economic growth of Nigeria. These findings are in line with Keynesian theory of economic which postulated that increase in government spending promote the economic growth. Therefore, government expenditure impacts significantly to the growth rate of GDP based on the research analysis. Hence, government expenditure is the main driver of economic growth.

### **Recommendations**

Based on the findings, the following recommendations are suggested:

- i. Government capital expenditure especially on agriculture and industry should be properly managed as they have the potential of raising the nation's production capacity and generating employment.
- ii. Government needs to increase its allocation to the priority sectors of the economy such as agriculture and industry.
- iii. Government expenditure should be monitored at all time to ensure that money budgeted is not diverted to other projector to private pockets. The audit should be carried on any project as this will act as a watch dog to the executive arm of the government.

- iv. Government and its managers should ensure that a reasonable proportion should be allocated for capital expenditure in the budget. This will increase the volume of economic activities through multiplier effects.
- v. Government should also encourage the health sectors through increased funding; as well as ensuring that their sources are properly managed and used for the development of health services.
- vi. The anti-corruption agencies in the country, such as: Economic and Financial Crime Commission (EFCC) and Independent Corrupt Practices Commission (ICPC) should be empowered and equipped to effectively carry out their functions, in order to arrest and penalize those who divert and embezzle public funds.

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