EFFECT OF GOVERNMENT EXPENDITURE ON ECONOMIC GROWTH IN NIGERIA

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Abstract

This study evaluates the effect of government expenditure on economic growth in Nigeria using time series data of 15 years (2004-2018). The variables used for the study include recurrent expenditure, expenditure on highways, safety costs, education costs as the independent variables and real GDP as the dependent variable. Four objectives were formulated for the study and four hypotheses were also prepared in line with the objectives. Ex-post-facto research design was employed and the time series data was generated and analysed using regression analysis, Autoregressive Distributed Lagged (ARDL) testing technique and Error Correction Model-based, Granger Causality, unit root test, and co-integration to examine the long run causal effect relationship that exist between government expenditure and economic growth in Nigeria. The study finds that government expenditure on highway, and expenditure on safety has positive significant effect on economic growth in Nigeria at 5% and 1% levels respectively, government recurrent expenditure has positive and no statistical significant on economic growth, while government expenditure on education has negative and no significant effect on the economic growth in Nigeria. The study recommends among others that Government should increase its expenditure on capital project as this will provide the needed infrastructure that can enhance the private sector productivity thereby improve economic growth.

Keywords: Government Expenditure, Education Cost, Highway Costs, Economic Growth.

Introduction

Government expenditure has remained one of the most important macroeconomic management tool for the controlling of the level of demand and money supply in an economy. If well managed, it can put an economy on the path of sustainable growth and development. Government in any society performs two major/main functions namely: protection and provision of basic infrastructure/amenities (Abdullah, 2010). The protection function of the government consists of the creation of the rule of law and enforcement of rights which help minimize risk of criminality and external aggression. Under the provision of basic infrastructure/amenities, the function includes the provision of good health facilities, education, power, agriculture, and transportation, build bridges, road etc. performing both functions, the government is required to spend huge amount of resources, especially in nations where the level of these infrastructure/amenities is low like in Nigeria. The Nigeria government operates a cash budget system where expenditure proposal are anchored on projected revenue. To meet this projected revenue, Government has three policy options; to borrow, to tax or both. Any of those options chosen has direct implication on the economic growth.

Government spending on public infrastructure can impact directly and indirectly on the macro economy (Aschauer, 1989 cited in Schmidheiny, 2012). In line with this, Munnell (1992) believe that a strong positive relationship exists between the level of output and capital expenditure by government. While Brülhart, Jametti, and Schmidheiny (2012); identified three specific types of government spending that can lead to economic growth hence they are considered as productive: spending on Education, highways and safety. These spending categories are said to improve the productive capacity of the economy.

Prudent government spending, through an efficient allocation of its resources to the different sectors of the economy, can be veritable tool for stimulating demand and better sales for firms. This boom serves

as a driver for eradicating poverty, inequality within society productive capacity of the economy and steady economic growth. However, the pattern of government expenditure in Nigeria over the years has not achieve this aim as it is largely driven by crude oil revenue, which is reflected in the generated revenue (Akanbi, 2014).

Nigeria is currently experiencing an economic downturn due to dwindling oil revenue, upon which the country relies for its sustenance. The gross domestic product of Nigeria shows a declining trend of -2.06% and -1.5% for 2016 and 2015, respectively, due to falling oil revenue (Trading Economics, 2016). Despite the dwindling revenue, the need for the creation of enabling and secure environment for human and business to operate is on the increase, this has led to increased spending on infrastructure, security and health with a view to achieving steady infrastructure development, security and create conducive environment for capitalist to operate. However, those huge spendings have not translated into achievement of steady economic growth in Nigeria as shown by the dwindling growth rate in the Gross Domestic Product of 2015 and 2016 (Trading Economics, 2016).

Despite the numerous studies done on the effect of government spending studies like (Asley, 2012 Muhtar 2011, Smyth & Hsing, 2009) the effect of government spending on economic growth remain unresolved as there is no universal agreement on the extent the effect of government spending has on economic growth (Anyamu, 2013).

Most studies on external government spending have largely been devoted to describing the origin, causes, magnitude and sustainability of the government spending problem. Some of these studies include Raheem (1994), Ajayi (1994) Nyatepe (1993), Uwatt (1995) and Iyoha (1997). Few studies have been focused on the effect of government spending on economic growth they includes Ajayi and Oke (2012), Adepoju (2007), Adesola (2009) Amakon (2003) Anyamu (2013). Moreover, the studies conducted in Nigerian, Europe and other developed economy has measured government spending using recurrent expenditure, debt servicing costs, expenditure on security, spending on education, but none has tested the magnitude of the impact that spending on highway could have on economic growth. Again, this study will use a more current and updated data against what the previous works used on the topic.

Objectives of the Study

The main objective of this study is to examine the effect of Government spending on economic growth of Nigeria. The specific objectives include, to:

i.   Examine the effect of recurrent expenditure on economic growth of Nigeria.

ii. Evaluate the effect of Highways cost on economic growth of Nigeria.

iii. Determine the effect of safety cost on economic growth of Nigeria.

iv. Evaluate the effect of Education cost on economic growth of Nigeria.

Statement of Hypotheses

The hypotheses formulated for this study are in line with the objectives and are all stated in null form; they are:

$H0_1$: Recurrent expenditure has no significant effect on economic growth of Nigeria.

$H0_2$: Amount expended on Highways cost has no significant effect on the economic growth of Nigeria.

$H0_3$: Expenditure on Safety program has no significant effect on the economic growth of Nigeria.

$H0_4$: Education cost has no significant effect on the economic growth of Nigeria.

The result is expected to be useful to government in attend to issues accordingly when appropriating expenditures. Local and international investors will find this work useful as it provides evidence of Government commitment toward building enabling business friendly environment in Nigeria.

International Financial Institution like the international monetary fund (IMF) and World Bank will find the empirical evidence from this study useful especially in making or taking decision to lend or not to lend to Nigeria government after evaluating the purpose of the expenditure. The study is structured in such a way that next section is where all the related literature are reviewed, section three contains the methodology of the study, the next section is discussed analysis and results alongside conclusion and recommendations.

Conceptual review

Economic growth

Kimberly (2019), defines economic growth as an increase in the productive capacity of a state in terms of production of goods and services over a specific period of time. The economic growth of a nation or state can be measured using gross domestic product. This measure takes into account the country's productive capacity and output. The gross domestic product uses all goods and services that are produced in the country. Maingi (2017) opine that economic growth is caused by many factors, however, they are more associated with higher rate of investment by the private or government sector than on other factors like; consumption spending, higher school enrollment rates, and greater political stability. This proposition has altered the neo-classical view about causes of growth, which they believe can occurs as a result of technical change caused by chance, but economic growth can be fostered and promoted by appropriate policies. Government policies can be targeted toward enhancing the economic growth rates by taxing consumption, subsidizing investment and research, and shifting resources from government consumption to government investment and provide the enabling environment for private sector to drive the growth. However, government policies can deter the level of economic growth, for instance, government borrowing to finance recurrent expenditure, high tax rate for companies, lack of investment in capital stock, high exchange rate and interest rate.

High way expenditure (Infrastructure)

High way expenditure are cost incurred in building roads, bridges, canals and tunnels for the passage of human, cargos and goods (Nasiru, 2012). The expenditure on long term assets or core infrastructure, as roads, railways, airports, and utilities, which are expected to lead to larger gains in economic output. Expenditure in high way infrastructure create enabling environment and link communities, this enhances the productive capacity of firms, as it allows more goods and services to be produced with the same level of inputs, fostering long-term economic growth. With respect to overall firm output, increased infrastructure spending by the government is generally expected to result in higher firm output in the short term by stimulating demand and in the long term by increasing overall productivity. the federal system allows Federal, state, and local governments make investment in infrastructure with the majority of direct spending coming from federal and state governments. The federal government contributes to infrastructure investments in the form of direct spending, grants to state and local governments, loan guarantees, and preferential tax treatment. Such infrastructure is beneficial for both businesses and households and for the economy broadly. For businesses, infrastructure can help to lower fixed costs of production, especially transportation costs, which are often a central determinant of where businesses are located.

Education Cost

Okoro, (2013) define public expenditure on education as the current and capital public expenditure on education which includes government spending on educational institutions (both public and private), education administration as well as subsidies for private entities (students/households and other privates entities). Owoye, (2007) general government expenditure on education (current, capital, and transfers) is expressed as a percentage of total general government expenditure on all sectors (including health, education, social services, etc.). It includes expenditure funded by transfers from international sources to government. Education, which covers: Pre-primary and primary education, Secondary education, Post-

secondary non-tertiary education, Tertiary education, Education not definable by level, Subsidiary services to education, R&D education, and Education.

Recurrent Expenditure

Recurrent expenditure refers to all payments other than for capital assets, made on goods and services which include wages and salaries, employer contributions, interest payments, subsidies and transfers (Akpan, 2005).

Government recurrent expenditure on goods and services is expenditure, which does not result in the creation or acquisition of fixed assets (new or second-hand). It consists mainly of expenditure on wages, salaries and supplements, purchases of goods and services and consumption of fixed capital. So government recurrent Expenditures or Government final consumption expenditure on goods and services for current use is to directly satisfy individual or collective needs of the members of the community (Akpan, 2005).

Safety Cost

Dunne and Uye (2010) opined that War and lack of security are some of the major obstacles to development. In this regard, government at different levels take up heavy safety costs. However, this indicates the reason many countries of the world desire and make effort towards maintaining peace and security in and outside their territories (Apanisile & Okunlola, 2014). Government spend on safety to ensure internal and external security which complies with the words of Adams Smith that government's important role is to protect the society from violence and invasion of independent societies, also to protect every member of the society from oppression by another member. This therefore establishes the need for government spending on security in the whole world. Some authors like Asghari (2017), Apanisile and Okunlola (2014) and Awaworyi and Yew (2014) have carried out research on defense and economic growth using spendings on military expenditure to measure defense costs.

Review of Empirical Studies

Authors and date	Variables	Methodology	Findings
Nurudeen and Usman (2010)	Gross fixed capital formation and government infrastructure spending, economic growth	The study used co-integration and error correction model in analyzing the time-series data collected between the period 1979 and 2007.	The finding of the study shows that total capital expenditure, total recurrent expenditures, and government expenditure on education have negative effect on economic growth. While the government expenditure on transport and communication has positive significant effect on economic growth.
Wahab (2011)	Government spending, economic growth, disaggregate government spending	The study adopts the symmetric and asymmetric model approach. The study used the 2-stage Tobit/ Logit dynamic panel data procedure.	The study also finds government consumption spending having no significant output growth effects; while the government investment spending has positive output growth effects

			especially on growth that falls below trend-growth.
Chowdrg (2011)	Government spending, economic growth .	The study was based on causal effect design and used error correction mechanism and the vector auto-regressive (VAR) models and co-integrating technique for data analysis	The study finds government spending has negative impact on firms performance, as spending can leads to inflation and inefficiency in the economy which will negatively affect the economic growth s.
Uchenna and Evans (2016)	Government expenditure, fiscal decentralization, political instability and economic growth .	The econometric model used was estimated using vector autoregressive technique.	The study finds that government expenditure in Nigeria responds largely to fiscal decentralisation and political instability than to economic growth .
Babatunde and Adefabi (2005)	Government education spending, school enrolments in primary and tertiary levels	Using the Johansen co-integration approach as a framework of analysis.	The study finds that well educated labour force possessed a positive and significant impact on economic growth through factor accumulation and on the evolution of total factor productivity.
Adebiyi and Oladele (2005)	Public education spending expenditure, defense	The study employed the error correction mechanism and the vector auto-regressive (VAR) models	Found a negative tradeoff between defense spending and public education expenditure. The study finds from the impulse responses show that increase in defense spending will increase public expenditure available for government education spending in the short-run.
Dauda (2009)	Gross fixed capital formation and government infrastructure spending, economic growth	The study used annual time series data of 1977 to 2007 and employs Johansen co-integration technique and error correction model	The results indicate that there is a long-run relationship between investment in government infrastructure and economic growth .
Omojomite (2010)	Government capital spending, public expenditures capital	Time series econometrics tools like co-integration and Granger Causality Test.	The tests also revealed that there is bi-directional causality between public recurrent expenditures and

	project and economic growth .	Time series data for the period of 1980-2005	economic growth . No causal relationship was established between capital expenditure and growth in economic growth .
Omotor (2004)	Government revenue, population, government expenditures	The study was based on ex-post facto design and the ordinary least squares (OLS) methods.	The study shows Government revenue was the only significant determinant of government capital expenditures as revealed by the results of the regression.
Odeleye (2012)	Recurrent health expenditure,	The study used using primary and secondary annual data ranging collected from 1985 to 2007.	The findings show that only recurrent health expenditure has significant effects on population growth rate and the productivity of Nigeria
Lawal and Wahab (2011)	Capital spending, economic growth in Nigeria	The time series data were collected between 1980 and 2008, and OLS technique was used to estimate the model.	The study finds that government capital spending investments have direct and significant impact on economic growth in Nigeria.
Chude and Chude (2013)	Public expenditure, economic growth ,	The study used Ex-post facto research design and applied time series econometrics technique (Error Correction Model)	The results indicate that total expenditure on government capital spending is highly and statistically significant, and have positive relationship on economic growth in Nigeria in the long run.
Ajayi and Oke (2012)	Government spending, capital project	The study used regression analysis of Ordinary Least Squares (OLS) on secondary data.	The findings indicate that government spending led to devaluation of the nation's currency, increase in retrenchment of workers, continuous industrial strike and poor government education spending system.
Adepoju (2007)	Government spending, sustainable development.	The study was based on ex post facto and use simple ordinary least square regression analysis.	The result of the research showed that availability of access to external finance strongly influences the level of government spending and economic

			growth of any nation. The result concludes that, government spending management has positive impact on development of the any nation
Bewley and Li (2010)	Government expenditure,	The study used regression analysis for the secondary data collected between 1990 and 2008.	Their result shows that firms with higher dependency on public spending are unstable as the government spending is unstable. The study finds government expenditure directly affects the level of economic growth in Canadian. However, the level of effect differs with the various expenditure heads.
Oxfam (2008)	Recurrent expenditure, capital expenditure, debt servicing , consumption (proxy by changes in GDP level)	The study was based on ex post facto and use simple ordinary least square regression analysis	The finds that government spending on debt servicing Impact negatively on the local firms as the creditors leads to capital flight.
Pattilo, Ricci and Poirson (2011)	government spending growth, gross domestic product	The study used granger causality test and error. the study was based on time series design.	Their findings suggested the average impact of spending becomes negative at about 160-170 percent of export or 35-60 percent of gross domestic product GDP).
Ojo (2009)	Recurrent expenditure, capital expenditure, ecological and debt servicing cost	The study used time series data and adopted the descriptive design. The study used granger causality test and error correction model	The study finds that capital expenditure, and ecological cost granger cause the level of economic growth in Nigeria
Smyth and Hsing (2009)	Capital expenditure, recurrent expenditure, GDP growth.	The study was based on ex-post facto design and used error correction mechanism (ECM) integrating technique for data analysis	The study finds that government spending has positive impact on the economic growth s. Capital expenditure positively affect the economic growth on the long run, recurrent expenditure

| Sjoerd, Nasser, and Jolanda (2011) | Debt servicing, peace and security, recurrent and capital expenditure | The study c Debt servicing, peace and security, recurrent and capital expenditure | The results suggest a significant positive association between government expenditure and economic growth . |
| Shabana, Mohd and Nazia, (2017) | Government spending, health, security spending and economic growth | The study adopted the vector error correction model and ordinary least square regression in analyzing the data. | The study finds that government spending on health, security and development project has a short and long run impact on the economic growth s in South Africa for the period of 2012 to 2015. |

Source: researchers' review

Methodology

Research design

The study used time series data and was based on ex-post-facto research design. The study was based on ex-post-facto because the data used are data of event that has taken place, and the study made no attempt to manipulate its nature or value. The data were obtained from Central Bank of Nigeria (CBN) statistical bulletin, and the National Bureau of Statistic (NBS) for the period 2004 and 2018.

The time series properties of the data were explored to determine the order of integration of each variable in the model. Standard procedure in the time series literature suggests that the researcher should check for unit roots in each series before estimating any equations. If a unit root exists in any variable, then that particular series is considered to be non-stationary. Co-integration analysis using the Augmented Dickey Fuller (ADF) unit root test, Johansen Co-integration and Vector Error Correction techniques of estimation which provides coefficient estimates of the time-series data used in analysis. Estimation based on non-stationary variables may lead to spurious results with high coefficient of determination (R^2). R^2 explains how much of the variances in the dependent variable is accounted for by the regression model from the sample. The stationary test was performed to avoid spurious regression problems normally associated with time series econometric modeling.

Data and Variable Description

Recurrent expenditure, safety cost, Education cost, highway expenditure were used as explanatory variables while Gross Domestic Product was used to measure Economic growth. Below are the variables and their proxy.

Variables	**Measures/Proxy**
Economic growth	Real Gross domestic product (GDP)
Recurrent expenditure	Recurrent expenditure (RECCOST)= lnRECCOST
safety cost	Safety Cost (SAFCOST) = lnSAFCOST
Education cost	Education Cost (EDCOST) = lnEDCOST
High ways expenditure	High ways expenditure (HWCOST) = lnHWCOST

Model Specification

The linear regression model designed to test each of the Null hypotheses was adapted from the work of Shabana, Mohd and Nazia (2017) to suite this study. Their model is presented thus;

GDP= f(HEALTHSPENDING + SECURITYSPENDING + DEVPMTPROJECT)…… (1)

The linear regression model above is moderated to suit our null hypotheses formulated as follows:

GDP = f(HWCOST, EDCOST, RECCOST, SAFCOST) ………………………………… (2)

This can be econometrically express as

$\ln GDP_t = d_0 + d_1 \ln HWCOST_{1\text{-}t} + d_2 \ln EDCOST_{1\text{-}t} + d_3 \ln RECCOST_t + d_4 \ln SAFCOST_t + E_t$ .. (3)

Where: GDP   =   Gross domestic product (Real)

HWCOST   =   High ways expenditure; EDCOST   =   Education cost

RECCOST   =   Recurrent expenditure; SAFCOST   =   Safety cost

d_0 =   Constant;   ln = natural log (was used to reduce the data to single unity to ensure uniformity)

d_1, d_2…… d_4 = are the coefficient of the regression equation

E   =   stochastic error term ; 1   =   one year time lag

t   =   time series characteristics

Data analysis and interpretation

Descriptive Statistics

The descriptive statistics result shows the mean (average) for each of the variables, their maximum values, minimum values, standard deviation and the Jarque-Bera (JB) statistics (normality test). Table 4.1 below, provides the summary of the descriptive statistics of the data covering the period of fifteen years (2004 – 2018).

Table 4.1 Descriptive Statistics

	GDP	*HWCOST*	*RECEXP*	*SAFCOST*	*EDCOST*
Mean	*4.567804*	*10973323*	*1.13E+08*	*1820246.*	*2387989.*
Maximum	*6.902390*	*17179495*	*8.62E+08*	*25267542*	*28957710*
Minimum	*2.233286*	*4475241.*	*48515829*	*145374.7*	*180225.0*
Std. Dev.	*1.937118*	*4173608.*	*1.77E+08*	*5540644.*	*6291548.*
Jarque-Bera	*13.728329*	*1.278747*	*241.2026*	*237.2615*	*232.9302*
Probability	*0.004904*	*0.527623*	*0.000000*	*0.000000*	*0.000000*
Observations	*75*	*75*	*75*	*75*	*75*

Source: Researcher's summary of descriptive statistics (2019).

Table 4.1 provides some insight into the nature of the time series data used for the study. From the table above, we observed that within the period under study, recurrent expenditure value (mean) is over four times higher than the expenditure on Education and that of high ways (road and bridges), this relationship shows that only small proportion of government expenditure is directed toward building capital stock and human capital. The expenditure on Education is lower than expenditure safety cost. The result shows that beside recurrent expenditure, security cost is the second most capital consuming project of government in Nigeria. The Jarque-Bera (JB) which test for normality or existence of outlier shows that all the variables are normally distributed at 1% level of significance accept Education expenditure.

Unit Root Test-The stationarity of data used were tested by unit root test using Augmented Dickey Fuller test.

Variables	Order of integration	ADF	1% (CV)	5% (CV)	10% (CV)
GDP	1 (1)	-3.481166	-3.857386	-3.040391	-2.660551
RECOST	1 (0)	-4.203555	-3.831511	-3.029970	-2.655194
HWCOST	1 (0)	-4.440976	-3.831511	-3.029970	-2.655194
SAFCOST	1 (0)	-6.989251	-3.959148	-3.081002	-2.681330
EDCOST	1 (1)	-3.488358	-3.831511	-3.029970	-2.655194

Source: Researcher's summary of unit root test

The Augmented Dickey Fuller stationarity result shows that in recurrent expenditure, high way expenditure, and safety cost are stationary at first level order. While Education expenditure are stationary at first order, that is after first differential was taken.

Granger Causality Tests- Pairwise Granger Causality Tests

Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
EDCOST does not Granger Cause GDP	15	3.42578	*0.0827
GDP does not Granger Cause EDCOST		0.45226	0.5109
RECOST does not Granger Cause GDP	15	1.49017	0.2399
GDP does not Granger Cause RECOST		4.09505	*0.0600
HWCOST does not Granger Cause GDP	15	0.20002	0.6607
GDP does not Granger Cause HWCOST		0.42801	0.5223
SAFCOST does not Granger Cause GDP	15	0.48092	0.4979
GDP does not Granger Cause SAFCOST		8.24837	*0.0111

From the result, we observed that education expenditure granger causes the level of economic growth but economic growth does not granger cause education expenditure. This shows that economic growth does not lead to higher cost in education expenditure however, the amount spend on education granger cause the level of economic growth of Nigeria. Secondly, we observed from the result that recurrent expenditure does not granger cause economic growth but economic growth granger cause recurrent expenditure. When government spends more in recurrent activities, it spurs the demand level and lead to better economic growth citric paribos. Thirdly, we observed from the result that highway (capital) expenditure does granger cause economic growth and economic growth does not granger cause highway (capital) expenditure. The result indicates that if more funds are committed to infrastructural highway

(capital) development, it may not increase the level of economic growth in Nigeria. But the level of economic growth does not lead to increase in highway (capital) expenditure.

We observed from the result that social expenditure does not granger cause economic growth but economic growth granger cause social expenditure. Spending on social security does not lead to better , but level of economic growth lead to increase in social expenditure.

Vector error correction mechanism- The error correction model (ECM) was used to capture the long-run behaviour of the variables.

Variables	Coefficient	T-statistics	Probability – value
D (RECOST (-0))	(0.00019	0.9556	0.1690
D (HWCOST(-1))	0.00596	19.0592	0.0135*
D (SAFCOST (-1))	0.00506	0.02661	0.0001**
D (EDCOST(-1))	0.05594	1.84510	0.1032
ECM (-1)	0.6976	4.3844	0.0082**
R-sq(adj) F-statistics F-statistics Prob. Value	0.6995 69.663 0.0000**		

 Source: Researcher (2019) summary from e-view software 8.

The result reveals that recurrent with no year lag has no statistical significant effect on economic growth of Nigeria. Highway and safety with one year lag has statistical significant effect on the economic growth in Nigeria. The long-run error correction mechanisms (ECM) proved to be statistically significant in correcting the disequilibrium at lag one in the model. It shows that about 70% (69.663) correction is made to the disequilibrium result from the co-integrating vector, at every one year to adjust it to its equilibrium root. This also means that government expenditure adjusts rapidly to changes in the economic growth variables. The R-squared adjusted of 0.6995 (70%) shows that government expenditure variables can jointly affect about 70% of changes in economic growth of Nigeria. The F-statistic probability value of 0.0000 shows that the regression result is statistically significant.

Regression Analysis

To examine the effect of government expenditure on economic growth, the study used the multiple regression analysis. The result obtained is summarize in table 4.3 below.

Dependent Variable: GDP

Method: Least Squares

Date: 12/22/19   Time: 21:28

Sample: 2004 2018

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	35778589	7660074.	4.670789	0.0004
EDCOST	-0.395852	0.430335	-0.919871	0.3744
HWCOST	0.308718	0.140362	2.199441	0.0465
SAFCOST	2.510965	1.386829	1.810580	0.0934
RECOST	0.004451	0.002597	1.713733	0.1103

R-squared	0.512275	Mean dependent var		46205328
Adjusted R-squared	0.362206	S.D. dependent var		14491009
F-statistic	3.413594	Durbin-Watson stat		2.103201
Prob(F-statistic)	0.040701			

Source: Researchers summary of regression Analysis from E-view 8

The above table reports the ordinary least square regression result. In table above, the study observe from the result that R. sq value of 51.23 and R-sq(adj) 36.22(36%) this indicates that government expenditure can cause about 36 percent of the changes in the level of economic growth in Nigeria. The F-statistics value of 3.4136 and its probability value of 0.0407 shows that the government expenditure model used is statistically significant at 1% levels. The Durbin Watson statistics result was 2.103 can be approximated into two, this indicates the absence of autocorrelation in our model hence the model used is appropriate for the study.

Hypotheses 1: Education cost has no significant effect on the financial economic growth in Nigeria.

The analysis result showed a coefficient value of -0.3959, t-value of -0.9199 and a P-value of 0.3744. The negative coefficient value reveals that Government expenditure on Education negatively influences the economic growth in Nigeria. The t-value of 0.9199 shows that Government expenditure on Education has a negative effect on the Economic growth. The probability value of 0.3744 reveals that the effect of Government expenditure on Education on economic growth is not statistically significant. Based on the analysis result, the study accept the null hypothesis and reject the alternate hypothesis, it therefore concludes that, that Government expending on Education has no statistical significant effect on Economic growth in Nigeria. The finding is in line with the study Ojo (2009) but contrary to that of Ajayi and Oke (2012).

Hypotheses 2: Highways cost has no significant effect on the financial economic growth in Nigeria.

The analysis result showed a coefficient value of 0.308718, t-value of 2.199441 and a P-value of 0.0465. The positive coefficient value reveals that highway expenditure has positive influence on the economic growth in Nigeria. The t-value of 2.199441 shows that highway cost has a positive effect on economic growth in Nigeria. The probability value of 0.0465 reveals that the effect of highway expenditure on economic growth is statistically significant. Based on the analysis result, the study accept the alternate hypothesis and reject the null hypothesis, it therefore concludes that highway cost has statistical significant effect on the economic growth of Nigeria. The more government is spending on highway cost

the more will the national income be distributed to the citizenry which will invariably better their lives and increase the per capital GDP. The finding is in line with the study of Ojo (2009).

Hypotheses 3: Safety cost has no significant effect with the financial economic growth in Nigeria.

The analysis result showed a coefficient value of 2.5109, t-value of 1.8105 and a P-value of 0.0934. The positive coefficient value of 2.511 reveals that expenditure on safety can influence about 2.511 percent of economic growth in Nigeria. The t-value of 1.8105 shows that expenditure on safety programs has a positive effect on economic growth in Nigeria. The probability value of 0.0934 reveals that the effect of Expenditure on safety on economic growth is statistically significant at 10% level. Based on the analysis result, the study accepts the alternate hypothesis and rejects the null hypothesis; it therefore concludes that expenditure on safety programs has statistical significant effect on economic growth in Nigeria. The ability of a nation to ensure the stability in its security status, the more investment it will attract from both foreign and domestic investors and the more its GDP will rise. The finding is in line with the study of Shabana, Mohd and Nazia, (2017).

Hypotheses 4: Recurrent expenditure has no significant effect on financial economic growth in Nigeria.

The analysis result showed a coefficient value of 0.0044, t-value of 1.7137 and a P-value of 0.1103. The positive coefficient value is low, the value reveals that recurrent cost has positively influences Economic growth . The t-value of 1.7137 shows that recurrent cost has a positive effect on the economic growth of Nigeria. The probability value of 0.1103 reveals that the effect of recurrent cost on economic growth is not statistically significant. Based on the analysis result, the study accept the null hypothesis and reject the alternate hypothesis, it therefore conclude that recurrent cost has no statistical significant effect on economic growth in Nigeria. The finding is in line with the study of Odeleye (2012) but contrary to that of Omojomite (2010).

Conclusion

The result of this study supported previous studies on the effect of government expenditure on economic growth in Nigeria. The findings demonstrate that government expenditure has statistical significant effect on economic growth. Thus the more money spent on highways and security (safety) programs has positive effect on economic growth in Nigeria. Government expenditure increase money in circulation and savings, which is mobilize by the financial institutions and lend to the firms which is used for production. The increase in the production level also increases the tax revenue collection by government and reduces social vices. The more government expenditure is incurred, the more the flow of money in the economy and the private sector increases its production capacity.

Recommendations

Based on the empirical findings, the study recommends the following.

1. Government should appropriate lesser portion of its expenditure to recurrent expenditure and pay more attention to capital expenditure as it is the major drive to economic growth.
2. Government in Nigeria should increase its expenditure on highway projects as this will provide the needed infrastructure that can enhance the private sector productivity, easy distribution raw and finished goods and enhance economic growth.
3. Government should increase its expenditure on safety because it will help to calm insurgency, kidnapping, militancy and restiveness of all kinds and create conducive environment for business to thrive, thereby enable significant rise in economic growth of Nigeria.
4. Government expenditure on education negatively affects the level of economic growth. Government should monitor strictly the execution of expenditure on education to ensure all budgeted are spent appropriately on education. This is because only corruption can tend to create an inverse relationship between expenditure on education and economic growth in Nigeria.

References

Abdullah, H. A. (2010). The relationship between government expenditure and economic growth in Saudi Arabia. *Journal of Admin. Science, 12* (2), 173-191.

Adebiyi, M. A., & Oladele, O. (2005). Public education expenditure and defence spending in Nigeria: An empirical investigation. *http//www.saga.cornell.educ/saga/educconf/ adebiyi.pdf (accessed February 10, 2019).*

Adepeju, S. (2018). Government spending on infrastructure and economic growth in Nigeria. *Economic Research-Ekonomska Istraživanja, 31* (1), 997–1014.

Adesola, O. (2009). Tax revenue, government expenditure and economic of Nigeria. *African Economic Research Review. An International Multi-Disciplinary Journal, Ethiopia. 4* (3a), 90 -108.

Ayodele, A. (2014). Government expenditure in Nigeria: Determinants and trends. *Mediterranean Journal of Social Sciences, 5* (27,) 98 - 108.

Afxention, C & Serletis, (2011). The Nature of Government Expenditure and Its Impact on Sustainable Economic growth. *Middle Eastern Finance and Economics,* ISSN: 1450-2889.

Ajayi, S., & Oke, A. (2012). Public expenditure and financial accountability in Nigeria. Paper presented at the Joint Government of Nigeria – World Bank Workshop on Improving Public Expenditure and Financial Accountability in Nigeria, Kaduna, April 24 – 26.

Akanbi, O.A. (2011). The macroeconomic determinants of technological progress in Nigeria. *South African Journal of Economics and Management Sciences*, *14*(3), 1-16.

Anyanwu, J. C. (2013). *Nigerian Public Finance.* Awka: Joanee Educational Publishers Ltd.

Babatunde M. A., & Adefabi, R. A. (2005). Long-run relationship between education and economic growth in Nigeria: Evidence from Johannes's co-integration approach. Paper presented at the regional conference on education in West Africa: Constraints and opportunities. Dakar Senegal Nov. 1st – 2nd 2006.

Chude, N. P., & Chude, D.I. (2013). Impact of government expenditure on economic growth in Nigeria. *International Journal of Business and Management Review*, *1* (4), 64–71.

Dauda, R. O. (2009). Investment in education and economic growth in Nigeria: A co-integration approach. Paper presented at the 9th Global Conference on Business and Economics held at University of Cambridge, UK.

Dunne, J.P., & Uye, M. (2010). Defence spending and development. Department of Economics, British University in Egypt and University of the West of England. A paper is based on work undertaken for Oxfam.

Iyoha, A. (1997). *Macroeconomics: Theory and Policy*. Benin City: Mareh Publishers.

Kimberly, N. (2019). Public spending and economic growth during economic crises. *Southwestern Economic Review*, *4*(1), 59–68.

Jelilov, G., & Musa, M. (2016). The impact of government expenditure on economic growth in Nigeria. *Sacha Journal of Policy And Strategic Studies, 5* (1), 15 – 23.

Lawal A. & Wahab T. I. (2011). Education and economic growth: The Nigerian experience. *Journal of Emerging Trends in Econ. Manage.* Sci. *2*(3), 225-231.

Maingi, S. (2017). Government expenditure and economic growth: Evidence from India. *The ICFAI University Journal of Public Finance*, *6*, 60-69.

Muhtar, D. (2005). The impact of government spending on economic growth. Retrieved on 1 September, 2016 from *http://www.heritage.org/research/reports/2005/03/the-impact-of- government-spending-on-economic-growth.*

Munnel, A. (1992). Policy watch: Infrastructure investment and economic growth. *The Journal of Economic Perspective Fall, 5*(4), 189-198.

Nasiru, I. (2012). Government expenditure and economic growth in Nigeria: Cointegration analysis and causality testing. *Academic Research International*, *2*(3), 53-66.

Nurudeen, A., & Usman, A. (2010). Government expenditure and economic growth in Nigeria (1970-2008): A disaggregated analysis. *Business, Economic Journal, 3*(6),1-11.

Nwadiubu, A., & Onuka, I. O. (2015). Public expenditure and economic development in Nigeria – A time serial study (1980 – 2012). *Journal of Arts, Social Sciences Humanities, 1*(5), 20-30.

Nyatepe, C. (1993). Government and economic growth in the less developed countries: An empirical Study from 1960-1980. *Economic Development and Cultural Change, 35*, 35-75.

Odeleye, A. T. (2012). Education and economic growth in Nigeria: A comparative analytical approach. *European Journal of Global Development Research, 6*(1), 330-342.

Ojo, A. (2009). Effects of public expenditure on industrial sector productivity in Nigeria. *Canadian Social Science, 8*(1), 204-214.

Okoro, A. (2013). Government spending and economic growth in Nigeria. *Global Journal of Management and Business Research Economics and Commerce*.

Omojomite, B. U. (2010). Education and economic growth in Nigeria: A granger causality analysis. *African Research Review. An International Multi-Disciplinary Journal, Ethiopia, 4*(3a), 90-108.

Omotor, D. G. (2004). An analysis of federal government expenditure in the education sector of Nigeria: Implications for national development. *Journal of social science, 9*(2), 105-110.

Chude, N. K., & Chude, D. I. (2013). Impact of government expenditure on economic growth in Nigeria. *International Journal of Business Management Review, 1*(4), 64-71.

Owoye, O. A. (2007). Public expenditure and economic growth: New evidence from OEDC Countries.

Pattilo, Y., Ricci, S., & Poirson, D. (2011). Is public expenditure productive? Evidence from the manufacturing sector in U.S. cities, 1880–1920. *Cato Journal, 33* (1), 1- 28.

Raheem, S. (1994). Easing the disease of poverty in Nigeria. *Developing Country Studies, 4*(19), 55–66.

Shabana, N., Mohd, S. & Nazia, M. (2017). An examination of the relationship between government spending and economic growth in Namibia.

Schmidheiny, D. (2012). Government Expenditure and Economic Growth in Malaysia. *Journal of Economic Development*, *23*(2), 71–80. http://doi.org/10.1109/ICCASM.2010.5622654

Smyth, V., & Hsing, E. (2009). Government size and economic growth. Ohio: Washington, D.C.

Sjoerd, H., Nasser, C., & Jolanda, T. (2011). Government expenditure and national income in Malaysia. *Journal Analysis, 8*, 37–51.

Uchenna, E., & Evans, O. (2016). Government expenditure in Nigeria: An examination of tri-theoretical mantras. *Journal of Economic and Social Research 14* (2), 27-52.

Udoka, C., & Anyingang, R. A. (2015). The effect of public expenditure on the growth and development of Nigerian economy (1980–2012). *International Review of Management and Business Research, 4*(3), 824–835.

Uwatt , K. (1995). The nature of government expenditure and its impact on sustainable economic growth. *Middle Eastern Finance and Economics Journal, 4* (3), 25-56.

Wahab, M. (2011). Asymmetric output growth effects of government spending: Cross-sectional and panel data evidence. *International Review of Economics & Finance*, *20*(4), 21-34.