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PUBLIC SPENDING AND ECONOMIC GROWTH IN NIGERIA (2015-2021)

Prof. Agbo Elias Igwebuike and Ugwu Osmund C., Ph.D.
Department of Accounting and Finance, Faculty of Management and Social Sciences, Godfrey Okoye University, Enugu State, Nigeria.
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Abstract: Since one of the major goals of public spending is to create sustained and equitable economic development, it is mandatory for every government to allocate such across different economic sectors. Unfortunately, for some years in the past, Nigeria has continued to be confronted with the challenge of not making its rising public expenditures to spur the growth of its economy significantly. This study investigates the influence of public spending on the economic growth of Nigeria for the period 2015 to 2021. Specifically, it explores the impact of government spending on administration, health and education on real gross domestic product in Nigeria from 2015 to 2021. Ex-post research approach is employed, while the historical data used are obtained from yearly reports and financial reports of Central Bank of Nigeria (CBN) and National Bureau of Statistics (NBS). OLS and multiple regression are employed for estimation. The results indicate that public spending on health has a positive a weak influence on economic growth in Nigeria, while the impacts of public spending on administration and education on economic growth are weak and negative. Based on the results, the study recommends that the Nigerian government should ensure that total its spending is managed in such manner that will enhance the country's productive capacity and accelerate its economic growth.

Keywords: Public Spending Administration, Health, Real Gross Domestic Product, Economic Growth. Nigeria.

1.1 Introduction

Government exists partly for the sake of providing some basic services like health education, among others, through spending which has some influence on the wellbeing of citizens and business environment for the private sector (Jibir&Aluthge,2019b; Ukwueze, 2015). Public spending continues remaining an essential tool employed for fast-tracking growth (Aluthge et al.,2021).

For some years now, Nigerian government has been voting and spending huge sums of money increasingly on operating expenses, overhead cost, and infrastructure, expecting that such expenditures would fasten the process of economic growth and development (Aluthge et al.,2021). The bulk of public spending in Nigeria continued rising from1970 to 2019. (CBN,2020). In contrast, the country's GDP has instead grown at a slower rate.

For example, according to World Bank (2020), the country's GDP grew approximately at 7 percent between 1970-79 but plummeted by about 0.94 from 1980 to 1989 due to several recessions in most of the years.

1.2 Statement of the Problem

There are some controversies among scholars concerning the influence of government spending on economic

growth. For instance, while study of Haque and Kim (2003) found strong and positive influence of public spending, other studies, particularly those that were one on wealthy economies found that huge public spending is harmful to economic growth. (Schaltegger & Torgler, 2006; Abu & Abdullahi, 2010; Segun & Adelowokan, 2015).

Further, in spite of the sustained rise in public spending in Nigeria, not much of it has been invested in the health sector. Even though the spending on health as a percentage of GDP in Nigeria increased by 0.4 percentage points (+13.38 percent) in 2020 in comparison to 2019 (TheCable,2023), the country's spending on health has was considerably inadequate throughout the past twenty-two years. For instance, the average provision for health was only slightly higher than 3%. (World Health Organization,2022).

In addition, although Nigeria has been according high priority to sustainable human capital development or people-oriented development through education, the country has not been able to realize its full development potential (Onoja et al, 2020). As affirmed by Obi & Obi (2014), Nigeria has invested significantly in education in the past with the aim of improving the quality and productivity of its labor force yet, it is still confronted with dwindling real output and slow economic growth. Obi and Obi (2014) opine that the paradox is caused by huge labor market distortion, education staff redundancy and brain drain that exist in Nigeria.

The issue of ever-increasing public recurrent expenditure has also attracted serious criticisms and complaints from several Nigerians. They claim that the Nigerian public authority has been wasteful and that the funds spent on servicing the recurring component public spending, should have been moved to capital projects (Nwude et al.,2023).

Given the issues raised above, this work intends to establish empirically the rationale for allocating public funds to the sectors most likely to contribute to growth. Most of the available studies are cross - country studies which are not focused on Nigeria (Usman et al.,2011). The main intention of this work therefore, is to determine the effect of public spending on the economic growth in Nigeria. The specific objectives of the study are to: i). identify the extent government spending on administration affects real gross domestic product in Nigeria; ii.) examine the effect that public spending on health has on real gross domestic product in Nigeria and iii.) establish the extent to which of the amount government spending on education affects real gross domestic product in Nigeria.

The remaining part of this research is organized as follows: - Section two showcases the literature review. Section three contains the methodology. Section four highlights the data analysis and results, while Section five offers the conclusion.

1.0 Literature Review

2.1Conceptual review

2.1.1 Concept of public spending

Public spending (government expenditure) refers to the amount government spends on the provision of public goods a maintenance of itself as an institution, the economy and the society (Gukat & Ogboru,2017). Functionally, it is grouped into four in Nigeria namely administration, economic services, social a community services and transfers. Each group has capital and recurrent dimensions (CBN, 2011). Often, public spending has the propensity to increase with time as the economy increases in size and develops. Ogboru (2010) identifies recurrent a capital budget as major types of budget in ever economy. Idris and Bakar (2017) assert that public spending takes place in an economy (i) to make available the necessary and required facilities required for maintaining law and order and further boost efficiency in allocation where externalities exist and also (ii) to make available the

necessary and required infrastructural facilities which will push up productivity and encourage economic activities ultimately.

2.1.2 Government spending on administration

Government spending on administration (recurrent expenditure) includes government spending on wages, salaries, interest on loans maintenances etc. Adedoyin and Han (2017) observe that the profile of recurrent and capital expenditures in Nigeria between 2005 and 2021 shows that Nigeria's spending on recurrent items had been consistently higher than its spending on capital projects.

2.1.3 Government spending on health

Awoyemi et al. (2023) defines health as a condition of total physical, mental and social wellbeing. The authors observe that those that offer health services in Nigeria include government healthcare providers, non-governmental private healthcare providers, religious-affiliated institutions that operate privately. Government provides primary, secondary and tertiary healthcare services. Awoyemi et al. (2023) report that government-funded health spending per capita was $11.2 between 2000 and 2019. The private spending on health per capita ($49.8) was significantly below $86 which is approximately the minimum amount required to ensure global health coverage for essential services. Also, public health spending as a percentage of GDP was 0.65percent which is less than 4.5 per cent recommended for attaining global health coverage (Awoyemi et al.,2023). In the midst of dwindling health budgets in Nigeria, majority of public health institutions do not have enough health professionals and modern health instruments that would enable them to provide quality service to the public (Awoyemi & Olaniyan, 2021; Innocent et al.,2014). As a consequence, there is poor healthcare service delivery. When compared to other emerging nations in the same category, the health status of Nigeria is low (Awoyemi et al.,2023). This is worsened by the burdens of chronic and infectious diseases.

2.1.3 Government spending on education

Spending on education is considered as a life-long process through which a person is developed morally, emotionally, physically and intellectually in a manner that he can be useful to both himself and the society in which he is born (Ijaiya et al.,2004; Hill & King, 1991). Education is classifiable into formal and non-formal.

2.1.4 Economic growth

Economic growth is a gradual increase in the real production of goods and services and the boost in the capability the economy to create goods and services (Agbo,2023). It is defined by Jhinghan (2011) considers as the quantitative sustained increase in a nation's per capita output or income which comes together with an increase in its labor force, consumption, capital and volume of trade. Economic growth is usually computed as a percentage rate of increase in real gross domestic product (GDP) (IMF,2012). This is the working definition for this paper, since real gross domestic product (Real GDP) is employed as an indicator of economic growth.

2.2 Theoretical Framework

The following economic theories of public spending have been provided which show three different states of the influence of public spending on a nation's economy.

2.2.1 Keynesian theory

Keynesian theory posits that the growth of an economy arises from an increase in public spending. It suggests that a proactive fiscal policy is an essential tool available to the public authority to boost economic activity and development (Shafuda & De,2020). The extent to which successful fiscal policy will stabilize aggregate demand will depend on the ability of public spending to competes with private consumption and investment. If public

spending increases and there is no commensurate tax or fee rises, there will be a budget imbalance (Kandil,2000). Financing the ensuing budget deficit with a simple monetary policy might create room for inflationary expectations because of credit and liquidity expansion which can bring about higher nominal interest rates and consequently hurt private consumption and investment (Loizides &Vamvoukas, 2005). To avoid running deficits, the private sector may have to huzzle for funds which would have been employed in investing in capital goods and buying consumer goods. The Keynesian economists support using government spending to drive growth and development through stimulating aggregate demand. This is the reason why government participates in economic activities currently as it is required to correct short term distortions in an economy (Jibir & Aluthge,2019b; Singh & Sahni, 1984) and create socially optimal path for the growth of a country (Ram, 1986).

2.2.2 Wagner's theory

Wagner (1883) contends that public spending is an endogenous factor, rather than a cause of economic growth. Wagner's hypothesis can be expressed mathematically as Gt = f (Y t), where G denotes the size of the government sector, which reflects the *quantum* of public spending, and Y denotes the rate of economic growth in a given country. Wagner's law posits that public spending increases as the economy develops and grows and that as the per capita income of a country increases, so will the ratio of government expenditure to GDP increase This implies that a rise in per capita income that is driven by industrialization is an inducement to government to increase its expenditures that have direct relevance to education, health, etc., which equally motivates industries produce additional goods and services as aggregate demand rises. Increased industrial production ultimately raises aggregate output.

2.2.3Barro's Endogenous growth theory

Both Aluthge et al. (2021) and Devarajan (1996) posit that endogenous growth theories like that of Barro (1990) argue that government expenditures have both temporary enduring impacts on the growth of an economy. Both Barro (1990) and Sala-i-Martin and Barro (1995) have innovative characteristic of public-policy endogenous models which assume that public spending can determine the size of the output path and the steady-state rate of growth of a nation (Gemmell et al., 2016).

This research is anchored on Keynesian and Wagner's endogenous theories.

2.3 Empirical Review.

Gukat (2015) evaluate the connection between public spending on human capital and economic growth in Nigeria. Using the error correction mechanism, the study noted that government spending on human capital has a positive and significant impact on economic growth in Nigeria. Ebong et al. (2016) assessed the effect of public human capital expenditure on the Nigerian economic growth. Multiple regression technique that is based on the modified endogenous growth framework was use for capturing the correlations. Using error correction and cointegration specifications, an OLS technique was employed to analyze the historical time series data. Results showed that the disaggregated expenditures do not crowd out private investment. Udoffia et al. (2017) investigated the impact of public spending on economic growth in Nigeria for 1981 to 2016. Specifically, the effect of public recurrent and capital expenditures were tested with two different models. The findings of the study showed that each of the two models had one cointegrating equation. To estimate the data, and OLS technique and error correction specifications were utilized. The finding for model 1 showed that the coefficients of social and economic services were negative but that of administration was positive and strong. The finding of model 2 indicate that the coefficients of administration and social services were negative and weak while those of economic services were

positive and non-significant. Irughe et al. (2020) analyzed the impact of different levels of education on various elements of growth in Nigeria. The data used for the study were obtained from CBN Annual Bulletins, the Nigerian Bureau of Statistics and from World Bank between 1970 and 2013. The fully modified OLS and Dynamic OLS approaches were used for analysis. Education was proxied by enrollment rates at various levels of schooling and completion rate. The findings indicated that varying levels of education have positive effects of varying size on each element of growth in Nigeria. However, the size of the impact from completion rate is much higher on the total growth. Aluthge et al. (2021) evaluated the influence of Nigerian public spending (separated into capital and recurrent) on economic growth using historical time series for1970-2019.The work employed the Autoregressive Distributed Lag (ARDL) model. For the purpose of robustness of results, the research controlled for structural breaks while carrying out the unit test and co-integration analysis. The major results of the work were that capital spending has positive and strong impact on the growth of economy in the long and short run. However, administration spending has weak impact on economic growth in the short and long run. Rahman et al. (2023) sought evaluate the impact of public spending on economic growth in the SAARC nations. Quantitative techniques like regression, co-integration and granger causality on panel secondary data from SAARC nations (Bangladesh, India, Pakistan, Sri Lanka, and Bhutan) from 2011 to 2020 were used. E-views software was utilized to carry out the regression analysis, Random-effects panel OLS model was used to generate the results. The findings indicated that public spending has a significant positive influence on, and long-run relationship with, GDP in the SAARC nations.

3.0 Methodology

3.1 Research design

The ex-post facto research design was used for this study as this kind investigation has to do with the data that are already in place (Onwumere, 2009).

3.2 Data

The research employed historical data for the estimation of the influence of public spending on economic growth in Nigeria for 2015 to 2021. The variables data were sourced from the CBN Statistical Bulletin and the National Bureau of Statistics of Nigeria.

3.3 Model Specification

The OLS Multiple regression technique was employed for this review. The technique was chosen for analysis on account of its computational simplicity and robustness. Based on this, a model is developed that expresses Real GDP as a function of government expenditures on administration (PAEX), government expenditures on health (GHEX) and government expenditures on education (GEEX). The model's structural shape is;

RGDP = f (GHEX, GEEX, GAEX) …… (1)

Where

RGDP = Real Gross Domestic Product

PHEX= government health expenditure

GEEX= government education expenditure

GAEX = government administration expenditure

The mathematical form of this model is thus:

Y = a + b X .....(2)

Where:

Y = Gross Domestic Product = the dependent variable

X = Government administration expenditure (GAEX), government health expenditure (GHEX), government education expenditure (GEEX) = The explanatory variables; a and b are constants representing the intercept and the slope respectively.

Expressing equation (1) in linear form,

$RGDP = b_o + b_1GAEX + b_2GHEX + b_3GEEX + \mu$ …. (3)

Where,

μ is the error term;

b_1 b_2 and b_3 are the constant elasticity coefficients of GAEX, GHEX, GEEX respectively. They are the slopes of the regression line representing the rate of change in Y as each of the explanatory variables (GAEX, GHEX and GEEX) changes.

3.4 Definition and Measurement of Variables

a. Government administration expenditure

This is the spending of government on the - to – day activities including salaries and wages, overhead cost, among others.

b. Public spending on health

This includes public sector spending on healthcare goods and services consumed each year and capital expenditures on health including buildings, machinery, information technology and stocks of vaccines for emergency or outbreaks.

c. Government spending on education

This means public spending on educational goods and services like teaching staff, school buildings, teaching materials, etc.

d. Real GDP

This refers to a statistic that measures the worth of the goods and services
by an economy over a specific period, adjusted for the changes in price changes (Ganti,2023).

4.0 Data presentation, analysis and empirical findings

Table 1 presents the time series data for the dependent and explanatory variables of the study in ₦ billions while table 2 shows their transformation to their natural logarithm forms.

Table 1: Data presentation

Year	RGDP	GAEX	GHEX	GEEX
2015	95,177.7	1,228.99	325.19	257.70
2016	102,575.4	1,277.00	339.28	200.82
2017	114,899.2	1,324.30	403.96	245.19
2018	129,086.9	1,584.06	465.30	296.44
2019	145,639.1	2,105.20	593.33	388.37
2020	154,252.3	2,294.72	646.75	423.33
2021	173,527.7	2,168.45	620.59	386.24

Source: CBN Statistical Bulletin, NBS and Index Mundi, (2015-2021)

Table 2: Times series data presented in their log form.

Year	LGDP	LPAEX	LGHEX	LGEEX
2015	11.46350	7.113948	5.784410	5.551796
2016	11.53835	7.152269	5.826826	5.302409
2017	11.65181	7.188639	6.001316	5.502033
2018	11.76824	7.367746	6.142682	5.691845
2019	11.88889	7.652166	6.385751	5.961958
2020	11.94634	7.738366	6.471960	6.048152

2021	12.06409	7.681768	6.430671	5.956459

Source: Author's Compilation Using E-views 8

4.2Analysis of empirical data and findings

The findings of the study based on the specified model are stated in this section. The summary statistics are first presented, followed by the results of the unit root test, the findings of the autocorrelation test, heteroscedasticity test, normality test, model fitness test, correlogram q-statistics test and finally, the results of the multiple regression are stated and discussed thereafter.

4.2. Descriptive analysis

Table 3: Shows descriptive Analysis of the Natural Logarithm of the variable under study

	LRGDP	LGAEX	LGHEX	LGEEX
Mean	11.76018	7.413557	6.149088	5.716379
Median	11.76824	7.367746	6.142682	5.691845
Maximum	12.06409	7.738366	6.471960	6.048152
Minimum	11.46350	7.113948	5.784410	5.302409
Std. Dev.	0.220839	0.272365	0.288174	0.280780
Skewness	-0.027459	0.097464	-0.120010	-0.163425
Kurtosis	1.660589	1.230652	1.388329	1.604535
Jarque-Bera	0.524136	0.924171	0.774402	0.599128
Probability	0.769459	0.629968	0.678955	0.741141
Sum	82.32123	51.89490	43.04361	40.01465
Sum Sq. Dev.	0.292620	0.445096	0.498265	0.473026
Observations	7	7	7	7

Source: Researcher's Computation, 2023

The descriptive statistics (Table3) shows the mean value of Real GDP, the government administration expenditure (GAEX), government health spending GHEX), and government education expenditure (GEEX) to be approximately 11.76018b, 7.413557b, 6.149088b, and 5.716379b respectively. The maximum and minimum value each variable is shown like manner and indicate how the historical data have varied during the study period. The standard deviation has shown the extent to which the time series have deviated from their mean. Real GDP, GHEX and GEEX have negative skewness -they have long left tails. GAEX has positive skewness – implying that it has long tail to the right. Kurtosis estimates the normality of the series. Each of the variables (RGDP, GAEX, GHEX and GEEX) has Kurtosis which is below 3 - implying that they are all platykurtic. Further, a RGDP, GAEX, GHEX and GEEX have Jarque berra statistics which are above 0.05 with 0.524136, 0.774402, 0.599128 and 0.599128 respectively.

4.2.2Stationarity test

The study employed Augmented Dickey-Fuller test (1978) to establish the unit root status of the variables used.

Table 4: Unit Root Test Results

Series	**Augmented Dickey-Fuller (ADF) Test (Prob.)**	**Equation Specification**	**Order of Integration**	**Max. No. Of Lags**
LRGDP	-2.88 (0.11)	Intercept	1(1)	1
LGAEX	-5.34 (0.01)	Intercept	1(1)	1
LGHEX	-0.86(0.72)	Intercept	1(1)	1

LGEEX	-2.69(0.13)	Intercept	1(1)	1

Source: Authors' computation using E-views 8.0 (2023)

Decision rule:

Accept H_o: There is a unit root (that is, series is non-fixed) if p-value is below 1; otherwise, reject H_0.

Every variable in table 4 is stationary at first difference, as each of them has p-value that less than 1 1 at 5% significance level. The Johansen cointegration test was applied for detecting if there was long-run relationship among the variables. Before carrying out the examination, the ideal lag length was determined since cointegration technique is lag sensitive. Even though the variables were introduced as I (0), they were really I (1) since there first difference had been explained in the computation.

4.2.3 Autocorrelation Test

Null hypothesis: There is no autocorrelation

Alternative hypothesis: There is autocorrelation

Table 5: Results of the test for Autocorrelation

R-squared	0.994526	Mean dependent var	1.65E-15
Adjusted R-squared	0.967157	S.D. dependent var	0.045694
S.E. of regression	0.008281	Akaike info criterion	-6.981342
Sum squared resid	6.86E-05	Schwarz criterion	-7.027705
Log likelihood	30.43470	Hannan-Quinncriter.	-7.554377
F-statistic	36.33720	Durbin-Watson stat	2.923903
Prob(F-statistic)	0.125258		

Source: Authors' computation using E-views 8.0 (2023**)**

The Durbin-Watson measurement has values somewhere between 0 and 4. A value of 2.0 in table 5 suggests that there is no autocorrelation in the information. Values between 0 and 2 would indicate positive correlation, while, though those between 2 and 4 would demonstrate negative autocorrelation. As the Durbin-Watson measurement of 2.923903 in table 5 is higher than 2, the implication is that there is no autocorrelation.

4.2.4 Breusch-Godfrey Serial Correlation LM Test

Table 6: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	90.84301	Prob. F(2,1)	0.0740
Obs*R-squared	6.961683	Prob. Chi-Square (2)	0.0308

Source: Authors' computation using E-views 8.0 (2023)

The outcome of the Serial Correlation L.M. test in table 6 indicate that the p - value chi-square is 0.0308. Hence, the regression result appears significant.

It implies that the null hypothesis is rejected and the alternative accepted. - implying that there is serial correlation in the model.

4.2.5 Heteroscedasticity Test

Null hypothesis: There is no heteroskedasticity

Alternative hypothesis: There is Heteroscedasticity

Decision: If the observe R-square Prob. Chi-Square is greater thano0.05 significance level, it means that one should accept the null hypothesis and the alternate hypothesis is rejected. Hence, data is not heteroscedastic.

Table 7: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.818480	Prob. F(3,3)	0.5634
Obs*R-squared	3.150632	Prob. Chi-Square (3)	0.3690
Scaled explained SS	0.642822	Prob. Chi-Square (3)	0.8866

Source: Authors' computation using E-views 8.0 (2023)

The outcome in table 7 shows that the R-square Prob. Chi-Square 0.3690> 0.05 It implies that the null hypothesis should be accepted and that the alternative should be rejected. This means that the series is not heteroscedastic.

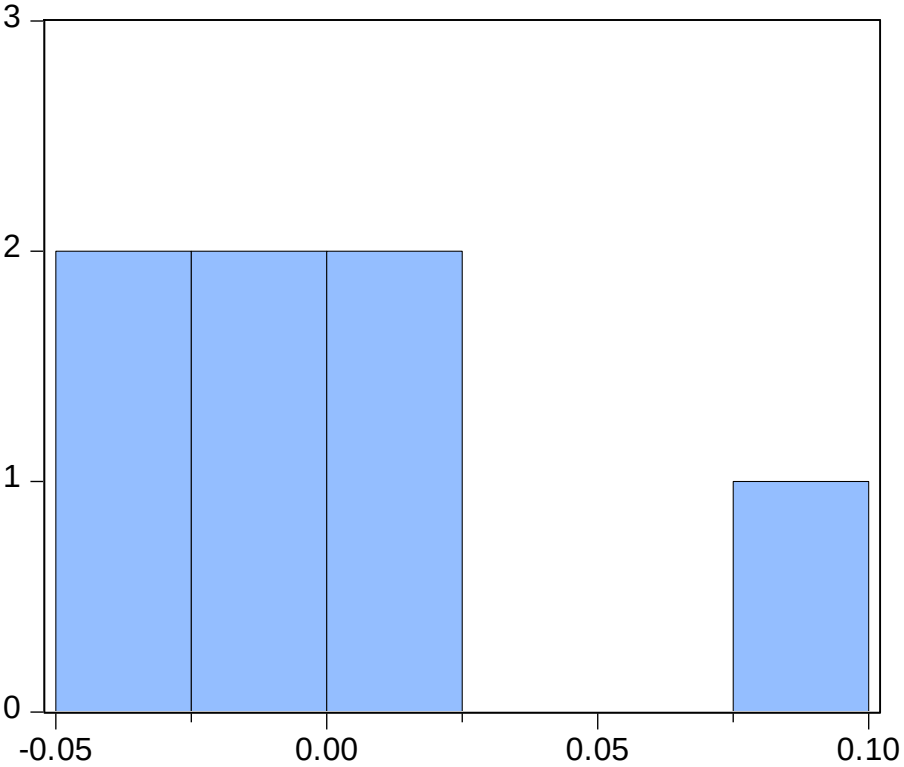
4.2.6 Normality Test

Decision rule:

Null hypothesis: Normal distribution

Alternative hypothesis: Not normal distribution

If the p-value is less than or equal to 0.05, the assertion of normality is rejected and the sample could not have been drawn from a normal distribution. However, when P > 0.05, the null hypothesis is accepted and the data series is said to be normally distributed, and vice versa.

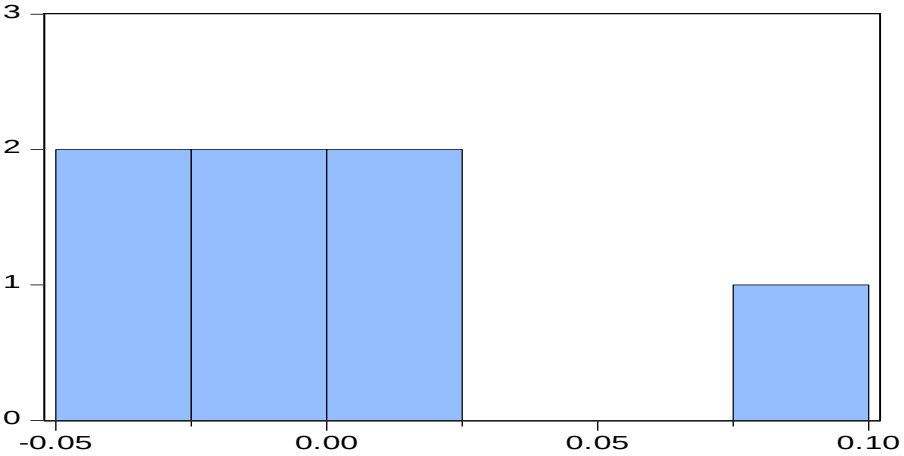


Source: Authors' computation using E-views 8.0 (2023)

The Jarque-Bera statistics 1.24, with respective p-value 0.53 is above the acceptable 0.05 level of significance,

indicating that the data series is normally distributed.

4.2.7 Test of Model Fitness



Series: Residuals	
Sample 2015 2021	
Observations 7	
Mean	1.65e-15
Median	-0.007860
Maximum	0.089577
Minimum	-0.046732
Std. Dev.	0.045694
Skewness	1.026809
Kurtosis	3.221656
Jarque-Bera	1.244389
Probability	0.536765

Source: Authors' computation using E-views 8.0 (2023)

4.2.7 Test of Model Fitness

Table 9: Results of Test of Model Fitness

R-squared	0.938855	Mean dependent var	130736.9
Adjusted R-squared	0.877710	S.D. dependent var	28627.45
S.E. of regression	10011.01	Akaike info criterion	21.55632
Sum squared resid	3.01E+08	Schwarz criterion	21.52541
Log likelihood	-71.44712	Hannan-Quinncriter.	21.17430
F-statistic	15.35457	Durbin-Watson stat	1.788710
Prob(F-statistic)	0.025192		

Source: Authors' computation using E-views 8.0 (2023)

Table 9 above indicates that the model is fit and robust with the R-squared being 93.9% and the Adjusted R-squared being 87.8%; both are Adjusted R-squared, the better the model fits. The model's fitness was additionally examined with prob. (F-statics), which disclosed that it was below 5% significance level (0.03<0.05).

4.2.8 Multi Regression Output

Table 11: Multi Regression Output

Dependent Variable: LRGDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LGAEX	-0.004160	0.619160	-0.006719	0.9951
LGHEX	0.958287	0.532091	1.800982	0.1695
LGEEX	-0.226514	0.313182	-0.723266	0.5218
C	7.193267	1.180735	6.092194	0.0089

R-squared	0.957188	Mean dependent var	11.76018
Adjusted R-squared	0.914377	S.D. dependent var	0.220839
S.E. of regression	0.064621	Akaike info criterion	-2.345002
Sum squared resid	0.012528	Schwarz criterion	-2.375910
Log likelihood	12.20751	Hannan-Quinncriter.	-2.727025

F-statistic	22.35815	Durbin-Watson stat	1.777648
Prob(F-statistic)	0.014843		

Source: e-view 8 output, 2023

Table 10 The coefficients of the explanatory variables in table 10(ß1, ß2, ß3) indicate that one unit increase in public spending on administration will GAEX, GHEX, and GEEX prompts a 0.416 decrease in Real GDP GDP; a unit increase in public spending on health care causes 0.958287 increase in Real GDP, while a unit increase in public spending on education causes 0.2264 decrease in Real GDP of Nigeria. Given the p-values of 0.9951, 0.5218 and 0.1695 for GAEX, GHEX, and GEEX respectively which are all above 0.05, the influence of each of them on Real GDP is non-significant. As the R-squared of the model is 0.957188, GAEX, GHEX, and GEEX collectively account for 95.82% of the alterations in RGDP while other variables excluded from this model account the remaining 4.18%. Hence, the model is robust. The adjusted R-squared, which takes care of the drawbacks of R-squared, is 0.914377. With the Durbin-Watson statistic being 1.777648, which is lower than 2, there is evidence of positive serial correlation in the model. The Prob(F-statistic) that is 0.014843 is lower than 0.05- another confirmation that the overall regression is robust and meaningful.

4.4 Discussion of findings

The findings of the study show that public spending on administration has a negative and weak influence on Real GDP that proxied economic growth. This result implies that government recurrent spending does not help in explaining growth and development in Nigeria. It goes to confirmed the postulation of the endogenous growth model of Barro (1990) which considers expenditures on public administration as consumption part public expenditure. The study agrees with those extant like Aluthge et al. (2021), Gukat and Ogboru (2017) and Nurrudeen and Usman (2010) that found weak and negative connection between administration spending and economic growth. However, it contradicts the studies by Idris and Balar (2017), Ihugba and Njoku (201), Oyinlola and Akinnnibosun (2013) and Segun and Adelowokan (2015). Whose results suggest public spending on as having positive influence on economic growth. Another for negative influence of public spending on administration could be the prevalence of large - scale corrupt practices in Nigeria which allows converting administration expenditure effortlessly into private public office holders' accounts by using ghost workers, bogus budgets expenditures and other illegal practices (Aluthge et al.,2021). The study found that public spending on healthcare in Nigeria has a positive but non-significant influence on economic growth. This finding partly aligns with studies like Awoyemi et al. (2023), Yakubu and Akanegbu (2015), Gukat (2015), Irughe et al. (2020) and Nwude et al. (2023) that witnessed a positive and significant effect of government spending on education on economic growth. However, it is in conflicts with Kiross et al. (2020) that observed a negative link between the two variables. The weak correlation found by this study between the two variables is traceable to the low level of government spending on healthcare that hardly exceeded 3% of GDP during the study period. Finally, the findings of the study also show that public spending on education has negative and weak effect on economic growth in Nigeria. This finding is in conformity with that of Ohwofasa et al (2012), but disagrees with those of studies like Oluwatobi and Ogunrinola (2011) and Gyimah-Brempong (2011) that observed education spending to be positively correlated with economic growth. Just as Irughe & Edafe (2020) argued, the observation of a weak connection between public spending on education and economic growth in Nigeria might have arisen from the failure of this study to disaggregate education expenditure into capital and recurrent types. This finding agrees to some extent with Abiodun and Osagie (2018) that found that it is only recurrent educational spending that exhibits

a strong connection with economic growth. This study attributes these finding of weak and adverse effect of public spending on education on economic growth to the extraneous factors like policy mismatch insufficient funding, inadequate placement of priority on capital spending on education by Nigeria, misappropriation of funds, etc. (Abiodun&Osagie,2018; Obi & Obi,2014).

5.1 Conclusion

The study investigated the influence of public spending on economic growth in Nigeria from 2015 to 2021. Results showed that while public spending on health has positive and non-significant influence on economic growth its spending on administration and education negative and weak effect on economic growth in Nigeria.

5.2. Recommendations

The study recommends as follows Nigerian government should

1. ensure that all its spending is managed in such manner that will enhance the nation's productive capacity and accelerate its economic growth;
2. increase the share of the capital spending allocated to high priority projects that will enhance the welfare of the citizenry.
3.improve manpower and the quality of the lives of ordinary Nigerians by giving teacher education desired attention;
4. step up and reallocate more resources to the healthcare sector to minimize the mortality rate and increase life expectancy at birth.

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