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Impact of Government Capital Expenditure on Economic Growth in Nigeria: 1980-2020

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Abstract

Despite the ever growing capital budgetary expenditure, the Nigerian economic growth has been slow and below expectation. It is against this back drop that the study investigated the impact of capital expenditure on economic growth in Nigeria using time series data. A unit root test was conducted on the data because of the time series nature of it The model used in this study is Auto Regressive Distributed Lag (ARDL).The results appeared mixed. This is because while the lag value of Capital expenditure on defense (CED) appeared positive and statistically significant, Capital Expenditure on health (CEH), but the coefficient of Capital Expenditure on education (CEE) and Capital Expenditure on transport and communication (CETC) appeared positive. The implication of this finding is that achieving quality education depends on government investment to the sector. Since economic growth is closely linked with human capital development, academic underperformance can slow growth. With the impact of Corona virus (Covid-19) on socio-economic status of households in Nigeria. Covid-19 has severe impact on health, education, employment and income of Nigerian citizen. The study recommends that governments should increase funds to national centre for disease control to enable it perform better, for prevention of disease. The paper therefore, recommended Government should ensure that capital Expenditure are properly managed in a manner that it will raise the nation's productive capacity and by extension accelerate economic growth.

Keywords: Capital expenditure, Economic growth.

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1. Introduction

The theories of public expenditure emerged out of the seeming failure of the market economy to allocate scarce resources equitably so as to promote social and economic infrastructure. This is because; market economy or Laissez-faire emphasizes the absence of government (Donijo,2004). To the laissez-faire, economic activity should be left to the free market; government's role is to ensure that the society is protected against internal disruption. However, for public goods such as defense, roads, light among others whose social marginal benefit far exceeds its social marginal cost and which also exhibits three main characteristics of non-rivalry in consumption, non-excludability and non-depletion, imply that market will not be able to provide these goods efficiently since markets function by excluding individuals who cannot pay for the good (Ulbrich,2003).

Therefore, government provision of public goods is required in the presence of market failure. Also, this failure brought about the emergence of welfare economics that precipitated state intervention in economic activities (Modebe, Okafor, Onwumer& Ibe,2012). Consequent upon this is the rapid growth of the government sector and by extension, the growth in government expenditures. These growths necessitated the need for a proper system or mechanism that would allocate resources equitably (Onakoya&Somole, 2013). To fill this void, the budget that contain a planned public expenditure and revenue of the government on yearly basis becomes a valid tool for controlling, monitoring and relating government planned budgetary allocation to macroeconomic objective of ensuring sustainable economic growth (Fan &Saukar, 2012).

However, budgetary allocation, being a dynamic process, has been changing with the historical and political conditions of the country. Indeed, the issue of budgetary allocation in Nigeria came to sharp focus with the granting of political independence and the freedom to exercise independent budgetary powers. Therefore, since the time of Nigeria's political independence, the budget has developed and grown, not only into an instrument of economic management but also as a tool of economic development and growth. The budget which consists of government fiscal policy measures of taxation and expenditure as well as borrowing has always been a potent instrument of economic development and growth.

In Nigeria, government capital budgetary expenditurehave continued to grow owing to the huge revenues derivable from crude oil, non-oil, federal government independent revenue and the rising demand for public goods and services like education, transport and communication and health. In addition, there is also increasing need in the face of rising insurgence to provide both internal and external security to protect life and property. Available statistics have shown that total government capital budgetary expenditure and its components have continued to grow in the last six decades or so. For instance, while government capital expenditure in 1980 to defense stood at ₦127.50 million, education was ₦952.60 million, transport and communication was ₦2,349.30 million and health was ₦147.20 million, it rose to ₦196.40 million, ₦331.70 million, ₦877.00 million and ₦257.00 million for the afore mentioned components in 1990, ₦6,954.90 million, ₦23,342.60 million, ₦3,021.00 million and ₦6,569.20 million in 2000 to ₦232,044,871,801 million, ₦24,086,254,059 million and ₦161,845,511,090 in 2010 to ₦24,525,795,702, ₦369,556,376,895, ₦237,145,224,960 and ₦221,712,151,46 in 2016 respectively(National Bureau of Statistics,2016). However, despite budgetary capital expenditure, Nigerian economic growth has been described as slow and of crisis proportion (Oziengbe, 2013). For instance, Nigerian Gross Domestic Product (GDP) fell to 3 percent in 2009 compared with 6 percent in 2008 (National Bureau of Statistics, 2010). Furthermore, Nigerian economic growth entered into technical recession in 2016 as its Gross Domestic Product (GDP) declined by 3.16 (National Bureau of Statistics, 2017).Also, investment in people for productive purposes that contribute to growth has been disappointing (Arimah, 2001). Apart from the above, national, regional and international organizations have established a downward trend in some selected indicators that are endogenous to economic growth. For instance, the United Nations' most recent multi-dimensional poverty index (2015) has it that over 67 percent of Nigerians lives below poverty line. The average Nigerian life expectancy is 38.3 percent (World Health Report, 2014), its human development index has been consistently on less than 0.6

percent(World Health Report, 2015), its school enrollment which fell from 64.5 percent in 2000 to 57.6 percent in 2013 is still one of the lowest in Sub-Sahara Africa (African Development Indicators, 2013).

The recent corona virus (Covid-19) outbreak was caused by the severe acute respiratory syndrome (SARS) corona virus. The outbreak was reported in December 2019 in Wuhan city in Hubei province of china (Mckibbin and Fernando 2020). Covid-19 continues to spread across the world. Another move corona virus causes mild, non-specific symptoms including fever, cough and shortness of breath, muscle pain and tiredness, the acute respiratory, distress syndrome, sepsis and septic lead to death. The virus is transmitted via respiratory droplets its estimated period is 2-14 days (Delivorias and Scholz, 2020). At global level, the world health organization (WHO 2020) declared a public health emergency of international concern at the end of January, as infections spread rapidly within china currently, it is being discovered that covid-19 has escalated to all over the world (Mckibbin and Fernando, 2020)

This dismal Nigerian economic growth performance has not only been brought to the front burner but has remained dominant and most contentious in existing literatures (Abu & Abdullahi, 2010, Oziengbe, 2013,Oyakhilomen, Abdulsalam &Rekwot, 2013). However, a not well – synthesized fact in the extant literatures is the impact government capital budgetary allocation on economic growth. It is against this backdrop that this paper is out to investigate the impact of government capital budgetary allocation on economic growth. To achieve this objective, this paper is structured as follows:

2. Conceptual Review

2.1 Capital Expenditure

This is conceptualized here as the expenditure made to acquire fixed assets whose useful life span expands beyond one fiscal year (Ulbrich, 2003). It can also been seen as expenditure made to upgrade or improve the already existing fixed assets or infrastructure such as roads, machines and equipment, buildings, researches among others. These expenditures usually create future benefits and there are often some time lags between when they are allocated and when they take effect on the economy. It is these capital budgetary expenditure that driver the economy. This is because no economy can achieve meaningful economic growth without investment in infrastructure like roads, buildings, health facilities, educations. This can only be made possible through capital budgetary allocation.

2.2. Economic Growth

The concept of economic growth belongs to the main topics in economics discipline. The interests result from the principles of human being, the necessity of satisfaction of unlimited needs.In economics “economic growth” or “economic growth theory” typically refers to growth of potential output, i.e production at “full employment” (Sayi, 2011) Alsoaccording to Ibn Khaldum (1376) the idea of economic growth was that increasing either population or tax rate could generate more surplus money for the crown or the country. Adam Smith (1776) saw economic growth (output) to depend on the amount of input (land, labour and capital) and the output is determined by population growth, increase in investment and land and total labour productivity growth, Ricardo (1931) approach to growth was that growth was gained through advantageous trade but to trade with other nation on equal term was disadvantageous. Solow (1956) in his growth model emphasizes that capital accumulation and exogenous rate of change in population and technological progress as the sources of growth. Similarly, Romer (1986) based his idea that long run growth is determined by economic incentives. In view of the above, the concept of economic growth refers to growth of potential output. That is production at full

employment which is caused by growth in aggregate demand or observed output. It is theoretically defined as the increased in the value of good and service produced by an economy. It is conventionally measured as the percent rate of increases in real Gross Domestic Product (GDP)

3. Theoretical Framwork

This paper is anchored on the following theories the Wagner's law of expanding state activities, Peacock and Wise manhypothesis and Keynesian growth theory.

3.1 Wagner's law of increasing Government activity.

This law was formulated by Adolph Wagner in 1908. Wagner, a famous German political Economist who based his law of increasing state activities on historical facts, primarily German, opined that there are inherent tendencies for the activities of different layers of a government such as Central and state governments to increase both intensively and extensively. That is, there is a functional relationship between the growth of an economy and the growth of the government activities so that the government sector grows faster than the economy. Thus, all kinds of governments irrespective of their level, intentions (peaceful or warlike), and size etc indicate the same tendency of increasing public expenditure. In other words, Wagner argued that a functional, cause and effect relationship exists between the growth of an industrializing economy and the relative growth of its public sector. Therefore, Wagner, opined that the relative growth of the public sector is an inherent feature of industrializing economies. This secular (long-term) hypothesis believes that social progress was the basic cause of the relative growth of government in industrializing economies. The chain reaction circumstances are that social progress leads to a growth in government functions which, in turn, leads to the absolute and relative growth of government economic activity. Wagner distinguished certain forms of government activities in an attempt to validate this viz: (a) law and order and (b) participation in the material production of economic goods, including the provision of certain social products such as education, roads, machine and equipment, monetary-banking arrangements, etc, in the face of market failure. Government corporations must produce certain economic goods requiring large fixed investment, since private companies cannot undertake such investment on a profitable basis. Thus, apart from the traditional State functions which were expanding, the state activities were increasing in coverage (e.g subsidies and other welfare measures) and hence the increasing need to provide and expand the sphere of public goods. Other forces behind the tendency of increasing government capital budgetary allocation are rising population, urbanization and pressure on civic amenities, higher prices, the need to provide increasingly qualitative services, provision of welfare and social security measures, rising cost of servicing debt and debt payments.

3.2 Peacock-Wiseman Hypothesis of Displacement, Inspection and Concentration Effects.

In their study of the UK economy between 1890-1955, Jack Wiseman and Allan Peacock(1961) formulated their hypothesis to fill the void in Wagner;s law. They concluded that public expenditure does not increase in a smooth and continuous manner, but in jerks or step like fashion. In other words, government fiscal activities rise step by step to successive new plateau. Sometimes, some social or other disturbances such as war or depression take place which the existing public revenue cannot meet. The public expenditure rises and makes the inadequacy of the present revenue quite clear to everyone. The movement from the older level of expenditure and taxation to a new and higher level is called the 'displacement effect'. The insufficiency of the

revenue as compared with the required public expenditure creates an 'inspection effect'. That is war or other social disturbances force people and the government to seek solutions to important problems which previously had been neglected. The people and the government review the revenue position and the need to find a solution of the important problems that have emerged and thus agree to make the needed adjustments to finance the increased expenditure. This results in the attainment of a new level of 'tax tolerance'. That is they are prepared to tolerate a greater tax burden hence both the general level revenue and expenditure rise. In this manner, public expenditure and revenue stabilize at a new level till another disturbance result in a displacement effect. In addition, since each major disturbance causes the government to assume a large proportion of the total national economic activities, the net result is the 'concentration effect or the scale effect'. This refers to the apparent tendency for central/ national government economic activity to become an increasing proportion of total public sector economic activity when a society is experiencing economic growth. That is the apparent tendency for central economic activity to grow faster than that of the state and local levels of governments. This means that sub-national government necessarily will decline in relative importance within the public sector, a finding consistent with British economy's empirical evidence.

3.3.Keynesian Growth Theory.

The Keynesian growth theory pounded by Keynes (1939) provided the theoretical basis for the relationship between budgetary allocation by difference tiers of governments and economic growth. It also, provides an appealing set of models for investigating the relationship between economic growth and different components of government capital budgetary allocations such as budgetary capital allocation to defense, health, transport and communication, education among others. The model assumes that economic growth is influenced by policy variables other than the technical relationship between capital and labour (Ram, 1986; Barro, 1990; Aigbokhan, 1999). This flexibility introduced by policy variables has made the model popular in the analysis of economic growth of nations especially developing countries (Aigbokhan, 1999).

Therefore, the Keynesian growth model employed in this study is an extension from other studies like (Ram, 1986 and Aigbokhan, 1996; 1999). The model assumes that the economy consists of two broad sectors, public (G) and private (P) whose output depends on labour (L) and capital (K). In addition, the output of G exercises some externality effect on output in P. The production function of the economy is thus:

$Y = f(L, K_P, K_G)$ ----------(1)

where the subscripts denote sectoral inputs:

K_P= private capital per labor

K_G = public capital per labor

The production functions of the respective sectors are thus:

$Y_P = P(L_P, K_P, G)$ ----------(2)

$Y_G = G(L_G, K_G)$ ----------(3)

Total inputs are given as:

$L_T = L_P + L_G$ ----------(4)

$K_T = K_P + K_G$ ----------(5)

Total output Y is given as the sum of sectoral output or a function of sectoral inputs:

$Y = Y_P + Y_G$, or ----------(6)

$Y = P(L_P, K_P) + G(L_G, K_G)$, or ---------- (7)

$Y = f(L_T, K_T, G_T)$----------(8)

Drawing on the foregoing evidence, the study postulates that capital budgetary allocation has an impact on economic growth. Theoretically, capital budgetary allocation is expected to foster growth through allocative efficiency. However there is no consensus in the empirical literature on the direction of impact. Thus, the

impact of capital budgetary allocation on growth is an empirical issue.

4. Empirical Review

Loizides and Vamvoukas (2005), employing the trivariate causality test to examine the relationship between government expenditure and economic growth, using data set on Greece, United Kingdom and Ireland. The authors found that government size granger causes economic growth in all the countries they studied. The finding was true for Ireland and the United Kingdom both in the long run and short run. The results also indicated that economic growth granger causes public expenditure for Greece and United Kingdom, when inflation is included.

Komain and Brasmasrene (2007), studied the relationship between public expenditure and economic growth in Thailand. Applying granger causality and co-integration technique, the study, found that public expenditure and economic growth are not co integrated but there exists a significant positive effect of public expenditure on economic growth. On this basis, they recommended that public expenditure should be closely monitored to avoid rent seeking behavior.

Liu Chih-HL, Hsu and Younis (2008) examined the causal relationship between GDP and public budgetary expenditure for the US data during the period 1947-2002. 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.

Olorunfemi, (2008) studied the direction and strength of the relationship between public investment and economic growth in Nigeria. Using time series data from 1975 to 2004 and multiple regression analysis, the study found that public expenditure impacted positively on economic growth and that there was no link between gross fixed capital formation and Gross Domestic Product. The study affirmed that from disaggregated analysis, the result reveal that only 37.1% of government expenditure is devoted to capital expenditure while 62.9% share is to current expenditure. On the basis of the findings, the study recommended that to ensure sustained economic growth more fund should be made available for capital expenditure.

Bingxn, Fan and Sauker (2009) examined the impact of the composition of public expenditure on economic growth in developing countries. Using a dynamic generalized method of moment (GMM) model and a panel data set for 44 developing countries, they found that different types of government spending have various impact on economic growth. That in Africa, human capital expenditure contributes to economic growth while in Asia, capital formation, agriculture and education expenditure had strong growth enhancing effect. In Latin America, none of the public expenditure items have significant impact on growth. They therefore, recommended more to be given to various expenditure items that have more impact on growth of different countries.

Zheng, Li and Li (2010) investigated the relationship between the size of Chinese government and the growth rate of the economy with more emphasis on the applicability of Wagner's law to the Chinese economy. Using Auto regressive distributed lag (ARDL) on Chinese time series data, the study found no evidence in support of the validity of Wagner's law for Chinese economy. They therefore, recommended a proactive government programmed expenditure that will promote and sustained economic growth.

Edame and Akpan (2013) studied the structure and growth of public expenditure in Nigeria. Employing Ordinary Least Square technique, they found that factors such as fiscal deficit, Gross Domestic Product, government revenue and debt servicing were identified as some of the factors causing the growth of public expenditure in Nigeria. The study therefore recommended sound fiscal discipline, productive use of government revenue and increasing productivity to help reduce the growth of public expenditure in Nigeria.

In Nigeria, Oziengbe (2013), studied the impact of federal capital and recurrent expenditure on Nigerian economy. Exploiting co integration and error correction mechanism, he found that long-run relationship existed between the variables and that the short run impact on each explanatory variable on Gross Domestic Product (GDP) was statistically not significant contemporaneously but statistically significant with a lag with recurrent expenditure having more impact on GDP than the capital expenditure. On the basis of this findings, recommended that larger share of government expenditure should go into the provision of infrastructure and other capital project.

Ukwueze (2014) examined the impact of public expenditure on output growth in Nigeria. Using granger causality and impulse response function, he found that public expenditure has strong impact on output growth and that public expenditure granger cause output. The study also find that in the short run, public expenditures on education, agriculture, all have both positive and significant impact on output growth while expenditures on health and construction have negative impact on output growth. On the basis of the findings recommended that public debt should be curtailed and revenue base expanded to provide avenue for private sector investment that will promote economic growth.

5. Methodology

5.1 Nature and sources of data

The paper utilized secondary data obtained from the Central Bank of Nigeria statistical bulletin (2016), National Bureau of Statistics, Annual reports and approved estimates for various years from 1980-2016.

5.2 Model specification

This paper adopted Auto Regressive Distributed Lag (ARDL). Auto Regressive Distributed Lag (ARDL) was introduced by Dave (2013), to incorporate 1(0) and 1(1) variable. This specified below thus

RGDP=f (CBAD, CBAH, CBAE, CBA TC)----------(9)

Where, RGDP = Real Gross Domestic Product, CBAD = Capital Budgetary Allocation to defense, CBAH = Capital Budgetary Allocation to health, CBAE = Capital Budgetary Allocation to education and CBA TC= Capital Budgetary Allocation to Allocation to transport and communication. Stating equation (3.1) on the basis of ARDL form, gives:

$\Delta y_t=\alpha_0+\alpha_1 y_{t-1}+\sum_{j=1}^{L} \propto_j \Delta D_{t-j}+\sum_{j=1}^{L} \alpha_2 \Delta E_{t-j} +\sum_{j=1}^{L} \alpha_3 \Delta H_{t-j} +\sum_{j=1}^{L} \alpha_4 \Delta TC_{t-j} \mu_t$----------(10)

$\Delta H_t =\lambda_0 + \lambda_1 H_{t-1} + \sum_{j=1}^{L} \lambda_j \Delta y_{t-j} +\sum_{j=1}^{L} \lambda_2 \Delta D_{t-j}+\sum_{j=1}^{L} \lambda_3 \Delta E_{t-j}+ \sum_{j=1}^{L} \lambda_4 \Delta TC_{t-j}+ \mu_t$----------(11)

$\Delta D_t =\lambda_0 + \lambda_1 D_{t-1} + \sum_{j=1}^{L} \lambda_j \Delta y_{t-j} +\sum_{j=1}^{L} \lambda_2 \Delta H_{t-j} +\sum_{j=1}^{L} \lambda_3 \Delta E_{t-j} + \sum_{j=1}^{L} \lambda_4 \Delta TC_{t-j} +\mu_t$ ---------- -(12)

$\Delta E_t =\lambda_0 + \lambda_1 E_{t-1} + \sum_{j=1}^{L} \lambda_j \Delta y_{t-j} +\sum_{j=1}^{L} \lambda_2 \Delta H_{t-j} +\sum_{j=1}^{L} \lambda_3 \Delta D_{t-j} + \sum_{j=1}^{L} \lambda_4 \Delta TC_{t-j} + \mu_t$ ----------(13)

$\Delta TC_t =\lambda_0 + \lambda_1 TC_{t-1} + \sum_{j=1}^{L} \lambda_j \Delta y_{t-j} +\sum_{j=1}^{L} \lambda_2 \Delta H_{t-j} +\sum_{j=1}^{L} \lambda_3 \Delta D_{t-j} + \sum_{j=1}^{L} \lambda_4 \Delta E_{t-j} + \mu_t$ ----------(14)

Where Y= Gross Domestic Product (GDP), D= Capital Budgetary Allocation to defense(CBAD) H= Capital Budgetary Allocation to health (CBAH), E= Capital Budgetary Allocation to education (CBAE) and TC= Capital Budgetary Allocation to Allocation to transport and communication (CBA TC) .Δ = first difference, and L= maximum lag length. Equations 3.2-3.6 intends to find out the impact of fiscal CBAD, CBAH,CBAE and CBATC on economic growth proxied by GDP and to test the hypothesis that all the above mentioned variables do impact on economic growth.

6. Results and Discussion

6.1 ADF unit root test

The unit root was conducted in order to ascertain the stationarity properties of the series used in the study. This was conducted using Augmented Dick-fuller (ADF) unit root test. Apart from avoiding spurious regression result, ADF unit root helped to establish the order of integration of the variables. The ADF unit root results are shown in table .1.

Table 1. ADF unit root

variables	ADF STATISTICS	CRITICAL VALUE (5%)	ORDER OF INTEGRATION
RGDP	-5.079487	-2.981038	1(1)
CBAD	-6.379446	-2.948404	I(1)
CBAE	-4.679123	-2.945842	1(0)
CBAH	-3.342693	-2.954021	1(0)
CBATC	-4.256191	-2.945842	1(0)

SOURCE: Author's computation using E-View

The result of the ADF unit root test in table 1.showed that all the variables except RGDP and CBAD were not stationary at level. However, after first difference RGDP and CBAD became stationary. This was achieved by comparing the ADF test statistics with their respective critical values at 5 %. This gives the order of integration of purely I(0) and I(1). This difference in order of integration of the variables connote that there may be long run relationship between and among the variables. Furthermore, the results of the ADF statistics confirmed Auto Regressive Distributed Lag (ARDL) and

ARDL Bound test will provide a better estimate.

6.2 ARDL Results

To evaluate the impact of different components of government capital budgetary allocation on economic growth in Nigeria proxied by RGDP, Auto Regressive Distributed Lag (ARDL) was used and the result is presented in table 2

Table .2 Auto Regressive Distributed Lag (ARDL) regression Result

Number of models evalulated: 162
Selected Model: ARDL(2, 1, 0, 2, 2)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
RGDP(-1)	0.304315	0.175998	1.729078	0.0992
RGDP(-2)	-0.266113	0.120505	-2.208310	0.0391
CBAD	-3.515516	280.7946	-0.012520	0.9901
CBAD(-1)	753.8753	380.1913	1.982884	0.0613
CBAE	-21833.14	51513.63	-0.423832	0.6762
CBAH	243577.4	108003.6	2.255271	0.0355
CBAH(-1)	-261429.1	279365.8	-0.935795	0.3605
CBAH(-2)	277795.4	144602.1	1.921102	0.0691
CBATC	-291.2133	181.3890	-1.605463	0.1241
CBATC(-1)	-897.8249	221.6974	-4.049777	0.0006
CBATC(-2)	-897.7759	139.2756	-6.446038	0.0000
C	-25607727	6171049.	-4.149655	0.0005

R-squared	0.979166	Mean dependent var	11429040
Adjusted R-squared	0.967707	S.D. dependent var	23543225
S.E. of regression	4230745.	Akaike info criterion	33.63365
Sum squared resid	3.58E+14	Schwarz criterion	34.18330
Log likelihood	-526.1384	Hannan-Quinn criter.	33.81584
F-statistic	85.45228	Durbin-Watson stat	1.250767
Prob(F-statistic)	0.000000		

Source: E-View output

9.0

The result of the Auto Regressive Distributed Lag (ARDL) on the impact of Capital Budgetary Allocation to defense (CBAD),Capital Budgetary Allocation to health (CBAH), Capital Budgetary Allocation to education (CBAE) and Capital Budgetary Allocation to Allocation to transport and communication (CBA TC) on RGDP appeared mixed. This is because while the lag value of Capital Budgetary Allocation to defense (CBAD) appeared positive, that Capital Budgetary Allocation to health (CBAH), Capital Budgetary Allocation to education (CBAE) and Capital Budgetary Allocation to Allocation to transport and communication (CBA TC) appeared positive. The implication of this finding is that achieving quality education depends on government investment/ allocation to the sector. Since economic growth is closely linked with human capital development, academic underperformance can slow

growth. This is because, education leads to increase in productivity, increase the stock of human capabilities and efficiency of workers by increasing the level of their cognitive skills. The implication of this findings also, suggests that provision of education is a productive investment in human capital which equals or even more worthwhile than that of physical capital. Also, the negative sign of the lag value of Capital Budgetary Allocation to health (CBAH) justifies the low average life expectancies, high infant and maternal mortality rate that have compromise sustained economic growth in Nigeria. Furthermore, the negative lag value of Capital Budgetary Allocation to Allocation to transport and communication (CBA TC) revealed that Nigeria transport and communication sector is still largely underdeveloped. To underscore, the nature of the relationship, the paper conducted ARDL bound test shown in the table 4.3.

Table .3 ARDL bound test result

EC = RGDP - (780.1630*CBAD -22700.3191*CBAE + 270268.3179*CBAH
-2169.6995*CBATC -26624830.0822)

F-Bounds Test			Null Hypothesis: No levels relationship	
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	14.56068	10%	2.2	3.09
K	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Source: E-View output

Here, two sets of asymptotic critical values are provided for the two polar cases which assumethat all the regression are, on the one hand, purely I(1) and, on the other, purely I(0). Since the study variables of interest fall purely intoI(1) and I(0), the study conducted a bounds test to ascertain if a long run relationship exist between or among the variables under investigation. This is because, if the computed F-statistic falls outside the critical value bounds, a conclusive inference can be drawn that a long run relationship exists. However, if the F-statistic falls inside these bounds, inference is inconclusive. In this study, the F-statistic falls outsides the critical bounds revealing co integration between RDGP and Capital Budgetary Allocation to health (CBAH), Capital Budgetary Allocation to education (CBAE), Capital Budgetary Allocation to Allocation to transport and communication (CBA TC) and Capital Budgetary Allocation to defense (CBAD). The implication of this is that since there is a long run relationship between capital expenditure and economic growth, if concise effort is not made to ensure the productivity of capital expenditure which will ensure appropriate investment in human capital, sustained economic growth may remain elusive in Nigeria.

7. Conclusion and Recommendations

Capital budgetary allocationsuppose to be the bedrock of economic growth by providing infrastructural facilities that have the tendency of promoting and sustaining economic growth. However, over the years, despite the increasing government budgetary

allocation to these key sectors, there contribution to economic growth appeared to be negative. On this basis, the paper recommended thatgovernment should ensure that capital budgetary allocation are properly monitored and managed in a manner that it will raise the nation's productive capacity via investment in human capital that will ultimately accelerate economic growth. There is need for strong monitoring of capital budgetary allocation to avoid missing revenue between allocation, disbursement and execution.

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