



IMPACT OF GOVERNMENT SPENDING ON ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

Government expenditure can be used as a useful tool for fiscal policy to help put Nigeria's economy on the path of growth. Nigeria's economic growth between 1990 and 2022 is examined in relation to government capital spending. Utilizing the Augmented Dickey-Fuller (ADF) test, the times series data utilized in the study were examined. Capital expenditures for health (HCEX), education (ECEX), and agricultural (ACEX) are the independent variables in the study, while the gross domestic product (GDP) is the dependent variable. Nigeria's economic growth is positively impacted by government capital spending, as demonstrated by the study's statistical significance. The report suggests that investing in capital infrastructure will not only entice investors to make investments, but also create jobs for the impoverished youth and boost economic output. In conclusion, government capital investment on a few vital economic sectors, such as agriculture, health, and education, will benefit people both socially and economically.

Keywords: Agricultural Capital Expenditure; Health Capital Expenditure; Education Capital Expenditure

JEL CODE: H51 H52 H53

1.0 Introduction

Examining government capital expenditure is essential, considering the role that public investment plays in promoting long-term growth. Government capital expenditure is the term used to describe spending on infrastructure, which includes the transportation, health, education, and agricultural sectors, among others, with the aim of raising overall living standards and productive capacity. Public investment in these sectors is frequently seen as a major engine of economic growth in developing nations like Nigeria, particularly in light of the need to address structural issues like subpar infrastructure and low productivity. (Adamu, & Hajara, 2015, Ikubor, et. al. 2021).

In order to accelerate economic growth, Nigeria undertook a series of programs and reforms in the 1980s, with a focus on capital investment in sectors such as education, transportation, and energy. But even with such massive spending, the relationship between capital spending and growth remains unclear because Nigeria continues to face serious economic challenges, including high unemployment, extreme poverty, and poor infrastructure.

Theoretically, government capital spending should stimulate the economy by generating jobs, improving productivity, and building the infrastructure required to support the expansion of the private sector. Studies like those by Romer (1986) and Barro (1990) indicate that public investment is critical for economic growth because it offers necessary services that the private

sector is unable to effectively provide. Capital spending has the ability to alleviate major obstacles that impede economic progress in Nigeria, such as inadequate transportation systems and power shortages.

However, instances of corruption, poor project execution, and mismanagement have made it impossible to ignore the inefficiencies in government expenditure in Nigeria. As a result, this has been a major source of concern. Studies on the Nigerian economy, such those by Adedokun (2012) and Iyoha (2013), draw attention to worries that capital expenditures may not always produce the desired results, particularly if money is mismanaged or misallocated. Furthermore, the nation's reliance on extremely erratic oil earnings frequently has an impact on the patterns of government expenditure and its capacity to maintain capital investment.

Thus, a complicated analysis influenced by variables including governance, economic policy, and external shocks must be conducted to determine the relationship between government capital expenditure and economic growth in Nigeria. In order to better understand the potential and problems facing public investment in Nigeria's development, this study will examine the degree to which government spending has aided in the country's economic expansion.

1.2 Objectives of the Study

This study is done with the sole aim of assessing how government capital expenditure affects economic growth in Nigeria. The specific objectives are:

- i. To examine agricultural capital expenditure on economic growth in Nigeria.
- ii. To determine health capital expenditure on economic growth in Nigeria.
- iii. To determine education capital expenditure on economic growth in Nigeria.

2.0 Literature Review

2.1 Theoretical Framework

Keynes's theoretical model supports the study's examination of the impact of government capital expenditure on economic growth. According to Keynesian economics, Government capital expenditure is a vital tool for influencing aggregate demand and economic output. Investment in public infrastructure and other capital projects can stimulate economic growth, reduce unemployment, and enhance the economy's productive capacity. The multiplier effect amplifies the impact of government spending, leading to greater overall economic activity.

This theoretical framework underpins the empirical investigation of how government capital expenditure affects economic growth in Nigeria, particularly in understanding the role of public investment during periods of economic instability or low private sector activity. The mathematical representation as below

Mathematical Representation:

$$Y=C+I+G$$

Where:

Y = GDP, C = Consumption, I = Private Investment, G = Government Spending

Keynesian theory supports the idea that increasing government capital expenditure can counteract economic slowdowns by boosting aggregate demand. For example, during a

recession, higher government spending on public projects can increase total demand, leading to higher production, income, and employment.

2.2 Empirical Literature

Aregbeyen and Akpan (2013) investigated the relationship between financial growth in Nigeria from 1981 to 2010 and government revolving expenditure, including capital and recurring. The study used the vector autorregressive (VAR) model to attest to the fact that capital expenditures, particularly those spent in infrastructure, are a key long-term stimulator of economic growth. Only, the anticipated positive impact on growth was not achieved via operational spending. The study's conclusions demonstrated that government capital expenditure, particularly in infrastructure, is crucial for influencing Nigeria's economic growth. The report suggests that Nigeria should increase its capital expenditures while enhancing openness and efficiency, with a particular emphasis on industries like transportation, communication, and energy.

Nurudeen and Usman (2010) examined how government spending between 1970 and 2008 – with an emphasis on capital and ongoing expenditures – impacted Nigeria's economic growth. The Ordinary Least Squares (OLS) regression technique was utilized in the study to ascertain the effect of several categories of government expenditure on GDP growth. The findings demonstrated that while capital spending on economic services like transportation and communication has a beneficial impact on economic growth, ongoing spending on defense and administration has a negligible or negative effect. This implied that while inefficient recurrent spending, especially on salaries and administrative expenses, had minimal advantages, capital spending in productive industries promotes growth. In order to boost growth, the report suggested giving capital expenditures by the government more priority and providing more funds to areas like infrastructure, health care, and education.

Ogundipe and Oluwatobi (2013) looked at how public capital spending affected Nigeria's economic expansion between 1980 and 2011. They discovered, through the use of an error correction model, that capital investment and growth are strongly positively correlated, particularly in the areas of infrastructure, health, and education. According to the ECM, yearly corrections account for roughly 40% of the short-term departures from long-term equilibrium in the capital expenditure-growth connection. To promote growth, they advocated for higher public capital spending, particularly in the areas of infrastructure and human capital development.

Akpan (2005) investigated how government spending affected Nigeria's economic expansion using data on expenditures that were broken down into capital and ongoing categories between 1970 and 2004. Using the OLS estimating technique, the study found that capital investment has a beneficial impact on economic growth, whereas recurrent expenditure has no discernible effect. The study also brought to light the problem of government expenditure inefficiencies and mismanagement, especially with regard to recurring expenditures, which frequently lowers the overall efficacy of fiscal policy. Therefore, the report recommended changes targeted at enhancing public financial management, raising capital expenditure allocations, and cutting back on wasteful recurring expenditures.

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frequently lowers the overall efficacy of fiscal policy. Therefore, the report recommended changes targeted at enhancing public financial management, raising capital expenditure allocations, and cutting back on wasteful recurring expenditures.

Taiwo and Agbatogun (2011) looked into the connection between Nigeria's economic expansion and government capital spending between 1970 and 2008. The study found a substantial positive correlation between capital expenditure on economic and social services (such transportation, communication, health, and education) and economic growth using a multivariate regression model. According to the analysis, strategic capital spending can boost economic growth, yet resource allocation inefficiencies still exist. The results of the study indicate that the government ought to concentrate on enhancing the effectiveness of capital expenditure by allocating funds to industries with the greatest potential for growth and ensuring that capital projects are adequately monitored to avert delays and corruption.

With an emphasis on corruption and the caliber of administration, Olorunfemi and Akinpelu (2017) investigated the contribution of government capital expenditure to economic growth in Nigeria. The study, which employed GMM to account for endogeneity, discovered that while capital investment can stimulate economic growth, Nigeria's high levels of corruption and inadequate governance greatly lessen this effect. Public expenditure was inefficient as a result of corruption since funds were frequently taken from worthwhile initiatives. The report stressed that in order to guarantee that capital expenditures result in observable economic growth, anti-corruption initiatives and governance reforms are essential. The report suggested that public financial management should be made more accountable and transparent.

Oladipo and Yusuf (2021) looked into the impact of government capital spending on Nigeria's economic expansion from 1981 to 2020. The Autoregressive Distributed Lag (ARDL) model was employed in the study to evaluate the short- and long-term impacts of capital expenditure on GDP growth. Additionally, they break down capital spending into industries including social services, infrastructure, and agriculture. The findings showed that government capital spending, particularly when it comes to infrastructure and education, significantly boosts economic growth. The long-term connection demonstrated that investing in infrastructure produces more steady growth than investing in other industries, although the short-term benefits are less pronounced because of corruption and project execution delays. In order to guarantee that money are allocated to infrastructure and education, the report suggested cutting bureaucratic inefficiencies and putting anti-corruption measures in place.

With an emphasis on post-democratic Nigeria, Eze and Okoye (2022) investigated the efficiency of government capital expenditure in fostering economic growth in Nigeria between 1999 and 2021. The study's use of a VECM showed that government capital spending has a short-term, positive, but modest impact on economic growth. The long-term analysis showed a more pronounced positive impact, especially for energy and transportation infrastructure spending. The study also showed that persistent problems including poor planning, corruption, and delays in projects lessen the potential benefit of capital spending on growth. In order to maximize the growth outcomes from capital investments, the study's findings led it to recommend greater capital expenditure in productive industries,

In their 2020 study, Onuorah and Ebiringa looked at how public capital expenditures fueled economic expansion and how external debt affected public investment in Nigeria between 1985 and 2019. In addition to using the Two-Stage Least Squares (2SLS) approach, the study took debt finance into account while making public capital investments. According to the study, investing in infrastructure, manufacturing, and other productive industries like agriculture and manufacturing greatly boosted economic growth. The research did point out,

though, that taking on too much debt in the long run as a result of borrowing excessively to fund capital expenditures can have a detrimental effect on growth. It was proposed that fiscal restraint is essential to prevent debt overhang, even when government capital expenditures can stimulate economy. Additionally, they suggested giving high-return investments priority and enhancing.

Adamu and Enyioko (2023) investigated the impact of capital expenditure on infrastructure development and its subsequent effect on economic growth in Nigeria from 2000 to 2022. The study employed GMM approach and the results showed that infrastructure-related capital expenditure has a robust positive effect on economic growth. In particular, investment in energy and transport infrastructure was found to have the most substantial impact on growth. However, the study also revealed issues such as underfunding of key projects and misallocation of resources as significant challenges. The study recommended prioritizing critical infrastructure projects and implementing better monitoring and evaluation mechanisms to ensure that capital expenditure produces long-term growth effects.

The study conducted by Adeyemi and Adeoye (2020) examined the impact of government capital investment on sectoral growth in Nigeria between 1980 and 2020, with a specific focus on the manufacturing and agriculture sectors. The study discovered that capital investment in the agriculture sector significantly boosts economic growth over the short and long terms using the ARDL bounds testing approach. However, because of structural inefficiencies and restricted access to capital, the industrial sector's spending demonstrates a weaker link. Because agriculture creates jobs and plays a vital role in food security, capital spending in the industry has generally contributed more to economic growth. The report recommended policies that support private sector engagement in capital-intensive industries like manufacturing and increased capital investment in agriculture as a way to increase productivity.

Okon and Ita (2022) examined the effects of governance quality in their study of the relationship between government capital expenditure and economic growth in Nigeria between 1980 and 2021. The study's application of structural equation modeling (SEM) showed that while government capital spending had a favorable effect on economic growth, the link was greatly mitigated by the quality of governance. The possible advantages of capital expenditure on growth were lessened by bad governance, corruption, and ineffective project delivery. To ensure that capital expenditures result in significant economic growth, the study promoted greater anti-corruption measures, increased transparency in public finance, and improved governance.

The study conducted by Augustine et al. (2020) examines the correlation between government spending and economic growth in Nigeria between 1980 and 2018. The authors' goal is to examine the various ways that government spending—especially capital and recurring expenditures—contributes to the expansion of Nigeria's economy. They contend that the composition and effectiveness of government expenditures significantly influence the course of the economy.

3.0 Methodology

The study used an autoregressive distributed lag model to examine how government spending affected Nigeria's economic growth from 1990 to 2022. In accordance with theory, an econometric model was constructed to achieve the study's goal. The study's model is based on Augustine et al.'s (2020) research on how government spending affects Nigeria's economic expansion. Thus, the model is described as;

$$\text{GDP} = f(\text{GHS}, \text{GED}) \quad (1)$$

Where,

GDP = gross domestic product

GHS = government expenditure on highways and safety cost

GED = government expenditure on education

The model for this study is specified in a functional form as in equation 2, which is the modification of Augustine et al. (2020). Thus, functional form of the study's model is specified as:

$$\text{GDP} = f(\text{ACEX}, \text{HCEX}, \text{ECEX}) \quad (2)$$

The mathematical form of the model is:

$$\text{GDP} = \beta_0 + \beta_1\text{ACEX} + \beta_2\text{HCEX} + \beta_3\text{ECEX} \quad (3)$$

The econometric form of the model is:

$$\text{GDP} = \beta_0 + \beta_1\text{ACEX} + \beta_2\text{HCEX} + \beta_3\text{ECEX} + \mu_i \quad (4)$$

Where;

GDP = Gross domestic product

ACEX = Agricultural capital expenditure

HCEX = Health capital expenditure

ECEX = Education capital expenditure

$\beta_0, \beta_1, \beta_2, \beta_3$ = Slope of the coefficients

μ is the stochastic error term which explains other variables that cannot be captured in the model

Estimation Techniques and Procedures

To determine the impact of government capital expenditure on economic growth in Nigeria, we need advanced econometric techniques. So we estimated the parameters of the model using ARDL model since the variables are of different orders i.e I(0) and I(1). This model has several advantages over other approach. The model does not require that all the variables be I(1). However, none of the variables must be I(2) or above, if so, the ARDL approach will not be applicable. Also, the model produces robust results even in small samples. Additionally, this technique gives unbiased estimate of the long run model and valid t-statistics even in the presence of endogenous regressors. We also used Augmented Dickey-Fuller test to test for unit root since the data is time series. ADF is chosen because it can handle bigger and more complex time series models. Similarly, we used ARDL Bound test cointegration approach to test for long run relationship among the variables.

3.2 Nature and Sources of Data

Time series data on the variables were collected for this investigation. GDP, ACEX (agriculture capital expenditure), ECEX (education capital expenditure), and HCEX (health capital expenditure) are the variables included in this analysis. GDP is referred to in this context as the dependent variable, whereas ACEX, ECEX, and HCEX are the independent variables. The Central Bank of Nigeria Statistical Bulletin, the National Bureau of Statistics, the World Bank database, the Budget Office, textbooks, and the internet were the sources of information used in the study. Time series data on the variables were collected for this investigation. GDP, ACEX (agriculture capital expenditure), ECEX (education capital expenditure), and HCEX (health capital expenditure) are the variables included in this analysis. GDP is referred to in this context as the dependent variable, whereas ACEX, ECEX, and HCEX are the independent variables. The Central Bank of Nigeria Statistical Bulletin, the National Bureau of Statistics, the World Bank database, the Budget Office, textbooks, and the internet were the sources of information used in the study.

Table 1

Summary of Unit Root Test

Augmented Dickey-Fuller Unit Root Test

Variables	ADF Test	5% critical value	Order of Integration
GDP	-5.1773	-2.9810	I(0)
ACEX	-7.6142	-2.9719	I(1)
HCEX	-9.8994	-2.9678	I(1)
ECEX	-6.5943	-2.9678	I(1)

Source: Researchers' Computation Using Eviews 10.0

Table 1 below, which highlights the results of the Augmented Dickey-Fuller (ADF) unit root test summary, indicates that the series had a mixed order of integration. Where the ADF Statistics is smaller than the crucial value at the 5 percent significance level, the stationarity attribute is identified. Furthermore, the null hypothesis' rejection at the five percent significance level supports the series' stationarity. The GDP was discovered to be stationary at level, whereas the ACEX, HCEX, and ECEX series would become stationary at first difference. This was a mixed order, as the integration process revealed, so the ARDL technique was required. Thus, at the 5% level of significance, we have sufficient evidence to rule out the null hypothesis.

Table 2

ARDL Bound Test Results

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)

			Asymptotic: n=1000	
F-statistic	12.740112	10%	2.72	3.77
K	3	5%	3.23	4.35
		2.5%	3.69	4.85
		1%	4.29	5.61

Source: Researcher's Computation using E-views 10.0

Since the stationarity status has been established through ADF unit root test, the ARDL Bounds testing approach to cointegration was used to analyse the long run relationship among the variables namely GDP, HCEX, ACEX and ECEX. From the result of the ARDL bounds test shown in table 2 the F-Statistics was obtained 12.740112 From the obtained results, 12.740112 is greater than the upper and lower bound at 5 percent level of significance. This means that there is a long run co integration between government capital expenditure and economic growth. Therefore, the null hypothesis of no cointegration could thus be rejected.

Table 3

Long- Run ARDL Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.92095	0.325990	0.365719	0.0178
D(GDP(-1))	0.96774	1.363637	0.709680	0.0484
D(ACEX)	0.65565	0.899748	0.214512	0.0320
D(ECEX)	0.52048	0.420653	0.387290	0.0250
D(HCEX)	0.31816	0.650532	1.438609	0.1632

Source: Researcher's Computation using E-views 10.0

The results then showed that the bound test of the ARDL model was used to estimate the parameters of the variables if they were co-integrated. According to the table, the coefficient for the GDP's historical value is 0.966774. This suggests that there is a positive correlation between the past and present values of economic growth. Additionally, the ACEX, ECEX, and HCEX coefficients, which were equivalent to 0.65565, 0.52048, and 0.31816, respectively, have a favorable impact on the GDP, which is used to gauge economic expansion.

Table 4**Short - Run ARDL**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.222011	2783.263	-2.797665	0.4332
D(GDP(-1))	0.218282	1.394267	2.565562	0.0311
D(ACEX(-1))	0.613609	51.17221	2.487841	0.0504
D(HCEX(-1))	0.434852	222.4770	2.543913	0.0363
D(ECEX(-1))	-0.348312	155.8548	-2.796393	0.0103
ECM(-1)	-0.909726	0.567384	-2.603369	0.1225
R-squared	0.628276	Durbin-Watson stat	1.501277	
Adjusted R-squared	0.482249			
F-statistic	12.74011			
Prob(F-statistic)	0.008372			

Source: Researcher's Computation using E-view 10.0

GDP's lagged value has a coefficient of 0.2182. It demonstrates that a unit rise in GDP's historical value will result in a 0.22 percent increase in GDP's current value. With a coefficient of 0.614, agricultural capital expenditure (ACEX) significantly and favorably affects GDP. This suggests that the GDP will increase by roughly 0.61 percent for every unit increase in ACEX. Furthermore, with a correlation of 0.4349, health capital expenditure (HCEX) significantly and favorably influences economic growth. In other words, economic growth will rise by 0.4 percent on average for every unit increase in HCEX.

On average, a unit increase in education capital expenditure (ECEX) is expected to reduce economic growth by 0.3 percent, according to the coefficient of education capital expenditure (ECEX), which was recorded at -0.348. Despite being negative, the coefficient of ECEX is statistically significant at the five percent significance level. However, because the coefficient is negative, which goes against the expectations of this study, the signs of ACEX and HCEX do not fit to a priori assumption, although ECEX does.

The percentage that the independent variables account for of the fluctuations in the dependent variable was indicated by the coefficient of determination, or R². According to the calculated R² value of 0.7882, ACEX, HCEX, and ECEX account for a large 79% of GDP variations, with the remaining 21% being related to other factors that the error term captures. The model yielded an F-Statistics of 12.74011, and a p-value of 0.008 indicating that the significance level

was set at 5 percent. This conclusion indicates that the independent variables have a combined significant impact on the dependent variable, indicating the model's robust specification.

In addition, the Durbin-Watson statistic is used to determine whether autocorrelation exists in the residuals. The D-W statistic, which has a value of 1.5, is around 2, indicating that there are no autocorrelation problems in the model. Thus, it may be deduced that there is no correlation among the model's residuals.

4.2. Post-Estimation Tests

Test of Heteroscedasticity

Table 5

Summary of Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.634635	Prob. F(4,24)	0.6427
Obs*R-squared	2.773991	Prob. Chi-Square(4)	0.5963

Source: Researcher’s Compilation using Eviews 10

The validity and dependability of the outcome estimations are demonstrated by this test. At the five percent significance level, the p value of 0.64 is greater than 0.05. This means that the mean and variance are consistent throughout and that there is no heteroscedasticity in the residuals. Thus, it is not possible to reject the null hypothesis that there is no heteroscedasticity in the residuals.

4.3 Discussion of Findings

The main conclusions of this review are presented in this section. The coefficient for the GDP's lagged value is 0.2182. This implies that the GDP will increase by 0.22 percent in the present for every 1% increase in its prior value. With a coefficient of 0.614, agricultural capital expenditure (ACEX) significantly and favorably affects GDP. Therefore, a 1% increase in ACEX will translate into a 0.61 percent increase in GDP. But health capital expenditure (HCEX) also contributes significantly and favorably to economic growth (0.4349). In other words, the economic rate of growth will improve by 0.4 percentage points for every percentage point increase in HCEX.

Based on these benefits, government capital investments in agriculture and health have essentially promoted Nigeria's economic growth over the research period. This is related to the fact that the sectors receive their allotted monies under proper supervision, which promotes economic expansion.

On average, a one percent increase in education capital expenditure (ECEX) is expected to reduce economic growth by 0.3 percent, according to the coefficient of education capital expenditure (ECEX), which was recorded at -0.348. Despite being negative, the coefficient of ECEX is statistically significant at the five percent significance level. The ECEX's detrimental

effects on economic growth imply that insufficient funding is provided to the sector to deliver high-quality instruction that can boost Nigeria's economy. Nigeria's economic growth is positively and significantly impacted by capital expenditures.

However, because the coefficient is negative, which goes against the expectations of this study, the signs of ACEX and HCEX do not fit to a priori assumption, although ECEX does. The results of this investigation are consistent with those of Adeyemi and Adeoye (2020); Ogundipe and Oluwatobi (2013), among others. According to their findings, government capital expenditures on health and agriculture have a major and favorable influence on Nigeria's economic growth.

The dynamic model's rate of self-adjustment to return to equilibrium from short-term disequilibrium was made clear by the ECM. The coefficient, which stands at -0.9097, shows that, during the current era, the short run shock-induced divergence from the long-term equilibrium is corrected for at a rate that approaches 91 percent.

4.0 Presentation of Results and Discussions of Finding

4.1 Summary of Unit Root Test

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Since the stationarity status has been established through ADF unit root test, the ARDL Bounds testing approach to cointegration was used to analyse the long run relationship among the variables namely GDP, HCEX, ACEX and ECEX. From the result of the ARDL

bounds test shown in table 2 the F-Statistics was obtained 12.740112 From the obtained results, 12.740112 is greater than the upper and lower bound at 5 percent level of significance. This means that there is a long run co integration between government capital expenditure and economic growth. Therefore, the null hypothesis of no cointegration could thus be rejected.

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4.2.1 Summary of Test of Heteroscedasticity

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Obs*R-squared	2.773991	Prob. Chi-Square(4)	0.5963

Source: Researcher's Compilation using Eviews 10

The validity and dependability of the outcome estimations are demonstrated by this test. At the five percent significance level, the p value of 0.64 is greater than 0.05. This means that the mean and variance are consistent throughout and that there is no heteroscedasticity in the residuals. Thus, it is not possible to reject the null hypothesis that there is no heteroscedasticity in the residuals.

4.3 Discussion of Findings

The main conclusions of this review are presented in this section. The coefficient for the GDP's lagged value is 0.2182. This implies that the GDP will increase by 0.22 percent in the present for every 1% increase in its prior value. With a coefficient of 0.614, agricultural capital expenditure (ACEX) significantly and favorably affects GDP. Therefore, a 1% increase in ACEX will translate into a 0.61 percent increase in GDP. But health capital expenditure (HCEX) also contributes significantly and favorably to economic growth (0.4349). In other words, the economic rate of growth will improve by 0.4 percentage points for every percentage point increase in HCEX.

Based on these benefits, government capital investments in agriculture and health have essentially promoted Nigeria's economic growth over the research period. This is related to the fact that the sectors receive their allotted monies under proper supervision, which promotes economic expansion.

On average, a one percent increase in education capital expenditure (ECEX) is expected to reduce economic growth by 0.3 percent, according to the coefficient of education capital

expenditure (ECEX), which was recorded at -0.348. Despite being negative, the coefficient of ECEX is statistically significant at the five percent significance level. The ECEX's detrimental effects on economic growth imply that insufficient funding is provided to the sector to deliver high-quality instruction that can boost Nigeria's economy. Nigeria's economic growth is positively and significantly impacted by capital expenditures.

However, because the coefficient is negative, which goes against the expectations of this study, the signs of ACEX and HCEX do not fit to a priori assumption, although ECEX does. The results of this investigation are consistent with those of Adeyemi and Adeoye (2020); Ogundipe and Oluwatobi (2013), among others. According to their findings, government capital expenditures on health and agriculture have a major and favorable influence on Nigeria's economic growth.

The dynamic model's rate of self-adjustment to return to equilibrium from short-term disequilibrium was made clear by the ECM. The coefficient, which stands at -0.9097, shows that, during the current era, the short run shock-induced divergence from the long-term equilibrium is corrected for at a rate that approaches 91 percent.

5.0 Conclusion and Policy Recommendations

5.1 Conclusion

This study looks at how government capital spending affected Nigeria's economic growth from 1990 to 2022. The study has demonstrated that government capital spending has a statistically significant positive impact on Nigeria's economic growth. Both theoretical and empirical evidence point to the importance of government capital expenditures in promoting economic growth. Spending by the government is therefore a helpful tool for fiscal policy that would aid in putting the economy on a development path. Along with attracting investment, infrastructure spending would boost economic output and give young people, who are in dire need of jobs, new options. In conclusion, government capital investment on a few vital economic sectors, such as agriculture, health, and education, will benefit people both socially and economically.

5.2 Policy Recommendations

The study's conclusions led to the formulation of the following policy recommendations.

- i. To reach worldwide standards, the government should construct new hospitals and rehabilitate the ones that already exist. Modern laboratory equipment should also be bought in order to lower the number of individuals traveling abroad to seek medical care. This would increase the government's revenue.
- ii. In order to revitalize Nigeria's failing educational system, the government should allocate significant funds to the field of education. This will motivate Nigerians pursuing education elsewhere to return home.
- iii. The government should provide high-quality infrastructure for the agricultural sector, including storage facilities, well-maintained roads, field equipment, and so forth. If all of these were implemented, agriculture would attract investment. Food security, higher output, the creation of jobs, and a source of income for the government would all be improved by this.

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