

#### GOVERNMENT EXPENDITURE AND ECONOMIC DEVELOPMENT IN NIGERIA: A DISAGGREGATED APPROACH

Bolanle Folakemi Odetola<sup>1</sup>, Oluwagbenga David Adekunle<sup>2</sup>,

and Olalekan Akinrinola (Ph.D.)<sup>3</sup>

<sup>1</sup>Accounting, Finance and Taxation Department, Caleb University, Imota, Lagos State. Email: <u>bolanleodetola@gmail.com</u>

<sup>2</sup>Accounting, Finance and Taxation Department, Caleb University, Imota, Lagos State. Email: <u>adekunlegbenga196@gmail.com</u>

<sup>3</sup>Accounting, Finance and Taxation Department, Caleb University, Imota, Lagos State. Email: <u>olalekan.akinrinola@calebuniversity.edu.ng</u>

#### Cite this article:

Odetola, B. F., Adekunle, O. D., Akinrinola, O. (2025), Government Expenditure and Economic Development in Nigeria: A Disaggregated Approach. African Journal of Accounting and Financial Research 8(2), 84-97. DOI: 10.52589/AJAFR-XIBNKBWI

#### Manuscript History

Received: 10 Apr 2025 Accepted: 12 May 2025 Published: 26 May 2025

**Copyright** © 2025 The Author(s). This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

**ABSTRACT:** This study evaluated government expenditure and economic development in Nigeria: a disaggregated approach using time series data of 34 years (1990-2023). The variables used for the study include government spending on education, government spending on health, government spending on agriculture as the independent variables and GDP per capita as the dependent variable. Three objectives were formulated for the study and three hypotheses were also prepared in line with the objectives. Ex-post-facto research design was employed, and the time series data was generated and analysed, using regression analysis, Autoregressive Distributed Lagged (ARDL) testing technique and unit root test, to examine the long run causal effect relationship that exist between government expenditure and economic development in Nigeria. The study finds that government spending on education has a significant positive effect on GDP per capita, with an unstandardized coefficient of 0.186 and a p-value of 0.031. Conversely, government expenditure on health showed an insignificant positive impact, with an unstandardized coefficient of 0.062 and a p-value of 0.455. Government spending on agriculture was found to have a negative effect, but it was not statistically significant, with an unstandardized negative coefficient of 0.031 and a p-value of 0.403. The regression model explained approximately 99.5% of the variation in GDP per capita ( $R^2 = 0.995$ ), indicating a strong relationship between government spending and economic development. The results concluded that increased investments in education, coupled with reforms in health and agricultural policies, are essential for promoting long-term economic development in Nigeria. Based on these findings, the study recommended prioritizing education, improving health expenditure efficiency, enhancing agricultural policies, and ensuring effective resource allocation to maximize the potential of government spending in economic development.

**KEYWORDS:** GDP per Capita, Agriculture, Education, Health and Government Expenditure.



# **INTRODUCTION**

Government expenditure plays a critical role in driving economic development, particularly in developing economies like Nigeria. Economic development refers to sustained improvements in the living standards of a population, encompassing higher income levels, improved health care, quality education, and infrastructural development (Hariram et al., 2023). In Nigeria, government expenditure is categorized into capital and recurrent expenditures, both of which are vital for fostering economic development and addressing socio-economic challenges (Bhavsar et al., 2023). Capital expenditure is geared towards long-term investments in infrastructure, education, and healthcare, while recurrent expenditure primarily caters to salaries, pensions, and administrative costs (Imouokhome, 2021). Over the years, Nigeria has witnessed fluctuations in government expenditure due to changes in oil revenues, policy priorities, and political regimes. Oil revenue remains the backbone of Nigeria's fiscal structure, accounting for over 60% of government income, which directly influences expenditure patterns (Simpasa, 2024). Despite significant allocations to public services, the country continues to grapple with underdevelopment characterized by poor infrastructure, high unemployment, and low human capital development (Joy-Uyo et al., 2024).

Studies reveal that the relationship between government expenditure and economic development is not linear. While some argue that increased government spending leads to growth through enhanced infrastructure and improved public services, others highlight inefficiencies such as corruption, waste, and misallocation of resources as hindrances (Akuche, et al., 2024). Nigeria's experience reflects a paradox where substantial government spending has not translated into proportional economic development, necessitating an investigation into the factors undermining effective expenditure utilization (Buny, 2020). Understanding the impact of government expenditure on Nigeria's economic development is crucial for designing policies that enhance fiscal efficiency, promote sustainable development, and improve living standards.

#### **Statement of the Problem**

Despite Nigeria's significant government expenditure, economic development remains elusive. Over the years, substantial allocations to critical sectors such as education, health, and infrastructure have failed to translate into tangible improvements in the living standards of citizens. For instance, the Nigerian government allocated  $\aleph 2.05$  trillion to education in the 2023 budget, yet over 20 million children remain out of school, according to UNICEF (2023). Similarly, despite increasing capital expenditures on health care, Nigeria continues to grapple with poor health indicators, ranking 187 out of 191 countries in the World Health Organization's global health system rankings (WHO, 2022).

A key issue lies in the inefficiency and mismanagement of government funds. Corruption, bureaucratic delays, and project abandonment often undermine the effectiveness of government spending (Oluseye, 2024). For example, in 2022, a N50 billion road rehabilitation project in the South-East was left uncompleted, rendering the funds wasted and the project's intended benefits unrealized. These inefficiencies highlight the gap between government expenditure and economic outcomes (CBN, 2023). Moreover, the dependence on oil revenues makes Nigeria's government expenditure vulnerable to global price fluctuations, often disrupting fiscal planning (Osmond & Okechukwu, 2024). The COVID-19 pandemic further exposed these vulnerabilities, with sharp declines in oil revenues leading to budget cuts and



stalled development projects (Hoang et al., 2021). This study seeks to examine the disconnect between government expenditure and economic development in Nigeria, identifying underlying issues and proposing actionable solutions. Addressing these problems is critical for ensuring that government spending yields meaningful and sustainable economic progress for the Nigerian populace.

## **Objectives of the Study**

This study focuses on examining the relationship between government expenditure and economic development in Nigeria. The specific objectives are to:

- i. examine the relationship between government spending on education and economic development.
- ii. evaluate the effect of government spending on health on economic development.
- iii. determine the impact of government spending on agriculture on economic development.

### **Research Questions**

The following research questions were answered in this study:

- i. What is the relationship between government spending on education and economic development?
- ii. To what extent does government spending on health have an effect on economic development?
- iii. How does government spending on agriculture impact economic development in Nigeria?

### **Research Hypotheses**

The hypotheses that provide for this study are stated in null forms below:

Ho1: There is no significant relationship between government spending on education and economic development.

H<sub>0</sub>2: Government spending on health has no significant effect on economic development.

H<sub>0</sub>3: Government spending on agriculture has no significant impact on economic development.



#### LITERATURE REVIEW

#### **Economic Development**

Economic development refers to the sustained improvement in the economic well-being and quality of life of a nation's population. It encompasses increased income levels, improved health care, access to education, infrastructure development, and the reduction of poverty and inequality (Amar et al., 2020). Unlike economic growth, which focuses solely on increases in a country's gross domestic product (GDP), economic development is a multidimensional process that addresses both quantitative and qualitative aspects of progress (Barska et al., 2019). In developing nations, economic development is critical to alleviating poverty and achieving long-term prosperity. However, achieving this goal requires effective governance, sound fiscal policies, and the efficient use of resources. For example, investments in infrastructure and education can enhance productivity and drive innovation, which are essential for sustainable development (Awan, 2021). Additionally, economic development is closely linked to social and environmental factors, such as gender equality, environmental sustainability, and social inclusion (Polasky et al., 2019).

#### Gross Domestic Product (GDP) per Capita

GDP per capita is a widely used indicator that measures the average economic output per person in a country. It is calculated by dividing the total GDP by the population size, providing insights into the standard of living and economic well-being of citizens (World Bank, 2021). A higher GDP per capita typically signifies better access to goods, services, and resources, while lower values indicate economic challenges such as poverty and inequality. GDP per capita is crucial for comparing economic performance across countries and overtime. For instance, developed countries often have significantly higher GDP per capita compared to developing nations, reflecting better infrastructure, industrialization, and productivity. However, it is not without limitations, as it does not account for income distribution or non-monetary aspects of well-being, such as environmental quality and health (Mohamed et al., 2022).

#### **Government Expenditure**

Government expenditure refers to the total spending by a government on goods, services, and public projects to promote economic stability and development. It is broadly categorized into capital and recurrent expenditures. Capital expenditure involves long-term investments in infrastructure, education, and healthcare, while recurrent expenditure covers operational costs such as salaries, pensions, and maintenance (Okonkwo et al., 2023). It plays a critical role in influencing economic development by fostering infrastructure development, improving human capital, and stimulating economic activities. In developing countries like Nigeria, significant portions of government budgets are allocated to sectors such as education and health to address poverty and inequality (Prince et al., 2023). However, inefficiencies such as corruption and mismanagement often hinder the effectiveness of public spending, leading to suboptimal outcomes. Efficient allocation and utilization of government resources are essential for achieving sustainable economic development (Okonkwo et al., 2023).

### **Government Spending on Education**



Government spending on education is a critical investment in human capital development, driving economic development and reducing inequality. By funding schools, training programs, and research institutions, governments equip citizens with skills and knowledge essential for innovation and productivity (Pee et al., 2020). Education spending also fosters social mobility, allowing individuals from disadvantaged backgrounds to access opportunities for personal and professional growth. In Nigeria, government expenditure on education has been historically low, with allocations often falling below the United Nations Educational, Scientific and Cultural Organization (UNESCO) recommendation of 15-20% of the national budget (UNESCO, 2022). This underfunding has resulted in challenges such as inadequate infrastructure, poorly trained teachers, and high rates of out-of-school children. Increasing education funding and ensuring its efficient utilization are crucial for addressing these issues and achieving sustainable economic development (Agbedahin, 2019).

# **Government Spending on Health**

Government spending on health is essential for improving the well-being of citizens and fostering economic development. By funding healthcare systems, governments can enhance access to medical services, reduce mortality rates, and improve productivity by maintaining a healthy workforce (WHO, 2021). Public investment in health infrastructure, vaccination programs, and disease prevention initiatives also reduce the economic burden of illness on individuals and societies. The government spending on health remains low, often below the World Health Organization (WHO), which recommended 15% of the national budget (WHO, 2021). This underfunding has resulted in inadequate health facilities, a shortage of medical professionals, and poor health outcomes. For instance, Nigeria struggles with high maternal and child mortality rates, ranking among the highest globally (UNICEF, 2023). Increasing health expenditure and ensuring accountability in its use are crucial for achieving universal health coverage and sustainable development (WHO, 2019).

### **Government Spending on Agriculture**

Government spending on agriculture plays a vital role in promoting food security, employment, and economic development. Investments in agricultural infrastructure, research, subsidies, and rural development programs enhance productivity and resilience to climate change. These initiatives can help reduce poverty, particularly in developing nations where agriculture constitutes a significant portion of the economy (World Bank, 2021). In Nigeria, government expenditure on agriculture has fluctuated over the years, often falling short of the Maputo Declaration target of allocating at least 10% of the national budget to the sector (FAO, 2022). This inadequate funding has led to challenges such as poor infrastructure, limited access to credit, and low adoption of modern farming techniques (Balana et al., 2022). Despite these setbacks, agriculture remains a key driver of Nigeria's economy, contributing significantly to GDP and employing a large portion of the population. Increased and efficient spending on agriculture is essential for achieving food security and rural development (Pawlak et al., 2020).

# **Keynesian Economic Theory**

Keynesian Economic Theory was propounded by John Maynard Keynes in 1936 in his seminal work The General Theory of Employment, Interest, and Money. The theory emphasizes the critical role of government intervention in stabilizing the economy, particularly during recessions. Keynes argued that during periods of low demand, private sector investment often



fails to stimulate economic activity. As a result, increased government spending can boost aggregate demand, create jobs, and drive economic recovery (Wang et al., 2023).

Keynesian theory assumes that markets do not always self-correct efficiently and that active fiscal policies, such as public expenditure and taxation, are necessary to achieve economic stability. The theory has been widely supported by economists like Paul Samuelson, who emphasized its relevance during economic downturns, such as the Great Depression and the 2008 financial crisis (Bibow, 2020). However, critics such as Milton Friedman and proponents of monetarism argue that excessive government intervention can lead to inflation and inefficiencies, emphasizing the role of monetary policy over fiscal measures (Ali et al., 2023). Despite criticisms, Keynesian economics remains influential in shaping fiscal policies, particularly in addressing unemployment and economic stagnation.

### **Endogenous Growth Theory**

Endogenous Growth Theory, developed by economists Paul Romer and Robert Lucas in the late 1980s and early 1990s, emphasizes the role of internal factors, such as technological innovation, human capital, and knowledge accumulation, in driving long-term economic growth. Unlike earlier theories that viewed technological progress as an external factor, Endogenous Growth Theory suggests that investments in education, research, and development (R&D) can foster sustained growth by enhancing the productivity of workers and capital (Sarpong et al., 2023; Habib et al., 2019).

The theory assumes that economies can achieve perpetual growth by investing in innovation, human capital, and institutions that promote knowledge creation. According to Roufagalas and Orlov (2020), technological progress is endogenous and results from intentional investments in human and physical capital. This view contrasts with the classical Solow-Swan model, which posits that technological progress is exogenous and occurs independently of economic decisions. Supporters of the theory, including economists like Jeffrey Sachs and Robert Barro, argue that government spending on education, R&D, and infrastructure can foster sustainable economic growth (Zhang et al., 2021). Critics, however, argue that the theory's assumptions on the role of knowledge and human capital can be overly simplistic and difficult to apply in practice, particularly in developing countries (Faggian et al., 2019). Despite this, Endogenous Growth Theory remains influential in shaping policies on innovation and economic development.

### **Empirical Review**

Duruibe et al. (2023), investigated the effect of government public expenditures on Nigeria's economic development using the sectoral economic function approach. They employed the real GDP as a proxy for economic development while government's expenditures on administrative services, economic services, social and community services, and transfers were used as the predictor variables in the study. The results from the cointegration test and VECM estimate revealed that all the predictor variables, apart from EAS, had a positive relationship with GDP. While EES and ESCS and EAS have a significant relationship with GDP, GTR has an insignificant relationship with GDP. Using the Johansen method Musa et al. (2023) showed that over the period 1970-2009, expenditure on health and education sectors in Nigeria correlated strongly with economic growth.



Al-Fawwaz (2021) examined the impact of Nigerian government expenditure on economic growth from 1970 to 2019 using time series data. The Autoregressive Distributed Lag (ARDL) model is utilized in this paper. The study takes structural breaks in the unit root test and the cointegration analysis into account to guarantee the robustness of the conclusions. The study concluded that in contrast to recurrent spending, which has no discernible effect on economic growth over the short- or long-term, capital expenditure has a positive and considerable impact on growth. Therefore, it suggested that the government should allocate a larger portion of capital funds, particularly to worthwhile initiatives that directly impact the welfare of the populace. Madugba et al. (2021) used dynamic ordinary least squares (DOLS) to estimate the impact of government expenditure on economic growth in Nigeria between 1981 and 2015. The result of the study indicated a strong impact of government expenditures on administration and economic services on economic growth. Roufagalas et al. (2020) used ordinary least squares method (OLS) to estimate the effect of government spending on economic growth in Malaysia between 1970 and 2014. Evidence from the study indicated that expenditures on housing and development reduced output growth while expenditures on education, defence, healthcare and government operations did not significantly affect economic growth. Bingilar et al. (2020) examined the impact of government expenditure on Nigeria's economic growth (measured by GDP). For the years 1998 to 2017, secondary time series panel data was gathered from the Central Bank of Nigeria's (CBN) statistical bulletin. The dependent variable, GDP, which serves as a proxy for economic growth, was regressed as a function of the study's variables using the Ordinary Least Squares (OLS) technique. Inflation rate (IFR) and interest rate (ITR) are the independent variables. The analysis' findings demonstrated that both the IFR and ITR have no significant effect on Nigeria's GDP. The report suggested that the government should put in place measures to control inflation and guarantee sustainable economic growth; financial policies that improve investment-friendly rates of interest should be developed and put into effect. Other factors that deter investment in the nation should also be taken into account.

Pawlak et al. (2020) analysed the nexus between public spending and output growth using Italian data spanning from 1861 to 2008 and the finding established a non-linear relationship between public spending and economic growth for Italy. Bibow (2020) investigated the nexus between public spending and output growth; the result upheld the conventional belief that large government size is detrimental to growth. The studies by Ali et al. (2020) and Agbedahin (2019) revealed a strong positive correlation between government spending and economic growth. In another study by Dudzeviciute et al. (2018) using data for eight European Union member countries, a strong positive association was found between public spending and economic growth. Wang et al. (2023) and Sarpong et al. (2021) investigated national income and government expenditure nexus in Nigeria and found that there is a stable long-run relationship between the fiscal variable and economic growth.

Ebong et al. (2016) examined the impact of capital and recurrent expenditure on economic growth in Nigeria over the period 1970-2012 using VECM. The result reveals that capital expenditure on infrastructures positively and significantly influences economic growth in both short and long runs. Onifade et al. (2020), using ARDL model and 1981-2017 Nigerian data, discovered that recurrent expenditure negatively impacts on national output, whereas capital expenditure, albeit insignificantly, positively affects GDP. The findings of these studies have validated the propositions of Barro's (1990) endogenous model that productive expenditures



have the potential to boost level output and economic growth rate in both short and long runs.

Lin et al. (2015) using a panel of 29 OECD countries found a positive relationship between military spending and education and health expenditure. Using the ARDL technique on 2004-2019 Afghanistan data, Barlas (2020) found that current expenditures on education and infrastructure have a positive impact on economic growth as opposed to security expenditure, which negatively affects economic growth in Afghanistan. In contrast, Phiri (2019) in his analysis of the effect of military expenditure on economic growth found that the current level of defence expenditure is too high and does not support growth and development. Similarly, d'Agostino et al. (2019), using large sample data for 109 middle- and low-income countries, found that defense expenditure has a negative impact on economic growth.

#### **Gaps in Literature**

While significant research has been conducted on government expenditure and its effects on economic development, several gaps persist in literature. This study addresses these gaps by focusing on sector-specific government spending, specifically in education, health, and agriculture and their distinct impacts on long-term economic development in Nigeria. Unlike much of the existing literature, which treats government expenditure as a homogenous factor, this study takes a more granular approach, analyzing the separate effects of spending in these critical sectors (Guerrero et al., 2022). Additionally, this study examines the efficiency of government spending within the context of Nigeria's developing economy. While previous research has explored the relationship between government expenditure and development, few have delved into the mechanisms of fund allocation and utilization. The study incorporates factors such as inefficiencies, corruption, and mismanagement, which have historically hindered the potential benefits of government spending (Ahuja et al., 2020). Finally, this study incorporates the role of political institutions and governance quality in shaping the outcomes of government spending. It explores how factors such as political stability and corruption influence the effectiveness of public expenditure, addressing a gap where studies often overlook the interaction between governance and economic development (Wong, 2020). This comprehensive scope allows for a more nuanced understanding of government expenditure's impact on Nigeria's economic development.

### METHODOLOGY

#### **Research Design**

The research design for this study on government expenditure and economic development in Nigeria adopted a quantitative approach. The study employed correlational research design to examine the relationship between government spending on sectors such as education, health, and agriculture, and GDP per capita. Data for this study were collected through secondary sources that focused on publicly available datasets from reputable institutions such as the World Bank, Central Bank of Nigeria (CBN) Statistical Bulletin, and Nigeria's National Bureau of Statistics. Time-series data from 1990 to 2023 were utilized that cover government expenditure across sectors (education, health, and agriculture) and economic indicators like GDP per capita.



## Model Specification

For this study on the relationship between government expenditure and economic development in Nigeria, the following model was formulated:

where:

GDP<sub>PC</sub> = Gross Domestic Product (GDP) per Capita

EDU = Government Spending on Education

HEA = Government Spending on Health

AGR = Government Spending on Agriculture

 $\beta$  = average change in y that is associated with unit change in variable x

 $\mu = error term.$ 

### DATA PRESENTATION AND DISCUSSION OF RESULTS

GDPPC	EDU	HEA	AGR
5.1245	1.8974	1.5971	1.0978
5.3360	2.1063	1.8537	1.4007
6.0085	3.0876	3.0832	1.9936
3.7023	-0.5356	-0.8234	-0.6804
0.6904	0.8761	0.9858	0.7675
34	34	34	34
	5.1245         5.3360         6.0085         3.7023         0.6904	5.1245       1.8974         5.3360       2.1063         6.0085       3.0876         3.7023       -0.5356         0.6904       0.8761	5.1245       1.8974       1.5971         5.3360       2.1063       1.8537         6.0085       3.0876       3.0832         3.7023       -0.5356       -0.8234         0.6904       0.8761       0.9858

#### **Table 1: Descriptive Statistics**

**Source:** *Extracted from E-views, Version 9 (2025)* 

Table 1 shows the mean value of GDP<sub>PC</sub> is 5.1245, indicating a relatively consistent level across the dataset. EDU, HEA, and AGR have lower means of 1.8974, 1.5971, and 1.0978, respectively, suggesting relatively modest contributions from these sectors. Median values across the variables align closely with the means, reflecting a balanced distribution, though the minimum values for EDU (-0.5356), HEA (-0.8234), and AGR (-0.6804) highlight periods of negative contributions in these sectors. The maximum values for all variables indicate peak levels within the data, with GDP<sub>PC</sub> reaching a high of 6.0085, and EDU, HEA, and AGR peaking at 3.0876, 3.0832, and 1.9936, respectively. Standard deviation values show variability, with HEA exhibiting the highest dispersion (0.9858), followed by EDU (0.8761), AGR (0.7675), and GDP<sub>PC</sub> (0.6904). Skewness values reveal negative skewness for all variables, implying that most observations are concentrated towards the higher end of the distribution. Among them, EDU (-0.9123) and AGR (-0.8548) exhibit stronger asymmetry.



Variable	Test @ Trend	ADF Critical Values@ 5%	<b>P-values</b>	Remark
<b>GDP</b> <sub>PC</sub>	-5.710	-3.557	0.000**	I(I)
EDU	-8.153	-3.557	0.000**	I(1)
HEA	-9.915	-3.557	0.000**	I(1)
AGR	-4.444	-3.612	0.008**	I(1)

#### Table 2: Augmented Dickey Fuller (ADF) Unit Root Results

**Source:** Extracted from E-views, Version 9 (2025) \*\*signifies P-values @first order difference

The Augmented Dickey-Fuller (ADF) unit root test results presented in Table 2 indicate the stationarity properties of the variables: Gross Domestic Product per Capita (GDP<sub>PC</sub>), government spending on education (EDU), government spending on health (HEA), and government spending on agriculture (AGR). The test was conducted at trend level, and all variables were evaluated at their first difference, denoted as I(1). The critical value at a 5% significance level for the ADF test was used as a benchmark. The GDP<sub>PC</sub> variable had a negative ADF test statistic of 5.710, which exceeds the critical value of -3.557 in absolute terms, with a p-value of 0.000. This result demonstrates that  $GDP_{PC}$  is stationary at the first difference, as indicated by the remark I(1). Similarly, EDU exhibited a negative ADF statistic of 8.153, also surpassing the critical value of -3.557, with a p-value of 0.000. This confirms the stationarity of the education variable at the first difference. For the health sector (HEA), the ADF statistics were negative 9.915, which is significantly greater than the critical value of negative 3.557 in absolute terms. The corresponding p-value of 0.000 further validates that HEA is stationary at I(1). Lastly, the AGR variable displayed a negative ADF statistic of 4.444, exceeding the critical value of negative 3.612, with a p-value of 0.008. This indicates that agriculture spending is also stationary at the first difference.

#### Table 3: ARDL Result

Variables	Parameter	Coefficient	t-Value	<b>Pr(&gt; t )</b>
Constant		1.249	6.481	0.000
$(GDPPC)_{t-1}$	$\Box$ $\Box$ $_1$	0.684	14.441	0.000
EDU	$\beta_1$	0.186	2.273	0.031
HEA	$\beta_2$	0.062	0.757	0.455
AGR	β <sub>3</sub>	-0.031	-0.848	0.403

[Dependent = GDPPC)] Selected Model: ARDL (1, 0, 0, 0)

 $R^2 = 0.995$ ; Adj.  $R^2 = 0.995$ ; MSE = 0.060; AIC = -3.168; F-Stat. = 1608.90 (P-value = 0.000); DW = 1.324

**Source:** *Extracted from E-views, Version 9* (2025)

# H<sub>0</sub>1: Government spending on education has no significant effect on economic development.

For the education variable (EDU), the coefficient is 0.186 with a t-value of 2.273 and a p-value of 0.031. This result shows a positive and statistically significant effect of government spending on education on GDP<sub>PC</sub>. It suggests that investment in education contributes to economic development, as improvements in education enhance human capital and productivity. In view of the result, it portrayed that the null hypothesis was rejected while the alternate hypothesis



was accepted. Thus, government spending on education has a significant effect on economic development in Nigeria.

# H<sub>0</sub>2: There is no significant effect between government spending on health and economic development.

The government spending on health variable (HEA) has a coefficient of 0.062 with a t-value of 0.757 and a p-value of 0.455. While the coefficient is positive, the relationship is statistically insignificant. This suggests that government spending on health does not have a significant impact on GPC during the period, potentially due to inefficiencies or misallocation of health expenditures. In view of the result, it portrayed that the null hypothesis was accepted while the alternate hypothesis was rejected. Thus, there was no significant effect between government spending on health and economic development in Nigeria.

# H<sub>0</sub>3: Government spending on agriculture has no significant effect on economic development.

The government spending on agriculture variable (AGR) has a negative coefficient of 0.031 with a negative t-value of 0.848 and a p-value of 0.403. The negative and statistically insignificant coefficient implies that government spending on agriculture does not significantly impact GDP<sub>PC</sub>. Structural challenges or inefficiencies in the agricultural sector may hinder the expected positive contributions to economic development. In view of the result, it portrayed that the null hypothesis was accepted while the alternate hypothesis was rejected. Thus, government spending on agriculture has no significant effect on economic development in Nigeria.

The R<sup>2</sup> value of 0.995 indicates that the model explains 99.5% of the variation in the dependent variable, demonstrating excellent explanatory power. The Mean Squared Error (MSE) of 0.060 reflects the low average squared difference between observed and predicted values, highlighting high model accuracy. The Akaike Information Criterion (AIC) of -3.168 suggests the model is well-fitted with minimal complexity. The F-statistics of 1608.90, with a p-value of 0.000, confirms that the independent variables collectively significantly influence the dependent variable. The Durbin-Watson statistics of 1.324 suggest mild positive autocorrelation in the residuals, requiring further investigation.

### **Implication of the Findings**

The findings reveal a gap between government spending and its intended economic development outcomes. Despite significant resources allocated to education, health, and agriculture, inefficiencies and structural challenges undermine their potential contributions to GDP per capita. This study highlighted the need for policy reforms focusing on improving the efficiency, transparency, and effectiveness of government spending in Nigeria's key sectors to achieve meaningful economic development.



#### CONCLUSION AND RECOMMENDATIONS

This study highlighted the significant role of government expenditure in driving economic development in Nigeria. The findings reveal that spending on education has a strong positive impact on GDP per capita, emphasizing the importance of investing in human capital for sustainable growth. However, the positive but insignificant effect of health expenditure and the negative effect of agricultural spending suggest that inefficiencies and misallocation of resources in these sectors need to be addressed. To promote balanced economic development, the study calls for more efficient, targeted, and strategic public expenditure across key sectors, with a focus on education, health, and agriculture.

Based on the findings of this study, the following recommendations are made:

The government should prioritize increasing the efficiency and effectiveness of public spending on education, ensuring funds are allocated to improve infrastructure, teacher quality, and access to education at all levels. This will enhance human capital development and positively influence economic productivity. Healthcare spending should focus on improving service delivery, combating inefficiencies, such as corruption, and addressing gaps in access to healthcare facilities. These measures will help translate investments in health into higher economic output. For agriculture, there is a need for reforms to ensure government spending addresses structural challenges in the sector, such as inadequate funding, poor infrastructure, and low mechanization levels. Investments should target productivity-enhancing technologies, research, and rural development to maximize agriculture's contribution to economic development. Additionally, the government should adopt robust monitoring and evaluation frameworks to assess the outcomes of its expenditures, ensuring accountability and transparency in resource utilization. Policymakers must also collaborate with private sector stakeholders to supplement government spending and foster innovation.

### REFERENCES

- Agbedahin, A. V. (2019). Sustainable development, education for sustainable development, and the 2030 agenda for sustainable development: Emergence, efficacy, eminence, and future. *Sustainable Development*, 27(4): 669-680.
- Ahuja, D., & Pandit, D. (2020). Public expenditure and economic growth: Evidence from the developing countries. *FIIB Business Review*, 9(3): 228-236.
- Akuche, C. C., & Akindoyin, D. I. (2024). Elucidating the Problems of Service Delivery in the Nigerian Local Government System since the Fourth Republic. Kashere Journal of Politics and International Relations, 2(2): 396-406.
- Ali, A., Khokhar, B., & Sulehri, F. A. (2023). Financial Dimensions of Inflationary Pressure in Developing Countries: An In-depth Analysis of Policy Mix. *Journal of Asian Development Studies*, 12(3): 1313-1327.
- Amar, S., & Pratama, I. (2020). Exploring the link between income inequality, poverty reduction and economic growth: An ASEAN perspective. *International Journal of Innovation, Creativity and Change*, 11(2), 24-41.
- Awan, U. (2021). Steering for sustainable development goals: a typology of sustainable innovation. In *Industry, innovation and infrastructure* 1026-1036. Cham: Springer International Publishing.
- Balana, B. B., & Oyeyemi, M. A. (2022). Agricultural credit constraints in smallholder farming



in developing countries: Evidence from Nigeria. World Development Sustainability, 1, 100012.

- Barska, A., & JÄ, J. (2019). Indicator analysis of the economic development of Polish regions in the context of the implementation of the concept of sustainable development. *European Journal of Sustainable Development*, 8(5), 210-210.
- Bhavsar, V., & Samanta, P. K. (2023). Analysing the impact of quality of government expenditure on economic growth: evidence from Indian states. *International Journal of Sustainable Economy*, 15(1): 72-92.
- Bibow, J. (2020). The General Theory as' Depression Economics'? Financial Instability and Crises in Keynes's Monetary Thought. *Levy Economics Institute, Working Papers Series, Working Paper*, (974).
- Buny, A. A. (2020). Impact of Government Expenditure on Economic Growth in South Sudan. *Global Journal of Applied Sciences and Technology*, 5(1): 1-17.
- Faggian, A., Modrego, F., & McCann, P. (2019). Human capital and regional development. *Handbook of regional growth and development theories*, 149-171.
- Guerrero, O. A., & Castañeda, G. (2022). How does government expenditure impact sustainable development? Studying the multidimensional link between budgets and development gaps. *Sustainability science*, *17*(3): 987-1007.
- Habib, M., Abbas, J., & Noman, R. (2019). Are human capital, intellectual property rights, and research and development expenditures really important for total factor productivity? An empirical analysis. *International Journal of Social Economics*, 46(6): 756-774.
- Hariram, N. P., Mekha, K. B., Suganthan, V., & Sudhakar, K. (2023). Sustainalism: An integrated socio-economic-environmental model to address sustainable development and sustainability. *Sustainability*, 15(13): 10682.
- Hoang, A. T., Nižetić, S., Olcer, A. I., Ong, H. C., Chen, W. H., Chong, C. T., & Nguyen, X. P. (2021). Impacts of COVID-19 pandemic on the global energy system and the shift progress to renewable energy: Opportunities, challenges, and policy implications. *Energy Policy*, 154: 112322.
- Imouokhome, P. (2021). Leveraging the Pension Industry for Sustained Economic Growth and Development in Nigeria through Targeted Investments. *International Journal of Research and Innovation in Social Science*, 5(12): 802-805.
- Joy-Uyo, A. A., Adama, I., Sumaila, A., & Suleiman, R. (2024). Assessment of the Causes of Poverty and Unemployment in Omala Local Government Area, Kogi State, Nigeria. *International Journal of Democracy and Development Studies*, 6(4): 34-42.
- Lencucha, R., Pal, N. E., Appau, A., Thow, A. M., & Drope, J. (2020). Government policy and agricultural production: a scoping review to inform research and policy on healthy agricultural commodities. *Globalization and health*, 16(1): 11.
- Madugba, J. U., Agburuga, T. U., Egbide, B. C., Oludaro, S., & Falaye, J. (2021). Dysfunctional Association Between Public Expenditure Growth and National Consumption Cost: A Vector Error Correction Approach. Asian Economic and Financial Review, 11(10), 794â.
- Marson, F., Eagly, P., & Russell, O. M. (2023). Impact of social assistance programs on family economic welfare in urban environments: an analysis of equity and community engagement. *Law and Economics*, 17(3): 186-202.
- Mohamed, M. M. A., Liu, P., & Nie, G. (2022). Do knowledge economy indicators affect economic growth? Evidence from developing countries. *Sustainability*, 14(8): 4774.
- Musa, I., & Ismail, Y. (2023). Impact of Government Expenditure on Economic Growth in Nigeria: 1970-2020. International Journal of Management and Business Applied, 2(2): 94-107.
- Okonkwo, O. N., Ojima, D. A. V. I. S., Ogwuru, H. O. R., Echeta, D. O., Duru, E. E., Akamike,



Volume 8, Issue 2, 2025 (pp. 84-97)

O. J., & Manasseh, C. O. (2023). Impact of Government Capital Expenditure on the Economic growth rate of Nigeria. *Journal of Economics and Allied research*, 8(1): 335-348.

- Oluseye, O. (2024). Exploring potential political corruption in large-scale infrastructure projects in Nigeria. *Project Leadership and Society*, *5*, 100108.
- Osiobe, E. U. (2019). A literature review of human capital and economic growth. *Business and Economic Research*, 9(4): 179-196.
- Osmond, O. N., & Okechukwu, A. J. (2024). Public Debt Crisis in Nigeria: Causes and Consequences. *International Journal of Social Sciences and Management Research*, 10(4): 166-175.
- Pawlak, K., & Kołodziejczak, M. (2020). The role of agriculture in ensuring food security in developing countries: Considerations in the context of the problem of sustainable food production. *Sustainability*, 12(13): 5488.
- Pee, S., & Vululleh, N. (2020). Role of universities in transforming society: Challenges and practices. *International perspectives on policies, practices & pedagogies for promoting social responsibility in higher education*, 67-79.
- Polasky, S., Kling, C. L., Levin, S. A., Carpenter, S. R., Daily, G. C., Ehrlich, P. R., & Lubchenco, J. (2019). Role of economics in analyzing the environment and sustainable development. *Proceedings of the National Academy of Sciences*, 116(12): 5233-5238.
- Prince, A. I., Ehi, O. E., Brown-Ofoeme, M. N., Collins, O., & Alobele, I. A. (2023). Social Policies and Poverty Reduction in Africa: A Nigeria-centered Perspective. *IIARD J. Human. Soc. Policy*, 9(1): 49-77.
- Roufagalas, J., & Orlov, A. G. (2020). Endogenous growth, human capital and the dynamic costs of recessions. *Journal of Economic Studies*, 47(2): 264-285.
- Sadik-Zada, E. R., Gatto, A., & Niftiyev, I. (2024). E-government and petty corruption in public sector service delivery. *Technology Analysis & Strategic Management*, 36(12): 3987-4003.
- Sarpong, D., Boakye, D., Ofosu, G., & Botchie, D. (2023). The three pointers of research and development (R&D) for growth-boosting sustainable innovation system. *Technovation*, 122, 102581.
- Simpasa, A. (2024). Nigeria: Challenges and opportunities to avoid the middle-income trap. Avoiding the Middle-Income Trap in Africa: Economic Challenges and Policy Responses, 169-205.
- UNESCO. (2022). Global education monitoring report.
- UNICEF. (2023). Education crisis in Nigeria: Facts and statistics.
- Wang, Y., Wang, X., Zhang, Z., Cui, Z., & Zhang, Y. (2023). Role of fiscal and monetary policies for economic recovery in China. *Economic Analysis and Policy*, 77: 51-63.
- Wong, S. Y. (2020). Assessment of public expenditure efficiency: A review. Journal of Economics and Sustainability (JES), 2(2): 27-38.
- World Health Organization. (2019). Report of the Global conference on primary health care: from Alma-Ata towards universal health coverage and the Sustainable Development Goals (No. WHO/UHC/IHS/2019.62). World Health Organization.
- World Health Organization. (2022). Global health rankings: Nigeria's position.
- Zhang, D., Mohsin, M., Rasheed, A. K., Chang, Y., & Taghizadeh-Hesary, F. (2021). Public spending and green economic growth in BRI region: mediating role of green finance. *Energy Policy*, 153, 112256.