

**GOVERNMENT EXPENDITURE ON HEALTH AND THE CHALLENGES OF
ECONOMIC DEVELOPMENT IN EDO STATE, NIGERIA**

BY

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ABSTRACT

This study examined the relationship between government expenditure on health development in Edo State, Nigeria. From various empirical works reviewed, there is still an insufficient all-inclusive study on government expenditure on health development in Edo State. The specific objectives of this study were to examine the relationship between government expenditure on health development in the State. The study was anchored on both Keynesian Economic Theory that advocates for active government intervention through increased public spending and expansionary monetary policy to stimulate growth and Endogenous Growth Theory that suggests that investments in agriculture, and health can foster sustained growth by enhancing the productivity of workers and capital. The findings of the study indicate that health expenditures indicated negative and insignificant effect on economic development. The study concluded that there is need for strategic allocation and effective management of public funds to maximise their growth-enhancing potential. It is recommended that government should prioritise and expand investment in health expenditure should be restructured and better managed to improve efficiency.

Key Words: Capital, Development, Expenditure, Growth, Investment, Potential, Health

INTRODUCTION

The main feature of the world economy today is uncertainty, generated by a series of complex and interrelated challenges that will continue to influence global economic developments in the medium to long term. These challenges are driven by a range of economic, geopolitical, technological and environmental factors, each with significant implications for economic stability and growth, on the one hand, and for the very existence of life on Earth, on the other. 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, Mekha, Suganthan, & Sudhakar, 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, & Samanta, 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, Adama, Sumaila, & Suleiman, 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, & Akindoyin, 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 utilisation (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 ₦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 ₦50 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 stalled development projects (Hoang, Nižetić, Olcer, Ong, Chen, Chong, & Nguyen, 2021). This study seeks to examine the disconnect between government expenditure on health 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 citizens.

Objectives of the Study

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

- i. evaluate the effect of government spending on health development.
- ii. determine the impact of government spending on infrastructural development.

LITERATURE REVIEW

Conceptual Review

Proponents of increased public expenditure argue that boosting investments in public goods such as health, agriculture, and infrastructure is essential for elevating productivity levels. They contend that higher public expenditure also enhances the spending capacity of individuals and businesses, thereby stimulating further production. Keynesian economists, for instance, advocate for government involvement in economic activities as a means to drive improved performance. They posit that public expenditure spurs demand by increasing spending on various consumer goods, thereby promoting economic growth. Large-scale public expenditure stimulates both public and private sector demand for goods and services, resulting in increased production to meet this heightened demand. Empirical support for the positive correlation between public expenditure and economic growth is presented by scholars like Uchenna & Evans (2020), Anaman (2021), Kustepelli, (2021), and Heidari et al. (2021).

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, & Pratama, 2020). Unlike economic growth, which focuses solely on increases in a country's Gross Domestic Product (GDP), economic development is a multi-dimensional process that addresses both quantitative and qualitative aspects of progress (Barska & JA, 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, Kling, Levin, Carpenter, Daily, Ehrlich, & Lubchenco, 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, advanced 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, Liu, & Nie, 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 categorised 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, Ojima, Ogwuru, Echeta, Duru, Akamike, & Manasseh, 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, Ehi, Brown-

Ofoeme, Collins, & Alobele, 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 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).

Expenditure on Public Administration

Public administration encompasses the execution, oversight, and management of government policies and the management of public affairs. The field involves the organization, operation, and strategic coordination of bureaucratic structures in the public sector. Public administrators play a significant role in devising and executing policies, managing shared resources, and ensuring the efficient functioning of government agencies and programs. In 1947, Paul H. Appleby defined public administration as the "public leadership of public affairs directly responsible for executive action." In democracies, it usually has to do with such leadership and executive action in terms that respect and contribute to the dignity, worth, and potential of the citizen. One year later, Gordon Clapp, then Chairman of the Tennessee Valley Authority, defined

public administration "as a public instrument whereby democratic society may be more completely realized." This implies that it must relate itself to concepts of justice, liberty, and fuller economic opportunity for human beings and is thus concerned with "people, with ideas, and with things". James D. Carroll and Alfred M. Zuck called Woodrow Wilson's publication of his essay, "The Study of Administration," "the beginning of public administration as a specific and influential field of study."

Theoretical Framework

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, Wang Zhang, Cui, & Zhang, 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, Khokhar, & Sulehri, 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, Boakye, Ofosu, & Botchie, 2023; Habib, Abbas, & Noman, 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 & 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, Mohsin, Rasheed, Chang, & Taghizadeh-Hesary, 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, Modrego, & McCann, 2019). Despite this, Endogenous Growth Theory remains influential in shaping policies on innovation and economic development.

Knowledge Gap There have been a limited number of studies that have delved into the relationship between public expenditure and economic growth. Some of these studies include Ajayi and Oke (2020), Adepoju (2020), Adesola (2020), Amakon (2020), and Anyamu (2020). Furthermore, the research conducted in Nigeria, Europe, and other developed economies has primarily focused on evaluating public expenditure using metrics such as Health expenditure. To the best of the researcher's knowledge, few studies, both locally and internationally, have examined the impact of public expenditure on Nigeria's economic growth by employing a broader sample size and incorporating independent variables such as health expenditure and agricultural expenditure. In light of this, the present study seeks to enrich existing scholarship by utilizing an expanded dataset sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin and the National Bureau of Statistics (NBS).

Specifically, it investigates the influence of health expenditure on economic growth in Nigeria, using time series data covering the period 1991 to 2024. Including a larger sample size with health and agricultural expenditure enhances the understanding of factors influencing economic growth in Nigeria. By situating public expenditure within the broader framework of these specific variables, the study provides deeper insights into the complex interactions that drive growth in the Nigerian economy. The reliance on credible sources such as the Central Bank of Nigeria (CBN) and the National Bureau of Statistics (NBS) enhances the robustness of the dataset, thereby strengthening the reliability of the findings. The extended timeframe of 1991 to 2024 also facilitates a comprehensive analysis of long-term trends and patterns, offering valuable historical context for present and future policy formulation. Lastly, this research underscores the necessity for a more thorough examination of the nexus between public expenditure, health expenditure, agricultural expenditure, and economic growth in Nigeria. By bridging this gap and adopting a rigorous methodological approach, the study aims to generate insights capable of informing effective policies and strategies that promote sustainable economic growth in the country.

METHODOLOGY

Research design

The study adopted an ex-post facto. Correlational research design is employed in research to establish the relationships among research variables; therefore, ex-facto research design was used. The population of this study will include only the economy of Nigeria and all governmental sectors in Nigeria. For this study, the population consists of all possible elements that constitute expenditures in the Nigerian economy. However, we will stress government expenditure on education, government expenditure on public administration and Government expenditure on information and communication as dependent variables while the economy of Nigeria proxy by gross domestic product serves as the exogenous variable. The annual secondary time series data were collected from the Statistical Bulletin of the Central Bank of Nigeria (2023) for twenty-four years (2000 to 2023), the multiple regression model was used with the aid of Eview (version 10). The regression technique is often considered as the best linear unbiased estimator due to its predictive precision. Besides, it has the advantage of ease in comprehension and application.

Data and Variable Description

Health expenditure and agriculture expenditure were used as independent variables, while ss Domestic Product and Gross National Product were used to measure Economic growth. Below are the variables and their proxy. The descriptive statistics, Simple linear regression model, correlation coefficient (R), R-Square, Adjusted R-Square, t-Statistic (t-Stat) and P-value are used to analyze the data collected and to test the hypotheses stated as well. The level of significance is 5%.

<u>Variables</u>	<u>Measures</u>
Economic growth	GDP
Health expenditure	HTEPT
Infrastructural expenditure	AGCEPT

RESULT AND DISCUSSION

This section lays out the methodology for analysis, the subsequent interpretation of findings, and the implications of the results. The computed variables are Gross Domestic Product (GDP), health expenditure (HTEPT), and agriculture expenditure (AGCEPT). These variables underpin the research objective of appraising the influence of public outlays on economic growth. Calculations were performed on figures obtained from annual reports. Full representation of the data employed in the study is shown in Table 1 of the appendices. 4.1 Descriptive Statistics Descriptive statistics for each of the indicated variables were organized and are provided in Table 1 below: Table 1: Descriptive Statistics

Variable	Mean	Std. Deviation	N
GDP Growth	1.6718	.93339	34
Health Exp.	2.4609	2.0597	34
Agric. Exp.	1.34371	1.59897	34

Source: Researcher's Computation, 2025.

The descriptive statistics show that agricultural expenditure (AGCEPT) ranges from 0.02 to 6.56 with a mean of 2.0597 (SD = 1.59897), while health expenditure (HTEPT) ranges from 0.02 to 6.03 with a mean of 2.4609 (SD = 1.34371). GNP and GDP have means of 2.4429 and 1.6718, respectively, with standard deviations of 1.22882 and 0.93339, indicating moderate dispersion around their sample means. The relatively wide ranges, especially for AGCEPT and

non-trivial standard deviations, suggest possible skewness or outliers that may bias OLS estimates if not addressed. With only 34 observations, the sample is small for macroeconomic inference, increasing the risk that coefficient estimates are sensitive to a few influential points or measurement error. Overall, the summaries confirm usable variation

DISCUSSION OF FINDINGS

Infrastructural expenditure showed a positive and significant effect on Gross Domestic Product

The study discovered that agricultural expenditure has a positive and significant impact on Gross Domestic Product, indicating that government investment in agriculture boosts productivity, creates rural jobs, and enhances the value chain that contributes to overall domestic income. This result shows that resources allocated to agriculture effectively help increase farm outputs and diversify exports, thereby improving national welfare. In line with this, Soyebi and Umobong (2024) also reported that capital-biased government expenditure in Nigeria, especially in agriculture, notably promotes long-term economic growth. The finding highlights that agriculture remains a vital sector for Nigeria, owing to its substantial capacity to absorb labour and its direct effect on food security. Consequently, maintaining and increasing capital expenditure in agriculture is essential for sustaining continuous growth in GDP.

Health expenditures indicated a negative and insignificant effect on Gross Domestic Product

The result that health expenditures have a negative and insignificant impact on Gross Domestic Product suggests that increases in health spending did not contribute meaningfully to short-term economic growth during the study period. However, the negative sign should not be misinterpreted to mean that health spending harms the economy; rather, it may reflect issues such as poor implementation of health budgets, misallocation of resources, corruption, or the fact that the benefits of health investments often emerge only in the long run rather than immediately. This outcome resonates with Gombe (2024), who found that health spending, when not properly managed, can become a burden that suppresses short-run economic output, particularly when deficit-financed. It implies that while health expenditure is essential for long-term human capital

development, in the short run, it may crowd out private investment or increase macroeconomic instability. To reverse this trend, policy should prioritize quality capital health investment, strong monitoring systems, and reducing waste in recurrent health budgets.

CONCLUSION

The coefficient results suggest that agricultural expenditure has a positive and significant impact on GDP, highlighting its importance as a driver of economic growth in Nigeria. Conversely, health expenditure shows a negative but insignificant effect, implying that its contribution to growth is not evident in the short term and may be hindered by inefficiencies or delayed outcomes. The model, therefore, underscores the stronger role of agricultural investment in stimulating immediate economic performance compared to health spending. Overall, the findings emphasise the need for strategic allocation and effective management of public funds to maximise their growth enhancing potential.

RECOMMENDATIONS

Drawing from the empirical evidence and analytical findings, this study offers the following recommendations:

1. Reforms should focus on improving efficiency, transparency, and accountability in the use of health funds.
2. Investments should be directed toward areas with high developmental spillovers, such as primary healthcare, preventive medicine, and workforce development, to generate long-term growth benefits.
3. Development government partners efforts to support by channeling resources into health, with emphasis on capacity building, technology transfer and institutional strengthening.

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