

IMPACT OF GOVERNMENT EXPENDITURE ON ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

Effective utilization of government expenditure plays a pivotal role in fostering substantial growth and development on a global scale. Despite the escalating government expenditure in Nigeria, tangible progress and development have not been fully realized, positioning the country among the still underdeveloped nations worldwide. This study examined the impact of government expenditure on economic growth in Nigeria (1981-2022). Government expenditure is categorized into two, capital expenditure which includes spending on fixed assets such as roads, education health facilities etc. and recurrent expenditure which includes spending on salaries, pensions, subsidies etc. The ex-post factor research design was adopted while data was sourced from the Central Bank of Nigeria Statistical Bulletin. The hypothesis was tested using multiple linear regression analysis (Robust least square technique). The results from the findings show that capital expenditure has an insignificant effect on economic growth while recurrent expenditure has a positive significant effect on economic growth. This study recommends that; the federal government should not only increase its expenditure on priority sectors of the economy such as education, agriculture, mining and infrastructural development, but also ensure spending efficiencies, transparent budgetary processes and strict monitoring of government projects. Also, the government should increase its recurrent expenditure in payment of salaries and provision of goods and services but also reduce government borrowings as they have been seen to foster economic growth.

Keywords: *Economic growth, Capital Expenditure, Recurrent Expenditure, Economic services expenditure, social service expenditure, infrastructure, Gross domestic product.*

INTRODUCTION

It has been established from previous studies that the government's role toward economic growth cannot be overstressed, this means any society without government may not have all the social and legal structure for the economy to operate easily and this may also lead to poor economic growth. This is because state intervention ensures economic stability and promotes the rule of law and property rights. In numerous developing nations globally, government expenditure stands out as a crucial policy tool for stimulating growth and equitable resource distribution. It is widely recognized in these countries that government spending serves to enhance technology, human capital, and infrastructure—a prerequisite for sustainable growth. Moreover, it creates incentives and a conducive environment to encourage private sector investments, further contributing to overall economic development. Government expenditure is essentially the allocation of funds derived from taxes, levies, and other revenue sources by the government.

Government spending on various sectors has different efficacy to the economic growth (Yusuf *et al.* 2015). Government investment is essential for the eradication of poverty and other similar social and economic roles performed by the state among which are the production of public goods which is capable of reducing the cost of private production as well as for the improvement in the general welfare of the citizens. A continuous public expenditure may reach a level where the marginal productivity of government services declines up to a negative point. The aforementioned can be elaborated as being

the reason why government services tend to impact positively on productivity at a lower level of spending than when government spending is high. High spending diminishes the profitability of the private sector which might cause mismatches between the spending and the growth of the economy and therefore, overfitting the economy. Thus, the most desirable government level of government expenditure should be found within the interval limit.

It is notable to observe that government expenditures on various sectors seem to have contributed to economic growth at different rates in Nigeria (Chude *et al.*, 2019). Owing to the above, the argument has been inconclusive on whether or not these critical sectors contribute significantly to the economic growth in Nigeria. In order to attain a sustainable level of development, it is anticipated that the government actively engages in furnishing essential public infrastructure crucial to the economy. Such infrastructure encompasses elements like roads, bridges, security, healthcare, water supply, electricity, schools, and more. The substantial financial investments made by the Nigerian government to support both recurrent and capital expenditures have resulted in an augmented aggregate money supply. However, this increase has not been accompanied by the requisite stability in key macroeconomic indicators such as the employment/unemployment rate, interest rate, balance of payments, consumer price index, Gross Domestic Product, and others (Okere *et al.*, 2019).

Many literatures on government/public expenditure suggest that there has been a consistent rise in government spending over the years, primarily due to the increased revenue from crude oil. However, the recent decline in crude oil prices challenges the assumption that the preceding years couldn't have contributed to tangible economic growth. It is important to recognize that despite the recent downturn, those years might have fostered economic development with visible and beneficial impacts on various aspects of Nigerian economic and social life.

According to Chude *et al* (2019) one essential policy for fostering economic growth involves augmenting human capital through increased investment in education, training, and skill development for the workforce. This approach directly influences labor productivity. This perspective is further reinforced by Anyanwu (2020), who contends that for sustained economic growth, government expenditure should be directed towards facilitating the development of infrastructure and creating a conducive economic environment.

In an emerging nation such as Nigeria, the government plays a pivotal role in fostering development, and financial resources should be directed towards this goal. Consequently, it is crucial to consistently conduct research to assess the impact of government spending in relation to the revenue generated on the overall economic growth.

Despite the increased government spending in Nigeria over the years, concerns persist regarding the deterioration of public infrastructure. Furthermore, only a limited number of empirical studies have undertaken a comprehensive examination of the impact of government expenditure on economic growth, despite its significance for informed policy decisions. Additionally, as Nigeria aspires to become one of the world's largest economies by 2025, it is imperative to analyze the influence of public expenditure on economic growth as a strategy to accelerate the nation's economic development. The Nigerian economy has transitioned from millions to billions and is now poised to reach trillions of naira on the expenditure side of the budget.

Research findings on the impact of government expenditure on economic growth have yielded diverse outcomes, including positive effects, negative effects, and instances where researchers were unable to

establish a clear relationship between government spending and economic growth. For example, Saidu and Ibrahim (2019), Omoredo (2019), Yerima *et al* (2021) obtained negative evidence while Udi (2018), Ikubor and Oladipo (2022), Abomaye and William (2020)); Ayeni and Sani (2021) have found positive evidence the varied outcomes and inconclusive debates stem from discrepancies in study periods, statistical methodologies employed, data sources, and study jurisdictions, among other factors. Consequently, this study aims to address these gaps by presenting additional empirical evidence on the impact of government spending on economic growth in Nigeria.

Furthermore, it has been noted that government spending in Nigeria has been increasing. Nevertheless, this upward trend in government expenditure may not have translated into substantial growth and development, considering that Nigeria is ranked among the world's poorest nations. A significant portion of the population in Nigeria continues to live below the poverty line, with many individuals earning less than US\$1 per day (Ayeni *et al* 2019)). Despite the consistent rise in government spending by the federal government of Nigeria in recent years, there appears to be a lack of commensurate growth in the economy. Consequently, there is skepticism regarding whether previous federal government expenditures were allocated to finance the intended expenditure items as outlined in the budget. This skepticism serves as the basis for the current study, which aims to investigate the impact of government expenditure on economic growth in Nigeria.

The primary aim of this study is to assess the impact of government expenditure on economic growth in Nigeria spanning the years 1981 to 2022. The specific objectives are to:

- i. Determine the impact of capital expenditure on the Gross Domestic Product (GDP) in Nigeria.
- ii. Evaluate the impact of recurrent expenditure on the Gross Domestic Product (GDP) in Nigeria.

In line with the stated specific objectives of this study, the following hypotheses was formulated:

H₀₁: Capital expenditure does not exert a significant impact on the gross domestic product in Nigeria.

H₀₂: Recurrent expenditure does not exert a significant impact on the gross domestic product in Nigeria.

REVIEW OF RELATED LITERATURE

Economic growth

According to Kimberly (2019), economic growth is defined as an increase in the productive capacity of a state, measured by the production of goods and services over a specific period. Gross domestic product (GDP) serves as a key indicator for assessing the economic growth of a nation or state, considering the total output of goods and services, encompassing the country's productive capacity. Contrary to the neo-classical view that attributes economic growth to technical change occurring by chance, Manga (2017) argues that factors such as a higher rate of investment, both by the private and government sectors, play a more significant role. This perspective challenges the notion that growth can only result from random technological advancements and emphasizes the potential for fostering economic growth through intentional policies. Conversely, government policies have the potential to impede economic growth. Practices such as government borrowing for recurrent expenditure, high corporate tax rates, inadequate investment in capital stock, and maintaining high exchange rates and interest rates can hinder the overall level of economic growth. Therefore, understanding and implementing effective policies are vital for shaping the trajectory of economic growth in a nation or state.

Government Capital Expenditure

Government capital expenditures refer to the financial resources allocated for the creation and enhancement of durable assets, including structures, machinery, equipment, educational institutions, healthcare facilities, and other tangible assets. These funds also encompass expenses related to strategic investments made by the government, aiming to generate future dividends and acquire lasting assets (Osmond et al., 2023). The advantages of such expenditures extend over several years, categorizing them as capital expenditures. Activities falling under this umbrella include the acquisition of both fixed and intangible assets, the enhancement of existing assets, the maintenance of current assets, and the repayment of loans. Repaying debts is considered a capital asset because it not only diminishes financial obligations but also contributes to the creation of assets.

In the present day, a majority of industrialized and emerging nations utilize public spending to modify the consumption of national income, enhance distribution, and stir allocation of resources in a desirable direction (Vtyurina, 2020). In various emerging nations, the variety in the expenditure patterns of the government is anticipated to ensure not only stabilization and also to stimulate economic growth and enhance employment opportunities (Osmond et al., 2023). Government capital expenditure can enhance productivity and promote economic growth as well as foster societal well-being, examples of government Capital expenditure encompasses the acquisition of transport and energy infrastructure, schools, hospital buildings, IT systems, defense systems and intangible assets.

Capital Expenditure on Administration: This is the total budget allocated annually for fixed assets and other major expenditures in the administration of the economy channeled to General Administration, Defense, Domestic Security and Legislative sector.

Capital Expenditure on Social Community Services: This is the capital expenditure estimated annually on the education sector, Health sector and other community services. It is used to purchase infrastructural equipment for these sectors of service.

Capital Expenditure on Economic Services: This refers to the annual capital allocation intended for the acquisition or procurement of fixed assets in sectors such as Agriculture, Construction, Transportation, and Communication.

Capital Expenditure on Transfer: This is the capital expenditure on managing debt services. The capital expenditure is distributed through public debt servicing, pensions and gratuities, contingencies or subventions.

Government Recurrent Expenditure

Recurrent expenditure pertains to all disbursements, excluding those for capital assets, incurred on goods and services. This encompasses payments for wages and salaries, employer contributions, interest payments, subsidies, and transfers (Odubuasi,2020).

Government recurrent expenditure on goods and services constitutes spending that doesn't lead to the creation or acquisition of fixed assets, whether new or second-hand. This primarily includes expenses related to wages, salaries, supplements, purchases of goods and services, and the consumption of fixed capital. Therefore, government recurrent expenditures or government final consumption expenditure on goods and services for current use is intended to directly meet the individual or collective needs of the members of the community (Odubuasi, 2020).

Theoretical Review

The Wagner's Law/Peacock Wiseman Hypothesis

In his work on the 'Law of Rising Public Expenditures,' the author examined the dynamics of the growth of public expenditure and the expansion of the public sector. The hypothesis posited that as the economy undergoes further development, there is a corresponding increase in the financial and administrative role of the government. Simply put, an upswing in economic expansion is viewed as a consequence of heightened government expenditure. In essence, as the country progresses, the government enhances its financial and administrative capabilities. Adolph Wagner emphasized that the growth of national income is an endogenous factor that affects government spending. As a result, public spending is determined by national revenue.

Conversely, Peacock-Wiseman conducted a contemporary study rooted in Wagner's law, empirically examining the impact of government expenditure on the UK economy from 1891 to 1955. Their findings corroborate Wagner's proposition, asserting that Wagner's law remains valid. The Peacock-Wiseman hypothesis posits that an augmentation in government-generated revenue is contingent upon government expenditure. To put it differently, as the government accumulates more revenue, it tends to allocate a larger portion to enhance the economic well-being of its citizens. Both Wagner's law and the Peacock-Wiseman hypothesis collectively suggest that government expenditure has a tendency to escalate over time.

Keynesian Economic theory

In line with Keynesian economic principles, it is advocated that the government should augment demand to stimulate economic growth. Keynesians posit that the foremost catalyst in an economy is consumer demand. The Keynesian economic theory advocates for an expansive fiscal policy, employing government expenditure on education, unemployment benefits, and infrastructure as principal instruments. Nonetheless, a potential drawback of implementing Keynesian policies lies in the risk of heightened inflation if pursued excessively.

In Keynesian economics, the notion is that increased spending is the catalyst for heightened output, subsequently leading to increased income and employment. This theory is rooted in the belief that overall expenditure or aggregate demand incentivizes businesses to supply goods and services. Consequently, if the overall expenditure in an economy diminishes due to elevated savings or a pessimistic outlook on the economic future, businesses are likely to respond by reducing their output. Consequently, reduced spending triggers a decrease in output, thereby influencing various other macroeconomic factors to decline.

Government involvement in the economy primarily takes a form of control over selected sectors or industries. Various interventions are employed based on the specific needs or objectives the government aims to accomplish. The Keynesian economic theory, formulated in the 1930s by the British economist John Maynard Keynes, emerged as a response to the Great Depression, which had proven resistant to earlier efforts to bring it to a close.

This study is anchored on Keynesian theory from the intervention of government perspective. Keynesians believe the government has business in business that is, total government spending in the economy induces output, employment and inflation. The theory provides a framework and a logical linkage between government expenditure and economic growth.

Empirical Review

Ekpo *et al.* (2022) investigated the impact of government expenditure on economic growth in Nigeria utilizing a bound test approach. Employing a modified and extended aggregate production model, the analysis examined the effects of aggregate-level government expenditure on economic growth in Nigeria over the period 1981-2018, employing the bound test (ARDL) approach. The co-integration results revealed the presence of a long-term relationship between total government expenditure (LTGE) and economic growth in Nigeria. According to the ARDL findings, total government expenditure (LTGE) exhibited a positive influence on economic growth in Nigeria, aligning with Keynesian economic theory. The Granger causality test results demonstrated a unidirectional causal relationship from LGDP to LTGE throughout the observed period, consistent with Wagner's theory. The study recommends a prudent utilization of public funds, particularly in enhancing security and critical infrastructure, such as electricity supply and road development, crucial for effective economic performance. Emphasizing proper management of public funds is crucial to ensuring accountability, transparency, and fiscal responsibility in executing public assignments. Addressing corruption is highlighted as a key measure, as it could lead to the release of more public funds for development, thereby enhancing the impact of public expenditure on economic performance.

Ikubor *et al.* (2022) examined the impact of government capital expenditure in the economic services sector on Nigeria's economic growth between 1981 and 2020, using the ARDL model. The data obtained were from secondary sources, CBN Statistical Bulletin and, the National Bureau of Statistics. The dependent variable of the study is Gross Domestic Product (GDP), a proxy for economic growth, while Capital Expenditure on Agriculture (AGEX) and Capital Expenditure on Manufacturing, Mining and Quarrying (MGEX), were the independent variables. The results of the findings reveal that both AGEX and MGEX have a positive relationship with GDP and at the 5% significant level, are statistically significant. The study therefore recommends that since spending in the areas of infrastructural facilities is a good determinant of output growth, the government should ensure that basic infrastructural facilities needed in these sectors (agriculture and manufacturing, mining and quarrying) such as good roads, storage facilities stable electricity and so on, are provided.

Damilola *et al.* (2022) investigated the interconnections among economic growth, government expenditure, and debt in Nigeria, utilizing data spanning from 1981 to 2020 and employing VAR pairwise Granger causality analysis. The VAR test findings revealed a significant positive correlation between government capital and recurrent spending and public debt in the Nigerian economy. The Wald test results indicated a one-way causal relationship from state debt in Nigeria to both capital and recurrent expenditures. This implies that Nigerian government borrowing is a consequence of budget deficits, a well-recognized phenomenon at both the federal and state levels. To enhance allocative efficiency in the budgeting system and ensure that borrowing to cover budget deficits is approached judiciously and realistically, a reevaluation of the government budgeting process is recommended. The study proposes the adoption of planning-programming-budgeting systems (PPBS) and zero-based budgeting (ZBB) in lieu of the incremental budgeting (IB) currently employed at the federal and state levels. These budgeting approaches, aligned with global practices, aim to foster competition for budgetary resources and thereby facilitate the realization of government fiscal policy goals in the economy.

Omitogun *et al.*(2022) The study delved into the asymmetric effects of government expenditure on Nigeria's economic growth using secondary data spanning from 1981 to 2018. To capture these asymmetric impacts, the research employed the Non-Linear Auto-regressive Distributed Lag (NARDL) model. Government expenditure components, namely recurrent and capital expenditure, underwent decomposition to discern positive and negative changes resulting from government reviews. The results confirmed that, in the short run, both positive and negative changes in recurrent and capital expenditure exerted a significant positive influence on economic growth in Nigeria, albeit at different time lags. In the long run, the study found that positive changes in recurrent expenditure had a detrimental effect on economic growth, while negative changes had a positive and significant impact. Positive changes in capital expenditure were associated with a positive impact on economic growth, whereas negative changes had a significant negative impact of 5% on economic growth. The conclusion drawn from these findings is that government expenditure plans exert a noteworthy impact on Nigeria's economic growth, both in the short run and the long run. As a recommendation, the study suggests that the government should recalibrate its plans between capital and recurrent expenditure to optimize its growth objectives.

Nwankwo *et al.* (2022) explored the impact of federal government expenditure on economic growth in Nigeria from 1986 to 2020. The analysis unveiled that government recurrent expenditure significantly influences real gross domestic product, gross fixed capital formation, and savings. Notably, government recurrent expenditure is inversely correlated with real gross domestic product, gross fixed capital formation, savings, and manufacturing capacity utilization. On the other hand, government capital exhibits a positive association with gross fixed capital formation and manufacturing capacity utilization, while displaying a negative relationship with real gross domestic product and savings. Distinguished from prior research, which predominantly focuses on real gross domestic product as a measure of economic growth, this study introduces three additional variables—gross fixed capital formation, savings, and manufacturing capacity utilization—to comprehensively gauge economic growth. The utilization of the Auto-Regressive Distributive Lag (ARDL) model, considering the diverse order of integration in time series data, provides a robust framework for assessing the short-term and long-term effects of Federal Government expenditure on key economic growth indicators in Nigeria. The study emphasizes the imperative for the government to prioritize capital expenditure, recommending an allocation of at least 50.0% of total expenditure to capital projects. The prevalent practice of allotting only 16.6% (based on the 2020 approved budget of the Federal Government) for capital expenditure is deemed insufficient to significantly propel economic growth and development in Nigeria.

Adole *et al.* (2021) examined the influence of government expenditure on economic growth in Nigeria spanning from 1984 to 2015, aiming to reassess the propositions of the Keynesian and Endogenous Growth Models, which posit that public expenditure fosters economic growth. The research utilized the Johansen co-integration and Error Correction Model for analysis. The empirical findings indicated that both public recurrent and capital expenditures exhibit a significant positive impact on long-term economic growth. In the short run, however, their impact on the Nigerian economy was found to be insignificantly negative, thereby reaffirming the Keynesian and Endogenous Growth Models' contention that public expenditure stimulates economic growth in Nigeria when observed over the long term. Consequently, the study recommends a recalibration of spending priorities by the Nigerian government to allocate more resources to capital expenditure. It suggests directing increased expenditures towards

critical sectors like health, power, education, and general infrastructure, which are deemed essential for optimizing the impact of government expenditure on economic growth in Nigeria.

Olayiwola *et al.* (2021) this study undertook a re-examination of the link between public health expenditure and economic growth in Nigeria, framed within the context of Wagner's theory of ever-increasing State activities. The research revealed the existence of a long-term relationship between public health expenditure and economic growth. Granger-causality test results, however, indicated neither a uni-directional nor bi-directional relationship between public health expenditure and GDP. Nonetheless, health expenditure as a proportion of total government expenditure and the population displayed a uni-directional causal relationship with real GDP, indicating that public expenditure influences public health expenditure. In conclusion, while a direct causal relationship between public health expenditure and GDP was not established, both variables still exhibited evidence of a long-term connection. As a recommendation, the study suggests expanding health insurance coverage to encompass a larger population, thereby mobilizing more resources for the health sector. This strategic approach aims to foster the desired impact of healthcare expenditure on economic growth in Nigeria.

Yerima *et al.*(2021) examined the influence of government expenditure on economic growth in Nigeria through the analysis of time series data spanning from 1986 to 2020, this study employed the Structural Vector Auto-regression (SVAR) model and pair-wise causality test. The findings indicated that government spending on health and education exhibited an insignificant impact on economic growth. Additionally, the study revealed that public debt had an insignificant effect on economic growth. Consequently, the study recommends notable increases in government expenditure on education and health, aiming to at least align with regional and global expenditure benchmarks. Furthermore, the government is advised to minimize borrowing, especially considering that approximately 92% of generated revenue is allocated to debt servicing for largely non-productive borrowings. The analysis of borrowing should also extend to the evaluation of revenue-generating capacity, as the debt to GDP ratio might not provide a comprehensive picture.

Abomaye and Williams (2020) conducted a study on government expenditure and economic growth in Nigeria spanning from 1985 to 2015, with data extracted from the Central Bank of Nigeria (CBN) statistical bulletin serving as the primary information source. Employing the Augmented Dickey-Fuller test technique for the Unit root test, the results indicated the stationarity of all variables in the model at different levels of testing. Furthermore, the Johansson co-integration test revealed a long-run relationship among all variables in the model, with government capital expenditure demonstrating a positive and significant impact on economic growth in Nigeria. Conducted a study on government expenditure and economic growth in Nigeria spanning from 1985 to 2015, with data extracted from the Central Bank of Nigeria (CBN) statistical bulletin serving as the primary information source. Employing the Augmented Dickey-Fuller test technique for the Unit root test, the results indicated the stationarity of all variables in the model at different levels of testing. Furthermore, the Johansson co-integration test revealed a long-run relationship among all variables in the model, with government capital expenditure demonstrating a positive and significant impact on economic growth in Nigeria

Odubuasi *et al.*(2020) Examining the impact of government expenditure on economic growth in Nigeria over a 15-year span (2004-2018), this study employed an ex-post-facto research design. The time series data was generated and subjected to a comprehensive analysis using regression analysis,

Autoregressive Distributed Lagged (ARDL) testing technique, Error Correction Model-based analysis, Granger Causality, unit root test, and cointegration. The objective was to explore the long-run causal relationship between government expenditure and economic growth in Nigeria. The study's findings indicate that government expenditure on highways and safety has a significantly positive effect on economic growth in Nigeria, with statistical significance levels of 5% and 1%, respectively. On the other hand, government recurrent expenditure demonstrated a positive effect on economic growth but lacked statistical significance. Furthermore, government expenditure on education was found to have a negative and statistically insignificant impact on economic growth in Nigeria. As part of its recommendations, the study suggests that the government should increase its focus on capital projects expenditure. This strategic emphasis on capital projects is anticipated to yield the necessary infrastructure improvements, fostering enhanced productivity in the private sector and ultimately contributing to improved economic growth in Nigeria.

Ayeni and Sani (2019) investigated the impact of government expenditure on the economic growth of Nigeria during the period 1999-2016, utilizing data sourced from the Central Bank of Nigeria Statistical Bulletin and World Development Indicator. The hypotheses were subjected to scrutiny through multiple linear regression analysis. The study disclosed that capital spending exerts a significantly positive effect on gross domestic product per capita in Nigeria. Furthermore, recurrent spending was identified to have a noteworthy positive impact on gross domestic product per capita in the country. Based on these findings, the study provides the following recommendations: Firstly, the federal government of Nigeria should augment its capital expenditure, directing funds towards productive sectors such as agriculture and production industries. Implementing this suggestion is anticipated to stimulate economic growth in Nigeria. Secondly, the federal government is advised to increase recurrent expenditures, ensuring timely disbursement of salaries. This proposed course of action is expected to contribute positively to economic growth in Nigeria.

Ibrahim and Ashiru (2019) Examined the impacts of capital expenditure on the growth rate of the Nigerian economy spanning from 1981 to 2017, employing the Engel-Granger 2-step error correction technique. The study reveals a negative influence of capital spending on economic growth, attributed to a discrepancy between funds disbursement and utilization. Additionally, findings indicate that the exchange rate and inflation rates exhibit positive and negative relationships, respectively, with economic growth. The study further identifies cointegration between the variables, with a 28.5% error correction in the case of any disturbance in the short-term equilibrium. As a recommendation, the study suggests implementing measures to oversee the spending and project implementation associated with government funds. Furthermore, it advocates for the adoption of a flexible exchange regime tailored to meet the specific requirements of the Nigerian economy.

Chinasa *et al.* (2019) conducted an investigation into the influence of capital and recurrent public education expenditure on economic growth in Nigeria, aiming to determine the primary contributor to economic growth between the two components. Utilizing the ordinary least squares technique on time series data spanning from 1981 to 2016, the study revealed that the capital component of total education expenditure exerted a more substantial impact (17%) on the nation's GDP compared to its recurrent counterpart (13%). The Granger Causality test indicated that while capital education expenditure Granger causes economic growth in Nigeria, recurrent education expenditure does not. As a result, the study recommends an increase in the annual budgetary allocation to education by the Nigerian government, advocating for a shift from the current single-digit average of approximately 7% of

the total budget to double digits. Furthermore, it suggests that such allocations should place greater emphasis on the capital component, as it has a more pronounced positive effect on economic growth compared to its recurrent counterpart.

Okere *et al.*(2019) conducted a study to examine the correlation between government expenditure and economic growth in Nigeria, utilizing data obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin covering the period from 1981 to 2016. The investigation employed the Granger Causality method and the error correction model (ECM) technique, revealing that the series were integrated at the first difference (1(1)), indicating stationarity. The Johansen Cointegration test demonstrated the existence of a long-run relationship among the variables. The Granger Causality findings indicated a reciprocal causation between economic growth and government spending on administration, as well as between economic growth and government expenditure on economic services. Moreover, a one-way causation was observed from economic growth to Community Services. As a suggestion, the study proposes careful surveillance of government expenditures, underscoring the importance of project audits as a tool for overseeing the executive branch of the government. Additionally, endeavors should be focused on augmenting government funding for education and health to alleviate the occurrence of strikes in these vital sectors.

Ogar *et al.*(2019) conducted an analysis on the influence of government expenditure on the growth of the Nigerian economy, with a focus on government capital, government recurrent expenditure, and government fiscal deficit. The study employed an ex-post facto design, utilizing secondary data sourced from the CBN statistical bulletin through a desk survey covering the period from 1980 to 2017. Various techniques, including the VAR technique, were applied for data analysis. The findings indicated that government capital expenditure had a positive but statistically insignificant impact on the growth of the Nigerian economy. Moreover, the study revealed that the government fiscal deficit had an insignificant negative effect on economic growth. In the short run, government recurrent expenditure displayed an insignificant positive effect on economic growth, while in the long run, it had a positive but statistically insignificant impact. Based on these results, the study recommends that the government should revitalize non-functioning capital projects to enhance efficiency in capital expenditure. Additionally, it emphasizes the need for close monitoring of the contract awarding process to prevent overestimation of execution costs, ultimately contributing to the boost in economic growth.

Omodero (2019) examined the influence of government general spending on human development in Nigeria during the period from 2003 to 2017, with a particular emphasis on how the Human Development Index (HDI) responds to both recurrent and capital government expenditure. To accomplish this goal, the study employed the multiple linear regression model to establish relationships between the study variables. The Ordinary Least Squares method was utilized for model analysis. The findings indicated that government capital expenditure and inflation had an insignificant negative impact on HDI. Conversely, corruption showed no discernible effect on HDI, while government recurrent expenditure exhibited a robust and statistically significant positive influence on HDI. In conclusion, the study recommends a decrease in resources allocated to recurrent expenses and advocates for increased investment in capital projects to enhance human capital development in Nigeria.

Saidu and Ibrahim (2019) examined the impacts of capital expenditure on the growth rate of the Nigerian economy from 1981 to 2017 using the Engel-Granger 2-step error correction technique, this study uncovered a negative influence of capital spending on economic growth attributed to a gap

between funds disbursement and utilization. The investigation also revealed positive and negative relationships between exchange rates and inflation rates, respectively, with economic growth. Additionally, cointegration between the variables was observed, with a 28.5% error correction identified in the event of any disturbance in short-term equilibrium. The study recommends the establishment of effective mechanisms to oversee government funds' spending and project implementation, alongside adopting a favorable and flexible exchange regime tailored to meet the specific requirements of the Nigerian economy.

Uzoma-Nwosu (2018) conducted a research study exploring the causal connection between economic growth and government expenditure spanning the years 1970 to 2016. Employing contemporary co-integration techniques, the Granger causality test within an error-correction modeling framework, and variance decomposition analysis, the investigation uncovered a co-integration relationship between economic growth and government expenditure. The results of the Granger Causality test indicated the presence of both short-term and long-term bidirectional relationships between the variables. Notably, causality was more pronounced from economic growth to government expenditure than in the reverse direction, as affirmed by the variance decomposition analysis. The study's findings from the Granger Causality test suggested a mutual cause-and-effect relationship between economic growth and government expenditure, highlighting substantial growth in both aspects. Based on the outcomes of the variance decomposition analysis, the study recommends that the government ensures effective resource management and efficient allocation among competing needs to expedite economic growth.

Osuji *et al.* (2017) conducted an investigation into the influence of government expenditure on economic growth and development in Nigeria spanning the years 1990 to 2012. The study utilized twenty-two years of time series data collected from secondary sources, including the CBN statistical bulletin and pertinent publications through the desk survey method. The Ordinary Least Square (OLS) multiple regression technique was employed to evaluate the impact of government expenditure on economic growth and development. Gross Domestic Product (GDP), serving as a proxy for economic growth and development, was considered the dependent variable, while Total Recurrent Expenditure and Total Capital Expenditure were treated as independent variables. The study's findings revealed that Federal Government Expenditure on Education, Health, General Administration, and Road Construction during the period 1990–2012 had a positive and significant impact on Nigeria's economic growth and development. In contrast, government expenditure on Agriculture exhibited fluctuating patterns, resulting in an inverse relationship with GDP. As a result, the study recommends the implementation of robust control measures to ensure the judicious utilization of allocated funds, particularly in the agricultural sector, to align public expenditure with economic growth in Nigeria.

METHODOLOGY

A research design, also known as a research strategy, encompasses the blueprint for addressing a specific set of questions or guidelines to guide the execution of research. (McCombes, 2019). This study employed an *ex post facto* research design, commonly known as a retrospective research strategy. This design is utilized to assess the relationship between one or more variables, investigating the impact of one variable on another. Notably, the variables involved cannot be manipulated by the researcher (Onwumere, 2021). The choice of the *ex post facto* design was motivated by availability of existing data necessary for the investigation. Given the nature of this study, reliance on secondary data was imperative. Both dependent and independent variables' data were sourced from the CBN

Statistical Bulletin, covering the extensive period from 1981 to 2022. To evaluate the influence of government expenditure on economic growth, the study employed the robust least square technique. This specific technique was chosen due to its effectiveness and efficiency in estimating the statistical relationship or effect between variables.

Model Specification

This study adopted the ex-post facto to test for the effect of the independent variable (government capital expenditure and government recurrent expenditure) on the dependent variable (economic growth in Nigeria proxy as Nominal Gross Domestic Product) to ascertain the effect of government expenditure on economic growth in Nigeria, Robust regression model is established.

The structural form of the model is stated in Equation 1 below;

$$Y=f(x)..... (i)$$

Where Y is the dependent variable, f is the function and x represent the independent variables.

The model is further expressed in a mathematical equation as;

$$NGDP=f (CAPX + CURX) (ii)$$

To make the mathematical expression estimable, it is transformed as equation (iii) below

$$NGDP= a_0 + a_1CAPX + a_2CURX +e..... (iii)$$

Where;

NGDP=Nominal Gross domestic product (proxy of economic growth)

CAPX= Government capital expenditure

CURX= Government recurrent expenditure

a₀ = constant

a₁-a₂ = Coefficient of explanatory variables

e =error term of the model

DATAANALYSIS AND DISCUSSION OF FINDINGS

Data presentation

The data pertaining to government capital expenditure, government recurrent expenditure, and gross domestic product data are presented in two forms; raw data as it was sourced from CBN's Statistical Bulletin and transformed data (log of data) yearly.

Data Analysis

This section discussed the descriptive statistics and various pre and post-estimation tests of this study.

Descriptive Statistic

It is crucial to provide a quantitative description of the key characteristics of the data in this study. This process aids in simplifying the raw data, making it more visually accessible and enhancing comprehension of the data trends. Descriptive statistics, therefore, facilitate the presentation of data in a more meaningful manner, enabling a simpler interpretation of the information.

Table 1 Descriptive Statistics

	NGDP	CAPX	CURX
Mean	41475.05	613.2512	2012.205
Median	9867.970	336.3150	638.0500
Maximum	202365.0	3133.820	11002.31
Minimum	139.3100	4.100000	4.750000

Std. Dev.	55932.01	738.5520	2765.242
Skewness	1.336628	1.668055	1.632812
Kurtosis	3.703695	5.549824	5.028879
Jarque-Bera Probability	13.37259	30.85466	25.86615
	0.001248	0.000000	0.000002
Sum	1741952.	25756.55	84512.60
Sum Sq. Dev.	1.28E+11	22363821	3.14E+08
Observations	42	42	42

Source: E-views 12 output 2024

Table 1 shows the result of descriptive statistics, which provide the number of observations, mean, median, standard deviation, and minimum and maximum value of variables used for this study. The mean of NGDP is 41475.05, with minimum and maximum values of 139.3100 and 9867.790 respectively. This shows that the NGDP variable has high values. The standard deviation of 55932.01 also indicates that the performance indicator deviates from the mean by 41475.05.

The mean value of capital expenditure is 613.2512 and the standard deviation of 738.5520, which indicates that the capital expenditure variable deviates from the mean by 613.2512

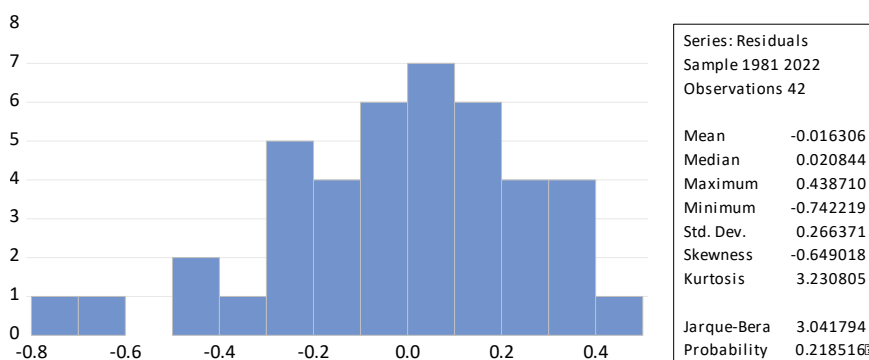
Table 2 Compilation of unit root findings.

Variables	ADF statistic	Critical value at 5%	Order of integration	Prob value	Remark
NGDP	-2.767012	-3.568379	1(2)	0.2194	Not stationary
CAPX	-4.808195	-3.557759	1(1)	0.0027	stationary
CURX	-7.116578	-3.533083	1(2)	0.0000	stationary

Source: survey, E-Views computation 2024.

The result from the unit root test shows that Nominal gross domestic product is not stationary, capital expenditure is stationary at the first difference while recurrent expenditure is stationary at the second difference. Based on this, the study will adopt the Robust least square regression method to test the hypotheses of this study.

Normality test



The outcome of the normality test indicates a Jarque-Bera value of 3.041794, coupled with a corresponding probability (prob) value of 0.218516. Consequently, since the prob value is higher than the significance level, the null hypothesis of the data being normally distributed is not rejected. Therefore, this study fails to reject the null hypothesis and does not accept the alternate hypothesis suggesting that the data is not normally distributed, with a skewness of -0.649018, shows that the explanatory variable may harm the predicate.

Table 3. Robust Least Square Regression Output
Dependent variable: NGDP

Variables	Co-efficient	Std. error	Z Statistics	Prob
C	3.042541	0.117196	25.96113	0.0000
LOG (CAPX)	0.167952	0.096765	1.735674	0.0826
LOG (CURX)	0.846845	0.080631	10.50268	0.0000
R-squared	0.863966			
Adj R-squared	0.856990			
Prob	0.000000			

Source: Computed by researcher using E-Views

The result of the Robust least square analysis presented in Table 3 indicates that government capital expenditure with a prob value of 0.0826 has an insignificant impact on gross domestic product. This suggests that a rise in capital expenditure does not lead to an increase in gross domestic product in Nigeria.

Government recurrent expenditure with a prob value of 0.0000 has a positive and significant impact on gross domestic product. The values of the R-square and Adjusted R-squared indicate that there might be other factors that are responsible for economic growth other than capital and recurrent expenditure that were not included in the regression model. Additionally, further analysis and additional information may be needed to draw a more definitive conclusion about the relationship of the variables

Hypothesis Testing

Hypothesis One

Ho₁: Government capital expenditure exerts an insignificant impact on the gross domestic product in Nigeria.

Based on the study's findings, government capital expenditure demonstrates an insignificant effect on the gross domestic product in Nigeria. Consequently, the null hypothesis, asserting that government capital expenditure has no significant effect in Nigeria, will be accepted, and the alternate hypothesis will be rejected.

Hypothesis Two

Ho₂: Government recurrent expenditure lacks a significant impact on the gross domestic product in Nigeria.

The study revealed a significant effect of government recurrent expenditure on gross domestic product. Consequently, the null hypothesis, positing that government recurrent expenditure has no significant effect on gross domestic product, will be rejected, and the alternate hypothesis will be accepted.

Discussion of findings

The study revealed that government capital expenditure has a non-significant impact on economic growth in Nigeria. This implies that an escalation in capital expenditure does not lead to a substantial

increase in economic growth in the country. Notably, this outcome contradicts the researcher's initial expectations and is also inconsistent with Keynesian theory. According to Keynesian economists, government spending is expected to stimulate output, generating income and employment, thereby fostering economic growth. This finding aligns with several other studies, such as Ogar et al. (2019), Yerima et al. (2021), Abomaye and Williams (2020), and Saidu and Ibrahim (2019). However, it differs from the conclusions drawn Omitogun et al. (2022).

The study indicates that government recurrent expenditure exerts a positive and significant influence on economic growth in Nigeria. This implies that an increase in recurrent expenditure corresponds to a proportionate increase in economic growth in the country. Notably, this result aligns with the researcher's initial expectations and is consistent with Keynesian theory, which posits that overall expenditure or aggregate demand stimulates businesses to provide goods and services, thereby fostering economic growth. The findings from this study support the notion that government recurrent expenditure significantly contributes to economic growth, a perspective shared by Ayeni and Sani (2019) and Ikubor and Oladipo (2022). However, this conclusion diverges from the findings of Omoredo (2019) and Abomaye et al. (2020).

CONCLUSION AND RECOMMENDATIONS

This research delved into the impact of government expenditure on economic growth in Nigeria spanning from 1981 to 2022. The study's findings led to the conclusion that government expenditure significantly influences economic growth, playing a crucial role in the nation's economic development and contributing to the improvement of its citizens' standard of living. It was observed that economic growth has been notably influenced by both capital and recurrent expenditure, although the extent and degree of their effects vary.

The study identified that, in principle, capital expenditure would have positively contributed to economic growth. However, issues such as corruption and institutional failures have led to the indirect conversion of intended capital expenditure into recurrent expenditure, thereby affecting economic growth. Despite these challenges, the study underscores the fundamental role of government expenditure in shaping the economic trajectory of Nigeria.

Based on the study's findings, the following recommendations are proposed:

- i. The federal government should augment its expenditure in key sectors of the economy, including education, agriculture, mining, and infrastructural development, among others. Additionally, it is imperative to ensure spending efficiencies, transparent budgetary processes, and rigorous monitoring of capital projects to enhance economic growth.
- ii. Furthermore, the federal government should raise its recurrent expenditure allocations for salary payments and service provision. Simultaneously, efforts should be made to curtail external borrowings, aiming to promote sustained economic growth.

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