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Economic Growth, Government Recurrent and Capital Expenditures in Nigeria: An Examination of the Linkage Effects

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ABSTRACT

This study examines the long and the short run linkage effects of government recurrent and capital expenditure on economic growth in Nigeria using annual data covering the period of 1985 to 2022. This study employs Autoregressive Distributed Lag (ARDL) model to examine the long run relationship existing among the variables. The ARDL long-run bounds test established the existence of long run effects of government recurrent and capital expenditure on economic growth in Nigeria. Specifically, the ARDL long run model test reveals that while government capital expenditure has a negative and statistically significant relationship with economic growth in Nigeria, government recurrent expenditure has a positive and significant relationship with economic growth in Nigeria. The ARDL Short-run bounds test reveals that it will take the speed of about one year and six months for a disequilibrium in the short-run to be corrected in the long-run. The study recommends the strategic channeling of government capital expenditures to the productive sector and for the provision of critical infrastructure that will boost growth. It also recommends the prudent management of recurrent expenditures for the optimal use of public funds.

Keywords: Economic growth, ARDL model, Co-integration, Error correction, Government Recurrent and Capital Expenditures.

1.0 Introduction

The fluxes in Nigeria's economic growth, despite substantial government expenditure, raise pivotal questions about the effectiveness and efficiency of public spending. Understanding how government expenditure translates into tangible outcomes across various sectors is imperative for crafting targeted policies that drive sustainable economic development. In the face of global

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economic uncertainties, Nigeria's journey becomes emblematic of the challenges and opportunities inherent in managing the interplay between government spending and economic growth. A vital component of fiscal management, the structure of public expenditures in Nigeria is traditionally decomposed into two broad categories: capital and recurrent expenditures. These are further broken down into four groups of public spendings: administration, social and community services, economic services and transfers.

In the past decade, the Nigerian economy has witnessed a substantial shift in the scale of government expenditure, transitioning from millions to billions and projecting towards trillions of naira (Aladejare, 2013). Despite this surge in government spending, there persist repeated public complaints regarding deteriorating infrastructure, essential for enhancing productivity and fostering economic growth. Paradoxically, the escalating government expenditure has not translated into significant economic growth, as evidenced by lacklustre contributions to the nation's GDP. The prevailing infrastructural deficits are a direct consequence of the inadequate implementation of fiscal responsibilities, attributed to a lack of comprehensive monitoring and evaluation of sectors critical to GDP growth (Abdullah, 2000).

One striking problem associated with this investigation is that the growth rate of government recurrent expenditure remains higher than the growth rate of capital expenditure. According to CBN 2022 data, this assertion holds true as the growth rate of government recurrent expenditure increases from 0.16% in 2010 to 0.22% in 2018, while the growth rate of government capital expenditure declines from 19% to 16% in the same year, freeing up lesser resources for developmental investment projects, which could have stimulated economic activities and promote output growth in Nigeria.

Again, the allocated infrastructure spending for 2015 was ₦556.6 billion representing 11% of the total expenditure, this fall short of the World Bank’s suggested 70% infrastructure-to-GDP benchmark. Nigeria, with 213.4 million people, owns 195,000 kilometres of road, according to the Infrastructure Concession Regulatory Commission, the watchdog agency that regulates the government’s public- private-partnership programmes. The deficit, coupled with low investment in rail lines that could efficiently connect key agrarian states to cities and ports, where produce could bring in strong export earnings, has denied the economy much-needed revenue and worsened post-harvest losses for farmers and traders.

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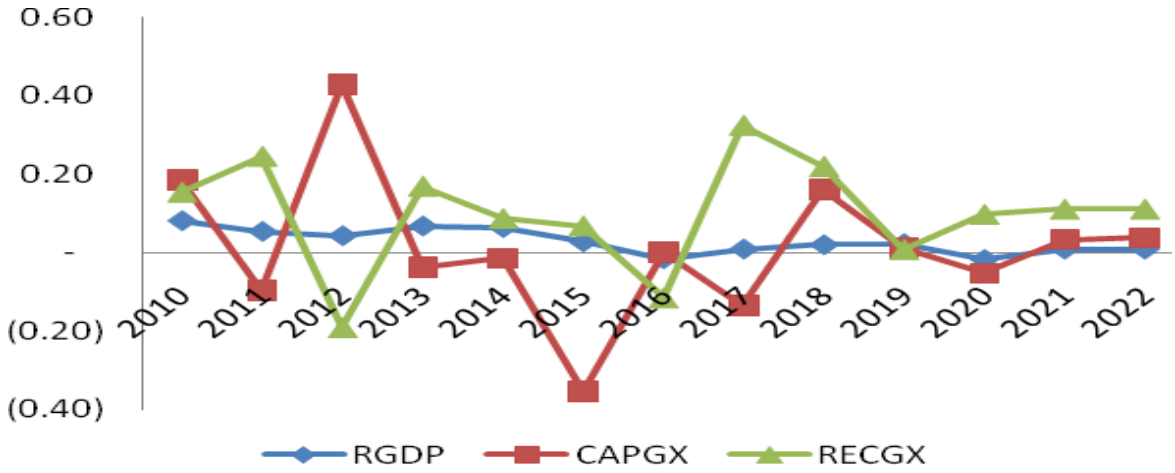
Figure 1: Trends of Government Recurrent and Capital Expenditures on Real GDP in Nigeria (2010-2022)



Source: Author's Computation (Eviews 10) (2022)

There are mixed findings in the empirical literature on the growth effects of government recurrent and capital expenditures. For instance, while Nkoro and Uko (2017) reveal positive influences of government recurrent expenditure on economic growth and inconclusive results regarding the effect of capital expenditure, Alimi (2017) reveals that government recurrent expenditure had a positive and significant impact on economic growth, while the effect of capital expenditure was relatively weaker. Furthermore, available data on the Nigerian economy spanning from 1985 to 2022 reveals a noteworthy disparity between the escalating trajectory of government expenditure and the seemingly insubstantial or lacklustre growth in the output level in Nigeria. Despite the considerable increase in government spending over this extended period, the anticipated positive correlation between expenditure and output growth appears to be elusive, prompting an exploration into the underlying dynamics shaping this economic relationship.

Figure 1 reveals the interactive forces of government capital and recurrent expenditure on economic growth rate in Nigeria. The fluctuating nature of Figure 1 shows that though the growth rate of government recurrent and capital expenditure alongside real GDPs have fluctuated actively between 2010 and 2021. However, it can be clearly seen that recurrent expenditure for most of the years remains higher than the growth rate of capital expenditure, thus leaving the growth rate of gross the domestic product sluggish or even decline in some years, as the growth rate of government recurrent expenditure increases from 0.16% in 2010 to 0.22% in 2018, while the growth rate of government capital expenditure declines from 19% to 16% in the same year, leaving growth rate of GDP to fall from 8% to 2% in that same period.

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It is pertinent to note that the growth rate of any economy depends to a larger extent on the rate of capital formation. The observed scenario, where recurrent expenditure has consistently exceeded capital expenditure and a sluggish growth rate over the years underscores the need for an exploration of the growth effects of both components of government expenditure. This underscores the need for an analysis to discern the intricate long and short run dynamics between both categories and overall economic performance. What are the long and short run influences of government recurrent and capital expenditures on economic growth in Nigeria? Therefore, the objective of this study is to examine the long and the short run linkage effects of government recurrent and capital expenditures on economic growth in Nigeria using annual data covering the period of 1985 to 2022.

This research holds significant importance for several reasons. It offers insights into the individual effects of recurrent and capital expenditures on economic growth in Nigeria. Thus, the study becomes crucial in informing relevant authorities on the appropriate public finance policies to make. Specifically, it will serve as a guide to public officials especially those involved in economic planning and public budgeting processes for optimal resource allocation decisions. Additionally, the study contributes substantially to the existing body of knowledge on the interplay between the two categories of government spending and economic growth.

This study is organized into different sections, starting with the introduction, Section two presents the literature review which includes conceptual, theoretical, empirical reviews and the evaluation of literature reviewed. Section three presents the methodology and model specification. While section four deals with data presentation and discussion of findings. Section five presents the summary of the findings, conclusions and recommendations of the study.

2.0 Literature Review

2. 1 Conceptual Framework

2.1.1 Gross Domestic Product (GDP)

According to Nakamura and Steinsson (2014), GDP is one of the most widely used indicators to measure the economic performance of a country. It represents the total monetary value of all goods and services produced within a country's borders within a specific time period, typically annually or quarterly. GDP is a crucial metric for policymakers, economists, investors, and businesses as it provides insights into the overall health and size of an economy. Below are three types of GDP:

a) Nominal GDP: It measures the value of goods and services produced in a country using current prices. It does not account for inflation.

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b) Real GDP: It adjusts nominal GDP for changes in price levels (inflation or deflation), providing a more accurate measure of economic output over time.

c) GDP per capita: This metric divides GDP by the total population of a country, providing a measure of average economic output per person. It's useful for comparing living standards between countries.

2.1.2 Economic growth

Economic growth, as defined by Dwivedi (2004), is a sustained, long-term increase in net national product or per capita national output. This implies that the overall output of goods and services must consistently outpace population growth. Another perspective on economic growth emphasizes the importance of producing goods and services that cater to the needs of a larger population. The quantitative aspect of economic growth involves a measurable increase in the monetary value of goods and services produced within an economy over a specified period. This is typically assessed through a percentage change in either the gross domestic product (GDP) or gross national product (GNP), as outlined by Dwivedi (2004). Such growth is indicative of an expanding and thriving economy that is effectively meeting the needs of its populace while surpassing demographic trends.

2.1.3 Government Expenditure

Government expenditure can be broadly categorized into two main types: capital expenditure and recurrent expenditure. These two categories represent the various ways in which governments allocate funds to meet their diverse responsibilities and obligations. Understanding the distinction between capital and recurrent expenditure is crucial for effective financial management and policy planning (Ibrahim, 2019).

2.1.3.1 Capital Expenditure

Capital expenditure refers to the funds allocated by the government for long-term investments that aim to create or acquire physical assets and improve the overall economic infrastructure. These assets typically have a lasting impact and contribute to the economic development and growth of the nation. Examples of capital expenditure include Infrastructure Development **(**construction of roads, bridges, airports, and other public facilities), Education and Healthcare Facilities **(**building schools, hospitals, and other essential institutions), Public Housing **(**investment in affordable housing projects) and Technology and Research (funding for technological advancements and research initiatives). Capital expenditure is considered an investment in the future, as it lays the foundation for sustained economic development and

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improved living standards. While the benefits may not be immediately realized, they contribute significantly to the long-term well-being of the population.

2.1.3.2 Recurrent Expenditure

Recurrent expenditure, on the other hand, refers to the day-to- day or routine expenses incurred by the government to maintain its operations and provide essential services (Bohn, 1998). Unlike capital expenditure, recurrent expenditure is often short- term and focuses on sustaining the existing infrastructure and services. Examples of recurrent expenditure include Salaries and Wages (payment of salaries to government employees), Utilities (funding for ongoing operational costs such as electricity, water, and maintenance), Public Services (provision of healthcare, education, and social welfare programs) and Routine Maintenance (upkeep of existing infrastructure and facilities). Recurrent expenditure is crucial for the smooth functioning of government operations and the delivery of essential services. However, it does not contribute directly to long-term economic growth and development in the same way as capital expenditure.

Balancing government capital and recurrent expenditure is a delicate task that requires strategic planning and financial discipline. While capital expenditure lays the groundwork for future prosperity, recurrent expenditure ensures the efficient functioning of the government in the present. Governments must prioritize these expenditures based on the current needs of society and the long- term goals outlined in their development plans. Effective management of government finances involves optimizing the allocation of funds between capital and recurrent expenditure to achieve a sustainable balance that promotes economic growth, social welfare, and fiscal responsibility. Additionally, transparency and accountability in the budgeting process are crucial to ensuring that public funds are used efficiently and for the benefit of the entire population (Cooray, 2009).

2.2 Theoretical Framework

There are diverse theories in the literature on the government spending-output growth nexus. These include: Keynesian, Neoclassical, Wagner's Theory and the Endogenous Growth Theory.

2.2.1 Keynesian Theory of Government Expenditure and Economic Growth

The Keynesian theory was developed by the British economist John Maynard Keynes in the 1930s, notably articulated in his book "The General Theory of Employment, Interest, and Money" published in 1936. The core idea of Keynesian theory is that during times of economic downturns, government expenditure should be increased to stimulate economic growth. Critics argue that excessive government spending during economic downturns can result in fiscal imbalances and long- term economic challenges. Additionally, there can be a lag in implementing

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such policies effectively, which may limit their impact. The Keynesian theory seeks to serve governments and policymakers by providing a framework for using fiscal policy, particularly government spending and taxation, as a tool to actively manage and stabilize the economy (Erkin, 1988).

2.2.2 Neoclassical theory of Government Expenditure and Economic Growth

The neoclassical theory primarily seeks to serve policymakers, economists, and individuals who advocate for limited government involvement in economic activities. It is often associated with proponents of laissez- faire capitalism (Cass, 1965). The central idea of the neoclassical theory is that government expenditure should be limited, and the role of government in the economy should be minimal. Neoclassical economists argue that markets are efficient and self-regulating, and government intervention should be limited to preserving property rights, enforcing contracts, and maintaining a stable monetary system.

2.2.3 Wagner's Theory of Government Expenditure and Economic Growth

Wagner's theory also known as Wagner's law posits that government expenditure tends to increase as a country's economy grows. This theory suggests that as incomes rise, people demandmore government services and social welfare programs, leading to an increase in government spending. In other words, economic growth drives an expansion of the government sector (Wagner, 1883). This theory also assumes a linear relationship between economic growth and government expansion, which may not always hold true in practice (Wagner, 1883).

2.2.4 Endogenous Growth Theory of Government Expenditure and Economic Growth

The central idea of endogenous growth theory is that economic growth is not solely determined by external factors such as capital accumulation or technological progress but is significantly influenced by internal or endogenous factors within an economy. In particular, it emphasizes the role of human capital, innovation, and knowledge as key drivers of economic growth. Unlike the older neoclassical theory, which suggested that economic growth would naturally slow down over time as economies reached a steady state, endogenous growth theory argues that economies can sustain long-term growth by investing in education, research and development, and innovation (Olugbenga and Owoye, 2007).

2.3 Review of Empirical Literature

Alimi (2017) investigated the effects of government recurrent and capital expenditure on economic growth in Nigeria between 1970 and 2015. The methodology employed was the Vector Error Correction Model (VECM). The study found that government recurrent expenditure

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had a positive and significant impact on economic growth, while the effect of capital expenditure was relatively weaker. The study recommended that the government should focus on increasing investment in critical infrastructure projects and improving the efficiency of recurrent expenditure to enhance economic growth.

Also, Nkoro and Uko (2017) investigated the effects of government recurrent and capital expenditure on economic growth in Nigeria. Data was collected between 1970 and 2015 in Nigeria. The methodology employed was the Ordinary Least Squares (OLS) regression analysis. The study found that government recurrent expenditure positively influenced economic growth, while the effect of capital expenditure was inconclusive. Nkoro and Uko recommended that the government should prioritize investment in critical infrastructure projects and social services, while also implementing measures to enhance the efficiency of recurrent spending to drive economic growth.

Adegbie and Alege (2018) examined the effects of government recurrent and capital expenditure on economic growth in Nigeria between 1970 and 2016. The methodology employed was the Autoregressive Distributed Lag (ARDL) bounds testing approach. The study found that both government recurrent and capital expenditure positively influenced economic growth in Nigeria, with recurrent expenditure having a stronger impact. Adegbie and Alege recommended that the government should prioritize investment in infrastructure projects and social services while ensuring prudent management of recurrent expenditure to foster sustainable economic growth.

Ola-David and Oladipo (2019) analysed the effects of government recurrent and capital expenditure on economic growth in Nigeria. Using data collected between 1970 and 2017 in Nigeria. The methodology employed was the Autoregressive Distributed Lag (ARDL) approach. The study found that both government recurrent and capital expenditure had a positive and significant impact on economic growth in Nigeria. Ola-David and Oladipo recommended that the government should maintain a balanced budget, prioritize productive investment in capital projects, and improve the efficiency of recurrent spending to stimulate economic growth.

Adeniran and Adeleye (2021) analysed the effects of government recurrent and capital expenditure on economic growth in Nigeria. Data was collected between 1970 and 2020 in Nigeria. The methodology employed was the Johansen cointegration technique and the Error Correction Model (ECM). The study found that both government recurrent and capital expenditure had a positive and significant impact on economic growth in Nigeria. Adeniran and Adeleye recommended that the government should increase investment in critical infrastructure projects, improve the efficiency of recurrent spending, and adopt fiscal policies that promote sustainable economic growth.

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3.0 Research Methodology

3.1 Research Design

The research design adopted for this study is the ex-post facto design. This design is suitable for investigations or evaluations conducted retrospectively, utilizing existing information from past events. It is particularly apt for after-the-fact research scenarios where data analysis is based on historical information.

3.2 Nature and Sources of Data

Data used for this study are annual time series data covering the period 1985 to 2022. All data were obtained from sources such as the Central Bank of Nigeria (CBN) Statistical Bulletin (various issues), World Bank and World Development Indicators (WDI) and World Bank national accounts data.

3.3 Model specification

The underlying theories of this study are both the Keynesian theory, Wagner's theory and the endogenous growth theory given their theoretical relevance to this study. The basic mathematical equation for the endogenous growth model can be represented as:

$$Y = \mathbf{AK}^{\alpha} * \mathbf{L}^{1-\alpha}$$

…….....(1)

Where Y = Output; A = Total factor productivity, representing technological progress and efficiency in resources used. K = Physical capital L = Labour input; α = Output elasticity of capital, indicating the share of output attributed to physical capital.

In an attempt to determine the effects of government recurrent and capital expenditures on economic growth in Nigeria, the study modifies the model of Oyinlola and Akinnibosun (2013)/ The modification involves a breakdown of government expenditure into capital and recurrent expenditure, serving as a nuanced measure for the independent variable. Meanwhile, real GDP assumes its role as a reliable gauge for the dependent variable. By employing this refined model, the research endeavours to provide a more detailed analysis shedding light on the intricate dynamics between government spending components and economic growth in the Nigerian context. This model is presented in equation 2.

RGDP = f(GXCAP, GXREC)

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……
……..(2)

In line with our objectives, equation 2 is modified to capture other variables such as exchange rate, interest rate, gross fixed capital formation, labour force and real broad money supply alongside government capital and recurrent expenditures are expressed as the independent variables, while real gross domestic products is used to measure economic growth, which represents the dependent variable. Thus, the model for this study is formulated and stated in equation 3 as follows:

RGDP = f(CAPGX, RECGX, EXR, LRTINT, LABFR, GFCF, MS)

……..(3)
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Equation 3 can be restated in the econometric form as in equation 4:

$RGDP_t = \alpha + \beta 1CAPGXt + \beta 2RECGXt + \beta 3EXRt + \beta 4LRTINTt + \beta 5LABFRt + \beta 6GFCFt + \beta 7MSt + \mu t_t$

……..……...(4)

Where:

RGDP = Real Gross Domestic Product

CAPGX = Government Capital Expenditure to GDP

RECGX = Government Recurrent Expenditure to GDP

EXR = Nominal Exchange rate

LRTINT = Lending rate of interest

LABFR = Labour force participation rate

GFCF = Gross fixed capital formation (% of GDP)

MS = Real broad money supply

α = Constant Parameter

μt_t = Error term

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β_1, β_2, β_3, β_4 β_5, β_6 and β_7, = Represent the coefficients of the explanatory variables.

A priori expectations: The figures in parenthesis in equation 3 represents a priori expectation about the signs of the coefficients.

3.4 Analytical Techniques

The techniques of data analysis adopted for the study are based on the objectives of the study. To examine the long and the short run linkage effects of government recurrent and capital expenditures on economic growth in Nigeria, the study adopted the ARDL model and Bounds test. To perform the bounds test for cointegration, the conditional ARDL model for Equation 4 with their respective variables is specified in equation 6.

3.4.1 The ARDL Model

This test for co-integration was developed by Pesaran *et al.* (2001). ARDL co-integration Technique is preferable when dealing with variables that are integrated of mixed order between I(0) and I(1) and, robust when there is a single long run relationship between the underlying variables in a small sample. The ARDL method does not require the unit root test of stationarity, but to avoid ARDL model crash in the presence of variables that are stationary at second difference, the unit root test will be carried out to determine the number of unit root in series of co-integration. The long run relationship of the underlying variables is detected through the F-statistic (Wald test). In this approach, long run relationship of the series is said to be established when the F-statistic exceeds the critical value bond (Nkoro and Uko, 2016). To ascertain the cointegration between the variables, equation 3.4 will therefore be expressed in the general ARDL model developed by Peasran et al, (2001). The generalized ARDL (p,q) model is specified as in equation 5.

$$Y_t = \alpha_{0j} + \sum_{i=1}^{p} \delta Y_{t-1} + \sum_{j=1}^{q} \beta X_{t-1} + \varepsilon_j \quad \text{.....(5)}$$

Where Y_t is a vector and the variable in X_t are allowed to be purely I(0) or I(1) or cointegrated; β and δ are coefficients; α_0 is the constant; j=1,...,k;p,q are optimal lag order; ε_j is the vector of the error terms.

The Autoregressive distributed lag (ARDL) model for this study is written as in equation 6:

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$$RGDP_t = \propto_0 + \alpha_1 RGDP_{t-1} + \alpha_2 CAPGX_{t-1} + \alpha_3 RECGX_{t-1} + \alpha_4 EXR_{t-1} + \alpha_5 LRTINT_{t-1} + \alpha_6 LABFR_{t-1} + \alpha_7 GFCF_{t-1} + \alpha_8 MS_{t-1} + \sum_{i=1}^{n} \beta_1 \Delta RGDP_{t-i} + \sum_{i=1}^{n} \beta_2 \Delta CAPGX_{t-1} + \sum_{i=1}^{n} \beta_3 \Delta RECGX_{t-1} + \sum_{i=1}^{n} \beta_4 \Delta EXR_{t-1} + \sum_{i=1}^{n} \beta_5 \Delta LRTINT_{t-1} + \sum_{i=1}^{n} \beta_6 \Delta LABFR_{t-1} + \sum_{i=1}^{n} \beta_7 \Delta GFCF_{t-1} + \sum_{i=1}^{n} \beta_8 \Delta MS_{t-1} + \mu_t$$

……..……(6)

Where $\beta_0 - \beta_9$ are short-run elasticities, $\alpha_0 - \alpha_9$ are long-run elasticities, ECM_{t-1} is one lag of error correction term, λ is the speed of adjustment parameter with a negative sign, Δ is first difference, μ_t is white noise, β_0 is constant term.

If the computed F-test exceeds the upper critical bounds value, then H0 is rejected signaling co-integration amongst the different variables. If the computed F-value is below the critical bound, we fail to reject H0. But if the computed F-value falls within the critical value bound, the result is inconclusive. If these series are found to be co-integrated, an unrestricted error correction version of the corresponding ARDL model can be estimated to trace the short-term dynamics of the model. The reparametrized result gives the short-run dynamics and long run relationship of the underlying variables.

3.4.2 Error Correction Model

The error correction model (ECM) is used to detect the short-term and long-term dynamics of a variable around its stationary equilibrium value. For an adjustment in the short-run distortions, error correction requires that the sign of the coefficient of the residual is negative and statistically significant. The greater the absolute value of the ECM coefficient, the more quickly the model fine-tunes to achieve long-run equilibrium. Based on Equation 6, the short-run connections may be stated as an ARDL ECM. Thus, if there is cointegration, the error correction model (ECM) for equation 5 is specified in equation 7.

$$RGDP_t = \propto_0 + \sum_{i=1}^{n} \beta_1 \Delta RGDP_{t-i} + \sum_{i=1}^{n} \beta_2 \Delta CAPGX_{t-1} + \sum_{i=1}^{n} \beta_3 \Delta RECGX_{t-1} + \sum_{i=1}^{n} \beta_4 \Delta EXR_{t-1} + \sum_{i=1}^{n} \beta_5 \Delta LRTINT_{t-1} + \sum_{i=1}^{n} \beta_6 \Delta LABFR_{t-1} + \sum_{i=1}^{n} \beta_7 \Delta GFCF_{t-1} + \sum_{i=1}^{n} \beta_8 \Delta MS_{t-1} + \lambda ECMt - 1 + \mu_t$$

……(7)

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Where $\beta_0 - \beta_8$ are short-run elasticities, $\alpha_0 - \alpha_5$ are long-run elasticities, ECM_{t-1} is one lag of error correction term, λ is the speed of adjustment parameter with a negative sign, Δ is first difference, μ_t is white noise, β_0 is constant term.

3.5 Diagnostic Tests

3.5.1 Pre-estimation tests

3.5.1a Unit Root Test

The unit root test is involved with the testing for the order of integration of each variable. A series is said to be integrated of order I(1) if it needs to be differenced once to become stationary. The same holds for an I(2) series which will need to be differenced twice to become stationary. Thus a stationary series is integrated of order zero I(0) (i.e, no differencing is necessary). The study will employ the Augmented Dickey-Fuller (ADF) and the Philips-Perron (PP) unit root tests to determine the order of integration of each series.

3.5.2 Post-estimation tests

a) Breusch-Godfrey test is a statistical test that checks for the presence of serial correlation or autocorrelation in the residuals of a regression model. In other words, it determines if there is a pattern in the residuals that can be explained by previous residuals or errors.

b) The Breusch-Pagan-Godfrey test is a statistical test used to determine whether there is heteroscedasticity in a regression model. The test involves regressing the squared residuals from a linear regression model on the independent variables in the original model. The resulting regression model is then used to calculate a test statistic, which is compared to a chi-square distribution to determine the p-value. In summary, if the p-value is less than 0.05, it indicates that there is evidence of heteroscedasticity in the data, and the regression results should be interpreted with caution. If the p-value is greater than 0.05, there is no evidence of heteroscedasticity, and the regression results are considered reliable.

c) The Jarque-Bera test is a statistical test used to determine whether a given dataset has a normal distribution. The test calculates a test statistic, which is compared to a critical value from a chi-squared distribution with two degrees of freedom. If the test statistic is larger than the critical value, then the null hypothesis of normality is rejected. If the null hypothesis is rejected, it means that the data does not have a normal distribution. However, if the null hypothesis is not rejected, it does not necessarily mean that the data is normally distributed, as the test is not very sensitive to departures from normality when the sample size is small.

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4.0 Data Presentation, Analysis and Discussion of Findings

4.1 Descriptive Statistics

Table 1: Descriptive Statistics of all Variables

	RGDP	CAPGX	RECGX	EXR	LRTINT	LABFR	GFCF	MS
Mean	4.207895	0.236777	0.212139	127.7567	18.17842	6.122456	0.153947	17.33536
Median	4.200000	0.169808	0.203440	123.1930	17.60000	1.105428	0.145000	14.88079
Maximum	15.30000	1.629377	0.916291	425.9800	31.60000	167.6667	0.370000	27.37879
Minimum	2.000000	0.582104	0.190349	0.894000	9.430000	0.247281	0.140000	9.063329
Std. Dev.	3.806423	0.401857	0.216850	119.0002	4.256181	26.99504	0.117486	6.130035
Skewness	0.488077	1.247489	0.825621	0.931420	0.630638	5.863490	-0.341707	0.282858
Kurtosis	3.488144	5.799617	4.485336	3.066163	4.512198	35.59795	3.041091	1.396953
Jarque-Bera	1.886005	22.26605	3.810303	2.501368	6.139471	1900.235	0.742179	4.575510
Probability	0.389457	0.000015	0. 120138	0. 163884	0.046433	0.000000	0.689982	0.101494
Observations	38	38	38	38	38	38	38	38

Source: Author's Computation (Eviews 10)

The study conducted descriptive statistics as presented in Table 1 to provide a summary of the data used and it helps in understanding its characteristics. Descriptive statistics is important because it provides a concise summary of the main features of a dataset; allows for a preliminary exploration of the data; helps identify data errors, inconsistencies, or missing values and creates a visual representation of data making it easier to understand patterns, and distributions.

The descriptive statistics for each of the variables used in this study is presented in Table 1, have a total of 36 observations for each of our variables. From the summary statistics presented, it is evident that each of the variables has a positive mean value with exchange rate the highest mean, median and maximum while gross fixed capital formation has the lowest mean, median and minimum values respectively in absolute terms. The Jarque-Bera test is used to assess if a given data set has a normal distribution. From the result in Table 5.4, it can be seen that real GDPs, government recurrent expenditure, nominal exchange rate, gross fixed capital formation and broad money supply are normally distributed because their probability values are greater than 0.05, while government capital expenditure, lending rate and labour force are not normally distributed because their probability values of 0.00 is less than 0.05.

4.2 Correlation Matrix

The study also conducted a correlation matrix which is a useful statistical analysis technique that provides insights into the relationships between multiple variables in a dataset. Some of the

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reasons for running a correlation matrix are that it helps to identify the strength and direction of relationships between variables; assists in variable selection by identifying highly correlated variables and provides valuable insights for decision-making and policy formulation. This is presented in Table 2.

Table 2: Correlation Matrix of All Variables

	RGDP	CAPGX	RECGX	EXR	LRTINT	LABFR	GFCF	MS
RGDP	1	0.0919	0.2026	-0.1080	0.1328	-0.0823	-0.2009	-0.1296
CAPGX	0.0919	1	0.5288	-0.3342	0.1964	-0.2280	0.0139	-0.3280
RECGX	0.2026	0.5288	1	-0.2240	0.5790	-0.1184	0.0592	-0.3234
EXR	-0.1080	-0.3342	-0.2240	1	-0.3614	0.1011	0.1001	0.8029
LRTINT	0.1328	0.1964	0.5790	-0.3614	1	-0.0680	0.2772	-0.3195
LABFR	-0.0823	-0.2280	-0.1184	0.1011	-0.0680	1	-0.1482	0.1411
GFCF	-0.2009	0.0139	0.0592	0.1001	0.2772	-0.1482	1	-0.1395
MS	-0.1296	-0.3280	-0.3234	0.8029	-0.3195	0.1411	-0.1395	1

Source: Author's Computation (Eviews 10)

Table 2 depicts the correlation matrix for our variables in the model. However, there is no correlation coefficient that exceeds or is even close to 0.70 in absolute terms. For this reason, in our model, there is no problem of multicollinearity which enhances the reliability for regression analysis.

4.3 Unit Root Test Results

The variables in the models were subjected to unit root tests to determine the stationarity of the variables. The test was carried out at levels and first differences of the chosen variables and was performed assuming intercept and trend in ADF and PP specifications. The null hypothesis states that each of the variables has unit root, that is, each is non-stationary whereas the alternative hypothesis states that each variable does not have unit root, that is, each variable is stationary. The unit root test result is contained in Table 3.

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Table 3: ADF and PP Unit Root Test Result

Variable	ADF t-Statistic	Order of Integration	Variable	PP t-Statistics	Order of Integration
RGDP	-6.9325	I(1)	GDPR	-6.9325	I(1)
CAPGX	-2.4408	I(0)	CAPGX	-2.4408	I(0)
RECGX	-1.6619	I(0)	RECGX	-1.6619	I(0)
EXCH	-3.2881	I(1)	EXCH	-3.2881	I(1)
LINT	-6.7140	I(1)	LINT	-6.7140	I(1)
LABFR	-5.8113	I(0)	LABFR	-5.8113	I(0)
GFCF	-3.4610	I(1)	GFCF	-3.4610	I(1)
MS	-2.1954	I(1)	MS	-2.1954	I(1)

Source: Author's Computation (Eviews 10)

The decision rule states that for variable to be stationary at any level, the absolute value of the t-statistic must be higher than the absolute critical value at 5% level of significance. From the result in Table 3, unit root for both (ADF) and (PP) test shows that all the variables used for this study were stationary at level and first difference. Real GDP, nominal exchange rate, lending rate, gross fixed capital formation and broad money supply are all stationary at first difference, while government capital expenditure, government recurrent expenditure and labour participation rate are stationary at level. Based on the mixed order of integration between I(0) andI(1) among our variables, this justifies adoption of ARDL techniques to investigate the effect of inflation on economic growth in Nigeria.

4.4 Cointegration Test Results

Cointegration among time series variables suggests that series may behave in different ways in the short run but that they will converge towards common equilibrium behaviour in the long run. The ARDL Bounds Test will be used to test for cointegration in the model. The cointegration test result is contained in Table 4. To examine the long and short run linkages between government recurrent and capital expenditure on economic growth in Nigeria, the long run cointegration estimate was conducted and the cointegration test result is contained in Table 4.

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Table 4: ARDL Bounds Test Result for Cointegration

Test Statistic	value	Significant Level	Bound Lower I(0)	Bound Upper I(1)
F-Statistic	5.1436			
k	7	10%	2.03	3.13
		5%	2.32	3.5
		1%	2.96	4.26

Source: Author's Computation (Eviews10)

The co-integration test was conducted to ascertain the long run relationship among the variables after the data have been ascertained to be free from unit root. Table 4 shows the results of the cointegration analysis. It can be seen that the calculated F-statistics value of 5.1436 exceeds the lower bound critical value of 2.32 and upper bound critical value of 3.5 at the 5% level of significance. This means the null hypothesis of no co-integration among the variables is rejected at the 5% level, hence there exist cointegration (a long run relationship) between the variables, and this shows that economic growth, government capital and recurrent expenditures (as well as other independent variables in the model) are bound by a long run relationship. Thus, the result is a sufficient condition for fitting ECM. This suggests that if fiscal responsibility is optimally managed, government capital and recurrent expenditures can serve as policy tools for boosting economic growth in the long run.

4.5 ARDL Test Results

4.5.1 ARDL Long Run Estimates

Given the objective of the study, we examine the long run linkages between government recurrent and capital expenditure on economic growth in Nigeria using the ARDL model. The result is presented in Table 5.

The ARDL long run model reveals that government capital expenditure has a negative and statistically significant relationship with economic growth in Nigeria given its coefficient as -12.65. Conversely, government recurrent expenditure has a positive and significant relationship with economic growth in Nigeria given its coefficient s +42.69. These findings do not conform to our stated a priori expectations (of positive relationship between government capital expenditure and economic growth as well as negative relationship between government recurrent expenditure and economic growth), but conforms to the findings of the study conducted by (Alimi (2017). The value of EXR shows a positive and significant effect on economic growth in Nigeria. This result conforms to the a priori expectation. LRTINT, LABFR, GFCF and MS were found to have negative and significant effects on economic growth in Nigeria.

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Table 5: ARDL Long-Run Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CAPGX	-12.65317	6.881225	-1.838795	0.0825
RECGX	-42.69290	18.95849	-2.251915	0.0371
EXR	0.007570	0.018467	0.409935	0.6867
LRTINT	-1.529583	0.763166	-2.004260	0.0603
LABFR	-0.044311	0.031109	-1.424397	0.1714
GFCF	-29.33250	11.64074	-2.519814	0.0214
MS	-0.303968	0.273360	-1.111967	0.2808

EC = GDPR - (-12.6532*CAPGX + 42.6929*RECGX + 0.0076*EXR -1.5296

*LRTINT -0.0443*LABFR -29.3325*GFCF -0.3040*MS)

Source: Author's Computation (Eviews 10)

4.5.2 ARDL Short Run Estimates

Having established the existence of long run effects of government recurrent and capital expenditure on economic growth in Nigeria, we sought to determine the short run influence of government recurrent and capital expenditure on economic growth in Nigeria, using the ARDL model. The result is presented in Table 6.

Table 6: ARDL Short-Run Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	23.64107	3.06192	7.720996	0
D(GDPR(-1))	-0.429561	0.092253	-4.656354	0.0002
D(CAPGX)	-5.655549	1.02094	-5.539548	0
D(RECGX)	8.147725	1.900334	4.287523	0.0004
D(RECGX(-1))	-9.645065	2.096404	-4.600767	0.0002
D(EXR)	-0.093421	0.019552	-4.777977	0.0002
D(LRTINT)	-0.036726	0.133082	-0.275961	0.7857

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D(LRTINT(-1))	0.41699	0.131725	3.165596	0.0054
D(GFCF)	-11.3216	3.205546	-3.531878	0.0024
D(MS)	-0.60456	0.168877	-3.579875	0.0021
CointEq(-1)*	-0.624839	0.082652	-7.559867	0
R-squared	0.838032	S.D. dependent var		4.332916
Adjusted R-squared	0.773245	Akaike info criterion		4.532942
S.E. of regression	2.063283	Durbin-Watson stat		2.27639
F-statistic	12.93516	Prob(F-statistic)		0

Source: Author's Computation (Eviews 10)

The ARDL short run result reveals that government capital expenditure has a negative and statistically significant relationship with economic growth in Nigeria given its coefficient as -5.656. Conversely, government recurrent expenditure has a positive and significant relationship with economic growth in Nigeria given its coefficient as +8.15. Additionally, the short run result shows that the coefficient of multiple determination R^2 is 0.83, meaning that 83% of the changes in economic growth is accounted for by the independent variables. The Prob (F- stat) value of 0.000000 shows that the overall relationship in the model is significant, also the Durbin- Watson value of 2.28, implies that our model is free from the problems of serial correlation. The error correction term CointEq(-1) in the model has the expected sign (i.e. negative) and significant at 5% probability level. The slope coefficient of the error correction term -0.63 represents the speed of adjustment and is consistent with the hypothesis of convergence towards the long-run equilibrium. The value indicates that it will take the speed of about one year and six months for a disequilibrium in the short-run to be corrected in the long-run, if government capital and recurrent expenditure are channels into the productive sector that will increase output productivity.

4.6 Diagnostic Test Results

4.6.1 Test for autocorrelation

The hypothesis to be tested includes:

H0: there is no autocorrelation

H1: there is autocorrelation

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Decision Rule:

Do not reject H0 if the p-value is greater than 0.05, otherwise reject H0 and conclude that there is autocorrelation. Table 7 contains the correlation test result.

Table 7: Breusch-Godfrey Serial Correlation Test Result

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	3.945911	Prob. F(2,12)	0.2404
Obs*R-squared	27.96193	Prob. Chi-Square(2)	0.3428

Source: Author's Computation (Eviews 10)

From Table 7, 0.3428 > 0.05, therefore we accept the null hypothesis of no autocorrelation and conclude that there is no serial correlation amongst the variables. Also, the Durbin-Watson statistics also confirms the presence of no serial correlation, given its value as 2.37.

4.6.2 Test for Normality

The classical normal linear regression model assumes that each error term is distributed normally. This study will make use of the Jarque-Bera normality test to find out if the estimated errors are normally distributed. The following hypothesis will be tested:

H_0: The data follows a normal distribution

H_1: The data does not follow a normal distribution

Decision rule:

Reject H0 if the histogram is not bell shaped and the p-value of the Jarque-Bera statistics is significant at 5% level of significance; otherwise, we fail to reject H0. Figure 2 represents the normality test result.

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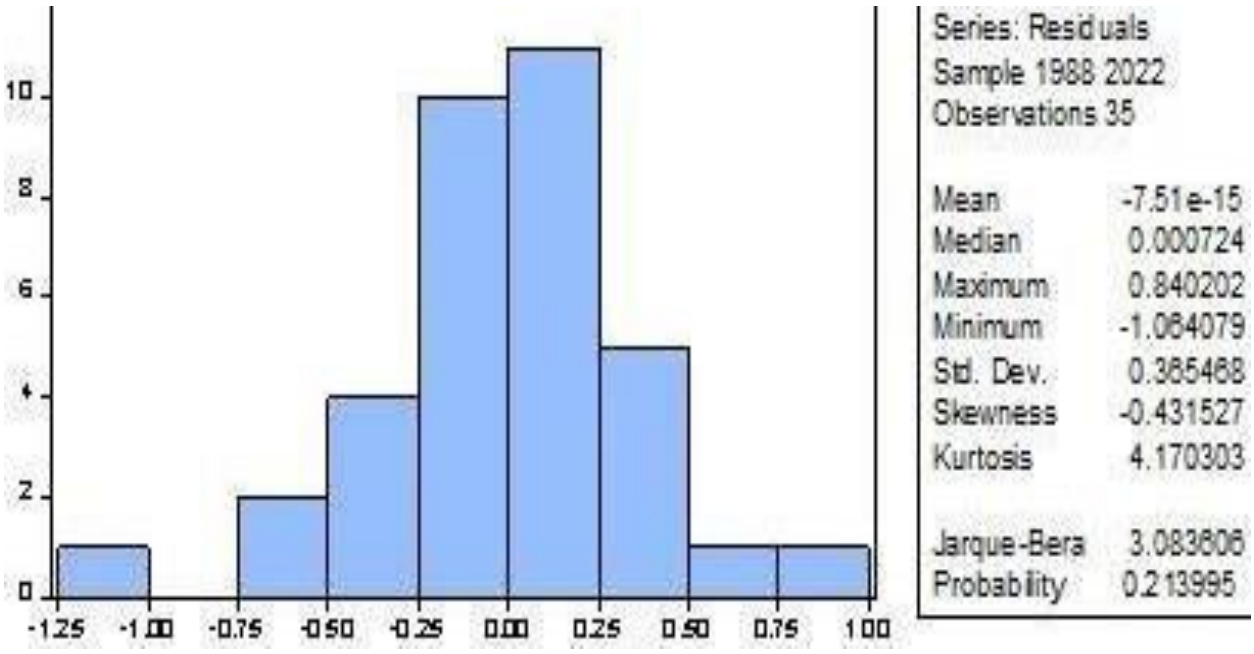
Figure 2: Histogram of Normality Test Result

Figure 2: Jarque-Bera Normality Test Result



Source: Author's Computation (EViews10) (2021).

From Figure 2, the histogram is bell shaped with a Jarque-Bera value of 3.08 and p-value of 0.21 which is greater than 0.05. Therefore, we accept the null hypothesis and conclude that the model follows a normal distribution.

4.6.3 Test for Heteroskedasticity

This test is basically focused on the variance of the error term. The test helps to ascertain whether the variance of the error is constant. The hypothesis to be tested include:

H_0: There is no heteroskedasticity

H_1: There is heteroskedasticity

Decision Rule:

Reject H_0 if the p-value of the F-statistic is insignificant (meaning that the p-value is greater than 0.05), otherwise we fail to reject H_0 and conclude that there is no heteroskedasticity in the model. Table 8 shows the heteroskedasticity test result.

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Table 8: Breusch-Pagan-Godfrey heteroskedasticity test result

Heteroskedasticity Test: ARCH			
F-statistic	0.289821	Prob. F(1,32)	0.5941
Obs*R-squared	0.305171	Prob. Chi-Square(1)	0.5807

Source: Author's Computation (Eviews 10)

From Table 8, the prob. Chi-square (0.5807) is greater than 0.05, therefore we accept the null hypothesis and conclude that our model is homoscedastic, meaning that the variance of the errors is constant across different values of the independent variables.

4.7 Findings

The objective of this study is to examine the long and the short run linkage effects of government recurrent and capital expenditures on economic growth in Nigeria using annual data covering the period of 1985 to 2022. Firstly, the ARDL bounds test results established the existence of a long run relationship between economic growth, government recurrent and capital expenditures and other independent variables in the model. Secondly, the ARDL long and short run model results both reveal a negative and statistically significant relationship between government capital expenditure and economic growth in Nigeria as well as the existence of a positive and significant relationship between government recurrent expenditure and economic growth in Nigeria,

Specifically, the ARDL long run model reveals that government capital expenditure has a negative and statistically significant relationship with economic growth in Nigeria given its coefficient as -12.65. Conversely, government recurrent expenditure has a positive and significant relationship with economic growth in Nigeria given its coefficient s +42.69. This indicates a misallocation of resources in recurrent expenditure, further reducing growth potential. These findings do not conform to our stated a priori expectations (of positive relationship between government capital expenditure and economic growth as well as negative relationship between government recurrent expenditure and economic growth), but conforms to the findings of the study conducted by (Alimi (2017). The value of EXR shows a positive and significant effect on economic growth in Nigeria. This result conforms to the a priori expectation. LRTINT, LABFR, GFCF and MS were found to have negative and significant effects on economic growth in Nigeria.

The ARDL short run result reveals that government capital expenditure has a negative and statistically significant relationship with economic growth in Nigeria given its coefficient as -

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5.656. Conversely, government recurrent expenditure has a positive and significant relationship with economic growth in Nigeria given its coefficient as +8.15. Additionally, the short run result shows that the coefficient of multiple determination R^2 is 0.83, meaning that 83% of the changes in economic growth is accounted for by the independent variables. Furthermore, the slope coefficient of the error correction term -0.63 represents the speed of adjustment and is consistent with the hypothesis of convergence towards the long-run equilibrium. The value indicates that it will take the speed of about one year and six months for a disequilibrium in the short-run to be corrected in the long-run, if government capital and recurrent expenditure are channeled into the real sector such that it increases output productivity.

4.8 Discussion of Findings

From the ARDL results, this study shows that both in the short run and in the long run. government capital expenditure has a negative and significant effect on economic growth in Nigeria and government recurrent expenditure has a positive and significant effect on economic growth in Nigeria as well. This implies that, government capital expenditure in Nigeria has not been directed towards strategic infrastructure projects and development initiatives which can help to promote economic growth in Nigeria. Nigeria has a massive infrastructure deficit in the country, the allocated infrastructure spending for 2015 was ₦556.6 billion representing 11% of the total expenditure, this fall short of the World Bank's suggested 70% infrastructure-to-GDP benchmark. By investing in areas like transportation, energy, and healthcare, the government stimulates economic growth, creating job opportunities and increasing productivity. This can alleviate inflationary pressures by fostering a more robust and diversified economy.

On the other hand, for government recurrent expenditure, it is essential for the government to reduce her operational and other day-to-day costs which took over 75% of the total spending in 2019 according to CBN (2020), so as to free up a significant level of revenue for infrastructural and other developmental projects. When the government consistently spends less on salaries, palliatives, and other day-to-day operational costs, this could free up significant revenue that could be redirected towards strategic infrastructure projects such as transportation, energy, and telecommunications which will stimulate economic activity, enhance productivity, and ultimately contributing to overall growth and prosperity in the country. Prudent allocation of capital expenditure towards development projects can promote economic productivity, while unchecked recurrent expenditure may exacerbate inflationary pressures, consequently leading to reduction in aggregate demand and output growth in Nigeria. This is in conformity with the study of (Adeleke, 2017).

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4.9 Policy Implication of Findings

The findings from the ARDL results offer important policy implications for government expenditure in Nigeria. Firstly, it is crucial to reevaluate the allocation of government capital expenditure to ensure it is directed towards strategic infrastructure projects and development initiatives. Investments in critical areas such as agriculture, education, transportation, energy, and healthcare can stimulate economic growth by creating job opportunities and increasing productivity. This targeted approach can also help alleviate inflationary pressures and foster a more resilient and diversified economy.

Conversely, prudent management of government recurrent expenditure is essential. By minimizing spending on salaries, palliatives, and day-to-day operational costs, revenue can be redirected towards strategic infrastructure projects. This re-allocation can enhance productivity, stimulate economic activity, and attract private investment, thereby contributing to overall growth and prosperity. However, unchecked recurrent expenditure may exacerbate inflationary pressures and reduce aggregate demand and output growth in Nigeria. Therefore, policymakers must prioritize prudent allocation of capital expenditure towards development projects while carefully managing recurrent expenditure to ensure sustainable economic growth and prosperity in the country.

5.0 Summary, Conclusion, And Recommendations

5.1 Summary

This study examined the long and the short run linkage effects of government recurrent and capital expenditures on economic growth in Nigeria using annual data covering the period of 1985 to 2022. The study employs Autoregressive Distributed Lag (ARDL) model to examine the long run relationship existing among the variables. The ARDL long-run bounds test established the existence of long run effects of government recurrent and capital expenditure on economic growth in Nigeria. Specifically, the ARDL long run model test reveals that while government capital expenditure has a negative and statistically significant relationship with economic growth in Nigeria, government recurrent expenditure has a positive and statistically significant relationship with economic growth in Nigeria.

This implies that, government capital expenditure in Nigeria has not been directed towards strategic infrastructure projects and development initiatives which can help to promote economic growth in Nigeria. It also reveals a possible misallocation of recurrent expenditures. Additionally, the ARDL Short-run model test reveals that it will take the speed of about one year and six months for a disequilibrium in the short-run to be corrected in the long-run, if

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government capital and recurrent expenditure are channeled into the real sector such that it increases output productivity.

5.2 Conclusion and Recommendations

This study has revealed the existence of long and the short run linkage effects of government recurrent and capital expenditures on economic growth in Nigeria. It has also revealed the existence of a negative and significant relationship between government capital expenditures and economic growth in Nigeria as well as the existence of a positive relationship between government recurrent expenditures and economic growth in Nigeria. It has also revealed the speed of adjustment of about one year and six months for a disequilibrium in the short-run values of the variables to be corrected in the long-run.

Furthermore, this work has contributed significantly to the existing body of knowledge through its findings as it helps to advance the frontiers of knowledge. However, there is still room for further studies. Therefore, we suggest that researchers in related fields embark on research activities to determine the threshold or optimal levels of government recurrent and capital expenditures and economic growth.

Based on the findings of this study, the policy recommendations are necessary. From our findings which shows that both government capital and recurrent expenditure has not contributed significantly to output growth in Nigeria makes it crucial for relevant government authorities at all levels to reevaluate the allocation of government capital expenditure to ensure it is directed towards strategic infrastructure projects and development initiatives. Given that investments in the real sector of the economy and critical areas such as agriculture, education, transportation, energy, and healthcare can stimulate economic growth by creating job opportunities and increasing productivity. This targeted approach can also help alleviate inflationary pressures and foster a more resilient and diversified economy. Therefore, this study recommends that government capital expenditures be strategically channeled to the productive sectors and also for the provision of critical infrastructure that will boost output growth.

Furthermore, prudent management of government recurrent expenditure is essential for the optimal use of public funds. By minimizing spending on salaries, palliatives, and day-to-day operational costs, can free-up revenue which could be redirected towards strategic infrastructure projects. This re-allocation can enhance productivity, stimulate economic activity, and attract private investment, thereby contributing to overall growth and prosperity. Therefore, policymakers must prioritize prudent allocation of government capital and recurrent expenditures towards development projects while carefully managing recurrent expenditure to ensure sustainable economic growth and prosperity in the country.

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References

Abdullah, A. (2000). The impact of government expenditure on economic growth: A case study of Pakistan. *Journal of Economic Studies,* 27(5), 355-369.

Adegbie, F. F., & Alege, P. O. (2018). Effects of government recurrent and capital expenditure on economic growth in Nigeria (1970-2016). *Journal of Economics and Sustainable Development,* 9(5), 34-48.

Adeniran, O. A., & Adeleye, N. A. (2021). The impact of government recurrent and capital expenditure on economic growth in Nigeria (1970-2020*). International Journal of Economics and Financial Research,* 7(1), 56-72.

Aladejare, A. (2013). Government expenditure and economic growth in Nigeria: An analysis of the impact of public expenditure on economic growth. *International Journal of Economics and Finance,* 5(5), 132-141.

Alimi, R. S. (2017). Government recurrent and capital expenditure and economic growth in Nigeria (1970-2015). *International Journal of Economics and Financial Issues,* 7(1), 77-83.

Bohn, H. (1998). The Behaviour of US Public Debt and Deficits, *The Quarterly Journal of Economics*, 113(3), 949-963.

Cass, D. (1965). Optimum Growth in An Aggregative Model of Capital Accumulation, Review of Economic Studies, 32(3), 233-240.

Central Bank of Nigeria (2022). *Statistical Bulletin,* Published by Research Department, Central Bank of Nigeria, Abuja

Cooray, A. (2009). Government expenditure, governance, and economic growth. *Comparative Economic Studies*, 51(3), 329-357.

Dwivedi, D.N. (2004) *Managerial Economics*. New Delhi: Vikas Publishing House PVT Ltd., 6th Edition.

Erkin B, (1988), Government Expenditure and Economic Growth: Reflections on Professor Ram's Approach, A New Framework and Some Evidence from New Zealand Ti Series Data. *Keio Economic Studies,* 25(1): 59-66.

Ibrahim, A. (2019). Government expenditure and economic growth: Evidence from Nigeria. *Nigerian Journal of Economic and Social Studies*, 20(2), 56-72.

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Nakamura, E. and Steinsson, J. (2014). Fiscal Stimulus in a Monetary Union: Evidence from US Regions. American Economic Review, 104(3), 753-792.

Nkoro, E., & Uko, A. (2017). Government recurrent and capital expenditure and economic growth in Nigeria: Evidence from 1970-2015. *African Journal of Economic Review,* 5(2), 116-136.

Ola-David, E. O., & Oladipo, S. E. (2019). The impact of government recurrent and capital expenditure on economic growth in Nigeria (1970-2017). *International Journal of Research in Business and Social Science*, 8(4), 56-64.

Olugbenga, A.O. and Owoye, O. (2007). Public Expenditure and Economic Growth: New Evidence from OECD Countries. *Business and Economic Journal*, Vol. 4(17)

Oyinlola, M. A., & Akinnibosun, O. (2013). Public Expenditure and Economic Growth Nexus: Further evidence from Nigeria. *Journal of Economics and International Finance*, 5(4), 146-154.

Pesaran H. M, Shin Y. and Smith R.J (2001). Bounds Testing Approaches To The Analysis Of Level Relationships. *Journal of Applied Econometrics*. Econ. 16: 289–326 (2001). DOI: 10.1002/ jae.616

Wagner A. (1883), Three Extracts on Public Finance, translated and reprinted in R.A. Musgrave and A.T. Peacock (Eds), *Classics in the Theory of Public Finance*, London: Macmillan [1958].

