



# FISCAL POLICY AND INCLUSIVE GROWTH IN NIGERIA

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**Abstract:** Fiscal policy plays a central role in the economic development of a country, and inclusive growth is the key for Nigeria to achieve a growth that is broad-based and sustainable. Even though there are several studies on inclusive growth, there is a dearth of literature on the study that relates fiscal policy to inclusive growth in Nigeria. Thus, this study examines the effect of fiscal policy on inclusive growth in Nigeria using the Autoregressive Distributed Lag (ARDL) model within the endogenous growth theory framework from 1981 to 2023. The Central Bank of Nigeria provided the data, and the composite index of the difference between the GDP per capita growth rate and percentage changes in Gini coefficients was used to measure inclusive growth. Government expenditure was divided into recurrent and capital expenditure. Sectoral government spending was also considered in analysing the effect of government expenditure on inclusive growth.

The findings showed the important role of targeted public expenditure in promoting inclusive growth in Nigeria. In the long run, disaggregated expenditure shows that both current and capital expenditure contribute positively to inclusive growth. While current expenditure supports essential services and immediate welfare needs, capital expenditure promotes infrastructure development and long-term economic benefits. However, the negative impact of government revenue and public debt on inclusive growth highlights the need for efficient revenue mobilisation and sustainable borrowing practices. The disaggregation of sectoral spending indicates that health, agriculture, and educational expenses greatly increase inclusive growth and enhance

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the importance of prioritising these areas for their long-term socio-economic benefits. Conversely, the negative impact of service cost means the inefficient or incorrect distribution of this category, emphasising the need for strategic redistribution in a sector that directly supports growth and inclusiveness. Thus, the government should prioritise productive expenditure by allocating more resources to recurrent and capital expenditures that directly support inclusive growth in Nigeria.

**Keywords:** Fiscal policy, Inclusive growth, ARDL, Nigeria

## 1. INTRODUCTION

The concept of inclusive growth has gained attention due to the central place it holds in the economic development of countries (Ngepah, 2017). Several countries pursue inclusive growth policies to eradicate poverty and income inequality while also fostering long-term development. This becomes critical in a country's development pattern as it entails a sustainable, broad-based, and paced growth process. Inclusive growth as a policy objective became pronounced following the transition from the Millennium Development Goals (MDGs) to the Sustainable Development Goals (SDGs). Economic growth is largely insufficient to improve individual well-being and provide a level playing field for investment and increased job creation. These serve as a pointer to the government to urgently work on the process of increasing citizen participation and future economic growth and prosperity. This will make actualisation of the UN's 2030 Sustainable Development Goals and Agenda 2063 for African Development possible. Nigeria's economy is growing more slowly than its population, and a large proportion of its population lives in poverty. Nigeria had a GDP per capita of \$2162 in 2022 and is classified as a lower-middle-income country. A fifth of the population belongs to the middle class (World Bank, 2023). However, despite the government's efforts to reduce the high level of poverty, severe poverty persists. Based on the purchasing power parity poverty line per capita of \$1.90 per day, about 31.83% of Nigerians lived in extreme poverty, and 59.64% were multidimensionally poor in 2023 (NBS, 2023). Nigeria needs more inclusive economic growth that lifts more people out of poverty so that the country can develop into a society with a sizeable middle class. However, a major development challenge in Nigeria is economic growth, which has a limited impact on reducing poverty and building shared prosperity. Achieving inclusive growth is the fundamental objective of the government's

economic recovery and growth plan (ERGP) and NDP 2021-2025. To achieve more inclusive growth and reduce poverty, a good macroeconomic policy, such as fiscal policy, is important.

Macroeconomic policy instruments can correct the imbalances in this system through well-structured fiscal measures that will help mobilise resources for all sectors of the economy. People believe that growth is an important factor and a necessary prerequisite for economic development, but unless an enabling environment is created to further reduce imbalances and ensure stable growth, growth may be difficult to achieve (Metu *et al.*, 2019). This can only be achieved through well-planned fiscal measures, including reducing unemployment and inflation, as well as budgetary discipline and efficient use of resources. These measures will be achieved through a robust framework that will ensure adequate allocation, mobilization and allocation of resources. The most important factor is to achieve this through a well-designed tax structure that ensures an equitable distribution of resources to all levels of government and sectors of the economy (Katuka *et al.*, 2023). To engender inclusive growth, more spending needs to go into health, education, infrastructure and defence. The improvement in macroeconomic indicators is not only a fiscal phenomenon, but in fact, Nigeria's finances are largely a fiscal phenomenon, as the public sector is the main investor and driver of the economy. Therefore, the study focuses on the nexus between fiscal policy and inclusive growth in Nigeria from 1981 to 2023 using data from the CBN and World Bank. This period is chosen to capture Nigeria's major fiscal policy shifts and economic transitions, starting from the early 1980s oil crash, boom-bust cycles, austerity measures, and inclusive growth initiatives, allowing analysis of fiscal impacts on poverty reduction and equality amid structural changes. Following the introductory section, Section II will review the literature, which entails a theoretical review and an empirical review. While section III focuses on the theoretical framework and methodology, section IV discusses the results. Section V concludes the study.

## **2. LITERATURE REVIEW**

### **2.1. Theoretical Literature**

The paradigm of inclusive growth is related to the theoretical propositions of the social welfare model, which emphasises the essential role of public

budget distribution, where the individual's economic and social well-being is prioritised based on equality of opportunity, justice and efficiency in the distribution of wealth to save the poor (Blau, 1989). Moreover, the theoretical underpinnings of the relationship between public investment and growth outcomes are also complex. The Keynesian demand-side paradigm argues that productive investment and the provision of public goods and services restore aggregate demand (suppress unemployment) and necessarily stimulate growth (Easterly & Rebero, 1993). The supply-side economics show that aggregate supply is stimulated through fiscal leverage (Masca *et al.*, 2015). Another view is that government bureaucracy and inefficiency hinder economic productivity; therefore, the government's fiscal policy hinders the growth process by distorting tax effects and inefficient investment spending.

In addition, Solow's neoclassical growth theory also shows the transitory effects of public investment spending and taxes on the level of output. However, in endogenous growth theory, the short-term and permanent effects of infrastructure spending on growth are evident (Barro, 1990). Publicly provided capital spending can improve aggregate growth by reducing factor costs or expanding opportunities for profitable investment. Moreover, fiscal spending can inhibit growth if it crowds out private sector output and is financed by taxes that reduce growth. Theoretical views on government size, public debt and growth are clear in the literature, but the evidence is mixed. Whajah *et al.* (2019) argue that there is a positive correlation between government size and economic growth, while Afonso and Jalles (2011) confirm a negative correlation. The results of Asimakopoulos and Karavias (2016) support Armev's (1995) U-shaped hypothesis that government size below a certain optimal point reflects negative effects, after which a positive effect on growth is evident. While Keynesian claims suggest that deficit spending and debt are critical to economic well-being, Whajah *et al.* (2019)'s negative relationship between public debt and inclusive growth contradicts this finding. From the point of view of debt surplus theory, Reinhart *et al.* (2012) show that debt has a negative effect on growth, and debt above a certain threshold predicts negative net profits because its marginal cost exceeds marginal revenue. However, given the mixed nature of the literature, further research is needed to lay a solid foundation for the relationship between fiscal performance and inclusive growth.

## 2.2. Empirical Review

The concept of inclusive growth and its determinants is relatively new and has attracted the interest of economists. Therefore, there is little empirical literature on this issue. Overall, one of the challenges that researchers face when trying to explore this concept is related to the selection of variables and measures to capture the concept of inclusive growth. Therefore, most studies focus on the link between fiscal policy and growth. Some studies that attempt to measure inclusive growth and relate it to key determinants, such as fiscal policy, are Avci and Tonus (2022), who used ARDL to study the impact of fiscal policy on inclusive growth in Turkey from 2006 to 2018. The survey calculated different indices to determine whether Türkiye's economy is inclusive. Their results show that fiscal policy has a differential effect on the constructed index of inclusive growth. The impact of health and education public expenditures on the index of inclusive growth gradually weakens, while the contribution of social transfers to the index of inclusive growth is positive, and both indices are negatively affected by indirect taxes. However, Adeosun *et al* (2020), while examining the impact of public investment on inclusive growth in Africa, pointed out that positive investment shocks can stimulate inclusive growth by empowering people, creating jobs and productive employment in Morocco and Algeria. But there are evidences which shows that the impact of declining public investment is reflected in insufficient capital and limited investment opportunities, which hinder people's access to opportunities, hinder labour force employment and reduce the inclusiveness of growth.

In addition, Katukaet *al.* (2023) used the generalised method of moment regression to study the effects of fiscal space and governance quality on inclusive growth in African countries from 2000 to 2020. Principal component analysis was used to calculate the inclusive growth index. The main findings show that the availability of fiscal space (de facto fiscal space and fiscal balance) promotes inclusive growth. The study also shows that delayed inclusive growth, digitisation and governance indicators have a positive impact on inclusive growth. The study concludes that the availability of fiscal space promotes inclusive growth, but this effect is moderated by the quality of governance in Africa. However, in Pakistan, Zulfiqar (2018) studied fiscal policy for inclusive growth using the vector autoregressive (VAR) method. The analysis shows that fiscal policy has not been effective in promoting broad, inclusive economic

growth. In a developing country like Pakistan, the weak link between fiscal policy and inclusive economic growth is against the essence and spirit of the former. Sabir *et al* (2019) used GMM to study the impact of fiscal policy and institutional quality on the process of inclusive growth in selected Asian developing countries. The results show that both fiscal policy and institutions have a positive effect on inclusive growth. The empirical results confirm that fiscal policy can work more effectively when developing countries in Asia have high-quality institutions.

In Nigeria, Asogwa (2015) used three methods to study the impact of fiscal policy on inclusive growth in Nigeria. First, public expenditure in Nigeria is disaggregated to assess the relative distribution over time of sectors that reduce inequality (education, health, social transfers/services) compared to other sectors. Second, the impact on educational expenditure benefits is analysed across income quintiles. Third, the study measures the prevalence of different tax components in Nigeria to determine whether they are progressive or regressive and their redistributive effects. The results show that current public spending and tax structures are not progressive enough and have limited capacity to reduce inequality and promote inclusive growth. Arodoye and Adegboye (2015) studied the impact of tax structure and tax base on inclusive growth in Nigeria from 1981 to 2013. The results show that the corporate income tax explains the changes in public consumption the best, while the VAT explains the changes the worst. The results also show that economic and productive spending patterns generally provide optimal tax revenue in terms of productivity gains. Regarding the tax structure, studies have found that indirect taxes can stimulate production more than direct taxes. Therefore, to achieve economic growth in terms of productivity and job creation, a more appropriate tax restructuring, transition to indirect taxes and use of tax revenues for more productive purposes is required.

Furthermore, Metu *et al.* (2019) used annual data from 1980 to 2017 to examine how fiscal policy can be designed to promote inclusive growth and identify the most effective fiscal instruments that can promote inclusive growth in Nigeria. A structural vector autoregressive (SVAR) model was used for analysis. The findings suggest that public capital expenditure is a more effective fiscal instrument for achieving inclusive growth in Nigeria. Tax revenue shocks have a greater impact on unemployment than on poverty and

per capita GDP growth. EffiongBassey and Egwu (2019) set out to investigate the impact of fiscal policy and institutional quality on inclusive growth in Nigeria from 1985 to 2017. This is achieved through two models, namely the Human Development Index (HDI) and the Per Capita Gross Domestic Product (PGDP), which are the main dependent variables used to capture the degree of spatiality of growth in Nigeria. The study found that fiscal policy has a significant effect on Nigeria's inclusive growth, while domestic institutional quality has an insignificant effect on Nigeria's inclusive growth. The review shows that although studies such as Metu *et al.* (2019), Asogwa (2015) and Arodoye and Adegboye (2015) have extensively studied the impact of fiscal policies and institutions on inclusive growth in Nigeria, their main weakness is the selection of indicators for inclusive growth. For example, Arodoye and Adegboye (2015) used GDP as a measure of inclusive growth, thus weakening the credibility of the results. This is because GDP was previously used as a measure of economic growth. It does not take into account the distribution of such income among the citizens of the country. In this study, the index of inclusive growth is calculated using GDP per capita and the Gini coefficient. This study also differs from other studies in that it estimates a two-layer equation when assessing the impact of fiscal policy on inclusive growth in Nigeria. The second level examines the impact of the allocation of public expenditure to different sectors on inclusive growth. This has direct implications for inclusive growth.

### **3. METHODOLOGY**

#### **3.1. Theoretical Framework**

The endogenous growth theory, which traces the impact of economic activities on long-run growth, provides the theoretical anchor for this study. In the long run, economic growth is influenced by total factor productivity growth, which in turn is powered by technological progress. While accounting for the role of government through fiscal policy, variants of the endogenous growth theory, which recognise key channels through which fiscal policy could have permanent growth effects, were adopted. This raises the prospect that fiscal policies could have much more substantial and enduring effects on income level and growth rate. To assess the implications of this framework for fiscal policy in Nigeria,

this study adopted the AK version of the endogenous growth model. In this special case where the marginal product of capital is exactly constant, aggregate output  $Y$  is proportional to the aggregate stock of capital  $K$  is specified below:

$$Y = AK \quad (1)$$

where  $A$  is a positive constant to capture technology and R&D. According to the AK model, an economy's long-run growth rate depends on its saving rate. With a fixed fraction  $s$  of output saved and the fixed rate of depreciation  $\delta$ , the aggregate net investment rate is:

$$\frac{dk}{dt} = Y - \delta K \quad (2)$$

When R&D is a function of technological progress and government spending, equation (3) can be expressed as:

$$A = A_0 e^{\phi t + \theta F} \quad (3)$$

$A_0$  is initially technology,  $\phi$  is the constant rate of technological progress ( $t$ ),  $F$  is fiscal policy, and  $\theta$  is a parameter that determines the outcome of fiscal policy.

Expanding equation (2) and combining it with (3) means the growth rate is:

$$g = \frac{1}{Y} \frac{dy}{dt} = \frac{1}{k} \frac{dk}{dt} = s A_0 e^{\phi t + \theta F} - \delta \quad (4)$$

Hence, a rise in the saving rate will result in a permanent increase in the growth rate. This theory is relevant because it provides a new viewpoint on the forces that drive economic growth and development. It was argued that internal processes such as human capital, innovation and investment capital influence a sustained pace of prosperity. Hence, the productivity increases can be directly attributed to increased innovation and human capital investments. Thus, fiscal policy can influence growth through government spending on innovation and other productive investments. Emphasis was placed on the capacity of government policies to increase a country's growth rate. Since the focus of the study was inclusive growth, the growth indicator in the model was replaced with the measure of inclusive growth, which is broad-based.

### 3.2. Model Specification

Following the theoretical framework sketched above and the expansion of equation (4), fiscal policy enters the endogenous growth model through the role of R&D. Thus, the empirical model is specified as:

$$y_t = f(\text{fiscal}, \text{inv}, \text{lab}) \quad (5)$$

Where  $y_t$  is the measure of inclusive growth, fiscal includes the component of fiscal policy such as government expenditures (both recurrent and capital), budget deficit and government revenue. Government revenue is used in place of taxes because of data availability. The set of control variables is investment (INV) and labour force (LAB). The model can be explicitly specified as:

$$y_t = \beta_1 + \beta_2 GE_t + \beta_3 PDB_t + \beta_4 GR_t + \beta_5 INV_t + \beta_6 LAB_t + \varepsilon_t \quad (6)$$

Where GE is government expenditure, PDB is public debt, and GR is government revenue. Government expenditure is disaggregated into its components in equation (7)

$$y_t = \beta_1 + \beta_2 RE_t + \beta_3 CE_t + \beta_4 GR_t + \beta_5 INV_t + \beta_6 LAB_t + \varepsilon_t \quad (7)$$

Where  $y_t$ , INV, GR and LAB are as named above, RE is recurrent expenditure, CE is capital expenditure, and GR is government revenue. Disaggregating fiscal spending into sectoral spending yields:

$$y_t = \beta_1 + \beta_2 HS_t + \beta_3 ED_t + \beta_4 DE_t + \beta_5 AG_t + \beta_6 INV_t + \beta_7 LAB + \varepsilon_t \quad (8)$$

Where HS is government spending on health, ED is government spending on education, DE is government spending on defence, and AG is government spending on agriculture.

### 3.3. Variables Description

According to Anand *et al.* (2013), this study uses a composite measure of inclusive growth that adjusts economic growth (measured as real GDP growth per capita) for changes in income inequality. The measure is based on a utilitarian social welfare function based on the consumer choice literature, where inclusive growth depends on income growth and its distribution. The effect of this measure of inclusive growth is that an increase in income inequality (a positive change) decreases the measure of inclusive growth, while an improvement in

the equitable distribution of income increases the measure of inclusive growth. According to Anand *et al.* (2013), this approach is consistent with the absolute definition of pro-poor growth. Therefore, to achieve inclusive growth, there is a strong need to increase per capita income and its equitable distribution. In other words, inclusive growth requires an increase in per capita income and a reduction in income inequality. Given that data on income inequality are readily available from various authoritative sources, this study uses an index of income inequality to calculate a proxy for inclusive growth. Therefore, the proxy for inclusive growth used in this study was derived as follows:

$$Y = PCYGR - YGINIGR \quad (9)$$

Where Y stands for inclusive growth, PCYGR is real GDP growth per capita (or income growth per capita); YGINIGR represents the percentage change in the Gini index of income inequality. Fiscal policy is calculated in two ways: based on total expenditure and by classification along sectoral spending. Fiscal spending is disaggregated in spending on health (HS), Education (ED), defence (DE) and agriculture (AG). The control variables included in the model were influenced by factors theorised in the literature to promote inclusive growth. There is a consensus in the development literature that capital and labour are the most important drivers of growth. Therefore, this study used labour (LF) and investment (INV), reflected in gross investment, as control variables. The model was calculated using annual time series from 1981 to 2023.

### 3.4. Estimation Technique

#### 3.4.1. ARDL Bound Testing Approach

Following Kumar (2013), this study employs the Autoregressive Distributed Lag (ARDL) Bound testing approach proposed by Pesaran *et al.* (2001). This approach has some statistical advantages over other cointegration techniques. While other cointegration techniques require all variables to be I(1), the ARDL bound testing procedure is applicable whether all the variables are I(0), I(1) or frictionally cointegrated. It also provides consistent and efficient results in both small and large samples. The different order of integration and the small number of observations make the bound testing technique a preferred approach for this study. For comparison purposes, ARDL models are specified for the impacts of fiscal policy on inclusive growth.

The ARDL equation is specified as:

$$\Delta \ln y_t = \beta_0 + \sum_{i=1}^n \beta_{1i} \Delta \ln y_{t-1} + \sum_{i=0}^n \beta_{2i} \Delta \ln \text{fiscal}_{t-1} + \sum_{i=0}^n \beta_{3i} \Delta \ln \text{INV}_{t-1} + \sum_{i=0}^n \beta_{4i} \Delta \ln \text{LAB}_{t-1} + \beta_{4i} \ln y_{t-1} + \beta_{5i} \ln \text{fiscal}_{t-1} + \beta_{6i} \ln \text{INV}_{t-1} + \beta_{7i} \ln \text{LAB}_{t-1} + \varepsilon_t \quad (8)$$

Where  $\Delta$  is the difference operator? In order to implement the ARDL bound test approach, the familiar Wald coefficient test or F-statistic should be used to test the joint significance of the coefficients of the lagged variables for the purpose of examining the existence of a long-run relationship among the variables. The null hypothesis of no long-run relationship among the variables in equation 8 is  $H_0$ :

$B_4 = \beta_5 = \beta_6 = \beta_7 = 0$ . This null hypothesis was tested against the alternative hypotheses of  $H_1$ :

$B_4 \neq \beta_5 \neq \beta_6 \neq \beta_7 \neq 0$ ) following Peseran *et al.* (2001). The decision to accept or reject was based on the following conditions: if F-value > upper bound,  $H_0$  is rejected and the variables are cointegrated; if F-value < lower bound, then  $H_0$  is not rejected and the variables are not cointegrated; however, the test is inconclusive when F-value  $\geq$  lower bound  $\leq$  upper bound. The error correction model for the estimation of the short-run relationship is specified as:

$$\Delta \ln y_t = \beta_0 + \sum_{i=1}^n \beta_{1i} \Delta \ln y_{t-1} + \sum_{i=0}^n \beta_{2i} \Delta \ln \text{fiscal}_{t-1} + \sum_{i=0}^n \beta_{3i} \Delta \ln \text{INV}_{t-1} + \sum_{i=0}^n \beta_{4i} \Delta \ln \text{LAB}_{t-1} + \beta_{5i} \text{ECM}_{t-1} + \varepsilon_t$$

A negative and significant ECM measures the speed of adjustment of any disequilibrium between the dependent and explanatory variables in the short-run to long-run equilibrium.

## 4. DISCUSSION OF RESULTS

### 4.1. Descriptive Statistics

The summary statistics of the variables in the study are shown in Table 1. Descriptive statistics revealed that for certain variables, the mean was quite near the median, while for others, there was a significant difference. While investment recorded the highest absolute values for mean, public debt had the highest median. Also, investment had the highest variation around the

mean with a standard deviation of 15038.99, which was the highest. This showed that investment was relatively volatile. In terms of skewness, most of the variables were positively skewed, apart from inclusive growth and labour force, which had negative skewness. The kurtosis for most of the variables was leptokurtic. For instance, only spending on agriculture, service, labour force and government revenue had a kurtosis value that is below 3, which made them to be platykurtic.

**Table 1: Descriptive Statistics**

<i>Variable</i>	<i>Mean</i>	<i>Median</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Std. Dev.</i>	<i>Skewness</i>	<i>Kurtosis</i>	<i>No.</i>
Agric (N'Billion)	22.15	8.77	81.87	0.01	25.87	0.90	2.50	42
Capex (N'Billion)	852.97	336.34	6335.59	4.10	1382.74	2.47	8.69	42
Education (N'Billion)	161.41	61.37	702.98	0.16	209.73	1.22	3.26	42
Agg. Exp (N'Billion)	3657.58	1018.09	24431.21	9.64	5900.24	2.14	6.76	42
Admin (N'Billion)	590.00	225.07	2456.33	0.90	730.56	1.14	3.18	42
Govt Revenue (N'Billion)	3952.42	2068.88	12586.53	10.51	4168.10	0.55	1.78	42
Health (N'Billion)	98.02	28.90	437.52	0.04	133.61	1.29	3.42	42
Inclusive growth	0.00	0.12	2.12	-2.30	0.92	-0.28	3.70	42
Investment (N'Billion)	9321.23	2776.13	65227.13	87.14	15038.99	2.42	8.42	42
Labour Force (N'Million)	46.24	50.84	73.27	19.88	17.44	-0.15	1.51	42
Public debt (N'Billion)	6740.28	3107.87	40912.62	13.52	9816.27	2.03	6.48	42
Recurrent Expenditure (N'Billion)	2505.53	638.05	15553.55	4.75	3993.35	2.02	6.11	42
Service (N'Billion)	131.30	44.45	534.54	0.16	164.87	0.99	2.63	42

Source: CBN (2024)

## 4.2. Unit Root Test

The Philippe Perron (PP) and Augmented Dickey Fuller (ADF) tests were used to determine the stationarity of the series. These tests are shown in Table 2. The results of the two unit root tests are complementary since all series, with the exception of the inclusive growth index, are integrated of the first order I(1). The mixture of I(0) and I(1) in this series enables the use of ARDL bounds test estimation methods.

**Table 2: Unit Root Tests Using ADF and PP**

Variable	Augmented Dickey-Fuller (ADF)			Phillip Perron (PP)		
	Level With constant and Trend	First Diff. With constant and Trend	I(Q)	Level With constant and Trend	First Diff. With constant and Trend	I(Q)
Inclusive growth	-4.4341***	-10.4656***	I(0)	-4.4042***	-12.138***	I(0)
Education	-2.8518	-6.1574***	I(1)	-2.6799	-15.313***	I(1)
Health	0.0898	-5.7019***	I(1)	-3.2496*	-21.0421***	I(0)
Service	-1.6019	-6.7092***	I(1)	-1.5674	-7.7605***	I(1)
Agric	-2.0718	-6.8274***	I(1)	-1.7056	-12.7293***	I(1)
Investment	-1.7409	-4.1565***	I(1)	-2.2321	-4.1577***	I(1)
Labour force	-1.3847	-6.0936***	I(1)	-1.3994	-6.0926***	I(1)
Capex	-1.7656	-6.0944***	I(1)	-1.8535	-6.0944***	I(1)
Agg. Exp	-1.1326	-7.7787***	I(1)	-1.5391	-7.6965***	I(1)
Admin	-0.2745	-6.7171***	I(1)	-0.7645	-9.8262***	I(1)
Revenue	-0.7451	-5.5272***	I(1)	-0.6224	-7.0463***	I(1)
Debt	-2.1971	-4.7193***	I(1)	-2.3743	-4.7224***	I(1)
Recurrent Expenditure	-1.8256	-8.5885***	I(1)	-1.6003	-8.6601***	I(1)

Source: Author’s computation. Note: \*\*\*, \*\* and \* indicate 1 per cent, 5 per cent and 10 per cent significance levels, respectively.

### 4.3. Cointegration Analysis

Table 3 shows the cointegration test results based on the ARDL bound test method. There are three models, depending on the classification of government expenditure. The results show that all variables are cointegrated. For all the models, the F-statistics exceed the 1% significance level upper bound. As a result, there is a rejection of the null hypothesis of no cointegration for the model. Thus, the models have a long-run relationship for three models.

**Table 3: Cointegration Results**

Model			F-statistic	Results
1	$F_{agg}(Y GE, GR, PD, INV, LAB)$	ARDL(1,2, 4,3,1,2)	10.84***	Cointegrated
2	$F_{disagg}(Y RE, CE, GR, PD, INV, LAB)$	ARDL(1,4,1,4,3,1,1)	12.64***	Cointegrated
3	$F_{sector}(Y HE, AG,ED,SE, INV, LAB)$	ARDL(4,4,4,3,4,1,4)	6.36***	Cointegrated
	Critical value bounds	1 per cent	5 per cent	10 per cent
	I0	3.74	2.86	2.45
	I1	5.06	4.01	3.52

Source: Author’s computation. Note: \*\*\*, \*\* and \* indicate 1 per cent, 5 per cent and 10 per cent significance levels, respectively.

#### 4.4. The Effect of Aggregate Government Expenditure on Inclusive Growth in Nigeria

In this section, the effect of aggregate government expenditure on inclusive growth is determined. Table 4 presents the results of the short-run ARDL model for aggregate government expenditure. The immediate influence of various economic factors such as government expenditure, government revenue, public debt, investment, and labour force is considered. Model 1 is based on when the aggregate expenditure of government is taken as a whole, and Model 2 is when government spending is broken down into recurrent and capital expenditure. Beginning with Model 1, it can be seen from the short-run model that any increase in aggregate government expenditure promotes inclusive growth. This suggests that money spent by the government on infrastructure, health services and education will benefit economic activities and people at the same time in the short run. This aligns with the work of Asogwa (2015), who found a positive relationship between government spending and inclusive growth in Nigeria. The model also reveals that government revenue has a positive impact on inclusive growth. This indicates that if a government has a higher level of revenue, it is able to directly invest in projects for economic openness, such as social welfare activities, projects in infrastructure, and efforts to alleviate poverty. Higher revenue makes effective redistribution as well as support for the disadvantaged possible, thus benefiting inclusive growth.

It is interesting to find that public debt has a positive effect in the short run on inclusive growth. This could be because government spending, coupled with debt, creates immediate economic benefits, employment opportunities and a range of returns, while greater demand also supports inclusiveness. But this effect is likely to be only temporary. At high levels of debt, with time, there may be fiscal constraints and 'crowding-out effects' during the long term. Investment has a positive influence on inclusive growth in the short run. When levels of investment increase, there is a rise in capital formation and consequently greater productivity, with more jobs created. This expansion in economic activities provides income opportunities for wider segments of the population and thus promotes inclusive growth. This is in line with the work of Metu *et al.* (2019), who found a positive relationship between investment and inclusive growth in Nigeria. The effect of the labour force on inclusive growth is also positive in the short run. A larger labour force is likely to mean

more expansion of national output to be done and sustain income levels. Those countries with an expanding labour force, so long as they are gainfully employed, can help provide greater inclusiveness by cutting down on unemployment rates or inequality between the rich and poor. In this model, the error correction term is -1.1167 and significant at the 1% level. The value indicates that there is a strong and significant adjustment mechanism operating in the model. The coefficient size of -1.1167 shows that deviations from the long-run equilibrium are corrected at a rate of approximately 111.67% per period. The negative, significant error correction term suggests that if the path of inclusive growth were to diverge from its long-run position because of shocks resulting from government expenditure or other factors, then this deviation would be quickly and successfully corrected over the next period, by an inbuilt system in the model which ensures that everything returns to equilibrium.

**Table 4: Short-run Effects of Aggregate and Disaggregated Government Expenditure on Inclusive Growth in Nigeria**

<i>Variable</i>	<i>Model 1</i>	<i>Model2</i>
$\Delta$ Government Expenditure	-0.8883 (0.8173)	
$\Delta$ Government Expenditure-1	4.4888 (1.0967)***	
$\Delta$ Recurrent Expenditure		-0.3360 (0.4449)
$\Delta$ Recurrent Expenditure-1		0.2421 (0.5309)
$\Delta$ Recurrent Expenditure-2		-1.2797 (0.5023)**
$\Delta$ Recurrent Expenditure-3		1.2549 (0.4193)
$\Delta$ Capital expenditure		1.2506 (0.3757)**
$\Delta$ Government Revenue	0.7160 (0.3916)*	0.2718 (0.3041)
$\Delta$ Government Revenue1	0.0330 (0.4542)	
$\Delta$ Government Revenue2	1.1975 (0.4337)**	
$\Delta$ Government Revenue3	1.5381 (0.4097)***	
$\Delta$ Public Debt	1.2234 (0.6815)	7.9423 (2.9617)**
$\Delta$ Public Debt1	1.7818 (0.8176)**	-2.8456 (2.0868)
$\Delta$ Public Debt2	1.6053 (0.7387)**	1.4543 (1.2484)
$\Delta$ Labour force	0.1151 (1.6939)	1.8523 (1.2521)
$\Delta$ Investment	2.1503 (0.3250)***	2.0287 (0.8654)***
$\Delta$ Investment1	-1.1023 (0.8639)	
ECM	-1.1167 (0.1117)***	-0.8886 (0.1628)***
R-Square	0.8261	0.6332
Adjusted R-squared	0.7427	0.4974

Source: Author's computation. Note: \*\*\*, \*\* and \* indicate 1 per cent, 5 per cent and 10 per cent significance levels, respectively. Figures in parentheses represent the standard error.

On the other hand, Model 2 analysed how disaggregated government expenditure (recurrent and capital nature) influences inclusive growth. In the short run, recurrent expenditure has a positive impact on inclusive growth. A one per cent rise in recurrent expenditure will lead to a 0.24 per cent rise in inclusive growth in the short run. Recurrent expenditures generally consist of money spent on the wages, salaries and operational costs of government services. This means that when the government devotes more resources to recurrent payments, for example, it promotes inclusiveness by securing public sector employment and a functioning public service. It is beneficial for income distribution to stabilise in this way, since more people can receive stable incomes and the necessary funds for a good life, such as health care, education or social security, which nearly always get their funds from recurrent expenditure. Capital expenditure also has a positive effect on Inclusive Growth in the short run. Capital expenditure usually refers to the purchase of fixed assets, such as road-building, school construction or hospitals, that can provide a long-term boost to future economic growth. This kind of expenditure can create jobs in construction and other related industries and help to bring people essential services like access to clean water, medical care or education to a wide range of the population. The positive effect of capital expenditure on inclusive growth implies that investing in development projects and infrastructure may not take a long time to benefit the populace in terms of more income opportunities available at once, as well as general economic inclusiveness.

Similar to the aggregate expenditure model, government revenue has a positive effect on inclusive growth in the disaggregated model. With larger government revenue, more can be financed without resorting to excessive debt. As a result, reducing the cost of government debt promotes the sustainable development of the economy. When the cost of government borrowing is lower, it reduces fiscal pressure, which might otherwise have led to high deficits or larger national debts. This increases the government's vulnerability to shocks and reduces its ability to smooth income. Greater government revenue is an essential precondition for this. Governments have a higher capacity to support domestic initiatives, promote economic activities and with a richer revenue base, wealth redistribution is made more feasible. By this means, the economic pie gets bigger and everybody shares in its growth. Public debt has a positive impact on inclusive growth. Debt helps finance both recurrent and capital

expenditures, which in turn stimulate economic activities. More businesses open and the labour force expands with rigorous investment in research and development of new products for high added value. The short-run benefit of investing in a new industry may hence be ruined if onerous debts push a country into fiscal straitjackets and thus threaten its long-term economic stability. Although in the short run, deficit spending financed through government debt can promote inclusivity through projects that benefit a large number of people. Investment is positively related to inclusive growth. Investment from domestic and foreign sources increases capital formation and productivity, leading to the creation of new jobs in developing high-value-added industrial operations. But in the short run, investment can create a gap while it generates income and fosters enterprise. The growing labour force contributed to short-term inclusive growth. A bigger labour force leads to more output and higher productivity. Provided it is properly used, an expanding labour force will ease poverty and give more people the steadiness of an income that is not dependent on fate.

The error correction term is -2.1503 and is significant at the 1% level. This large negative coefficient means a strong and rapid convergence towards equilibrium. Specifically, a coefficient of -2.1503 suggests that approximately

**Table 5: Long-run Effects of Aggregate and Disaggregated Government expenditure on Inclusive Growth in Nigeria**

<i>Variables</i>	<i>Model 1</i>	<i>Model 2</i>
Constant	-29.7626 (7.5688)***	-4.0827 (4.9755)
Government Expenditure	7.6191 (2.2087)***	
Recurrent expenditure		2.9597 (1.0690)**
Capital expenditure		3.3709 (0.9270)**
Government Revenue	1.3508 (0.5582)**	-2.4318 (0.7757)**
Public Debt	-0.3054 (0.3075)	-0.2558 (0.2723)
Labour force	4.3067 (1.3920)***	10.1899 (2.1131)***
Investment	6.3964 (2.1710)***	6.9746 (1.7115)***
LM	0.4994 [0.6155]	0.9637 [0.3952]
JB	1.5570 [0.4590]	1.8617 [0.3942]
ARCH	0.7198 [0.4020]	0.0021 [0.9633]
RESET	0.1797 [0.6766]	4.6264 [0.0410]
Wald	4.2161 [0.0015]	4.0175 [0.0016]

Source: Author's computation. Note: \*\*\*, \*\* and \* indicate 1 per cent, 5 per cent and 10 per cent significance levels, respectively. While figures in parentheses represent the standard error, square brackets indicate the P-value.

215.03% of any deviation from the long-run equilibrium level of inclusive growth is corrected in the following period. The significant negative ECM implies that, if inclusive growth deviates from its equilibrium level due to shocks in government expenditure or other factors, the system swiftly adjusts, indicating that inclusive growth in the model is highly stable and reverts quickly to its equilibrium path.

In analysing the long-run ARDL (Autoregressive Distributed Lag) model on the effect of aggregate government expenditure on inclusive growth, both positive and negative long-run effects from various factors are observed in model 1 in Table 5. The model indicates that aggregate government expenditure has a positive effect on inclusive growth in the long run. A one per cent rise in aggregate government expenditure leads to a 7.6 per cent increase in inclusive growth. This suggests that increased government spending—whether directed towards infrastructure, social welfare, healthcare, or education—has a beneficial impact on inclusivity over time. By allocating resources to critical areas, government expenditure supports job creation, poverty reduction, and improved access to essential services, which are all necessary for fostering inclusive growth. Over the long run, well-targeted government spending can help reduce income inequality and improve the socio-economic conditions of marginalised groups. These findings align with the work of Katuka *et al.* (2023), who found a positive effect of government expenditure on inclusive growth in selected African countries. Surprisingly, government revenue hurts inclusive growth in the long run. This could indicate potential inefficiencies in the way revenue is collected or managed. For instance, if revenue collection relies heavily on taxation that disproportionately affects low- and middle-income households or businesses, it could reduce disposable income and discourage investment. Alternatively, this negative impact may suggest that the revenue generated is not being effectively allocated toward projects or policies that directly support inclusive growth. It highlights the need for efficient revenue allocation to ensure that funds support economic inclusivity.

The model shows that public debt hurts inclusive growth in the long run. A one per cent increase in public debt will lead to a 0.3 per cent decline in inclusive growth in the long run. A possible explanation for this is that high levels of public debt can have adverse effects on economic stability, as governments may need to redirect funds from inclusive initiatives to debt

servicing. Additionally, a heavy debt burden could limit the government's fiscal flexibility, leading to reduced spending on social programs and infrastructure. Over time, excessive public debt can also crowd out private investment, leading to slower economic growth and reduced employment opportunities, which in turn negatively impact inclusivity. Investment has a positive effect on inclusive growth in the long run. This implies that capital formation, whether through domestic or foreign investment, plays a critical role in driving sustainable and inclusive economic growth. Investments in various sectors—especially in industries with high job-creation potential—can lead to increased employment opportunities, productivity gains, and higher incomes, thereby broadening the economic benefits to more segments of the population. The labour force has a positive effect on inclusive growth in the long run. A larger and more productive labour force contributes to higher economic output and increases household incomes across different social classes. When the labour force is effectively utilised, it supports economic inclusivity by providing employment opportunities and reducing poverty and income inequality. This finding emphasises the importance of workforce development and skill enhancement programs to maximise the economic contributions of the labour force.

The results of the effect of disaggregated government expenditure into recurrent and capital spending on inclusive growth are presented in Model 2 in Table 5. The results showed that recurrent expenditure has a positive effect on inclusive growth in the long run. This implies that sustained government spending on wages, salaries, and essential public services (such as health and education) promotes inclusive growth by ensuring that a larger share of the population benefits from public services. Over time, recurrent spending supports social stability, human capital development, and poverty reduction, which are crucial elements for inclusive growth. Capital expenditure also shows a positive effect on inclusive growth in the long run. Capital investments—like infrastructure, schools, hospitals, and roads—are critical for creating long-term economic opportunities and increasing productivity. By improving access to essential services, capital expenditure helps reduce inequalities and broaden economic participation, thereby enhancing inclusivity. In the long term, infrastructure investments support economic diversification and job creation, leading to sustainable, inclusive growth.

Also, surprisingly, government revenue has a negative effect on inclusive growth in the long run. This could suggest that an increase in revenue collection, especially if it relies heavily on taxation, may impose a burden on households and businesses, potentially reducing disposable income and private investment. Alternatively, it may indicate inefficiencies in how revenue is allocated or managed, with revenue not effectively channelled into areas that foster inclusive growth. Public debt negatively affects inclusive growth in the long run. Excessive debt can crowd out productive investments as governments divert resources to service debt rather than investing in public goods and services. High debt burdens can also lead to austerity measures and reductions in social spending, which disproportionately impact vulnerable groups and undermine inclusivity. Investment has a positive effect on inclusive growth in the long run, suggesting that capital formation and investment flows (both domestic and foreign) are essential for sustained economic development. Investments in various sectors, particularly in productive industries, drive job creation, technological advancement, and economic expansion, thereby fostering a more inclusive economic environment. The labour force has a positive impact on inclusive growth in the long run. A larger and well-employed labour force boosts economic output and increases income levels across different social strata. If the labour force is equipped with adequate skills, it can contribute significantly to growth and inclusivity by ensuring that economic benefits reach a broad segment of the population.

**Table 6: Short-run Effects of Sectoral Government Expenditure on Inclusive Growth in Nigeria**

<i>Dependent Variable: Inclusive Growth</i>			
<i>Variable</i>	<i>Coefficient</i>	<i>Std Error</i>	<i>T-Statistic</i>
$\Delta$ Index-1	-0.4728	0.48546	-0.9740
$\Delta$ Index-2	-1.1553	0.4283	-2.6969**
$\Delta$ Index-3	-0.6607	0.3044	-2.1701*
$\Delta$ Health	2.1359	0.7229	2.9546***
$\Delta$ Health	-0.7672	0.8176	-0.9383
$\Delta$ Health	0.6613	0.5843	1.1318
$\Delta$ Health	-0.4370	0.3110	-1.4051
$\Delta$ Agric	1.6110	0.3491	4.4147***
$\Delta$ Agric	0.4056	0.2561	1.5839
$\Delta$ Agric	0.3766	0.2420	1.5561

<i>Dependent Variable: Inclusive Growth</i>			
<i>Variable</i>	<i>Coefficient</i>	<i>Std Error</i>	<i>T-Statistic</i>
$\Delta$ Agric	-0.4663	0.2797	-1.6667
$\Delta$ Education	2.1064	0.6765	3.1136***
$\Delta$ Education	0.6862	0.7874	0.8714
$\Delta$ Education	-1.0188	0.6032	-1.6890
$\Delta$ Service	-0.3367	0.4171	-0.8073
$\Delta$ Service	0.8286	0.5716	1.4494
$\Delta$ Service	1.0327	0.5240	1.9709*
$\Delta$ Service	0.7115	0.4452	1.5981
$\Delta$ Investment	-0.5443	0.9901	-0.5497
$\Delta$ Investment	2.1979	0.3998	5.4974***
$\Delta$ Investment	-0.4792	1.2984	-0.3690
$\Delta$ Investment	2.4985	1.4607	1.7104
$\Delta$ Labour force	3.7371	1.3432	2.7822***
ECM	-1.4577	0.5500	-2.6499**
R-squared	0.9444	Adjusted R-squared	0.7065

Source: Author's computation. Note: \*\*\*, \*\* and \* indicate 1 per cent, 5 per cent and 10 per cent significance levels, respectively.

The results of the short-run effect of sectoral disaggregation of government expenditure on inclusive growth in Nigeria are presented in Table 6. Based on the results, government expenditure on health has a positive impact on inclusive growth in the short run. Health spending enhances the quality of health service delivery, creates better health facilities and helps reduce disease prevalence and cost, which results in increased productivity. The improvement of health knowledge leads to the enhancement of the economically active population's activity, since healthy people are financially less of a burden for the state and can contribute to the economy. The short-term investments in health have the potential to quickly change the conditions in the area of well-being, increase the number of people with decent income, and improve the productivity of workers, thus becoming contributors to inclusive economic growth. Also, government spending on agriculture has a positive influence on inclusive growth. This is possible because agriculture is one of the most vital industries in Nigeria; it offers a source of income and livelihood to many people in Nigeria. Agricultural investment enhances food availability and quality, improves efficiency and generates employment opportunities, thereby eradicating rural poverty.

Furthermore, education expenditure has a positive impact on inclusive growth. A possible explanation for this is that current investments in education can help to address issues associated with basic education, increase literacy, and provide the young generation with skills which will make them readily marketable. While education spending has generally been regarded as having long-term effects, even the short-run outlays yield positive changes in school facilities, improved teachers' qualifications, and improved supplies of learning materials, which thus promote inclusive growth by raising human capital productivity. Similarly, government expenditure on services also brought about a positive impact on inclusive growth in the short-run. Expenditure in this group includes public services such as transportation, infrastructures and other services falling under this bracket. Most investments enhance the ability to access services, communication, and the well-being of the people. In the short run, better public services can lead to a boost in demand for economic activities by supplying the needful facilities for people, enhancing the business arena and productivity, which in turn helps in inclusive growth.

That investment has a positive impact on maintaining inclusive growth mean that if more capital is built, it will cause a more immediate economic increase to reach more persons of a community. Investment strengthens the production platforms, catalyses employment opportunities and increases remuneration, which are critical in the promotion of inclusiveness in the economy. Public and private investments are the two ways through which these positive short-run effects operate to the availability of the opportunities that are economic for various categories of people. The labour force also has an advantage in inclusive growth in the short run. A vibrant, youthful and growing workforce means that the economy can grow fast, which offers an immediate remedy to inclusiveness through employment and enhanced household incomes. Greater participation in labour activities results in increased levels of production and a broader distribution of the resultant economic returns. The Coefficient of the error correction term is -1.4577, and it is statistically significant at the 1 per cent level, which shows the very high speed of adjustment to long run equilibrium after any short-run disturbances. The coefficient means that 145.77 per cent of any divergence from the long-run equilibrium is adjusted within one year. The negative and significant ECM further substantiate the model result, supporting the fact that any deviations from the path that brings

inclusive growth are corrected back to the long-run movement influenced by the fundamental economic factors.

**Table 7: Long-run Effects of Sectoral Government Expenditure on Inclusive Growth in Nigeria**

<i>Dependent Variable: Inclusive Growth</i>			
<i>Variable</i>	<i>Coefficient</i>	<i>Std Error</i>	<i>T-Statistic</i>
Constant	-7.2908	7.5862	-0.9610
Health	2.1363	0.7243	2.9494***
Agric	0.9497	0.5330	1.7815
Education	1.9428	0.7590	2.5597***
Service	-0.9659	0.4542	-2.1263*
Investment	1.8787	0.5257	3.5735***
Labour force	5.2099	1.5133	3.4426**
JB	0.0546 [0.9732]	LM	2.6138 [0.1671]
ARCH	0.8576 [0.3608]	RESET	0.0057 [0.9419]

*Source:* Author's computation. Note: \*\*\*, \*\* and \* indicate 1 per cent, 5 per cent and 10 per cent significance levels, respectively. While figures in square brackets indicate the P-value.

The long-run results of the sectoral disaggregation of government expenditure and their effect on inclusive growth in Nigeria are presented in Table 7. The model revealed that government expenditure on health has long-run positive implications for inclusive growth. This result suggests that more investments in building up the stock of health capital and in health care services have had a positive implication on human health, leading to increased productivity. The results also show that government spending on agriculture has a significant positive effect on inclusive growth in the long run. Agriculture remains one of the crucial industries in the Nigerian economy, as most of the citizens are involved in it, especially in the rural areas. Extended investment in agriculture improves food supply, increases the rate of production of agriculture (most of which raises income returns in the rural setting), which is an additional factor in the dismissal of rural poverty. This means that when the government opens markets, puts in subsidies, and invests in structures that support agriculture, it can steer people towards better jobs and reduce poverty within the rural area.

Education spending is also positively correlated with inclusive growth in the long run. Education requires capital to be invested in it, hence the

development of human capital to make the workforce more employable as well as more productive. The population is enlightened to promote innovation, and also to raise income levels for an improved future socio-economic status. In the long run, channelling funds to education pays off and enhances a society's trickle-down effect of rendering a greater part of it capable of high-paying job opportunities and contributing to the nation's progress. However, interestingly, according to the long-run model estimation, government expenditure on services has a negative impact on inclusive growth. This negative impact could mean that there is inefficiency or malinvestment prevalent in the services sector. As such, it may push an idea that regardless of the quality of services provided by the government (which might cover administration, defence, or non-productive sectors), it is equally non-productive to economic inclusion. Alternatively, it could mean that some forms of service sector spending do not create jobs or reduce poverty as such spending draws on resources that could better be applied to sectors with stronger potential for balanced growth, health, agriculture and education.

The results show that investment enhances inclusive growth in the long run. This evidence shows the importance of capital accumulation for inclusive growth. The development of physical facilities, technologies, and industrial capacity creates greater levels of production, employment, and quality of life. Since offering incentives for investment, the government can mobilise domestic and foreign investment towards realising long-term economic growth for everyone. The labour force also has positive effects on the long-run inclusive growth, implying that a growing labour force is useful to the economy. More people engaging in the labour market ensures that more people are productive, can fend for themselves and their families, and this is good for the growth of the economy. This highlights policies and support in the development of the labour force, skills and policies that will enhance patronage and participation of the workforce, especially the vulnerable and the disadvantaged.

### **Diagnostic Test**

For all the models, the results of the diagnostic test are well-behaved and within an acceptable threshold. Here, the rejection of the null hypothesis in the LM test shows that there is no problem of serial correlation in the residuals, and therefore, the model error terms are said to be time-independently distributed.

This is a good sign, since the autocorrelation of residuals shows that the model is free of autocorrelation or it is in possession of an insignificant autocorrelation. The JB (Jarque-Bera) test is insignificant, which implies that the residuals are normally distributed, hence the errors made by the model are normally distributed. This enhances the probabilistic inferences made from the model, hence its statistical credibility is reputable. The value of the ARCH test indicates that there is no evidence of heteroscedasticity of the model at the particular 5 % level of significance. This, in turn, implies that the variances of the residuals are constant, thus validating the reliability of the model estimates. Therefore, the fact that the RESET test result is not statistically significant shows that the model is correctly specified and that the functional form captures the right relationships shared by the variables. This partly minimises problems of model misspecification errors. Information contained in the models shows that the Wald test chi-square is significant at 1% level of significance, meaning that the long-run relationships between the variables are statistically significant. This affirms that the overall variables have an impact on inclusive growth in Nigeria, hence corroborating the model.

## **5. SUMMARY OF FINDINGS, RECOMMENDATION AND CONCLUSION**

### **5.1. Summary of Findings**

The findings highlight the important role of fiscal policy, such as public expenditure, in promoting inclusive growth in Nigeria. In the long run, disaggregated expenditure shows that both current and capital expenditure contribute positively to inclusive growth. While current expenditure supports essential services and immediate welfare needs, capital expenditure promotes infrastructure development and long-term economic benefits. However, the negative impact of government revenue and public debt on inclusive growth highlights the need for efficient revenue mobilisation and sustainable borrowing practices. The disaggregation of sectoral spending indicates that health, agriculture, and educational expenses greatly increase inclusive growth and enhance the importance of prioritising these areas for their long-term socio-economic benefits. Conversely, the negative impact of service cost means the inefficient or incorrect distribution of this category, emphasising

the need for strategic redistribution in a sector that directly supports growth and inclusiveness. Increased investment and labour participation have been consistently demonstrated to have a positive impact on inclusive growth, highlighting the importance of creating an enabling environment for increased investment and labour force participation. Collectively, these findings highlight the need for evidence-based fiscal policies that efficiently allocate resources and address structural inefficiencies to achieve sustainable and inclusive economic development in Nigeria.

## **5.2. Conclusion**

In conclusion, the study reveals the significance of fiscal policy in inclusive growth in Nigeria. Analysis of spending by dividing expenditure into recurrent and capital expenditures demonstrates the fact that both types ensure inclusive growth in the long run. Recurrent expenditure can be used to service crucial needs and emergency welfare, while capital expenditure goes to developmental needs through investments in infrastructure. However, revenues and public debt stifle inclusive growth. Thus, the efficiency of revenues and the management of debts is crucial. A sectoral breakdown of the expenditures shows that the money spent on health, agriculture and education utilisation has a positive impact on the growth of inclusiveness due to better quality of human capital, food security and efficient productivity. However, government spending on services has a negative effect, suggesting perhaps wastage. Globally, both investment and labour force expansion remain relevant in supporting inclusive growth, as they were already identified as essential to the capacity of economic participation. These results imply that achieving resource efficiency in terms of the resource-productivity balance in the Nigerian economy and maintaining fiscal balance are critical for inclusive growth and sustainable development in Nigeria.

## **5.3. Recommendation**

Based on the findings, the following recommendations are proposed to enhance inclusive growth in Nigeria:

1. The government should prioritise productive expenditure by allocating more resources to recurrent and capital expenditures that directly support inclusive growth. Recurrent spending should focus on essential

- services, while capital expenditure should prioritise infrastructure projects with high economic and social returns.
2. Revenue utilisation should be strengthened. This will address the negative impact of government revenue on inclusive growth by improving revenue collection efficiency, reducing wasteful spending, and channelling revenues into growth-enhancing sectors such as health, agriculture, and education.
  3. The Ministry of Finance should ensure sustainable debt management. This will mitigate the adverse effect of public debt on inclusive growth and implement prudent borrowing practices. Borrowed funds should be strictly allocated to projects with measurable and sustainable benefits for economic development.
  4. Government should increase investment in key sectors: Expand funding for health, agriculture, and education, as these sectors have shown a significant positive impact on inclusive growth. Policies should aim to improve service delivery and ensure efficient use of resources in these critical areas.
  5. The government should address inefficiencies in service expenditure. This can be achieved by reviewing and optimising government spending on services, focusing on eliminating inefficiencies and reallocating funds to sectors that demonstrate clear contributions to inclusive growth.
  6. Government should promote private sector investment. This will encourage private sector participation in infrastructure development and other productive activities through favourable policies, public-private partnerships, and incentives.
  7. There is a need to strengthen fiscal discipline and governance. This will improve governance structures to enhance the efficiency of public spending. Greater transparency, accountability, and regulatory quality are crucial for ensuring resources are effectively utilised.

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