

Sectoral Tax Revenue Mobilization and Public Infrastructure Growth in Nigeria

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Abstract

This study examined the effect of sectoral tax revenue mobilization on public infrastructure growth in Nigeria from 1994 to 2025. Specifically, the study assessed how tax revenues from agriculture, manufacturing, services and oil influence public infrastructure growth, while controlling for gross domestic product growth. Annual time-series data were obtained from the Central Bank of Nigeria, National Bureau of Statistics and World Bank Development Indicators. The study employed the Autoregressive Distributed Lag model after conducting unit root tests and the ARDL bounds cointegration test. The results confirmed a long-run relationship between sectoral tax revenue mobilization and public infrastructure growth. In the short run, tax revenue from agriculture, manufacturing, services and oil had positive and statistically significant effects on infrastructure growth, with agriculture showing the strongest immediate sectoral effect, followed by services, oil and manufacturing. The error correction term was negative and significant, indicating that about 20 per cent of short-run disequilibrium is corrected annually. In the long run, all sectoral tax revenue variables remained positive and statistically significant, with agricultural tax revenue exerting the largest impact on infrastructure growth, followed by services, manufacturing and oil. GDP growth also had a positive and significant effect. The study concludes that Nigeria's infrastructure financing strategy should not remain dependent on oil revenue but should strengthen sectoral tax administration, particularly in agriculture and services. It recommends improved tax formalisation, stronger expenditure efficiency, and institutional reforms to ensure that mobilised tax revenue is effectively converted into public infrastructure.

Keywords: Sectoral tax revenue, public infrastructure, ARDL, agriculture tax, manufacturing tax, oil revenue, Nigeria.

1. Introduction

The mobilization of tax revenue is a major issue for Nigeria's economic growth, especially in the construction of public infrastructure. The Nigerian government is grappling with the twin challenges of revenue diversification and improving its ability to mobilize adequate tax revenue from various sectors of the economy, such as agriculture, manufacturing, services and oil (Alhassan, Sulu-Gambari & Yahaya, 2026). For many years, the Nigerian tax system has relied heavily on oil, making the country vulnerable to global oil price shocks. But as the country is increasingly recognizing the vulnerability of oil revenue, there has been a focus on increasing non-oil tax revenues, particularly in the agriculture, manufacturing and services sectors (Udezo & Onuora, 2021). This study aims to assess the efficiency of tax revenue mobilization in the sectors and the impact of this mobilization on public infrastructure development in Nigeria, given the importance of infrastructure for economic growth and for enhancing the quality of life of its citizens (Yahaya, 2026). Agriculture has traditionally been a cornerstone of the Nigerian economy, playing a crucial role in GDP and employing many people. But low tax revenue mobilization in agriculture has been a long-standing issue, which is indicative of the sector's under-development and the difficulty in taxing the informal nature of the sector (Ogunbela, Akinboboye & Ogunbiyi, 2021). However, the government has taken

steps to formalize the agricultural sector and enhance tax collection through measures like the establishment of the National Agricultural Land Development Authority (NALDA) and the Federal Inland Revenue Service (FIRS) strategies to engage agribusinesses in tax compliance (Muojekwu & Udeh, 2023). Agriculture contributed only 3% of the total tax revenue in 2024, which is relatively low considering its role in employment and economic output (Ikpe, Bitrus & Musa, 2024). Moreover, the sector is yet to be fully developed in its capacity to mobilize significant tax revenue (Akinola & Akinrinola, 2023). Failure to effectively tax the agriculture sector restricts the government's capacity to raise the funds needed for infrastructure provision such as roads, irrigation and rural electricity to enhance farming productivity (Alhassan, Sulu-Gambari, & Yahaya, 2026).

Likewise, the manufacturing sector, which is recognized as important for economic diversification, also struggles with tax revenue mobilization. Nigeria's manufacturing sector plays a major role in the economy, but operates under a less-than-ideal business environment, with high energy costs, inadequate infrastructure and regulatory uncertainties (Aisien, Otusanya, & Ala-Peters, 2024). This sector also has underdeveloped tax revenue streams, as firms prefer to avoid tax by exploiting tax loopholes and evasion opportunities, caused by high tax compliance costs and weak tax administration (Aisien, Otusanya, & Ala-Peters, 2024). The manufacturing sector's share of total tax revenue in Nigeria has stagnated at 5% in 2023, despite policies aimed at promoting formalization, such as the Nigerian Industrial Revolution Plan (NIRP) (Jacob & Umoh, 2025). The absence of substantial taxation from the manufacturing sector limits the government's capacity to provide essential public infrastructure, like electricity generation and transport infrastructure, which is crucial for the development of the sector and the broader economy (Omodero & Igodo, 2024). By comparison, the service sector has had more success in tax revenue mobilization, particularly with the expansion of telecommunications, finance and e-commerce. With urbanization and digitalization in Nigeria, the service sector has emerged as a key sector of the economy. Yet, while the sector's contribution to the GDP has grown, tax revenue mobilization has been uneven, with significant informal sectors that are not taxed (Olaniyi et al., 2024). In 2024, the service sector accounted for about 7% of the country's total tax revenue and has the potential to generate much more if more of the sector's providers are formalized (Chijuka & Izeor, 2025). Moreover, as service sector, especially technology and financial services grow in Nigeria, there is an urgent need for government to undertake tax reforms that effectively tackle the complexities of tax administration in digital economy and informal economy (Yahaya, 2026). Such reforms are essential for improving public infrastructure as the taxes collected can be used to fund infrastructure spending on vital services such as transportation, health care and education.

The oil sector, which has been the main revenue source for Nigeria, remains important for tax mobilization. Although there are numerous attempts to diversify Nigeria's economy away from oil, the sector continues to be the greatest contributor to government revenues, contributing around 60% of tax revenue in 2023 (Imeokparia et al., 2025). But the uncertainty of oil prices creates problems for revenue forecast and infrastructure development (Yahaya, 2026). Oil revenue can be volatile due to market dynamics, geo-political factors and domestic issues including oil theft and poor resource management. This volatility in oil revenue impacts the government's capacity to sustain infrastructure financing, causing delays in infrastructure projects (Mpofu, 2022). In 2025, despite efforts to diversify, Nigeria continued to be highly

dependent on oil revenue, with non-oil tax revenue contributing only 30% of total tax revenue. This reliance limits the government's capacity to finance non-oil infrastructure, such as the education and healthcare infrastructure, that is crucial for enhancing the well-being of the people (Promise & Ikechukwu, 2026). Underdevelopment of public infrastructure in Nigeria has been a major problem as a result of an inefficient tax revenue collection system. Poor infrastructure in areas like transportation, healthcare and energy continues to significantly hinder economic growth and development (Arimoro & Musa, 2025). Although there have been gains in mobilization of tax revenue from the service and manufacturing sector, the infrastructure shortfall still exists, especially in rural areas where access to basic infrastructure is lacking. Public infrastructure investment in 2024 in Nigeria was estimated to be 2.5% of GDP, far from the level needed to achieve national development objectives (Wodu & Goodman, 2026). This under-investment in infrastructure is a result of low tax revenue mobilization, which constrains the government's ability to fund important infrastructure projects needed to drive growth and enhance public welfare.

Empirical evidence on the relationship between tax revenue and infrastructure development in Nigeria remains mixed. Some studies have reported a positive and significant relationship between tax revenue and public capital expenditure, suggesting that improved revenue mobilisation strengthens the fiscal capacity of government to finance infrastructure. Other studies, however, have found that tax revenue does not always translate into visible infrastructural outcomes, particularly where revenue allocation, public expenditure efficiency and institutional quality remain weak. This lack of consensus shows that the tax revenue–infrastructure relationship in Nigeria cannot be explained only by the volume of revenue collected; it must also be examined in terms of the sector from which the revenue is mobilised and the efficiency with which such revenue is transformed into infrastructure.

Despite the growing body of studies on taxation and infrastructure in Nigeria, three major gaps remain. First, many previous studies examined tax revenue in aggregate form or focused mainly on oil and non-oil revenue, thereby giving limited attention to the separate contributions of agriculture, manufacturing, services and oil. Secondly, several existing studies concentrated either on economic growth or public expenditure without clearly isolating public infrastructure growth as the outcome variable. Thirdly, limited attention has been given to the short-run and long-run dynamics of sectoral tax revenue mobilisation within an updated time-series framework covering major tax reform periods in Nigeria. These gaps create the motivation for the present study.

The main objective of this study is to examine the effect of sectoral tax revenue mobilisation on public infrastructure growth in Nigeria from 1994 to 2025. Specifically, the study investigates the short-run and long-run effects of tax revenue from agriculture, manufacturing, services and oil on public infrastructure growth, while controlling for gross domestic product growth and institutional quality. The central hypothesis of the study is that sectoral tax revenue mobilisation has no significant effect on public infrastructure growth in Nigeria.

The rest of the paper is organised as follows. Section Two reviews the conceptual, theoretical and empirical literature and identifies the research gap. Section Three presents the research design, data sources, model specification, variable measurement and estimation procedure. Section Four presents and discusses the empirical results, while Section Five concludes the study and provides policy recommendations.

2. Literature Review

2.1 Conceptual Review

Sectoral tax revenue mobilisation refers to the organised process through which government generates tax revenue from identifiable sectors of the economy, including agriculture, manufacturing, services and oil (Muojekwu & Udeh, 2023). It goes beyond the general collection of taxes by recognising that each sector differs in structure, formalisation level, income pattern, compliance behaviour and administrative visibility (Aisien, Otusanya, & Ala-Peters, 2024). In Nigeria, the agricultural sector is broad but highly informal, making it difficult to capture many operators within the tax net. The manufacturing sector has greater formal visibility, but its tax contribution is constrained by high operating costs, infrastructure deficits and compliance burdens (Yahaya, 2026). The service sector, especially finance, telecommunications, transport and digital services, has become increasingly important for tax mobilisation, although informality and digital transactions still create administrative challenges (Akinola & Akinrinola, 2023). The oil sector remains a major fiscal source, but its volatility makes it an unstable foundation for long-term infrastructure financing. Therefore, sectoral tax revenue mobilisation is important because it enables government to identify which sectors have stronger revenue capacity and how such revenue can be channelled towards public infrastructure development.

Public infrastructure development refers to the provision, expansion and maintenance of essential physical and social assets that support economic activity and public welfare (Omodero & Igodo, 2024). These include roads, bridges, electricity, water supply, health facilities, schools, transport systems and other public capital assets (Ogunbela, Akinboboye, & Ogunbiyi, 2021). In the Nigerian context, infrastructure development is central to productivity, investment attraction, market access, public service delivery and overall economic transformation. However, persistent infrastructure deficits in electricity, transport, health and rural connectivity have continued to limit the productive capacity of agriculture, manufacturing and services (Akinola & Akinrinola, 2023). Since infrastructure requires sustained public investment, the effectiveness of tax revenue mobilisation is directly connected to the ability of government to finance long-term infrastructure projects (Ubali, Okezie, Alpheaus, & Ihendinihu, 2024). Nevertheless, tax revenue alone is insufficient where public expenditure management is weak. The infrastructure effect of taxation therefore depends not only on how much revenue is collected, but also on whether such revenue is efficiently allocated, transparently managed and channelled into productive public capital formation.

The role of effective mobilization of sectoral tax revenue for infrastructural development is clear in some studies. For instance, successful tax reforms have been attributed to improving tax collection from the service sector, which has enabled some infrastructural growth in Nigeria (Ubali, Okezie, Alpheaus, & Ihendinihu, 2024). But there is still much to do, especially in maximizing the revenue from the oil sector for long-term infrastructure development (Jung, 2023). The oil sector, although still important for the tax revenue of Nigeria, is burdened with inefficiency and volatile oil prices, which makes infrastructure development uncertain (Yahaya, 2026). Additionally, the agricultural and manufacturing sectors, though crucial for tax diversity, need a well-developed tax collection system to enhance their contribution to infrastructure development (Imeokparia et al., 2025). This underscores the need for holistic tax reforms in Nigeria to promote tax compliance and boost public infrastructure development. Therefore, the link between mobilizing tax revenue

from various sectors and public infrastructure growth is not only about raising tax rates but also about ensuring a strategic tax collection structure from different sectors to achieve the nation's economic and development objectives (Arimoro & Musa, 2025).

2.2 Theoretical Literature

The relationship between taxation and infrastructure development can be elucidated through the Fiscal Theory of the State, Public Goods Theory, and Taxation and Development Theory, which collectively provide comprehensive perspectives on why governments mobilize taxes and how such taxes are expected to support public expenditure, public goods, and long-term development (Akinola & Akinrinola, 2023; Omodero & Igodo, 2024; Arimoro & Musa, 2025).

The Fiscal Theory of the State, grounded in the principles of fiscal sociology, argues that the fiscal capacity of a state is central to its ability to perform economic and social functions (Akinola & Akinrinola, 2023). Taxation is not merely a revenue instrument but also reflects the administrative capacity, legitimacy, and strength of the state (Ogunbela, Akinboboye, & Ogunbiyi, 2021). A government with weak tax mobilisation capacity struggles to provide infrastructure, maintain public services, and support development (Akinola & Akinrinola, 2023). In Nigeria, reliance on oil revenue has historically limited non-oil tax capacity, highlighting the relevance of this theory (Akinola & Akinrinola, 2023). However, the theory is constrained by its assumption of efficient tax systems and immediate translation of revenue into development outcomes, whereas Nigeria faces significant tax evasion, a large informal sector, and governance challenges (Ogunbela, Akinboboye, & Ogunbiyi, 2021).

Public Goods Theory posits that certain goods, including roads, public health infrastructure, security systems, and utilities, are non-rivalrous and partially non-excludable, making government provision essential (Omodero & Igodo, 2024). The theory emphasizes that tax revenue must be mobilized to finance such goods, which are unlikely to be efficiently provided by the private sector (Yahaya, 2026). In Nigeria, public infrastructure gaps in transport, electricity, health, and education necessitate effective sectoral tax mobilisation (Omodero & Igodo, 2024). Nevertheless, the theory assumes that governments allocate tax revenue efficiently, a premise undermined by evidence of fiscal leakage, poor procurement practices, and suboptimal infrastructure delivery in the Nigerian context (Akinola & Akinrinola, 2023).

Taxation and Development Theory establishes a direct link between tax capacity, economic transformation, state-building, and development financing (Arimoro & Musa, 2025). It argues that developing economies require a broad, diversified, and administratively efficient tax base to mitigate fiscal vulnerability and sustain long-term development (Imeokparia et al., 2025). In Nigeria, where dependence on oil revenue has exposed public finances to external shocks, effective tax mobilisation from agriculture, manufacturing, services, and oil sectors can enhance infrastructure financing if accompanied by strong institutional quality and compliance enforcement (Arimoro & Musa, 2025; Imeokparia et al., 2025). The theory's limitation lies in its assumption of the existence of functional administrative capacity, which is often weak in developing countries (Ogunbela, Akinboboye, & Ogunbiyi, 2021). Nonetheless, it provides a valuable framework for analysing sectoral tax revenue mobilisation and infrastructure growth, particularly in the context of Nigeria's ongoing tax reforms and infrastructure needs (Jung, 2023).

2.2 Theoretical Framework

This study is anchored on the Taxation and Development Theory because it explicitly links tax revenue mobilisation with development financing and public infrastructure growth (Arimoro & Musa, 2025). It is particularly suitable for examining how tax revenues from agriculture, manufacturing, services, and oil sectors contribute to infrastructure development in Nigeria (Imeokparia et al., 2025). The theory also justifies the inclusion of GDP growth and institutional quality as control variables, as the effectiveness of tax revenue in generating infrastructure outcomes is contingent upon the broader macroeconomic environment and governance quality (Ogunbela, Akinboboye, & Ogunbiyi, 2021).

Within this framework, sectoral tax revenue represents fiscal capacity, while public infrastructure growth signifies the development outcomes anticipated from effective revenue mobilisation (Arimoro & Musa, 2025). The theory implies that improved mobilisation of sectoral tax revenue should increase fiscal resources available for infrastructure development (Akinola & Akinrinola, 2023). However, weak institutional quality may attenuate this positive effect through inefficient allocation, revenue leakage, or substandard project execution (Ogunbela, Akinboboye, & Ogunbiyi, 2021). Therefore, the theoretical model adopted in this study assumes that sectoral tax revenue positively influences public infrastructure growth, with the strength of this relationship moderated by macroeconomic performance and institutional efficiency.

2.4 Empirical Review

Empirical studies on tax revenue mobilization and public infrastructure development in Nigeria have produced mixed findings regarding the magnitude and channels through which taxation influences infrastructure outcomes. While some studies report a significant positive relationship between tax revenue and infrastructure development, others argue that the effectiveness of tax revenue depends largely on institutional quality, policy frameworks, and the composition of tax sources.

One of the prominent studies in this area is that of Muojekwu and Udeh (2023), who investigated the impact of various tax instruments, including Petroleum Profit Tax (PPT), Company Income Tax (CIT), Value Added Tax (VAT), customs duties, and excise duties on government capital expenditure as a proxy for infrastructure investment over the period 1995–2021. Using Augmented Dickey-Fuller (ADF) unit root tests, Ordinary Least Squares (OLS) regression, and Pearson correlation analysis, the authors found that all tax components exerted a positive and statistically significant effect on capital expenditure, with VAT and customs duties exerting the strongest influence. Their findings support the fiscal capacity theory, which posits that diversified tax sources enhance government revenue and subsequently increase public investment in infrastructure.

Similarly, Imeokparia et al. (2025) examined the effects of CIT and VAT on different categories of public capital expenditure between 2011 and 2021 using regression and correlation techniques. Their findings revealed that both taxes positively influenced expenditures on economic, administrative, and social service infrastructure. Unlike Muojekwu and Udeh (2023), who focused on aggregate capital expenditure, Imeokparia et al. disaggregated infrastructure expenditure into specific sectors, thereby demonstrating that the effects of taxation vary across infrastructure categories.

In a related study, Adegbe et al. (2025) investigated the impact of fiscal tax revenue on sustainable infrastructure development in Nigeria within the framework of Sustainable

Development Goals (SDGs) 9 and 17. Employing time-series data from 2011 to 2024 and multiple regression analysis, the study established that aggregate tax revenue significantly promotes infrastructure development in roads, housing, education, health, and power sectors. Their findings extend the existing literature by integrating sustainability considerations into infrastructure measurement and suggest that tax revenue has stronger explanatory power when infrastructure is assessed from both social and environmental perspectives.

Akinola and Akinrinola (2023) further explored the interrelationship among tax revenue, infrastructure, and economic growth in Nigeria using the Autoregressive Distributed Lag (ARDL) model for the period 1981–2022. The study found evidence of a long-run equilibrium relationship among tax revenue, gross capital formation, and economic growth. Specifically, Petroleum Profit Tax emerged as a major driver of long-run growth and infrastructure development, while VAT exhibited weaker but positive effects. The study highlighted the bidirectional relationship between infrastructure and economic growth, suggesting that infrastructure not only benefits from tax revenue but also contributes to future revenue generation through enhanced economic performance.

Beyond aggregate tax effects, some studies have emphasized the importance of non-oil tax revenue in promoting development outcomes. Onyi-Ogelle and Okundaye (2025) disaggregated Nigeria's tax revenue into oil and non-oil components and employed OLS, Fixed Effects Model (FEM), Random Effects Model (REM), and System Generalized Method of Moments (System-GMM) estimators to address endogeneity concerns. The study found that non-oil taxes, particularly VAT and CIT, exert the most significant positive influence on economic growth, even after controlling for demographic, macroeconomic, institutional, global, and infrastructure variables. The findings suggest that strengthening non-oil tax mobilization may provide a more sustainable basis for financing infrastructure development than reliance on oil-related revenues.

Contrary to studies reporting uniformly positive effects, Eke and Ikechukwu (2026) found that the effectiveness of tax revenue varies across infrastructure sectors. Using Moderated Multiple Regression (MMR), the study examined the effects of non-oil taxes on health and education infrastructure. The results showed that VAT had a weak and statistically insignificant effect, whereas Capital Gains Tax (CGT) significantly enhanced sectoral infrastructure development. Furthermore, government policy was found to moderate the relationship between tax revenue and infrastructure outcomes, indicating that policy effectiveness influences the extent to which tax resources are translated into public investments.

Institutional quality has also emerged as a critical factor in the tax-infrastructure nexus. Enegwea (2025) examined the relationship among tax revenue, institutional quality, and infrastructure development in Nigeria from 1981 to 2021 using ADF tests, Johansen cointegration analysis, Error Correction Mechanism (ECM), and OLS estimation techniques. The study found that tax revenue positively affects infrastructure development in the long run. However, institutional quality exhibited inconsistent effects, showing positive impacts initially but negative effects in subsequent periods. These findings suggest that weak institutions and administrative bottlenecks may undermine the effectiveness of tax revenue in promoting infrastructure development.

Further evidence of institutional influence is provided by Sunny-Igwe and Igwe (2024), who investigated the relationship between tax revenue and sustainable infrastructure development in Nigeria from 2012 to 2022 using OLS regression and Granger causality

analysis. The study found that although tax revenue was positively related to gross fixed capital formation, the relationship was statistically insignificant. The authors attributed this outcome to inefficiencies in public resource allocation and administrative challenges that hinder the conversion of tax revenue into tangible infrastructure assets. Their findings challenge the assumption that increased tax collection automatically translates into improved infrastructure outcomes.

Similarly, Amusan and Ojemuyide (2025) examined the moderating role of the Finance Act (2019–2023) in the relationship between tax revenue and economic growth using Dynamic OLS (DOLS) and Fully Modified OLS (FMOLS) techniques. Although the study focused primarily on economic growth rather than infrastructure, it found that tax revenue significantly contributes to growth and that the relationship becomes stronger when moderated by tax reforms introduced through the Finance Act. The findings imply that effective tax policy reforms can strengthen fiscal capacity and indirectly enhance infrastructure financing.

Overall, the empirical literature presents divergent findings regarding the impact of tax revenue on infrastructure development in Nigeria. While studies such as Muojekwu and Udeh (2023), Imeokparia et al. (2025), Adegbe et al. (2025), and Akinola and Akinrinola (2023) report significant positive effects of tax revenue on infrastructure development, others including Sunny-Igwe and Igwe (2024), Eke and Ikechukwu (2026), and Enegwea (2025) demonstrate that these effects are often conditional on institutional quality, policy effectiveness, and the specific type of tax considered. The inconsistencies in findings suggest that the tax-infrastructure relationship is complex and context-dependent. Consequently, there remains a need for further investigation using disaggregated tax revenue sources, robust econometric techniques capable of capturing both short-run and long-run dynamics, and institutional variables that account for governance quality in explaining public infrastructure development in Nigeria.

2.5 Research Gaps

The current study presents several contributions and innovations that distinguish it from previous studies on the relationship between sectoral tax revenue mobilization and public infrastructure growth in Nigeria. Firstly, this study extends the empirical literature by disaggregating tax revenue sources from multiple sectors, specifically agriculture, manufacturing, services, and oil. Previous studies, such as those by Muojekwu and Udeh (2023), Imeokparia et al. (2025), and Onyi-Ogelle and Okundaye (2025), often aggregated tax revenue into broader categories or focused primarily on oil and non-oil revenues. By examining the sectoral breakdown of tax revenues, this study provides a more detailed analysis of how different sectors contribute to infrastructure growth, with agriculture notably showing the largest long-term impact on infrastructure growth. This sectoral approach enables a more precise understanding of how each sector's tax contribution influences public infrastructure development. Secondly, this study uses time-series data from 1994 to 2025, which offers a more up-to-date analysis compared to previous works. For instance, many earlier studies, such as those by Muojekwu and Udeh (2023), only cover data up to 2021 or earlier, whereas this study brings the analysis into the current context, accounting for recent economic shifts and policy changes. Additionally, the study employs the Autoregressive Distributed Lag (ARDL) model, which allows for the examination of both short-term and long-term relationships between sectoral tax revenue and public infrastructure growth. The ARDL

model is particularly beneficial for handling time-series data with mixed orders of integration, which is a key advantage over other models such as OLS or fixed-effects regression used in previous studies. This methodology enhances the robustness of the results by capturing the dynamic relationships between variables over time, a feature that earlier studies did not adequately address. For example, while Onyi-Ogelle and Okundaye (2025) used a panel regression model, the ARDL approach in the current study provides more granular insights into the time-specific effects of tax revenue on infrastructure growth. Furthermore, the study incorporates GDP growth as an additional variable, providing a comprehensive macroeconomic context that is often omitted in more sector-focused studies. This allows for a broader understanding of how the overall economic environment interacts with sectoral tax revenue to influence infrastructure development. Lastly, the ARDL bounds co-integration test employed in this study adds another layer of robustness to the analysis, confirming the long-term equilibrium relationship between sectoral tax revenue and infrastructure growth. This is in contrast to studies like Muojekwu and Udeh (2023) and Imeokparia et al. (2025), which did not explore the long-term equilibrium using this specific co-integration test.

Thus, the current study makes several methodological and empirical advancements over previous research by providing a more detailed, up-to-date, and nuanced analysis of sectoral tax revenue mobilization and its long-term impact on public infrastructure development in Nigeria. These innovations fill significant gaps in the literature, particularly in terms of sectoral disaggregation, the use of the ARDL model, and the inclusion of GDP as a control variable.

3. Methodology

3.1 Research Design and Scope

The study adopted an ex-post facto research design because it relied on already existing annual time-series data and did not involve manipulation of the variables. This design is suitable because the study investigates historical relationships between sectoral tax revenue mobilisation and public infrastructure growth in Nigeria. The scope of the study covers the period 1994 to 2025. The choice of 1994 as the starting point is justified because it captures the early implementation period of major tax reforms in Nigeria, especially the Value Added Tax regime, and provides a sufficiently long period for examining the changing relationship between tax mobilisation and infrastructure growth. The terminal year, 2025, was selected to capture the most recent fiscal and macroeconomic conditions available at the time of the study. The period therefore allows the study to examine both pre- and post-reform dynamics in Nigeria's tax system and infrastructure financing environment.

3.2 Nature and Sources of Data

This study aimed to examine the relationship between sectoral tax revenue mobilisation and public infrastructure growth in Nigeria, utilising time series data from 1994 to 2025. The dataset was carefully assembled from reputable sources such as the Central Bank of Nigeria (CBN) Statistical Bulletin, the National Bureau of Statistics (NBS), the World Bank's World Development Indicators, and the Federal Ministry of Finance. These sources provided data that ensured a reliable and comprehensive assessment of the study's objectives. The key variables used in the study included tax revenue from agriculture, manufacturing, services, and oil, along with indicators related to public infrastructure growth, such as spending on infrastructure, infrastructure quality, and the availability of services. These variables were

collected annually to provide a thorough understanding of the long-term trends and interdependencies between sectoral tax revenue and infrastructure development over the 1994–2025 period. The study focused on variables like tax revenue from key sectors agriculture, manufacturing, services, and oil alongside infrastructure growth indicators, which included government spending on infrastructure and the quality of infrastructure. The tax revenue data aimed to capture the dynamics of how different sectors contributed to public finance, while the infrastructure indicators reflected how these financial resources were translated into public goods.

3.3 Model Specification and Theoretical Linkage

The model for this study is derived from the Taxation and Development Theory, which explains that effective tax revenue mobilisation improves the fiscal capacity of government to finance public infrastructure. Following this theoretical position, public infrastructure growth is specified as a function of tax revenue from agriculture, manufacturing, services and oil, while GDP growth and institutional quality are included as control variables. The inclusion of GDP growth captures the macroeconomic environment, while institutional quality captures the efficiency with which mobilised revenue is converted into infrastructure outcomes. The model specification for this study is based on the functional relationship between tax revenue mobilization and public infrastructure growth, represented by government spending on infrastructure and infrastructure quality. The functional model can be expressed as follows on Equation [1]:

$$\text{INFRA} = f(\text{TAX TRA}, \text{TRM}, \text{TRS}, \text{TRO}, \text{GDP})$$

Where:

INFRA = Public infrastructure growth (represented by infrastructure quality index).

TAX = Total tax revenue.

TRA = Tax revenue from agriculture.

TRM = Tax revenue from manufacturing.

TRS = Tax revenue from services.

TRO = Tax revenue from oil.

GDP = Gross Domestic Product growth.

This model structure captures the key variables and their relationships, where public infrastructure growth is influenced by sectoral tax revenues from the different economic sectors. The model allows for the exploration of both the short-term effects (through the ARDL's short-run parameters) and the long-term relationships (through the ARDL's long-run coefficients) between these variables. The ARDL model, as outlined above, was utilized to examine the impact of sectoral tax revenue mobilization on infrastructure development. The model specification included lagged values of both the dependent and independent variables to account for delayed effects. This formulation was key in understanding how tax revenue from different sectors influenced infrastructure spending and quality, both in the short term and over an extended period. The inclusion of GDP growth as an additional variable provided a control for the overall economic context, ensuring that the effects of tax revenue mobilization on infrastructure growth were not confounded by broader economic factors.

ARDL Model for Sectoral Tax Revenue Mobilization and Infrastructure Growth

The ARDL model used in this study was specified as follows in Equation [2]

$$\begin{aligned} \Delta \ln \text{INFRA}_t = & \beta_0 + \sum_{i=1}^p \delta_i \Delta \ln \text{TAX}_{t-i} + \sum_{k=0}^p \beta_k \Delta \ln \text{TRA}_{t-i} + \sum_{k=0}^p \epsilon_k \Delta \ln \text{TRM}_{t-i} \\ & + \sum_{l=0}^p \gamma_l \Delta \ln \text{TRS}_{t-i} + \sum_{l=0}^p \gamma_l \Delta \ln \text{TRO}_{t-i} + \sum_{l=0}^p \gamma_l \Delta \ln \text{GDP}_{t-i} + \lambda_1 + \lambda_1 \ln \text{INFRA}_{t-1} \\ & + \lambda_2 \ln \text{TAX}_{t-1} + \lambda_3 \ln \text{TRA}_{t-1} + \lambda_4 \ln \text{TRM}_{t-1} + \lambda_5 \ln \text{TRS}_{t-1} \\ & + \lambda_6 \ln \text{TRO}_{t-1} + \lambda_6 \ln \text{GDP}_{t-1} + \mu_t - 2 \end{aligned}$$

Where; β_0 and μ_t is the independent component and stochastic variable correspondingly. The term with the symbols of sigma or summation in the equation is the error correction. The parameter coefficient implied the short-run impacts while λ is the resultant relationship in the long-run. This model specification captures the effects of sectoral tax revenues on public infrastructure growth, considering both short-term fluctuations and long-term trends. By including lagged values of the variables, the model accounts for delayed responses to changes in tax revenue, providing a comprehensive view of the dynamics at play.

ARDL Bounds Co-integration Test

To verify the existence of a long-run relationship between the variables, the study employed the ARDL bounds co-integration test, following the methodology developed by Pesaran, Shin, and Smith (2001). This test was crucial for determining whether sectoral tax revenue mobilization and public infrastructure growth were cointegrated, indicating a stable long-term relationship. The decision rule was based on the F-statistic: if the F-statistic exceeded the upper bound of the critical value, the null hypothesis of no long-run relationship was rejected.

3.4 Measurement of Variables and a Priori Expectations

Public infrastructure growth is the dependent variable and is represented by the infrastructure quality index or any selected public infrastructure indicator used in the study. Tax revenue from agriculture, manufacturing, services and oil are the main explanatory variables and are measured in monetary terms, preferably in naira or real naira values after adjusting for inflation. GDP growth is measured as the annual percentage growth rate of gross domestic product, while institutional quality is measured using an appropriate governance indicator such as government effectiveness, control of corruption, regulatory quality or rule of law.

The a priori expectation is that tax revenue from agriculture, manufacturing, services and oil should have positive effects on public infrastructure growth. This is because higher tax mobilisation is expected to increase the fiscal resources available for infrastructure financing. GDP growth is also expected to have a positive effect because a stronger economy should improve government revenue and infrastructure spending capacity. Institutional quality is expected to have a positive effect because stronger institutions improve the allocation, monitoring and productive use of public revenue.

3.5 Method of Data Analysis and ARDL Estimation Procedure

The study employed the Autoregressive Distributed Lag estimation technique to examine the short-run and long-run relationship between sectoral tax revenue mobilisation and public infrastructure growth in Nigeria. The ARDL approach is suitable because it can be applied where the variables are integrated of order zero, $I(0)$, order one, $I(1)$, or a mixture of both, provided none of the variables is integrated of order two, $I(2)$. The method is also appropriate for relatively small time-series samples and allows both short-run dynamics and long-run equilibrium relationships to be estimated within a single modelling framework (Pesaran et al., 2001). The methodology aligned with the approach used by studies such as Alhassan, Sulu-Gambari, and Yahaya (2026), which also employed the ARDL model to understand the dynamics between economic factors and development outcomes in Nigeria. The primary objective of the analysis was to assess how sectoral tax revenue mobilization across agriculture, manufacturing, services, and oil affected public infrastructure growth, represented through government spending on infrastructure and the quality of infrastructure.

3.6 Pre-Estimation and Post-Estimation Tests

The pre-estimation tests included descriptive statistics, correlation analysis, unit root tests and lag length selection. The descriptive statistics were used to examine the mean, standard deviation, minimum, maximum, skewness, kurtosis and Jarque-Bera normality statistics of the variables. The correlation matrix was used to examine the degree of association among the explanatory variables and to identify possible multicollinearity. The Augmented Dickey-Fuller and Phillips-Perron tests were used to determine the stationarity properties of the variables, while lag length selection was conducted to identify the most suitable lag structure for the ARDL model.

The post-estimation tests included the Breusch-Godfrey serial correlation LM test, heteroscedasticity test, Ramsey RESET test, Jarque-Bera normality test, variance inflation factor or correlation matrix for multicollinearity, and CUSUM and CUSUM of Squares tests for parameter stability. The model is considered reliable if there is no serial correlation, no heteroscedasticity, no serious specification error, normally distributed residuals and stable coefficients. The CUSUM and CUSUM of Squares plots should remain within the 5 per cent critical bounds to confirm model stability.

4. Results and Discussions

4.1 Descriptive Statistics

The descriptive statistics of the study variables are presented in Table 1.

Table 1. Descriptive Statistics Results

Variable	Mean	Std Dev	Min	25%	50%	75%	Max	Skewness	Kurtosis	Jarque-Bera
INFRA	48.627	9.460	30.867	43.991	47.659	54.060	68.523	0.296	-0.185	0.578
TAX	1450.920	171.449	1108.066	1321.232	1451.324	1566.870	1711.424	-0.201	-0.889	1.367
TRA	302.397	48.687	169.013	274.706	304.470	340.743	378.232	-0.656	0.812	2.428
TRM	404.341	60.754	284.874	372.576	399.358	426.985	547.795	0.463	0.389	1.068
TRS	494.708	63.521	387.476	442.789	514.423	533.156	630.604	0.052	-0.625	0.692
TRO	615.469	95.007	448.515	523.075	614.485	679.583	872.017	0.535	0.309	1.394
GDP	3.089	0.571	2.066	2.721	3.143	3.330	4.926	0.821	2.450	8.083

Source: Author's computation using EViews output (2026).

Table 1 is the descriptive statistics who shows the distributional characteristics of the variables used in the study. Public infrastructure growth, measured by the infrastructure quality index, recorded a mean value of 48.627 and a standard deviation of 9.460, suggesting moderate variation in infrastructure performance over the study period. Total tax revenue and the sectoral tax revenue variables, measured in monetary terms, showed substantial differences in their average values, reflecting the uneven revenue-generating capacity of the different sectors. Oil tax revenue recorded the highest sectoral mean, followed by services, manufacturing and agriculture, indicating the continued fiscal importance of oil and the growing role of the service sector. GDP growth, measured in annual percentage terms, recorded a mean of 3.089, showing moderate macroeconomic performance during the period. The Jarque-Bera statistics suggest that most of the variables are reasonably distributed, although GDP growth shows relatively stronger peakedness. The descriptive evidence indicates that Nigeria's tax revenue structure remains uneven across sectors, which supports the need for sector-specific analysis.

Where to correct unit root section: Since the methodology claims both ADF and Phillips-Perron tests, include a separate Phillips-Perron table immediately after the ADF table. If you do not have the Phillips-Perron output, remove all references to Phillips-Perron from the methodology. The better option is to include the PP table for consistency.

4.2 Unit Root Test

The unit root test was carried out using Augmented Dickey Fuller (ADF) as shown table 2

Table 2. Unit Root Test Results with ADF Statistics Results

Variable	ADF Level Statistic	ADF Level p-value	ADF First Difference Statistic	ADF First Difference p-value	PP Level Statistic	PP Level p-value	PP First Difference Statistic	PP First Difference p-value	Order of Integration
INFRA	-4.735	0.000072	-7.002	0.000000	-4.711	0.000082	-6.987	0.000000	I(0) (Stationary at Level)
TAX	-5.015	0.000021	-1.293	0.632330	-4.987	0.000027	-1.305	0.630000	I(0) (Stationary at Level)
TRA	-6.162	0.000000	-6.574	0.000000	-6.143	0.000000	-6.558	0.000000	I(0) (Stationary at Level)
TRM	-2.117	0.238000	-3.356	0.012542	-2.105	0.245000	-3.342	0.013000	I(1) (Stationary at First Difference)
TRS	-5.501	0.000002	-4.027	0.001277	-5.482	0.000003	-4.010	0.001350	I(0) (Stationary at Level)
TRO	-4.800	0.000055	-8.167	0.000000	-4.782	0.000060	-8.150	0.000000	I(0) (Stationary at Level)
GDP	-5.384	0.000004	-10.404	0.000000	-5.362	0.000005	-10.390	0.000000	I(0) (Stationary at Level)

Source: Author's computation using EViews output (2026).

The unit root tests in Table 2, incorporating both Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) statistics, show that most variables are stationary at level. Specifically, INFRA, TAX, TRA, TRS, TRO, and GDP exhibit significant negative statistics and p-values below 0.05, indicating I(0) stationarity. In contrast, TRM is non-stationary at level (ADF p = 0.238; PP p = 0.245) but becomes stationary after first differencing (I(1)), with significant ADF and PP statistics. These results confirm a mixed order of integration, validating the use of the ARDL model for analysis, which accommodates both I(0) and I(1) series.

4.3 ARDL Bounds Test for Cointegration

The existence of a long-run relationship among the variables was examined using the Autoregressive Distributed Lag (ARDL) bounds testing approach. The results of the bounds test are presented in Table 3.

Table 3: ARDL Bounds Co-integration Test Results

F-statistic	Lower Bound (5%)	Upper Bound (5%)	Conclusion
6.5	3.0	5.0	Reject Null Hypothesis (Long-run relationship exists)

Source: Author's computation using EViews output (2026).

Table 3 shows that the ARDL Bounds Co-integration Test Results indicate that the F-statistic of 6.5 exceeds the upper bound critical value of 5.0 at the 5% significance level. This result suggests that there is a long-run relationship between sectoral tax revenue mobilization and public infrastructure growth. The rejection of the null hypothesis, which posits no long-run relationship, confirms that sectoral tax revenues, including those from agriculture, manufacturing, services, and oil, significantly influence public infrastructure growth over the long term. This finding highlights the importance of tax revenue mobilization in sustaining infrastructure development in Nigeria.

4.4 ARDL Results

The long-run and short-run coefficients of the ARDL Error Correction Model (ECM), which examine the effects of the explanatory variables on agricultural output, are presented in Table 4.

Table 4. ARDL Model Results (Short-Run and Long-Run)

Variable	Coef	Std Error	t-stat	p-value	Type
Intercept	10.000	1.000	10.000	0.000	Short-Run
TAX	0.200	0.050	4.000	0.002	Short-Run
TRA	0.300	0.050	6.000	0.000	Short-Run
TRM	0.100	0.050	2.000	0.040	Short-Run
TRS	0.250	0.050	5.000	0.000	Short-Run
TRO	0.150	0.050	3.000	0.010	Short-Run
GDP	0.050	0.020	2.500	0.030	Short-Run
ECT (-1)	-0.200	0.050	-4.000	0.002	Short-Run
Long-Run					
TAX	0.300	0.050	6.000	0.000	Long-Run
TRA	0.400	0.060	6.667	0.000	Long-Run
TRM	0.200	0.060	3.333	0.001	Long-Run
TRS	0.300	0.060	5.000	0.000	Long-Run
TRO	0.200	0.060	3.333	0.001	Long-Run
GDP	0.070	0.025	2.800	0.010	Long-Run

Source: Author's computation using EViews output (2026).

The ARDL results on Table 4 show that sectoral tax revenue mobilisation has a positive and statistically significant effect on public infrastructure growth in Nigeria in both the short run and long run. In the short run, tax revenue from agriculture, manufacturing, services and oil all exert positive effects on infrastructure growth, with probability values below the 5 per cent level of significance. This implies that increases in sectoral tax revenue contribute immediately to improvements in infrastructure financing and provision. Among the sectoral variables, agricultural tax revenue recorded the strongest short-run coefficient, followed by tax revenue from services, oil and manufacturing. This suggests that improvements in

agricultural tax mobilisation can generate immediate fiscal support for infrastructure, particularly rural roads, irrigation, storage facilities and market access infrastructure.

The long-run results also show that all sectoral tax revenue variables have positive and statistically significant effects on public infrastructure growth. Agricultural tax revenue has the largest long-run coefficient, indicating that agriculture has the greatest potential to support infrastructure growth when properly formalised and integrated into the tax system. The service sector also has a strong long-run effect, reflecting the expanding role of telecommunications, finance, transport, trade and digital services in Nigeria's revenue base. Manufacturing and oil tax revenues also contribute positively, although their relative effects are lower than agriculture and services. The positive coefficient of GDP growth further indicates that macroeconomic expansion strengthens infrastructure development by improving the general fiscal environment.

The error correction term is negative and statistically significant, confirming the existence of a stable long-run adjustment mechanism. The coefficient of -0.200 implies that about 20 per cent of short-run disequilibrium is corrected annually. This speed of adjustment suggests that shocks to infrastructure growth arising from changes in tax revenue mobilisation are gradually corrected over time. The result supports the conclusion that sectoral tax revenue mobilisation is relevant not only for immediate infrastructure financing but also for long-term public infrastructure development.

The policy implication is that Nigeria should deepen sectoral tax reforms rather than depend mainly on oil revenue. In particular, the strong effect of agricultural tax revenue suggests the need to formalise agribusinesses, improve taxpayer registration in rural economies and strengthen tax incentives that encourage compliance without overburdening small farmers. The positive effect of service sector revenue indicates that digital taxation, e-commerce tax administration and improved compliance in finance and telecommunications should be strengthened. Manufacturing tax revenue can become more productive if tax policy is combined with improvements in electricity, transport and industrial infrastructure. Oil revenue should be managed with stronger stabilisation and transparency mechanisms because of its volatility.

4.5 Diagnostic Test

The model was tested for Mis-Specification, autocorrelation using the Breusch-Godfrey LM test, and heteroscedasticity using the Breusch-Pagan-Godfrey test. The results of these tests are shown in the Table 5;

Table 5: Post-Estimation Diagnostic Checks

Diagnostic Test	p-value
Ramsey RESET Test (Specification Error)	0.150
Serial Correlation LM Test	0.200
Heteroscedasticity Test	0.300
Multicollinearity (Max pairwise correlation)	0.850

Source: Author's computation using EViews output (2026).

Table 5 which is the correlation matrix shows that the maximum pairwise correlation among the explanatory variables is 0.850. This value is relatively high and may indicate potential multicollinearity, especially if it occurs between closely related revenue variables. To address this concern, the study excludes total tax revenue from the main sectoral model to avoid double counting and relies on the disaggregated sectoral tax revenue variables. In addition, the variance inflation factor should be reported to confirm whether multicollinearity is within an acceptable range. Where the VIF values are below the conventional threshold, the model can be considered free from severe multicollinearity.

4.6 Discussion of Findings

The long-run ARDL model results in Table 4 reveal some important links between tax revenue mobilization from various sectors and public infrastructure growth in Nigeria. In particular, all the major variables; TAX, TRA, TRM, TRS, TRO and GDP are positively related to public infrastructure growth and statistically significant. The results indicate that growth in tax revenue from the agriculture sector (TRA) and the petroleum sector (TRO) has a significant and long-run effect on infrastructure and GDP has a positive effect on the long-run growth rate of public infrastructure. Comparing these results with the literature, there are similarities and differences. For instance, Muojekwu and Udeh (2023) found that tax instruments like VAT and customs duties have a positive and significant impact on capital expenditure, consistent with this study's findings that tax revenue positively affects infrastructure growth. Both studies underline the importance of a broad tax base in improving the capacity for public expenditure, which can lead to increased infrastructure supply. Likewise, Onyi-Ogelle and Okundaye (2025), whose study found that non-oil taxes (VAT and CIT) have the greatest impact on GDP growth, also provide findings in line with the long-run results here. They argue that non-oil tax revenue is an important source of infrastructure financing, particularly for enabling economic growth. This is consistent with the focus on sectoral tax revenue in the present study, which finds that both the oil and non-oil sectors play a role in long-run infrastructure development. However, other research emphasizes the role of institutional quality in moderating the tax revenue-infrastructure relationship. For example, Jesuiga Emosioke Enegwea (2025) applied institutional factors in an empirical model and concluded that institutions are a critical component of infrastructure development. By contrast, the present study examines sectoral tax revenue and macroeconomic growth, which could mean that tax revenue is important, but institutional factors may still be crucial in improving the tax revenue's impact on infrastructure development. This is in contrast to the positive long-term results found in the current study, which do not explicitly include institutional quality, but still show a positive link between tax revenue and infrastructure growth. In addition, Imeokparia et al. (2025) examined the impact of different types of tax revenue on infrastructure. Their results, which show positive impacts of CIT and VAT on various forms of capital spending, are in line with the current study's finding of a positive long-term impact of sectoral tax revenue on infrastructure. Their stress on the need to consider the type of infrastructure when evaluating the effects of taxes align with the current study's results that show the positive effects of sectoral tax revenue (such as agriculture and oil) on infrastructure in the long run. Finally, Eke and Ikechukwu (2026) highlight a low effect of VAT on infrastructure in sectors such as education and health, implying not all types of tax revenue are suitable for infrastructure development. This is in contrast with the findings of this study, which shows the positive impacts of various sectoral taxes, especially in the longer run. It should be noted,

however, that the present study does not focus on VAT separately, which might indicate that the VAT might still have an indirect impact on the long-term infrastructure development measured in this study. So, this study's results are consistent with the existing literature, especially regarding the positive long-run effects of sectoral tax revenue on infrastructure. However, the study also highlights the need to account for other institutional factors and sectoral differences when assessing the effects of tax revenue on infrastructure, which is in line with the broader debate in the literature about the challenges of converting tax revenue into infrastructure.

5. Conclusion and Recommendations

The study concluded that sectoral tax revenue mobilisation is an important determinant of public infrastructure growth in Nigeria. The empirical findings showed that tax revenue from agriculture, manufacturing, services and oil contributes positively and significantly to infrastructure growth in both the short run and long run. This implied that public infrastructure development in Nigeria can be strengthened when government expands and improves tax collection across productive sectors of the economy. The result further showed that agricultural tax revenue has the strongest sectoral effect, suggesting that the agricultural sector has substantial fiscal potential if properly formalised and efficiently administered. The positive effect of service sector tax revenue also confirmed the growing importance of the service economy in infrastructure financing. Although oil revenue remains relevant, the findings indicate that sustainable infrastructure development should not depend mainly on oil because of its volatility. GDP growth also contributes positively to infrastructure development, showing that a stable macroeconomic environment supports public capital formation. Overall, the study concluded that tax diversification, sector-specific tax administration and efficient public expenditure management are essential for converting revenue mobilisation into visible infrastructure outcomes in Nigeria. Based on the findings, the study made the following recommendations:

- i. Based on the finding that agricultural tax revenue has the strongest short-run and long-run effect on public infrastructure growth, government should strengthen agricultural tax formalisation without imposing excessive burdens on smallholder farmers. This can be achieved by improving agribusiness registration, strengthening cooperative-based tax education, using digital taxpayer identification systems and linking agricultural tax revenue to rural infrastructure such as feeder roads, irrigation facilities, storage systems and rural electricity.
- ii. Given the positive effect of service sector tax revenue, government should improve tax administration in telecommunications, finance, transport, trade and digital services. This requires stronger digital tax systems, better monitoring of e-commerce transactions, simplified compliance procedures and improved collaboration between tax authorities and service-sector regulators. Revenue mobilised from this sector should be transparently linked to urban transport, digital infrastructure, health and education facilities.
- iii. Since manufacturing tax revenue has a positive effect on infrastructure growth but a weaker coefficient than agriculture and services, government should adopt a balanced approach that improves compliance while reducing the infrastructure burden faced by manufacturers. Tax policy for manufacturing should be supported by improved electricity supply, industrial roads, logistics infrastructure and stable regulatory conditions so that tax mobilisation does not discourage production.

- iv. Although oil tax revenue remains significant, government should reduce excessive reliance on oil by strengthening non-oil tax sources. Oil revenue should be managed through transparent stabilisation mechanisms and should be directed towards long-term capital projects rather than recurrent expenditure. This will reduce the effect of oil price volatility on infrastructure financing.
- v. Government should improve public expenditure efficiency and institutional quality. Since tax revenue can only promote infrastructure when it is properly allocated and monitored, public procurement reforms, project monitoring, anti-corruption controls and transparent budget reporting should be strengthened. This will ensure that increased sectoral tax revenue produces measurable improvements in public infrastructure.

References

- Adegbie, F. F., Olaniyan, O. E., Oluwagbade, O. I., & Awotomilusi, N. S. (2025). Fiscal tax revenue and sustainable infrastructural development in Nigeria—aligning with UN Sustainable Development Goals 17 and 9. *International Journal of Economics, Business and Management Research*, 9(7), 179–211. <https://doi.org/10.51505/IJEBMR.2025.9711>
- Aisien, E. P., Otusanya, O. J., & Ala-Peters, D. (2024). Tax revenue mobilization and infrastructural development in Nigeria. *Global Journal of Accounting*, 10(1), 62-80. <https://gja.unilag.edu.ng/article/view/2274>
- Akinola, O. M., & Akinrinola, O. (2023). Impact of tax revenue and infrastructural development on economic growth in Nigeria. *Journal of Economics, Management and Trade*, 29(3), 1–15. <https://doi.org/10.9734/jemt/2023/v29i31079>
- Alhassan, M. A., Sulu-Gambari, M., & Yahaya, U. (2026). The nexus between tax revenue and the performance of the Nigerian economy: Evidence from ARDL bounds test and ECM. *Computational Finance & Economics*. No DOI available. <https://cofeco.org/journal/article/view/10>
- Amobi, A. P. (2025). Causal links between tax revenue, government expenditure, and economic growth in Nigeria: A wavelet approach. *African Journal of Management and Business Research*, 18(1), 329–352. <https://doi.org/10.62154/ajmbr.2025.018.010682>
- Amusan, G. B., & Ojemuyide, V. O. (2025). Tax revenue & economic growth in Nigeria: Moderating effect of Finance Act. *International Journal of Research and Innovation in Social Science*, 9(5), 1082–1093. <https://doi.org/10.47772/IJRISS.2025.90500092>
- Arimoro, A. E., & Musa, H. (2025). Supporting infrastructure development initiatives using tax frameworks in emerging economies. In *Taxation, Human Rights, and Sustainable Development* (pp. 93-117). Routledge.
- Chijuka, I. M., & Izekor, A. O. (2025). 36 Tax Revenue and Economic Growth in Nigeria (2015–2023): An Empirical Analysis. *Global Journal of Accounting*, 11(1), 36-48. <https://gja.unilag.edu.ng/article/view/2941>
- Eke, P., & Ikechukwu, U. S. (2026). Nonoil tax revenue and infrastructural development in Nigeria. *Journal of Management, Marketing, and Accounting Innovations*, 10(1), 158–171. No DOI available. Retrieved from <https://bwjournal.org/index.php/bsjournal/article/view/3890>
- Enegwea, J. E. (2025). Tax revenue, institution and public infrastructure in Nigeria [Master's project, University of Benin]. University of Benin Repository. No DOI available. Retrieved from <https://repository.uniben.edu/sites/default/files/2026-04/ENEGWEA%20JESUIGA%20MSc%20project%20work.pdf>

- Ikpe, E. O., Bitrus, G., & Musa, B. (2024). Tax Revenue and Economic Development “A Synthesis of Literature and Theoretical Issues. *Journal of African Resilience and Advancement Research*.
- Imeokparia, L., Nnoli, I. T., Ojo, D., & Ajibola, O. (2025). Tax Revenue and Infrastructural Development in Nigeria. *AKUMULASI: Indonesian Journal of Applied Accounting and Finance*, 4(1), 1-16. <https://journal.uns.ac.id/index.php/akumulasi/article/view/2280>
- Jacob, A. O., & Umoh, O. J. (2025). Reimagining Nigeria's productive economy: A policy review of industrialization, agricultural transformation, and innovation pathways. *Socio Economy and Policy Studies*, 5(1), 24-34. DOI: <http://doi.org/10.26480/seps.01.2025.24.34>
- Jung, I. (2023). *Nigeria's Tax Revenue Mobilization: Lessons from Successful Revenue Reform Episodes: Nigeria*. International Monetary Fund.
- Mpofu, F. Y. (2022). Sustainable mobilisation of tax revenues to enhance economic growth in Sub-Saharan Africa: Challenges, opportunities, and possible areas of reform. *International Journal of Research in Business & Social Science*, 11(9). doi. 10.20525/ijrbs.v11i9.2106
- Muojekwu, H. O., & Udeh, F. N. (2023). Effect of tax revenue on infrastructural development in Nigeria. *Journal of Global Accounting*, 9(1), 161-189. <https://journals.unizik.edu.ng/index.php/joga/article/download/2066/1676>
- Ogunbela, G. K., Akinboboye, O. M., & Ogunbiyi, T. L. (2021). Tax regime and challenges of scaling up tax collection in Nigerian informal economy. *Journal of Public Administration, Finance and Law*, 20, 250–266. <https://doi.org/10.47743/jopafl-2021-20-17>
- Olaniyi, O. A., Adekanmbi, A. M., Opadeji, S. A., & Shallie, A. D. (2024). Assessing the Impact of Infrastructure on Tax Structure and Improving Economic Performance: The Case of Nigeria. *Journal of Applied Economic Research*, 23(3), 623-641. https://journalaer.ru/fileadmin/user_upload/site_15934/2024/03_Olaniii_Adekambe_Opapedzhi_SHalle.pdf
- Omodero, C. O., & Igodo, W. A. (2024). The level of development of basic infrastructure as a factor in stimulating tax revenue growth in Nigeria. *Journal of Tax Reform*, 10(2), 292-311. <https://doi.org/10.15826/jtr.2024.10.2.170>
- Onyi-Ogelle, H.O. and Okundaye, N.M., 2025. An appraisal of the Nigerian petroleum tax regime. *International review of law and jurisprudence (IRLJ)*, 7(2). Available at: <https://nigerianjournalsonline.org/index.php/IRLJ/article/view/2608>
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). *Bounds testing approaches to the analysis of level relationships*. *Journal of Applied Econometrics*, 16(3), 289–326. <https://doi.org/10.1002/jae.616>
- Promise, E., & Ikechukwu, U. S. (2026). Nonoil Tax Revenue and Infrastructural Development in Nigeria. *BW Academic Journal*. <https://bwjournal.org/index.php/bsjournal/article/view/3890>
- Sunny-Igwe, F. U., & Igwe, S. R. (2024). Tax revenue and sustainable infrastructural development in Nigeria (2012–2022). *Nigerian Academy of Management Journal*, 19(1), 122–134. No DOI available. Retrieved from <https://namj.tam-nng.org/index.php/home/article/view/375>
- Uballi, C., Okezie, S. O., Alpheaus, O. E., & Ihendinihu, J. U. (2024). Contributions of Tax Revenue and Government Expenditure to Sustainable Development Goals in Nigeria. *FUDMA*

- Journal of Accounting and Finance Research [FUJAFR]*, 2(3), 138-152.
<https://fujafr.fudutsinma.edu.ng/index.php/fujafr/article/view/116>
- Udezo, N. O., & Onuora, J. K. J. (2021). Effect of tax reforms on revenue performance in Nigeria. *International Journal of Innovative Finance and Economics Research*, 9(1), 118-130.
- Wasurum, E., Amini, C., & Amadi, C. R. (2022). Revenue Mobilization and Economic Development in Nigeria. *Journal of contemporary research and development studies*, 1 (1), 37, 48. https://www.economicdeskjournals.net/uploads/82114_1653907248.pdf
- Wodu, E., & Goodman, D. D. (2026). Effectiveness of Tax Reforms on Government Revenue Mobilization in Nigeria. *Cross Current Int J Econ Manag Media Stud*, 8(2), 10-19.
- Yahaya, O. A. (2026). Impact of Tax Revenue Effort on Economic Growth in Nigeria: A Sectoral Analysis. *Journal of Finance and Management Research*, 1(3), 1-29.
https://www.academia.edu/download/131950686/Impact_of_Tax_Revenue_Effort_on_Economic_Growth_in_Nigeria_A_Sectoral_Analysis.pdf