

**FEDERALLY COLLECTED NON-OIL TAX REVENUE AND PUBLIC INFRASTRUCTURE
DEVELOPMENT IN NIGERIA.**

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Abstract

This study focused on the impact of non-oil tax revenue collected by the federal government on public infrastructural development in Nigeria using road infrastructure and health infrastructure as proxies for public infrastructural development. It focused specifically on the effect of three main non-oil tax revenue components, namely, the Company Income Tax (CIT), Value Added Tax (VAT), and the Excise and Customs Duties (ECD). The study was ex-post facto and the population was national fiscal data from 1994 to 2025, while the tax categories that influence the development of infrastructure were selected using the purposive sampling technique. The secondary data used were of time series and obtained from Central Bank of Nigeria Statistical Bulletin, Federal Inland Revenue Service reports and National Bureau of Statistics spanning 36 years period (1994-2025). EViews software was used to analyze data by descriptive statistics and ordinary least squares regression. The road infrastructure model was found to have a good explanatory power of R-squared 0.8928 and adjusted R-squared 0.8813, while the health infrastructure model had an R-squared of 0.8621 and an adjusted R-squared of 0.8473. The results showed that CIT and VAT had a positive and significant impact on the road infrastructure, with ECD showing a statistically negative and significant impact on the road infrastructure. With regards to health infrastructure, the effect of CIT was negative but statistically not significant, VAT was positive and statistically significant and ECD was negative and statistically significant. The study has shown that non-oil tax revenue, especially the Value Added Tax (VAT) and Company Income Tax (CIT) has a significant role in the promotion of infrastructure development in Nigeria. From the results of the study, it is emphasised that the efficiency of non-oil tax mobilisation should be increased, fiscal transparency should be improved and tax revenues should be properly directed to productive infrastructure development. The study is in particular relevant for Sustainable Development Goals (SDGs) 3 (good health and well-being), 9 (industry, innovation and infrastructure), 11 (sustainable cities) and 17 (partnerships for the achievement of the SDGs), and contributes to the domestic resource mobilization for sustainable development.

Keywords: Company Income Tax, Value Added Tax, Excise and Customs Duties, Road Infrastructure and Health Infrastructure

Introduction

The development of public infrastructure has been driven by Nigeria's public revenue system; from the Federal Government's increasing dependence on taxation and other internal sources of revenue

for the provision and maintenance of economic and social infrastructure for production mobility, healthcare delivery, and all aspects of human development. This phenomenon of the growing share of petroleum revenue over a number of decades took Nigeria's fiscal structure in recent years towards a greater prominence of non-oil taxation as a source of development funding (Ilori & Efuntade, 2020; Ogbonna, 2021). This reliance on petroleum income has remained a determinant of the fiscal ability and the domestic sources of stable public investment of the country. In this fiscal context, the revenue performance of these federally collected tax instruments – Company Income Tax (CIT), Value Added Tax (VAT), and Excise and Customs Duties (ECD) – are key drivers of corporate activity, consumption, international trade, taxpayer compliance, economic conditions, and tax administration (Ewa et al., 2020; Aondoakaa et al., 2022; Ndu & Uguru, 2022). The three are a source of revenue for the government; CIT gives revenue from corporate profits, ECD gives revenue from customs and excise activities which is a good source to expand the fiscal resources potentially available for development-oriented expenditure, and VAT mobilises revenue from a wide base of consumption. Road infrastructure is of special interest to these tax instruments because the Federal Government spending on Road and Construction has a significant impact on transportation services, market connectivity, productive activities, employment opportunities, and access to essential services (Adejare, 2021; Akinola & Akinrinola, 2023).

Non-oil tax revenues are also pertinent to health infrastructure as the Federal Government capital expenditure on Health serves as a source of funds for hospitals, health facilities, specialised medical infrastructure and other physical assets to reinforce health delivery and population health (Mustapha et al., 2022; Oyedokun et al., 2024). The financing of road and health infrastructure is also relevant to SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities) and SDG 16 (Peace, Justice and Strong Institutions), which all relate to better public services, infrastructure that is resilient, sustainable communities and strong institutions. Oziegbe and Itua (2024), for example, analyzed CIT, VAT, and customs duties as taxes for infrastructural development, but primarily used electricity production as the measure of infrastructure, suggesting the importance of studying more aspects of infrastructure in future research. On this background, the fiscal dimension of public infrastructural development in Nigeria during the period 1994 to 2025 is examined in the context of an assessment of CIT, VAT and ECD with the focus on Federal Government capital expenditure on Road and Health.

Statement of Problem

Despite all the efforts of successive governments and the mobilization of domestic revenue, Nigeria remains with huge deficits in public infrastructure. Poor roads in many areas of the country provide poor mobility, trade, market access and efficient movement of goods and services. The adequate infrastructure plays a pivotal role in the achievement of economic activities and development outcomes, as reported by Ayeni and Afolabi (2020) and Akinola and Akinrinola (2023) respectively for Nigeria. Likewise, the lack of public health facilities remains a limiting factor in the availability of quality health care services, and the health sector's ability to respond to the needs of the population is compromised (Mustapha et al., 2022; Oyedokun et al., 2024). The infrastructure challenges are taking place against a backdrop of an economic context where the Nigerian government has growing demands for public spending but limited resources to meet them and mobilise resources. Previous research has explored the linkages between tax revenue and infrastructure investment for Nigeria, but some of these studies have only focused on general proxies of infrastructure or tax revenue in aggregate rather than breaking infrastructure into specific categories and tax revenue into components (Aisien et al., 2024; Mgbemena et al., 2023). Lacking in the empirical evidence is therefore the relationship between CIT, VAT and Excise and Customs Duties, respectively, and Federal Government capital expenditure on Road and Construction and Health. This marks an important empirical void as individual tax instruments could have different revenue raising patterns, magnitudes and fiscal features; and these could also be reflected in varying ways in the link between government tax receipts and government infrastructure expenditure.

There is evidence on the relevance of certain tax components to development outcomes from Oziegbe and Itua (2024) and from Duyile et al. (2024), but a more disaggregated investigation is needed to explore the linkages between specific tax instruments collected at the Federal level and specific categories of public expenditure on infrastructure. The issue also raises the question of Nigeria's achievement of the SDGs, especially SDG 9 (Industry, Innovation and Infrastructure), which calls for resilient infrastructure and inclusive and sustainable industrialisation and SDG 3 (Good Health and Well-being), for healthy lives and promoting well-being for all. Poor road investment can limit connectivity and economic activity, as well as access to markets and services, and poor health infrastructure can limit access, availability and quality of health services. The ability of the non-oil tax revenues collected by the federal government to back this investment in infrastructure is then relevant to the overall development priorities contained within the SDGs. In the Nigerian context, the relationship between CIT, VAT and Excise and Customs Duties with Federal Government expenditure on road and construction as well as health is an important fiscal and development issue that needs empirical investigation.

Conceptual Framework

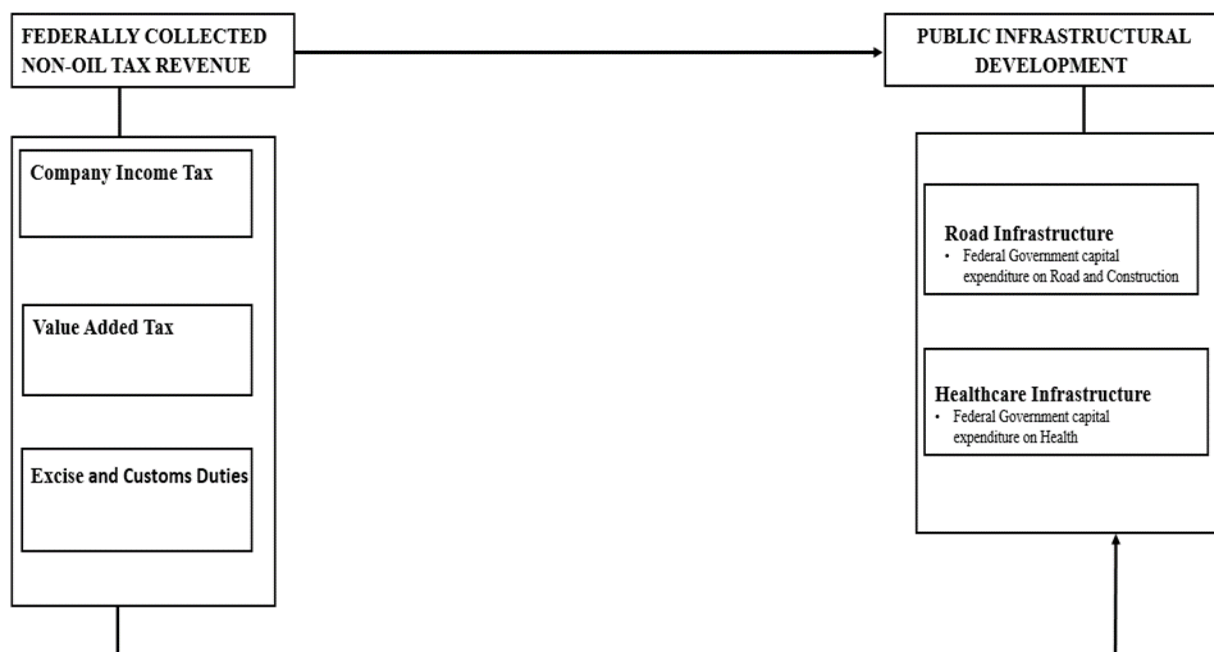


Figure 1: Conceptual Framework of Federally Collected Non-Oil Tax Revenue and Public Infrastructure Development.

Sources: Ajinwo (2023); Otuedon and Ogodogun (2024); Oziegbe and Itua (2024).

Objectives of the study

The aim of this study is to determine the effect of federally collected non-oil tax revenue on public infrastructure development in Nigeria. The specific objectives of this study were to:

1. Ascertain the effect of Company income tax on Road Infrastructure in Nigeria
2. Determine the effect of Value Added tax on Road Infrastructure in Nigeria
3. Ascertain the effect of Excise and Custom Duties on Road Infrastructure in Nigeria
4. Determine the effect of Company income tax on Health Infrastructure in Nigeria
5. Ascertain the effect of Value Added tax on Health Infrastructure in Nigeria
6. Determine the effect of Excise and Custom Duties on Health Infrastructure in Nigeria

REVIEWS OF RELATED LITERATURE

Conceptual Review

Federally Collected Non-Oil Tax Revenue

The non-oil revenue generated by the Federal government, which includes tax revenue, is a significant revenue source in the domestic revenue mobilisation of Nigeria and also constitutes a source of fiscal resources for financing government programmes and public investment. This is particularly gaining significance as Nigeria looks to diversify its economy from petroleum revenue and enhance the sustainability of its public finances (Ilori & Efuntade, 2020; Ologbenla, 2024). The contribution of the utilization of federally collected non-oil tax revenue is also pertinent to the goals of sustainable development (SDGs). The mobilisation of domestic financial resources aligns with SDG 17 with a focus on strengthening domestic resource mobilisation as a source of support to sustainable development. Fiscal resources raised by non-oil taxation also can be used to invest in infrastructure and productive public goods that have a bearing on SDG 9 about resilient infrastructure, inclusive and sustainable industrialisation, and innovation. Likewise, if public revenue can be optimally converted to health-related infrastructure, it can be used to achieve the goals related to SDG 3, including the enhancement of the physical capabilities of public health delivery systems.

Company Income Tax

Company Income Tax (CIT) is a tax collected at the federal level on the taxable income of companies based in Nigeria, it's one of the important sources of government non-oil revenue. By levying the tax on corporate income, CIT plays a role in the mobilisation of local resources by raising a share of corporate profits for payment to the government for funding government expenditure and development programmes. CIT mobilisation is also relevant when it comes to the achievement of Sustainable Development Goals (SDGs). Domestic taxation can play a role in SDG 17, specifically in relation to enhanced domestic resource mobilisation towards sustainable development, through strengthening domestic taxation. Efficient CIT mobilisation can also draw down the fiscal resources needed to invest in transport and other productive infrastructure as per SDG 9 and public investment in health related facilities can also contribute to SDG 3.

Value Added Tax (VAT)

The VAT is generated through the consumption and transactions of goods and services which are taxable, unlike CIT, which is mainly associated with corporate profits. It is a very broad-based tax and therefore allows for a great potential of revenue generation with increasing economic activity, household consumption and taxable transactions. The rising relevance of tax as a tool for enhancing domestic revenue mobilisation in Nigeria has been emphasised by Ewa et al. (2020) and Amah (2021) especially in the search to diversify the non-oil revenue base of government. VAT can be seen in the context of sustainable development as well. Strengthening domestic resource mobilisation and the financial capacity of the government to fund development programmes through enhanced VAT mobilisation can contribute to SDG 17. Enhanced VAT mobilisation can help in strengthening domestic resource mobilisation and improve financial capacity of government to support development programmes contributing to SDG 17. Investments in resilient transport and public infrastructure can contribute to SDG 9, health related infrastructure can contribute to SDG 3; if fiscal resources result from this investment, then those resources can also contribute to SDG 9.

Excise and Customs Duties

Most customs duties are levied on international trade and imports, whereas excise duties are mostly levied on specified goods and can be used for both revenue and regulatory purposes. Ndu and Uguru (2022) and Osamor et al. (2023) identify customs and excise duties as one of the government revenue sources other than oil, and they provide an analysis of its impacts on economic and development outcomes. Excise and Customs Duties also play a role in sustainable development, in the context of mobilizing domestic resources under SDG 17. The fiscal resources generated by these

tax instruments can be used for public investment in infrastructure in line with SDG 9, especially when public expenditure is related to transportation infrastructure and other productive public goods and assets that facilitate trade. Health infrastructure and provision of public health infrastructure can also help achieve SDG 3.

Public Infrastructural Development

Public infrastructural development is the investment done by the government for creating physical facilities, structures and systems that helps in the economic activity, social welfare and to provide basic public services. Ayeni and Afolabi (2020) and Akinola and Akinrinola (2023) give a great emphasis to the role of public revenue and infrastructure investment in providing support to the economic and developmental activities. The developmental relevance of public infrastructure also has significant links with the Sustainable Development Goals (SDGs). Infrastructure is clearly linked to SDG 9, which highlights resilient infrastructure and sustainable industrialisation and innovation, and to SDG 3, which emphasises health-related infrastructure and the promotion of healthy lives and well-being for all at all ages.

Road Infrastructure

Road infrastructure refers to the road network and construction facilities that are funded by government and used to transport people, goods and services in Nigeria. The federal government capital expenditures for Road & Construction are direct spending of capital funds to develop, rehabilitate, expand and improve transportation infrastructure (Oyedokun et al., 2024). An adequate road infrastructure will help to decrease transportation costs, enhance market connectivity and help transport agricultural, industrial and commercial products. On the other hand, transportation systems may be costly when the roads are bad, there is no network coverage or a poor maintenance plan. On the other hand, transportation systems can be costly if their roads are bad, their network is not available, or the maintenance plan is inadequate.

The infrastructure of the roads is also an important factor in the sustainable development. Quality, reliable, sustainable and resilient transport infrastructure is a direct concern of SDG 9, and contributes to the economic connectivity and productive activity of SDG 9.5. The direct contribution to SDG 8 is through improved road networks that can support indirectly through trade, job creation, market access, business activity and productivity.

Health Infrastructure

Health infrastructure refers to all public funded physical facilities and assets that are needed for the provision of health services, such as hospital facilities, clinics, diagnostic facilities, and other health-related infrastructure. The relevance of domestic revenue mobilisation and public investment in health-related infrastructure facilities has been observed from empirical studies conducted in Nigeria, which found relationships between the two (Mustapha et al., 2022; Oyedokun et al., 2024). The investment in health infrastructure has a clear and direct link with SDG 3, which focuses on ensuring healthy lives and promoting well-being for all at all ages. Other health facilities, such as hospitals, clinics, diagnostic centres, are also important elements of social infrastructure, and are thus relevant to SDG 9.

Theoretical Review

The study made use of a theory that was best suited for the study. This study is based on the Fiscal Exchange Theory.

Fiscal Exchange Theory

Fiscal Exchange Theory is mostly related to the work of James M. Buchanan, whose formal treatment of taxation as a fiscal exchange was published in 1976, but its intellectual roots lie in Buchanan's

general public-choice and contractarian work of the 1970s. Taxation and public expenditure are seen as an exchange relationship whereby citizens agree to levy resources on the state and in turn, receive return in the form of public goods and services which lead to an improvement of collective welfare, hence the relevance of the relationship in Nigeria in respect of non-oil tax revenue collected at the federal level and public infrastructural development. Ayeni and Afolabi (2020) in a theoretical study on the relationship between tax revenue and infrastructural development in Nigeria, suggested that tax revenue could contribute to infrastructural development. Likewise, Craig et al (2020) found that in Nigeria, non-oil tax revenue statistically significantly positively influenced capital expenditure, thus supporting the premise that tax mobilisation can generate funds for government investment in productive public assets.

Empirical Review

Ayeni and Afolabi (2020) investigated the relationship between tax revenue and infrastructural development and economic growth in Nigeria with tax revenue, infrastructure and real GDP. The study employs a secondary data ex-post facto design, 1981-2018 as a time frame and employs ADF, Phillips-Perron, Johansen cointegration and VAR and causality tests. Results revealed that there were significant relationships between tax revenue, infrastructure and economic growth. The study suggested that tax administration and accountability, and provision of infrastructure, should be improved.

Craig et al (2020) examined the tax revenue and capital expenditure in Nigeria with nonoil tax revenue, oil tax revenue, total tax revenue and capital expenditure. Using secondary data on an annual basis from 1989 to 2018, the study found that non-oil tax revenue had significant impact on capital expenditure, while also employing regression and Granger causality techniques. The study has found that tax revenues enable public investment. It suggested good spending of tax revenue. Ewa et al. (2020) studied tax revenue and economic development based on CIT, PPT, VAT and GDP. Secondary data for the years 1994-2018 were analysed ex-post facto using OLS regression method. Analysis of the results indicated that CIT and VAT had significant effect on the economic development, whereas PPT had no significant influence. Bigger efforts in tax collection and administration were recommended in the study.

Etim et al. (2020) examined the relationship between taxation and economic development with the use of CIT, PIT, VAT, PPT and HDI. The multiple regression with the use of an ex-post facto design and secondary data showed that the influence of VAT was positive for human development, whereas the influence of CIT was negative for human development. The contributions of PIT and PPT were negligible.

Ilori and Efuntade (2020) study called for the expansion of the tax base and enhancement of tax administration. Using oil revenue, non-oil revenue, exchange rate and real GDP, they looked at oil and non-oil revenue and economic growth. The secondary data covering 30 years was analysed about the study, based on cointegration and error-correction techniques. The findings set up long run relationships and that the economic growth has a significant effect on revenue variables. The authors suggested diversifying revenue and enhancing public-resource management.

Amah (2021) analyzed the effects of taxation and economic performance using VAT, PPT, CIT and GDP. This study is ex post facto in nature with 1999-2017 time frame and secondary data was used for OLS regression. The results indicated positive relationship of CIT and PPT with GDP whereas negative relationship was found in case of VAT. The study called for a conducive business environment and right VAT policies.

Apinoko et al. (2021) studied tax revenue, socio-economic performance (CIT, PPT, Customs and Excise Duties), school enrolment and life sustenance. The study employed the ex-post facto design and secondary data from 1981 to 2020, followed by the application of ARDL and Dynamic Error Correction Model. Results indicated that Customs and Excise duties had a positive impact on the basic-school enrolment and life sustenance. The study called for optimal tax revenue allocation for socio-economic development.

Knowledge Gap

Past research has found that tax revenue has been shown to have a positive impact on economic development and infrastructure, but most work has been carried out on overall tax revenue or overall economic outcomes and not specific impacts of CIT, VAT and Excise and Customs Duties on infrastructure in particular. The studies by Ayeni and Afolabi (2020), Craig et al. (2020), Ewa et al. (2020) and Etim et al. (2020) had primarily concentrated on the aspects of economic growth and general development. Likewise, Mustapha et al. (2022) and Omodero (2021) analysed each infrastructure sector separately but have not analysed the road and health infrastructure together in the context of federal capital expenditure. There is also a lack of adequate research on the individual impact of CIT, VAT and Excise and Customs Duties on the federal road and health infrastructure, especially in recent years. Hence, this study is aimed at filling the gap by investigating the influence of these three federal revenues collected non-oil tax on road infrastructure and health infrastructure in Nigeria.

METHODOLOGY

The study is an ex-post facto research design with a period of study covering 32 years (1994-2025) and secondary data from the CBN, FIRS and NBS were used. Population consists of federal fiscal data and 32 annual observations are selected using judgmental sampling. The annual tax revenue is the measure used for CIT, VAT and Excise and Customs Duties, and the capital expenditure of the Federal Government is used for Road and Construction Infrastructure (RDINF) and Health Infrastructure (HEINF). The data are analysed using E-views and multiple regression analysis, to find out the effect of independent variables to the dependent variables.

Model Specification

The econometric models are therefore specified as:

$$RDINF = \beta_0 + \beta_1CIT + \beta_2VAT + \beta_3ECD + \mu \dots\dots\dots \text{Model 1}$$

$$HEINF = \beta_0 + \beta_1CIT + \beta_2VAT + \beta_3ECD + \mu \dots\dots\dots \text{Model 2}$$

Where: RDINF = Road Infrastructure; HEINF = Health Infrastructure; CIT = Company Income Tax; VAT = Value Added Tax; ECD = Excise and Custom Duties; β_0 = Constant term; β_1 – β_3 = Coefficients of the independent variables; μ = Error term.

DATA ANALYSIS, AND DISCUSSION FINDINGS

Data Analysis

Table 1: Least Squares Method for Road Infrastructure

Dependent Variable: LOGRDINF

Method: Least Squares

Date: 08/30/26 Time: 20:57

Sample: 1994 2025

Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGCIT	0.688427	0.363581	1.893464	0.0487
LOGVAT	0.741190	0.556501	1.331876	0.0236
LOGECD	-0.978991	0.420605	-2.327575	0.0274
C	0.744986	0.269001	2.769457	0.0099
R-squared	0.892774	Mean dependent var	1.885749	

Adjusted R-squared	0.881286	S.D. dependent var	0.562128
S.E. of regression	0.193681	Akaike info criterion	-0.328741
Sum squared resid	1.050344	Schwarz criterion	-0.145524
Log likelihood	9.259864	Hannan-Quinn criter.	-0.268010
F-statistic	77.71040	Durbin-Watson stat	1.704639
Prob(F-statistic)	0.000000		

Source: Eview Output v13 (2026)

The regression results show that CIT and VAT have positive and significant effects on road infrastructure expenditure, while ECD has a negative and significant effect. The model accounts for 89.28% of the variability in RDINF and is jointly significant. (F-statistic = 77.71, $p = 0.0000$). Therefore, H01, H02 and H03 are rejected, confirming significant effects of CIT, VAT and ECD on road infrastructure expenditure.

Table 2: Least Squares Method for Health Infrastructure

Dependent Variable: LOGHEINF

Method: Least Squares

Date: 08/30/26 Time: 21:01

Sample: 1994 2025

Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGCIT	-0.137736	0.431738	-0.319026	0.7521
LOGVAT	1.998054	0.660824	3.023581	0.0053
LOGECD	-1.472413	0.499453	-2.948053	0.0064
C	0.435872	0.319428	1.364538	0.1833
R-squared	0.862084	Mean dependent var		1.390083
Adjusted R-squared	0.847307	S.D. dependent var		0.588568
S.E. of regression	0.229989	Akaike info criterion		0.014894
Sum squared resid	1.481053	Schwarz criterion		0.198111
Log likelihood	3.761690	Hannan-Quinn criter.		0.075626
F-statistic	58.34055	Durbin-Watson stat		1.184251
Prob(F-statistic)	0.000000			

Source: Eview Output v13 (2026)

The findings indicate that VAT has a positive and significant impact on the health infrastructure whereas ECD has a negative and significant impact. CIT has a negative but insignificant effect on HEINF. The model explains 86.21% of the variation in health infrastructure and is jointly significant (F-statistic = 58.34, $p = 0.0000$). Hence, Ho (H05) and Ho (H06) are rejected and Ho (H04) is accepted.

Discussion of Findings

Company Income Tax and Road Infrastructure

The positive and statistically significant relationship between Company Income Tax and Road Infrastructure (coefficient = 0.688427; $p = 0.0487$) indicates that Company Income Tax is an important fiscal source to support Federal Government investment in the transportation and construction of roads. The result corroborates that of Ayeni and Afolabi (2020) and Craig et al. (2020) who also found that tax revenue has a positive relationship with infrastructural development and capital expenditure, hence the fiscal significance of company tax to infrastructural development.

Value Added Tax and Road Infrastructure

The result indicates that Road Infrastructure for Value Added Tax is positive and statistically significant (coefficient = 0.741190; $p = 0.0236$) implying that higher the mobilisation of VAT, higher the government capacity for road and construction expenditure. This result corroborates the overall results of Ewa et al (2020), Amah (2021) and Akinola and Akinrinola (2023) which found that tax revenue can enhance the capacity of the government to finance development-oriented expenditure.

Excise and Customs Duties and Road Infrastructure

Although the ECD is regarded as highly important in terms of revenue generation, it is observed that there is not a proportional increase in expenditure on Road Infrastructure with every increase in revenue received from ECD during the study period, with the coefficient of the relationship being negative and statistically significant (coefficient = -0.978991; $p = 0.0274$). It is a useful comparison to Ndu and Uguru (2022) and Aondoakaa et al. (2022), who studied the infrastructure effect of a specific tax source in the context of tax-revenue relationships as a whole, as it implies that the infrastructure effect of a tax source can vary by government priorities and the composition of expenditures.

Company Income Tax and Health Infrastructure

From this result it can be seen that the coefficient value of Company Income Tax is negative but not statistically significant ($p = 0.7521$); this means that the changes in Company Income Tax revenue did not have a statistically measurable impact on Federal Government health capital expenditure over the period of the study. This is similar to the findings of the study by Demehin (2024) which did not pay particular attention to health care but focused on indirect effects of tax policies. This further illustrates the relevance of specific use of tax revenue to enhance healthcare infrastructure, given other systemic challenges, like inefficiencies in tax administration.

Value Added Tax and Health Infrastructure

The statistically significant positive regression coefficient of 1.998054 and the significance level of $p = 0.0053$ for Health Infrastructure shows that there is strong positive evidence between the mobilisation of VAT and investment in the health infrastructure sector of the Federal Government. The result is similar to that of Mustapha et al. (2022), Omodero (2021) and Mgbemena et al. (2023), which also highlighted the importance of tax revenue in health and social infrastructure. The higher coefficient in this study indicates the high responsiveness of health infrastructure expenditure to tax revenue in the estimated model.

Excise and Customs Duties and Health Infrastructure

The result shows that the effect of the Excise and Customs Duties is statistically significant and negative (coefficient = -1.472413; $p = 0.0064$) on Health Infrastructure suggesting that there is negative relationship between the revenue from the Excise and Customs Duties and the Federal Government health capital expenditure in the study period. This finding is in contrast to that obtained by Ndu and Uguru (2022), Emudainohwo and Ndu (2022) and Demehin (2024) who reported that on average, revenue from non-oil taxes is associated with positive development outcomes. It provides an important sector-specific perspective on the finding that the availability of

revenue from a particular tax source does not necessarily guarantee a corresponding increase in health infrastructure allocation.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The results suggest that non-oil tax revenues collected at the federal level significantly and measurably influence infrastructural development in Nigeria, with the combined tax variables accounting for large amounts of the variations in the infrastructural expenditure of both roads and health. The current statistics for Company income tax (CIT) indicate positive and significant impact on the road infrastructure whereas Value added tax (VAT) has positive impact on both road and health infrastructure, which highlights its importance in financing infrastructure. Excise and Customs Duties (ECD) are statistically significant and have a negative correlation with road infrastructure and health infrastructure, indicating that besides the volume of ECD collected, their composition and utilisation can be as significant.

Recommendations

1. Considering the contribution of Company Income Tax (CIT) towards the generation of road financing, Federal Government should reinforce the mobilisation and administration of CIT with enhanced taxpayer compliance; expanding CIT tax base; narrowing leakages; and building a digital tax administration system.
2. The efficient use of digital collection systems for VAT, new mechanisms for compliance and a wider formal economic base should be further enhanced, given that VAT has shown a positive and statistically significant impact on road and health infrastructure.
3. Government should conduct a thorough audit of the administration and utilisation of Excise and Customs Duties (ECD) and focus on the revenue leakages, exemptions and customs valuation and allocation mechanisms as the negative but significant coefficients indicate that as ECD revenue increases, the corresponding infrastructure outcomes have not increased proportionately.
4. The management of capital expenditure should be more efficient and predictable, with a larger share of non-oil tax revenues allocated to road infrastructure, which should include sustainable financing for road construction, rehabilitation and maintenance, using predictable multi-year funding.
5. Financing of health infrastructure should be a priority for the Federal Government by allocating funds generated from VAT and other non-oil taxes to hospitals, primary healthcare facilities, health infrastructure and health related capital projects in an efficient manner.
6. Government is to ensure improved transparency, accountability and monitoring of tax-funded capital expenditure, which will allow for better mobilisation of more non-oil tax revenues to translate their value into better roads and health infrastructure: regular tracking of revenue collection to roads and health projects; independent audits of projects and project performance; and budgeting by project output.

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Appendix A

Table: Federally Collected Non-Oil Tax Revenue and Public Infrastructure Development in Nigeria (1994–2025)

Year	RDINF	HEINF	CIT	VAT	ECD	LOG-RDINF	LOG-HEINF	LOG-CIT	LOG-VAT	LOG-ECD
1994	12	0.961	12.28	7.26	18.3	1.079181	-0.01728	1.089022	0.860996	1.262332
1995	17.9	1.725	21.87	20.76	37.36	1.252853	0.236789	1.339908	1.317248	1.572453
1996	10.5	1.66	22	31	55	1.021189	0.220108	1.342423	1.491362	1.740363
1997	13.8	2.624	26	34	63	1.139879	0.418964	1.414973	1.531479	1.799341
1998	26.6	8.307	33.3	36.87	57.7	1.424865	0.919444	1.522444	1.56665	1.761176
1999	5	7.387	46.2	47.14	87.9	0.69897	0.868468	1.664642	1.673353	1.943989
2000	7.01	8.866	51.1	58.47	101.5	0.84547	0.947728	1.708421	1.766933	2.006466
2001	21.44	20.128	68.7	96.76	170.6	1.331225	1.303801	1.836957	1.985687	2.231979
2002	35.85	12.608	89.1	108.6	181.4	1.554489	1.100646	1.949878	2.035834	2.258637
2003	17.46	6.431	114.8	136.4	195.5	1.242019	0.808279	2.059942	2.134821	2.291147
2004	40.67	18.208	130.8	159.5	217.2	1.609285	1.260262	2.116608	2.202761	2.33686
2005	89.06	21.836	170.2	178.1	232.8	1.949668	1.339173	2.23096	2.250664	2.366983
2006	72.49	32.152	246.7	221.6	177.7	1.860296	1.507208	2.392169	2.34557	2.249687
2007	105.7	96.9	332.4	289.6	241.4	2.024075	1.986324	2.521661	2.461799	2.382737
2008	126.9	97.2	420.6	401.7	280.2	2.103462	1.987666	2.623869	2.603902	2.447468
2009	138.5	52.5	600.6	481.4	295.5	2.14145	1.720159	2.778585	2.682506	2.470557
2010	195.4	35	666.1	564.89	429.56	2.290925	1.544068	2.823539	2.751964	2.633024
2011	150.7	39.5	715.4	659.15	570.87	2.178113	1.596597	2.854549	2.818984	2.756537

2012	154.2	45	846.6	710.56	646.67	2.188084	1.653213	2.927678	2.851601	2.810683
2013	110.8	32.4	998.4	802.69	636.38	2.04454	1.510545	2.999305	2.904548	2.803717
2014	142.9	40.7	1173.49	802.96	750.53	2.155032	1.609594	3.069479	2.904694	2.875368
2015	134.3	30.3	1268.98	767.33	694.6	2.128076	1.481443	3.103455	2.884982	2.841735
2016	108.2	31.7	933.54	828.2	679.49	2.034227	1.501059	2.970133	2.918135	2.832183
2017	172	47.2	1215.06	972.35	785.89	2.235528	1.673942	3.084598	2.987823	2.895362
2018	271.4	70.7	1340.33	1,108.04	884.76	2.43361	1.849419	3.127212	3.044555	2.946825
2019	357.3	90.7	1604.7	1,189.98	1005.49	2.553033	1.957607	3.205394	3.07554	3.002378
2020	206.13	35	1275.38	1,474.53	1094.08	2.314131	1.544068	3.10564	3.168654	3.039049
2021	192.87	39.5	1747.99	2,042.95	2240	2.285253	1.596597	3.242539	3.310258	3.350248
2022	218.47	45	2830	2,462.26	2511.52	2.33939	1.653213	3.451786	3.391334	3.399937
2023	234.01	120.96	4896	3,397.33	2375.76	2.369234	2.082642	3.689841	3.531138	3.375803
2024	550.05	197.7	5055.7	6,564.31	3301.23	2.740398	2.296007	3.703781	3.817189	3.518676
2025	597.07	211.3	9,210.00	8,597.20	3920.98	2.776025	2.324899	3.96426	3.934357	3.593395

Source: *CBN Bulletin and FIRS Tax Statistics (2025)*