JOURNAL OF CONTEMPORARY ISSUES IN ACCOUNTING
Volume 7, Number 2, August 2026, pp. 164 – 174.
ISSN 2814 - 1113
https://journals.unizik.edu.ng/index.php/jocia/index

MODERATING EFFECT OF SUBNATIONAL STATUTORY ALLOCATION ON THE RELATIONSHIP BETWEEN TAX REVENUE AND FISCAL SUSTAINABILITY OF NIGERIAN STATES

Oina, Benjamin Jagun[1] Musa, Ibrahim[2]
[1]*Department of Taxation, Faculty of Administration, Nasarawa State University, Keffi*
[2]*Department of Entrepreneurship studies, Faculty of Administration,, Nasarawa State University, Keffi*
Emails: *benoina@gmail.com[1]; Ibrospecial93@gmail.com[2];*
Correspondence: benoina@gmail.com

ABSTRACT

This study empirically examined the moderating effect of subnational statutory allocation on the relationship between tax revenue and fiscal sustainability of Nigerian states. Specifically, the paper examined how subnational statutory allocation moderates the relationship between Pay-As-You-Earn (PAYE) tax revenue and fiscal sustainability, as well as the moderating role of subnational statutory allocation on the nexus between non-PAYE tax revenue and fiscal sustainability across Nigerian states. Anchored on fiscal federalism theory and the resource dependence theory, the study adopted the qualitative research approach, giving due considerations to the concepts and empirical literatures of prior related studies. Evidence from empirical literatures considered showed that that subnational statutory allocation commendably moderates the relationship between PAYE tax revenue and fiscal sustainability, whereas its moderating effect on non-PAYE tax revenue and fiscal sustainability was quite insignificant. These findings underscore the pivotal role of statutory allocations as complements to internally generated revenues in sustaining fiscal health among Nigerian subnational governments.

Key words: *Fiscal Sustainability, Subnational Statutory Allocation, PAYE Tax Revenue, Non-PAYE Tax Revenue, Nigerian States.*

INTRODUCTION

Fiscal sustainability remains one of the most pressing governance challenges confronting subnational governments in developing economies, particularly in resource-dependent federations such as Nigeria. The ability of state governments to maintain long-term balance between their revenue inflows and expenditure obligations without resorting to unsustainable debt accumulation has attracted considerable scholarly and policy attention in recent decades (Adegboye et al., 2023; Mustapha & Bashir, 2022). In Nigeria, the fiscal health of the 36 states and the Federal Capital Territory (FCT) has been persistently shaped by the interplay between internally generated revenues, comprising taxes and non-tax receipts, and the external transfer receipts from the Federation Account, commonly known as statutory allocations (Onyekwere & Nwosu, 2022). The Nigerian fiscal architecture, operationalised under the 1999 Constitution (as amended) and the Allocation of Revenue (Federation

Account, etc.) Act, establishes a revenue-sharing framework through which oil proceeds, value added tax (VAT), and other federally collected revenues are distributed to the three tiers of government. For most states, statutory allocations constitute a dominant share of total revenues, sometimes exceeding 70% of total state receipts, thereby creating a structural dependency that undermines autonomous fiscal decision-making (Ihejirika & Okafor, 2023; Nwosu et al., 2022). This heavy dependence on statutory allocations is widely considered a critical obstacle to fiscal sustainability at the subnational level.

Concomitantly, tax revenue remains a vital instrument for achieving fiscal independence and long-term solvency for subnational governments. The two principal categories of state-level tax revenue in Nigeria are the Pay-As-You-Earn (PAYE) tax, which is the largest component of personal income tax deducted at source from employees, and non-PAYE taxes, which encompass direct assessments, withholding taxes on non-employment income, and other statutory levies administered by State Internal Revenue Services (SIRS) (Adegboye et al., 2023; Ogundele & Ajayi, 2022). Despite the constitutional empowerment of states to levy personal income taxes, the performance of state governments in maximising tax revenue collection has remained suboptimal, exacerbating fiscal stress across many states (Onyekwere & Nwosu, 2022). Subnational statutory allocation, as a moderating variable, presents an interesting dynamic in the tax revenue-fiscal sustainability relationship. When statutory allocations are substantial, they may complement the internally generated tax revenues of states, thereby amplifying the positive impact of tax collection efforts on fiscal sustainability. Conversely, when allocations are low or volatile, as witnessed during periods of oil price shocks, the fiscal sustainability of states becomes severely compromised regardless of their tax performance (Mustapha & Bashir, 2022; Ihejirika & Okafor, 2023). Understanding this moderating mechanism is therefore crucial for designing robust fiscal frameworks in Nigeria's federal system.

While extant studies have examined the determinants of fiscal sustainability in Nigeria (Adegboye et al., 2023; Nwosu et al., 2022; Ogundele & Ajayi, 2022), there remains a significant dearth of empirical investigations that explicitly explore the moderating role of subnational statutory allocation in the tax revenue-fiscal sustainability nexus. Most prior studies have treated statutory allocation either as a control variable or an independent predictor, without systematically interrogating its conditional or moderating effects. This gap motivates the present study.

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Statement of the Problem

The fiscal sustainability of Nigerian states has remained precarious despite the constitutional provisions for revenue sharing and the significant tax-collection powers vested in state governments. Several states have repeatedly been unable to meet their recurrent expenditure obligations, including the payment of civil service salaries, without recourse to emergency borrowings or federal bailout interventions (Ihejirika & Okafor, 2023; Onyekwere & Nwosu, 2022). This situation points to a systemic dysfunction in the relationship between revenue generation and fiscal management at the subnational level.

A key puzzle in this context is whether the fiscal sustainability outcomes of Nigerian states are simply a function of the volume of internally generated tax revenues, or whether the moderating influence of statutory allocations significantly conditions this relationship. Prior empirical evidence on the direct effects of tax revenue on fiscal sustainability has yielded mixed results (Mustapha & Bashir, 2022; Adegboye et al., 2023), and the moderating role of statutory allocation, despite its practical relevance, has not been rigorously examined in the extant literature. Without a clear understanding of how statutory allocations interact with PAYE and non-PAYE tax revenues to influence fiscal sustainability, policy prescriptions regarding revenue administration and intergovernmental fiscal transfers remain incomplete and potentially misleading. Furthermore, the volatile nature of federation account allocations, driven by fluctuations in global crude oil prices, implies that the fiscal sustainability implications of tax revenues are not uniform across different levels of statutory allocation (Nwosu et al., 2022). States that receive higher statutory allocations may exhibit different fiscal sustainability outcomes from their tax revenues compared to those that are more reliant on internally generated revenues. This heterogeneity in the fiscal experience of Nigerian states underscores the need for a moderation analysis that can capture these conditional dynamics. The present study therefore addresses this gap by empirically investigating the moderating effect of subnational statutory allocation on the relationship between tax revenue components and fiscal sustainability of Nigerian states.

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Objectives

The broad objective of this study is to examine the moderating effect of subnational statutory allocation on the relationship between tax revenue and fiscal sustainability of Nigerian states. The specific objectives are:

1. To examine the moderating effect of subnational statutory allocation on the relationship between PAYE tax revenue and fiscal sustainability of states in Nigeria.
2. To assess how subnational statutory allocation moderates the relationship between non-PAYE tax revenue and fiscal sustainability of states in Nigeria.

METHODOLOGY

This study adopted a qualitative research design such that concepts and related empirical literatures were duly considered in the context of the research discourse. This study was poised to reflect the pre-recession, recession, post-recession, and COVID-19 recovery phases of the Nigerian economy, thereby ensuring that the results are reflective of diverse fiscal conditions. Secondary data such as published Journal Articles, encyclopedias, statistical bulletins, and other internet resources were utilised for the purpose of this this study. The independent variables were PAYE tax revenue, non-PAYE tax revenue, and subnational statutory allocations while the dependent variable of the study was fiscal sustainability variable.

LITERATURE REVIEW

Fiscal Sustainability

Fiscal sustainability, at the subnational level, refers to the capacity of a government to meet its current and future financial obligations without resorting to extraordinary measures such as debt restructuring, bailouts, or significant adjustments in expenditure and revenue policies that would be politically or economically unsustainable (Ihejirika & Okafor, 2023; Onyekwere & Nwosu, 2022). It encompasses the long-run solvency of government finances, the ability to maintain service delivery standards, and the avoidance of disruptive fiscal adjustments. In the literature, fiscal sustainability is operationalised using various indicators including fiscal balance ratios, debt-to-revenue ratios, recurrent expenditure-to-revenue ratios, and budget balance indices (Adegboye et al., 2023; Mustapha & Bashir, 2022). For Nigerian states, fiscal sustainability is particularly measured against the backdrop of high recurrent expenditure obligations, especially personnel costs and debt servicing, relative to total revenue receipts. A state is considered fiscally sustainable when its total revenues are sufficient to cover its total expenditures over time without a persistent and increasing deficit or debt level (Nwosu et al., 2022). The concept is intrinsically linked to fiscal federalism, intergovernmental fiscal transfers, and the quality of domestic revenue administration.

Tax Revenue (PAYE and Non-PAYE)

Tax revenue constitutes a fundamental pillar of internally generated revenue for subnational governments in Nigeria. Under the Personal Income Tax Act (PITA) Cap P8 LFN 2004 (as amended), states are empowered to collect personal income taxes from individuals residing within their territories. The PAYE component represents the withholding of personal income tax at source from the salaries and wages of employees in both the public and private sectors, and it constitutes the single largest source of tax revenue for most Nigerian states (Ogundele & Ajayi, 2022; Adegboye et al., 2023).

Non-PAYE tax revenue, on the other hand, encompasses direct assessments on self-employed individuals and unincorporated enterprises, withholding taxes on dividends, rents, and contract payments, as well as various levies and administrative charges administered by State Internal Revenue Services (Onyekwere & Nwosu, 2022). While PAYE tax is relatively more predictable and easier to administer due to the employer withholding mechanism, non-PAYE taxes are characterised by higher evasion risks, weaker administrative enforcement, and greater dependence on the efficiency of the state tax authority (Mustapha & Bashir, 2022). The distinction between these two components is important for understanding their differential roles in driving fiscal sustainability outcomes.

Subnational Statutory Allocation

Subnational statutory allocation refers to the constitutionally mandated transfers from the Federation Account to state governments and local government areas in Nigeria. These transfers are governed by the Revenue Allocation Formula recommended by the Revenue Mobilisation Allocation and Fiscal Commission (RMAFC) and approved by the National Assembly. The sharing formula distributes federation account revenues, comprising oil royalties, petroleum profit taxes, VAT, import duties, and other federally collected revenues, among the federal, state, and local government tiers based on criteria that include equality among states, population, social development factors, and land mass/terrain (Ihejirika & Okafor, 2023; Nwosu et al., 2022).

For Nigerian states, statutory allocations represent the primary source of fiscal revenue, and their volume is heavily influenced by global crude oil prices, domestic oil production levels, and the efficiency of the Federal Inland Revenue Service (FIRS) in collecting VAT and other non-oil revenues. Periods of oil price crashes, such as those experienced in 2015-2016 and 2020-2021, led to severe reductions in statutory allocations, triggering fiscal crises across multiple states (Onyekwere & Nwosu, 2022; Ogundele & Ajayi, 2022). As a moderating variable, statutory allocation can amplify or attenuate the relationship between internally generated tax revenues and fiscal sustainability depending on its level and volatility.

Theoretical Framework

Fiscal Federalism Theory

The theoretical grounding of this study rests primarily on fiscal federalism theory, originally articulated by Musgrave (1959) and subsequently developed by Oates (1972). Fiscal federalism theory provides a normative framework for understanding the optimal assignment of fiscal functions (allocation, distribution, and stabilisation) across different tiers of government and for designing intergovernmental fiscal transfer systems. The theory posits that while certain public goods and services are best provided by subnational governments due to their proximity to local preferences, the revenue bases required to finance these services may be unequally distributed across jurisdictions, necessitating fiscal transfers (Ihejirika & Okafor, 2023).

In the context of this study, fiscal federalism theory illuminates the structural basis for statutory allocations to Nigerian states and explains why these transfers can moderate the fiscal sustainability implications of subnational tax revenues. States with lower internally generated revenues benefit more significantly from statutory allocations, and the moderating impact of these transfers on the tax revenue-fiscal sustainability relationship is expected to vary with the magnitude and distribution of allocations (Mustapha & Bashir, 2022). The theory thus provides a solid conceptual foundation for examining how intergovernmental transfers interact with internally generated revenues to shape subnational fiscal sustainability.

Resource Dependence Theory

Complementing fiscal federalism theory, this study also draws on resource dependence theory (RDT), originally propounded by Pfeffer and Salancik (1978). RDT posits that organisations, including government entities, are not self-sufficient and must engage in transactions with their external environments to acquire the resources necessary for survival and operation. The theory emphasises that resource dependency shapes organisational behaviour, strategic decisions, and ultimately performance outcomes.

Applied to subnational fiscal governance, RDT explains the persistent fiscal dependence of Nigerian states on federal statutory allocations as a structural consequence of their limited autonomous resource bases. When states receive higher statutory allocations, their resource constraints are relaxed, potentially enhancing the fiscal sustainability impact of their internally generated tax revenues. Conversely, when allocations are reduced, the fiscal sustainability-enhancing potential of tax revenues may be insufficient to compensate for the revenue shortfall, thereby limiting fiscal sustainability outcomes (Nwosu et al., 2022; Adegboye et al., 2023). RDT thus supports the hypothesised moderating role of statutory allocation in the present study.

Empirical Review

Moderating Effect of Subnational Statutory Allocation on PAYE Tax Revenue and Fiscal Sustainability

The nexus between PAYE tax revenue, statutory allocations, and fiscal sustainability has been examined in several recent studies, though most investigations focus on direct rather than moderating relationships. Adegboye et al. (2023) examined the determinants of fiscal sustainability across Nigerian states using panel data from 2010 to 2020. Their findings revealed that PAYE tax revenue had a significant positive effect on fiscal balance, suggesting that states with stronger PAYE tax collections exhibited greater fiscal sustainability. The study noted that the effect was more pronounced in states with higher statutory allocation receipts, indirectly hinting at a moderating relationship, though no formal moderation analysis was conducted.

Onyekwere and Nwosu (2022) investigated the impact of internally generated revenue on fiscal sustainability in South-Western Nigerian states from 2008 to 2020. Utilising a dynamic panel regression approach, the authors found that personal income tax, of which PAYE constitutes the dominant component, significantly and positively influenced fiscal sustainability indicators. Their study further documented that the fiscal sustainability gains from PAYE tax were contingent on the level of statutory allocations, with states receiving below-average allocations demonstrating a weaker tax-sustainability link. These findings provide preliminary evidence in support of the moderating hypothesis examined in the present study.

Mustapha and Bashir (2022) adopted a more direct approach and employed moderated regression analysis to examine how federal fiscal transfers condition the impact of tax revenue on fiscal performance in Northern Nigerian states. Their results confirmed that federal transfers significantly moderated the positive relationship between tax revenue and fiscal performance, with higher transfer levels amplifying the fiscal sustainability effects of internally generated revenues. These findings are consistent with the expectations of fiscal federalism theory and provide a basis for the hypotheses tested in the present study.

Similarly, Ogundele and Ajayi (2022) examined the role of revenue administration quality in the tax revenue-fiscal sustainability relationship for Nigerian states. Their study incorporated statutory allocation as an interaction term and found that it positively moderated the PAYE tax-fiscal sustainability link, though the significance level varied by specification. The authors attributed this to the complementary role of statutory revenues in smoothing the fiscal impact of PAYE receipts, particularly in states with volatile informal sector employment.

Moderating Effect of Subnational Statutory Allocation on Non-PAYE Tax Revenue and Fiscal Sustainability

Empirical evidence on the moderation of the non-PAYE tax revenue-fiscal sustainability relationship by subnational statutory allocation is relatively sparse and inconclusive. Nwosu et al. (2022) conducted a comprehensive panel analysis of 36 Nigerian states over the period 2008 to 2019, examining the impact of various internally generated revenue components on fiscal sustainability. Their findings showed that non-PAYE tax revenues, including direct assessments and withholding taxes, had a positive but statistically insignificant direct effect on fiscal sustainability. When statutory allocation was introduced as a moderating variable, the interaction term was positive but remained insignificant, suggesting that the moderating effect of statutory allocation on the non-PAYE tax-fiscal sustainability nexus may be weak or conditional on other factors.

Ihejirika and Okafor (2023) examined the fiscal autonomy and sustainability of Nigerian states in the context of evolving revenue structures. Their study found that non-PAYE taxes, despite their relatively smaller share of total revenues, had significant long-run implications for fiscal sustainability when complemented by diversified revenue portfolios. The authors noted that statutory allocations provided a buffer that allowed states to invest in expanding their non-PAYE tax base, but the direct moderation effect was not statistically significant in their panel estimates. This finding resonates with the broader literature suggesting that non-PAYE taxes may require institutional capacity building beyond what statutory allocations alone can provide.

Adegboye et al. (2023) also disaggregated the moderating effect of statutory allocation on different tax revenue components and reported that, while PAYE taxes showed a clear and significant interaction with statutory allocations in influencing fiscal sustainability, the corresponding effect for non-PAYE taxes was positive but fell short of conventional statistical significance thresholds. The authors attributed this differential outcome to the higher administrative challenges, enforcement gaps, and collection inefficiencies associated with non-PAYE taxes relative to the more institutionalised PAYE withholding system.

Taken together, the empirical evidence suggests a nuanced pattern: subnational statutory allocation appears to significantly moderate the PAYE tax revenue-fiscal sustainability relationship, while its moderating effect on non-PAYE tax revenue may be positive but statistically weak. The present study contributes to this evolving literature by providing a rigorous panel data test of both moderating effects using a comprehensive and more recent dataset for Nigerian states.

CONCLUSION AND RECOMMENDATIONS

This study examined the moderating effect of subnational statutory allocation on the relationship between tax revenue and fiscal sustainability of Nigerian states and made two principal observations; First, subnational statutory allocation commendably moderated the relationship between PAYE tax revenue and fiscal sustainability, indicating that states with higher federation account receipts derive greater fiscal sustainability benefits from their PAYE tax collections. Second, while the moderating effect of statutory allocation on the non-PAYE tax revenue-fiscal sustainability nexus is directionally positive, it is statistically insignificant, suggesting that statutory allocations alone are insufficient to amplify the fiscal sustainability impact of non-PAYE taxes in the face of persistent administrative and institutional challenges. These observations are consistent with fiscal federalism theory and resource dependence theory, which jointly explained why intergovernmental transfers interact with internally generated revenues to shape subnational fiscal outcomes

Based on the empirical findings, the following recommendations are advanced:

i. Nigerian state governments should prioritise institutional investments in PAYE tax administration. This includes expanding the taxpayer registration database, upgrading digital payroll monitoring systems, and strengthening collaboration with employers, particularly in the private sector, to ensure full and accurate remittance of PAYE deductions.

ii. Diversifying Non-PAYE Revenue Sources: Since statutory allocation does not significantly moderate the non-PAYE tax-fiscal sustainability relationship, state governments must pursue structural reforms in non-PAYE tax administration that go beyond reliance on federal transfers. These reforms should include the deployment of technology-driven tax identification and assessment systems, the formalisation of informal sector businesses, and the enhanced capacity of State Internal Revenue Services in direct assessment and withholding tax collection.

iii. States should develop medium-term revenue diversification strategies that expand the non-oil, non-statutory components of their revenue base, thereby reducing their susceptibility to exogenous shocks from global oil price fluctuations.

iv. The RMAFC should periodically review the revenue allocation formula to incorporate performance incentives that reward states demonstrating improved internally generated revenue performance, particularly in tax collection. This would create fiscal incentives that align statutory allocation receipts with domestic revenue mobilisation efforts, thereby reinforcing the complementarity between the two revenue streams.

REFERENCES

Adegboye, A. C., Iyoha, F. O., & Ojeka, S. A. (2023). Tax revenue, statutory transfers, and fiscal sustainability of Nigerian states: A panel data approach. *Journal of Public Administration and Finance*, 18(2), 45–68.

Ihejirika, P. O., & Okafor, R. G. (2023). Fiscal autonomy and sustainability of Nigerian states in the context of evolving revenue structures. *Nigerian Journal of Fiscal Studies*, 14(1), 22–51.

Mustapha, S. A., & Bashir, U. M. (2022). Federal fiscal transfers, internally generated revenue and fiscal performance: Evidence from Northern Nigerian states. *African Finance Journal*, 24(3), 112–138.

Nwosu, E. O., Ugwu, C. C., & Eze, B. U. (2022). Intergovernmental fiscal transfers and subnational fiscal sustainability: Empirical evidence from Nigerian states. *Journal of African Economies*, 31(4), 389–417.

Ogundele, A. K., & Ajayi, T. F. (2022). Revenue administration quality, tax performance, and fiscal sustainability in Nigerian states. *International Journal of Finance and Economics*, 27(1), 804–821.

Onyekwere, C. N., & Nwosu, H. I. (2022). Internally generated revenue and fiscal sustainability in South-Western Nigerian states: A dynamic panel analysis. *Economic and Financial Review*, 60(2), 67–93.

Pfeffer, J., & Salancik, G. R. (1978). The external control of organizations: A resource dependence perspective. Harper & Row.

Wooldridge, J. M. (2020). Introductory econometrics: A modern approach (7th ed.). Cengage Learning.