

Sustainable Voluntary Tax Compliance Systems and Economic Development in Nigeria: A Survey-Based Regression Analysis

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Abstract. The study investigates the effect of sustainable voluntary tax compliance systems on economic development in Nigeria by examining three institutional and behavioural determinants: taxpayer education and awareness, tax administration efficiency, and trust in government and tax transparency. Despite repeated administrative reforms, persistently low levels of voluntary compliance, a narrow domestic revenue base, and weak fiscal capacity continue to constrain Nigeria's development financing. The study used a cross-sectional survey design. Taxpayers and tax administration stakeholders from all thirty-six states and the Federal Capital Territory were sampled using multi-stage purposive sampling, with 506 valid questionnaires returned (91.2 %). The internal consistency of the research instrument was excellent, with Cronbach's alpha of 0.912. The researchers conducted descriptive and multiple regression analyses to analyse the data. The results indicate that all three predictors positively and significantly affect economic development, with tax administration efficiency being the most significant predictor ($\beta = 0.301$, $p < 0.001$), followed by trust in government and tax transparency ($\beta = 0.231$, $p < 0.001$) and taxpayer education and awareness ($\beta = 0.196$, $p < 0.001$). The model accounted for around 70.9% of the variance in economic development ($R^2 = 0.709$; $F = 346.212$, $p < 0.001$), and a second model showed that sustainable voluntary tax compliance significantly predicted economic development outcomes. The study finds that voluntary compliance systems based on trust are more sustainable for domestic revenue mobilisation than enforcement, and suggests increased taxpayer education, further digitalisation of tax administration and increased transparency in the use of tax revenues.

Keywords: voluntary tax compliance; taxpayer education; tax administration efficiency; institutional trust; economic development; Nigeria.

INTRODUCTION

Sustainable economic development is still a key policy goal in Nigeria, where limited fiscal capacity, a shallow domestic revenue base, institutional inefficiency, and inequitable public service delivery still limit inclusive growth. Researchers increasingly recognise taxation as a tool for strengthening government accountability and promoting a more equitable distribution of the costs and benefits of development, rather than merely as a source of revenue [1, 2]. However, the success of any tax system depends not only

on the existence of tax laws but also on taxpayers' willingness to comply voluntarily. Sustainable voluntary tax compliance systems, which rely on taxpayers' trust in the system, not fear, to comply with tax obligations, have thus emerged as a key focus of the domestic revenue mobilisation agenda in sub-Saharan Africa (SSA), as highlighted by authors [3, 4].

Voluntary tax compliance refers to the voluntary willingness of individuals and firms to pay taxes accurately and on time in the absence of coercive action. Institutional and behavioural factors in-

fluence taxpayers' willingness, including their awareness of tax obligations, the efficiency of tax administration, and their trust in how the government uses collected tax revenue [5–7]. Voluntary compliance is less costly to administer than enforcement-driven measures, less likely to cause disputes, and extends the tax base, creating a more sustainable revenue stream. However, in Nigeria, although the Nigeria Revenue Service (NRS), formerly the Federal Inland Revenue Service (FIRS), and state revenue services have introduced reforms, voluntary compliance remains relatively low, especially because the filing process is still largely manual and cumbersome. The tax-to-GDP ratio remains low compared to other economies, and the government continues to face challenges in collecting taxes due to tax evasion, low taxpayer awareness, administrative inefficiencies, and a lack of trust in the tax system [8, 9].

Theoretically, sustainable voluntary compliance is best understood through models that focus on the interplay between institutional trust and administrative capacity, rather than enforcement alone. The Slippery Slope Framework suggests that the more trust taxpayers have in the tax authority and the more they believe that the tax authority is fair and legitimate, the higher the level of compliance, even if the tax authority has only moderate enforcement capabilities [5, 7, 10]. The Fiscal Exchange Theory adds that taxation is a two-way street, and citizens are more willing to pay taxes when they believe tax revenue is spent on tangible public goods [11]. Both views focus on taxpayer education, administrative efficiency, and government transparency as means to improve sustainable compliance and, consequently, economic development.

Statement of the Problem. In Nigeria, despite several attempts at tax reform by the Nigeria Revenue Service (NRS) and State Internal Revenue Services to modernise tax administration, voluntary tax compliance remains low. Weak administrative capacity, low public confidence in government, limited taxpayer awareness, and tax evasion remain major challenges that hinder revenue mobilisation, resulting in a tax-to-GDP ratio significantly lower than that of other developing and developed countries [8, 9]. This limitation constrains the government's ability to fund infrastructure, health, education and other development priorities.

The current literature in Nigeria has taken a narrow approach to this issue, with many studies focusing on taxpayer education, administrative efficiency or institutional trust alone, while most focus on revenue generation as an end in itself, and not on the development outcomes that voluntary compliance is meant to serve [12, 13]. Few studies combine these institutional and behavioural factors in a single explanatory model of economic development, and even fewer use recent primary data nationally distributed across Nigeria's federating states and focus on taxpayers and administrators. The research problem this study seeks to address is thus: how taxpayer education and awareness, tax administration efficiency, trust in government and tax transparency, individually and collectively, influence economic development in Nigeria and whether strengthening these aspects of a sustainable voluntary tax compliance system is a more sustainable mechanism for mobilising domestic revenue than enforcement-led approaches.

Research Objectives. The specific objectives of this study are to:

- 1) To critically discuss the impact of taxpayer education and awareness on economic development in Nigeria;
- 2) Examine the impact of the efficiency of tax administration on economic development in Nigeria; and
- 3) Determine the effect of trust in government and tax transparency on economic development in Nigeria.

The researchers tested the following null *hypotheses* based on the study's objectives:

H01: There is no significant relationship between taxpayer education and awareness and economic development in Nigeria.

H02: There is no significant effect of tax administration efficiency on economic development in Nigeria.

H03: There is no significant relationship between trust in government and tax transparency and the economic development of Nigeria.

Literature Review

1) Conceptual Review. In economies like Nigeria, where oil revenue has become an increasingly fragile pillar, taxation is an important factor in fiscal sustainability. It is a source of financing

public expenditure [1, 3]. Sustainable voluntary tax compliance systems are institutional structures that rely on trust, transparency, fairness and administrative efficiency and do not rely on coercion to motivate taxpayers to comply with their tax obligations voluntarily [5]. These systems enhance the relationship between taxpayers and government over time, and can lead to lower levels of tax evasion and a wider tax base than enforcement-based systems.

The more educated the taxpayer, the better they understand the requirements and processes of tax filing, as well as the rationale for tax development; better-informed taxpayers have higher tax morale and are more willing to comply [6]. Non-compliance is still a major factor in Nigeria due to a lack of awareness, especially in the informal sector [9]. Efficient tax administration, manifested in simplified procedures, digital filing systems and timely dispute resolution, reduces compliance costs and increases trust in the tax administration system; the NRS's TaxPro-Max platform is a step towards, but not a complete, digitalisation in this regard [14, 15]. When citizens trust that the government uses revenue responsibly and spends public funds to create value, they are more likely to trust the government and comply voluntarily with tax obligations. However, corruption and poor accountability can undermine citizens' confidence in the government and reduce voluntary tax compliance [7, 10].

Economic development is the ultimate goal of interest, and not just in terms of revenue generation, but also in terms of infrastructure, employment and public welfare [16]. Increased voluntary compliance increases the resources available for productive public investment and decreases the need for external borrowing, linking taxpayer behaviour directly to national development outcomes [17].

2) Theoretical Framework. The study is based on the Slippery Slope Framework (SSF) developed by [5] and validated in various national contexts [7, 18], and supplemented with the Fiscal Exchange Theory (FET) of [11]. The SSF assumes that the relationship between the power of tax authorities and taxpayers' trust in tax authorities is a crucial factor in tax compliance: compliance can be achieved through audits and sanctions, or it can be voluntary, based on taxpayers' confidence in the fairness and legitimacy of the tax administration. The framework states that, in

addition to enforcement, which can ensure short-term compliance, durable compliance requires taxpayer education, administrative efficiency, and institutional trust, which are exactly the three constructs explored in this study [10]. Since then, the SSF has been extended and validated for corporate taxpayers, self-employed individuals, and across 44 countries, all of which are consistent in that trust and power work together, not in opposition [7, 18].

The Fiscal Exchange Theory treats taxation as a two-way street: citizens are more willing to pay taxes when government visibly uses tax dollars to provide infrastructure, security, and social services [11]. Without accountability, the perceived exchange fails, even if the administration is sophisticated, and voluntary compliance is undermined. Together, the SSF and the FET describe the behavioural and institutional mechanisms, taxpayer education, administrative efficiency, and trust, and how transparent and visible use of tax revenue reinforces these. Together, the two theories support the conceptual model of this study, which connects taxpayer education and awareness, tax administration efficiency, trust in government, and tax transparency to economic development.

3) Empirical Review. The theoretical claim that trust-based, education-driven compliance systems are superior to coercive ones is supported by a cross-national pattern of evidence. In OECD contexts, authors [19] showed that tax compliance is a "psychological contract" that responds more to fair treatment than to punitive enforcement. Author [7] found that both trust and power drive voluntary and enforced tax compliance, with trust having a more lasting effect when analysing forty-four countries. Authors [18] applied the framework to corporate taxpayers and found that perceived tax risk moderates the relationship between trust and compliance.

Across the four African countries studied by authors [20] – Kenya, Tanzania, Uganda, and South Africa – citizens' willingness to pay tax was linked to satisfaction with public service delivery and perceived enforcement credibility, which are empirical manifestations of the fiscal exchange logic. The findings of this study further corroborate the importance of trust-related constructs, as they are significant factors in mobilising tax revenues, as found by both authors [3, 4] in their respective studies using panel data for sub-Saharan Africa. Author [17] also found that good

governance was associated with domestic resource mobilisation and inclusive growth in the sub-region.

In Nigeria in particular, author [12] reported that effective tax administration is a key factor in enhancing revenue generation, and authors [13] confirmed a positive relationship between tax revenue and economic development indicators. More recent evidence from Nigeria has focused on digitalisation: authors [21] showed that digital tax administration and taxpayer education together increase voluntary compliance; and authors [10], who surveyed individual taxpayers, found that trust in tax authorities significantly moderates the relationship between tax administration and personal income tax compliance. In south-eastern Nigeria, authors [9] identified that tax audits, communication of tax requirements and fiscal incentives have an interaction effect on firm-level compliance behaviour. On the technology side of tax administration, authors [14, 15], the latter based on VAT e-invoicing data from Peru, found that digitalisation has a material impact on the tax gap and compliance; this is directly relevant to the NRS's TaxPro-Max rollout in Nigeria.

The macro-level panel evidence from sub-Saharan Africa supports the trust-compliance nexus found at the individual level. Author [3] compared tax effort in sub-Saharan Africa and Latin America since 1980, and found that tax effort in Africa was higher and more stable in countries with greater institutional capacity; author [4] used a system GMM approach across forty-two African countries and found that voice and accountability, government effectiveness, and control of corruption each had significant positive effects on tax revenue mobilisation. Authors [17] furthered this argument by showing that governance quality mediates the relationship between domestic resource mobilisation and inclusive growth. At a country-comparative level, these findings confirm the trust effect found at the individual level in this study based on survey data.

Table 1 synthesises the key empirical studies reviewed above, highlighting their geographic focus, methodological approach, and principal findings relative to the constructs examined in this study.

Table 1 – Summary of key empirical literature

Author(s)	Year	Focus/ context	Method	Key finding
[5]	2008	Cross-national (theory)	Conceptual (Slippery Slope Framework)	Trust and power jointly determine voluntary versus enforced compliance
[19]	2007	OECD countries	Conceptual (psychological tax contract)	Fair treatment strengthens compliance more than punitive enforcement
[20]	2014	Kenya, Tanzania, Uganda, South Africa	Survey (Afrobarometer)	Service satisfaction and enforcement credibility raise willingness to pay tax.
[7]	2019	44 nations	Survey	Trust and power jointly and durably shape compliance
[18]	2022	Corporate taxpayers, Indonesia	Survey/ structural model	Perceived tax risk moderates the trust-compliance relationship
[14]	2022	Cross-country	Systematic review	Digital tax administration frameworks improve efficiency and transparency
[15]	2022	Peru	Administrative data (VAT e-invoicing)	Digitalisation narrows the tax gap and improves compliance
[9]	2023	South-east Nigeria	Survey (industrial clusters)	Audits, simplified communication, and incentives jointly shape firm compliance
[10]	2023	Nigeria	Survey/OLS	Trust in tax authorities moderates the administration-compliance relationship.
[3]	2021	Sub-Saharan Africa and Latin America	Panel/comparative	Institutional capacity raises revenue collection and reduces its volatility.
[4]	2024	42 African countries	Panel (system GMM)	Governance quality significantly raises tax revenue mobilisation
[17]	2020	Sub-Saharan Africa	Panel	Governance mediates domestic resource mobilisation and inclusive growth

4) Gap in the Literature. While the reviewed studies have established that each of taxpayer education, administrative efficiency and institutional trust separately affects compliance, most of the Nigerian studies have been limited to the analysis of just one of these determinants or have only considered the revenue outcomes of compliance rather than the overall development outcomes that voluntary compliance is supposed to serve [12, 13]. Few studies combine all three constructs in a single explanatory model of economic development based on recent, nationally representative primary data from taxpayers and administrators across all the federating states of Nigeria. This study will fill that void by testing a unified model that connects taxpayer education and awareness, tax administration efficiency, and trust in government and tax transparency to economic development, and then testing sustainable voluntary tax compliance as a predictor.

5) Conceptual Framework. Figure 1 presents the study's conceptual framework. The framework identifies three constitutive elements of a sustainable voluntary tax compliance system: taxpayer education and awareness, tax administration efficiency, and trust in government and tax transparency. The study hypothesises that each dimension positively affects economic development by increasing voluntary tax compliance, which can, in turn, generate higher government revenue for developmental investment through better-informed taxpayers, more efficient administration, and stronger institutional trust.

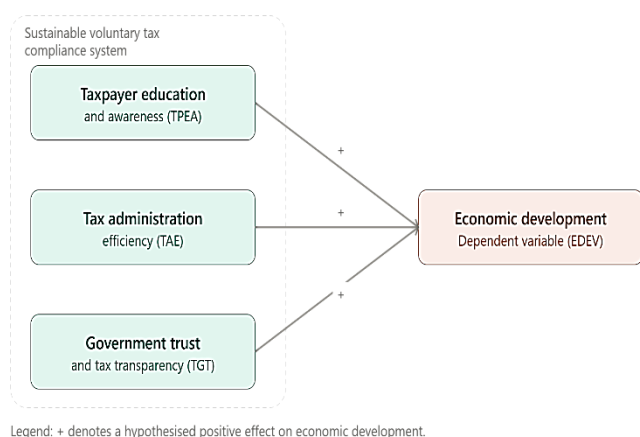


Figure 1 – Conceptual framework linking sustainable voluntary tax compliance systems to economic development

METHODS

Research design. The study used a cross-sectional survey design, suitable for measuring constructs that are not easily captured in secondary records [22], such as perceptions and self-reported experiences of taxpayers and tax administration stakeholders regarding education, administrative efficiency, trust, and compliance. Nigeria was selected because, despite current reforms, the country still suffers from low voluntary compliance due to evasion, weak administration, limited awareness, and low institutional trust, which limit government revenue and development financing [23, 24].

Population and sample. The study covered the thirty-six states of the federation and the Federal Capital Territory (FCT) of Nigeria, namely Abuja. The target population included taxpayers and stakeholders in the tax system, such as business owners, salaried employees, tax consultants, and officials of the Nigeria Revenue Service (NRS) and State Internal Revenue Services. The questionnaires were distributed using a multi-stage purposive sampling technique, resulting in a nationwide sample of 555 questionnaires, focusing on individuals with direct experience with and knowledge of taxation and fiscal administration. Of the 506 completed and returned, 49 were unretrieved or unusable (8.8%).

Data collection and measurement. The data were collected using a structured questionnaire with two sections. Section A gathered the demographic information, while Section B gathered the data on Taxpayer Education and Awareness, Tax Administration Efficiency, Trust in Government and Tax Transparency, Voluntary Tax Compliance and Economic Development, all of which were measured on a five-point Likert scale ranging from Strongly Agree (5) to Strongly Disagree (1). Experts in taxation and public finance established the content and face validity through expert review. The internal consistency of the instrument was measured using Cronbach's alpha, yielding an overall instrument coefficient of 0.912 (standardised = 0.915) for 20 items and construct-level coefficients of 0.867 to 0.901 (Table 2), indicating excellent internal consistency.

Model specification. The researchers summarised the respondents' characteristics and item responses using descriptive statistics and tested the hypothesised effects using multiple regression analysis. They specified the first regression model as follows:

$$\text{EDEV} = \beta_0 + \beta_1\text{TPEA} + \beta_2\text{TAE} + \beta_3\text{TGT} + \varepsilon \quad (1)$$

where EDEV is Economic Development; TPEA is Taxpayer Education and Awareness; TAE is Tax Administration Efficiency; TGT is Trust in Government and Tax Transparency; β_0 is the intercept; β_1 – β_3 are regression coefficients; and ε is the error term.

A supplemental specification also added Sustainable Voluntary Tax Compliance (SVTC) as a predictor to evaluate its incremental explanatory power.

Ethical considerations and analysis technique. Participants took part voluntarily, and the researchers maintained confidentiality and anonymity throughout the study. The researchers used the data solely for academic purposes and tested the hypotheses at the 5% significance level, considering p-values below 0.05 statistically significant for effects on economic development.

RESULTS AND DISCUSSION

Table 2 summarises the demographic characteristics of the 506 respondents. Male respondents were 57.8% and female respondents 42.2%. The majority of respondents (36.4%) were aged 31–40 years, followed by 41–50 years (25.0%), 18–30 years (21.4%), and 51 years and above (17.2%). Most respondents had HND/B.Sc. (44.7%), Master's (27.2%), OND/NCE (16.0%), and PhD (12.1%) qualifications. In terms of tax/business experience, 39.8% had 5–10 years, 23.8% had less than 5 years, 22.0% had 11–15 years, and 14.4% had more than 15 years. The researchers selected the sample from an economically active, well-educated, and moderately experienced population, which strengthens the credibility of the responses.

Table 2 – Demographic profile of respondents

Variable	Category	Frequency	%
Gender	Male	292	57.8
	Female	214	42.2
Age bracket	18–30 years	108	21.4
	31–40 years	184	36.4
	41–50 years	126	25.0
	51 years and above	88	17.2
Educational qualification	OND/NCE	81	16.0
	HND/B.Sc.	226	44.7

Variable	Category	Frequency	%
	Master's degree	138	27.2
	PhD	61	12.1
Tax/business experience	Below 5 years	120	23.8
	5–10 years	201	39.8
	11–15 years	112	22.0
	Above 15 years	73	14.4

Table 3 presents the instrument reliability in terms of Cronbach's alpha. All of the constructs were above the conventional 0.70, and the overall instrument yielded a coefficient of 0.912, indicating that the twenty-item scale was a reliable measure of the five constructs of interest.

Table 3 – Reliability statistics by construct

Construct	Number of items	Cronbach's alpha
Taxpayer education and awareness	4	0.874
Tax administration efficiency	4	0.886
Trust in government and tax transparency	4	0.892
Sustainable voluntary tax compliance	4	0.901
Economic development	4	0.867
Overall instrument	20	0.912

Table 4 reports the overall scale statistics for the 20-item instrument, summarising respondents' overall agreement across all constructs before the disaggregated regression analysis.

Table 4 – Scale statistics for the composite instrument

Statistic	Value
Mean	78.24
Variance	146.385
Standard deviation	12.099
Number of items	20

The regression summary (Table 5) indicates that the three predictors are strongly related to economic development. The model yielded an R of 0.842 and an R² of 0.709, which means that the three variables of taxpayer education and awareness, tax administration efficiency, and

trust in government and tax transparency together explain about 70.9 % of the variation in economic development, and an adjusted R^2 of 0.707 shows the robustness of the estimate after adjusting for the number of predictors.

Table 5 – Regression model summary

Model	R	R^2	Adjusted R^2	Std. error of the estimate
1	0.842	0.709	0.707	0.38652

Notes: Predictors—(Constant), taxpayer education and awareness, tax administration efficiency, trust in government, and tax transparency; dependent variable—economic development.

The analysis of variance (Table 6) also shows that the overall model is statistically significant

($F = 346.212$, $p < 0.001$), meaning the three predictors account for a significant portion of the variance in economic development and that the model fits the data well overall.

Table 6 – Analysis of variance (ANOVA)

Model	Sum of squares	df	Mean square	F	Sig.
Regression	258.614	3	86.205	346.212	0.000
Residual	105.298	502	0.210		
Total	363.912	505			

Results from the coefficient analysis in Table 7 indicate that all three predictors positively and significantly influence economic development.

Table 7 – Regression coefficients: direct-effects model

Predictor	Unstandardised B	Std. error	Standardised β	t	Sig.
(Constant)	0.512	0.138	—	3.710	0.000
Taxpayer education and awareness	0.184	0.034	0.196	5.412	0.000
Tax administration efficiency	0.273	0.039	0.301	7.000	0.000
Trust in government and tax transparency	0.215	0.041	0.231	5.244	0.000

Notes: Dependent variable – economic development.

Taxpayer education and awareness recorded a standardised coefficient of $\beta = 0.196$ ($t = 5.412$, $p < 0.001$); tax administration efficiency recorded the strongest effect, $\beta = 0.301$ ($t = 7.000$, $p <$

0.001); and trust in government and tax transparency recorded $\beta = 0.231$ ($t = 5.244$, $p < 0.001$).

A supplementary specification also added sustainable voluntary tax compliance as a predictor (Table 8).

Table 8 – Regression coefficients with sustainable voluntary tax compliance included

Predictor	Unstandardised B	Std. error	Standardised β	t	Sig.
(Constant)	0.512	0.138	—	3.710	0.000
Taxpayer education and awareness	0.184	0.034	0.196	5.412	0.000
Tax administration efficiency	0.273	0.039	0.301	7.000	0.000
Trust in government and tax transparency	0.215	0.041	0.231	5.244	0.000
Sustainable voluntary tax compliance	0.158	0.036	0.167	4.389	0.000

The three original predictors had positive and statistically significant coefficients. Sustainable voluntary tax compliance was a significant positive predictor of economic development ($\beta = 0.167$, $t = 4.389$, $p < 0.001$), strengthening the conceptual framework's role of voluntary tax compliance as the pathway between taxpayer

education, administrative efficiency, and institutional trust and the economic development outcome.

The researchers rejected all three null hypotheses at the 5% significance level (Table 9), indicating that taxpayer education and awareness, tax administration efficiency, trust in government,

and tax transparency significantly and positively affect economic development in Nigeria.

Table 9 – Summary of hypothesis testing

Hypothesis	Statement	p-value	Decision
H01	Taxpayer education and awareness have no significant effect on economic development	0.000	Rejected
H02	Tax administration efficiency has no significant effect on economic development	0.000	Rejected
H03	Trust in government and tax transparency have no significant effect on economic development	0.000	Rejected

The result that taxpayer education and awareness have a significant and positive impact on economic development ($\beta = 0.196$, $p < 0.001$) corroborates the author's [6] argument that informed taxpayers have higher tax morale and is in line with the Slippery Slope Framework, which focuses on knowledge as a precondition for voluntary, not enforced, compliance [5]. Taxpayers' resistance to compliance declines and the effective tax base expands when taxpayers are aware of their responsibilities and the developmental purpose of tax, as observed by [9] in industrial clusters in South-Eastern Nigeria.

The efficiency of tax administration was the most significant predictor of economic development ($\beta = 0.301$, $p < 0.001$), supporting evidence from [14, 15] that digitalisation and procedural simplification significantly affect compliance outcomes. In contrast, authors [10] found that the quality of tax administration is vital to personal income tax compliance in Nigeria. This outcome is intuitive in the Nigerian context: platforms like the NRS's TaxPro-Max have helped to smooth out some of the friction in filing, but institutional bottlenecks, delays and inconsistent service delivery remain and continue to undermine the efficiency gains these reforms are intended to achieve, with further administrative streamlining offering the single biggest lever to enhance compliance and development outcomes.

Similarly, the Fiscal Exchange Theory's prediction that taxpayers are more likely to pay taxes when they believe that the tax is used to provide a public good that is visible to them [11] was supported by the positive effect of trust in government and tax transparency ($\beta = 0.231$, $p < 0.001$), which was also consistent with cross-national studies showing that trust and power co-occur, rather than substituting for one another in determining tax compliance [7, 18]. The result is important in the Nigerian context, where researchers have extensively documented corruption and weak accountability and where administrative and educational reforms are unlikely to succeed without corresponding improvements in transparency in the use of public revenue.

The micro-level evidence aligns with the macro-level, cross-country evidence reviewed earlier. Authors [3, 4] showed that institutional capacity and governance quality positively influence aggregate tax revenue mobilisation in sub-Saharan Africa. In contrast, the present study shows that individual taxpayers' trust in government has a similar positive effect at the micro level in Nigeria. This convergence at both macro and micro levels lends greater credibility to the trust-compliance relationship as a structural phenomenon, rather than a data source or method effect. It also implies that any institutional quality improvement reform in Nigeria, not just tax-specific reform, is likely to have a compounding effect on voluntary compliance rates and, in turn, on economic development outcomes.

Finally, the significant positive impact of sustainable voluntary tax compliance on economic development ($\beta = 0.167$, $p < 0.001$) supports the conceptual framework's core argument that taxpayer education, administrative efficiency and institutional trust are not only direct predictors of economic development outcomes, but they also form the sustainable voluntary compliance system that gives rise to those outcomes. Overall, the findings support the general sub-Saharan African evidence that institutional quality and governance, not enforcement intensity, are key to sustainable domestic revenue mobilisation in Nigeria [3, 4, 17].

Theoretical and Practical Implications. Theoretically, the study builds on the Slippery Slope Framework and Fiscal Exchange Theory, which are mostly high-income country theories, by showing that they work together, not in competi-

tion, in a large-scale sample from Nigeria. Trust, education, and administrative efficiency all drive voluntary compliance and development outcomes. From a practical perspective, the results indicate that the Nigerian tax administration should integrate taxpayer education, digitalisation of tax administration, and effective communication about the use of tax revenues into a single reform plan rather than treat them as separate initiatives, because each factor independently explains variation in the outcomes. The findings warn policymakers not to rely on enforcement-based revenue drives, which the theory and practice of the last decade have shown to be less effective and more fragile at ensuring compliance than trust-based reform.

CONCLUSIONS

This study explored the impact of sustainable voluntary tax compliance systems (SVCS) operationalised through taxpayer education and awareness, tax administration efficiency, trust in government, and tax transparency on economic development in Nigeria, using primary survey data from 506 taxpayers and stakeholders across the country. The results showed that all three predictors and the composite measure of sustainable voluntary tax compliance had significant

positive effects on economic development, with tax administration efficiency being the most significant. The study concludes that sustainable voluntary compliance systems are a key, yet underutilised, revenue mobilisation tool for the domestic economy and, in turn, for Nigeria's economic development.

The study suggests that tax authorities should:

- 1) Continue to educate taxpayers via sustained public enlightenment campaigns, digital platforms and community-based outreach;
- 2) Continue to digitalise tax administration and to simplify tax filing processes further while reducing the time lag in the administration process; and
- 3) The Nigerian government should visibly and transparently allocate tax revenues to infrastructure and social development projects because the findings show that accountability is as important to taxpayer compliance as tax administration efficiency. Future researchers should use longitudinal designs to examine how these relationships change over time, include additional factors such as perceived fairness and digital taxation literacy, and extend the analysis to other African economies for comparative purposes.

REFERENCES

1. OECD. (2021). Tax Administration 2021: Comparative Information on OECD and Other Advanced and Emerging Economies. Retrieved from https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/09/tax-administration-2021_72b221d1/cef472b9-en.pdf
2. Bird, R. M., & Zolt, E. M. (2014). *Redistribution via Taxation: The Limited Role of the Personal Income Tax in Developing Countries*. *Annals of Economics and Finance, Society for AEF*, 15(2), 625-683
3. Gwaindepi, A. (2021). Domestic revenue mobilisation in developing countries: An exploratory analysis of sub-Saharan Africa and Latin America. *Journal of International Development*, 33(2), 396-421. doi: [10.1002/jid.3528](https://doi.org/10.1002/jid.3528)
4. Bah, M. (2024). Tax revenue mobilisation and institutional quality in sub-Saharan Africa: An empirical investigation. *African Development Review*, 36(2), 201-221. doi: [10.1111/1467-8268.12752](https://doi.org/10.1111/1467-8268.12752)
5. Kirchler, E., Hoelzl, E., & Wahl, I. (2007). Enforced versus voluntary tax compliance: The "slippery slope" framework. *Journal of Economic Psychology*, 29(2), 210-225. doi: [10.1016/j.joep.2007.05.004](https://doi.org/10.1016/j.joep.2007.05.004)
6. Alm, J. (2018). What Motivates Tax Compliance? *Journal of Economic Surveys*, 33(2), 353-388. doi: [10.1111/joes.12272](https://doi.org/10.1111/joes.12272)
7. Batrancea, L., Nichita, A., Olsen, J., Kogler, C., Kirchler, E., Hoelzl, E., Weiss, A., Torgler, B., Fookien, J., Fuller, J., Schaffner, M., Banuri, S., Hassanein, M., Alarcón-García, G., Aldemir, C., Apostol, O., Weinberg, D. B., Batrancea, I., Belianin, A., & Zukauskas, S. (2019). Trust and power as

- determinants of tax compliance across 44 nations. *Journal of Economic Psychology*, 74, 102191. doi: [10.1016/j.joep.2019.102191](https://doi.org/10.1016/j.joep.2019.102191)
8. Central Bank of Nigeria. (2023). Annual Statistical Bulletin. Retrieved from <https://www.cbn.gov.ng/documents/Statbulletin.html>
 9. Nwokoye, E. S., Igbunugo, C. I., Ekesiobi, C., & Dimnwobi, S. K. (2022). Fiscal incentives and tax compliance behaviour in industrial clusters: A survey of clusters in south-east Nigeria. *Journal of African Business*, 24(1), 147–166. doi: [10.1080/15228916.2022.2031827](https://doi.org/10.1080/15228916.2022.2031827)
 10. Ayoola, T. J., Olaniyi, O. O., Kolawole, P. E., Aregbesola, O. D., & Wright, O. (2023). Tax administration, trust in tax authorities, and personal income tax compliance: Evidence from Nigeria. *Public and Municipal Finance*, 12(1), 12–21. doi: [10.21511/pmf.12\(1\).2023.02](https://doi.org/10.21511/pmf.12(1).2023.02)
 11. Buchanan, J. M. (1987). *Public Finance in Democratic Process: Fiscal Institutions and the Individual Choice*. UNC Press Books
 12. Awotomilusi, N. S. (2022). Tax administration and generation of tax revenue in Nigeria. *International Journal of Scientific and Management Research*, 05(01), 145–152. doi: [10.37502/ijsmr.2022.5108](https://doi.org/10.37502/ijsmr.2022.5108)
 13. Ofoegbu, G. N., Akwu, D. O., & O, O. (2016). Empirical Analysis of the Effect of Tax Revenue on the Economic Development of Nigeria. *International Journal of Asian Social Science*, 6(10), 604–613. doi: [10.18488/journal.1/2016.6.10/1.10.604.613](https://doi.org/10.18488/journal.1/2016.6.10/1.10.604.613)
 14. Bassey, E., Mulligan, E., & Ojo, A. (2022). A conceptual framework for digital tax administration - A systematic review. *Government Information Quarterly*, 39(4), 101754. doi: [10.1016/j.giq.2022.101754](https://doi.org/10.1016/j.giq.2022.101754)
 15. Bellon, M., Dabla-Norris, E., Khalid, S., & Lima, F. (2022). Digitalisation to improve tax compliance: Evidence from VAT e-Invoicing in Peru. *Journal of Public Economics*, 210, 104661. doi: [10.1016/j.jpubeco.2022.104661](https://doi.org/10.1016/j.jpubeco.2022.104661)
 16. Todaro, M. P., & Smith, S. C. (2015). *Economic development* (12th ed.). Pearson
 17. Oyinlola, M. A., Adedeji, A. A., Bolarinwa, M. O., & Olabisi, N. (2019). Governance, domestic resource mobilisation, and inclusive growth in sub-Saharan Africa. *Economic Analysis and Policy*, 65, 68–88. doi: [10.1016/j.eap.2019.11.006](https://doi.org/10.1016/j.eap.2019.11.006)
 18. Aulia, S., Rosdiana, H., & Inayati, I. (2022). Trust, Power, and Tax Risk into the "Slippery Slope": A Corporate Tax Compliance Model. *Sustainability*, 14(22), 14670. doi: [10.3390/su142214670](https://doi.org/10.3390/su142214670)
 19. Feld, L. P., & Frey, B. S. (2007). Tax compliance as the result of a psychological tax contract: the role of incentives and responsive regulation. *Law & Policy*, 29(1), 102–120. doi: [10.1111/j.1467-9930.2007.00248.x](https://doi.org/10.1111/j.1467-9930.2007.00248.x)
 20. Ali, M., Fjeldstad, O., & Sjørnsen, I. H. (2014). To pay or not to pay? Citizens' attitudes toward taxation in Kenya, Tanzania, Uganda, and South Africa. *World Development*, 64, 828–842. doi: [10.1016/j.worlddev.2014.07.006](https://doi.org/10.1016/j.worlddev.2014.07.006)
 21. Falana, G. A., Dakhil, M. S., Abbood, F. G., & Dagunduro, M. E. (2024). Digital tax administration and tax compliance in Nigeria's informal sector. *Economy Business and Development, an International Journal*, 5(2), 32–45. doi: [10.47063/ebd.00020](https://doi.org/10.47063/ebd.00020)
 22. Kerlinger, F. N. (1973). *Foundations of behavioural research* (2nd ed.). Holt, Rinehart and Winston.
 23. World Bank. (2023). *Nigeria Development Update. Turning the Corner: from Reforms and Renewed Hope to Results*. Retrieved from <https://thedocs.worldbank.org/en/doc/88d5ed4248d7063eced528070a83173e-0360012023/original/NDU-december-2023-presentation.pdf>
 24. International Monetary Fund. (2003). Nigeria: Selected Issues and Statistical Appendix. Retrieved from https://books.google.com.ua/books/about/Nigeria.html?id=PAaWQR1Qcm8C&redir_esc=y