Dutse Business Review (DBR): Volume 1, Issue 1 (2026) *ISSN Print: 3156-4062* *eISSN:3156-4852*

Education and Tax Compliance: Rethinking the Role of Formal Schooling in Informal Economies

Jamilu Umar Lawan
julawan@sazu.edu.ng
Department of Accounting, Faculty of Management Sciences
Sa'adu Zungur University, Bauchi State, Nigeria
+2348036566456

Yusuf Ibrahim Karaye, (PhD)
karaye2000@gmail.com
Department of Accounting, Faculty of Management Sciences
Federal university Dutse, Jigawa State, Nigeria
+2348137443805

Shuaibu Shehu Kura
shehukura@fud.edu.ng
Department of Banking and Finance, Faculty of Management Sciences
Federal University Dutse, Jigawa State, Nigeria
+2349022233324

Abstract

This paper challenges the conventional assumption that formal schooling fosters tax compliance in informal economies. While education is often credited with cultivating civic responsibility and respect for the rule of law, empirical evidence from Tanzania, Nigeria, and Sub-Saharan Africa shows that its moderating effect is weak or inconsistent. Instead, compliance is shaped more decisively by institutional trust, socio-cultural norms, and economic precarity. Drawing on recent studies and the author's thesis, the paper reconceptualizes education's role as indirect and context-dependent, highlighting trust-building, functional literacy, and culturally grounded outreach as more effective pathways to compliance.

1. Introduction

Tax compliance remains a cornerstone of fiscal sustainability and state capacity. Governments and scholars have long assumed that education enhances compliance by cultivating civic awareness, rational decision-making, and respect for the rule of law (Alm & Torgler, 2006). From this perspective, higher levels of formal schooling should moderate compliance behavior, strengthening the link between tax knowledge and voluntary payment.

However, evidence from informal economies challenges this assumption. Studies in Tanzania (Fjeldstad & Semboja, 2001) and broader comparative analyses (Torgler, 2007) reveal that education does not consistently predict compliance. More recent findings from Nigeria and Sub-Saharan Africa reinforce this contradiction: taxpayer education programs often yield mixed results (Oloyede, 2021; Aremu & Siyanbola, 2021), and empirical tests show that education level has

weak or inconsistent effects on compliance (Ekpulu, 2025; Yayangida et al., 2025). Instead, compliance appears more strongly shaped by institutional trust, perceptions of fairness, and socio-economic constraints (Levi, 1988; Ackom et al., 2025).

This paper therefore, argues for a reconceptualization of education's role in tax compliance. Rather than treating formal schooling as a universal moderator, we propose that education's influence is indirect, contingent, and context-dependent. In informal economies where institutional trust is fragile and economic survival dominates, education's moderating role is limited. The paper explores why education fails to moderate compliance behavior and proposes alternative conceptual pathways that emphasize institutional legitimacy, social norms, and economic precarity.

2. Literature Review

The relationship between education and tax compliance has been a recurring theme in fiscal sociology and public finance. Conventional assumptions posit that education enhances compliance by fostering civic responsibility, legal awareness, and rational economic behavior. Alm and Torgler (2006), for instance, argue that individuals with higher levels of formal schooling are more likely to internalize civic norms and understand the importance of taxation as a collective good. From this perspective, education is expected to moderate compliance behavior by strengthening the link between tax knowledge and voluntary payment.

However, empirical evidences from developing and informal economies complicate this narrative by coming up with several inconsistent research findings on the role played by education level. Fjeldstad and Semboja (2001), in their study of Tanzania's development levy, found that education did not significantly predict compliance, with institutional trust and perceptions of fairness playing more decisive roles. Similarly, Torgler (2007) demonstrated that tax morale and institutional legitimacy often outweigh education in shaping compliance outcomes. These findings suggest that the moderating effect of education is weak or insignificant in contexts where informal economic activity dominates and state institutions lack credibility.

Recent studies provide further nuance to this debate. Oloyede (2021) and Aremu & Siyanbola (2021) examined taxpayer education programs in Nigeria's informal sector and reported mixed results. While such programs improved awareness, they did not consistently translate into compliance, as institutional trust and enforcement mechanisms remained more influential. Ekpulu (2025) and Yayangida et al. (2025) reinforced this point, showing that education level has weak or inconsistent effects on compliance among Nigerian taxpayers. Ellawule et al. (2024) advanced the discussion by distinguishing between general education and tax-specific knowledge, finding that targeted tax knowledge moderates compliance more effectively than formal schooling. Ackom et al. (2025), broadening the scope to Sub-Saharan Africa, argued that compliance depends more on financial inclusion and trust than education, underscoring the importance of contextual factors.

Taken together, these studies reveal a critical gap in scholarship. The literature has historically overemphasized formal schooling as a determinant of compliance, while neglecting the role of institutional legitimacy, corruption, social norms, and economic precarity. This gap calls for a reconceptualization of education's role, situating it within broader institutional and socio-cultural frameworks rather than treating it as a universal moderator.

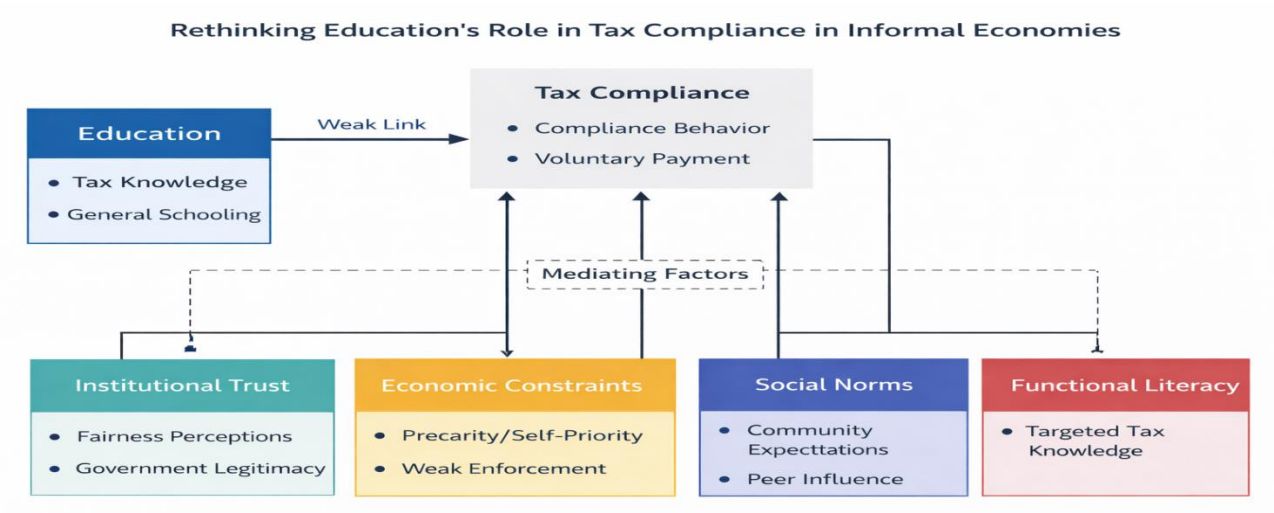
3. Conceptual Framework

The conceptual framework for this study provides a structured lens through which the complex relationship between education and tax compliance in informal economies can be examined. It synthesizes theoretical assumptions, empirical contradictions, and contextual realities to explain why education which is traditionally viewed as a driver of civic responsibility, fails to consistently moderate compliance behavior in settings characterized by institutional fragility and economic precarity.

Conventional fiscal theory posits that education enhances compliance by cultivating civic awareness, rational decision-making, and respect for the rule of law. From this perspective, formal schooling should strengthen the link between tax knowledge and voluntary payment. However, emerging evidence from developing economies challenges this linear assumption. In contexts where informal economic activity dominates and state legitimacy is weak, education's influence appears indirect, contingent, and mediated by other socio-institutional factors.

This framework therefore reconceptualizes education's role, positioning it not as a universal moderator but as a contextual variable whose effects depend on institutional trust, social norms, and economic constraints. It integrates insights from fiscal sociology, behavioral economics, and institutional theory to propose that compliance behavior is shaped more by perceptions of fairness, legitimacy, and survival imperatives than by formal schooling alone.

The model developed herein illustrates how education contributes to tax knowledge but exerts only a weak direct influence on compliance. Instead, mediating factors, such as institutional trust, economic constraints, social norms, and functional literacy, serve as the primary pathways through which compliance is achieved. This reconceptualization advances both theoretical understanding and policy relevance, emphasizing the need for trust-building, simplified tax systems, and culturally grounded outreach rather than reliance on education as a singular solution.



Developed by the researchers, 2026

Framework Explained:

Core Structure and Logic

At the center of the framework is **Tax Compliance**, represented by two components:
-Compliance Behavior which is defined as the actual act of paying taxes or fulfilling tax obligations.
-Voluntary Payment which is the willingness to comply without coercion or enforcement.
To the left, **Education** is shown as the starting point, comprising:
-Tax Knowledge means understanding tax laws, procedures, and obligations.
-General Schooling refers to formal education that builds literacy and reasoning skills.

A **dashed arrow labeled "Weak Link"** connects Education to Tax Compliance, symbolizing that while education contributes to tax knowledge, its direct influence on compliance is limited or inconsistent in informal economies.

Mediating Factors: The Real Drivers of Compliance

Although education contributes to tax knowledge, its direct influence on compliance in informal economies is weak. Instead, compliance is mediated by a set of contextual forces that determine whether knowledge translates into actual tax-paying behavior. These mediators which include trust in institutions, economic constraints, social norms, and functional literacy, illustrate why education alone cannot guarantee compliance.

Institutional trust is perhaps the most decisive factor. Citizens are far more willing to comply when they believe that taxes are used transparently and fairly, and when government institutions demonstrate legitimacy. In contexts where corruption is widespread or state credibility is fragile, distrust undermines compliance regardless of education level. Fjeldstad and Semboja's (2001) study of Tanzania's development levy showed that resistance to taxation stemmed not from ignorance but from skepticism about how revenues were managed. This highlights that education cannot overcome distrust; institutional credibility is the essential foundation for compliance.

Economic constraints also play a critical role. Informal workers often face precarious conditions in which survival takes precedence over civic obligations. Even individuals with higher levels of schooling may evade taxes when economic insecurity dominates, as compliance becomes conditional on affordability and enforcement strength. Weak enforcement further reduces incentives to comply, reinforcing the logic of evasion. Behavioral economics helps explain this dynamic: scarcity and risk perception shape decision-making, meaning that education alone cannot offset the pressures of economic precarity.

Social norms exert a powerful influence as well. Compliance is not only an individual choice but also a socially embedded practice shaped by community expectations and peer influence. In many informal economies, tax evasion is normalized, creating collective patterns of non-compliance. Social learning theory suggests that individuals adopt behaviors modeled by peers; if evasion is common, education cannot easily counteract entrenched norms. Evidence from Nigeria's informal sector demonstrates this point: taxpayer education programs improved awareness but failed to shift behavior because evasion remained socially acceptable (Oloyede, 2021). Changing compliance, therefore, requires shifting norms, not simply increasing knowledge.

Finally, **functional literacy** provides a more practical pathway to compliance than general schooling. Unlike broad education, functional literacy refers to applied, context-specific knowledge of tax systems, forms, and procedures. Ellawule et al. (2024) found that targeted tax knowledge moderates compliance more effectively than formal education, underscoring the importance of equipping taxpayers with the skills to navigate complex systems. Functional literacy reduces barriers to compliance by empowering individuals to act on their knowledge, making it a stronger determinant of behavior than general schooling.

Taken together, these mediators demonstrate that education's effect on compliance is indirect and contingent. Institutional trust, economic realities, social norms, and functional literacy filter the impact of schooling, making them the true determinants of tax behavior in informal economies. Policies that focus solely on education risk overlooking these critical pathways, while strategies that address trust, affordability, norms, and practical literacy are more likely to foster sustainable compliance.

4. Theoretical Interpretation

The framework draws on three major theoretical traditions, and these are the **institutional theory, behavioral economics, and social learning theory**, to explain why education's effect on tax compliance is indirect and contingent rather than universal. Each perspective highlights a different pathway through which compliance is shaped, showing that schooling alone cannot account for the complexities of behavior in informal economies.

Institutional theory emphasizes the central role of trust and legitimacy in mediating compliance. Citizens are more likely to pay taxes when they perceive government institutions as credible and fair, and when they believe that revenues are used transparently for collective benefit. In contexts where corruption is widespread or state capacity is weak, distrust undermines compliance regardless of education level. This perspective underscores that institutional credibility is the foundation upon which compliance rests, and that education cannot substitute for legitimacy.

Behavioral economics adds another layer by highlighting how economic constraints and perceptions of fairness shape decision-making. Individuals in informal economies often face precarious conditions where survival imperatives outweigh civic obligations. Even those with higher levels of schooling may evade taxes when affordability is low or enforcement is weak. Behavioral insights show that compliance is not simply a rational calculation informed by knowledge, but a decision filtered through scarcity, risk perception, and fairness judgments.

Education may provide awareness, but economic realities ultimately determine whether compliance is feasible.

Social learning theory further explains how norms and peer influence shape tax behavior. Compliance is not only an individual choice but also a socially embedded practice. In many informal economies, tax evasion is normalized within communities, creating collective patterns of non-compliance. Individuals learn from peers and adopt behaviors modeled around them; if evasion is common, education alone cannot counteract entrenched norms. This perspective highlights the importance of shifting social expectations and community-level practices in order to foster compliance.

Taken together, these theoretical insights demonstrate that education's role in tax compliance is indirect, mediated by institutional trust, economic realities, and social norms. Rather than serving as a universal driver, schooling interacts with these contextual forces in complex ways. The framework therefore positions education as a contingent variable whose influence depends on broader institutional and socio-cultural conditions. This reconceptualization advances a more nuanced understanding of compliance, moving beyond simplistic assumptions about the power of formal schooling and toward a multidimensional view that reflects the lived realities of informal economies.

Policy Implications

Governments in informal economies should prioritize building **institutional trust** as the foundation for tax compliance. Citizens are more likely to pay taxes when they believe revenues are managed transparently and used for collective benefit. This means that anti-corruption measures, visible public service delivery, and accountability mechanisms are more effective than simply expanding formal schooling. Simplifying tax systems is equally important. Complex procedures discourage compliance, especially among informal workers with limited resources. Streamlined processes, accessible platforms, and culturally relevant outreach programs can reduce barriers and make compliance more feasible. Rather than relying on formal education alone, policymakers should invest in **functional literacy initiatives** that equip taxpayers with the practical skills needed to navigate tax systems. Such targeted interventions are more likely to foster sustainable compliance than broad schooling campaigns.

Research Implications

Future research should move beyond the assumption that education directly moderates compliance and instead examine the **mediating relationships** that shape tax behavior. Empirical studies should investigate how institutional trust, social norms, and economic precarity interact with education in diverse informal contexts. For example, comparative studies across Sub-Saharan Africa could explore whether trust-building initiatives have stronger compliance effects than taxpayer education programs. Similarly, longitudinal research could assess how shifts in community norms influence compliance over time, even among populations with similar educational backgrounds. By focusing on these mediators, scholars can generate more nuanced insights into the dynamics of compliance and provide evidence-based recommendations for policy design.

Theoretical Implications

The framework advanced in this paper contributes to fiscal sociology and behavioral economics by positioning education as a **contextual variable** rather than a universal moderator. It challenges the linear assumption that schooling automatically fosters compliance and instead highlights the indirect pathways through which education interacts with trust, norms, and economic realities. This reconceptualization enriches theory by integrating institutional legitimacy, social learning, and behavioral economics into a multidimensional model of compliance. It underscores that tax behavior cannot be explained by education alone but must be understood within the broader socio-cultural and institutional environment. In doing so, the framework opens space for more sophisticated theorizing about compliance in informal economies.

5. Conclusion

This paper has argued that education, while valuable, is not a universal driver of tax compliance in informal economies. The evidence from Tanzania, Nigeria, and across Sub-Saharan Africa demonstrates that compliance is shaped more decisively by institutional trust, socio-cultural norms, and economic realities than by formal schooling. Education contributes to tax knowledge, but its influence is filtered through these mediating forces, making its direct effect weak and inconsistent.

By re-conceptualizing education as a **contextual variable**, the framework presented here advances a more nuanced understanding of compliance. It highlights that sustainable tax behavior depends on trust in institutions, affordability, community norms, and functional literacy. This perspective challenges policymakers to move beyond simplistic assumptions about the power of schooling and instead design interventions that address the lived realities of taxpayers in fragile institutional contexts.

For researchers, the conclusion underscores the need to empirically test the complex interactions between education, trust, norms, and economic precarity. For policymakers, it emphasizes the importance of building legitimacy, simplifying tax systems, and promoting culturally grounded outreach. And for theorists, it offers a multidimensional lens that integrates institutional theory, behavioral economics, and social learning into the study of compliance.

Ultimately, the message is clear: education alone does not guarantee compliance. In informal economies, where survival pressures and skepticism toward institutions prevail, trust, norms, and functional literacy are the true determinants of tax behavior. Recognizing this reality opens pathways for more effective policy, richer research, and deeper theoretical insight into the dynamics of taxation in the developing world.

6. Recommendations

Building on the findings of this study, it is clear that education alone cannot guarantee tax compliance in informal economies. Instead, compliance is shaped by deeper forces such as institutional trust, socio-cultural norms, and economic realities. To foster sustainable compliance, governments and policymakers must adopt a multidimensional approach that goes beyond formal

schooling and addresses the lived realities of taxpayers. The following recommendations highlight practical strategies for strengthening compliance in fragile institutional contexts.

Strengthen Institutional Trust
Governments should prioritize transparency, anti-corruption measures, and visible public service delivery. Taxpayers comply more when they see revenues used fairly and effectively.

Simplify Tax Systems
Complex procedures discourage compliance, especially in informal economies. Streamlined processes, mobile-friendly platforms, and accessible tax offices can reduce barriers.

Invest in Functional Literacy
Instead of broad schooling campaigns, focus on practical tax knowledge, that is, how to fill forms, use digital payment systems, and understand obligations. This equips taxpayers to act on awareness.

Culturally Grounded Outreach
Tailor tax education to local socio-cultural contexts. Using community leaders, peer influence, and culturally relevant messaging can shift norms more effectively than generic education.

Balance Enforcement with Incentives
Enforcement mechanisms should be complemented with positive incentives such as simplified registration, small-business tax relief, or visible community benefits funded by taxes.

7. Areas for Future Research

Comparative Studies Across Regions
Examine whether institutional trust-building initiatives outperform taxpayer education programs in different Sub-Saharan African countries.

Longitudinal Studies on Norms
Track how shifts in community norms influence compliance behavior over time, even among populations with similar educational backgrounds.

Functional Literacy vs. Formal Schooling
Explore the relative impact of targeted tax knowledge (functional literacy) compared to general education levels on compliance outcomes.

Role of Technology in Informal Economies
Investigate how mobile tax platforms, digital payment systems, and e-governance tools affect compliance among informal workers.

Interplay of Economic Precarity and Compliance
Study how survival pressures and affordability constraints interact with education and trust to shape compliance decisions.

Trust and Legitimacy Mechanisms
Assess which specific trust-building strategies (e.g., participatory budgeting, community tax forums) most effectively foster compliance.

References

Ackom, E. K., Ocansey, E. O. N. D., & Asamoah, F. O. (2025). Tax compliance and informal sector dynamics in Sub-Saharan Africa: Rethinking revenue mobilization for sustainable economic growth. *International Journal of Economic Perspectives, 19*(4).

Alm, J., & Torgler, B. (2006). Culture differences and tax morale in the United States and Europe. *Journal of Economic Psychology, 27*(2), 224–246. https://doi.org/10.1016/j.joep.2005.09.002 (doi.org in Bing)

Aremu, E., & Siyanbola, T. T. (2021). Tax education and compliance in the informal sector of Ogun State, Nigeria. *European/American Journals.*

Ekpulu, G. (2025). Educational level and tax compliance: Empirical evidence from Nigeria. *International Journal of Accounting and Financial Reporting.*

Ellawule, A., Bashir, Y. M., Dalhat, B. S., & Suleiman, N. (2024). The moderating effect of tax knowledge on the relationship between tax rates and tax compliance of MSMEs in Nigeria. *FUDMA Journal of Accounting and Finance Research, 2*(1).

Fjeldstad, O.-H., & Semboja, J. (2001). Why people pay taxes: The case of the development levy in Tanzania. *World Development, 29*(12), 2059–2074. https://doi.org/10.1016/S0305-750X(01)00086-7 (doi.org in Bing)

Levi, M. (1988). *Of rule and revenue.* University of California Press.

Oloyede, F. L. (2021). Taxpayers' education: Enhancing tax compliance in the informal sector of Nigeria. *International Journal of Innovative Research and Development.*

Torgler, B. (2007). *Tax compliance and tax morale: A theoretical and empirical analysis.* Edward Elgar Publishing.

Yayangida, A. S., Ehada, S., & Yahaya, O. A. (2025). The impact of tax education on tax compliance among Nigerian taxpayers. *Journal of Finance and Fiscal Policy, 31*(12).