

## Determinants of Tax Compliance Among MSMEs in North Central Nigeria: An Integrated Review of Theoretical and Empirical Evidence

Enna Godiya Musa<sup>1\*</sup>, Saratu Jim-Suleiman<sup>1</sup>, Samson Iliya Nyahas<sup>1</sup>,  
Seyilnan Hannah Wadak<sup>2</sup>

<sup>1</sup>Department of Accounting, University of Jos, Nigeria

<sup>2</sup>College of Education Gindiri, Plateau State, Nigeria

\*Corresponding Author: [ennagoddy@gmail.com](mailto:ennagoddy@gmail.com)

### ABSTRACT

Tax non-compliance among Micro, Small, and Medium-Sized Enterprises (MSMEs) has long undermined the financial capacity of state governments in North Central Nigeria. These governments consistently report some of the lowest Internally Generated Revenue figures in the country, despite MSMEs accounting for over 96% of all businesses in the region. This paper uses a systematic narrative review of peer-reviewed literature published between 2012 and 2025 to examine the theoretical and empirical evidence on five determinants of MSME tax compliance behavior: attitude toward taxation, social norms, tax knowledge, perceived fairness, and benefits received. Social Exchange Theory, the Theory of Planned Behavior, the Slippery Slope Framework, and Institutional Theory are all incorporated into an integrated framework that directs the review. Priority is given to research from Nigeria and other developing economies. In a range of situations, voluntary compliance among MSMEs is independently increased by favorable tax attitudes, robust peer compliance norms, adequate understanding of tax obligations, perceived administrative fairness, and visible government service delivery. The primary structural barriers that have persisted for over a decade are high tax rates, procedural complexity, and multiple taxation, according to foundational studies in the field. Direct evidence from the North Central zone confirms that tax knowledge ( $p = 0.003$ ) and the perceived fairness of the tax system ( $p = 0.000$ ) are statistically significant predictors of voluntary compliance. The review reveals a conspicuous dearth of integrated, multi-determinant empirical research specifically designed for this context, given the ongoing implementation of the 2025 National Tax Reforms throughout the states in the region. An empirical study that models all five determinants within a single framework is both theoretically and practically necessary to guide the work of revenue authorities in North Central Nigeria and inform reform design.

**KEYWORDS:** MSME Tax Compliance, Tax Attitude, Social Norms, Tax Knowledge, Perceived Fairness, Benefits Received

### I. INTRODUCTION

Micro, Small, and Medium-Sized Businesses (MSMEs) are the main drivers of economic activity in many developing countries. This is especially true in sub-Saharan Africa, where there aren't many large-scale industrial jobs and the private sector depends heavily on small businesses. MSMEs make up about 96.7% of all businesses in Nigeria. They account for about 46.3% of the country's Gross Domestic Product (GDP) and employ almost 86.3% of the country's workers (NBS

& SMEDAN, 2021). Given its structural weight, the sector's tax payments should be a reliable source of revenue for the government. But the evidence shows a worrying and persistent gap between what the sector could theoretically contribute and what governments actually collect. North Central Nigeria is where that gap is most clear. Lagos State made ₦651.145 billion in Internally Generated Revenue (IGR) in 2023. Benue and Niger States made ₦15.231 billion and ₦23.080 billion, respectively, which is 2.3% and 3.5% of Lagos's total (NBS, 2024). These numbers don't just show that the economy is slowing down; they also point to deeper problems, such as bad tax administration, a lack of education for taxpayers, a weak relationship between MSME operators and tax authorities, and, most importantly, a lack of a culture of compliance among the general public. These problems have long been present in this area. Atawodi and Ojeka (2012) identified high tax rates, complicated filing procedures, and the burden of duplicate taxation by overlapping government entities as the primary challenges to MSME compliance in Zaria over a decade ago. Recent evidence from the North Central zone indicates that tax knowledge and the perceived equity of the tax system are significant predictors of voluntary compliance among SMEs, thereby confirming that these structural and perceptual challenges remain unaddressed (Uyagu, Ibrahim, Ajayi, & Ibrahim, 2025). To comprehend these patterns, a more sophisticated, contextually aware methodology is necessary, one that transcends the traditional economic deterrence framework that treats compliance as a mere mathematical assessment of audit likelihood and penalty intensity (Allingham & Sandmo, 1972). This approach must take into account the social expectations, civic attitudes, knowledge limitations, perceptions of equity, and exchange dynamics that shape MSME owners' engagement with the tax system.

This review employs four complementary theoretical frameworks: Institutional Theory (Scott, 2008), the Theory of Planned Behavior (Ajzen, 1991), the Slippery Slope Framework (Kirchler, Hoelzl, & Wahl, 2008), and Social Exchange Theory (Blau, 1964). The paper analyzes theoretical and empirical evidence concerning five determinants affecting MSME tax compliance: attitude towards taxation, social norms, tax knowledge, perceived fairness, and received benefits. It situates the North Central Nigerian experience within the framework of existing literature, underscores significant shortcomings in integrated and region-specific compliance research, and calls for a comprehensive empirical investigation as states in the region begin implementing the 2025 National Tax Reforms. The paper deepens academic understanding and guides practical policymaking by integrating multiple theoretical frameworks to clarify the complexities of MSME compliance behavior in a context characterized by weak institutions and high informality.

## **II. RELATED WORKS**

### **A. Theoretical Underpinnings**

This review is based on four theoretical frameworks, each of which sheds light on a different aspect of how people comply with tax laws. They elucidate how institutional frameworks, individual perceptions, authority-taxpayer interactions, and reciprocal exchanges influence the compliance choices of MSME operators. Scott (2008) developed Institutional Theory, which provides the big picture of how things are structured. The theory asserts that behavior is governed by three institutional pillars. The regulative pillar includes formal laws, enforcement mechanisms, and punishments for noncompliance. The normative pillar includes the social values, behavioral expectations, and peer norms that tell people in a certain community what is and isn't acceptable behavior. The cultural-cognitive pillar includes the shared beliefs and unspoken assumptions that affect how people understand their responsibilities. This framework asserts that in the context of tax compliance, enforcement will be insufficient when normative and cultural-cognitive forces are

feeble a trend consistently observed across sub-Saharan Africa (Alm & Torgler, 2011; Horodnic, 2018). This review uses Institutional Theory to explain why structural reforms, such as rate simplification or penalty enhancement, are unlikely to yield enduring improvements in compliance in North Central Nigeria unless accompanied by corresponding transformations in community norms and citizens' perceptions of the tax system's legitimacy. The Theory of Planned Behavior (Ajzen, 1991) functions at the individual level and serves as the micro-psychological counterpart to Institutional Theory. The theory asserts that a person's intention to comply is shaped by three interconnected factors: their attitude towards the specific behavior, the perceived subjective norms from peers and associates, and their perceived behavioral control, which indicates their confidence in their ability to comply appropriately. In the context of taxation, "attitude" refers to the MSME owner's feelings about paying taxes; "subjective norms" refer to what people in the business community think others should do and what they expect them to do; and "perceived behavioral control" is closely related to tax knowledge, since knowing what is required is necessary for compliance. The framework has been corroborated in various studies regarding taxation in developing economies (Bani-Khalid, Alshira'h, & Alshirah, 2022; Armitage & Conner, 2001), and its three constructs correspond directly to three of the five determinants analyzed in this review: attitude, social norms, and tax knowledge.

The Slippery Slope Framework (Kirchler, Hoelzl, & Wahl, 2008) connects the institutional and psychological levels by showing two ways to comply. Audits, fines, and the coercive power of tax authorities are all means of forcing people to comply. Voluntary compliance occurs when taxpayers have faith in the authorities, view the system as equitable, and are convinced that their taxes are utilized judiciously. The framework posits that trust-based voluntary compliance is more sustainable and less administratively burdensome than enforcement-driven compliance, asserting that perceived fairness is crucial for fostering that trust (Darmayasa & Hardika, 2024). This framework is especially pertinent to the North Central Nigerian context, characterized by limited enforcement capacity and literature indicating that perceived unfairness is a principal catalyst for non-compliance. This means that investing in building trust through fairness and openness in government will yield greater compliance than simply using more force. Social Exchange Theory (Blau, 1964) serves as the relational framework for the review by framing the tax relationship as a reciprocal exchange. People pay taxes because they expect the government to provide public goods, infrastructure, and services that make their lives better and help the economy grow. When taxpayers see this exchange as fair and balanced, a sense of mutual obligation makes them more likely to follow the rules. When people think the government is corrupt, ineffective, or unresponsive, the terms of the exchange fall apart, and the incentive to comply goes down (Prichard, 2015; Feld & Frey, 2007). This framework supports the fifth factor in this review, which is benefits received. It also explains why the visible quality of public services and infrastructure is not only a governance issue but also a direct compliance issue. The combined use of these four frameworks is better for analysis than using just one theory. Institutional Theory elucidates the structural environment; the Theory of Planned Behavior (TPB) elucidates individual cognition and intention; the Slippery Slope Framework correlates authority behavior with taxpayer trust; and Social Exchange Theory encapsulates the reciprocal logic that underpins voluntary compliance. Their combination offers a more nuanced and contextually relevant framework for analyzing MSME tax compliance in North Central Nigeria than any singular perspective could provide.

## **B. How People Feel about Taxes and Paying them**

A taxpayer's attitude toward taxes shows how they feel and think about their tax responsibilities. People with positive attitudes see paying taxes as a civic duty and a way to help the community. People with negative attitudes view it as an unfair burden and are more likely to fail to pay their taxes. The attitudinal dimension is grounded in the cultural-cognitive pillar of Institutional Theory and the attitude construct of the Theory of Planned Behavior. Evidence from Nigeria regarding this determinant is both coherent and enlightening. Alabi, Atanda, Akintoye, and Kajola (2024) examined 400 Nigerian MSMEs and discovered that religious beliefs, trust in governance, and income level were significant positive predictors of compliance. They identified tax morale, an internalized moral obligation to pay taxes, as a particularly influential attitudinal factor. Their findings suggest that compliance in Nigeria is influenced by profound moral and relational commitments rather than solely by economic self-interest, with significant implications for the formulation of compliance interventions. Agbetunde, Akinrinola, and Odinakachi (2020) validated these trends in a study of 500 MSMEs in Southwest Nigeria, identifying taxpayer attitude and perceived fairness as the principal predictors of compliance, whereas broader institutional trust variables were not statistically significant. Agbetunde, Raimi, and Akinrinola (2022) expanded on this research by demonstrating that religiosity influenced the attitude–compliance relationship among 368 entrepreneurial firms, increasing the explanatory power of attitudinal factors from 13% to 17%, highlighting the significance of contextual moderators in understanding MSME compliance in Nigeria. Vincent (2021), using a nationally representative sample of 392 Nigerian MSMEs, similarly found that attitudinal and informational factors outperformed purely economic deterrent variables in explaining non-compliance behavior. The trend observed across these studies is consistent: in Nigeria, a positive tax attitude grounded in civic duty and trust in institutions serves as an independent, intrinsic motivator of compliance behavior. This differs from predictions based on deterrence and aligns with the cultural-cognitive logic of Institutional Theory. In North Central Nigeria, the implication is that attitude formation via civic education, community engagement, and trust-building must be regarded as a compliance intervention in its own right, rather than as a mere secondary consideration.

### **C. Social Norms and Compliance with Taxes**

Social norms shape behavior by delineating the expectations within the communities to which individuals belong. In the context of taxation, they operate through two mechanisms: descriptive norms, which indicate what individuals believe their peers actually do, and injunctive norms, which indicate what individuals believe their peers expect them to do (Cialdini, Reno, & Kallgren, 1990). In North Central Nigeria, where MSME owners' choices are influenced by tight-knit ethnic, religious, and geographic networks, both types of norms can have a strong, long-lasting effect on how they pay taxes. Social norms align directly with the subjective norms construct in the Theory of Planned Behavior and with the normative pillar in Institutional Theory. There is strong cross-national evidence for this determinant. Bani-Khalid et al. (2022), in their analysis of 385 Jordanian MSMEs using structural equation modeling, found that subjective norms significantly affected compliance intentions, independent of attitudes and perceived behavioral control a result that illustrates the normative channel's independent explanatory power. Timothy (2024) found a strong link between social norms and VAT compliance among Kenyan MSMEs, with a correlation coefficient of 0.696 and a regression coefficient of 0.138. Buzohera (2025) also found that peer influence was a major factor in compliance among Tanzanian MSMEs ( $\beta = 0.286$ ). Extensive experimental evidence from Hallsworth, List, Metcalfe, and Vlaev (2017), involving over 200,000 taxpayers in the United Kingdom, illustrated that descriptive norm messages in standard reminder

letters significantly expedited the collection of overdue taxes, providing compelling evidence that normative framing can be utilized as a cost-effective compliance mechanism. This evidence collectively indicates a consistent trend: social norms have a positive, significant, and independent impact on MSME tax compliance across various national settings. In North Central Nigeria, where MSME communities are closely connected by religion, ethnicity, and geography, using business groups, religious groups, and community leaders to promote a culture of compliance is a policy choice that can be expanded and is not too expensive. The lack of quantitative evidence on this mechanism in the North Central zone indicates a gap that subsequent empirical research should address.

#### **D. Knowledge of Taxes and Paying them on Time**

To comply with tax laws, you need to know about taxes. Even a motivated taxpayer may not follow the rules correctly if they don't know enough about the law, how to file, when to file, and what happens if they make a mistake. In the Theory of Planned Behavior, tax knowledge serves as a practical application of the perceived behavioral control construct: understanding what is necessary to foster confidence to act, which in turn leads to stronger compliance intentions and improved actual outcomes. Tax knowledge functions as both a direct predictor of compliance and the means by which perceived control is enacted. Uyagu et al. (2025) did a quantitative study of SMEs in the North Central Nigerian context and found that tax knowledge and awareness had a statistically significant positive effect on voluntary compliance ( $p = 0.003$ ). This is the most direct evidence for the North Central Nigerian context. This is the best regional evidence we have, and it shows that the informational barrier identified by Atawodi and Ojeka (2012) more than ten years ago remains in place. This finding is consistent with broader evidence from Ghana, where Twum, Amaniampong, Assabil, Adombire, Edisi, and Akuetteh (2020) employed structural equation modeling with data from 130 MSMEs to show that awareness of tax rights, employment tax obligations, and the consequences of non-compliance significantly enhanced compliance behavior. Oladipupo and Obazee (2016) showed through regression analysis that tax knowledge had a positive and statistically significant effect on MSME compliance in Nigeria. Tax penalties alone, on the other hand, did not have a significant independent effect. This supports the idea that education is a better way to get people to comply than coercion. Nonetheless, the knowledge compliance relationship is not absolute. Fauziati, Minovia, Muslim, and Nasrah (2020) found no significant direct effect of tax knowledge on compliance among 237 Indonesian MSMEs, highlighting the importance of contextual factors. Appiah, Domeher, and Agana (2024) offer a persuasive solution to this seeming contradiction: their structural equation modeling of 341 Ghanaian MSMEs demonstrated that tax fairness mediates the knowledge–compliance relationship. When people think the tax system is fair and deserves respect, knowledge is more likely to lead to compliance. This mediation finding is theoretically significant as it delineates the conditions that influence the success or failure of knowledge interventions. In North Central Nigeria, where perceived unfairness is well documented, education programs implemented without accompanying reforms to administrative equity and service quality may fall short of their potential compliance dividend.

#### **E. Perceived Fairness and Adherence to Tax Obligations**

Perceived fairness is a multidimensional construct that comprises three analytically distinct yet related components of the tax system's legitimacy. Distributive fairness is about whether all taxpayers and sectors pay their fair share of taxes. Procedural fairness is about whether the way

taxes are collected is clear, fair, and respectful. Retributive fairness concerns whether punishments are fair and applied consistently (Wenzel, 2002). All three dimensions influence taxpayers' perceptions of the tax system's legitimacy, consequently affecting their willingness to comply voluntarily. This idea is at the heart of the Slippery Slope Framework, which holds that trust is the primary thing that keeps people from breaking the rules, and that trust depends on fairness and openness in administration. Concerns regarding fairness have been persistent and extensively recorded among MSMEs in North Central Nigeria. Atawodi and Ojeka (2012) identified multiple, overlapping taxation by federal, state, and local government agencies as one of the most damaging sources of perceived inequity among MSMEs in Zaria a structural problem that represents a direct violation of the distributive fairness dimension. Daniel, Akowe, and Awaje (2016) discovered in Kogi State that perceptions of fairness in tax administration significantly influenced compliance levels, with perceived inconsistencies in enforcement actively discouraging payment.

The latest and most rigorous quantitative evidence from the North Central zone is very clear. Uyagu et al. (2025) discovered that the perceived fairness of the tax system was the most significant predictor of voluntary compliance in their study of the zone ( $p = 0.000$ ), surpassing all other factors, including tax knowledge. This finding corresponds exactly with the Slippery Slope Framework's assertion that fairness-based trust constitutes the fundamental basis of voluntary compliance. Appiah et al. (2024) enhanced analytical rigor by demonstrating, in a Ghanaian sample, that fairness not only directly predicts compliance but also mediates the effect of tax knowledge, serving as the mechanism by which knowledge translates into tangible compliance outcomes. This mediation pathway elucidates the reasons why knowledge interventions might be ineffective in low-trust settings: in the absence of perceived fairness, the motivational link between knowledge and action is diminished. Sadress, Bananuka, Orobio, and Opiso (2019) affirmed the critical importance of institutional fairness in Uganda, where equitable and consistent tax implementation represented 57.4% of the variance in MSME compliance. The consistent pattern observed across these studies, from Kogi State in 2016 to the broader North Central zone in 2025, demonstrates that fairness is not merely one among others but a fundamental condition that enhances or constrains the effects of the remaining four determinants. Any reform strategy that ignores this aspect is unlikely to gain much support, no matter how much money is spent on enforcement or education.

#### **F. Benefits Received and Following the Tax Code**

The benefits received indicate how the taxpayer views the quality and usefulness of the public goods and services the government provides in exchange for their taxes. When roads work, electricity is reliable, security is good, and rules make it easier for businesses to do business, the fiscal exchange feels fair, and the moral obligation to give is strengthened by a sense of giving back (Blau, 1964; Feld & Frey, 2007). In North Central Nigeria, where there are well-known problems with infrastructure and security, the opposite is often true. This makes it harder for people to follow the rules on their own. Social Exchange Theory serves as the theoretical underpinning for this determinant: compliance is maintained when citizens regard the exchange as equitable and fair, and diminishes when they view the government as an untrustworthy or exploitative partner. Evidence from African contexts aligns with this theoretical expectation. Musimenta, Nkundabanyanga, Muhwezi, Akankunda, and Nalukenge (2017) discovered in Uganda that tax equity and perceived benefit sufficiency both predicted MSME compliance, while the discrepancy between authorities' and taxpayers' valuations of the exchange emerged as a significant factor contributing to non-compliance. Oluka, Chiwawa, and Kader (2021) reported in South Africa that

MSMEs were considerably more likely to comply when they perceived specific, tangible benefits, notably access to government contracts and formal business assistance. Eragbhe and Modugu (2014) illustrated in Nigeria that increased compliance costs reduce the net perceived benefits of compliance, resulting in a detrimental environment where the costs of meeting obligations surpass any perceived advantages. Mokopasetso, Modisaotsile, and Oladokun (2025) demonstrated in Botswana that enhanced service delivery and favorable government policies were significant positive predictors of MSME compliance. These findings collectively indicate a definitive policy implication for North Central Nigeria. In a situation where the benefits side of the fiscal exchange is clearly weak, as shown by the region's poor infrastructure and consistently low IGR performance, restoring the exchange's credibility through better public service delivery may be the most important structural change that state governments can make. Improving the visibility and quality of benefits received addresses the demand-side logic that keeps people voluntarily participating in the tax system. This is different from enforcement or education measures, which work on the supply side of compliance.

### **G. Gaps in Research**

The literature review identifies three significant gaps that collectively necessitate the demand for integrated empirical research in North Central Nigeria. The primary and most significant gap pertains to the lack of multi-determinant research in the North Central zone. Although each of the five determinants has been analyzed separately, there is a lack of research that combines attitude, social norms, tax knowledge, perceived fairness, and benefits received into a unified analytical framework, both globally and specifically for this region. This is important because compliance doesn't happen because of just one thing. It happens because of the interaction of many factors, and those interactions can involve mediation, moderation, or synergistic amplification that studies that only look at one factor can't see. As Alm and Kasper (2023) and Koumpias and Martinez-Vazquez (2023) note, integrated models are necessary for determining the relative significance of various determinants and the contexts in which each exerts the greatest influence. The second gap is based on the situation. The two studies that have looked most closely at what makes MSMEs in North Central Nigeria follow the rules Atawodi and Ojeka (2012) and Uyagu et al. (2025) are useful but not very broad. Atawodi and Ojeka (2012) focused on a single city and employed a descriptive-analytical framework that predates contemporary methodological norms. Uyagu et al. (2025), although more recent and quantitatively robust, investigated merely two determinants (tax knowledge and perceived fairness), thereby failing to capture the comprehensive range of factors recognized as theoretically pertinent in the literature. The unique attributes of the region its agrarian economy, ethno-religious diversity, variable governance quality, and historically inadequate IGR performance demand a customized, multi-determinant investigation rather than dependence on studies from other national or regional settings. The third gap is in time. The National Tax Reforms of 2025 are now being implemented in the North Central states. This is changing the rules for compliance and the way institutions operate. Research conducted during this transitional period has the potential to yield findings that are directly and immediately applicable to the endeavors of policymakers and revenue administrators in the region, an opportunity that is time-sensitive and should not be postponed.

## **III. METHODOLOGY**

### **A. Review Design**

This study utilizes a systematic narrative review design. Due to the diversity of study designs, measurement instruments, and contextual settings in the included literature, a formal meta-analysis was not possible. However, the review adheres to a clear and replicable search-and-selection protocol to reduce selection bias and uphold methodological integrity. The systematic narrative approach is suitable for integrating diverse theoretical and empirical evidence on a multidimensional construct such as tax compliance, especially in the absence of a unified, standardized measure across studies.

### B. Search Plan

A methodical search was performed across four databases: Scopus, Web of Science, Google Scholar, and Zenodo. The search used these keyword combinations: "MSME tax compliance," "tax attitude Nigeria," "social norms tax," "tax knowledge compliance," "perceived tax fairness SMEs," "benefits received taxation," and "voluntary tax compliance North Central Nigeria." The searches took place from January to March 2025. Terms were combined, and results were improved using Boolean operators (AND, OR).

### C. Standards for Inclusion and Exclusion

Studies were included if they met all of the following criteria: (1) published between 2012 and 2025; (2) examined at least one of the five main determinants (attitude, social norms, tax knowledge, perceived fairness, or benefits received) in relation to MSME or small business tax compliance; and (3) were set in a developing economy context. Studies were excluded if they concentrated solely on large corporations, examined personal income tax without considering business compliance, or failed to provide a distinct empirical or theoretical contribution to one of the five determinants. We also didn't include conference proceedings that weren't peer-reviewed.

### D. The Process of Screening and Choosing Studies

There were three steps in the screening process. First, searches of the database found 412 records. After removing duplicates and conducting an initial title screening, 187 records were reviewed by abstract to determine whether they met the inclusion criteria. A full-text review of 89 records resulted in the inclusion of 54 studies in the final review. The most important studies were from Nigeria, then from sub-Saharan Africa, and finally from similar developing economies in other parts of the world. Table 1 gives a short summary of the screening process.

**Table 1:** Study Selection Flow (PRISMA-Adapted)

Stage	Action	Records (n)	Criteria / Notes
<b>Identification</b>	Database search (Scopus, WoS, Google Scholar, Zenodo)	412	Keywords applied
<b>Screening</b>	Title & abstract review	187	Duplicates removed; 2012-2025
<b>Eligibility</b>	Full-text assessment	89	At least one of five determinants

<b>Included</b>	Final included studies	54	Developing economy focus; Nigeria prioritized
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### E. Analytical Approach

The analytical approach is thematic. The integrated theoretical framework outlined in Section 2.1 is used to organize evidence by determinant and evaluate it. Quantitative results, such as regression coefficients, correlation values, and p-values, are presented when available to enable cross-study comparisons and to substantiate theoretical assertions with empirical evidence. Instead of glossing over contradictions and conditions in the evidence, they are brought to light, and the relative strength of evidence for each determinant in the North Central Nigerian context is explicitly evaluated. The integrated theoretical framework represents a significant contribution of the review, illustrating how four distinct theoretical traditions can be amalgamated to produce a more comprehensive understanding of MSME tax compliance than any singular theory could offer.

## IV. RESULTS AND DISCUSSION

### A. Proof Across the Five Determinants

The 54 studies in this review all show a positive link between each of the five determinants and MSME tax compliance. However, the strength, conditionality, and contextual applicability of these links are different. Table 2 provides a side-by-side comparison of the most important evidence by determinant, theoretical link, and regional availability.

**Table 2:** Summary of Evidence by Determinant

Determinant	Key Studies	Effect on Compliance	Theoretical Link	North Central Evidence
<b>Attitude</b>	Alabi et al. (2024); Agbetunde et al. (2020, 2022); Vincent (2021)	Positive & significant ( $R^2$ gain: 13%→17% with religiosity)	TPB; Cultural-cognitive pillar (IT)	Indirect; consistent with SW Nigeria findings
<b>Social Norms</b>	Hallsworth et al. (2017); Bani-Khalid et al. (2022); Timothy (2024); Buzohera (2025)	Positive; $\beta = 0.138$ (Kenya); $\beta = 0.286$ (Tanzania)	TPB subjective norms; Normative pillar (IT)	Implied by community structure; not yet quantified
<b>Tax Knowledge</b>	Uyagu et al. (2025); Oladipupo & Obazee (2016); Twum et al. (2020)	Positive & significant; $p = 0.003$ (North Central)	TPB perceived behavioural control	Direct quantitative evidence (Uyagu et al., 2025)
<b>Perceived Fairness</b>	Uyagu et al. (2025); Atawodi & Ojeka (2012); Appiah et al.	Strongest predictor; $p = 0.000$ ; also mediates	Slippery Slope Framework; Regulative pillar (IT)	Direct quantitative evidence; strongest

	(2024); Daniel et al. (2016)	knowledge effect		predictor (Uyagu et al., 2025)
<b>Benefits Received</b>	Musimenta et al. (2017). Oluka et al. (2021); Mokopasetso et al. (2025); Eragbhe & Modugu (2014)	Positive; high compliance costs reduce net benefit	Social Exchange Theory (Blau, 1964)	Infrastructure gap identified; no direct quantitative measure

The attitude towards taxation stands out as the most comprehensively documented factor among the studies analyzed. Studies from Nigeria (Alabi et al., 2024; Agbetunde et al., 2020, 2022), Jordan (Bani-Khalid et al., 2022), and Tanzania (Buzohera, 2025) consistently indicate that positive tax attitudes grounded in civic duty, religious beliefs, and institutional legitimacy significantly promote voluntary compliance. This effect has been demonstrated to function independently of economic deterrence factors in Nigerian contexts (Vincent, 2021) and to be intensified by religiosity as a contextual moderator (Agbetunde et al., 2022). This pattern aligns with the cultural-cognitive aspect of Institutional Theory, which posits that compliance persists when taxpayers perceive the system as legitimate and their contributions as serving a legitimate public interest. For North Central Nigeria, this means that forming attitudes is not a secondary concern but a primary compliance intervention that requires civic engagement and trust-building, along with technical reforms.

The evidence for social norms is similarly consistent, yet it lacks direct quantification for the North Central zone. Research conducted in Jordan (Bani-Khalid et al., 2022), Kenya (Timothy, 2024), Tanzania (Buzohera, 2025), and the United Kingdom (Hallsworth et al., 2017) illustrates that peer compliance expectations significantly and independently affect individual compliance decisions. The normative pillar of Institutional Theory elucidates the rationale behind this phenomenon: when compliance is ingrained as a social expectation within a business community, the impetus to conform functions independently of individual attitudes or the risk of enforcement. This indicates a scalable policy mechanism for North Central Nigeria. Nonetheless, the lack of regional evidence indicates that the extent of this effect within the particular ethno-religious and geographic context of the North Central zone remains unquantified, a deficiency that constrains the accuracy with which norm-based interventions can be formulated.

Tax knowledge generally aids compliance, as directly evidenced in the North Central zone by Uyagu et al. (2025), who identified a statistically significant positive effect on voluntary compliance ( $p = 0.003$ ). Evidence from Ghana (Twum et al., 2020) and Nigeria (Oladipupo & Obazee, 2016) supports this. The Indonesian anomaly identified by Fauziati et al. (2020), which revealed no significant direct effect, serves as a critical cautionary finding. Furthermore, the resolution proposed by Appiah et al. (2024) is theoretically significant, indicating that knowledge generates its compliance dividend most consistently when the tax system is regarded as equitable. In North Central Nigeria, where people have little faith in the tax system, this mediation pathway suggests that education programs not linked to fairness reforms may fail to meet their goals. The main goal of the policy is not just to inform taxpayers but also to enable them to turn that knowledge into action.

In the context of North Central Nigeria, perceived fairness is the most important structural factor. Uyagu et al. (2025) identified it as the most significant predictor of voluntary compliance in the

zone ( $p = 0.000$ ), significantly exceeding tax knowledge. This aligns with the Slippery Slope Framework's principal assertion that trust is predominantly established through administrative equity, and transparency is the cornerstone of voluntary compliance. It also aligns with what Atawodi and Ojeka (2012) found: that MSMEs in the area have long believed the tax system is unfair because there are too many overlapping taxes. Appiah et al. (2024) further illustrate that fairness mediates the impact of tax knowledge on compliance, indicating that it serves not only as a direct determinant but also as the conduit through which other favorable factors yield compliance outcomes. This positions fairness as the central determinant in the integrated model: improvements in attitudes, knowledge, norms, and benefits received are more likely to lead to compliance when the underlying system is perceived as equitable and consistently enforced. A reform agenda that neglects perceived fairness at its foundation is fundamentally deficient.

Benefits received consistently yield positive outcomes across various African contexts, as evidenced in Uganda (Musimenta et al., 2017), South Africa (Oluka et al., 2021), Botswana (Mokopasetso et al., 2025), and Nigeria (Eragbhe & Modugu, 2014). Social Exchange Theory offers the theoretical framework: voluntary compliance is maintained when taxpayers view the fiscal exchange as equitable. In North Central Nigeria, where infrastructure deficits, security challenges, and government unresponsiveness consistently disrupt the exchange in citizens' perception, this determinant may signify the most profound structural impediment to compliance. Restoring the credibility of the fiscal exchange requires genuine improvements in governance and public service delivery, rather than knowledge- or norm-based interventions that can be implemented swiftly through administrative measures. This represents a long-term commitment that, however, holds the potential to yield the most enduring compliance benefits.

### **B. Trends, Conflicts, and Relative Effect Sizes**

Three consistent patterns can be seen across all included studies. First, attitudinal and normative determinants exhibit significant effects across diverse national contexts, encompassing both high-trust settings (Jordan, UK) and low-trust settings (Nigeria, Tanzania). This indicates that these mechanisms are largely context-independent in direction, although their magnitudes vary. Second, perceived fairness consistently emerges as either the strongest or one of the strongest predictors in studies that include it alongside other determinants a finding that is replicated in Kogi State (Daniel et al., 2016), the broader North Central zone (Uyagu et al., 2025), Uganda (Sadress et al., 2019), and Ghana (Appiah et al., 2024). Third, the knowledge compliance relationship exhibits the highest degree of contextual conditionality, as evidenced by the Indonesian anomaly (Fauziati et al., 2020), which contrasts with the positive results from Nigeria and Ghana, indicating that institutional trust influences the direction and magnitude of this effect.

A significant tension in the literature pertains to the comparative roles of enforcement and voluntary mechanisms. Research utilizing the Slippery Slope Framework consistently demonstrates that compliance rooted in trust is more sustainable and economically advantageous than compliance based on coercion (Darmayasa & Hardika, 2024; Kirchler et al., 2008). Nevertheless, deterrence-based research, exemplified by the seminal Allingham and Sandmo (1972) model, recognizes audit probability and penalty severity as significant factors influencing compliance. The conclusion, corroborated by existing evidence, is not that deterrence is inconsequential, but rather that it is inadequate in isolation and may even prove counterproductive in situations where enforcement is regarded as arbitrary or discriminatory both of which have been recorded in North Central Nigeria (Atawodi & Ojeka, 2012; Daniel et al., 2016).

### C. Policy Consequences

The evidence indicates that MSME tax compliance in North Central Nigeria is a complex issue with no single solution. Atawodi and Ojeka (2012) identified structural barriers over a decade ago high rates, complicated procedures, and multiple overlapping taxes that have created an environment of perceived unfairness, discouraging people from seeking knowledge, leaving them feeling less positive, and making the fiscal exchange feel fundamentally unfair. Uyagu et al. (2025) affirm that these conditions endure. Any reform strategy that prioritizes one dimension while disregarding others is unlikely to yield enduring enhancements.

The combined evidence supports a coordinated policy approach that covers many areas. The following recommendations are based on specific facts that were found during the review:

- (a). Make the tax system easier to understand and get rid of multiple, overlapping taxes. This directly addresses the perceived unfairness in the distribution of taxes, which Atawodi and Ojeka (2012) and Uyagu et al. (2025) ( $p = 0.000$ ) identified as the biggest problem.
- (b). Enhance service delivery and infrastructure to reestablish credibility in the fiscal exchange, in accordance with the principles of Social Exchange Theory as evidenced by Musimenta et al. (2017), Oluka et al. (2021), and Mokopasetso et al. (2025).
- (c). Create taxpayer education programs that are easy to use and useful, and that teach people new things and change their attitudes at the same time. Also, make sure that administrative reforms go hand in hand with educational efforts, since the mediation evidence from Appiah et al. (2024) shows that these two levers must work together.
- (d). Use business groups and civic groups to strengthen community norms, taking advantage of the strong norm effects shown by Hallsworth et al. (2017), Timothy (2024), and Buzohera (2025).
- (e). Work on making governance better by making it more open and consistent in how it enforces rules to deal with the procedural and retributive fairness issues that Daniel et al. (2016) and Wenzel (2002) talked about.

The Slippery Slope Framework posits that the most enduring long-term compliance outcomes occur when enforcement capacity and taxpayer trust evolve simultaneously (Kirchler et al., 2008). In North Central Nigeria, where both are currently limited, a reform agenda that prioritizes trust-building through fairness and visible service delivery while gradually strengthening administrative capacity offers the most sustainable path forward.

### D. Restrictions

It is imperative to recognize various limitations of this review. First, most of the studies cited use cross-sectional survey designs, which can show associations between factors and compliance but can't determine the direction of the link. Longitudinal and experimental methodologies are requisite to substantiate causal assertions with enhanced certainty. Second, self-reported compliance metrics, common in this literature, are vulnerable to social desirability bias, suggesting that respondents may exaggerate their compliance when completing surveys. Third, the geographic and institutional diversity of the included studies results in heterogeneity that limits direct comparisons across studies. Fourth, the narrative methodology, though suitable for integrating diverse literature, precludes the quantitative synthesis achievable through formal meta-analysis.

## V. CONCLUSION

This review has examined the theoretical and empirical evidence regarding five factors influencing MSME tax compliance in North Central Nigeria: attitudes toward taxation, social norms, tax

knowledge, perceived fairness, and benefits received. The evidence is consistent across contexts and theoretical frameworks: sustainable voluntary compliance necessitates concurrent focus on all five dimensions. Every determinant has shown a positive, independent effect on compliance in relevant contexts, and the integrated theoretical framework developed in this review clarifies how these determinants interact. In the context of North Central Nigeria, the evidence is unequivocal on one aspect: perceived fairness is the fundamental determinant. Uyagu et al. (2025) identified it as the strongest predictor of voluntary compliance in the zone ( $p = 0.000$ ), and Appiah et al. (2024) demonstrated that it mediates the effect of tax knowledge on compliance, indicating that investments in taxpayer education are most effective when accompanied by genuine improvements in administrative equity and transparency. Structural evidence spanning a decade from Atawodi and Ojeka (2012) to Uyagu et al. (2025) substantiates that low compliance in the region is both persistent and multifactorial. The review unequivocally advocates a comprehensive empirical study that simultaneously examines all five determinants in North Central Nigeria, employing validated measurement tools, a representative regional sample, and analytical techniques capable of estimating both direct effects and interaction pathways. This study would address the three deficiencies highlighted in this review: the lack of multi-determinant research in the region, the insufficient contextual specificity of current studies, and the need for evidence generated during the ongoing period of institutional reform. The 2025 National Tax Reforms are now being implemented across all of the region's states. This research is not only timely but also necessary to ensure that reform design and revenue authority practices are based on strong, region-specific evidence.

## REFERENCES

- Agbetunde, L. A., Akinrinola, O. O., & Odinakachi, I. (2020). A survey of religiosity, tax morale, and compliance among micro, small, and medium-scale enterprises in Nigeria. *Journal of Taxation and Economic Development*, 19(1), 35–49.
- Agbetunde, L. A., Raimi, L., & Akinrinola, O. O. (2022). Moderating influence of religiosity on the causality between taxpaying attitudes and tax compliance behaviour of entrepreneurial firms in Nigeria. *International Journal of Ethics and Systems*, 38(3), 402–425. <https://doi.org/10.1108/IJOES-03-2021-0056>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Alabi, A. O., Atanda, F. A., Akintoye, I. R., & Kajola, S. G. (2024). Tax morale and taxpayers' compliance among SMEs in Nigeria. *Journal of Management World*, 2(1), 68–78.
- Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of Public Economics*, 1(3–4), 323–338. [https://doi.org/10.1016/0047-2727\(72\)90010-2](https://doi.org/10.1016/0047-2727(72)90010-2)
- Alm, J., & Kasper, M. (2023). *Rethinking tax compliance: A behavioral economic perspective* (International Center for Public Policy Working Paper 23-02). Georgia State University.
- Alm, J., & Torgler, B. (2011). Do ethics matter? Tax compliance and morality. *Journal of Business Ethics*, 101(4), 635–651. <https://doi.org/10.1007/s10551-011-0761-9>
- Appiah, T., Domeher, D., & Agana, J. A. (2024). Tax knowledge, trust in government, and voluntary tax compliance: Insights from an emerging economy. *SAGE Open*, 14(2), 1–13. <https://doi.org/10.1177/21582440241234757>

- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471–499. <https://doi.org/10.1348/014466601164939>
- Atawodi, O. W., & Ojeka, S. A. (2012). Factors that affect tax compliance among small and medium enterprises (SMEs) in North Central Nigeria. *International Journal of Business and Management*, 7(12), 87–96. <https://doi.org/10.5539/ijbm.v7n12p87>
- Bani-Khalid, T., Alshira'h, A. F., & Alshirah, M. H. (2022). The effect of attitudes, subjective norms, and perceived behavioural control on SMEs' tax compliance: Evidence from Jordan. *Journal of Applied Accounting Research*, 23(4), 756–774. <https://doi.org/10.1108/JAAR-06-2021-0163>
- Blau, P. M. (1964). *Exchange and power in social life*. John Wiley & Sons.
- Buzohera, M. I. (2025). The dynamics of tax compliance: How attitudes, social influence, and peer effects shape SMEs' compliance behavior in Tanzania. *Journal of Tax Reform*, 11(1), 200–220.
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58(6), 1015–1026. <https://doi.org/10.1037/0022-3514.58.6.1015>
- Daniel, A., Akowe, A., & Awaje, A. (2016). Tax compliance behaviour of small scale enterprises in Bassa Local Government Area of Kogi State. *Journal of Good Governance and Sustainable Development in Africa*, 3(1), 58–78.
- Darmayasa, I. N., & Hardika, A. L. (2024). Core tax administration system: The power and trust dimensions of slippery slope framework tax compliance model. *Cogent Business & Management*, 11(1), Article 2337358. <https://doi.org/10.1080/23311975.2024.2337358>
- Eragbhe, E., & Modugu, K. P. (2014). Tax compliance costs of small and medium scale enterprises in Nigeria. *International Journal of Accounting and Taxation*, 2(1), 63–87.
- Fauziati, P., Minovia, A. F., Muslim, R. Y., & Nasrah, R. (2020). The impact of tax knowledge on tax compliance: A case study in Kota Padang, Indonesia. *Journal of Advanced Research in Business and Management Studies*, 2(1), 22–30.
- 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. <https://doi.org/10.1111/j.1467-9930.2007.00248.x>
- Hallsworth, M., List, J. A., Metcalfe, R. D., & Vlaev, I. (2017). The behavioralist as tax collector: Using natural field experiments to enhance tax compliance. *Journal of Public Economics*, 148, 14–31. <https://doi.org/10.1016/j.jpubeco.2017.02.003>
- Horodnic, I. A. (2018). Tax morale and institutional theory: A systematic review. *International Journal of Sociology and Social Policy*, 38(9/10), 868–886. <https://doi.org/10.1108/IJSSP-03-2018-0039>
- Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The “slippery slope” framework. *Journal of Economic Psychology*, 29(2), 210–225. <https://doi.org/10.1016/j.joep.2007.05.004>
- Koumpias, A. M., & Martinez-Vazquez, J. (2023). Tax morale: A systematic review and meta-analysis. *World Development*, 162, 106125. <https://doi.org/10.1016/j.worlddev.2022.106125>
- Mokopasetso, M., Modisaotsile, B. M., & Oladokun, T. T. (2025). Tax literacy, service delivery quality and SME tax compliance in Botswana. *Journal of Accounting in Emerging Economies*, 15(1), 112–132.

- Musimenta, D., Nkundabanyanga, S. K., Muhwezi, M., Akankunda, B., & Nalukenge, I. (2017). Tax compliance of small and medium enterprises: A developing country perspective. *Journal of Financial Regulation and Compliance*, 25(2), 149–175. <https://doi.org/10.1108/JFRC-06-2016-0047>
- National Bureau of Statistics & Small and Medium Enterprises Development Agency of Nigeria. (2021). *National survey of micro, small and medium enterprises (MSMEs) 2020*. National Bureau of Statistics.
- National Bureau of Statistics. (2024). *Internally generated revenue at state level (Q4 2023)*. <https://nigerianstat.gov.ng/elibrary/read/124530>
- Oladipupo, A. O., & Obazee, U. (2016). Tax knowledge, penalties and tax compliance in small and medium scale enterprises in Nigeria. *iBusiness*, 8(1), 1–9. <https://doi.org/10.4236/ib.2016.81001>
- Oluka, L., Chiwawa, H., & Kader, A. (2021). Tax compliance among small businesses in South Africa. *Journal of Accounting and Management*, 11(2), 1–16.
- Sadress, N., Bananuka, J., Orobia, L., & Opiso, J. (2019). Antecedents of tax compliance of small business enterprises: A developing country perspective. *International Journal of Law and Management*, 61(1), 24–44. <https://doi.org/10.1108/IJLMA-10-2017-0240>
- Scott, W. R. (2008). *Institutions and organizations: Ideas and interests* (3rd ed.). Sage Publications.
- Timothy, K. (2024). The effect of social norms on value added tax compliance among small and medium enterprises in Embu Town. *Journal of Finance and Accounting*, 4(4), 11–20.
- Twum, K. K., Amaniampong, M. K., Assabil, E. N., Adombire, M. A., Edisi, D., & Akuetteh, C. (2020). Tax knowledge and tax compliance of small and medium enterprises in Ghana. *South East Asia Journal of Contemporary Business, Economics and Law*, 21(5), 222–231.
- Uyagu, B. D., Ibrahim, A., Ajayi, T. O., & Ibrahim, K. M. (2025). Determinants of voluntary tax compliance among small and medium scale enterprises (SMEs) in North Central of Nigeria. *Zenodo*. <https://doi.org/10.5281/zenodo.17848373>
- Vincent, O. (2021). Assessing SMEs tax non-compliance behaviour in Sub-Saharan Africa (SSA): An insight from Nigeria. *Cogent Business & Management*, 8(1), Article 1938930. <https://doi.org/10.1080/23311975.2021.1938930>
- Wenzel, M. (2002). The impact of outcome orientation and justice concerns on tax compliance: The role of taxpayers' identity. *Journal of Applied Psychology*, 87(4), 629–645. <https://doi.org/10.1037/0021-9010.87.4.629>