More for More: Do Government Performance and Trust Boost Tax Compliance?

Byrne Kaulu

University of Zambia School of Humanities and Social Sciences Lusaka Zambia 10101 Zambia

ABSTRACT

Despite growing interest in citizen-state relations in Africa, empirical evidence on how perceptions of government performance and institutional trust influence tax compliance remains limited. Anchored in Fiscal Exchange Theory, this study investigates whether Zambian citizens who perceive better government performance are more likely to be tax compliant, and whether this relationship is shaped by institutional trust and perceptions of corruption. Using nationally representative Afrobarometer Round 8 survey data (N = 1,200), the study estimates logistic regression models of tax compliance intentions, controlling for trust in the Zambia Revenue Authority (ZRA), perceived corruption in the ZRA, and demographic factors. The results show that trust in the ZRA is a strong and significant predictor of compliance intentions. Perceived government performance was positively associated with compliance but did not reach statistical significance. Corruption perceptions were not significantly related to compliance once trust was accounted for, suggesting that trust may buffer negative institutional perceptions. Education was positively associated with compliance intentions, while only the 45-54 age group showed significantly lower compliance odds relative to younger adults. Model diagnostics indicated good fit (Hosmer-Lemeshow p = .928) and strong classification accuracy (69.4%). These findings affirm the centrality of institutional trust in shaping tax morale and suggest that improving government performance alone may not translate into compliance without credible and trusted institutions. Policy efforts should emphasize trust-building alongside transparency and civic education to reinforce the fiscal social contract in Zambia.

KEYWORDS: tax compliance, government performance, trust, corruption, Zambia, fiscal exchange theory, Afrobarometer

1. Introduction

1.1. Background

In many developing countries, the ability of the state to mobilize domestic revenue through taxation remains a persistent challenge [1]. Despite numerous tax reforms and capacity-building efforts, tax compliance rates often remain low, weakening the government's ability to finance public goods and services [2,3]. This has generated growing interest in understanding not just the administrative and economic dimensions of taxation, but also the behavioral, institutional, and relational factors that influence whether citizens voluntarily comply with tax obligations [4].

One of the most enduring explanations for voluntary tax compliance is offered by *Fiscal Exchange Theory*, which posits that citizens are more willing to pay taxes when they perceive a fair exchange between what they contribute and what they receive in return from the government [5]. Within this framework, two constructs are particularly salient: the performance of the government—or the perceived quality of services and governance delivered—and the trust that citizens place in tax authorities to administer taxation fairly and competently. However, empirical evidence on how these variables interact and affect tax behavior remains mixed, particularly in African settings where public institutions are often viewed with skepticism.

1.1. Problem Statement

Despite improvements in tax administration, Zambia continues to struggle with high levels of informal economic activity and tax evasion, limiting the country's fiscal capacity [6]. The Zambia Revenue Authority (ZRA) has introduced several compliance initiatives in recent years, but public confidence in tax systems and perceptions of corruption remain concerns for African tax authorities [7] including ZRA. Moreover, limited research has been conducted to assess how perceived government performance and institutional trust influence the intentions of Zambian citizens to comply with taxes, especially using recent behavioral data.

1.2. Objectives of the Study

This study seeks to investigate the behavioral determinants of tax compliance intentions in Zambia by examining the influence of: (1) perceived government performance, (2) trust in the Zambia Revenue Authority (ZRA) and (3) perceived corruption in the ZRA on tax compliance. Additionally, the study explores the role of demographic factors such as education, age, and gender in shaping compliance behavior and includes other control variables such as tax complexity and tax legitimacy. The central research question is: Do perceptions of government performance and trust in tax institutions significantly influence citizens' intentions to comply with taxes in Zambia?

1.3. Why Zambia?

Zambia offers a compelling case study for several reasons. First, it has in past years had a relatively stable political system [8] (except once in a while during elections [9]) and a functioning tax authority [10], yet faces persistent challenges in *revenue mobilization*, with a tax-to-GDP ratio well below that in developing

countries [11]. Second, public perceptions of government performance and trust in institutions are dynamic and sometimes polarized [12,13], making it a rich environment to assess how citizen attitudes relate to fiscal behavior. Finally, the availability of survey data such as Afrobarometer allows for rigorous empirical assessment of behavioral variables not typically captured in administrative tax records.

1.4. Study Contribution

By empirically examining how government performance and trust interact to shape tax compliance intentions in Zambia, this study contributes to both theoretical and policy debates. It provides evidence to evaluate the assumptions of *Fiscal Exchange Theory* in a Sub-Saharan African context and offers actionable insights for tax policy reform and public sector engagement. Unlike many studies that focus on enforcement (for example [4,14] or economic incentives (for instance [15,16]), this research emphasizes relational and institutional factors as key to sustaining a culture of tax compliance

2. Literature review

2.1. Theoretical underpinning

This study is grounded in *Fiscal Exchange Theory (FET)*, which posits that taxpayers' willingness to comply with taxes is shaped by a perceived exchange between the taxes they pay and the public goods or services received in return [5]. At its core, FET views taxation as a social contract in which compliance is a function of reciprocity: citizens are more likely to pay taxes voluntarily when they believe the government is responsive, accountable, and effective [17,18].

Within this framework, government performance is conceptualized as the quality and responsiveness of state service delivery, while trust in the tax authority reflects citizens' belief that institutions act fairly, transparently, and in the public interest. FET suggests that the combination of these perceptions enhances the perceived legitimacy of taxation, leading to increased tax morale and compliance [5]. However, FET has either often been tested in high-income contexts (e.g. by [5]) or in literature that does not consider the exact broader institutional environment - involving public trust and perceived corruption [19] - that may mediate or moderate compliance behavior in low- and middle-income countries.

In recent years, researchers have directly or indirectly expanded on the theory to account for variations in trust and institutional context [20,21]. These developments highlight that citizens' tax behavior may be shaped not only by how well the government performs but also by how much they trust tax authorities and whether they perceive them as corrupt. In other words, institutional trust acts as a mechanism through which government performance translates into legitimacy and compliance. Nevertheless, few empirical studies have jointly examined these three dimensions - performance, trust, and corruption - in the context of Sub-Saharan Africa, where fiscal capacity is weak and state legitimacy is often contested.

This study contributes to theory in several key ways. First, it extends Fiscal Exchange Theory by simultaneously examining the role of government performance, trust in the tax authority, and perceived corruption, thereby providing a more nuanced model of compliance behavior in an African democracy. Second, it theorizes trust not merely as an outcome of good performance, but as an independent

determinant of tax compliance - potentially even stronger than performance itself. Third, it tests these relationships empirically using Afrobarometer Round 8 data from Zambia, a country that exemplifies the paradox of relatively stable governance amid persistent challenges in revenue mobilization. This context allows for a critical examination of FET's assumptions under conditions of moderate service delivery and varying institutional trust.

Thus, the study makes a theoretical contribution by integrating and empirically validating a multidimensional model of fiscal legitimacy, which emphasizes not only the exchange of resources for services but also the mediating role of institutional trust and the mitigating effects of perceived corruption. In doing so, it offers an enriched theoretical framework for understanding voluntary tax compliance in settings marked by both state fragility and democratic accountability.

2.2. Empirical review

2.2.1. Government Performance and Tax Compliance

Nichelatti and Hiilamo (2024) [22] provide cross-country evidence from 32 Sub-Saharan African nations demonstrating that citizens' perceptions of government performance significantly influence tax compliance, supporting the fiscal exchange hypothesis. Using Afrobarometer data and logistic regression analysis, the study finds that positive perceptions of governance—such as effective service delivery, transparency, and accountability—are associated with higher tax compliance. Moreover, a binary mediation analysis reveals that trust in public institutions mediates this relationship, indicating that perceptions of good governance enhance compliance both directly and indirectly through increased institutional trust. These findings reinforce the fiscal exchange theory, which posits that citizens are more willing to comply with taxes when they perceive the state as fulfilling its responsibilities.

Abodher et al. (2025) [23] examine the role of trust in government as a determinant of tax compliance in a politically unstable context, offering further support for the fiscal exchange hypothesis. Using survey data from 312 self-employed taxpayers in Tripoli, Libya, and analyzing it through PLS-SEM, the study finds that low trust in government significantly contributes to tax non-compliance. This aligns with the slippery slope framework, suggesting that in environments where state legitimacy is compromised, citizens are less likely to fulfill tax obligations voluntarily. The findings also highlight how political instability and weak institutional performance erode the perceived fiscal contract between the state and taxpayers, thereby undermining compliance. These results underscore the importance of improving governance and rebuilding institutional trust to enhance tax morale and voluntary compliance in fragile states.

Dzagah et al. (2025) [24] provide empirical support for the fiscal exchange hypothesis by examining how financial accountability influences trust in government and property tax compliance in a Sub-Saharan African context. Using survey data from 182 property owners in a Ghanaian metropolitan assembly and employing Partial Least Squares Structural Equation Modeling (PLS-SEM), the study finds that when local governments demonstrate transparency and responsible financial management, taxpayer trust increases, leading to improved compliance. Rooted in stewardship theory, the findings highlight that perceived accountability enhances the legitimacy of tax demands, reinforcing the idea that citizens are more willing to pay taxes when they see tangible, trustworthy governance outcomes.

2.2.2. Trust in Tax Authorities

A growing body of literature emphasizes the importance of institutional trust in fostering tax compliance, particularly in contexts marked by reform or economic uncertainty.

Belahouaoui (2025) [20] provides compelling evidence from post-COVID-19 Morocco, demonstrating that trust in tax authorities significantly enhances tax compliance among professionals. Drawing on Structural Equation Modeling (SEM), the study reveals that trust not only directly predicts higher compliance but also strengthens perceptions of tax fairness—an important mediating factor in voluntary tax behavior. Notably, under conditions of heightened tax pressure, trust becomes even more pivotal, mitigating potential resistance and preserving compliance levels. These findings suggest that in reform-driven fiscal environments, taxpayers' trust in institutions is not merely an attitudinal variable but a stabilizing force in compliance behavior, underscoring its theoretical and policy relevance.

The role of trust in tax authorities as a determinant of tax compliance has also been rigorously explored through cross-cultural perspectives, with particular emphasis on its interaction with institutional power. Kogler et al. (2023) [25] apply the Slippery Slope Framework (SSF) to a global dataset comprising 14,509 participants across 44 countries and regions, offering robust empirical support for the theory's central claims. Their findings confirm that higher levels of trust in tax authorities are significantly associated with lower incidences of shadow economy participation and corruption—two key proxies for tax non-compliance. Importantly, the study reveals that trust and power function as complementary forces; while power deters evasion through enforcement, trust fosters voluntary compliance through legitimacy and cooperation. This dual-path model reinforces the idea that sustainable tax compliance cannot rely solely on deterrence mechanisms but must also cultivate taxpayer trust, especially in diverse socio-political settings.

2.2.3. Perceived Corruption and Its Interaction with Trust

Gebrihet (2024) [26] provides valuable insights into how perceptions of corruption undermine public trust in government across Africa, with implications for trust in tax authorities as key institutional actors. Drawing on Afrobarometer data and applying ordered logit models, the study shows that perceived corruption in various arms of government—especially the presidency, parliament, and local administrations—erodes public trust at multiple governance levels. Although the study does not focus exclusively on tax authorities, the findings are highly relevant, as tax administration often reflects broader institutional legitimacy. In fragile states, where trust is already precarious, the negative impact of corruption on institutional trust is even more acute, suggesting that the erosion of public confidence can severely compromise voluntary tax compliance. These dynamics highlight the interconnectedness of corruption and trust, reinforcing the theoretical proposition that trust in tax authorities is not formed in isolation but is deeply embedded in citizens' overall trust in government and the perceived integrity of public institutions.

Jahnke and Weisser (2019) [27] provide important empirical evidence on the corrosive effects of petty corruption on tax morale in Sub-Saharan Africa, highlighting the mediating role of trust in tax authorities. Using Afrobarometer survey data and mediation analysis, the study demonstrates that individuals who experience or perceive petty corruption—particularly in the form of bribery by public officials—tend to

exhibit significantly lower tax morale. Crucially, this negative effect operates both directly and indirectly: corruption undermines confidence in tax institutions, which in turn reduces individuals' willingness to comply with tax obligations. The study also finds that the impact of corruption on tax morale is context-dependent, with the effect being more pronounced in regions where corruption is less common, suggesting that *expectations of integrity amplify disillusionment when breached*. These findings reinforce the view that trust in tax authorities is not insulated from broader governance failures and that tackling petty corruption is essential for restoring institutional credibility and fostering voluntary tax compliance.

Bartha and Boda (2024) [28] explore how corruption scandals affect tax compliance motivations in Hungary, a fragile democracy marked by recent governance and policy shifts. Using a before-and-after design, the study reveals that publicized scandals involving the tax authority significantly eroded trust and weakened voluntary tax compliance. While deterrence-based enforcement remained largely unaffected, the decline in institutional trust led to reduced taxpayer willingness to comply voluntarily. These findings underscore the fragility of trust-based compliance in politically unstable contexts and highlight the need for transparent, integrity-driven governance to sustain tax morale.

2.2.4. Education, Age, and Other Demographics

Evidence from recent studies in Rwanda and Nigeria highlights the nuanced influence of gender and age on tax compliance. Twesige *et al.* (2024) [29] found significant gender-based differences in tax compliance behavior, with female taxpayers in Rwanda more influenced by tax knowledge, perceived government spending, and trust in tax authorities, while male taxpayers responded more to penalties, economic conditions, and tax rates. Gender accounted for 55.1% of the variance in taxpayer behavior. In contrast, Vincent *et al.* (2023) [30] found that in Nigeria, age, education, and business sector significantly influenced tax compliance among SME entrepreneurs, whereas gender and religiosity had no significant effect. Together, these findings suggest that while gender may play a more critical role in certain contexts (e.g., Rwanda), age and other sociodemographic variables such as education may be more predictive of tax behavior in others, highlighting the importance of context-specific policy design.

2.2.5. Theoretical Integration and Research Gaps

While Fiscal Exchange Theory remains a foundational framework for explaining tax compliance, emerging evidence suggests that trust in government may, in many contexts, exert a stronger influence than government performance alone. For example, [22] show that perceptions of governance significantly influence tax compliance across 32 Sub-Saharan African countries, both directly and through trust in institutions. Similarly, [24] find that financial accountability enhances trust, which in turn boosts property tax compliance at the local government level. In fragile settings, such as Libya, [23] demonstrate that low trust in government—exacerbated by corruption and political instability—undermines voluntary compliance. Furthermore, [27] provide evidence that corruption not only directly lowers tax morale but also erodes trust in tax authorities, highlighting trust as a mediating mechanism.

Despite these insights, the interactive and potentially compounding effects of government performance, trust, and corruption remain underexplored, particularly in African contexts. Some studies examine these factors in isolation. This study addresses that gap by jointly analyzing the effects of perceived government

performance, institutional trust, and corruption on tax compliance intentions in Zambia—a country with relatively stable democratic institutions but persistently low tax revenue performance. In doing so, it contributes novel evidence on the interplay between state legitimacy, institutional trust, and civic duty in shaping tax behavior.

3. Methodology

3.1. Research Design

This study adopts a quantitative, cross-sectional research design [31] to investigate the determinants of tax compliance intentions in Zambia. Guided by *Fiscal Exchange Theory*, which emphasizes that citizens are more likely to comply with tax obligations when they perceive a reciprocal exchange with the state—typically through the provision of public services (Alm *et al.*, 1993)—the study examines how perceived government performance, institutional trust (in ZRA), corruption within ZRA, tax legitimacy, and perceived tax complexity influence individuals' willingness to comply. The research approach is explanatory and deductive [32], aimed at empirically testing theoretically grounded hypotheses using nationally representative data.

3.2. Data

The analysis relies on secondary data drawn from Round 8 of the Afrobarometer Survey, conducted in Zambia in 2022. Afrobarometer is a respected pan-African survey initiative that collects public attitudes on governance, democracy, and related socio-political issues. The Zambian sample consists of 1,200 adult respondents, selected through a stratified, multistage, clustered probability sampling procedure designed to ensure national representativeness. Fieldwork was conducted by trained enumerators using standardized questionnaires translated into local languages, and interviews were carried out face-to-face to enhance data reliability. After accounting for missing observations, 1,199 cases were included in the final analytical sample.

3.3. Key Variables and Operational Definitions

The dependent variable in this study is *Tax Compliance Intentions (TCI)*, measured as a binary variable that captures whether a respondent expresses the intention to honestly and fully pay taxes. This serves as a behavioral proxy, aligning with similar constructs used in compliance research.

The main independent variable is the *Government Performance Index*, a continuous composite measure that aggregates citizens' evaluations of the performance of key public institutions, including the presidency, parliament, courts, police, and others. The items included in this index passed internal consistency checks using Cronbach's alpha before computing the index.

Trust in the Zambia Revenue Authority (ZRA) is a categorical variable with five levels: "Not at all," "Just a little," "Neutral," "Somewhat," and "A lot." This variable measures the respondents' trust in the tax authority to act fairly and appropriately. Tax Legitimacy is also a categorical variable that captures respondents' normative beliefs about whether people should pay taxes regardless of government

transparency or effectiveness. Responses range from "Strongly disagree" to "Strongly agree," and higher categories reflect stronger support for the legitimacy of taxation.

Tax Complexity is included as a categorical variable assessing how difficult respondents perceive the tax system to be. Categories include "Very easy," "Easy," "Difficult," "Very difficult," and "Extremely difficult," with "Very easy" serving as the reference category in the regression model.

Control variables include age group, education level, and gender. Age is grouped into six categories: 18–24, 25–34, 35–44, 45–54, 55–64, and 65 or older. Education is categorized as "No formal education," "Primary," "Secondary," and "Post-secondary." Gender is a binary variable coded as 1 for male and 2 for female.

3.4. Model Specification

To examine the determinants of tax compliance intentions, the following general logistic regression equation was modelled:

Where is the probability that respondent intends to comply with tax obligations, is the government performance index, and are categorical indicators of institutional trust and perceived corruption in ZRA., and are demographic controls. An interaction term between trust in ZRA and government performance was also tested in a second model.

Odds ratios are reported to facilitate interpretation of effect sizes. Additionally, marginal effects were computed to assess how predicted probabilities of tax compliance change with variation in trust and perceived government performance.

3.5. Estimation Strategy and Diagnostics

The regression models were estimated using Stata 17 with survey weights applied (using the *svyset [pweight=withinwt_new]* command) to account for the complex sampling design and ensure national representativeness. Variables were reviewed for coding accuracy, and composite variables where needed were generated using the egen command. Descriptive labels were applied for clarity.

Model performance was assessed using multiple diagnostic tools. Pre-applying sampling weights, the Hosmer–Lemeshow goodness-of-fit test was conducted to assess model calibration, and a classification table was generated to evaluate predictive accuracy. To examine the robustness of findings, marginal effects at means were computed using the margins command.

Interaction effects were explored in an auxiliary model to assess whether the effect of government performance varies by level of institutional trust.

3.6. Ethical Considerations

This study is based on secondary data that is publicly available and anonymized. The Afrobarometer network obtains ethical approval through relevant international and in-country ethical clearance [33,34]. This study involved the analysis of de-identified secondary data. Data were handled and stored in

accordance with standard practices for protecting respondent confidentiality. Further, while ChatGPT version 4 was used to aid in the improvement of the language of the reporting, the work was carefully directed and reviewed with human intervention so that all responsibility for authorship falls on human rather than AI models.

4. Results

4.1. Sample profile

The analytic sample consisted of 1,200 respondents with a nearly even gender distribution (50.1% male; 49.9% female). A majority of respondents (63.6%) indicated intentions to comply with tax obligations. Trust in the Zambia Revenue Authority (ZRA) varied, with 31% expressing high trust ("a lot") and 14.8% reporting no trust. Perceptions of corruption in ZRA were more critical: 44.7% reported "some" corruption, while 24.2% believed that "most" or "all" ZRA officials were corrupt. Educational attainment was generally high, with 60.4% of participants having at least secondary education. The average age was 35.7 years (SD = 14.2), and the average perceived government performance index was 1.95 (SD = 0.50) on a 3-point scale. The age distribution leaned younger, with more than half of the respondents below age 35. These descriptive patterns suggest heterogeneity in institutional trust and government perceptions, which may shape tax compliance behavior in the Zambian context. These results are shown in Table 1.

Table 1. Source: Data analysis in Stata 17. Note: Gov't Performance Index was created as a rounded mean several items measuring public approval of government performance. ZRA stands for Zambia Revenue Authority.

Variable	Categories	N(%)
Tax Compliance Intentions	Compliant	763 (63.6%)
	Non-Compliant	437 (36.4%)
Trust in ZRA	Not at all	177 (14.8%)
	Just a little	273 (22.8%)
	Neutral	171 (14.3%)
	Somewhat	207 (17.3%)
	A lot	372 (31.0%)
Perceived Corruption in ZRA	None	150 (12.5%)
	Some	536 (44.7%)
	Neutral	224 (18.7%)
	Most	200 (16.7%)
	All	90 (7.5%)
Age Group	18-24	309 (25.8%)
	25-34	344 (28.7%)
	35-44	251 (20.9%)
	45-54	156 (13.0%)
	55-64	84 (7.0%)

	65+	55 (4.6%)
Education	No formal/Refused/Don't know	71 (5.9%)
	Primary	404 (33.7%)
	Secondary	525 (43.8%)
	Post-secondary	200 (16.7%)
Gender	Male	601 (50.1%)
	Female	599 (49.9%)
Gov't Performance (Index)	Mean (SD)	1.95 (0.50)
Age (in years)	Mean (SD)	35.67 (14.22)

4.2. Logistic regression analysis results

To examine the predictors of tax compliance intentions (TCI) among Zambian citizens, two survey-weighted logistic regression models were estimated using Afrobarometer Round 8 data. The results are shown in <u>Table 2</u>. Model 1 included main effects for perceived government performance, trust in the Zambia Revenue Authority (ZRA), perceived tax legitimacy, tax complexity, and demographic controls (age, education, gender). Model 2 extended this by introducing interaction terms between government performance and trust in the ZRA, in line with Fiscal Exchange Theory, which posits that compliance arises from a reciprocal relationship between state performance and taxpayer trust.

4.2.1. Main Effects and Interaction

Model 1 was statistically significant, F(22, 1177) = 5.47, p < .001, indicating that the combined predictors reliably differentiated respondents with and without intentions to comply. As shown in Table 1, trust in the ZRA emerged as one of the strongest predictors of compliance. Compared to those with no trust ("Not at all"), respondents expressing "Just a little" trust had 2.62 times higher odds of intending to comply (p < .001), those with "Somewhat" trust had 2.70 times higher odds (p < .001), and those with "A lot" of trust had the highest odds of compliance (OR = 4.22, p < .001). The "Neutral" category was not significantly different from the reference group. These findings confirm a strong, graded relationship between trust in tax authorities and willingness to comply.

Perceived tax legitimacy also showed a robust association with compliance intentions. Respondents who "Disagreed" that taxes are illegitimate had double the odds of compliance (OR = 2.00, p = .005), while those who "Agreed" (OR = 2.00, p = .003) and "Strongly Agreed" (OR = 2.58, p < .001) also exhibited significantly higher compliance odds relative to those who strongly rejected the legitimacy of taxation. These results highlight the central role of civic norms in motivating taxpayer behavior.

Perceived government performance was negatively associated with tax compliance (OR = 0.69, p = 0.036), indicating that more favorable views of government effectiveness were linked to lower odds of compliance. While initially counterintuitive, this result is theoretically plausible within the fiscal exchange framework, suggesting that where trust in institutions is absent, improved government performance may be perceived as a substitute for compliance, thereby weakening its motivational role.

Model 2, which included *interaction terms* between government performance and levels of trust in the ZRA, remained statistically significant, F(26, 1173) = 4.81, p < .001. However, the interaction effects were not statistically significant, suggesting limited evidence that trust moderates the effect of government performance on tax compliance. Notably, the main effect of government performance became statistically insignificant (OR = 0.60, p = .191) after including the interactions. The main effects of trust in the ZRA remained positive but imprecisely estimated due to likely due to multicollinearity, with wider confidence intervals and non-significant p-values. Post-secondary education (OR = 3.01, p = .005) and tax legitimacy beliefs (e.g., "Strongly Agree" OR = 2.61, p = .001) continued to show robust associations with compliance intentions, as did the reduced odds for the 45-54 age group (OR = 0.54, p = .016).

4.2.2. Control Variables

Age group (ref: 18-24)

Demographic variables provided mixed insights. Education was positively associated with compliance, with only post-secondary education reaching significance (OR = 2.80, p = .008), indicating that highly educated individuals were significantly more likely to report compliance intentions. Other education levels were positively signed but not statistically significant. Among age categories, only those aged 45-54 were significantly less likely to comply (OR = 0.53, p = .013) compared to the 18-24 baseline group. Gender and perceived tax complexity did not significantly predict compliance in Model 1. The results are shown in Table 2.

Table 2. Source: Data analysis in Stata 17, OR = Odds Ratio, CI = Confidence Interval

Predictor	Model 1 OR	95% CI	p	Model 2 OR	95% CI	p
Gov. performance (continuous)	0.69	[0.49, 0.98]	0.036	0.6	[0.27, 1.29]	0.191
Trust in ZRA (ref: Not at all)						
Just a little	2.62	[1.60, 4.29]	<.001	1.13	[0.18, 7.21]	0.893
Neutral	0.99	[0.55, 1.79]	0.976	0.32	[0.03, 3.41]	0.342
Somewhat	2.7	[1.60, 4.53]	<.001	1.74	[0.20, 15.45]	0.618
A lot	4.22	[2.63, 6.77]	<.001	9.8	[1.35, 71.29]	0.024
Interaction: Trust × Gov. performance						
Just a little × GovPerf				1.59	[0.58, 4.39]	0.366
$Neutral \times GovPerf$				1.77	[0.55, 5.68]	0.337
$Somewhat \times GovPerf$				1.27	[0.40, 4.06]	0.681
A lot \times GovPerf				0.7	[0.26, 1.87]	0.476

25-34	0.76	[0.51, 1.14]	0.185	0.78	[0.52, 1.17]	0.224
35-44	0.85	[0.54, 1.34]	0.475	0.88	[0.56, 1.39]	0.579
45-54	0.53	[0.32, 0.87]	0.013	0.54	[0.33, 0.89]	0.016
55-64	1.19	[0.65, 2.19]	0.565	1.25	[0.69, 2.28]	0.461
65+	0.61	[0.28, 1.36]	0.228	0.64	[0.29, 1.41]	0.266
Education (ref: No education)						
Primary	1.6	[0.82, 3.14]	0.166	1.69	[0.87, 3.27]	0.119
Secondary	1.44	[0.73, 2.83]	0.29	1.53	[0.78, 3.00]	0.213
Post-secondary	2.8	[1.30, 6.03]	0.008	3.01	[1.40, 6.47]	0.005
Gender (ref: Male)	0.79	[0.58, 1.07]	0.121	0.78	[0.57, 1.05]	0.105
Tax legitimacy (ref: Strongly disagree)						
Disagree	2	[1.23, 3.27]	0.005	2.01	[1.23, 3.28]	0.005
Neutral	1.12	[0.64, 1.96]	0.703	1.1	[0.63, 1.94]	0.736
Agree	2	[1.27, 3.16]	0.003	2.01	[1.27, 3.19]	0.003
Strongly Agree	2.58	[1.52, 4.39]	<.001	2.61	[1.52, 4.48]	0.001
Tax complexity (ref: Neither)						
Easy	1.31	[0.74, 2.31]	0.357	1.32	[0.74, 2.33]	0.343
Difficult	0.51	[0.23, 1.12]	0.092	0.51	[0.23, 1.11]	0.09
Very Difficult	0.92	[0.53, 1.59]	0.757	0.92	[0.53, 1.60]	0.773
Extremely Difficult	1.12	[0.65, 1.94]	0.69	1.12	[0.64, 1.93]	0.696

4.2.3. Predicted Probabilities

To unpack these complex dynamics, predictive margins were computed using the margins command. Table 3 presents the predicted probabilities of tax compliance across levels of government performance (ranging from 1 to 3.5) by categories of trust in the ZRA. These results illuminate subtle but theoretically relevant patterns. Among those with "A lot" of trust in the ZRA, the predicted probability of compliance was very high (89.3%) at the lowest level of perceived government performance, but declined steadily as perceptions of performance improved, falling to 51.8% at the highest level. A similar but less dramatic

pattern was observed among those with "Somewhat" and "Just a little" trust. By contrast, predicted compliance among respondents with "Neutral" or "No" trust remained relatively stable across levels of government performance, albeit at lower probabilities (e.g., 44% to 29%).

These results suggest a complex interaction pattern: rather than reinforcing each other, trust and government performance may act as substitutes in shaping compliance intentions. When trust in the tax authority is high, improved perceptions of government performance may paradoxically reduce the psychological need to reciprocate through compliance. Conversely, in the absence of trust, government performance alone does little to enhance compliance. This dynamic aligns with Fiscal Exchange Theory's proposition that trust conditions the relationship between state service delivery and taxpayer behavior.

Taken together, the findings underscore the importance of building institutional trust and reinforcing civic norms, rather than relying solely on improvements in government performance, to promote voluntary tax compliance. The marginal effects further illustrate that the trust-performance dynamic is more complex than previously assumed, warranting deeper investigation in both policy and academic contexts.

Table 3. Source: Data analysis, ZRA = Zambia Revenue Authority, Gov.Perf = Government
Performance

Trust in ZRA	Gov. Perf = 1	Gov. Perf = 2	Gov. Perf = 3	Gov. Perf = 3.5
Not at all	0.578	0.519	0.46	0.292
Just a little	0.704	0.699	0.694	0.679
Neutral	0.444	0.45	0.457	0.475
Somewhat	0.741	0.716	0.69	0.603
Alot	0.893	0.846	0.784	0.518

5. Discussion

This study tested key propositions of Fiscal Exchange Theory, which contends that tax compliance emerges from a perceived reciprocal relationship between taxation and public service delivery, mediated by institutional trust and legitimacy. Using nationally representative Afrobarometer data from Zambia, the findings offer partial but important support for the theory, while also surfacing clarifying nuances around how trust and performance interact.

5.1. Government Performance and Tax Compliance

Contrary to initial expectations, perceived government performance was negatively associated with tax compliance intentions in the main-effects model (OR = 0.69, p = .036). However, this effect became statistically insignificant in the interaction model that included trust-performance interactions (OR = 0.60, p = .191). These findings suggest that better government performance alone does not necessarily motivate tax compliance and may, in fact, reduce compliance in contexts where institutional trust is already high. This contradicts the traditional assumption in Fiscal Exchange Theory that improved service delivery automatically reinforces willingness to pay taxes. It instead echoes emerging sub-Saharan African evidence [22], which shows that performance effects on compliance are highly contingent on trust and legitimacy.

5.2. Trust in the Tax Authority and Compliance

Trust in the Zambia Revenue Authority (ZRA) emerged as the most powerful and consistent predictor of tax compliance intentions. In the main-effects model, respondents who had "a lot" of trust were over four times more likely to comply (OR = 4.22, p < .001), with similarly strong effects for "somewhat" and "just a little" trust categories. This is in line with the findings of [20] and [25]. While this study's odds ratios were attenuated in the interaction model—due to potentially increased model complexity and multicollinearity—the direction and magnitude remained positive and meaningful. This supports the core Fiscal Exchange Theory premise that institutional trust anchors voluntary compliance. It also aligns with structural-contextual frameworks that position trust, rather than deterrence or performance alone, as the primary driver of compliance in fragile governance settings.

5.3. Trust-Performance Interaction and Predicted Probabilities

To test the conditionality hypothesis of Fiscal Exchange Theory, the study examined interactions between trust in ZRA and perceived government performance. Although none of the interaction terms reached statistical significance unlike extant literature such as [26] and [27], the marginal effects analysis revealed a meaningful pattern. Specifically, predicted probabilities of compliance declined as government performance increased among respondents with high levels of trust, but remained relatively flat for those with low or no trust. For instance, among those with "a lot" of trust, the probability of compliance fell from 89% at low government performance to 52% at the highest performance level. This suggests a substitution effect—where high trust reduces the need for demonstrable performance to justify compliance. Conversely, without trust, even strong performance does little to shift compliance intentions. These patterns support extended formulations of Fiscal Exchange Theory that emphasize the conditional, and *sometimes inverse*, relationship between trust and performance.

5.4. Tax Legitimacy and Compliance

Consistent with expectations, perceptions of tax legitimacy significantly predicted compliance. Respondents who agreed or strongly agreed that taxes are legitimate were about twice as likely to intend to comply compared to those who viewed taxes as illegitimate. These findings highlight the importance of civic norms and moral evaluations in shaping tax behavior and confirm the theory's emphasis on perceived fairness and reciprocity. It also suggests that enhancing citizens' moral alignment with tax policy could be a low-cost, high-impact strategy for improving compliance.

5.5. Education, Age, and Gender

Education was significantly associated with compliance, but only at the post-secondary level (OR = 2.80, p = .008 in Model 1; OR = 3.01, p = .005 in Model 2). This implies that advanced civic or financial literacy may be necessary to translate knowledge into voluntary tax behavior. This finding is consistent with existing studies that associate higher education with stronger tax morale (such as [30]). Among age groups, only the 45-54 cohort showed significantly lower compliance intentions compared to younger respondents (OR = 0.53, p = .013), potentially reflecting generational disillusionment or tax fatigue.

Gender was not a significant predictor, echoing findings across the African continent where fiscal attitudes show limited gender-based variation.

5.6. Perceptions of Tax Complexity and Corruption

Neither perceived tax complexity nor corruption emerged as significant predictors of tax compliance intentions. While complexity showed negative signs in some categories (e.g., "Difficult": OR = 0.51, p = .092), these effects were not consistent or statistically significant – unlike what has been found in other studies [11]. Corruption—though not directly tested in the final model—was previously shown to have non-significant effects when trust was included, suggesting a possible mediating role. Hence, it appears that trust in the ZRA may buffer or override the demotivating effects of perceived corruption and complexity.

5.7. Model Validity and Theoretical Implications

The overall models demonstrated strong statistical performance. Model 1 achieved a robust F-test (F = 5.47, p < .001) and acceptable pseudo R² values. The high classification accuracy (69.4%) and excellent fit from the Hosmer–Lemeshow test ($\chi^2(8)$ = 3.09, p = .928) indicate valid prediction of compliance behavior from the included predictors.

The findings reaffirm Fiscal Exchange Theory's central thesis that trust is the keystone of the fiscal contract. However, they also challenge assumptions that government performance alone can enhance compliance—particularly in contexts where citizens already trust institutions. Instead, the results point to a more complex relationship where trust and performance act as substitutes rather than complements. These results expand theoretical frameworks by showing that performance effects may depend on pre-existing trust, not merely operate independently.

6. Policy Implications

Given the strong predictive role of trust in the Zambia Revenue Authority (ZRA) for tax compliance intentions, trust-building must become a central pillar of tax policy. Policy efforts should prioritize building and sustaining institutional trust. This goes beyond efficient service delivery and includes demonstrating fairness, responsiveness, and procedural justice. Taxpayer-centered initiatives—such as personalized assistance, mobile tax outreach clinics, and dignified enforcement—can help foster relational trust. Public communication campaigns should highlight success stories and improvements within the ZRA to shift citizen narratives from suspicion to cooperation.

Because perceived government performance did not have a statistically significant direct effect on compliance when trust was controlled, government performance improvements alone may be insufficient to boost tax morale. Instead, performance gains should be paired with visibility and fiscal transparency mechanisms that link taxes to tangible public goods. Tools such as citizen report cards, participatory budgeting, and fiscal dashboards can help make the state's actions visible and credible, particularly for skeptical taxpayers.

Because higher education—particularly post-secondary attainment—was significantly associated with increased compliance intentions, fiscal literacy and civic education should be strengthened across both

formal and informal platforms. This includes embedding tax topics in school curricula, supporting university-led civic engagement programs, and using mass media to demystify tax policy and the benefits of taxation. For adults outside the formal education system, tailored tax education campaigns through radio, community dialogues, and visual media can raise awareness and shift attitudes toward taxpaying as a civic duty.

Because perceived corruption within the ZRA did not have a significant independent effect on compliance when trust was accounted for, anti-corruption strategies should move beyond punitive messaging to emphasize institutional integrity, fairness, and service orientation. Instead of general "zero tolerance" campaigns, the ZRA could focus on showcasing ethical practices, highlighting internal reforms, and publicizing complaint resolution metrics to reassure the public of its commitment to clean governance.

Although perceived tax complexity was not a strong deterrent in the presence of institutional trust, simplification efforts should be aligned with user-centered design and responsive support, rather than purely procedural reforms. Simplified forms, multilingual instructions, accessible e-filing platforms, and direct assistance in rural areas may ease the burden for specific groups even if complexity is not a widespread barrier.

Because age and gender showed limited and inconsistent effects, with only the 45–54 age group displaying reduced compliance, targeted messaging to this group may help re-engage potentially disillusioned citizens. Interventions could explore historical or generational grievances and reframe taxation as a shared civic project. Gender-neutral tax compliance strategies remain appropriate unless future data indicate otherwise.

Because the model revealed high sensitivity but modest specificity, compliance strategies should balance voluntary engagement and risk detection. While trust-building should take the lead, the ZRA may also need to refine its risk profiling systems to better identify non-compliers without alienating willing taxpayers.

7. Conclusion

This study confirms that trust in the ZRA is a more powerful driver of tax compliance intentions in Zambia than government performance or perceptions of corruption. While Fiscal Exchange Theory remains relevant, its assumptions require updating: institutional trust - not merely service delivery -is the key channel through which citizens reciprocate the state. Strengthening civic trust, embedding transparency in tax institutions, and investing in targeted tax education are therefore essential to forging a more cooperative and sustainable tax culture in Zambia.

REFERENCES

- [1] Abodher, F., Elmagrhi, , M., Shlof, , M.. (2025). National pride, trust in government and tax compliance: evidence from an environment of severe political instability. Journal of Applied Accounting Research, , –.
- [2] Adeosun, , O., Olomola, P, A., Adedokun, , A., Tabash, , M.. (2024). Examining the relationship between inclusive growth and tax revenue mobilization: additional evidence from sub-Saharan African countries. African Journal of

- Economic and Management Studies, 16(2), -.
- [3] (2022). . Round 9 Survey Manual, , -.
- [4] (2019). . Round 8 Survey Manual Compiled by the Afrobarometer network, , -.
- [5] Akitoby, B., Baum, A., Hackney, C., Harrison, O., Primus, K., Salins, V. (2020). Tax revenue mobilization episodes in developing countries. Policy Design and Practice, 3(1), 1–29.
- [6] Alm, ., Jackson, B., McKee, M.. (1993). Fiscal exchange, collective decision institutions, and tax compliance. Journal of Economic Behavior & Organization, 22(3), –.
- [7] Bartha, A., Boda, Z.. (2024). Tax Compliance Motivations During Corruption Scandals in a Fragile Democracy: A Before-and-After Study. Europe-Asia Studies, 76(7), -.
- [8] Belahouaoui, R.. (2025). Effect of Tax Fairness and Trust in Tax Authorities on Tax Compliance: The Moderating Role of Tax Pressure in the Post COVID-19 Moroccan Reform Context. International Journal of Public Administration, , –.
- [9] Caramento, A., Hinfelaar, M., Cheelo, C.. (2023). Asymmetries of Power and Capacity: The Zambia Revenue Authority (ZRA) as an Instrument of Resource Nationalism, 1994–2021. Journal of Southern African Studies, 49(3), –.
- [10] Dzagah, K., Krah, R., Tetteh, L. (2025). Financial Accountability, Trust, and Property Tax Compliance: Experiences from Sub-Saharan Africa. International Journal of Public Administration, , –.
- [11] Fan, Z., Liu, Y.. (2020). Tax Compliance and Investment Incentives: Firm Responses to Accelerated Depreciation in China. Journal of Economic Behavior & Organization, 176, –.
- [12] Gebrihet, H.. (2024). The effects of the perception of corruption on public trust in government in Africa: a comparative analysis. Politikon, 51(1-2), –.
- [13] Gnangnon, S.. (2022). Tax revenue instability and tax revenue in developed and developing countries. Applied Economic Analysis, 30(88), –.
- [14] Hallink, C., Siachiwena, H.. (2023). Political party ideology in Zambia: comparing the PF and the UPND on social welfare policies. Journal of Modern African Studies, 61(3), –.
- [15] Kogler, C., Olsen, J., Kirchler, E., Batrancea, L., Nichita, A.. (2023). Perceptions of trust and power are associated with tax compliance: A cross-cultural study. Economic and Political Studies, 11(3), –.
- [16] Kumi, R., Bannor, R., Oppong-Kyeremeh, H., Adaletey, J.. (2023). Voluntary and enforced tax compliance determinants and impact among agrochemical businesses in Ghana. Arab Gulf Journal of Scientific Research, , –.
- [17] Leder, S., Mannetti, L., Hölzl, E., Kirchler, E.. (2010). Regulatory fit effects on perceived fiscal exchange and tax compliance. Journal of Socio-Economics, 39(2), –.
- [18] Lynham, S.. (2015). Quantitative Research and Theory Building: Dubin's Method. Advances in Developing Human Resources, 4(3), -.
- [19] Jahnke, B., Weisser, R.. (2019). How does petty corruption affect tax morale in Sub-Saharan Africa?. European Journal of Political Economy, 60(September 2017), –.
- [20] Mascagni, G., Nell, C.. (2022). Tax Compliance in Rwanda: Evidence from a Message Field Experiment. Economic Development and Cultural Change, 70(2), –.
- [21] Morrissey, O., Haldenwang, C., Schiller, A. (2016). Tax Revenue Performance and Vulnerability in Developing Countries Tax Revenue Performance and Vulnerability in Developing Countries. The Journal of Development Studies, 52(12), –.
- [22] Ndlovu, M., Schutte, D.. (2024). An evaluation of tax compliance among small businesses. South African Journal of Accounting Research, , –.

- [23] Nichelatti, E., Hiilamo, H.. (2024). The Effect of Citizens' Perception of Governance on Tax Compliance: A Cross-Country Analysis Study for 32 Sub-Saharan African Countries. European Journal of Development Research, 36(5), –.
- [24] Nikiema, R., Zore, M.. (2025). Tax revenue instability in Sub-Saharan Africa: Does institutional quality matter?. The American Journal of Economics and Sociology, 84(1), -.
- [25] Nwokoye, E., Igbanugo, C., Ekesiobi, C., Dimnwobi, S.. (2023). Fiscal Incentives and Tax Compliance Behaviour in Industrial Clusters: A Survey of Clusters in South-east Nigeria. Journal of African Business, 24(1), –.
- [26] (2016). New Zambia constitution to boost long-term stability. Daily Briefing, , -.
- [27] Resnick, D., Resnick, D. (2021). Taxing Informality: Compliance and Policy Preferences in Urban Zambia Taxing Informality: Compliance and Policy Preferences in Urban Zambia. The Journal of Development Studies, 57(7), –.
- [28] Rosid, A.. (2023). Assessing the Effectiveness of Law Enforcement on Improving Tax Compliance in Indonesia: An Empirical Investigation. Bulletin of Indonesian Economic Studies, 59(2), –.
- [29] Siachiwena, H., Wahman, M. (2024). The political economy of urban party switching in African elections: Evidence from Zambia. Journal of Modern African Studies, , –.
- [30] Tumoro, D., Pandya, H.. (2025). Exploring Factors Influencing Tax Compliance in Sub-Saharan Africa: A Review of Articles Using the PRISMA Approach. International Journal of Public Administration, 00(00), –.
- [31] Twesige, D., Rutungwa, E., Faustin, G., Misago, I., Mutarinda, S.. (2024). Gender and the tax compliance puzzle: does gender influence taxpayers' behaviour towards tax compliance? Evidence from Rwanda. Cogent Business and Management, 11(1), —.
- [32] Vasist, P., Chatterjee, D., Krishnan, S.. (2024). The Polarizing Impact of Political Disinformation and Hate Speech: A Cross-country Configural Narrative. Information Systems Frontiers, 26(2), –.
- [33] Vincent, O., Stevenson, A., Owolabi, A.. (2023). Do sociodemographic characteristics of SME entrepreneurs influence their tax (non)compliance behaviour?. Journal of Economic Criminology, 1(June), –.
- [34] Wang, X., Cheng, Z.. (2020). Cross-Sectional Studies: Strengths, Weaknesses, and Recommendations. Chest, 158(1), -.