

Government spending transparency and tax compliance among informal-sector taxpayers in Tanzania

Asha Ramadhani Jumanne¹

Joseph Kiria²

Juma Buhimila³

¹ashajumanne455@gmail.com

²joseph.kiria@mzumbe.ac.tz

³jbuhimila@mzumbe.ac.tz

¹<https://orcid.org/0009-0004-4591-265X>

²<https://orcid.org/0000-0002-0415-423X>

³<https://orcid.org/0000-0001-5053-6071>

^{1,2,3} Mzumbe University, Tanzania

<https://doi.org/10.51867/ajernet.7.4.49>

ABSTRACT

Tax compliance among informal-sector taxpayers remains a major challenge in Tanzania despite government efforts to broaden the tax base and strengthen domestic revenue mobilisation. Limited visibility of public expenditure, concerns about government accountability, and low trust in government institutions may weaken taxpayers' willingness to comply with tax obligations. Consequently, this study examined the influence of government spending transparency on tax compliance behaviour among informal-sector taxpayers in Tanzania, focusing on visibility of government expenditure, government accountability, and trust in government. Guided by Equity and Fairness Theory, the study employed a mixed-methods cross-sectional design involving 384 informal-sector business operators in Dar es Salaam, Dodoma, and Morogoro. Quantitative data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM), while qualitative data were analysed using directed content analysis. The findings indicate that visibility of government expenditure positively and significantly affects registration compliance willingness ($\beta = 0.457$, $p < 0.001$), income disclosure intention ($\beta = 0.133$, $p = 0.002$), and tax payment readiness ($\beta = 0.111$, $p = 0.018$). Trust in government also positively and significantly affects registration compliance willingness ($\beta = 0.328$, $p < 0.001$), income disclosure intention ($\beta = 0.505$, $p < 0.001$), and tax payment readiness ($\beta = 0.435$, $p < 0.001$). However, government accountability has no statistically significant direct effect on the three dimensions of tax compliance. Qualitative findings further show that visible public expenditure, clear communication, responsible use of public resources, and trust in government institutions shape taxpayers' willingness to comply. Therefore, the study recommends strengthening the visibility of public expenditure, improving accountability and communication mechanisms, and building institutional trust to promote voluntary tax compliance among informal-sector taxpayers in Tanzania.

Keywords: Government Spending Transparency, Government Accountability, Informal Sector, Tax Compliance Behaviour, Trust in Government, Tanzania.

I. INTRODUCTION

Tax compliance remains a critical challenge for tax administrations, particularly in developing countries where large informal sectors, limited administrative capacity, and weak institutional trust constrain domestic revenue mobilisation (Organisation for Economic Co-operation and Development [OECD], 2024; Yamou *et al.*, 2024). Tax compliance involves fulfilling obligations such as registration, reporting, and payment of taxes due (OECD, 2024). Beyond enforcement and administrative measures, taxpayers' compliance decisions may be influenced by their perceptions of government institutions and how public revenues are managed. Government spending transparency is therefore increasingly recognised as an institutional factor that may shape voluntary tax compliance. Evidence from Tanzania indicates that perceptions of government spending, tax transparency, and trust in tax authorities are associated with voluntary compliance (Chindengwike & Kira, 2021; Hemed, 2020). When taxpayers can observe public expenditure, perceive government institutions as accountable, and trust that public resources are responsibly managed, they may develop stronger perceptions of fairness, reciprocity, and legitimacy, encouraging compliance (Asri *et al.*, 2025; Saruji *et al.*, 2019; Ya'u & Saad, 2019).

Government spending transparency refers to the extent to which taxpayers can observe and evaluate how public revenues are allocated and utilised and whether public institutions manage these resources responsibly (Oyewunmi, 2024). This study examines it through visibility of government expenditure, perceived government accountability, and

trust in government. Visibility concerns taxpayers' ability to observe public goods, services, and development projects; accountability reflects whether government institutions are answerable for managing public resources; and trust represents confidence that tax revenues are used fairly, efficiently, and in the public interest (Asri *et al.*, 2025; Chindengwiwe & Kira, 2021). Evidence suggests that these institutional factors can strengthen taxpayers' perceptions of reciprocity and fairness, although trust may influence different aspects of compliance differently (Athanas, 2025; Hemed, 2020; Munguasifiwe *et al.*, 2025).

The relationship between government spending transparency and tax compliance is grounded in Equity and Fairness Theory, which suggests that individuals assess whether their contributions are proportionate to the benefits they receive. In the tax context, taxpayers may therefore evaluate not only their tax burden but also how government manages public resources and provides services in return. Visible expenditure, accountable institutions, and responsible resource management may enhance perceptions of a fair and reciprocal tax relationship, whereas poor expenditure visibility and weak accountability may undermine fairness perceptions and voluntary compliance (Chindengwiwe & Kira, 2021; Munguasifiwe *et al.*, 2025; Rwabunywenge *et al.*, 2024).

This issue is particularly important in Tanzania, where the informal sector accounts for approximately 40% of GDP and provides livelihoods for more than 60% of the population, while contributing disproportionately little to national tax revenue (National Bureau of Statistics [NBS], 2022). Although the Government of Tanzania and the Tanzania Revenue Authority (TRA) have introduced measures such as presumptive taxation, Electronic Fiscal Devices, taxpayer identification systems, digital payments, simplified filing, and taxpayer education, challenges in registration, income reporting, and timely payment persist (Dom *et al.*, 2022; National Audit Office of Tanzania [NAOT], 2025). For informal-sector taxpayers, whose activities depend heavily on public infrastructure and services, perceptions of whether tax revenues generate visible community benefits may be particularly important in shaping compliance.

Against this background, this study examines the influence of government spending transparency on tax compliance behaviour among informal-sector taxpayers in Tanzania. Government spending transparency is measured through visibility of government expenditure, perceived government accountability, and trust in government, while tax compliance behaviour is assessed through registration willingness, income disclosure intention, and tax payment readiness. By examining these dimensions within a single framework, the study seeks to extend existing Tanzanian evidence by determining whether government spending transparency influences different stages of the tax compliance process differently.

1.1 Statement of the Problem

The study addresses an empirical and measurement gap in understanding how government spending transparency influences tax compliance among informal-sector taxpayers in Tanzania. Previous Tanzanian studies have examined institutional trust, tax transparency, government expenditure, public service provision, and accountability, but these factors have largely been investigated separately rather than as an integrated construct. For instance, Munguasifiwe *et al.* (2025) found that trust in government influences taxpayer registration and income declaration but not timely tax payment, while Ferdinand (2026) highlights the roles of trust, institutional fairness, service reciprocity, and administrative conditions among informal-sector traders. However, limited evidence exists on government spending transparency as a multidimensional construct incorporating visibility of government expenditure, perceived government accountability, and trust in government, particularly among informal-sector taxpayers.

A further gap concerns the measurement of tax compliance. Previous studies have often treated compliance as an aggregate outcome, providing limited evidence on whether behaviour factors influence specific compliance decisions differently. This is important because evidence suggests that trust may affect registration and income disclosure differently from tax payment (Munguasifiwe *et al.*, 2025). Similarly, recent evidence emphasises the roles of trust, transparency, accountability, and facilitation in voluntary compliance while recognising differences across compliance obligations (OECD/AUC/ATAF, 2024). Thus, limited evidence exists on how the three dimensions of government spending transparency influence registration willingness, income disclosure intention, and tax payment readiness.

Therefore, the study addresses the limited empirical understanding of whether and how government spending transparency influences different dimensions of tax compliance among informal-sector taxpayers in Tanzania. Guided by Equity and Fairness Theory, the study integrates three dimensions of government spending transparency with three dimensions of tax compliance to provide a more detailed assessment of the relationship between government resource management and taxpayer compliance.

1.1 Research Objective

- i. Examine the influence of visibility of government expenditure on tax compliance behaviour among informal-sector taxpayers in Tanzania.
- ii. Examine the influence of perceived government accountability on tax compliance behaviour among informal-sector taxpayers in Tanzania.

- iii. Examine the influence of trust in government on tax compliance behaviour among informal-sector taxpayers in Tanzania.

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Equity and Fairness Theory

This study is guided by Equity and Fairness Theory, developed by Adams (1965), which posits that individuals are more likely to fulfil their obligations when they perceive a fair relationship between their contributions and the benefits they receive. In taxation, taxpayers assess whether their tax contributions are matched by fair treatment, responsible management of public resources, and appropriate public services. Perceptions of fairness can therefore strengthen the legitimacy of taxation and willingness to comply, while perceived inequity may discourage compliance. Recent evidence indicates that perceptions of tax administration, institutional trust, and government performance are important in shaping taxpayers' compliance decisions (Asri *et al.*, 2025; OECD, 2024; OECD/AUC/ATAF, 2024).

The theory is relevant to this study because taxpayers may use government spending transparency to assess the fairness and reciprocity of their relationship with government. Visibility of government expenditure allows taxpayers to observe public benefits, perceived government accountability indicates responsible management of public resources, and trust in government reflects confidence that tax revenues are used fairly and effectively. When these conditions are perceived positively, taxpayers may develop a stronger willingness to comply. Evidence from Tanzania supports the relevance of transparency, institutional trust, and public service provision to tax compliance (Chindengwike & Kira, 2021; Munguasifiwe *et al.*, 2025; Rwabunywenge *et al.*, 2024). The theory is particularly applicable to informal-sector taxpayers in Tanzania, whose businesses depend on public infrastructure and services. Perceptions that taxes contribute to visible community benefits and are responsibly managed may strengthen the perceived fairness of taxation and encourage registration, income disclosure, and tax payment. Recent Tanzanian evidence further indicates that trust in government and tax authorities is associated with taxpayers' willingness to register and correctly declare income, although its influence may differ across compliance dimensions (Munguasifiwe *et al.*, 2025). Thus, the theory provides the theoretical foundation for examining how visibility of government expenditure, perceived government accountability, and trust in government influence tax compliance behaviour among informal taxpayers in Tanzania.

2.2 Empirical Review

2.2.1 Visibility of Government Expenditure and Tax Compliance Behaviour

Visibility of government expenditure refers to the extent to which taxpayers can observe how public revenues are allocated to public services, infrastructure, and other government programmes. Visible use of public resources may influence tax compliance by enabling taxpayers to recognise tangible benefits associated with taxation and strengthening perceptions of reciprocity between taxpayers and government. Empirical evidence supports a relationship between perceptions of government performance, public benefits, and tax compliance. For example, Rwabunywenge *et al.* (2024) found that public service provision significantly influenced tax compliance through tax morale among taxpayers in Tanzania. Their findings suggest that when taxpayers perceive government services as meaningful and responsive, they may develop stronger motivation to fulfil their tax obligations. However, the study focused on public service provision and tax morale rather than the visibility of government expenditure itself.

Similarly, Vietz and Sjursen (2026) found that communicating the relationship between taxation and public benefits can encourage voluntary tax compliance among taxpayers in Dar es Salaam. This finding highlights the importance of making the benefits associated with taxation understandable and observable to taxpayers. At the broader African level, OECD/AUC/ATAF (2024) emphasised that transparency in the use of public revenues can strengthen taxpayers' understanding of the relationship between taxation and public benefits. Nevertheless, these studies examine related concepts such as service provision, communication of public benefits, and broad transparency rather than taxpayers' perceptions of government expenditure visibility as a distinct construct.

Thus, existing evidence suggests that observable government benefits and public resource use may encourage positive tax attitudes and compliance. However, limited empirical evidence directly examines whether taxpayers' perceptions of visible government expenditure influence specific tax compliance behaviours. In particular, previous studies have rarely distinguished between registration willingness, income disclosure intention, and tax payment readiness. This study addresses this gap by examining the influence of perceived visibility of government expenditure on these three dimensions of tax compliance behaviour among informal-sector taxpayers in Tanzania.

2.2.2 Perceived Government Accountability and Tax Compliance Behaviour

Perceived government accountability refers to taxpayers' perceptions that government institutions are answerable for the collection, allocation, and use of public resources and that public officials can be held responsible for how government revenues are managed. Accountability may encourage tax compliance when taxpayers perceive

that public resources are managed responsibly and that government institutions are answerable for their decisions and actions. Existing evidence indicates that transparency, institutional trust, and accountability-related perceptions are associated with tax compliance. Chindengwiwe and Kira (2021), for example, found that tax transparency and institutional trust were associated with voluntary tax compliance among SMEs in Tanzania. Similarly, Asri et al. (2025) highlighted the importance of institutional trust and government-related factors in shaping taxpayers' compliance behaviour. OECD/AUC/ATAF (2024) also emphasised transparency and accountability in public revenue management as important elements of the relationship between citizens and government. These findings suggest that perceptions of responsible and accountable public institutions may strengthen taxpayers' willingness to fulfil their tax obligations.

However, the existing literature generally examines accountability together with broader concepts such as transparency, institutional trust, public service delivery, or government performance. Consequently, it remains difficult to determine the specific contribution of perceived government accountability to tax compliance behaviour. In addition, most studies use overall measures of tax compliance rather than distinguishing between different compliance obligations. Evidence from Munguasifiwe et al. (2025), for instance, shows that institutional trust influenced tax registration and correct income declaration but did not significantly influence timely tax payment, suggesting that institutional perceptions may have different effects across compliance behaviours. Therefore, a specific empirical gap remains regarding the influence of perceived government accountability on different dimensions of tax compliance among informal-sector taxpayers in Tanzania. This study addresses the gap by examining perceived government accountability as a distinct dimension of government spending transparency and assessing its relationship with tax compliance dimension.

2.2.3 Trust in Government and Tax Compliance Behaviour

Trust in government refers to taxpayers' confidence that government institutions act responsibly, fairly, competently, and in the public interest, particularly in managing public resources. Trust can influence tax compliance because taxpayers contribute resources to government with the expectation that these resources will be managed and used responsibly. Empirical evidence generally supports a relationship between trust and tax compliance. Chindengwiwe and Kira (2021) found that institutional trust was associated with voluntary tax compliance among SMEs in Tanzania. More recent evidence from Munguasifiwe et al. (2025) provides further insight by showing that trust in government significantly influenced tax registration and correct income declaration but did not significantly influence timely tax payment. This finding indicates that the effect of trust may vary according to the specific compliance obligation rather than producing a uniform effect across all forms of tax compliance.

Evidence from the informal sector also supports the importance of relational factors. Ferdinand (2026) found that institutional fairness, trust in tax authorities, respectful treatment, and reciprocity were associated with voluntary compliance among informal-sector traders. This evidence is particularly relevant because it demonstrates the importance of taxpayer–government relationships within the informal sector. However, trust in tax authorities is conceptually different from the present study's focus on trust in government in relation to the management and use of public revenues. Similarly, Asri et al. (2025) identified institutional trust and government-related factors as important influences on compliance behaviour, although trust was examined alongside other institutional determinants.

Overall, the literature establishes the relevance of trust to tax compliance but provides limited evidence on trust specifically linked to government resource management and its effects across different compliance behaviours. In particular, insufficient evidence exists on whether trust in government influences registration willingness, income disclosure intention, and tax payment readiness among informal-sector taxpayers in Tanzania. This study addresses this gap by treating trust in government as a distinct dimension of government spending transparency.

2.2.4 Synthesis of the Empirical Gap

The empirical literature indicates that taxpayers' perceptions of government and public resource management are relevant to tax compliance behaviour, but several gaps remain. Studies on visibility of government expenditure have mainly examined related concepts such as public service provision, government performance, and communication of public benefits, providing limited direct evidence on expenditure visibility. Research on government accountability has generally incorporated it into broader concepts of transparency, institutional trust, or institutional performance, making its independent influence on compliance difficult to establish. Although trust in government has received greater empirical attention, existing findings suggest that its influence may vary across tax obligations, rather than affecting all compliance behaviours uniformly. In addition, much of the existing literature measures tax compliance as an overall or voluntary outcome rather than distinguishing between registration willingness, income disclosure intention, and tax payment readiness. Few studies have examined visibility of government expenditure, perceived government accountability, and trust in government simultaneously within a single framework, particularly among informal-sector taxpayers in Tanzania. Therefore, this study addresses these gaps by examining the three dimensions of government spending transparency separately in relation to the three dimensions of tax compliance behaviour, guided by Equity and Fairness Theory.

III. METHODOLOGY

3.1 Research Design

The study adopted a positivist research philosophy, a deductive approach, and a convergent mixed-methods cross-sectional design. The quantitative component was used to test the hypothesised relationships between government spending transparency and tax compliance behaviour, while the qualitative component provided contextual explanations of taxpayers' perceptions and experiences regarding tax compliance. Quantitative and qualitative data were collected concurrently during the same study period and analysed separately. The findings were subsequently integrated during interpretation to identify areas of convergence and complementarity. The cross-sectional design was appropriate because data were collected at a single point in time, enabling the study to examine the hypothesised relationships based on respondents' perceptions and experiences during the study period (Saunders et al., 2019).

3.2 Study Area

The study was conducted in Dar es Salaam, Dodoma, and Morogoro, purposively selected because of their substantial informal-sector activities and diverse commercial and socioeconomic contexts (NBS, 2022). Four wards were selected from each region, giving a total of 12 study wards to capture taxpayers engaged in diverse informal economic activities.

3.3 Target Population

The target population comprised informal-sector business operators engaged in taxable activities in the selected regions. The quantitative population included street vendors, market traders, motorcycle taxi operators, vehicle and motorcycle repairers, mobile-phone business operators, and auto-spares-parts dealers. These groups were selected because informal-sector operators may face distinctive challenges related to tax registration, income disclosure, and tax payment, which are central to tax compliance behaviour. For the qualitative component, the study also included key stakeholders with relevant knowledge and experience in informal-sector taxation, comprising officials from the Tanzania Revenue Authority (TRA), local government authorities (LGAs), non-governmental organisations (NGOs), and business/trade associations. Their inclusion provided institutional and sector perspectives that complemented the perceptions and experiences reported by informal-sector taxpayers.

3.4 Sampling and Sample Size

A multi-stage sampling technique was used for the quantitative component, as it is appropriate for studies involving geographically dispersed populations and multiple sampling stages (Creswell & Creswell, 2018). The regions and selected business locations were purposively identified, business operators were stratified by business category, and respondents were selected through simple random sampling. The quantitative sample comprised 384 informal-sector taxpayers, distributed as follows: Dar es Salaam 219 (57%), Dodoma 110 (29%), and Morogoro 55 (14%). For the qualitative component, 12 FGDs involving 36 participants and 16 KIIs were conducted using purposive sampling, which is appropriate for selecting information-rich participants with relevant knowledge or experience of the research phenomenon.

3.5 Data Collection Methods and Instruments

The study employed questionnaires, focus group discussions (FGDs), and key informant interviews (KIIs) to collect quantitative and qualitative data. Quantitative data were collected from 384 informal-sector taxpayers using a structured questionnaire with a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree (Creswell & Creswell, 2018). The questionnaire measured government spending transparency and tax compliance behaviour, while the qualitative data were collected through six FGDs involving 36 participants and 16 KIIs with representatives from TRA, LGAs, NGOs, and business/trade associations. The FGDs were guided by a semi-structured discussion guide and explored taxpayers' perceptions and experiences regarding government spending, accountability, trust, and tax compliance, while the KIIs explored institutional and stakeholder perspectives on government expenditure, accountability, trust, taxpayer relations, and tax compliance (Creswell & Poth, 2018). The questionnaire was translated into Kiswahili to facilitate respondents' understanding and ensure the suitability of the instruments to the study context.

3.6 Data Collection Procedures

Before the main data collection, the questionnaire was pilot-tested with 30 informal-sector operators in Majengo, Dodoma. The pilot test assessed the clarity, wording, relevance, and suitability of the questionnaire items, and necessary adjustments were made before the final questionnaire was administered. For the quantitative survey, questionnaires were administered face-to-face to selected the taxpayers. Where appropriate, respondents completed the questionnaires independently, while clarification was provided on procedural matters without influencing their responses. FGDs and KIIs were conducted in Kiswahili using semi-structured discussion guides. Participants were

informed about the purpose of the study, and informed consent was obtained before participation. The qualitative discussions focused on participants' experiences and perceptions and did not require the disclosure of personally identifiable information.

3.7 Measurement of Variables

The study comprised one main independent construct and one dependent construct, each represented by three dimensions. Government spending transparency was the independent construct and was operationalised through: visibility of government expenditure; perceived government accountability; and trust in government. Tax compliance behaviour was the dependent construct and was operationalised through: registration willingness; income disclosure intention; and tax payment readiness. Measurement items were adapted from relevant theoretical and empirical literature and contextualised to the Tanzanian informal-sector taxation environment. The adaptation process was undertaken to ensure that the items were relevant to the study objectives and understandable to the target respondents (Hair et al., 2021).

3.8 Data Analysis

Quantitative data were analysed using descriptive statistics and PLS-SEM in SmartPLS. The measurement model was assessed using indicator loadings, Cronbach's alpha, composite reliability, AVE, and HTMT. The structural model was assessed using VIF, R^2 , Q^2 , SRMR, path coefficients, and significance levels. Bootstrapping with 5,000 resamples was used to test the hypothesised relationships (Hair et al., 2021). Qualitative data were analysed through systematic coding and categorisation of FGD and KII responses. Quantitative and qualitative findings were subsequently integrated to identify convergence and complementarity.

3.9 Ethical Considerations

Ethical standards were observed throughout the study. Participants were informed about the study purpose, voluntary participation, confidentiality, anonymity, and their right to withdraw without penalty. Informed consent was obtained before data collection. Data were securely stored and used solely for academic purposes, and participants' responses were reported without personally identifying information.

IV. FINDINGS & DISCUSSION

4.1 Descriptive Statistics

The study analysed data from 384 informal-sector taxpayers. Table 1 shows that the majority of respondents were male (74.0%), had secondary education (55.7%), were married (55.7%), and operated their businesses on a full-time basis (92.2%). Respondents were aged between 18 and 58 years, with a mean age of 32.28 years. They had worked in the informal sector for an average of 5.16 years.

Table 1
Demographic Characteristics of Respondents (n = 384)

Variable	Category	Frequency	Percentage
Sex	Male	284	74.0
	Female	100	26.0
Education Level	No formal Education	12	3.1
	Primary	71	18.5
	Secondary	214	55.7
	Tertiary	87	22.7
Marital Status	Single	158	41.1
	Married	214	55.7
	Widowed	12	3.1
Employed/Self-employed	Full time	354	92.2
	Part time	30	7.8
Age	Mean=32.28; SD=7.63	384	-
Years in informal sector	Mean=5.16; SD=3.64	384	-

The findings indicate that the respondents were mainly young, self-employed informal-sector operators with moderate educational attainment. This provides a suitable basis for examining perceptions of government spending transparency and tax compliance behaviour. Table 2 presents the business characteristics of the respondents. Street

vendors (25.8%) and motorcycle and vehicle repair operators (25.0%) constituted the largest groups. Most respondents were self-employed (92.7%) and financed their businesses mainly through their own savings (67.7%). More than half of the businesses (57.6%) had operated for between one and five years.

Table 2

Business Characteristics of Respondents (n = 384)

Variable	Category	Frequency	Percentage
Main Types of Business	Street Vendors	99	25.8
	Motorcycle tax	68	17.7
	Motorcycle and Vehicle Repairs	96	25.0
	Local Markets	48	12.5
	Mobile Phone repairs and sales	41	10.7
	Auto spare part sellers	32	8.3
Occupation Status	Self employed	356	92.7
	Paid worker	26	6.8
	Unpaid worker	2	.5
	Collateral	2	.5
Main source of capital	Own savings	260	67.7
	Informal Loans	59	15.4
	Formal loans	31	8.1
	Support from family/ friends	34	8.9
Current capital	< 100,000	5	1.3
	100,000-500,000	28	7.3
	500,000-1,000,000	61	15.9
	1,000,000-2,000,000	84	21.9
	2,000,000-5,000,000	148	38.5
	>5,000,000	58	15.1
Average daily income	<5,000	6	1.6
	5,001-10,000	36	9.4
	10,001-20,000	70	18.2
	20,001-30,000	109	28.4
	30,001-50,000	95	24.7
	> 50,000	68	17.7
Average daily profit	< 5,000	32	8.3
	5,001-10,000	110	28.6
	10,001-20,000	130	33.9
	20,001-30,000	49	12.8
	30,001-50,000	41	10.7
	> 50,000	22	5.7
Duration of Business	< 1 year	29	7.6
	1-5years	221	57.6
	6-10 years	102	26.6
	> 10 years	32	8.3
Employ or sublet someone in business	Yes	208	54.2
	No	176	45.8

The respondents were predominantly small-scale, owner-operated businesses with limited reliance on formal financing.

4.2 Evaluation of PLS-SEM Results

The PLS-SEM analysis was conducted in two stages. First, the measurement model was assessed to establish the reliability and validity of the constructs. Second, the structural model was evaluated to examine the hypothesized relationships between government spending transparency and tax compliance behaviour.

4.2.1 Evaluation of the Measurement Model

The measurement model was assessed using indicator loadings, internal consistency reliability, convergent validity, and discriminant validity.

4.2.2 Indicator Reliability and Internal Consistency

Indicator reliability was assessed using outer loadings, while internal consistency was assessed using Cronbach's alpha and composite reliability. An outer loading of 0.70 or above is generally considered acceptable. However, indicators with loadings between 0.40 and 0.70 may be retained when their removal does not improve the reliability or validity of the construct, and there is theoretical justification for retaining them (Hair et al., 2021).

Table 3

Indicator Loadings for Government Spending Transparency and Tax Compliance Constructs

Constructs	Indicators	Indicator Loadings
Visibility of Government Spending (GE1)	G1	0.873
	G10	0.661
	G11	0.873
	G12	0.860
Government Accountability (GE2)	G13	0.764
	G2	0.804
	G3	0.823
	G4	0.766
Trust in Government (GE3)	G6	0.691
	G7	0.853
	G8	0.764
	G9	0.728
Registration Compliance (TC1)	T1	0.814
	T2	0.749
	T3	0.841
	T4	0.794
Income Disclosure (TC2)	T6	0.701
	T7	0.867
	T9	0.889
Tax Payment Readiness (TC3)	T10	0.913
	T11	0.891

Table 3 shows that most indicators had loadings above 0.70. G10 (0.661) and G6 (0.691) were slightly below the recommended level but were retained because their values were close to 0.70 and the overall reliability and validity of the constructs remained satisfactory (Hair et al., 2021).

Table 4

Reliability and Convergent Validity

Constructs	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Visibility of Government Spending (GE1)	0.843	0.848	0.838	0.668
Government Accountability (GE2)	0.796	0.724	0.801	0.551
Trust in Government (GE3)	0.785	0.751	0.819	0.697
Registration Compliance (TC1)	0.813	0.821	0.818	0.640
Income Disclosure (TC2)	0.761	0.770	0.807	0.678
Tax Payment Readiness (TC3)	0.772	0.779	0.779	0.814

Table 4 shows that Cronbach's alpha values ranged from 0.761 to 0.843, while composite reliability values ranged from 0.779 to 0.838. All values exceeded 0.70, indicating satisfactory internal consistency. The AVE values ranged from 0.551 to 0.814, all above the recommended threshold of 0.50. Therefore, the constructs demonstrated satisfactory reliability and convergent validity (Hair et al., 2021).

4.2.3 Discriminant Validity

Discriminant validity was assessed using the Heterotrait–Monotrait (HTMT) ratio. Values below 0.85 generally indicate that constructs are sufficiently distinct (Hair et al., 2021).

Table 5

Heterotrait–Monotrait (HTMT) Ratio

	GE1	GE2	GE3	TC1	TC2	TC3
GE1						
GE2	0.445					
GE3	0.300	0.663				
TC1	0.623	0.365	0.505			
TC2	0.396	0.551	0.735	0.579		
TC3	0.326	0.478	0.648	0.466	0.927	

The results show that most HTMT values were below 0.85. However, the value between income disclosure (TC2) and tax payment readiness (TC3) was 0.927, indicating relatively high conceptual similarity. Nevertheless, the two constructs were retained because they represent different stages of tax compliance: income disclosure and readiness to make tax payments, and were theoretically specified as distinct dimensions in the study (Hair et al., 2021).

4.3 Structural Model Assessment

The structural model was assessed using multicollinearity, coefficient of determination (R^2), predictive relevance (Q^2), and model fit.

Table 6

Model's Explanatory Power, Predictive Relevance, and Goodness of Fit

	VIF			R^2			Q^2			
Paths	TC1	TC2	TC3	TC1	TC2	TC3				SRMR
GE1	1.162	1.162	1.162							
GE2	1.541	1.541	1.541							
GE3	1.427	1.427	1.427							
				0.361	0.404	0.301	0.337	0.383	0.281	0.092

The VIF values ranged from 1.162 to 1.541, which are well below the recommended threshold, indicating that multicollinearity was not a concern. The R^2 values were 0.361 for registration compliance, 0.404 for income disclosure, and 0.301 for tax payment readiness, indicating that government spending transparency explains a meaningful proportion of the variation in the three dimensions of tax compliance. The Q^2 values were 0.337, 0.383, and 0.281, respectively. Since all values were above zero, the model demonstrated predictive relevance. The SRMR value of 0.092 indicates an acceptable but marginal model fit. Overall, the structural model was considered adequate for testing the proposed relationships (Hair et al., 2021).

4.4 Hypothesis Testing

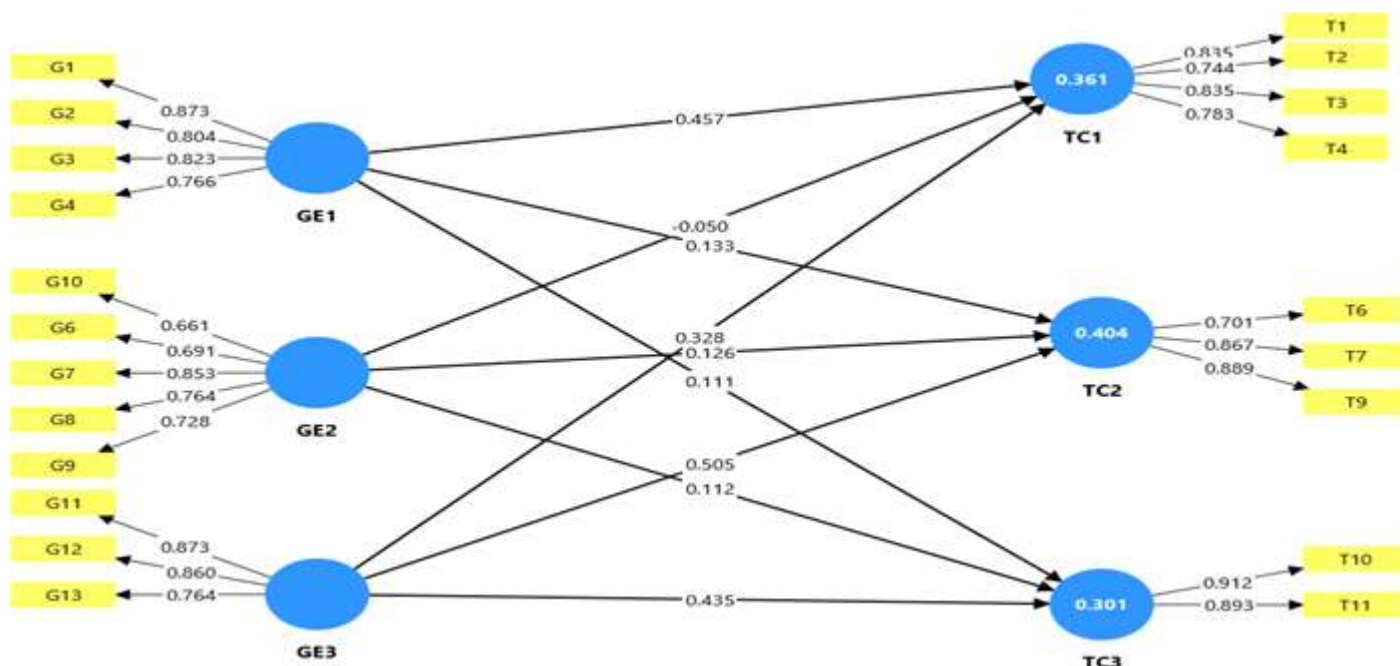


Figure 1
Structural Model Results

The hypotheses were tested using bootstrapping with 5,000 resamples. A relationship was considered statistically significant when the p-value was below 0.05.

Table 7
Results of Statistical Significance and Relevance of Path Coefficients

Paths	Coefficients(β)	Tstatistics (O/STDEV)	P values	Decision
GE1 -> TC1	0.457	9.161	0.000	Supported
GE1 -> TC2	0.133	3.152	0.002	Supported
GE1 -> TC3	0.111	2.374	0.018	Supported
GE2 -> TC1	-0.050	0.760	0.447	Not supported
GE2 -> TC2	0.126	1.950	0.051	Not supported
GE2 -> TC3	0.112	1.794	0.073	Not supported
GE3 -> TC1	0.328	5.264	0.000	Supported
GE3 -> TC2	0.505	9.304	0.000	Supported
GE3 -> TC3	0.435	7.697	0.000	Supported

4.4.1 Visibility of Government Expenditure and Tax Compliance

Visibility of government expenditure (GE1) had a positive and statistically significant effect on all three dimensions of tax compliance. The strongest relationship was observed with registration willingness ($\beta = 0.457$, $p < 0.001$), followed by income disclosure intention ($\beta = 0.133$, $p = 0.002$) and tax payment readiness ($\beta = 0.111$, $p = 0.018$). H1 was therefore supported across all three compliance dimensions.

These findings indicate that taxpayers who are more able to observe government expenditure are more willing to register their businesses, disclose their income, and prepare to pay taxes. The hypothesis was therefore supported across all three dimensions of tax compliance. The relatively stronger effect on registration willingness suggests that visibility of government expenditure may be particularly important at the initial stage of the compliance process. Informal-sector taxpayers may be more willing to enter the formal tax system when they can observe tangible benefits associated with government revenue, including improved markets, roads, sanitation, water supply, electricity, and other public services. Once taxpayers perceive that government expenditure produces benefits within their communities, registration may be viewed not only as a legal requirement but also as participation in a system from which they receive public benefits.

This interpretation is supported by Hemed (2020), whose findings indicate that taxpayers' perceptions of government expenditure are relevant to their attitudes towards taxation in Tanzania. The implication of this evidence is that taxpayers do not evaluate taxation solely in terms of the amount they are required to contribute; they also consider

whether government provides meaningful services in return. The present finding is therefore consistent with the argument that visible government expenditure can strengthen the perceived connection between taxation and public benefits. Similarly, Rwabunywenge *et al.* (2024) emphasise the importance of government performance and public service provision in shaping taxpayers' perceptions and compliance-related behaviour in Tanzania. Their findings are relevant to the present study because public services provide taxpayers with observable evidence of how government resources are being utilised. Where such services are visible and considered beneficial, taxpayers may perceive taxation as producing collective benefits. The present study extends this perspective by operationalising government spending visibility as a distinct dimension and demonstrating its statistically significant relationship with three separate compliance outcomes.

The finding also corresponds with Munguasifiwe *et al.* (2025), who found that institutional perceptions influence taxpayers' willingness to register and correctly declare income among Tanzanian taxpayers. Their evidence suggests that taxpayers' decisions are influenced by how they perceive government institutions and the broader tax environment rather than by enforcement considerations alone. The present study complements this evidence by showing that perceptions of government expenditure visibility are associated with registration and income disclosure and further demonstrates a significant relationship with tax payment readiness. International evidence also provides support for the relationship between government performance and voluntary tax compliance. Saruji *et al.* (2019) and Ya'U and Saad (2019) associate perceptions of government performance, public benefits, fairness, and reciprocity with taxpayers' willingness to comply. These studies provide a theoretical explanation for why visible expenditure may matter: taxpayers are more likely to regard taxation as legitimate when they perceive that their contributions are transformed into public goods and services. Thus, visibility provides taxpayers with observable evidence that the tax system produces benefits beyond the individual taxpayer.

The qualitative findings provide further support for this interpretation. Participants associated willingness to comply with visible improvements in public infrastructure and services. As one street vendor explained, "*People become willing to pay taxes when they see what their money is doing. If markets are improved and services are visible, traders can understand the importance of paying*" (Street Vendor, FGD, Dar es Salaam, 15th October, 2025). This evidence illustrates how informal-sector taxpayers interpret government expenditure through their everyday experiences. Unlike formal accountability reports, which may be difficult for ordinary taxpayers to access or understand, roads, markets, sanitation facilities, and other public services provide immediate and observable evidence of government activity.

The finding is therefore consistent with Equity and Fairness Theory. The theory suggests that individuals assess whether their contributions are proportionate to the benefits they receive. In the present context, visibility of government expenditure may reduce the perceived distance between tax contributions and public benefits, strengthening taxpayers' perceptions of reciprocity and fairness. This may explain why expenditure visibility was significantly associated with all three compliance dimensions.

Nevertheless, the differences in coefficient size are also important. The stronger effect on registration compared with income disclosure and tax payment readiness suggests that visibility may be more influential in encouraging taxpayers to enter the formal tax system than in determining the extent to which they subsequently disclose income or pay taxes. Registration represents an initial decision to participate in the tax system, whereas disclosure and payment involve continued compliance and potentially greater financial consequences. The findings therefore suggest that visibility of government expenditure can encourage participation in the tax system, but additional institutional and administrative factors may be required to sustain accurate reporting and payment. Generally, the present study extends previous evidence by demonstrating that the influence of government expenditure visibility is not limited to a general attitude towards taxation. Rather, it is associated with specific stages of tax compliance. This provides empirical support for treating tax compliance as a multidimensional behaviour and government spending transparency as a multidimensional behaviour factor.

4.4.2 Perceived Government Accountability and Tax Compliance

Perceived government accountability (GE2) did not have a statistically significant direct effect on registration willingness ($\beta = -0.050$, $p = 0.447$), income disclosure intention ($\beta = 0.126$, $p = 0.051$), or tax payment readiness ($\beta = 0.112$, $p = 0.073$). Consequently, the hypothesis (H2) that perceived government accountability positively influences tax compliance was not supported for any of the three compliance dimensions. The finding differs from the broader literature that identifies accountability and institutional performance as important conditions for voluntary tax compliance. Accountability is generally expected to strengthen taxpayers' confidence that government institutions are answerable for the collection and use of public resources. However, the present results suggest that the existence or perception of accountability does not necessarily translate directly into compliance behaviour among informal-sector taxpayers.

One possible explanation is that informal-sector taxpayers may distinguish between formal accountability and observable accountability. Formal accountability may involve financial reports, audits, parliamentary oversight, institutional procedures, and other mechanisms that taxpayers may not directly observe. By contrast, taxpayers are more

likely to experience government accountability through visible projects, service delivery, responsiveness, and actions taken against misuse of public resources. Consequently, accountability mechanisms may have limited behavioural influence when taxpayers are unable to understand or observe their practical outcomes. This interpretation is supported by the qualitative findings.

Participants recognised accountability as important but expressed concern that accountability information may be technical or inaccessible. A business association representative explained that “*Accountability information should be presented in a simple way that ordinary traders can understand. Technical reports alone do not build confidence*” (Business Association Representative, KII, Morogoro, 22nd November, 2025). This finding suggests that information about accountability may have little influence on compliance unless it is communicated in a form that informal-sector taxpayers can understand and relate to their everyday experiences. The finding can also be interpreted in relation to Chindengwike and Kira (2021), who emphasise institutional trust as an important factor in voluntary tax compliance in Tanzania. Their findings suggest that taxpayers’ confidence in government institutions may be more directly relevant to behavioural decisions than the formal presence of institutional mechanisms. Similarly, Rwabunywenge *et al.* (2024) highlight the importance of government performance and public service provision. Taken together, these studies suggest that accountability may be most effective when taxpayers can see evidence of responsible government performance.

The present finding therefore does not necessarily imply that accountability is irrelevant to tax compliance. Rather, it suggests that its direct behavioural effect may be weaker than the effects of visibility and trust. Accountability may contribute to compliance by strengthening taxpayers’ perceptions of government performance and institutional trust, rather than directly motivating registration, income disclosure, or payment. However, because the present study did not test mediation or indirect effects, this possibility cannot be confirmed empirically and should be considered an area for future research. The finding also provides an important explanation for the differentiated nature of government spending transparency. Visibility provides taxpayers with tangible evidence of public expenditure, while trust represents their confidence in government resource management. Accountability, in contrast, may depend on processes that are less visible to ordinary taxpayers. This difference may explain why accountability failed to demonstrate a significant direct relationship with any of the three compliance outcomes, while visibility and trust showed significant effects.

Thus, the non-significant finding contributes to the literature by demonstrating that not all dimensions of government spending transparency have the same behavioural influence. It cautions against assuming that improvements in formal accountability mechanisms will automatically result in higher tax compliance. For informal taxpayers, accountability may need to be accompanied by accessible information, visible outcomes, effective communication, and stronger institutional trust before it translates into behavioural change.

4.4.3 Trust in Government and Tax Compliance

Trust in government (GE3) emerged as the strongest and most consistent predictor of tax compliance. It had a positive and statistically significant effect on registration willingness ($\beta = 0.328$, $p < 0.001$), income disclosure intention ($\beta = 0.505$, $p < 0.001$), and tax payment readiness ($\beta = 0.435$, $p < 0.001$). Therefore, the hypothesis (H3) that trust in government positively influences tax compliance was supported across all three dimensions. The strongest relationship was observed with income disclosure, followed by tax payment readiness and registration willingness. The finding is strongly supported by previous evidence on institutional trust and tax compliance in Tanzania. Chindengwike and Kira (2021) found that institutional trust is relevant to voluntary tax compliance, suggesting that taxpayers’ willingness to cooperate with the tax system depends partly on their confidence in government and tax institutions. This provides direct support for the present finding because both studies emphasise that compliance cannot be explained solely through enforcement or legal obligations. Instead, taxpayers’ willingness to cooperate is influenced by whether they believe government institutions are trustworthy and act in the public interest.

The finding is also consistent with Munguasifiwe *et al.* (2025), who found that trust in government influenced taxpayer registration and correct income declaration among Tanzanian SMEs. Their finding is particularly relevant to the present study because registration and income declaration correspond closely with two of the compliance dimensions examined in this research. The present study extends their findings in two important ways. First, it focuses specifically on informal-sector taxpayers, a group that operates under different economic and institutional conditions from formally established SMEs. Second, it demonstrates that trust is significantly associated not only with registration and income disclosure but also with tax payment readiness.

The particularly strong effect of trust on income disclosure ($\beta = 0.505$) is noteworthy. Income disclosure requires taxpayers to provide information about their economic activities and financial position, which may increase their perception of vulnerability to government authorities. Where taxpayers trust government institutions, they may be less concerned that disclosed information will be misused or result in unfair treatment. Consequently, institutional trust may be particularly important in encouraging taxpayers to provide accurate information about their income.

The positive relationship between trust and tax payment readiness ($\beta = 0.435$) further indicates that trust extends beyond information-sharing behaviour to taxpayers’ willingness to make financial contributions. This finding is important because payment represents a more immediate economic cost to taxpayers than registration or disclosure.

Taxpayers may therefore be more willing to surrender part of their income when they believe that public resources will be managed responsibly and that government will provide services in return. This interpretation is consistent with Saruji *et al.* (2019) and Ya'U and Saad (2019), who link trust, fairness, reciprocity, and perceptions of government performance with voluntary tax compliance. Their findings suggest that taxpayers' willingness to comply is influenced by whether they perceive government as fulfilling its side of the implicit exchange underlying taxation. The present study provides further empirical evidence for this argument by demonstrating that trust is significantly related to each of the three compliance dimensions. Asri *et al.* (2025) similarly emphasise the role of trust and perceptions of government resource management in tax compliance. This evidence is particularly relevant to the present study because trust in government is conceptualised as part of government spending transparency. When taxpayers believe that government uses public resources fairly and efficiently, trust may increase, thereby strengthening their willingness to cooperate with the tax system. Thus, trust can be understood as an important institutional mechanism linking perceptions of government performance with taxpayer behaviour.

The qualitative findings reinforce these quantitative results. Participants associated trust with responsible use of tax revenues, visible development, government responsiveness, and effective communication. One informal-sector operator stated, *"Trust is important. When traders believe that taxes are used well, they become more willing to cooperate"* (mobile-phone business operators, FGD, Dodoma, 19th December, 2025). This evidence demonstrates that trust is not an abstract perception but is formed through taxpayers' experiences with government institutions and their observations of how public resources are used.

The finding is also consistent with Equity and Fairness Theory. When taxpayers trust government, they may be more likely to believe that the relationship between their contributions and the public benefits they receive is fair. Trust can therefore reduce perceptions that taxes are being collected without corresponding public benefits. In contrast, perceptions of misuse of public resources, poor government responsiveness, or inadequate service delivery may weaken trust and consequently reduce willingness to comply. An important contribution of the present study is the demonstration that the strength of the relationship between trust and compliance varies across compliance dimensions. The coefficient for income disclosure ($\beta = 0.505$) is substantially larger than that for registration willingness ($\beta = 0.328$), while tax payment readiness also shows a relatively strong relationship ($\beta = 0.435$). This indicates that trust may become increasingly important as compliance requires greater cooperation and financial sacrifice. The finding therefore provides evidence against treating tax compliance as a single undifferentiated outcome.

Generally, the results confirm and extend existing Tanzanian evidence by demonstrating that trust in government is a particularly important determinant of informal taxpayers' compliance behaviour. The convergence of the quantitative and qualitative findings suggests that building trust requires more than taxpayer education or enforcement. It requires government institutions to demonstrate responsible resource management, provide visible public benefits, communicate effectively, and respond to taxpayers' concerns. These conditions can strengthen perceptions of fairness and reciprocity and, consequently, encourage voluntary tax compliance.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

This study concludes that government spending transparency influences tax compliance behaviour among informal-sector taxpayers in Tanzania, although its effects differ across the dimensions of compliance. Visibility of government expenditure significantly improves taxpayers' willingness to register, disclose income, and pay taxes, while trust in government has a strong positive influence on all three dimensions. In contrast, government accountability does not have a significant direct effect. The findings therefore demonstrate that sustainable tax compliance requires not only enforcement and administrative measures but also visible public benefits, accessible information, and stronger trust in government institutions.

5.2 Recommendations

Based on the findings, the Government of Tanzania and the Tanzania Revenue Authority (TRA) should strengthen the visibility of tax revenue utilisation by communicating, through simple and accessible channels, how taxes contribute to public services, infrastructure, and local development. Since trust in government was the strongest predictor of compliance, authorities should promote fair treatment, responsiveness, transparency, and effective taxpayer engagement to strengthen confidence in public resource management. Accountability information should also be presented in simple, locally relevant, and outcome-oriented formats that enable informal-sector taxpayers to understand how public resources are used and the benefits achieved. In addition, taxpayer education and feedback mechanisms should be strengthened through market meetings, trader associations, community forums, and other accessible platforms to improve understanding of taxation, encourage dialogue, and reinforce perceptions of fairness, reciprocity, and trust that support voluntary registration, income disclosure, and tax payment.

Declaration of Interest

The authors declare that they do not have any known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Funding Declaration

This research received funding from the Heet Scholarship.

REFERENCES

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267–299). Academic Press.
- Asri, V., Fjeldstad, O.-H., Katera, L., & Nassary, S. (2025). *To trust or not to trust? Taxation from the perspective of businesspeople in Tanzania* (CMI Working Paper 2025:04). Chr. Michelsen Institute.
- Athanas, N. (2025). The influence of trust on voluntary tax compliance in Tanzania: A case of small enterprises. *East African Journal of Business and Economics*, 8(1), 117–128. <https://doi.org/10.37284/eajbe.8.1.2683>
- Chindengwiwe, J. D., & Kira, A. R. (2021). The relationship between tax transparency, trust and taxpayers' voluntary compliance in Tanzania. *International Journal of Innovative Science and Research Technology*, 6(2), 1–5.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Dom, R., Custers, A., Davenport, S. R., & Prichard, W. (2022). *Innovations in tax compliance: Building trust, navigating politics, and tailoring reform*. World Bank.
- Ferdinand, D. (2026). Fear or fairness? Enforcement, trust, and tax compliance in Tanzania's urban informal sector. *International Journal of Research and Innovation in Social Science*, 10(1), 7912–7926. <https://doi.org/10.47772/IJRIS.2026.10100616>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer. <https://doi.org/10.1007/978-3-030-80519-7>
- Hemed, H. S. (2020). *Challenges of voluntary tax compliance in Zanzibar: A case study of Chake-Chake Town Area* [Master's thesis, The Open University of Tanzania]. The Open University of Tanzania Institutional Repository.
- Munguasifiwe, P., Mbogela, C., & Kiria, J. (2025). Unravelling the effects of perceived severity of penalties on income tax compliance for Tanzanian small and medium enterprises. *African Journal of Accounting and Social Science Studies*, 6(2), 1–24. <https://doi.org/10.4314/ajass.v6i2.1>
- National Audit Office of Tanzania. (2025). *Performance audit report on the administration of electronic fiscal devices*.
- National Bureau of Statistics. (2022). *Tanzania integrated labour force survey 2020/21: Analytical report*.
- Organisation for Economic Co-operation and Development. (2024). *Tax administration 2024: Comparative information on OECD and other advanced and emerging economies*. OECD Publishing. <https://doi.org/10.1787/2d5fba9c-en>
- Organisation for Economic Co-operation and Development, African Union Commission, & African Tax Administration Forum. (2024). *Revenue statistics in Africa 2024: Facilitation and trust as drivers of voluntary tax compliance in selected African tax administrations*. OECD Publishing. <https://doi.org/10.1787/78e9af3a-en>
- Oyewunmi, O. R. (2024). Small and medium enterprise perception of government transparency and tax compliance in Lagos State: The mediating role of taxpayers' satisfaction with revenue utilisation. *Lagos Journal of Banking, Finance and Economic Issues*, 5(1), 154–168.
- Rwabunywege, M., Nchimbi, M., & Suluo, S. J. (2024). The influence of provision of public services on tax compliance in SMEs: Mediating role of tax morale. *Business Management Review*, 27(2), 90–107. <https://doi.org/10.56279/bmr.v27i2.6919>
- Saruji, S. C., Mohdali, R., & Nik Mohamed, N. N. (2019). Trust in government and perceptions of tax compliance among adolescents. *Journal of Advanced Research Design*, 61(1), 19–29.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson.
- Vietz, J., & Sjursen, I. H. (2025). *Leveraging religious leaders to increase voluntary tax compliance: Experimental evidence from Tanzania* (ifo Working Paper No. 415). ifo Institute.
- Yamou, T., Thomas, A. H., & Cai, K. (2024). *Citizens' perceptions of tax authorities and tax efficiency in Africa* (IMF Working Paper No. 2024/234). International Monetary Fund. <https://doi.org/10.5089/9798400292866.001>
- Ya'u, A., & Saad, N. (2019). Fairness perceptions and voluntary tax compliance in Nigeria: The moderating role of trust. *Global Business Management Review*, 11(2), 54–76. <https://doi.org/10.32890/gbmr2019.11.2.8661>