



# Effectiveness of Transfer Pricing Audit on Tax Compliance Among Large Taxpayers in Tanzania

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ARTICLE INFO	ABSTRACT
<b>Published Online:</b> <b>09 April 2025</b>	This study investigated the effectiveness of transfer pricing audits in enhancing tax compliance among large taxpayers in Tanzania, focused on intra-group services and intra-group financing transactions. The study is motivated by the complex operational structures of multinational enterprises (MNEs), which enable profit shifting through manipulated intra-group transactions, thus eroding the Tanzanian tax base. In response, Tanzania implemented Transfer Pricing Regulations in 2018, empowering the Tanzania Revenue Authority (TRA) to conduct targeted audits under the Large Taxpayers Department (LTD). Using a descriptive and inferential quantitative approach, the study systematically sampled 52 tax auditors from a population of 60 TRA officers using Yamane's formula. Data were collected via structured questionnaires capturing perceived compliance levels for three consecutive years (2020–2022) following audit detections and penalties in 2019. Analysis was conducted using SPSS for descriptive statistics and Microsoft Excel for trend visualization. Descriptive results revealed that compliance likelihood in intra-group services peaked in 2020 at 85.7% but declined to 61.3% in 2021 and further to 32.7% in 2022. Similarly, intra-group financing compliance declined from 77.6% in 2020 to 59.2% in 2021 and dropped sharply to 24.5% by 2022. This trend indicates that audit interventions initially promote compliance but lose their impact over time without further regulatory reinforcement. The study concludes that transfer pricing audits exert a strong short-term influence on tax compliance among large taxpayers, particularly in the first-year post-audit. However, the declining compliance trend suggests the need for continuous and strategic audit interventions. It recommends that TRA increase audit frequency, strengthen audit capacity through technology and training, and implement sustained taxpayer engagement strategies to support lasting compliance gains.
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<b>KEYWORDS:</b> Transfer pricing audit; tax compliance; intra-group services; intra-group financing; Tanzania Revenue Authority	

## 1. INTRODUCTION

Governments across the world perform an essential role in providing public goods and services that are critical to the welfare of their citizens and economic development. These include health and education services, infrastructure, water and electricity supply, law enforcement, and national security. Financing these services demands significant financial resources, of which taxation remains the most sustainable and reliable source. According to Bhattacharjee and Baid (2018), tax revenue remains the backbone of domestic resource mobilization, especially for developing economies. Tanzania is no exception. The government of Tanzania relies heavily on tax revenues, which finances nearly 40% of its national budget (URT, 2019).

To meet this requirement, the Tanzania Revenue Authority (TRA) was established with the mandate to assess, collect,

and account for tax revenues on behalf of the government. The TRA has instituted numerous reforms ranging from legal and administrative to technological interventions aimed at improving voluntary compliance. These include the implementation of Electronic Fiscal Devices (EFDs), electronic filing systems, and risk-based audit selection techniques (Chatama, 2013; Chege et al., 2015). Nevertheless, non-compliance remains a major concern, particularly among large taxpayers, most of whom are multinational enterprises (MNEs). MNEs, due to their complex structures and cross-border operations, are uniquely positioned to exploit loopholes in tax systems. One of the most exploited avenues is transfer pricing, wherein profits are shifted from high-tax jurisdictions like Tanzania to low-tax jurisdictions through manipulation of intra-group transactions (Beebejaun, 2018; Barker et al., 2016). These

include payments for services, royalties, or financing arrangements that may not reflect the arm's length principle a cornerstone of international tax compliance frameworks (OECD, 2004).

To mitigate this, Tanzania introduced the Transfer Pricing Regulations in 2018. These regulations provide detailed guidelines on acceptable pricing methods, documentation requirements, and penalties for non-compliance. Importantly, they empower TRA to conduct audits focused specifically on transfer pricing. The goal of such audits is not only to detect non-compliance but to act as a deterrent to aggressive tax planning by increasing the probability of detection and the cost of evasion (Allingham & Sandmo, 1972; Advani et al., 2021). The Large Taxpayer Department (LTD) within the TRA manages approximately 400 top taxpayers, contributing nearly 70% of the nation's tax revenue. This group is particularly significant due to their scale of operations and their extensive engagement in cross-border transactions. Given the importance of this segment, ensuring their compliance is essential for the country's fiscal stability (TRA, 2020).

However, despite the strategic importance of transfer pricing audits, there is a dearth of empirical research examining their effectiveness in enhancing compliance. Existing literature has largely focused on general audits and small taxpayers (Modugu & Anyaduba, 2014; Clement & Temitope, 2018). European-based studies such as those by Lohse and Riedel (2012) and Lisowsky and Mescall (2017) provide useful insights but may not translate directly to the Tanzanian context due to differing legal, institutional, and economic environments.

This study seeks to bridge that gap by focusing on the Tanzanian experience. Specifically, it assesses how transfer pricing audits influence compliance behavior among large taxpayers. It evaluates post-audit compliance over a three-year period, focusing on audits related to intra-group services and intra-group financing two of the most manipulated transfer pricing channels. By employing a descriptive survey method and analyzing responses from experienced TRA auditors, the study offers insights into both the strengths and limitations of the current audit regime. It highlights areas where the TRA's capacity can be strengthened and provides practical recommendations for improving audit effectiveness and sustaining compliance gains.

## 2.0 MATERIALS AND METHODS

### 2.1 Research Design

This study employed a descriptive and inferential quantitative research design to assess the effect of transfer pricing audits on tax compliance. The design facilitated the collection of primary data using structured questionnaires, followed by descriptive analysis (frequencies, means) and inferential analysis through Difference-in-Difference (DiD) estimation. This design was suitable for evaluating the trend of

compliance over three years following a successful audit intervention.

### 2.2 Sampling and Sample Size

This study employed a systematic random sampling technique to select respondents from the Large Taxpayers Department of the Tanzania Revenue Authority (TRA). The target population was estimated at 60 auditors. To determine the minimum sample size, Yamane's (1974) formula was applied:

$$n = \frac{N}{1 + Ne^2}$$

Where:

$n$  = sample size

$N$  = population size (60)

$e$  = level of precision (0.05)

$$n = \frac{60}{1 + 60(0.05)^2} = 52.17$$

Thus, a sample size of 52 auditors was determined. The study systematically selected 13 auditors each from four key units: manufacturing, services, oil and gas, and mining and construction. Of the 52 questionnaires administered, 49 were returned fully completed, yielding a response rate of 94.2%.

### 2.3 Data Collection Method

Data was collected using a structured questionnaire administered physically to selected auditors. The questionnaire asked respondents to evaluate the likelihood of compliance among audited taxpayers over a three-year period post-audit (2020–2022), following detection and penalties in 2019. Responses were recorded on a Likert scale from “Very Unlikely” (1) to “Very Likely” (5). Demographic and professional profiles of respondents were also gathered.

### 2.4 Data Analysis

The data was analyzed using SPSS and Microsoft Excel. SPSS was employed for statistical computations including frequency distribution tables using descriptive statistics which helped summarize respondent demographics and Likert scale data on compliance trends (Pallant, 2020). Excel was used to generate graphical representations using the line graphs to visualize compliance trends over the three years. These visualization tools were essential in presenting the magnitude and direction of changes in compliance likelihood.

## 3.0 RESULTS OF THE STUDY

### 3.1 Demographic and Institutional Characteristics

The results presented in Table 1 indicate a balanced gender distribution, with males slightly dominating the sample. This reflects a generally inclusive representation across gender lines in the audit function at TRA. Age-wise, most respondents are between 31–50 years, representing mid-career professionals with substantial field experience, which increases the reliability of the responses provided. Regarding education, the majority hold bachelor's and master's degrees, indicating a well-qualified respondent pool capable of offering informed perspectives on transfer pricing audits.

**Table 1: Demographic Characteristics of Respondents (n=50)**

Category	Sub-category	Frequency	Percentage
Gender	Female	20	40.81%
	Male	29	59.18%
Age Group	24–30	3	6.12%
	31–40	18	36.73%
	41–50	20	40.82%
	51–60	8	16.33%
Education Level	Diploma	3	7.14%
	Bachelor’s degree	26	61.91%
	Master’s and above	13	30.95%

Table 2 indicates that the professional competence of respondents is high, with the majority being CPA and ACCA holders. The dominance of accounting as a field of study reinforces the suitability of the sample in discussing financial and compliance issues. Most respondents are auditors, with some representation from managerial levels, providing a

comprehensive perspective from both operational and strategic viewpoints. The distribution of work experience reveals that most participants have more than seven years of experience, indicating exposure to audit procedures and familiarity with tax compliance dynamics.

**Table 2: Institutional and Professional Characteristics of Respondents (n=50)**

Category	Sub-category	Frequency	Percentage
Professional Qualification	CPA	31	63.27%
	ACCA	17	34.69%
	Others	1	2.04%
Field of Study	Accounting	30	78.57%
	Economics	10	14.29%
	Tax Management	9	4.76%
Position	Manager	7	14.29%
	Auditor	42	85.71%
Work Experience	0–2 years	6	12.24%
	3–6 years	11	22.45%
	7–10 years	20	40.82%
	Over 10 years	12	24.49%

### 3.2 Compliance Response to Transfer Pricing Audits (Intra-group Services)

From Table 3, results show that a steep drop in compliance likelihood over the years. In 2020, 85.7% of respondents believed taxpayers would comply post-audit, but this

optimism declined to 61.3% in 2021 and plummeted to 32.7% in 2022. This trend suggests that audit effects on compliance behavior are short-lived and may require periodic follow-ups or continued regulatory engagement to sustain as shown in figure 1.

**Table 3: Likelihood of Compliance (Intra-Group Services) (n=50)**

Year	Very Likely	Likely	Moderate	Unlikely	Very Unlikely
2020	57.1%	28.6%	14.3%	0%	0%
2021	28.6%	32.7%	26.5%	6.1%	6.1%
2022	8.2%	24.5%	40.8%	26.5%	0%

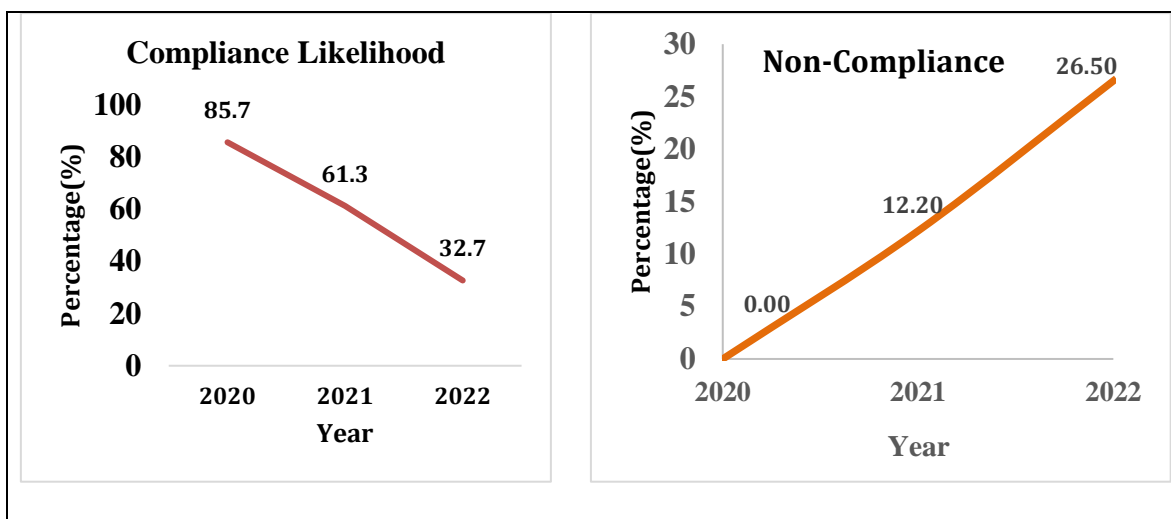


Figure 1: Trend in Intra-Group Services pricing for Likelihood of Compliance Over Time and for Non-compliance Over Time

### 3.3 Compliance Response to Transfer Pricing Audits (Intra-group Financing)

Table 4 illustrates the same decaying trend as in intra-group services. However, the decline in compliance in intra-group financing is more severe. The findings reveal that taxpayers

may perceive financing arrangements as less traceable or harder to regulate, thereby being more aggressive in exploiting these transactions. Policy attention may be needed to target these specific mechanisms more strictly as shown in figure 2.

Table 4: Likelihood of Compliance (Intra-Group Financing)

Year	Very Likely	Likely	Moderate	Unlikely	Very Unlikely
2020	42.9%	34.7%	22.4%	0%	0%
2021	26.5%	32.7%	20.4%	14.3%	6.1%
2022	6.1%	18.4%	42.9%	26.5%	6.1%

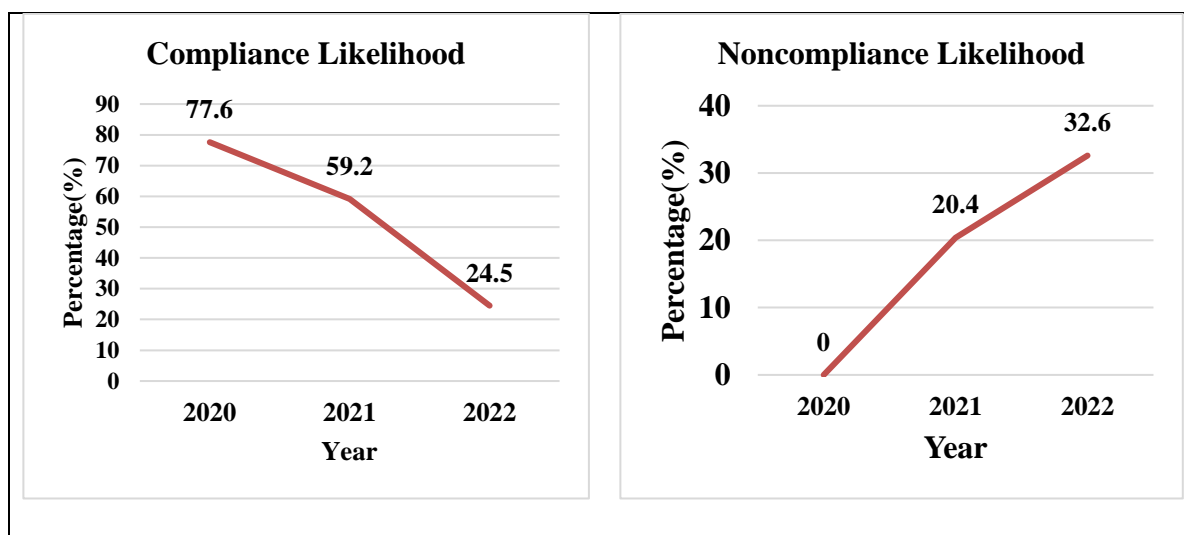


Figure 2: Trend in Intra-Group Financing for Likelihood of Compliance Over Time and for Non-compliance Over Time

## 4.0 DISCUSSION

The findings of this study emphasize the significant but time-bound effect of transfer pricing audits on corporate tax compliance among large taxpayers. As the data show, compliance spikes immediately after audits, consistent with the deterrence theory by Allingham and Sandmo (1972), which postulates that higher probabilities of detection and punishment enhance taxpayer compliance. This is further supported by Advani et al. (2021), who argue that while

audits do lead to improved reporting behaviors, the effects diminish over time unless reinforced.

Tax audits create a perception shift among taxpayers regarding enforcement visibility, especially in jurisdictions like Tanzania where informal tax avoidance mechanisms, including intra-group transactions, have long been a revenue risk (Ali et al., 2014; Ebrahim et al., 2021). The pronounced decline in compliance for intra-group financing observed in this study reflects what Barker et al. (2016) and Beebejaun

(2018) describe as deliberate opacity in corporate financing chains, often aimed at profit shifting. Intra-group loans and guarantees are harder to trace compared to service contracts, and hence more prone to manipulation a finding that demands tighter regulatory and forensic accounting measures (Melnychenko et al., 2017).

The study's results also underline the importance of risk-based targeting in audit strategies. Agosto et al. (2017) and Safaei et al. (2021) highlight that focusing audit resources on complex intra-group structures can yield higher revenue recoveries and improve voluntary compliance across similarly situated firms. Moreover, the behavioral response of audited firms—shifting back toward non-compliance within two years indicates a knowledge gap or regulatory fatigue, requiring consistent taxpayer education and communication (Alm et al., 2009; Devos, 2014).

Institutionally, this research confirms TRA's internal readiness to implement advanced audit mechanisms. The highly qualified and experienced personnel surveyed are a major strength in Tanzania's tax system. According to Chalu and Mzee (2018), technical competence is a primary determinant of audit effectiveness. However, continuous professional development and inter-agency collaborations are essential, especially when confronting sophisticated multinational structures that exploit regulatory gaps (OECD, 2015; Mashiri et al., 2021).

The results also highlight the essential role of tax morale and trust in tax administration. Alm and McClellan (2012) emphasized that when firms perceive fairness in the tax system and believe audits are impartial, compliance improves over the long term. Similarly, Feld and Frey (2002) argue that cooperative enforcement combining strict audits with taxpayer support services builds institutional legitimacy and enhances compliance durability. This perspective complements the observed decay in audit impact, suggesting that punitive action alone is insufficient.

Furthermore, as argued by Prichard et al. (2019), a modern compliance framework should include supportive strategies like compliance risk segmentation, service delivery innovation, and behaviorally informed communication. Applying these innovations alongside audits can help mitigate the post-audit decline in compliance detected in this study. Digital solutions, such as e-invoicing, blockchain for intra-group financing trails, and integrated audit dashboards (McCluskey & Huang, 2019; Chege et al., 2015), can increase audit coverage and efficiency, especially in resource-constrained tax administrations.

International best practices, as documented by ITD (2010) and OECD (2004), stress the importance of continuous reforms to align local transfer pricing rules with global standards. Countries that have adopted inclusive frameworks and automated reporting mechanisms such as country by country reporting and mandatory disclosure rules have seen reduced revenue leakage. For Tanzania, aligning its strategies with such frameworks is critical to maintaining momentum in audit effectiveness and revenue enhancement.

Finally, this study's findings call attention to the broader developmental implications of effective transfer pricing enforcement. As Bhattachargee and Baid (2018) point out, taxation remains a key lever for domestic resource mobilization in developing countries. Effective audit regimes can thus support long-term fiscal sustainability, reduce aid dependency, and promote equitable economic growth by ensuring that multinational corporations contribute their fair share (Kar & Cartwright-Smith, 2008; World Bank, 2015).

## 5.0 CONCLUSION AND RECOMMENDATIONS

This study examined the effectiveness of transfer pricing audits on enhancing tax compliance among large taxpayers in Tanzania, particularly through the lens of intra-group service and financing arrangements. The findings reveal that while audits trigger a strong initial behavioral response from taxpayers demonstrated by high compliance in the year immediately following detection their deterrent effect significantly declines over time. This pattern underscores the temporal limitation of audit interventions and emphasizes the necessity for consistent, recurring enforcement actions.

The study also highlights that the nature of intra-group transactions affects the sustainability of compliance. Intra-group services show relatively higher and more sustained compliance compared to intra-group financing, which is perceived by taxpayers as more obscure and easier to manipulate. These insights are critical for the Tanzania Revenue Authority (TRA) and other tax authorities in developing contexts, as they inform audit prioritization and risk-based resource allocation.

In conclusion, the study confirms that transfer pricing audits are a necessary enforcement tool, but they must be integrated with broader compliance strategies including legislative reinforcement, digital monitoring systems, inter-agency data sharing, and taxpayer education campaigns. Without these complementary measures, the short-term gains of audits risk being eroded over time, limiting their contribution to long-term revenue sustainability and tax justice.

## DECLARATIONS

### Ethics Statement

Ethical approval was obtained from the University of Dar es Salaam Research Ethics Board (UDSM-SoL/RE/2023/007). Informed consent was collected from all participants.

### Data Availability Statement

The data supporting this study's findings are available from the corresponding author upon reasonable request.

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