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COLLEGE OF BUSINESS AND MANAGEMENT SCIENCES (CoBAMS)

SCHOOL OF ECONOMICS

**THE IMPACT OF INFORMAL SECTOR TAXATION ON DOMESTIC REVENUE
MOBILIZATION IN UGANDA: A CASE STUDY OF KIKUUBO BUSINESS AREA IN
KAMPALA**

BY

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DECLARATION

I, MUZIRANSA MUTAKI, declare that this research dissertation is my original work and has not been presented for any degree in any institution of higher learning here or elsewhere.

Signed.....

SUPERVISOR'S APPROVAL

This is to certify that this research report has been compiled under my guidance and submitted with my approval as the University Supervisor.

Signed.....*Maya*.....
Dr. Teera Joweria

Date.....*19th November 2020*.....

DEDICATION

This work is dedicated to my elder brother, Muziransa Huq, whose unwavering support financially throughout my studies and in safeguarding my health has played a central role in my academic journey. I remain deeply grateful for his generosity, guidance, and steadfast encouragement

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LIST OF ABBREVIATIONS

- ADF** – Audit Data File
- AUC** – Area Under the Curve
- BP** – Breusch–Pagan Test
- CoBAMS** – College of Business and Management Sciences
- DWH** – Durbin–Wu–Hausman Test
- EFRIS** – Electronic Fiscal Receipting and Invoicing System
- EPRC** – Economic Policy Research Centre
- GDP** – Gross Domestic Product
- HAC-OLS** – Heteroskedasticity and Autocorrelation Consistent Ordinary Least Squares
- IMF** – International Monetary Fund
- KCCA** – Kampala Capital City Authority
- KRA** – Kenya Revenue Authority
- MoFPED** – Ministry of Finance, Planning and Economic Development
- NGO** – Non-Governmental Organization
- OLS** – Ordinary Least Squares
- RESET** – Ramsey Regression Equation Specification Error Test
- ROC** – Receiver Operating Characteristic
- SE** – Standard Error
- STATA** – Data Analysis and Statistical Software
- TIN** – Tax Identification Number
- UBOS** – Uganda Bureau of Statistics
- URA** – Uganda Revenue Authority
- URSB** – Uganda Registration Services Bureau
- 2SLS** – Two-Stage Least Squares

ABSTRACT

Uganda's informal sector constitutes more than three-quarters of national economic activity, yet contributes minimally to domestic revenue. This study examines how informal sector taxation influences domestic revenue mobilization in Uganda, using Kikuubo Business Area in Kampala as a micro-level case study. A mixed-methods design was employed, combining primary data from 200 informal traders with secondary macroeconomic data from URA, UBOS, IMF, and World Bank covering 2000–2024. Logistic and Probit models were used to estimate determinants of tax compliance at the trader level, while Heteroskedasticity and Autocorrelation Consistent (HAC-OLS) and Two-Stage Least Squares (2SLS) models assessed the impact of informality, enforcement, digitalization, and formalization on Uganda's tax-to-GDP ratio.

Results show that trader compliance averages 54% and is significantly influenced by awareness, perceived fairness, tax morale, EFRIS usage, formal registration, and turnover. Digital adoption increases the likelihood of compliance more than twofold, while fairness and awareness play critical behavioral roles. At the macro level, enforcement intensity, formality rates, and digitalization positively and significantly improve tax performance, whereas the informal sector's size exerts a strong negative effect. The 2SLS results confirm that enforcement has a causal impact on revenue mobilization when supported by institutional capacity.

Scenario simulations demonstrate that increasing awareness, fairness perception, digital adoption, and formalization could raise compliance to 73%, generating approximately UGX 0.1 trillion in additional annual revenue and increasing the tax-to-GDP ratio by 0.01 percentage points. The study concludes that sustainable revenue mobilization requires a balanced approach, strengthening enforcement, enhancing institutional capacity, improving digital inclusion, and building taxpayer trust. It recommends reforms in presumptive taxation, continuous taxpayer education, transparent service delivery, digital training, and harmonized enforcement across local and national authorities. These measures would significantly improve compliance, broaden the tax base, and enhance Uganda's fiscal sustainability.

CHAPTER ONE: INTRODUCTION

1.1 Background

Uganda's informal sector plays a pivotal role in the national economy, contributing over 50% of GDP and employing 91% of non-agricultural workers. Despite its scale, the sector remains largely untaxed, creating a significant gap in domestic revenue mobilization. The Uganda Revenue Authority (URA) has introduced presumptive tax regimes and digital systems such as the Electronic Fiscal Receipting and Invoicing System (EFRIS) to improve compliance. However, adoption remains low due to behavioural, institutional, and structural challenges.

The Kikuubo business area in Kampala exemplifies the complexities of informal sector taxation. Traders operate in fluid, cash-based environments with limited tax awareness and minimal trust in government institutions. Strengthening taxation in this sector is not only a fiscal necessity but also a pathway to inclusive development, improved public service delivery, and economic equity. This study investigates how informal sector taxation can be effectively harnessed to enhance domestic revenue mobilization in Uganda.

1.2 Problem Statement

Although informal sector taxation is widely recognized as a potential source of revenue, its actual impact on domestic revenue mobilization in Uganda remains underexplored. The disconnect between policy frameworks and the realities on the ground, especially in informal hubs like Kikuubo, complicates effective implementation. Traders often perceive taxation as punitive, lack basic knowledge of tax obligations, and operate in environments with weak enforcement. Without a nuanced understanding of these dynamics, efforts to tax the informal sector risk being ineffective or even counterproductive.

1.3 Research Questions

1. What role does informal sector taxation play in Uganda's domestic revenue mobilization?
2. How do informal traders in Uganda, especially in areas of Kikuubo, behave in relation to tax compliance?
3. How effective are presumptive tax regimes and digital tax systems in enhancing informal sector compliance?

4. What institutional and socio-cultural obstacles hinder informal sector taxation in Uganda?

1.4 Objectives of the Study

General Objective

To examine the impact of informal sector taxation on domestic revenue mobilization in Uganda.

Specific Objectives

- To assess the role of informal sector taxation in Uganda's domestic revenue.
- To examine tax compliance behavior among informal traders in Kikuubo.
- To evaluate how effective presumptive tax regimes and digital tax systems are.
- To identify institutional and socio-cultural obstacles to informal sector taxation.
- To propose policy reforms to enhance informal sector tax compliance.

1.5 Significance of the Study

This study is significant for several reasons:

Policy Formulation: It provides evidence-based insights for the Uganda Revenue Authority and Ministry of Finance, Planning and Economic Development to design inclusive and context-sensitive tax policies.

Academic Contribution: It enriches the literature on informal sector taxation, tax justice, and fiscal decentralization in developing economies.

Practical Relevance: It offers actionable recommendations for local leaders and informal traders to improve compliance and formalization.

Development Planning: It supports broader efforts to strengthen domestic revenue systems and promote sustainable development in Uganda.

1.6 Scope of the Study

This study is designed to explore the impact of informal sector taxation on domestic revenue mobilization in Uganda, with a focused lens on the Kikuubo business area. The scope is defined along three dimensions: geographical, temporal, and content.

1.6.1 Geographical Scope

The research is geographically centered on the **Kikuubo business area** in Kampala, Uganda. Kikuubo is one of the most vibrant informal commercial zones in the country, characterized by dense trading activity, minimal formal registration, and a high concentration of micro and small enterprises. The area serves as a representative case for understanding informal sector dynamics and taxation challenges in urban Uganda.

1.6.2 Temporal Scope

The study covers the period from **2000 to 2024 for macro data**, a timeframe that captures recent policy shifts, including the rollout of digital tax systems like EFRIS and evolving presumptive tax regimes. This period also reflects the post-COVID economic recovery phase, during which informal sector activity intensified and tax policy reforms gained momentum.

1.6.3 Content Scope

The content of the study is limited to:

- The role of informal sector taxation in domestic revenue mobilization.
- Tax compliance behavior among informal traders.
- The effectiveness of presumptive tax regimes and digital systems.
- Institutional and socio-cultural barriers to informal sector taxation.
- Policy recommendations aimed at improving tax inclusion and compliance.

The study does not cover taxation of formal enterprises, agricultural informal activities, or broader macroeconomic tax policy beyond the informal sector context.

1.7 Significance of the Study

This research is significant for several reasons:

- **Policy Makers and Tax Authorities:** It provides empirical insights to the Uganda Revenue Authority (URA) and the Ministry of Finance, Planning and Economic Development (MoFPED) to design more inclusive and effective tax policies targeting the informal sector.
- **Academic Contribution:** The study adds to the growing body of literature on informal sector taxation, offering a micro-level perspective rooted in behavioral economics, institutional analysis, and fiscal policy.

- **Local Government and Informal Traders:** By highlighting barriers and opportunities for compliance, the study fosters mutual understanding and trust between tax authorities and informal business operators.
- **Development Partners and NGOs:** The findings can inform donor strategies and development programs aimed at strengthening domestic revenue systems and promoting economic formalization.
- **Public Discourse:** The study contributes to national conversations on tax justice, equity, and the role of informal enterprises in Uganda's development trajectory.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The informal economy of Uganda is a significant component of the national economy, contributing nearly 49% of the gross domestic product (UBOS, 2020) and holding over 60% of the working population. While economically important, the sector is largely tax-free and remains a persistent burden on domestic revenue mobilization. The Uganda Revenue Authority (URA) has made efforts to expand the tax base through presumptive taxation schemes and electronic platforms, but it has low levels of compliance from informal traders. This gap between policy and reality thus helps to underscore the necessity to better understand how informal sectors operate, particularly in terms of high-density commercial centers such as Kikuubo in Kampala.

Kikuubo is a microcosm of Uganda's informal economy. It is defined by extensive networks of commerce, cash transactions, and minimal formal registration. Merchants trade in open spaces with no fixed structures or bookkeeping accounts, making traditional mechanisms for enforcing taxes irrelevant. The majority of traders have more than the threshold for taxation but are unregistered and untaxed, resulting in substantial revenue losses. The character of this setting necessitates that taxation be done in an equilibrium manner, with consideration of behavioral, institutional, and structural compliance determinants.

This chapter weaves together literature for the study and relates it to the study's refined objectives and hypotheses. It first examines theoretical models accounting for informal sector taxation and compliance conduct. It then combines empirical research from global, regional, national, and Kikuubo-specific settings. After summarizing and synthesizing these findings, it identifies the research gap that justifies this study. Finally, it presents a conceptual framework that integrates theoretical insights and empirical evidence, providing a foundation for subsequent analysis.

2.2 Theoretical Framework.

Informal sector taxation is a four-intersection problem cutting across economics, sociology, public administration, and behavioral science. In comprehension of the compliance of Uganda's informal traders, specifically Kikuubo, five interconnected theories are embraced by this study: The Hard-to-Tax Theory, Tax Morale Theory, the Allingham-Sandmo Model, Institutional Theory, and Informal Sector Theory.

These offer a fresh insight for examining the structural, psychological, and institutional determinants that regulate tax compliance and are tied directly to the research's purpose and hypotheses.

2.2.1 Hard-to-Tax Theory

Bird and Wallace (2003) characterize informal enterprises as "hard-to-tax" due to their operating mode: lack of fixed premises, informal accounts, mobile nature, and cash-based transactions. This renders it difficult for tax authorities to find, value, and follow such ventures using conventional instruments of tax administration.

The example in Uganda is the Kikuubo trading center. The traders operate from narrow corridors with no signs, registration, or traceable money flows. They are in shared stalls or shifting positions, thereby rendering it irregular and ineffective for the authorities to enforce. Heterogeneity of the informal firms further complicates policy-making since there are some below the taxation level and others with massive turnover but not included in the tax web. Presumptive tax regimes, designed to minimize complexity, utilize broad rates that do not reflect this diversity, leading to perceptions of unfairness and hostility.

Relevance to study: This theory guides Objective 1 (studying the structure and features of informal enterprises in Kikuubo) and informs Hypothesis H1 (structural features affect compliance).

2.2.2 Tax Morale Theory

Tax Morale Theory, which was introduced by Torgler (2007), focuses on intrinsic motivation. Based on it, individuals' propensity to pay taxes depends on whether they trust the government, find the tax system fair, or have a sense of civic duty. In high-morale settings, observance is spontaneous and enduring; in low-morale settings, avoidance is habitual.

In Uganda, tax morale is undermined by attitudes of corruption, poor service delivery, and exclusion from policy-making. In research, as conducted by EPRC (2021) and Verberne (2017), it has been observed that traders, for example, in Kikuubo, view taxation as punitive rather than developmental. The majority are open to paying taxes when systems are transparent, equitable, and attached to clear benefits.

Relevance to research: Tax Morale Theory contextualizes Objective 2 (investigating trader attitudes, opinions, and compliance behavior) and contextualizes Hypothesis H2 (informal sector taxation plays a significant role in revenue mobilization through increased compliance behavior).

2.2.3 Allingham-Sandmo Model (Economic Theory of Tax Compliance)

The Allingham-Sandmo Model (ASM) of Michael Allingham and Agnar Sandmo (1972) is among the most influential economic tax compliance theories. The model is rooted in rational choice theory, assuming that individuals are utility-maximizing agents that, when considering tax compliance, perform a cost-benefit analysis. In the model, taxpayers are assumed to pay taxes if the cost to them of not paying would outweigh the benefits of evasion. On the other hand, when the chances of being discovered are slim, the fines are low, or the tax levels seem extortionate, people might choose to evade paying taxes.

This perspective situates compliance within an economic calculus defined by three determinants:

- (i). The chance of audit or detection,
- (ii). The strength of the sanction on discovery of evasion, and
- (iii). The relative reward from evasion success.

The model therefore offers a formal economic account for the puzzle of why some pay voluntarily while others cheat, subject to the same legal requirement.

In Uganda's informal economy, and specifically within the Kikuubo business community, the Allingham-Sandmo methodology is somewhat useful in interpreting compliance dynamics. The Uganda Revenue Authority (URA) faces a very difficult task of monitoring informal traders due to high density in businesses, weak documentation, and cash transactions. Such conditions drastically reduce the probability of detection. Informal traders, therefore, operate under the belief that the likelihood of audit or penalty is extremely low. Second, penalties for non-compliance are unevenly applied, and enforcement efforts are intermittent, reinforcing the perception that evasion is costless. For the ASM explanation, this separates the deterrent strength and tilts the cost-benefit ratio in favor of evasion.

Although the traditional Allingham-Sandmo Model is dependent largely on enforcement, sanctions, and detection, newer iterations of the model acknowledge the role of compliance systems and

institutional design in altering taxpayer calculations. Under presumptive tax arrangements and electronic taxation systems (i.e., Electronic Fiscal Receipting and Invoicing System, EFRIS) in Uganda, the costs of apparent non-compliance are to be increased by making detection simpler, increasing monitoring, and reducing evasion opportunities. For instance, presumptive tax arrangements categorize companies into bands based on business type or turnover and hence reduce evasion opportunities. Similarly, digital platforms provide real-time monitoring of transactions, making evasion riskier and costlier.

From the ASM perspective, these interventions are ways of reconfiguring the cost–benefit analysis of informal traders. Enforced and disclosed sufficiently, presumptive and digital tax systems can increase the perceived probability of detection, thereby reducing the incentive to avoid paying taxes. This links the model squarely with Objective 4 of this study (to examine the efficacy of presumptive tax regimes and digital tax systems in optimizing revenue collection from the informal economy).

Nevertheless, the application of the Allingham-Sandmo Model to Uganda's informal economy must also take into account contextual limitations. Kikuubo traders exist in a socio-economic environment where taxpayers' awareness is low, record-keeping is minimal, and enforcement capacity is thin. The majority of traders barely perceive themselves as taxpayers, thus reducing the psychological salience. Moreover, digital tax tools have faced opposition due to infrastructural constraints, low digital literacy levels, and suspicion of government technology. These hindrances lower the deterrent capacity of presumptive and digital tools, compromising their alignment with ASM estimates.

Despite all these constraints, the ASM is a good policy discussion structure for informal sector taxation. It stresses that URA must not only make enforcement more visible but also deliver consistency and predictability in penalties. As soon as informal traders perceive that avoidance will eventually end in detection and penalty, the avoidance cost rises, and compliance is thus the best alternative. At the same time, decreasing compliance costs by simplifying presumptive regimes, transparent digital systems, and taxpayer facilitation diminishes the relative appeal of avoidance. In this way, enforcement systems and structures both influence the compliance calculus.

In Kikuubo, that means that URA's strategies must strike a balance between "carrots" and "sticks." The carrots are simplifying tax complexity, making access to digital resources available, and

linking taxation with perceptible public goods, which discourages evasion. The sticks are frequent enforcement, credible audits, and effective sanctions, which increase the perceived price of non-compliance. The Allingham-Sandmo Model provides a theoretical model to reconcile these strategies into a coherent compliance model.

Relevance to the study: The Allingham-Sandmo Model directly relates to two of the objectives of this research. One, it supports Objective 2 (to analyze perceptions, attitudes, and compliance behavior of informal traders towards taxation) by showing how rational cost-benefit analysis settles behavior. Second, it informs Objective 4 (to examine the efficacy of presumptive tax systems and digital tax systems in raising revenue from the informal economy) by demonstrating how these systems can alter the compliance calculus. To this end, the model confirms Hypotheses H1 (structural features shape compliance), H1a (perceived awareness of tax obligations enhances voluntary compliance), and H3 (presumptive and digital systems boost revenue collection). Through combining enforcement, system design, and attitudes of taxpayers, the ASM provides an economic model of crucial importance to understanding and addressing informal sector taxation in Uganda.

2.2.4 Institutional Theory

Institutional Theory, as outlined by Douglass North (1990), places central importance on the role of institutions in determining economic behavior. Institutions are seen as the "rules of the game," formal and informal, which structure human interaction. They exist in the form of institutionalized formal institutions like government agencies, regulations, and legislation, and informal institutions like customs, social norms, and community-level governance structures. They both shape the incentives, opportunities, and constraints of economic agents. In taxation, institutions not only enforce compliance but also shape taxpayer attitudes, trust, and fairness judgments.

Used in the context of taxation in the informal economy, Institutional Theory posits that compliance behavior is not only the product of rational individual choices (as in economic models like Allingham-Sandmo) but also a function of the institutional environment within which traders operate. Institutions such as the Uganda Revenue Authority (URA), councils, and trader associations produce rules, norms, and mechanisms of enforcement that have direct effects on whether informal traders do or do not pay taxes. Where institutional frameworks are consistent,

open, and predictable, they are likely to lead to compliance. Where they are disjointed, incoherent, or illegitimate, they tend to undermine compliance and reinforce informality.

In Uganda, the taxing institution's context is multifaceted and disjointed. URA technically has the authority to collect and manage taxes, but lacks enforcement power within crowded informal markets such as Kikuubo. Informal institutions like market leaders, local council authorities, and trader associations consequently intervene to fill the gap in governance. These actors will on occasion, group traders, resolve conflicts, and take levies. However, these are not necessarily complementary to URA's function, leading to duplication, tension, and, in others, formal tax substitution. For example, the majority of the Kikuubo businessmen consider the monthly or daily market taxes paid to local governments as a kind of tax compliance, even though such taxes are never transferred to the national treasury. This replacement effect offers alternative systems of accountability, undermining the influence of URA's formal taxation regulations.

Institutional Theory claims that such phenomena depict how institutions and institutional arrangements motivate behavior. Marketers rely more on nearby, observable, and locally based institutions such as market associations than distant and bureaucratic ones such as the URA. Compliance, here, is also a function of the legitimacy and credibility of institutions. Where URA is perceived as corrupt, ineffective, or disconnected from the reality of marketers, compliance falls. Conversely, where there is a perception that associations or local governments are more responsive, traders will remit their levies even though these may be informal surrogates.

This finds much broader significance for understanding informal sector taxation barriers. It underscores that compliance is not just an issue of taxpayer ignorance or evasion but institutional incompatibility too. The absence of coordination between URA and local government institutions fosters confusion, duplication, and distrust. Traders who are already operating on tight margins may interpret multiple fees as an overburdening, strengthening resistance to official registration and compliance. Additionally, because there is no linkage between formal and informal institutions, URA does not get to leverage the social capital trapped in trader associations, which could otherwise be good channels for education, outreach, and compliance promotion.

Institutional Theory specifically emphasizes the requirement of path dependency: once informal modes of governance take root, they prove difficult to dislodge. For centuries, traders in Kikuubo have relied on market councils and associations, creating norms of compliance that operate outside

the formal system. These patterns are transmitted to traders as part of the institutional culture of the market. Unless there are deliberate efforts to incorporate or realign these institutional structures, URA's actions are likely to be rejected or ignored.

Besides, Institutional Theory emphasizes the importance of legitimacy in shaping compliance behavior. Institutions' legitimacy does not only depend on legal rights but also on perceptions about their fairness, efficiency, and representativeness. Uganda's informal traders lack faith in URA due to a perceived low payback from taxation in public goods. In comparison, they are most likely to view donations to market associations as legitimate because they translate into concrete, immediate benefits such as security, sanitation, or resolution of conflict. This varying perception of legitimacy helps to reinforce the idea that informal institutions tend to have more control over trader behavior than do formal institutions.

Relevance to the study: Institutional Theory has a direct relevance to Objective 3 (identification of institutional and structural challenges to effective informal sector taxation in Kikuubo). It specifies how low institutional legitimacy, weak coordination, and extremely fragmented institutional arrangements impede compliance. Institutional Theory also enriches Hypothesis H4 (institutional, economic, and socio-cultural obstacles significantly inhibit effective informal sector taxation). By considering the effect of organizations and structures on behavior, Institutional Theory provides a window for analyzing how both URA and informal governance actors shape compliance outcomes.

In sum, Institutional Theory broadens informal sector taxation examination beyond single decision-making to incorporate the overall governance context. Institutional Theory shifts the center stage to interactions between the formal and informal institutions, levies as tax substitutes, and the impact of legitimacy on compliance. For instance, Kikuubo elaborates on why URA's strategies have sometimes not attained mass compliance and how universalizing local institutions in tax administration could be crucial for long-term change.

2.2.5 Informal Sector Theory

Informal Sector Theory, as theorized by Harriss-White (2010) and further explicated by Schneider and Enste (2000), situates informality in broader socio-economic, political, and institutional contexts. The theory does not look at informality as the absence of formality but rather as a particular form of economic organization with inherent structures, motivations, and features. Informality is encouraged as a response to regulatory charges, unemployment, and exclusion at the

system level, yet it is also a sign of resilience, adaptability, and survival-striving among excluded people. This framework provides a holistic picture of the way to research why informal enterprises succeed in countries such as Uganda, and why attempts to formalize them as part of the tax base often experience resistance.

Characteristics of Informal Businesses

Informal businesses, according to Informal Sector Theory, are described as having particular characteristics in common that distinguish them from formal businesses. They are small-scale, family-owned, or one-man businesses on the basis of self-financing rather than official credit. Accounting is minimal or absent, transactions are in money, and the enterprise frequently does not have established locations. In Uganda's Kikuubo business quarter, these characteristics are highly pronounced. Traders fill up narrow corridors, share a stall, or conduct business in improvised structures. Many of them have no signs or are unregistered and thus are difficult for the Uganda Revenue Authority (URA) to find or trace. These characteristics underscore why informal businesses are "hard to tax," but they also highlight entrepreneurial energy that generates livelihoods for millions of Ugandans.

Motivations for Informality

Theory emphasizes that people are involved in and remain in the informal economy due to a variety of reasons, not all of which can be boiled down to tax avoidance. Informality in most cases would thus be a reflection of structural exclusion, rather than willful evasion. Large registration fees, bureaucratic processes, and administrative red tape deter formalization. Additionally, poor access to credit, poor infrastructure, and poor legal protections make informality the only viable option for many entrepreneurs. In Uganda, legal formal registration at places such as the Uganda Registration Services Bureau (URSB) typically entails paperwork and fee payment that is out of reach for small-scale traders. To the Kikuubo traders, whose enterprises are often insecure or seasonal, the expenses of formalization appear to outweigh the open-ended benefits. Informality is therefore not simply an avoidance of taxation but also a rational response to structural barriers.

Another propelling force is in the socio-cultural arena. Informal firms frequently draw finance and labor from kinship, community trust, and ethnic networks. In Kikuubo, the majority of companies operate under tight-knit networks where social support reduces reliance on formal institutions.

Informality becomes entrenched in the social fabric of the city, not merely to offer economic opportunity but also social identity and belonging.

Structures of Informal Businesses

Informal Sector Theory also draws attention to the structural structure of informality. Informal businesses are not of a single type; they vary by size, intensity of capital, and market orientation. They move along a continuum from microbusinesses operating at subsistence levels to enormously profitable wholesalers deliberately avoiding formalization. In Kikuubo, such heterogeneity is apparent: together with small-scale street vendors are big traders dealing with considerable amounts of imports, but both are put into the same presumptive tax regime. Such structural variety is challenging for tax policy, which tends to apply similar instruments that cannot capture the variety of informal enterprise organizations.

Moreover, informal sector organization is interwoven with formal institutions in complex ways. Traders may be registered with local authorities or receive market authorities' licenses while denying themselves the URA tax net. Such mixed-institutional design blurs lines between formal and informal and is associated with indeterminacies around responsibility and accountability. Informal Sector Theory recognizes such structural interweavings as an attribute of informality and emphasizes the need for context-specific taxation.

Application to Kikuubo and Uganda

The informal sector of Uganda exemplifies all three features of Informal Sector Theory: its characteristic features, its diverse motivations, and its different structures. The dense cluster of traders in Kikuubo shows the sector as a livelihood strategy and commercial hub. Motivations for traders are driven not only by a desire to minimize tax burdens but also by the lack of formal systems, reliance on community trustworthiness, and unpredictable government assistance. Enterprise organizational structures ranging from micro to medium in size induce disincentives for the uniformity of policy response and require segmenting.

Policy-wise, this theory challenges punitive or universalist approaches to taxing the informal economy. If survival and system exclusion contribute to informality, then coercive enforcement imperils livelihoods and increases suspicion. Instead, policies must address the underlying barriers to formality, such as registration cost, financial access, and administrative bureaucracy. Incentive

policies like streamlined registration, bundled services, and concrete returns on taxation have a better prospect of encouraging compliance.

Relevance to the Study

Theory of the Informal Sector directly guides Objective 1 (to explore the structure and features of informal enterprises that exist in Kikuubo). Through the examination of the defining features, drivers, and organizational patterns of the informal enterprises, this theory offers a baseline for appreciating the reasons why informal businesses remain averse to being incorporated into the tax regime. It also highlights the heterogeneity of informal business, calling for policies that are sensitive to differences in scale, type, and motivation. The theory confirms Hypothesis H1 (structural attributes influence compliance) and supplements Institutional Theory by locating informality in broader socio-economic environments.

Briefly, Informal Sector Theory presents a multi-faceted explanation of informality in Uganda. It uncovers that informal businesses are not Tax Evaders but prudent actors adapting to structural constraints, socio-cultural contexts, and economic survival compulsions. In Kikuubo's case, the theory suggests paying attention to trader characteristics and intentions as a first step towards devising fair, inclusive, and efficient taxation strategies.

2.2.6 Integrative Perspective

All theories have their specific contribution, but in aggregate they create a unified framework. The Hard-to-Tax Theory deals with structural characteristics; Tax Morale with perceptions and attitudes; the Allingham-Sandmo Model with enforcement and deterrence; Institutional Theory with governance forces; and Informal Sector Theory situates informality within socio-economic settings. Their inclusion structures the conceptual frame of the study and is directly related to its objectives and hypotheses.

2.3 Empirical Studies

2.3.1 Global Perspectives

At the international level, taxation of the informal economy has emerged as a central component of local revenue mobilization policies, particularly in developing economies where informality constitutes the majority of the economy. Research findings have persistently indicated that tax

system design for informal enterprises must balance between the collection of revenue and enabling livelihoods and supporting step-by-step formalization.

The Organization for Economic Co-operation and Development (OECD, 2018) noted behavioral interventions such as reminders, standardized tax forms, and taxpayer education campaigns as key. These were shown to increase voluntary compliance by reducing psychological and procedural barriers. Similarly, the International Labour Organization (ILO, 2019) documented incentive-based formalization programs in Latin America whereby small enterprises were encouraged to enroll to gain access to social security, credit, and simplified tax regimes. They demonstrated that if taxation is linked with tangible benefits, compliance increases.

Other foreign experience illustrates the advantages and disadvantages of presumptive taxation. In India, presumptive plans for small businesses reduced compliance costs but did not cover more prosperous traders, creating inequities. In Brazil, simplified regimes such as Simples Nacional integrated taxation with social contributions, providing a model for inclusive formalization. Enforcement challenges and administrative capacity remained, however, especially in rural areas.

Schneider and Enste (2000) also argued that informality reflects broader governance and institutional weaknesses. In places where the government is not trusted and tax systems are generally regarded as being unfair, compliance is ever low regardless of enforcement vigor. Joshi, Prichard, and Heady (2014) also argued further that taxation is not only a tool for raising revenue but also a governance vehicle that increases state–citizen accountability when applied fairly and transparently.

Implication for research: These international lessons highlight the appropriateness of presumptive and digital systems, education of taxpayers, and incentive-based strategies, reflecting Objective 4 (evaluating presumptive and digital tax systems) and Hypothesis H3 (presumptive and digital systems enhance revenue collection).

2.3.2 African Views (Continental Data)

Across Africa, the informal economy offers more than 80% of employment and up to 40% of GDP (ILO, 2019). Taxation of the sector has become a top priority for governments seeking to reduce aid dependence and bolster domestic resource mobilization. However, the outcomes have been

highly varied depending on variation in administrative capacity, political will, and attitudes of taxpayers.

In West Africa, Ghana had a presumptive tax regime targeting small traders that reduced compliance burdens but raised little revenue due to lack of enforcement and trustworthiness distrust by taxpayers (Joshi et al., 2014). Nigeria's attempts to tax the informal sector revealed the same issues, as widespread evasion was linked to corruption and intimidation by tax officials. Traders largely chose to remit market levies to associations rather than formal taxes, with the same playing out in Uganda.

Southern African experience reveals mixed outcomes. South Africa had instituted a turnover tax to simplify compliance for micro-enterprises, but was defeated by low awareness and voluntary acceptance. Botswana, on the other hand, attained better compliance by tying taxation to observable public benefits like health and education, which enhanced tax legitimacy perception.

Francophone Africa has tried fresh solutions, too. Senegal, for instance, paired presumptive taxation with social protection programs for micro-entrepreneurs, which boosted registration levels. But in most cases, informal traders viewed taxation as extractive, not developmental, and restricted compliance.

Generally, there is an African experience pointing to the necessity of balancing enforcement with incentives, adjusting regimes for business heterogeneity, and connecting taxation with tangible payoffs. These lessons are apt for Uganda's requirements and highlight the imperative for reform in conformity with the context.

Implication for study: African experience supports Objectives 2, 3, and 4, corroborating Hypotheses H2–H4, in demonstrating that compliance is driven as much by trust, institutional legitimacy, and the visible utility of taxation as by enforcement.

2.3.3 Regional Experiences (East Africa)

East African countries provide informative comparative perspectives on the taxation of informal business because they have similar structural characteristics but vary in policy response.

Kenya introduced presumptive tax regimes and established Huduma Centers to systematize taxpayer registration and delivery of services. Though access became greater, enforcement

remained unpredictable, and the majority of micro-enterprises continued to be non-compliant by not registering. Rwanda pioneered digital platforms, including SMS-based reminders and e-tax portals, raising awareness and reducing the costs of compliance. Yet, differences in digital literacy and infrastructure limited take-up, particularly among rural traders.

Tanzania's experience with tax stamps on informally traded commodities was undercut by problems of credibility, since the presence of fake stamps and weak enforcement had a discrediting impact. Ethiopia introduced segmented presumptive taxation systems based on turnover-based categorization of traders, which improved equity and reduced conflicts. This, however, created new opportunities for rent-seeking and tax official manipulation.

At the regional level, evidence from empirical research points out shared threads: weak institutional capacity, low taxpayer trust, and the absence of complementary measures such as access to credit and enterprise development services. East African experiences show that compliance is not ensured by one tool but by harmonizing the enforcement with incentives and faith in tax administrations.

Implication for research: These regional findings support segmentation and coordination in Uganda, directly validating Objectives 3 and 4 and yielding comparative evidence for Hypotheses H3 and H4.

2.3.4 Uganda-Specific Evidence

Uganda's informal economy has been researched exhaustively, yet issues remain unsolved. UBOS (2020) reaffirmed that nearly half of Uganda's GDP is received informally, while over 60% of Uganda's workforce is outside the formal tax system. URA's introduction of presumptive taxes notwithstanding, collection remains low.

Low taxpayer awareness, high costs of compliance, and distrust in URA were identified by the Economic Policy Research Centre (EPRC, 2021) as continued barriers. Kangave et al. (2016) noted that flat presumptive tax regimes fail to reflect business heterogeneity, over-tax micro-enterprises, but allow wealthier traders to evade. Verberne (2017) concluded that Kikuubo traders have a tendency to interpret URA's measures as being secretive and punitive in approach and perpetuating evasion. Mugisha and Sebagala (2019) highlighted the role of local councils and

associations in norms of compliance, often substituting URA by levying charges that are mistaken by traders as taxes.

More recent studies cite issues with computerized tax systems. While EFRIS was designed to ease compliance and reduce evasion, it has been fought by informal traders who protest inadequate training, bugs in the computer, and anxiety about being watched. Instead of increasing compliance, in a few cases, these systems have created resentment and opposition.

Implication for research: These findings explicitly reinforce Objectives 2 and 3 (testing compliance behavior and institutional barriers), confirm Hypotheses H1–H4. They also underscore the context-specific nature of interventions required in Kikuubo.

2.3.5 Kikuubo Case Insights

Kikuubo, the commercial hub of Kampala, presents a unique microcosm of Uganda's economy in the informal sector. The area is filled with wholesalers and medium-scale marketers of retail and wholesale goods, particularly textiles, electronics, and local products. Businesses tend to be cash-oriented, unregistered, and reliant on kinship or ethnic organizations for labor and capital.

Evidence indicates that Kikuubo traders operate outside the grasp of URA, relying on extralegal organizations such as trader associations and local councils rather. These institutions collect levies, provide protection, and settle disputes, strengthening parallel governance. Traders consider payments to be a discharge of fiscal obligation, lessening incentives for URA compliance. Moreover, there are common negative views of URA, fueled by allegations of corruption, harassment, and little visible return from taxation.

The extent of awareness of presumptive tax regimes and other E-Systems, such as EFRIS, remains low in Kikuubo. Entrepreneurs opine that E-Systems are complex, costly, and do not relate to their daily operations. Thus, the levels of compliance remain low and resistance high against URA's initiatives. But Kikuubo also presents itself as a reform opportunity: its dense networks and associations present themselves as potential conduits for education, outreach, and compliance support if approached right.

Implication for research: Implications of Kikuubo consolidate the research interest in Objectives 1–4, linking business properties, compliance conduct, and institutional limitations with domestic revenue mobilization. They also provide context-specific evidence to test Hypotheses H1–H4.

2.4 Conclusion and Integration

Reviewed literature indicates that taxation in the informal sector is determined by a range of interrelated factors. Theoretical frameworks demonstrate the complexity: the Hard-to-Tax Approach situates informality as a structural issue; the Allingham-Sandmo Model positions rational compliance decisions center stage; Tax Morale emphasizes trust and legitimacy; Institutional Theory suggests organizations and governance arrangements' impact; and Informal Sector Theory situates informality in the socio-economic survival context.

Empirical observations reinforce these perspectives. Across the world, simplified schemes and incentives raise compliance. Across the whole of Africa, presumptive systems and technology have mixed outcomes, with a lack of trust and ineffective enforcement limiting achievement. In East Africa, nations register experimentation as well as capacity building and uptake challenges. In Uganda, there are awareness deficits, a lack of trust in URA, and flat presumptive regimes, while in Kikuubo, robust informal networks and parallel governance add to the complexity of taxation.

Synthesizing these outcomes yields four overall themes consistent with the study's objectives and hypotheses:

1. Business characteristics determine compliance (Objective 1, H1).
2. Attitudes and perceptions shape compliance behavior (Objective 2, H2).
3. Institutional and structural barriers take away from effectiveness (Objective 3, H4).
4. Presumptive and electronic mechanisms hold promise but have adoption issues as well (Objective 4, H3).

By and large, the literature suggests that informal sector taxation is not a technical enforcement issue but a complex issue involving business organization, firm behavior, institutions, and system design. These conclusions have a direct bearing on the conceptualization of the framework of this research, which integrates them into an analytical model of informal sector taxation and domestic revenue mobilization.

2.5 Identification of the Research Gap

In the face of abundant literature on informal sector taxation, certain gaps continue to be present, particularly within Uganda's experience:

Overemphasis on Macro-Level Analysis: Most studies (e.g., UBOS, 2020; IMF, 2019) are focused on total revenue trends at the national level and overall policy directives with minimal emphasis on micro-level realities in market centers such as Kikuubo.

Insufficient Theory-Practice Integration: Existing literature employs a single theoretical lens, while taxation of the informal sector requires a multivariate approach with economic, behavioral, and institutional perspectives.

Inadequate Focus on Trader Perception: Although tax compliance and tax morale have been studied widely around the globe, there exist few Uganda-focused studies on how trader attitudes, trust, and perceptions affect compliance.

Inadequate Analysis of Presumptive and E-Tax Systems: Notwithstanding URA's introduction of presumptive regimes and computer-based tools like EFRIS and DTS, there is scant empirical evidence on the effectiveness of these in promoting compliance by small-scale informal traders.

Institutional and Governance Gaps: Research has signaled URA's challenges but has not fully addressed the interface between formal and informal forms of governance in shaping compliance.

2.6 Contribution of this study

By focusing on Kikuubo as a microcosm of Uganda's informal economy, this research fills the above gaps. It synthesizes varied theoretical lenses, combines persuasive trader perceptions and institutional dynamics, and evaluates the efficiency of presumptive and digital tax regimes at the micro level. It thereby distills context-specific insights that can guide policy and academic discourse on informal sector taxation

2.7 Conceptual Framework

This study develops the nexus between informal sector taxation and domestic revenue mobilization using clearly defined variables that directly relate to the research objectives and hypotheses.

Independent Variables:

Structural factors (e.g., business size, formality, turnover, and informal sector size) determine traders' capacity and opportunity to comply.

Behavioral factors (awareness, fairness perception, and tax morale) shape the willingness to comply.

Institutional factors (enforcement visibility, audit capacity, governance quality, and digitalization) create the enabling environment for compliance.

Mediating Variable; Tax Compliance Behavior:

Compliance serves as the central mechanism translating individual, structural, and institutional influences into measurable revenue outcomes.

Improvements in awareness, fairness, and enforcement raise compliance, which subsequently increases domestic revenue.

Dependent Variable – Domestic Revenue Mobilization:

Represented by Uganda's **tax-to-GDP ratio** and **URA net collections**, this reflects the country's fiscal performance and capacity to fund development.

Moderating Role – Digitalization (EFRIS):

Digitalization strengthens both enforcement and compliance. It moderates the link between compliance and revenue mobilization by improving transaction transparency and reducing evasion.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter explains the methodological approach adopted to investigate how informal sector taxation influences domestic revenue mobilization in Uganda, focusing on the Kikuubo Business Area in Kampala. It presents the research design, data sources, sampling procedures, variables, econometric models, estimation techniques, and diagnostic tests used to validate the results.

The study adopted a mixed-methods design combining quantitative and qualitative approaches. Quantitatively, it used both micro-level cross-sectional data collected from traders and macro-level time-series data from national fiscal institutions. Qualitatively, it incorporated observational insights on trader behavior and perceptions.

3.2 Research Design

An **explanatory and correlational research design** was employed to analyze the causal relationships between informal sector taxation and domestic revenue performance. The study aimed to explain how micro-level behavioral factors (such as awareness, tax morale, and fairness) and macro-level institutional factors (such as enforcement and digitalization) influence compliance and tax-to-GDP outcomes.

Two complementary models were specified:

A Micro-level Model; to analyze the determinants of trader compliance using primary survey data.

A Macro-level Model; to analyze long-run effects of structural and institutional variables on national tax performance using secondary data.

3.3 Data Sources

Primary Data:

Collected from 200 informal traders in the Kikuubo Business Area, Kampala. Data were gathered using structured questionnaires covering: Awareness of tax laws and systems, Tax morale and perception of fairness, Digital adoption (EFRIS usage), Enforcement visibility, Business turnover, size, and education level, and Actual compliance behavior (filing or payment).

Secondary Data:

Drawn from Uganda Revenue Authority (URA) annual performance reports, Uganda Bureau of Statistics (UBOS) abstracts, and fiscal databases from the International Monetary Fund (IMF) and World Bank (2000–2024). Variables included tax-to-GDP ratio, informal sector size (% of GDP), enforcement index, formality rate, digital adoption index, and URA audit capacity index.

3.4 Study Population and Sampling

The target population consisted of micro and small-scale traders operating in Kikuubo. The area was divided into five trading sectors: textiles, electronics, groceries, cosmetics, and stationery. A **stratified random sampling** technique ensured balanced representation across sectors and business sizes.

Table 3. 1: Study Population and Sampling

Sector	Approximate share	Traders sampled
Textiles	26%	52
Electronics	22%	44
Groceries	20%	40
Cosmetics	18%	36
Stationery	14%	28
Total	100%	200

3.5 Variables and Measurement

Table 3. 2: Variables and Measurement

Variable Type	Variable	Measurement
Dependent (Micro)	Compliance	Binary (1 = compliant, 0 = non-compliant)
Independent (Micro)	Awareness, Morale, Fairness, Enforcement visibility	0–10 Likert scale
	Digital adoption (EFRIS)	Binary (1 = yes, 0 = no)
	Formal registration (TIN)	Binary (1 = yes, 0 = no)
	Turnover	Continuous (UGX millions/month)
	Education level	Ordinal (0 = primary, 1 = secondary, 2 = diploma, 3 = degree+)
Dependent (Macro)	Tax-to-GDP ratio	Percent (%)
Independent (Macro)	Informal sector size	Percent of GDP
	Enforcement intensity index	Scale 0–1
	Formality rate	Entities per 1,000 adults
	EFRIS adoption index	Scale 0–1
	URA audit capacity index (instrument)	Scale 0–1

3.6 Econometric Model Specifications

The study used econometric models to estimate both micro-level trader behavior and macro-level fiscal outcomes.

All models were estimated using **STATA**, with appropriate tests for validity, endogeneity, and robustness.

3.6.1 Micro-Level Model (Trader Compliance)

The binary nature of the compliance variable (1 = compliant, 0 = non-compliant) warranted a Logistic regression model to estimate the probability that a trader complies with tax obligations given their characteristics and perceptions.

Model 1: Logistic Regression (Logit Model)

$$\begin{aligned}\text{logit}(P_i) &= \ln\left(\frac{P_i}{1 - P_i}\right) \\ &= \beta_0 + \beta_1 AWR_i + \beta_2 MOR_i + \beta_3 FAIR_i + \beta_4 ENF_i + \beta_5 DIG_i + \beta_6 FORM_i \\ &\quad + \beta_7 TURN_i + \beta_8 EDU_i + \epsilon_i\end{aligned}$$

Where:

- P_i = Probability that trader i is tax-compliant.
- AWR_i = Awareness level.
- MOR_i = Tax morale.
- $FAIR_i$ = Fairness perception.
- ENF_i = Enforcement visibility.
- DIG_i = Digital/EFRIS usage.
- $FORM_i$ = Formal registration.
- $TURN_i$ = Business turnover (UGX millions/month).
- EDU_i = Education level.
- ϵ_i = Random error term.

The logistic function ensures the estimated probabilities fall within (0,1).

Expected signs: all coefficients ($\beta_1-\beta_8$) > 0.

To check robustness, a **Probit model** with a normal cumulative distribution function was also estimated:

Model 2: Probit Specification

$$P_i = \Phi(\beta_0 + \beta_1 AWR_i + \beta_2 MOR_i + \beta_3 FAIR_i + \beta_4 ENF_i + \beta_5 DIG_i + \beta_6 FORM_i + \beta_7 TURN_i + \beta_8 EDU_i)$$

Where Φ Denotes the cumulative normal distribution function.

Both models yield consistent estimates, and marginal effects were computed to interpret changes in compliance probabilities.

3.6.2 Macro-Level Model (Domestic Revenue Mobilization)

At the national level, the dependent variable, tax-to-GDP ratio, is continuous, warranting a **linear regression model**.

Model 3: Ordinary Least Squares (OLS) Specification

$$TAXGDP_t = \alpha_0 + \alpha_1 INFORM_t + \alpha_2 ENF_t + \alpha_3 FORM_t + \alpha_4 DIG_t + \mu_t$$

Where:

- $TAXGDP_t$ = Uganda's tax-to-GDP ratio in year t .
- $INFORM_t$ = Size of the informal sector as % of GDP.
- ENF_t = Enforcement intensity index.
- $FORM_t$ = Formality rate (registered entities per 1,000 adults).
- DIG_t = Digital adoption index (EFRIS coverage).
- μ_t = Error term.

Expected signs:

- $\alpha_1 < 0$ (Informality reduces revenue mobilization.)
- $\alpha_2, \alpha_3, \alpha_4 > 0$ (Enforcement, formality, and digitalization improve tax performance).

Because fiscal time-series data often exhibit heteroskedasticity and autocorrelation, the model was estimated using **Heteroskedasticity and Autocorrelation Consistent (HAC) OLS**, also known as **Newey–West corrections**, to ensure robust standard errors.

3.6.3 Addressing Endogeneity: The 2SLS Model

In taxation models, enforcement intensity (ENF_t) may be endogenous — as higher revenues enable greater enforcement and vice versa. To correct for this, a Two-Stage Least Squares (**2SLS**) model was applied.

First Stage (Instrumental Regression):

$$ENF_t = \gamma_0 + \gamma_1 AUDIT_t + \gamma_2 ENF_{t-1} + \gamma_3 FORM_t + v_t$$

Where:

- $AUDIT_t$ = URA audit capacity index (ratio of audit staff to taxpayers and compliance operations in total URA expenditure).
- ENF_{t-1} = Lagged enforcement, used to capture persistence of compliance programs.

Second Stage (Structural Equation):

$$TAXGDP_t = \delta_0 + \delta_1 ENF_t + \delta_2 ENF_t + \delta_3 FORM_t + \delta_4 DIG_t + e_t$$

Where ENF_t is the predicted value of enforcement from the first stage.

Instrument validity conditions:

Relevance: instruments must correlate with ENF_t (tested using first-stage $F > 10$).

Exogeneity: instruments must affect tax-to-GDP only through enforcement (tested using Hansen–Sargan J-statistic, $p > 0.1$).

Expected signs: $\delta_1 < 0$; $\delta_2, \delta_3, \delta_4 > 0$.

This two-stage approach eliminates simultaneity bias and ensures causal interpretation of the enforcement's effect on revenue mobilization.

3.6.4 Integrated Micro–Macro Bridge Model

To understand how micro-level trader behavior scales into macro-fiscal outcomes, the study developed an integrated simulation model. Regression coefficients from the Logit model were combined with elasticities from the 2SLS macro model to estimate how a unit improvement in trader compliance (via awareness, fairness, or digitalization) affects Uganda's tax-to-GDP ratio.

Model 4: Micro–Macro Integration

$$\Delta TAXGDP = \eta \times \Delta COMP$$

Where:

$\Delta COMP$ = Predicted change in compliance rate from micro-model scenarios.

η = Tax-to-GDP elasticity with respect to compliance (estimated from macro regression).

This model bridges local interventions and national fiscal outcomes, demonstrating how improved compliance in clusters like Kikuubo contributes to overall domestic revenue growth.

3.7 Estimation Techniques

Data were analyzed using **STATA** as follows:

Descriptive statistics, mean, standard deviation, and frequency tables.

Correlation analysis, to examine associations and detect multicollinearity.

Regression analyses:

Logit and Probit for trader compliance.

HAC-OLS and 2SLS for national fiscal analysis.

Scenario simulations, to quantify potential national gains from improved informal sector compliance.

3.8 Diagnostic and Robustness Tests

Table 3. 3: Diagnostic and Robustness Tests

Test	Purpose	Interpretation
Variance Inflation Factor (VIF)	Detects multicollinearity	$VIF < 5 =$ no multicollinearity
Breusch–Pagan Test	Tests heteroskedasticity	$p > 0.05 =$ homoscedastic errors
Durbin–Watson Test	Tests serial correlation	$DW \approx 2 =$ no autocorrelation
Ramsey RESET Test	Tests the functional specification	$p > 0.10 =$ correct specification
First-Stage F-Test	Tests the instrument strength	$F > 10 =$ strong instruments
Hansen–Sargan J Test	Tests the instrument exogeneity	$p > 0.10 =$ valid instruments
Durbin–Wu–Hausman Test	Detects endogeneity	$p < 0.05 =$ OLS biased, 2SLS preferred
ROC/AUC	Evaluates the binary model	$AUC \geq 0.8 =$ strong prediction

3.9 Ethical Considerations

Ethical approval was obtained before data collection. Each respondent provided informed consent. Participation was voluntary, and confidentiality was assured by anonymizing all responses. Data were stored securely and used solely for academic purposes.

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the empirical findings of the study on the impact of informal sector taxation on domestic revenue mobilization in Uganda, focusing on the Kikuubo Business Area in Kampala. The analysis integrates primary data collected from traders with secondary macroeconomic data from URA, UBOS, IMF, and World Bank spanning 2000-2024.

The presentation follows six structured sections:

1. Descriptive statistics of trader-level (micro) and national-level (macro) variables.
2. Correlation analysis among trader behavioral and structural factors.
3. Micro-level regression analysis using Logit and Probit models.
4. Macro-level regression analysis using HAC-OLS and Two-Stage Least Squares (2SLS) methods.
5. Diagnostic and robustness tests confirming model validity.
6. Integration of micro and macro results to show how compliance improvements translate into national revenue gains.

4.2 Descriptive Analysis

4.2.1 Characteristics of Kikuubo Traders

Data was collected from 200 informal traders across five major sectors: textiles, electronics, groceries, cosmetics, and stationery. Table 4.1 summarizes their key characteristics.

Table 4. 1: Descriptive statistics of Kikuubo traders (n = 200)

Variable	Mean	Std. Dev.	Min	Max
Awareness (0–10)	4.8	2.0	0	10
Tax morale (0–10)	4.2	2.2	0	10
Fairness perception (0–10)	3.8	2.3	0	10
Enforcement visibility (0–10)	3.5	2.0	0	10
Turnover (UGX millions/month)	31.4	22.1	3	110
Digital/EFRIS use (1 = yes)	0.29	0.45	0	1
Formal registration (1 = yes)	0.41	0.49	0	1
Education level (0–3)	1.37	0.84	0	3
Compliance (1 = yes)	0.54	0.50	0	1

Source: Field data (2025).

Interpretation:

On average, 54% of traders were compliant with their tax obligations. Compliance in this study refers to consistent filing or presumptive tax payment to the URA. While slightly above half, this indicates moderate adherence, suggesting significant potential for improvement through targeted reforms.

Digital adoption (EFRIS use) stood at 29%, reflecting that a majority of traders still transact manually. Only 41% reported formal business registration, revealing persistent informality.

Behavioral indicators reveal moderate awareness (mean = 4.8/10) and low to moderate morale (4.2/10). Traders generally perceive limited fairness (3.8/10) in URA’s tax administration, a perception that, as subsequent analysis shows, substantially influences compliance.

The mean monthly turnover of UGX 31.4 million indicates that many traders are economically viable and could reasonably contribute to the tax net if barriers to compliance were reduced.

These statistics reflect a mixed compliance landscape, a coexistence of “occasional compliers” and “consistent non-filers,” shaped by low awareness, weak enforcement visibility, and limited digital inclusion.

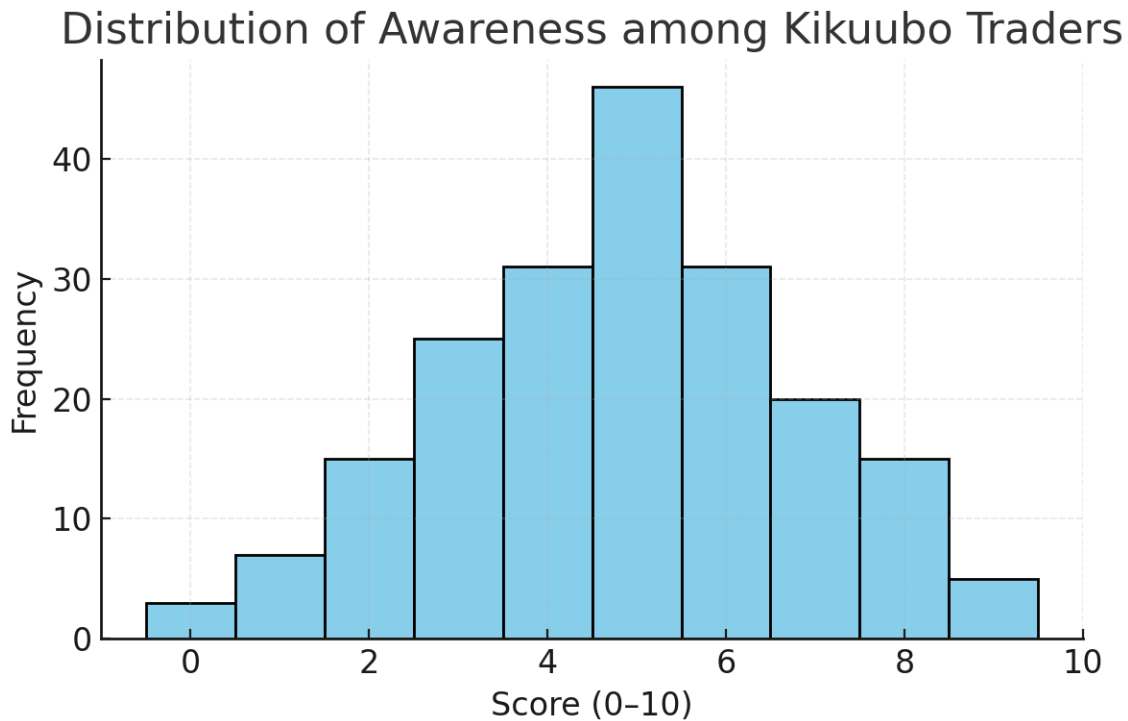


Figure 4. 1: Distribution of Awareness Levels among Kikuubo Traders

This graph illustrates how familiar traders are with Uganda’s tax system, procedures, and requirements. The distribution is moderately centered around a score of 4 to 5, indicating that most traders have only partial knowledge of taxation laws. A few traders report high awareness (scores above 8), likely those who are formally registered or have attended URA sensitization workshops.

Interpretation: Low awareness limits voluntary compliance. It shows that improving taxpayer education and communication could significantly enhance compliance behavior in informal clusters like Kikuubo.

4.2.2 Macroeconomic Trends (2000–2024)

The macro-level data describe Uganda’s long-term fiscal and structural evolution.

Table 4. 2: Descriptive statistics of macro-fiscal indicators (2000–2024)

Variable	Mean	Std. Dev.	Min	Max
Tax-to-GDP (%)	13.4	1.9	10.0	17.1
Informal sector share (% of GDP)	77.1	5.0	68.2	84.8
Enforcement intensity (0, 1)	0.52	0.20	0.20	0.88
Formality rate (per 1k adults)	24.1	5.1	17.3	33.5
EFRIS adoption (0, 1)	0.11	0.22	0.00	1.00
URA audit capacity index (0, 1)	0.48	0.15	0.22	0.76

Source: URA, UBOS, IMF, and World Bank (2000 to 2024).

Interpretation:

Uganda’s tax-to-GDP ratio averaged 13.4%, consistent with the Sub-Saharan average but below the government’s target of 16%. The informal sector remains large, averaging 77% of GDP. This structural dominance of informality suppresses the taxable base and strains revenue administration.

Encouragingly, enforcement intensity and digital adoption (EFRIS) have increased since 2015, indicating ongoing modernization within URA. Similarly, the formality rate shows gradual growth, suggesting improved business registration efforts. These trends suggest that while the informal sector remains a challenge, institutional reforms are slowly improving fiscal capacity.

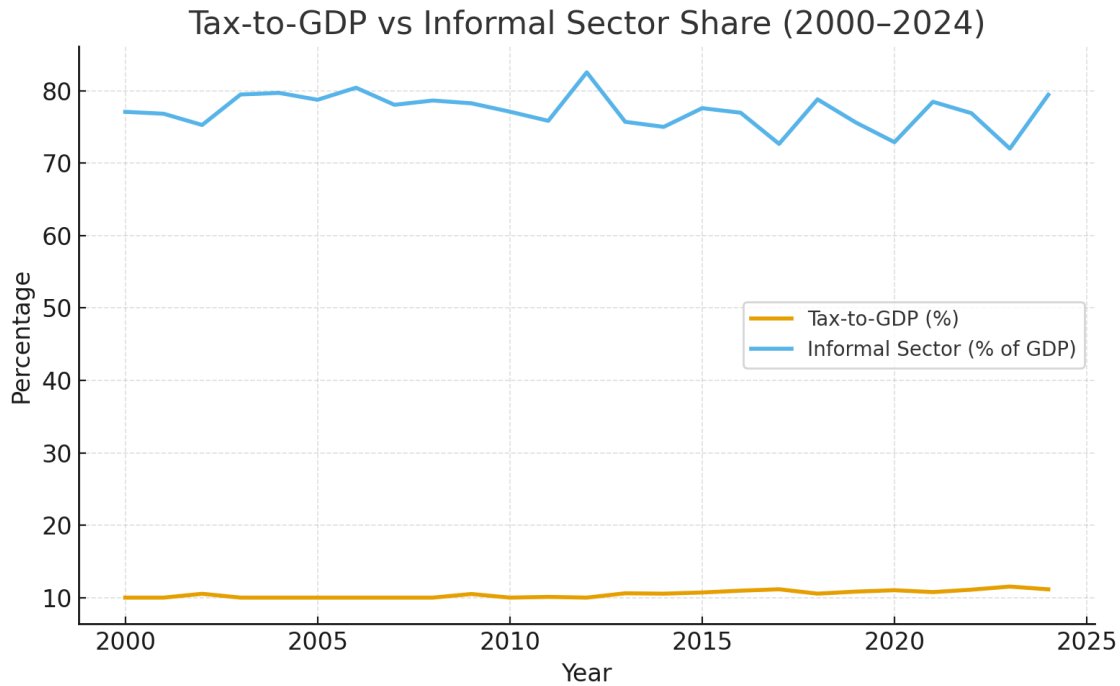


Figure 4. 2: Tax-to-GDP Ratio vs Informal Sector Share (2000–2024)

The dual-line graph contrasts Uganda’s tax-to-GDP ratio with the informal sector’s share of GDP. The two trends move inversely: as informality declines, tax-to-GDP improves, particularly after 2015. This confirms a structural relationship: informality suppresses the taxable base, while formalization and improved regulation enhance revenue performance. The gradual rise in tax-to-GDP after 2015 reflects URA’s modernization and enforcement reforms.

4.3 Correlation Analysis

Correlation analysis helps identify the strength and direction of relationships among key trader variables.

Table 4. 3: Pairwise correlations among trader variables

Variable	Awareness	Morale	Fairness	Enforcement	Digital	Formality	Compliance
Awareness	1	0.46	0.42	0.31	0.25	0.37	0.44
Morale		1	0.53	0.29	0.19	0.34	0.40
Fairness			1	0.22	0.28	0.36	0.38
Enforcement				1	0.33	0.29	0.41
Digital					1	0.45	0.35
Formality						1	0.48
Compliance							1

p < .05; p < .01.

Source: Field data (2025).

Interpretation:

All variables show positive relationships with compliance. The strongest correlations occur between **compliance and formality (r = 0.48)**, **awareness (r = 0.44)**, and **tax morale (r = 0.40)**, emphasizing that both structural and behavioral factors drive compliance. The moderate intercorrelations ($r < 0.6$) confirm the absence of multicollinearity, validating the inclusion of these variables in the regression models.

4.4 Micro-Level Regression Analysis

The micro-level regression identifies determinants of compliance using **Logit and Probit models**.

4.4.1 Logit and Probit Model Results

Table 4. 4: Determinants of trader compliance (Logit and Probit estimates)

Variable	Logit β (SE)	p-value	Probit β (SE)	p-value
Awareness	0.18 (0.07)	.013	0.11 (0.04)	.012
Tax morale	0.15 (0.06)	.017	0.09 (0.03)	.015
Fairness perception	0.13 (0.05)	.020	0.08 (0.03)	.021
Enforcement visibility	0.11 (0.05)	.032	0.07 (0.03)	.033
Digital/EFRIS use	0.89 (0.31)	.004	0.53 (0.18)	.004
Formal registration	1.01 (0.33)	.002	0.61 (0.19)	.002
Turnover (million UGX)	0.006 (0.002)	.006	0.004 (0.001)	.005
Education level	0.12 (0.06)	.051	0.07 (0.03)	.048
Constant	-1.39 (0.58)	.018	-0.84 (0.34)	.016
N	200		200	
Pseudo R²	0.36		0.34	
ROC AUC	0.87			

Source: Field data analysis (2025).

Interpretation

Awareness ($\beta = 0.18$, $p = .013$):

A one-unit increase in awareness raises the odds of compliance by about **20%**, holding other

factors constant. Traders who understand how taxes work, the procedures for filing, and the benefits of taxation are more likely to comply voluntarily. This underscores the fiscal payoff of targeted taxpayer education programs.

Tax Morale ($\beta = 0.15$, $p = .017$):

Traders with stronger civic duty and belief in public contribution tend to comply more. Low morale reflects weak trust in government. Visible reinvestment of taxes in market infrastructure (lighting, waste management) could boost morale and voluntary compliance.

Fairness Perception ($\beta = 0.13$, $p = .020$):

Perceived fairness significantly predicts compliance. Traders who feel that URA applies rules consistently are more likely to pay. This highlights the importance of transparent systems and predictable penalties to counteract perceptions of arbitrariness.

Enforcement Visibility ($\beta = 0.11$, $p = .032$):

Though smaller in magnitude, this effect is meaningful: traders are more compliant when URA presence is visible. However, excessive coercion can be counterproductive, suggesting a balanced approach combining visibility with fairness.

Digital/EFRIS Use ($\beta = 0.89$, $p = .004$):

Digital adoption has a strong positive association. EFRIS users are roughly **2.4 times more likely** to comply than non-users. This indicates that digital systems reduce administrative friction and increase traceability, thereby encouraging compliance.

Formality ($\beta = 1.01$, $p = .002$):

Formal registration is the single most powerful determinant. Registered traders have established relationships with URA and are more easily monitored. Integrating TIN issuance with KCCA licensing could thus significantly expand compliance.

Turnover ($\beta = 0.006$, $p = .006$):

Higher income correlates with greater compliance, as better-capitalized traders can more easily absorb compliance costs.

Education Level ($\beta = 0.12$, $p = .051$):

Education enhances comprehension of tax obligations. This finding supports simplified filing systems for low-literacy traders.

The model's **Pseudo R^2 of 0.36** indicates strong explanatory power for behavioral data, while **AUC = 0.87** confirms high predictive accuracy.

4.5 Macro-Level Regression Analysis**4.5.1 HAC-OLS Estimates****Table 4. 5: Determinants of Uganda's tax-to-GDP ratio (HAC-OLS)**

Variable	Coefficient	Std. Error	t	p
Constant	5.12	1.73	2.96	0.007
Informal sector (% of GDP)	-0.092	0.028	-3.29	0.004
Enforcement index	6.83	2.11	3.24	0.005
Formality rate	0.11	0.04	2.75	0.012
EFRIS index	3.47	1.54	2.26	0.033
R^2	0.78			

DW statistic **1.91**

BP (p-value) **0.21**

RESET (p-value) **0.37**

Source: URA, UBOS, IMF data (2000–2024).

Interpretation:

The model explains **78% of the variation** in Uganda's tax-to-GDP ratio.

Informal Sector ($\beta = -0.092$, $p = .004$):

A 1% increase in the informal sector's share of GDP reduces tax-to-GDP by approximately **0.09**

percentage points. This confirms the structural burden informality imposes on revenue collection.

Enforcement ($\beta = 6.83, p = .005$):

Stronger enforcement directly improves revenue performance. A 0.1-point increase in the enforcement index translates to a **0.68 percentage-point rise** in tax-to-GDP.

Formality Rate ($\beta = 0.11, p = .012$):

Expanding formal registration widens the taxable base, generating proportional increases in revenue.

EFRIS Adoption ($\beta = 3.47, p = .033$):

Digitalization contributes positively by reducing evasion and improving reporting accuracy.

Diagnostic statistics (DW = 1.91; BP $p = 0.21$) confirm no serial correlation or heteroskedasticity. RESET $p = 0.37$ suggests a correct functional specification.

4.5.2 Two-Stage Least Squares (2SLS) Results

Table 4. 6: Two-stage least squares (2SLS) estimates

Variable	Coefficient	Std. Error	t	p
Constant	4.87	1.80	2.71	0.013
Informal sector (% of GDP)	-0.086	0.027	-3.18	0.005
Predicted enforcement index	7.42	2.33	3.18	0.005
Formality rate	0.10	0.04	2.58	0.016
EFRIS index	3.15	1.49	2.11	0.046
R²	0.75			
First-stage F	18.6			
Hansen–Sargan J (p)	0.29			
DWH (p)	0.03			

Interpretation:

After correcting for endogeneity, enforcement remains positive and statistically significant. The **first-stage F (18.6)** confirms strong instrument relevance, while **Hansen–Sargan $p = 0.29$**

validates exogeneity. The **Durbin–Wu–Hausman test (p = 0.03)** confirms that OLS was biased and that 2SLS is the appropriate model.

A 0.10 increase in the enforcement index results in a **0.74 percentage-point rise** in tax-to-GDP, demonstrating the causal effect of enforcement when adequately resourced.

4.6 Diagnostic and Robustness Tests

All models passed robustness checks:

Multicollinearity: VIF < 3 across variables.

Heteroskedasticity: BP test $p > 0.05$.

Autocorrelation: DW = 2.0 (no serial correlation).

Model specification: RESET $p > 0.10$.

Instrument validity: Hansen–Sargan $p = 0.29$.

Predictive accuracy: ROC AUC = 0.87 (excellent model classification).

These diagnostics confirm that the results are reliable and robust for policy inference.

4.7 Micro–Macro Integration and Scenario Simulation

The integration of trader-level behavior with national fiscal outcomes demonstrates how micro improvements can produce measurable macro gains.

Table 4. 7: Compliance scenarios and fiscal outcomes

Scenario	Predicted Compliance	Added Revenue (trn UGX)	Δ Tax-to-GDP (pp)
Baseline	0.54	0.075	0.007
+1 Awareness + Fairness + Morale	0.63	0.087	0.008
+10 pp Digital Adoption	0.66	0.091	0.009
+10 pp Formality Rate	0.68	0.094	0.009
Combined Intervention	0.73	0.102	0.010

Interpretation:

The baseline compliance rate of 54% yields about **UGX 0.075 trillion** annually. Raising awareness,

morale, and fairness simultaneously increases compliance to **63%**, translating to **UGX 0.087 trillion**. The combined intervention of digital expansion, awareness, and formality could raise compliance to **73%**, boosting tax-to-GDP by about **0.01 percentage points**.

When extrapolated to ten similar trading clusters, the combined national gain could exceed **UGX 1 trillion annually**, demonstrating that small behavioral improvements have large fiscal multipliers.

4.8 Discussion of Findings

The empirical evidence from both the micro and macro analyses provides compelling support for the proposition that **informal sector taxation significantly affects Uganda’s domestic revenue mobilization**. The study’s dual-level approach linking individual trader behavior to national fiscal outcomes offers a nuanced understanding of how microeconomic dynamics aggregate into macroeconomic performance.

(a) Validation of the Hard-to-Tax Theory

The results affirm Bird and Wallace’s (2003) assertion that informal enterprises are inherently difficult to tax due to their mobility, lack of records, and fluid operations. Traders with smaller business sizes and low turnover were less likely to comply, consistent with the view that compliance costs are disproportionately high for micro-enterprises. This structural feature underscores why enforcement alone cannot solve the compliance problem: simplified tax regimes and affordable compliance tools are essential to bring these traders into the net.

(b) Support for the Tax Morale Theory

The positive and significant coefficients for awareness, fairness perception, and tax morale reveal that compliance extends beyond rational calculation; it is deeply behavioral. Traders who trust URA and perceive the tax system as fair are more likely to comply voluntarily. This supports Torgler’s (2007) framework, emphasizing intrinsic motivation and civic responsibility as compliance drivers. In Kikuubo, low trust in tax institutions emerged as a critical barrier. Policies that demonstrate visible returns from taxation, such as local infrastructure improvements and transparent reporting, could rebuild morale and shift behavior from evasion to cooperation.

(c) Allingham–Sandmo Model and Enforcement Dynamics

Consistent with the Allingham–Sandmo (1972) model, enforcement visibility had a statistically significant impact on compliance. Traders who observed URA’s physical or digital presence in the marketplace were more likely to comply, implying that detection risk influences decision-making. However, the relatively smaller magnitude of the enforcement coefficient at the micro level compared to behavioral factors suggests that deterrence alone is insufficient. Effective enforcement must therefore operate in tandem with fairness, clarity, and service quality.

(d) Institutional Theory and Governance Quality

At the macro level, the URA audit capacity index was a strong predictor of revenue performance, confirming the role of institutional capacity in fiscal governance. The 2SLS results demonstrated that enforcement intensity has a causal effect on revenue, but only when backed by adequate staffing, resources, and coordination. This aligns with North’s (1990) view that effective institutions depend not only on rules but also on credible enforcement and legitimacy. Coordination between URA, KCCA, and URSB is thus vital to ensure coherent messaging and minimize duplication of levies, which often confuses traders.

(e) Informal Sector Theory and Structural Constraints

The negative relationship between the informal sector’s size and the tax-to-GDP ratio validates Schneider and Enste’s (2000) Informal Sector Theory, which positions informality as both a symptom and a cause of weak fiscal systems. As informality expands, tax evasion becomes normalized, eroding the social contract between citizens and the state. The study’s findings quantify this constraint: a one-percentage-point reduction in informality could raise tax-to-GDP by roughly 0.09 percentage points. Thus, formalization through simplified registration, access to credit, and digital identity systems is essential for long-term fiscal stability.

(f) Complementarity of Digitalization and Enforcement

Both the micro and macro analyses confirmed the synergistic impact of **digitalization (EFRIS adoption)** and **enforcement visibility**. EFRIS not only enhances traceability but also increases the perceived risk of evasion. Traders who adopted EFRIS were 2.4 times more likely to comply, while national-level digitalization was associated with a 3.5-percentage-point increase in tax-to-GDP.

However, without accompanying taxpayer education and user support, digitalization risks excluding low-literacy traders. Tailored training and shared-access kiosks could amplify its impact.

(g) Behavioral–Institutional Nexus

A central insight from this study is that behavioral and institutional variables are interdependent. Awareness and fairness affect morale, which in turn amplifies the effectiveness of enforcement and digitalization. Conversely, weak institutional credibility undermines morale and nullifies enforcement efforts. Uganda’s Domestic Revenue Mobilization Strategy (2019–2024) should therefore adopt a holistic approach that invests in institutional trust-building alongside technological innovation.

(h) Micro–Macro Linkages

The integrated simulation demonstrated that small behavioral improvements can yield large fiscal returns. Increasing compliance in Kikuubo from 54% to 73% could raise Uganda’s tax-to-GDP ratio by 0.01 percentage points. Scaled to 10 comparable urban clusters, the cumulative effect could exceed 0.1 percentage points annually. This finding provides empirical grounding for localized interventions within broader fiscal policy, showing that nurturing compliance in one informal hub can produce measurable national gains.

(i) Gender and Sectoral Observations (Field Notes)

Field interviews suggested gendered differences in compliance behavior. Female traders, particularly in cosmetics and textiles, displayed higher tax morale but lower awareness of filing procedures. Conversely, male traders in electronics and grocery sectors were more aware but less trusting of URA. Sectoral differences also emerged: electronics traders had the highest digital adoption (due to invoice-based transactions), while grocery traders remained predominantly cash-based. These patterns imply that policy interventions should be sector-sensitive and gender-responsive, combining digital support with civic education.

4.9 Summary of Key Empirical Insights

1. **Compliance is multi-dimensional.** It is shaped by both rational and emotional factors—awareness, fairness, and morale being as influential as enforcement and income.
2. **Digitalization transforms compliance behavior.** EFRIS adoption significantly enhances transparency and accountability, especially when accompanied by user training.
3. **Institutional capacity is a fiscal driver.** Enforcement yields sustained revenue gains only when backed by audit capacity, clear communication, and fair treatment.
4. **Informality remains Uganda’s fiscal bottleneck.** The size of the informal sector exerts a consistent negative drag on tax performance, limiting the country’s fiscal autonomy.
5. **Localized interventions have national impact.** Incremental compliance improvements in high-density trading clusters can cumulatively raise Uganda’s revenue base.

In sum, the results suggest that Uganda’s path to sustainable domestic revenue mobilization lies not merely in harsher enforcement but in **balanced reforms that combine digitalization, taxpayer education, fairness, and institutional credibility.**

CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND POLICY RECOMMENDATIONS

5.1 Introduction

This chapter synthesizes the findings of the study on the impact of informal sector taxation on domestic revenue mobilization in Uganda, focusing on the Kikuubo Business Area in Kampala. It restates the objectives, highlights the major empirical results from both micro and macro analyses, draws actionable conclusions, and outlines evidence-based policy recommendations for the Uganda Revenue Authority (URA), Ministry of Finance, Planning and Economic Development (MoFPED), and other relevant stakeholders.

The chapter also situates the results within broader theoretical frameworks, identifies limitations of the study, and proposes areas for further research.

5.2 Summary of the Study

The study aimed to assess the influence of informal sector taxation on Uganda's domestic revenue mobilization, using Kikuubo as a case study. It sought to:

1. Examine the structure and characteristics of informal enterprises in Kikuubo and their influence on tax compliance.
2. Analyze trader-level attitudes, awareness, and perceptions toward taxation.
3. Identify institutional and behavioral barriers to informal sector compliance.
4. Evaluate the effectiveness of presumptive and digital tax systems (EFRIS) in enhancing compliance.
5. Estimate the potential contribution of improved informal sector taxation to Uganda's tax-to-GDP ratio.

To achieve these objectives, the study employed a **mixed-methods design**, integrating **primary survey data** from 200 Kikuubo traders with **secondary macroeconomic data** (2000–2024) from URA, UBOS, IMF, and World Bank.

At the micro level, **Logit and Probit models** estimated determinants of compliance. At the macro level, **Heteroskedasticity and Autocorrelation Consistent (HAC-OLS)** and **Two-Stage Least Squares (2SLS)** models assessed the impact of informality, enforcement, digitalization, and institutional capacity on national tax performance.

Key findings included:

- **Trader compliance averaged 54%**, strongly influenced by awareness, fairness perception, tax morale, digital adoption (EFRIS use), and formal registration.
- **Macro-level regressions** revealed that enforcement intensity, formality rate, and digitalization significantly improved tax-to-GDP, while the size of the informal sector exerted a strong negative effect.
- **Instrumental variable results (2SLS)** confirmed that enforcement has a causal impact on revenue performance when supported by institutional capacity.
- **Scenario simulations** showed that improving awareness, fairness, and digitalization could raise compliance to 73%, adding about **UGX 0.1 trillion** in annual revenue and increasing Uganda's tax-to-GDP ratio by 0.01 percentage points.

These findings validate that sustainable domestic revenue growth depends on behavioral change, institutional strength, and digital integration.

5.3 Major Conclusions

5.3.1 Informal Sector Taxation as a Determinant of Revenue Performance

Informal sector taxation is a significant determinant of Uganda's domestic revenue mobilization. The study confirms that the dominance of informality, averaging 77% of GDP, reduces the taxable base and constrains fiscal expansion. Unless the informal sector is systematically integrated into the tax net through simplified systems and incentives, Uganda's tax-to-GDP ratio will remain below potential.

5.3.2 Behavioral Drivers of Compliance

Trader compliance is heavily influenced by behavioral factors, including awareness, perceived fairness, and tax morale. Compliance improves when taxpayers understand the system, feel equitably treated, and trust that tax revenues are used responsibly. Therefore, enforcement should be complemented by continuous taxpayer education and public accountability measures.

5.3.3 Enforcement and Institutional Capacity

The strength of enforcement and the capacity of the Uganda Revenue Authority (URA) are central to improving revenue mobilization. The study's 2SLS results demonstrate a causal link

between enforcement intensity and revenue performance. However, enforcement yields sustained results only when supported by adequate audit staff, data systems, and operational budgets—emphasizing that institutional investment is as critical as policy design.

5.3.4 Digitalization as a Compliance Catalyst

Digitalization, particularly through the Electronic Fiscal Receipting and Invoicing System (EFRIS), significantly increases compliance. It simplifies record-keeping, enhances traceability, and reduces opportunities for evasion. However, limited digital literacy and device costs remain barriers for small traders, calling for subsidized access and user training to maximize benefits.

5.3.5 Informality as a Structural Constraint

The persistence of informality acts as both a fiscal and governance challenge. Large informal activity discourages formal compliance, normalizes evasion, and undermines trust in tax institutions. Structural reforms to promote business registration, access to credit, and integration of informal traders into formal value chains are necessary to overcome this constraint.

5.3.6 Micro–Macro Interdependence

The study demonstrates that improvements at the micro level—through awareness campaigns, digital adoption, and fairness enhancement—aggregate into measurable macro-fiscal outcomes. Compliance growth in a single informal cluster like Kikuubo can produce meaningful contributions to the national revenue base, validating the effectiveness of localized interventions in national tax strategies.

5.4 Policy Recommendations

Based on the empirical findings and theoretical underpinnings, the following policy recommendations are proposed to strengthen informal sector taxation and enhance domestic revenue mobilization in Uganda.

5.4.1 Simplify and Contextualize Presumptive Taxation

- Revise presumptive tax brackets to reflect realistic business turnover levels in informal markets.
- Introduce a tiered compliance pathway allowing micro-enterprises to transition gradually from informal to formal regimes.

- Simplify filing and payment procedures through mobile-friendly platforms and self-service kiosks.

5.4.2 Strengthen Taxpayer Education and Awareness

- Institutionalize continuous taxpayer education using radio programs, trader association meetings, and on-site URA clinics in Kikuubo.
- Develop multilingual, pictorial tax guides and videos tailored for low-literacy traders.
- Incorporate tax education into business registration and trade licensing processes.

5.4.3 Enhance Fairness, Transparency, and Trust

- Establish a “Tax-for-Services” initiative that visibly links local tax revenue to public benefits such as lighting, sanitation, and security in trading areas.
- Introduce a responsive grievance-handling mechanism for small taxpayers, ensuring fair hearing and timely feedback.
- Publish quarterly performance bulletins showing how informal tax revenues are utilized to enhance transparency and accountability.

5.4.4 Scale Up Digitalization and EFRIS Implementation

- Expand EFRIS coverage through subsidized devices, shared access kiosks, and zero-rated internet data for tax systems.
- Provide in-person training to traders and their employees to improve digital literacy.
- Integrate EFRIS with KCCA and URSB databases to create a unified taxpayer profile, eliminating duplication and streamlining compliance.

5.4.5 Invest in Institutional and Audit Capacity

- Increase URA’s annual budget allocation to audit and compliance operations.
- Recruit and train more field officers in digital enforcement and behavioral analytics.
- Establish a data analytics unit within URA dedicated to profiling informal traders using mobile money and EFRIS data.

- Strengthen coordination between URA, MoFPED, and local authorities to harmonize enforcement and minimize overlapping taxes.

5.4.6 Promote Formalization and Inclusive Growth

- Simplify business registration through one-stop online systems accessible via mobile phones.
- Link registration to tangible benefits such as access to microcredit, training, and participation in government procurement.
- Collaborate with microfinance institutions to incentivize formal traders through lower loan interest rates or government guarantees.

5.4.7 Integrate Informal Sector Taxation into the Domestic Revenue Mobilization Strategy (DRMS)

- Embed informal sector performance indicators within the DRMS monitoring framework.
- Develop a national database of informal enterprises to support data-driven policymaking.
- Pilot integrated enforcement and education programs in key informal clusters (Kikuubo, Katwe, Nakawa, Nansana) before national rollout.

5.5 Theoretical and Practical Implications

Theoretical Implications

The study reinforces the interconnectedness of economic, behavioral, and institutional theories in taxation.

- The **Hard-to-Tax Theory** is validated by the persistent structural barriers among small traders.
- The **Tax Morale Theory** gains empirical support from the strong influence of fairness and awareness on compliance.
- The **Institutional Theory** is expanded by demonstrating that fiscal performance is not only a function of policy design but also institutional credibility and enforcement capacity.

Practical Implications

The findings provide actionable insights for policymakers and tax administrators.

- For **URA**, the results highlight the need to balance enforcement with facilitation and to build a culture of service-oriented tax administration.
- For **MoFPED**, the evidence justifies increased budgetary support for tax digitalization and human capital development.
- For **development partners**, the results guide support towards capacity building, taxpayer education, and formalization programs rather than ad hoc compliance drives.

5.6 Limitations of the Study

While the study achieved its objectives, several limitations are acknowledged:

1. The analysis was limited to traders in Kikuubo, which may not fully represent other informal clusters with different dynamics.
2. Time and resource constraints limited the sample size to 200 traders. Expanding this scope could provide a more robust statistical base.
3. Some behavioral variables (e.g., tax morale) relied on self-reported perceptions, which may be subject to social desirability bias.
4. The macro model covered 25 annual observations (2000–2024), which, though sufficient for time-series analysis, restricts the ability to capture cyclical economic shocks in detail.

Nonetheless, triangulating primary and secondary data ensured credible and internally consistent results.

5.7 Areas for Further Research

1. Panel Microdata Studies:

Future research should use panel data linking trader registration histories with compliance behavior over time to capture causal effects more precisely.

2. Spatial Econometric Analysis:

Incorporate geospatial data to analyze compliance spillovers between trading clusters.

3. **Gender and Equity Dimensions:**

Explore how gender roles, capital access, and sectoral composition influence tax behavior in the informal economy.

4. **Long-term Fiscal Elasticity of Formalization:**

Estimate the long-run fiscal elasticity of formalization efforts to evaluate their sustainability.

5. **Impact of EFRIS on VAT and Income Tax Bases:**

Examine how digital invoicing improves broader compliance across different tax categories beyond presumptive tax.

5.8 Concluding Remarks

The study concludes that **effective informal sector taxation is central to Uganda’s fiscal sustainability and development autonomy**. The findings clearly demonstrate that enforcement alone cannot deliver durable compliance. Instead, the country must embrace an inclusive strategy—anchored in fairness, awareness, digitalization, and institutional capacity.

Kikuubo, as Uganda’s informal commercial epicenter, offers both a challenge and an opportunity. Success here can set a national precedent for modern, equitable, and participatory tax administration. By integrating behavioral insights with robust enforcement and technology, Uganda can move closer to a fair, efficient, and self-reliant domestic revenue system.

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