Beyond the tax bill: Measuring tax compliance costs for Ugandan firms

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Abstract

For low-income countries looking to enhance revenue mobilisation without harming firm growth, understanding the full burden of taxation, beyond just tax liabilities, is crucial. This paper documents the substantial and often regressive tax compliance costs faced by small and medium-sized firms in Uganda. Using original survey data from nearly 2,000 taxpaying firms across Uganda, matched to administrative tax returns data, I show that compliance costs are significant, equivalent to two percent of turnover for the median firm, with smaller firms bearing a disproportionate burden. Moreover, total compliance costs often exceed firms' tax liabilities. Breaking down cost components, I find that labour time spent on tax compliance activities is the largest component, with tax compliance consuming a median of 34 hours of labour time per month, and approximately 20 percent of firm owners' working hours. I show that the majority of firms outsource at least part of their tax obligations to a tax agent, often to compensate for limited tax knowledge. These agents are relatively expensive, costing a median of USD 54 per month. Adopting compliance technologies does not significantly reduce reported compliance costs or time, although firms perceive that technology makes compliance easier. Finally, I use a survey experiment to test how sensitive compliance costs measures are to the measurement strategy, finding significant divergence between estimates obtained through a detailed set of questions and a more aggregate question. Discrepancies between estimates are reduced when respondents are primed with the detailed set of questions first, suggesting that simple aggregate questions might not capture compliance costs in a consistent manner.

Keywords: Compliance costs, taxation, firms, economic development

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Abbreviations

CIT	Corporate income tax
EFRIS	Electronic Fiscal Receipting and Invoicing System
ETR	Effective tax rate
GDP	Gross domestic product
IHS	Inverse hyperbolic sine
LIC	Low-income country
MTO	Medium Taxpayers' Office
OLS	Ordinary least squares
PAYE	Pay-as-you-earn
UGX	Ugandan shillings
UNU-WIDER	United Nations University World Institute for Development Economics Research
URA	Uganda Revenue Authority
USD	United States dollar
VAT	Value-added tax

> *As a struggling mother of two and on behalf of the weary voiceless majority, I hope that this intervention will not only end just as all other research ends but rather help wipe this endless gainless sweat that mostly ends up in the name of "being a compliant taxpayer".*

Research participant, *2023*

1 Introduction

Low-income countries (LICs) need significantly more financing if they are to accelerate economic growth, achieve the Sustainable Development Goals, and tackle climate change. Yet, LICs typically raise around 12 to 15 percent of GDP in taxes, just half of what high-income countries can mobilise (UNU-WIDER, 2023). One important barrier to increased tax collection is that the growing complexity of the tax system, which many taxpayers in LICs struggle to navigate. Tax filing is an increasingly time-consuming process, with taxpayers spending numerous hours gathering information, completing various forms, and submitting documentation to the revenue authority. Tax compliance often requires frequent interactions with tax officials, adding to the psychological stress of taxation and creating opportunities for extortion and corruption.[1] There is an extensive literature documenting the behaviour of taxpayers, their attitudes towards compliance, and the effectiveness of enforcement action.[2] However, much less is known about the costs of tax compliance: the time, money, and effort incurred by taxpayers in meeting their tax obligations, over and above actual tax payments and any distortion costs inherent in the tax system.

Compliance costs directly increase the total effective tax burden faced by firms, but this is not the limit of their effect on the tax system. High compliance costs are often part of the explanation for taxpayers failing to take up provisions that would benefit them, such as not claiming value-added tax (VAT) credits for input costs (Almunia et al., 2024; Brockmeyer et al., 2024), missing expense deductions (Benzarti, 2020, 2021), or foregoing refunds for tax losses (Zwick, 2021). Smaller firms, being more constrained in their ability to document revenues, file returns, and accurately determine tax liabilities, might even overpay taxes as a result (Kosonen & Ropponen, 2015; Tourek, 2022). High compliance costs might also contribute to evasion. For instance, thresholds built into the tax system have been shown to incentivise firms to under-report turnover and "bunch" just below the threshold, to avoid increased tax liabilities as well as increased reporting requirements (Asatryan & Peichl, 2017; Boonzaaier et al., 2019; Liu et al., 2021). In some cases, the compliance cost effect has dominated the tax rate effect (Harju et al., 2019). Burdensome compliance processes could weaken tax morale,

[1] As an indication of this, the latest round of the World Bank's *Enterprise Surveys* found that, across sub-Saharan African countries, 65 percent of firms report visiting or being required to meet in-person with a tax official, on average 2.9 times per year (World Bank Group, 2024).

[2] For instance, see reviews such as Jensen et al. (2024) and Mascagni (2018) at the intersection of tax and development, and Slemrod (2019) for a complementary review of the literature on tax compliance and enforcement.

further impairing overall compliance levels (Alm & McClellan, 2012; Torgler et al., 2008). Compliance costs are therefore likely to influence the choices that economic agents make, such as business structure, supply chains, and investment decisions. At the margin, the fear of high compliance costs might induce a potential entrepreneur to take a salaried job rather than start a new business.

For policymakers, having a good measure of compliance costs provides useful information to improve policy design, such as ensuring that minimum firm-size thresholds are appropriate and provide relief for small firms. Despite policy interest in this issue, these costs are rarely comprehensively quantified, particularly in LICs.[3] The few empirical studies from lower-income countries countries have typically shown that compliance costs can be substantial, even exceeding tax liabilities (Yesegat et al., 2017), and are usually regressive, affecting smaller and less well-informed taxpayers more heavily (Coolidge, 2012), in line with findings from high-income countries (Aghion et al., 2017; Eichfelder & Vaillancourt, 2014; Evans et al., 2013). This regressivity has negative impacts on the equity of the tax burden and the competitiveness of smaller firms, which can constrain their growth.

I address this gap in the literature by providing micro-level empirical evidence of the magnitude and nature of tax compliance costs experienced by small and medium-sized firms in Uganda. To elicit detailed estimates of compliance costs, I designed and implemented a survey of nearly 2,000 firms, sampled from the database of corporate income tax (CIT) returns held by the Uganda Revenue Authority (URA). Many studies claiming to measure compliance costs, or the effects of an intervention on these costs, focus on a narrow interpretation, such as the total time spent on tax compliance or the perception of the difficulty of tax compliance. This paper goes beyond these narrow measures. As well as time spent on tax compliance activities, I capture a range of monetary costs, including fees paid to tax agents[4] and the cost of specialised software or hardware used for tax compliance. In addition, I examine the relationship between compliance costs and observed compliance behaviour, including actual tax liabilities, by matching the survey data to several administrative returns datasets. Finally, through an embedded survey experiment, I test whether including a list of detailed cost components yields high total cost estimates than more general questions, and whether priming respondents to consider compliance costs affects their perceptions of the compliance burden and the tax system.

This paper documents several facts about tax compliance costs for Ugandan firms (see Section 6). Firstly, these costs are substantial, with the median firm spending three million Ugandan shillings (UGX, approximately

[3]For the most comprehensive work covering surveys across 11 developing countries conducted between 2006 and 2011, see Coolidge (2012). Eichfelder and Vaillancourt (2014) reviewed empirical studies on tax compliance costs from 1984 to 2014, featuring two studies from middle-income countries, Malaysia and Indonesia. Slightly more recently, the World Bank and the International Finance Corporation conducted surveys in Ethiopia (2016), Tajikistan (2017b) and the Kyrgyz Republic (2017a). Vishnuhadevi (2021) reviews studies on VAT compliance costs in particular, including five developing countries, although these studies were all conducted before 2017 and largely have very small sample sizes.

[4]In this paper, I use "tax agents" to refer to any external labour to whom taxpayers outsource their tax compliance processes. Agents are thus authorised by a taxpayer to deal with the revenue authority on their behalf. Other terms used in the literature include tax professionals, preparers, practitioners, consultants, and advisors. They play a wide variety of roles in the tax system, including preparing returns, auditing accounts, responding to queries from the revenue authority, advising taxpayers (including on tax minimisation), and representing taxpayers or mediating in disputes.

800 US dollars, USD)[5] per year, or around two percent of annual turnover. Smaller firms are particularly burdened, with compliance costs often surpassing their CIT liability and representing over 20 percent of their turnover, compared to less than one percent for the largest firms. Secondly, a large proportion of these costs stems from labour time. Employees and firm owners spend a combined median of 34 hours per month on compliance-related activities, such as compiling tax-related documentation, filing returns, and getting help from the URA. Notably, for firm owners personally involved in tax compliance, this responsibility consumes an average of 20 percent of their working hours. Thirdly, outsourcing is common, with approximately 60 percent of firms using tax agents, advisors, or consultants in some capacity. The median firm outsourcing tax compliance spends UGX 200,000 (USD 54) per month on fees. Finally, while there has been much excitement about the potential for technology to reduce compliance costs (Okunogbe & Santoro, 2023), I do not find evidence of this among Ugandan firms. There is no significant time saving for firms using URA's digital tools, and the expenses related to adoption and maintenance are substantial. However, firms do perceive some benefits, reporting that using digital tools makes the compliance process easier.

Turning to the survey experiment, I find that measurement strategies have a significant effect on the magnitude of reported compliance costs. Estimations from a more general, aggregate question about overall costs diverge substantially from estimations calculated from a series of questions itemising cost components, although there was no systematic pattern of over- or under-estimation (see Section 7). Heterogeneity analysis shows that smaller firms and those using a tax agent tend to be more consistent in their estimations. Further, I show that priming respondents with a series of itemised questions before answering the aggregate question reduced the size of the discrepancy between the two estimates. In contrast, priming respondents to think about compliance costs had no significant effect on their perceptions of the compliance burden or the tax system more generally.

The main contribution of this paper is its detailed quantification of tax compliance costs in a low-income country, including a module on tax perceptions and a novel survey experiment testing the consistency of measurement techniques. In addition, I combine survey data with administrative returns to examine links between compliance costs and actual behaviour, which is generally not done in this literature. This is the first such analysis of compliance costs in Uganda, and, to my knowledge, the first in nearly ten years to be conducted in an African country.

Beyond measuring compliance costs, this paper is also related to the growing literature on the role of tax agents and technology in facilitating tax compliance.[6] Despite the ubiquity of tax agents in many economies, relatively little is known about their effect on compliance, particularly in LICs (Occhiali & Kalyango, 2023; Slemrod, 2019). In Uganda, Occhiali and Kalyango (2023) show that agents can compensate for a lack of

[5]USD 1 was equivalent to approximately UGX 3,700 at the time of writing.

[6]For recent reviews of the use of technology for tax administration and compliance, see Okunogbe and Santoro (2023) and Okunogbe and Tourek (2024).

knowledge among taxpayers, while studies in other contexts have shown that agents increase the likelihood of taxpayers' taking up tax incentives (Chetty & Saez, 2013; Zwick, 2021) and play an important role in tax education, diffusing information through their frequent interactions with clients (Boning et al., 2020; Garriga & Tortarolo, 2019). The literature on technology in tax administration has shown its potential to increase tax collection, reduce corruption, and alleviate compliance costs (Okunogbe & Pouliquen, 2022; Okunogbe & Santoro, 2023; World Bank Group, 2016). Although, these effects may not be evenly distributed, with lower-income, less knowledgeable taxpayers requiring more support to adapt (Carreras et al., 2023; Mascagni et al., 2023; Roy & Khan, 2021).

This paper is also related to the extensive literature on survey methodology and design. Survey experiments have been conducted to understand measurement problems in a wide range of areas, including firm sales and profits (Anderson et al., 2021; de Mel et al., 2009), public officials' time use (Kalaj et al., 2022), household consumption and expenditure (Gibson et al., 2015; Gibson & Kim, 2007), valuing the time of the self-employed (Agness et al., 2025), and measuring employment (Contreras et al., 2024). As in this study, the literature consistently finds that survey design features, such as question ordering, framing, recall periods, and survey length have a substantial impact on results (de Weerdt et al., 2020; Jeong et al., 2023; Sniderman, 2018; Stantcheva, 2023).[7]

The paper proceeds as follows. Section 2 presents a conceptual framework, followed by a discussion of common issues faced when measuring tax compliance costs in Section 3. Section 4 discusses Uganda's institutional context and Section 5 provides details on the survey design and the data used in this paper. Section 6 presents five facts about tax compliance costs for small and medium-sized firms in Uganda. The survey experiment is discussed in Section 7. Finally, Section 8 concludes.

[7] See de Weerdt et al. (2020) for a review of lessons from experimenting with survey methods and Stantcheva (2023) for a comprehensive manual on best practices for survey design.

2 Conceptual framework

Traditionally, the theoretical literature has modelled tax compliance as a direct relationship between the tax authority and taxpayers (Battaglini et al., 2019). In the family of tax evasion models originating from the Allingham and Sandmo (1972), taxpayers are assumed to weigh up the costs and benefits of under-declaring profits, subject to the tax rate, the probability of detection, and the penalty rate. However, it is increasingly the case that this relationship is mediated by tax agents, with taxpayers not just choosing their level of evasion, but also the mode of tax preparation – whether to prepare tax returns themselves, or to pay for the services of a tax agent.

To illustrate this in a simple framework, I loosely follow the exposition and notation in Erard (1993). Consider a firm with sales revenue of Y_i and costs of production of C_i facing a tax on profits of $\tau \in (0, 1)$. The true tax liability for firm i is therefore $\tau\Pi_i$, where $\Pi_i = Y_i - C_i$. Firms might decide to under-report profits, declaring $\pi_i < \Pi_i$, either by suppressing revenues ($y_i < Y_i$) or exaggerating costs ($c_i > C_i$), resulting in evasion, $E_i = \Pi_i - \pi_i$. Firms are audited with a probability of $P(E_i)$, where the chance of an audit occurring increases with the amount of evasion, $\frac{\partial P}{\partial E} > 0$. Assume that an audit detects evasion with certainty. In this case, firms are forced to pay the evaded tax, as well as a penalty at a rate of $\theta \in (0, 1)$ on the evaded tax.[8]

In addition, assume that firms choose between self-preparing tax returns, or outsourcing preparation to a tax agent.[9] The cost of self-preparation is $R_{s,i}$ and the cost of hiring a tax agent is $R_{ta,i}$. Depending on the firm and the complexity of their tax affairs, the cost of self-preparation might be higher or lower than the cost of outsourcing. Assume that compliance costs increase with firm size ($\frac{\partial R}{\partial Y} > 0$) but, due to economies of scale, the relative compliance cost burden decreases with firm size ($\frac{\partial^2 R}{\partial Y^2} < 0$). Since tax agents are more familiar with the tax law, they prepare more accurate and complete returns, reducing the probability of audit vis-à-vis self-prepared returns, for a given level of evasion: $P_{ta} < P_s$. This is a reasonable assumption in the Ugandan context: in a survey of tax officials, Occhiali and Kalyango (2023) find that returns prepared by agents are perceived as less 'risky' and usually lead to lower audit adjustments. Due to their tax expertise, we also assume that tax agents are able to legally reduce a firm's tax liability by an amount A_i for an extra cost of $B(A_i)$.

Firms choose a mode of preparation, the level of profits to report, and the level of legal tax avoidance to purchase by maximising their expected profits net of taxes, penalties, and tax preparation costs. Expected profits under self-preparation can be expressed as:

$$W_i = \Pi_i - \tau(\Pi_i - E_i) - P_s(E_i)(\theta + \tau)E_i - R_{s,i} \tag{1}$$

[8] A maximum penalty rate of 100 percent is motivated by the fact that fines for corporate income tax evasion are seldom close to 100 percent.

[9] To keep things simple, I do not allow for mixed modes of preparation or differentiate between types of outsourced labour. See Erard (1993) for a discussion differentiating between tax specialists and non-specialists.

or, in the case of preparation supported by a tax agent, as:

$$W_i = \Pi_i - \tau(\Pi_i - E_i - A_i) - P_{ta}(E_i)(\theta + \tau)E_i - R_{ta,i} - B(A_i) \tag{2}$$

The firm decides among the alternative modes of tax preparation by determining the optimal level of evasion in each scenario, given the perceived chance of audit and the penalty rate. In the world of tax agents, firms must also choose an amount of legal tax avoidance. Solving for an interior solution gives the first-order conditions:

$$\tau - \frac{\partial P_s}{\partial E_i}(\theta + \tau)E_i - P_s(\theta + \tau) = 0 \tag{3}$$

$$\tau - \frac{\partial P_{ta}}{\partial E_i}(\theta + \tau)E_i - P_{ta}(\theta + \tau) = 0 \tag{4}$$

$$\tau - B'(A_i) = 0 \tag{5}$$

Equations 3 and 4 give the optimal level of evasion under each alternative. At this optimum, the marginal benefit of evasion, τ, is equal to the expected cost of concealment $(\theta + \tau)P(1 + \eta_{P,E})$, where $\eta_{P,E}$ represents the elasticity of P with respect to the amount of evasion, E.[10] Equation 5 shows that at the interior optimum, the marginal benefit of legal tax avoidance, τ, is equal to the marginal cost. In this framework, the level of evasion depends on the audit probability, tax and penalty rates, as well as the compliance strategy deployed by the taxpayer. The firm would choose the mode of preparation associated with the highest level of expected net profit, evaluated at the optimal level of evasion and legal avoidance. This choice depends on differences in the cost of preparation and the expected net benefits of evasion. For instance, firms with high in-house costs, or those expecting a substantial reduction in audit probability from using a tax agent, will tend to outsource tax compliance.

[10] $\eta_{P,E} = \frac{\partial P}{\partial E} \cdot \frac{E}{P}$

3 Measuring tax compliance costs

Measuring tax compliance costs is not a simple exercise. Proxies, such as the number of tax payments expected per year or the length of tax returns,[11] do not distinguish between complex rules and simplifying provisions or capture variation across different sectors or types of firms, and are not usually regarded as comprehensive. Other methodologies, including the World Bank's (now discredited) *Doing Business* series, use a case scenario to measure the compliance burden of a "standardised" business based on several assumptions about the nature of the business.[12] Tax experts are then surveyed to establish the administrative burden for this hypothetical business (PwC, 2012). Similarly, the European Commission's *Standard Cost Model* surveys a small number of "normally-efficient" businesses to measure the administrative cost of various compliance activities (European Commission, 2013, 2018). While these methods might increase comparability across countries, they are not representative of how most firms experience the tax system. The questionnaires used also tend to focus narrowly on the time taken by employees or firm owners to comply with tax obligations, with less attention paid to other types of compliance costs, such as the fees paid to tax agents.

The quantification of compliance costs to allow for heterogeneity has typically been approached in two ways. First, studies such as Benzarti (2020, 2021) and Harju et al. (2019) use tax administrative data and bunching estimators to estimate costs through revealed preferences. These methods exploit situations where taxpayers have a choice between a high-cost/high-benefit option (such as itemising deductions) and a low-cost/low-benefit one (such as taking a standard deduction), or when taxpayers face a discontinuous increase in compliance costs above a certain turnover or income threshold (such as a change in reporting requirements). Since the quantification of costs is based on observed responses to notches and kinks in the tax system, these methods rely on appropriate policy variation and detailed, high-quality administrative data.

Second, a larger body of literature uses taxpayer-level surveys for more real world measures of the compliance burden.[13] Such surveys typically involve detailed questionnaires covering the time and cost involved in preparing, filing, and paying taxes, and occasionally less visible costs, such as delays in tax refunds, the psychological stress of taxation, and corruption (Coolidge et al., 2011).[14] I follow this survey-based approach in this study, with a number of innovations to address common issues, including difficulties obtaining an appropriately representative sampling frame, high rates of non-response, and challenges in eliciting reliable cost estimations. I will briefly discuss the first two issues here, with a longer discussion on measurement issues

[11] For instance, a number of papers proxy compliance costs, or tax complexity, with the word count of the tax code (Bacher & Brülhart, 2013; Benzarti & Wallossek, 2023; Hoppe et al., 2023).

[12] In the the *Doing Business* index, the business is assumed, inter alia, to be a limited liability company, wholly domestically-owned by five owners, located in the economy's largest city, with 60 employees, operating in general industry (producing and selling ceramic flower pots) with no engagement in foreign trade or products subject to special tax regimes.

[13] A related literature instead examines taxpayers' willingness-to-pay for a reduction in tax complexity. For instance, Benzarti and Wallossek (2023) show that individual taxpayers in the US are willing to pay more taxes in exchange for a simpler system.

[14] See, for instance, reports on surveys conducted by the World Bank and the International Finance Corporation in Ethiopia (2016), Tajikistan (2017b) and the Kyrgyz Republic (2017a), Evans et al. (2013) for evidence from small and medium enterprises in Australia, Coolidge (2012) for a discussion of findings from surveys done in developing countries, and Eichfelder and Vaillancourt (2014) for a review of older studies, mostly from high-income economies.

in Section 3.1 and 3.2.

Sampling Sampling strategies vary across studies and depend in large part on the availability of data on the taxpaying population. Ideally, the sampling frame would be drawn from a registry held by the tax authority, to generate a sample representative of actual taxpayers. However, in many contexts, this is a significant hurdle, usually due to strict data confidentiality protocols and occasionally even legal provisions precluding the tax authority from sharing identifiable information on taxpayers with external parties. In some cases, surveys have been administered by the tax authority to circumvent this problem (Coolidge et al., 2011), although this gives rise to other concerns – if the respondent fears that the tax authority will use the information for enforcement, this could bias responses. Where a taxpayer register is not available, researchers have typically used other business registries, such as a business census, company registration information, or lists of publicly traded companies. While these databases have wide coverage, they can also contain a large number of "ghost" firms, who have either registered and never traded, or have ceased operating but not de-listed.[15] In addition, they may not be representative of the taxpayer population, either over-representing larger firms in the case of listed companies, or including many more smaller firms who have registered a business but do not meet the turnover thresholds applicable to tax registration.

Non-response Compliance cost surveys typically see response rates of between five and ten percent (Evans et al., 2013), particularly for postal and online surveys, while response rates for similar in-person surveys are usually higher.[16] Non-response can lead to significant bias, if there are systematic differences between respondents and non-respondents, and affects external validity by reducing the representativeness of the sample. A priori, the potential influence of non-response on survey measures of compliance costs is ambiguous. On the one hand, taxpayers with relatively high costs might be more inclined to participate, to air their grievances and put pressure on the government to simplify the tax system, resulting in estimates that overstate true compliance costs. On the other hand, taxpayers with high costs might view the survey as yet another administrative effort and refuse to participate, so the resulting measures would under-estimate costs. Empirical evidence on the impact of non-response is limited, particularly as surveys are rarely comparable across countries. However, one study using eight different random samples of Belgian businesses found no significant evidence of bias in cost estimates due to non-response (Eichfelder & Hechtner, 2018).

[15]This problem is not completely avoided when using tax register data (see Mascagni et al. (2022) for a detailed study on the nature of "tax ghosts" in Rwanda), although it can be mitigated by restricting the sampling frame to include only taxpayers who have recently filed a tax declaration.

[16]For instance, a postal survey of small and medium enterprises in Australia had a response rate of 7.5 percent (Evans et al., 2013) and an online survey had a response rate of 4.5 percent (Lignier & Evans, 2012). Similarly, an online survey sent to businesses in South Africa saw a 6.7 percent response rate (Smulders et al., 2017). A postal survey of US businesses achieved a 27 percent response rate (Marcuss et al., 2013). In contrast, surveys of tax attitudes and perceptions conducted in person among businesses in Rwanda and Eswatini had response rates of 65 and 40 percent, respectively (Mascagni et al., 2023; Santoro, 2021).

3.1 What costs should we measure?

While there is some contention over the precise boundaries of tax compliance costs, there is a general consensus among most of the empirical literature that compliance costs for firms can be broken down into three core components (Eichfelder & Hechtner, 2018; Evans, 2008; Tran-Nam et al., 2000):

i. Internal labour costs, referring to the imputed value of the time spent on tax compliance activities by a firm's owner, employees, or other ad hoc labour;
ii. External labour costs, referring to the money paid to external tax advisors, accountants, or other tax agents; and
iii. Non-labour costs, such as specialised accounting software, computers and other technological equipment, transaction fees, and travel costs.

In most economies, firms are responsible for collecting and remitting the majority of tax revenue, either through taxes on their own income or through their role as withholding agents for a range of other taxes, such as payroll taxes applied to employees' earnings (Kopczuk & Slemrod, 2006; Slemrod, 2006). The word *remit* is important in this context. Firms might not bear the burden of the tax itself: tax burdens can be shifted to consumers through price adjustments, or, in the case of taxes like VAT, the tax base is final consumption by design. However, the *compliance* burden usually falls on firms, as the economic agent responsible for withholding, reporting, and paying tax directly to the government.

Beyond these core components, taxpayers may face other costs which are harder to measure reliably in a large-scale survey. This could include psychological costs, including frustration, stress or anxiety experienced when dealing with tax authorities (Evans et al., 2013; Tran-Nam, 2001) and discretionary (or avoidable) costs related to tax evasion and avoidance, such as bribes paid to officials for favourable treatment or fees paid for tax planning services (Slemrod, 2006). While one can argue that such costs should not be counted in a measure of the unavoidable costs of tax compliance, some components may be difficult to disentangle from "legitimate" compliance costs (Evans, 2008). For instance, fees paid to a tax agent might include tax planning services, as well as the cost of supporting tax compliance. Finally, firms may face indirect costs of being compliant, such as reduced price competitiveness versus non-taxpaying firms, which are difficult to define and to capture reliably in a survey.

Some authors have argued that tax compliance also provides benefits to firms, which should be deducted from gross compliance costs to obtain a measure of net compliance costs (Tran-Nam et al., 2000). For instance, tax compliance brings managerial benefits, as firms are forced to keep better records, and cash flow benefits, due to the delay between when firms are paid and collect tax on behalf of the government (such as VAT), and when they need to remit this revenue to the tax authority. These benefits can be substantial, but quantifying them often entails making significant assumptions about the return on cash or the opportunity cost of labour time spent on tax compliance activities. A more tangible benefit is the tax deductibility of compliance costs, as

salaries, fees paid to agents, and other equipment costs may fall under allowable expense deductions, reducing a firm's overall tax liability. Realising this benefit depends on taxpayers being well-informed and claiming the maximum allowable deduction to minimise their tax liability. However, empirical research has shown that taxpayers in LICs, particularly small firms, often fail to claim deductions for input costs (Brockmeyer et al., 2024). In addition, tax deductibility reduces the compliance burden for taxpayers by shifting the burden to government, affecting only the distribution of the costs, rather than reducing them (Eichfelder & Vaillancourt, 2014).

3.2 How should we elicit estimates?

Eliciting estimates of internal, external, and non-labour compliance costs through a survey is not straightforward, particularly for small businesses without reliable records of expenses. Measurement faces three main issues: disentanglement of costs, the valuation of labour time, and framing effects.

Disentanglement Legislative changes to tax policy or administrative practice might necessitate once-off compliance costs, such as time spent learning about new tax provisions or the cost of adopting a new compliance technology (Evans, 2008). Yet, if legislative changes are frequent, a common feature of tax systems in LICs, distinguishing between once-off and recurrent costs is difficult, if not impossible, and most survey measures do not attempt to do so. There is also likely to be overlap between tax compliance costs and the underlying costs of doing business, such as fees paid to an external accountant for simultaneously providing tax and financial accounting advice, labour time spent on bookkeeping activities, which might have been undertaken regardless, and other general office overheads (Eichfelder & Vaillancourt, 2014; Evans, 2008). This is complicated further when taxpayers themselves are not sure whether an activity should be classed as accounting or tax-specific. Without carefully designed questions, surveys might misallocate or double-count costs. However, there is a high degree of uncertainty regarding the extent of this overlap and most studies acknowledge this as a limitation (Evans, 2008). Further, taxation might be the predominant reason for keeping proper business records in the first place, particularly for smaller firms in LICs, so all accounting activities could be regarded as part of tax compliance.

Valuing time Labour time is often the most significant contributor to total compliance costs, and can be highly sensitive to how labour is valued (Tran-Nam et al., 2000). For employees of a business, the cost of labour can usually be adequately valued using the gross salary or wage rates for the relevant employee (see, for instance, Yesegat et al. (2017)).[17] Valuing the time spent on tax compliance by unpaid helpers, business owners, or sole traders can be more complicated. Some surveys ask respondents to estimate fair compensation for unpaid owners or helpers, which can yield widely dispersed valuations with some implausibly high values

[17] Ideally, the wage used would include payroll taxes and pension contributions paid by the employer, as this reflects the true cost of the employee to the business. However, this type of wage data is not always available and survey questions on wages or salaries are often a sensitive issue.

(Evans et al., 2013). To counter this, these estimates could be benchmarked against prevailing market rates for relevant professions, obtained through payroll tax data (if available) or labour force surveys, which generally have more complete information on wages. Although, in the presence of labour market frictions, this might overstate the value of time (Breza et al., 2021; Kaur, 2019).

Framing effects The way a question is framed can have a significant influence on the perception of costs (Tversky & Kahneman, 1974). Two main framing choices are relevant here: the time period covered by the question, and whether to itemise specific cost components (such as the time spent on specific activities) or to use more aggregated measures (such as total time spent on tax compliance in a month). On the first issue, the survey literature typically finds that recall errors increase with distance between the event and the interview, and that salience can reduce reporting errors (Celhay et al., 2022; de Mel et al., 2009).[18] However, in the context of compliance time, an annual measure might be more suited to capturing tax activities that are performed less frequently, such as filing an income tax return (Evans et al., 2013). Eichfelder and Hechtner (2018) find that eliciting an annual cost estimate instead of a monthly estimate results in a large reduction in average costs, particularly for small businesses with weaker bookkeeping practices. While the authors are agnostic about which measure is more accurate, the result shows the importance of careful survey design.

On the second issue, a high degree of aggregation might lead to the underestimation of compliance costs if certain cost types or activities are forgotten by survey participants. The value of detailed questions has been shown in other contexts: for instance, in measuring employment, where lists of activities yielded higher employment rates for women versus standard household surveys which typically under-count home-based work and informal employment (Contreras et al., 2024). On the other hand, aggregation may reduce measurement error if it avoids double-counting. Delineating activities might prompt respondents to report compliance hours more than once if relevant to more than one category. For instance, in a study of bureaucrat time-use, Kalaj et al. (2022) show that using providing a detailed list of activities increased discrepancies between survey estimates and time-use diaries. Yet, aggregation could also overestimate costs, for instance, if respondents include general accounting activities as part of their tax compliance activities. This potential for measurement error is a general problem for compliance costs surveys, with no clear evidence in favour of either method (Eichfelder & Hechtner, 2018).

[18] For instance, a change in the design of the Indian household survey resulted in 50 million households being reclassified from poor to non-poor (de Weerdt et al., 2020). The change "simply" shifted the recall period for frequently consumed items to 7 days, and infrequently consumed items to 365 days, as opposed to the previous 30 days for all items.

4 Institutional context

Uganda faces many typical challenges of LICs, including a high degree of informality, a reliance on manual systems, and limited state capacity. Despite recent improvements in the tax system, the Government of Uganda faces significant budgetary challenges and its revenue yield remains below expectations for a country at Uganda's stage of development. In the 2022/23 financial year, Uganda's tax-to-GDP ratio was 13.9 percent, below the government's medium-term revenue target of between 16 and 18 percent of GDP (Ministry of Finance Planning and Economic Development, 2023), as well as many of Uganda's peers in the region (see Figure A1).

Firms in Uganda with annual turnover (total sales) above UGX 150 million (USD 40,540) are required to register for Corporate Income Tax (CIT), charged at a statutory rate of 30 percent on net profits. Firms are allowed various deductions for expenses, input costs, depreciation, and other losses and are expected to file two provisional income tax returns and one final return per year.[19] Although Uganda's statutory CIT rate is relatively high in comparison to OCED countries, it is in line with regional peers, where the average is 28.3 percent (McNabb et al., 2022). However, Uganda's CIT under-performs, contributing the lowest amount of tax revenue as a percentage of GDP among regional peers with comparable data, as shown in Figure 1. This poor yield is partly explained by a low effective tax rate (ETR), due to a wide range of tax exemptions, incentives, and allowable deductions: on average, firms face ETRs of approximately half the statutory rate, with the largest firms bearing the lowest effective tax burden (Bachas et al., 2023; Ministry of Finance Planning and Economic Development, 2020).

Firms also act as withholding agents for a range of other important tax heads and, as a result, collect a large portion of total tax revenue. In addition to CIT, employee income tax (Pay-As-You-Earn, or PAYE), VAT, excise duty, and petrol duty are almost entirely remitted by firms,[20] implying that firms remit at least 70 percent of total revenue in Uganda (see Figure 2), in line with estimates from other contexts (Milanez, 2017; Slemrod & Velayudhan, 2018). The administrative burden of these taxes can be fairly onerous.[21] For instance, VAT-registered firms are required to file monthly VAT returns along with detailed annexes listing the particulars of every sale to or purchase from other VAT-registered entities.[22] Reducing compliance costs for firms could therefore have a significant impact on the efficiency, equity, and effectiveness of the overall tax system.

Existing evidence suggests that Ugandan firms find the tax system burdensome and difficult to navigate.

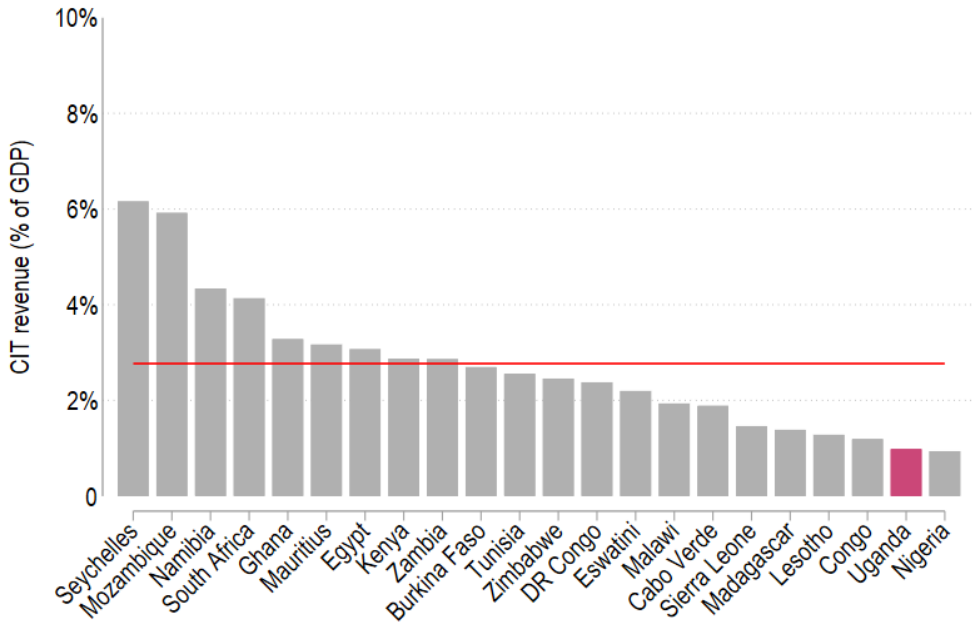
[19] Smaller businesses with gross annual turnover between UGX 10 million and UGX 150 million (approximately USD 2,700 to USD 40,540), can file under a simplified regime, the presumptive tax, where tax liabilities are determined based on total gross sales, but no expenditure deductions or tax credits can be applied. A mix of fixed amounts and percentages of turnover is used to determine the tax payable, with tax rates increasing as revenue increases (see Appendix Table A1 for details on the rates and thresholds).

[20] "Almost" because it can be difficult to distinguish between firms and self-employed individuals or sole proprietorships.

[21] Appendix Table A2 gives an overview of business-level taxes, rates, and filing and payment deadlines.

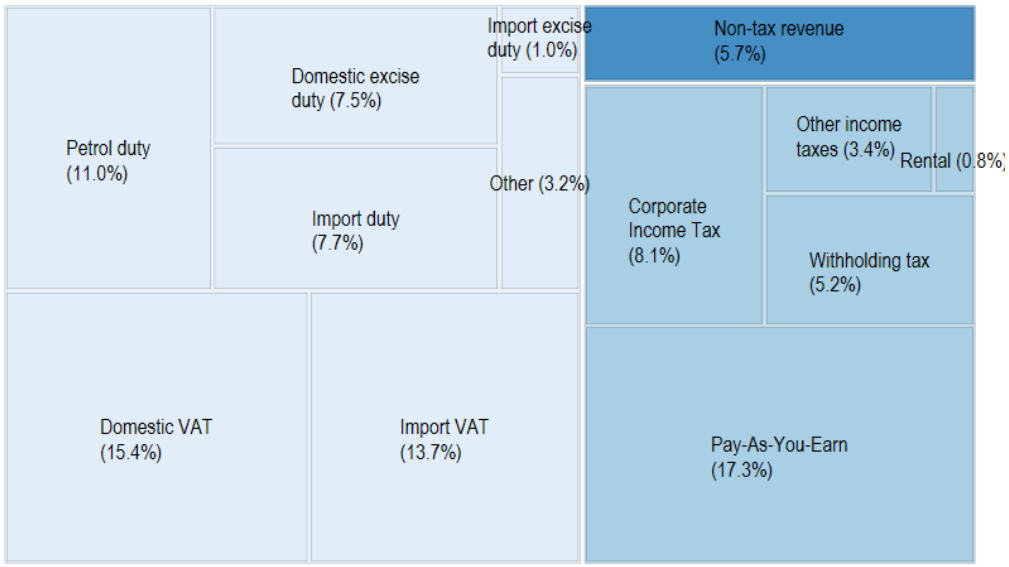
[22] All firms with annual sales above UGX 150 million are required to register for VAT, while smaller firms can voluntarily register if they have a fixed place of business, keep proper records, and are able to submit regular returns.

Figure 1: CIT performance in Uganda versus other African countries (2020)



Notes: The red line shows the average for all countries excluding Uganda.
Data source: UNU-WIDER (2023)

Figure 2: Decomposition of total revenue (FY2022/23)



Data source: Uganda Revenue Authority (2023b)

The last *Enterprise Survey* conducted in Uganda found that tax rates were the third-ranked obstacle to business, and firms reported an average of 2.8 visits or required meetings with tax officials per year, more than the average of 2.4 among low-income countries (World Bank Group, 2013). More recently, the International Survey on Revenue Administration finds extensive non-filing and late-filing in Uganda: just 38 percent of expected CIT returns are filed, of which 70 percent are filed on time (CIAT et al., 2022). The VAT numbers are slightly better: 75 percent of expected returns are filed, 76 percent of which are filed on time. Finally, Almunia et al. (2024) presents evidence that a substantial proportion of Ugandan firms consistently make reporting errors that *increase* their tax liability, indicating that not all non-compliance is due to evasion. Tax compliance costs are a likely part of the explanation for these behaviours.

5 Data, research design, and methods

5.1 Data

This paper combines original survey data from 1,972 small and medium-sized firms with administrative data from tax returns. This gives two key advantages over studies of compliance costs based on either type of data alone. Firstly, since the sample was drawn directly from the CIT returns database, the survey is reasonably representative of the actual population of taxpaying firms. Secondly, I can observe both reported compliance costs and actual compliance behaviour, enabling a deeper analysis of the burden of compliance costs and how these costs are related to tax behaviour.

5.1.1 Administrative tax data

The administrative tax data used in this paper comes primarily from the URA firm panel, which merges CIT returns data from all formal firms in Uganda with limited variables from the taxpayer register and currently runs from the 2013/14 financial year up to 2022/23.[23] The dataset contains rich information on firms' balance sheets, profit and loss accounts, and variables needed to calculate a firms' tax liability. The dataset also includes limited variables on firm characteristics, namely their location, industrial sector, and whether the firm is registered with one of URA's dedicated tax offices, such as the Large Taxpayers' or the Public Sector Office. The number of firms in the panel varies by year, but generally grows over time (see Table A3).[24] Firms are identified consistently in the panel by an anonymised taxpayer identification number, which allows for the firm panel to be matched to the survey data and other administrative datasets. In this study, I use a limited number of variables from the VAT and PAYE declarations data.

5.1.2 Survey data

The survey was conducted through in-person interviews between July and November 2023, with interview questions predominantly referring to the previous financial year (July 2022 to June 2023).[25] This was a salient

[23] See McNabb et al. (2022) for further details on variables available in this dataset. The panel is updated with new returns data annually.

[24] Some firms might appear in the panel intermittently, for instance because their income falls below the tax threshold in some years and they do not file a declaration. In addition, there is no dedicated register of presumptive taxpayers and some firms might shift between the presumptive and CIT regime as their turnover grows or shrinks between years. This could explain why some smaller firms declare inconsistently.

[25] Ethics approval for this study was obtained from the University of Sussex Social Sciences and Arts Research Ethics Committee on 28 February 2023, the Lira University Research Ethics Committee on 26 April 2023, and the Uganda National Council for Science and Technology on 20 June 2023. The ethics process involved a review of the study objectives, survey protocols, data collection tools, the budget, the CV for the lead researcher (Adrienne Lees), and support letters from the URA and the International Centre for Tax and Development (as the provider of funds). The Field Lab, an independent Ugandan research company, was contracted to implement the survey, including hiring and training a team of 15 local enumerators. The survey was coded in SurveyCTO and all data was collected electronically. All survey protocols were strictly followed and informed consent was obtained and recorded electronically before all interviews. The vast majority of interviews were conducted in English, with enumerators using local languages, usually Luganda, if needed. Appendix B contains further details on the administration of the survey, a description of survey protocols, and the full survey instrument.

time for the survey, as a new financial year had just begun and taxpayers would have recently prepared end-of-year accounts and submitted their second provisional CIT return for the 2022/23 financial year.[26] Since final returns are not due until six months after the end of the financial year (for most taxpayers, this is December), I am reasonably confident that the survey did not significantly add to the pressure of tax compliance. The survey was implemented by an independent third-party and during participant recruitment we avoided mentioning the URA as far as possible.[27] Interviews were held with the person most knowledgeable about the administration and financial management of the business, typically the owner, chief executive, director or general manager. The average survey time was 42 minutes.

Survey instrument design The main innovation in survey design was to measure tax compliance costs in two ways: through a detailed, itemised series of questions about each cost component, and an aggregate question asking respondents for their best estimate of total tax compliance costs and time spent on compliance activities.[28] The detailed questions on compliance costs cover all three of the main components detailed in Section 3.1: internal labour time, outsourcing costs, and non-labour costs, including acquiring and maintaining software, hardware and other digital or computer equipment specifically for tax compliance processes, and more incidental costs, such as transportation and transaction fees.[29] In addition, I introduced a series of questions measuring tax attitudes and perceptions, including questions on the perceived ease of tax compliance in general, and various compliance activities in particular. Following other taxpayer surveys, for instance Santoro and Mascagni (2023) and Afrobarometer (2019), I also included questions on the perceived fairness of the tax system, a measure of the intrinsic willingness to comply, trust in the URA, satisfaction with service delivery, and the perceived likelihood of evasion being detected, all central features of the tax morale literature (Luttmer & Singhal, 2014).

A common concern in survey design is that questions asked earlier in the survey will influence responses to later questions, leading to unintended question order effects. Earlier questions might prime respondents by making certain information more salient (Stantcheva, 2023). For instance, if questions on compliance costs come before questions on perceptions, respondents might be primed into thinking that the tax system is more burdensome or unfair than they would have otherwise. The order of questions can also introduce anchors, where subsequent answers are influenced by a particular reference point introduced earlier (Stantcheva, 2023; Tversky & Kahneman, 1974). For instance, if respondents are asked for their best guess of total costs before the

[26] On application to the URA, a taxpayer can use a different 12-month period as a substituted year of income, however, most taxpayers use the July to June financial year. CIT taxpayers are required to submit two provisional returns: the first provisional return is due within the first six months of a year of income and the second is due by the end of the 12th month.

[27] Enumerators had copies of an approval letter from the URA (see Appendix B.4) to show participants if they requested it. Enumerators were trained to emphasise that while the URA was aware of the study, no tax officials were involved in data collection or analysis. All information given to participants about the study is available in Appendix B.5.

[28] The full questionnaire is available in Appendix B.6.

[29] In line with more recent surveys from lower-income countries (see Coolidge et al. (2011), International Finance Corporation (2011) and World Bank Group (2016)), I do not attempt to quantify the benefits of tax compliance.

itemised questions, their estimate could become an anchor which influences their answers to the itemised questions, if they try to appear internally consistent by ensuring that the itemised total reaches their earlier total figure.

To explicitly test for priming and question ordering effects, I randomised the order of these three modules in three ways:

i. *Treatment 1:* Tax attitudes and perceptions (A) + Itemised compliance costs (B) + Aggregated compliance costs (C)
ii. *Treatment 2:* Itemised compliance costs (B) + Aggregated compliance costs (C) + Tax attitudes and perceptions (A)
iii. *Treatment 3:* Aggregated compliance costs (C) + Tax attitudes and perceptions (A) + Itemised compliance costs (B)

By randomising the order of the two compliance costs modules (B and C), I can examine the within-subject consistency of cost estimates. This is important for understanding whether survey time and budget can be saved, while still capturing a relatively accurate picture of compliance costs. In addition, by comparing the aggregated estimates obtained in treatment 3 (where module C comes before module B) against those obtained in treatment 1 and 2, I am able to test whether priming respondents with itemisation influences their aggregated estimates. I am also able to test whether priming respondents to think about compliance costs (in treatments 2 and 3) influences their subjective perceptions of the tax system and the compliance burden, measured in module A. This within-subject design allows me to control for time and duration effects, and increases statistical power for the same sample size, relative to a between-subject design for a similarly-sized sample, as this approach would imply that some respondents have a much shorter questionnaire (and I would not be able to examine within-subject consistency).

In addition, the survey included the following modules: (i) demographics of the respondent, (ii) business characteristics, (iii) digital financial services use, and (iv) tax knowledge, filing and payment information. These all came before the three main modules of interest, although were overall much shorter than the compliance costs and perceptions modules combined. Putting the main modules of interest last last risks survey fatigue and measurement error, as respondents might become tired and less engaged (Jeong et al., 2023). However, these questions were also more likely to be sensitive, and putting them later gave enumerators time to build trust and rapport with respondents, in line with recommendations in Stantcheva (2023). The questions were refined through interviews with business leaders and tax experts, discussions with tax officials, and pilot testing with approximately 80 respondents.[30]

I address the other issues discussed in Section 3.2 in the following ways. To disentangle time spent on

[30]These interviews included officials from the Ministry of Finance, Planning, and Economic Development, tax advisors from Grant Thornton in Kampala, and senior executives of the Ugandan Manufacturers' Association and Enterprise Uganda, a business development services provider.

accounting and tax-specific activities, I asked respondents to report time spent on various tax-related tasks separately, making a distinction between general bookkeeping from other tax-related processes. While this does risk double-counting, I am able to flexibly include or exclude certain categories to test the sensitivity of my estimations. Similarly, I explicitly asked respondents to clarify if there is any overlap between the fees paid to tax agents for bookkeeping and other tax compliance processes, and, if so, to estimate how much they would spend on outsourced labour if they *did not* have to pay any taxes. To monetise the value of labour time, respondents were asked to report salaries for the firm owner and employees, as relevant, within specified bands to decrease the sensitivity of the question. I also use wage information reported in firms' PAYE returns data to benchmark the survey-based estimates. With respect to the reference time period, most questions were asked in reference to a typical month, rather than annually, as other time periods did not perform well in the pilot testing and referring to different time periods for different activities resulted in an overly-complicated questionnaire. There are two deviations from this approach: (i) since software, hardware, and other equipment costs are more irregular, these questions were asked with respect to the past five years for acquisition costs and one year for maintenance costs; and (ii) in the aggregate costs module, I allowed respondents to select the time period with which they felt most comfortable (monthly or annually).

Sampling strategy The sample was drawn directly from the CIT declarations data, with five restrictions. First, I excluded all individuals filing under the CIT regime instead of the personal income tax.[31] Second, I only included firms which had filed at least one CIT declaration between 2018/19 and 2020/21 (the last year of declarations data available at the time of sampling in May 2023), to reduce the risk of drawing inactive firms, which have completely stopped filing returns but have not de-registered. Third, I restricted the sample to firms operating in the wholesale and retail trade, manufacturing, and services sectors.[32] Agricultural firms, utilities, public sector organisations, and firms operating in the natural resources sectors were excluded as they operate under different fiscal regimes and have quite different profiles to a typical Ugandan firm. Fourth, I excluded firms handled by the URA's Large Taxpayer Office, as these firms are subject to more intense monitoring and enforcement and the population of interest is small- and medium-sized firms.[33] Finally, I restricted the sampling frame to firms registered with tax offices in Kampala, the capital city, and three smaller cities in each of Uganda's other regions, Mbale in the East, Mbarara in the West, and Lira in the North, largely for logistical reasons.

[31]This is not an error in the data, as some individuals are permitted to file CIT returns instead of a personal income tax (PIT) return, for instance if they earn self-employment income. Many of the individual taxpayers in the firm panel only file rental income tax, reflecting a legacy issue in the tax code which applied a lower tax rate to rental income filed under the CIT rather than PIT.

[32]"Services" includes construction, transportation and storage, accommodation and food services, information and communication, financial and insurance services, real estate, professional, scientific and technical services, education, administrative and support services, health and social work, and the arts and entertainment sector. Information on sectors is available for 93 percent of all taxpayers in the panel.

[33]The URA defines large taxpayers as firms with annual turnover above UGX 15 billion (USS 4.1 million) and/or firms operating in specific sectors, including extractives, banking, insurance, and government departments.

The final sampling frame included just over 34,000 unique taxpayers and, unsurprisingly, has a larger proportion of firms based in Kampala than the original CIT panel (Table A3 gives summary statistics for the URA firm panel and the sampling frame, once the exclusion restrictions above are applied). In line with evidence from other LICs, roughly 30 to 35 percent of taxpayers in the firm panel and the sampling frame each year are nil-filers, referring to firms which report zero for all significant fields of the tax return.[34] From this sampling frame, I drew a random sample of 4,500 firms, over-sampling firms outside of Kampala, to enhance the representativeness of the final sample. The sample was stratified by sector and taxpayer size, proxied by whether the firm is handled by the URA's Medium Taxpayer Office, which has applied to firms with turnover above UGX 5 billion (USD 1.3 million) since 2015.[35]

By sampling from the CIT declarations data, the explicit focus of this study is firms filing and paying under the CIT regime. Firms classified by the URA as "micro" taxpayers, which file under the presumptive tax regime, are generally excluded.[36] However, the URA does not maintain a separate register for the presumptive tax. Rather, if a firm's turnover falls below the CIT threshold during a financial year, they can opt to file under this simplified regime. Therefore, some firms in my sample might move between these regimes, and I include an indicator for this in the analysis. By definition, this study only captures the experience of formal firms and I cannot draw any conclusions about the cost of (non-)compliance for unregistered businesses, or the extent to which the potential costs of tax compliance discourage business growth and tax registration. In addition, since the sample is only drawn from urban centres in Uganda, it is not nationally representative. However, as discussed earlier, this sampling method has two significant advantages: the sample is reasonably representative of the taxpaying population, particularly since the majority of Uganda's active taxpayers are based in the greater Kampala area, and I can link the survey responses to administrative returns data.

Non-response The enumerators attempted to contact 3,945 firms from the original sample list and successfully interviewed 1,972 firms, resulting in a response rate of 50 percent.[37] This is comparable to response rates for similar taxpayer surveys conducted in-person, and substantially higher than typical response rates seen for online, email, or telephone surveys about taxation (see Section 3). Table 1 shows results for balance tests between participants and non-participants, using CIT returns data from each firms' most recent declaration.[38] Participants are less likely to have filed a nil return the last time that they filed a return, in line with the fact that approximately 9 percent of non-response was due to business closure, or because the business never

[34]Nil-filers accounted for half of CIT declarations in Rwanda (Mascagni et al., 2022) and up to 45 percent of CIT declarations in Eswatini (Santoro & Mdluli, 2019).
[35]Appendix Figure A2 gives a detailed flow chart of the sampling process.
[36]This applies to firms with annual turnover between UGX 10 million and UGX 150 million.
[37]While the original sample list contained 4,500 taxpayers, some of these had to be dropped because contact details were missing once the anonymised returns data was matched back to the unmasked tax register, to obtain contact information, including names, addresses, and phone numbers.
[38]Firms were eligible for the sample if they had filed at least one return between 2019 and 2021, but not every firm in the final sample list filed in 2021. In this case, I use data from the last time they filed a return for the balance tests.

actually started trading (see Table A4). This phenomenon of "active ghosts" is not unique to Uganda and is likely due to a combination of mass tax registration campaigns, sometimes registering taxpayers before they have any business activity (Scarpini et al., 2024), and unclear or complex administrative practices, particularly with respect to de-registration (Mascagni et al., 2022). Participants were also less likely to be registered in Kampala and more likely to be registered for PAYE. Table A4 shows that about half of non-response is due to taxpayers refusing to participate or being unavailable for the interview, which was particularly the case for taxpayers based in Kampala.[39] Where enumerators were unable to locate or contact firms, this was usually due to errors in the administrative data.[40]

Table 1: Mean differences between participants and non-participants

	Non-participant		Participant		Diff.
	Mean	N	Mean	N	
Annual turnover (UGX)	1.01bn	1,971	854mn	1,970	158mn
Profit/loss before tax (UGX)	-6.91mn	1,971	1.99mn	1,970	-8.89mn
Filed a nil-return	0.42	1,973	0.35	1,972	-0.07***
Registered for PAYE	0.37	1,973	0.47	1,972	0.10***
Registered for VAT	0.38	1,973	0.38	1,972	0.00
Registered in Kampala	0.76	1,973	0.59	1,972	-0.17***
Registered with the MTO	0.02	1,973	0.02	1,972	0.00
Total	3,945				

Notes: Table shows averages from the administrative returns data for the last time the firm filed a tax return between 2019 and 2021. The 'Diff.' column gives the coefficient from a t-test of participation status on the variable. Stars indicate whether this difference is significant. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Data source: Uganda Revenue Authority (2023a)

5.2 Sample descriptive statistics

Table 2 reports descriptive statistics for the surveyed firms. Consistent with the sampling strategy, 60 percent of the surveyed firms are located in Kampala, approximately matching the proportion of firms based in the capital in the URA firm panel (see Appendix Table A3). Over 40 percent of firms have fewer than five employees. Average self-reported monthly turnover is UGX 67 million (approximately USD 18,000), although there is wide dispersion in the sample and median sales are just UGX 15 million monthly (USD 4,000).[41] Just over 56 percent of firms operate in services sectors, 40 percent in trade-related sectors, and less than five percent in manufacturing (see Appendix Figure A5 for a detailed split). This broadly matches the sectoral split in the

[39]Where a reason for declining to participate was given, taxpayers commonly reported that they are too busy, simply not interested, or that they were not comfortable talking about the topic (see Appendix Figure A3). Enumerators also reported that respondents often insisted that the enumerator was from the URA or another government agency, despite carrying photo ID and all letters of introduction indicating that they represented The Field Lab.

[40]This is a well-documented weakness of administrative tax data and not unique to Uganda. Researchers from the URA have been remarkably open about data integrity issues, documenting problems in the tax register (Mayega et al., 2019) and tax returns (Mayega et al., 2021).

[41]Respondents were able to report turnover for their preferred reference period: weekly, monthly, or annually. To control for extreme outliers in self-reported sales, I winsorised sales data at the 99th percentile. Appendix Figure A4 shows the full distribution of reported monthly sales.

sampling frame, where approximately 35 percent of firms are in trade-related sectors and five percent of firms are in manufacturing. Over 95 percent of firms report being registered for income tax and 53 percent for VAT. Less than one percent of respondents did not know their registration status.

Table 2: Descriptive statistics of surveyed firms

	Mean	SD	Min	Median	Max	N
Panel A: Firm characteristics						
Located in Kampala	85.7	35.0				1,972
Sector						
Trade, transportation, accommodation & food	40.5	49.1				1,967
Manufacturing	3.27	17.8				1,967
All other services sectors	56.2	49.6				1,967
In operation for <=5 years	24.2	42.8				1,953
Firm has <5 employees	43.2	49.5				1,958
Has a dedicated company bank account	90.2	29.8				1,949
Keeps full formal business records	95.5	20.8				1,956
Keeps business records digitally	74.8	43.4				1,956
Uses digital payment methods in business	87.5	33.0				1,937
Uses internet in business	82.5	38.0				1,970
Trades online or through social media	60.8	48.8				1,970
Exports goods or services	19.3	39.5				1,965
Self-reported monthly turnover (UGX millions)[1]	67.0	184.0	0	15.0	1,416.7	1,541
Panel B: Tax information from survey data						
Years since tax registration	9.32	5.90	0	8.0	47.0	1,788
Reports being registered for income tax	96.3	18.8				1,946
Reports being registered for VAT	53.6	49.9				1,946
Reports being registered for PAYE	63.2	48.2				1,946
Tax quiz score (out of 5)[2]	4.0	1.2	0	4.0	5.0	1,972
Reports using eTax	86.8	33.9				1,972
Reports using EFRIS	48.0	50.0				1,933
Reports using digital methods to pay tax	31.4	46.4				1,946
Panel C: Administrative returns data (FY2022/23)[3]						
Annual turnover (UGX billions)	1.95	11.8	0	0.06	270.5	1,189
Profit/loss before tax (UGX billions)	-0.05	-1.6	-38.2	0	5.5	1,252
CIT payable (UGX millions)[4]	11.0	54.4	0	0	756.1	1,232
Nil-filer in 2022/23	26.2	43.9				1,314
Perpetual nil-filers[5]	7.8	26.9				1,263
% reporting zero turnover	34.2					1,263
% reporting zero CIT payable	56.6					1,263

Notes: Results are weighted using survey design weights. For binary variables, the "Mean" column shows the weighted proportion of the sample with this attribute.
[1]To control for extreme outliers in self-reported turnover, survey data are winsorised at the 99th percentile. [2]Tax quiz score refers to the number of factual questions about the tax system that were answered correctly (standard VAT rate, VAT threshold, standard CIT rate, number of final income tax submissions per year, and whether the URA charges a fee for tax registration). [3]Firm performance may have remained suppressed in FY2022/23 due to Uganda's COVID-19 lockdown, which only ended in January 2022, and some firms were carrying forward losses from the COVID-19 period. [4]Calculated as 30 percent of chargeable income, as described in McNabb et al. (2022). [5]Defined as 1 if a firm files a nil return every time they have filed since the start of the CIT panel (2014).
Data sources: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab. The administrative returns data used in Panel C was provided by the Uganda Revenue Authority (2023a).

In terms of business practices, a high proportion of firms report having dedicated company bank accounts

and formal business records, indicative of tax-registered firms being more sophisticated than firms operating informally. Of the firms reporting that they keep full business records, approximately 75 percent keep computer-based records. Most firms use at least one digital payment method (mobile money, card payments, or bank transfers) to pay their suppliers or to accept payments from customers. Furthermore, the vast majority of firms (82.5 percent) use the internet for their business and 60 percent at least partially trade online (including through social media, such as WhatsApp and Facebook).

This level of sophistication is also reflected in respondents' tax knowledge. The average score on a mini-quiz of five questions about taxes in Uganda was four points, with less than one percent of respondents scoring zero. These questions were fairly straightforward: the standard VAT and CIT rates, the VAT threshold, the number of final income tax submissions expected per year, and whether the URA charges a fee for tax registration.[42] The majority of firms are using eTax, URA's electronic filing system, but far fewer firms pay taxes digitally, reporting that it is more convenient to pay in cash, they prefer to get a paper receipt, and that they do not trust digital methods. Nearly half of firms report that they use the URA's Electronic Fiscal Receipting and Invoicing System (EFRIS), a tool for VAT compliance.

Panel C of Table 2 gives summary statistics from the CIT declarations for those firms filing a declaration in FY2022/23. Of the 1,972 successfully interviewed firms, 1,263 filed a CIT return in FY2022/23. Reported annual turnover in the administrative data follows a relatively similar distribution to the survey, although there is a much higher density of zeroes reported in the administrative data (see Appendix Figure A6). Just over a quarter of surveyed firms filing a return in FY2022/23 filed nil, while another quarter report making a loss. Only 41 percent of surveyed firms have a positive amount of CIT payable in 2022/23.

[42]The worst-performing question was about the current VAT registration threshold, which about 60 percent of respondents answered correctly.

6 An anatomy of tax compliance costs in Uganda

6.1 Fact #1: Compliance costs are substantial and regressive

The median firm faces total tax compliance costs amounting to UGX 3 million per year (USD 810), or 1.89 percent of self-reported annual turnover, calculated using the sum of itemised cost components from module B of the survey (see Table 3). However, since the distribution of total compliance costs is skewed to the left, as shown in Figure 3, mean compliance costs are much higher than the median: on average, total compliance costs amount to UGX 5.77 million per year (USD 1,559), or 7.48 percent of turnover.[43] Two percent of firms report total compliance costs greater than their annual turnover, most of which are in the first turnover decile or report zero turnover. This could be explained by a tendency for dormant or closed businesses to continue to file returns, rather than de-register, and thus continue to incur compliance costs despite being inactive.[44] These estimates exclude costs associated with general bookkeeping, which might be incurred regardless of whether the business complies with tax obligations. Including bookkeeping costs increases median total tax compliance costs to UGX 3.42 million, or 2.19 percent of turnover (see Appendix Table A6).

Table 3: Summary statistics for annual tax compliance costs

	Mean	SD	p10	Median	p90	N
Panel A: Absolute compliance costs (UGX)						
Outsourcing costs	4,602,951	7,264,319	600,000	2,400,000	7,200,000	1,103
Cost of internal labour time	3,427,581	4,931,816	303,750	1,462,500	8,640,000	957
Non-labour costs[1]	1,585,995	2,395,245	0	660,000	3,700,000	1,897
Total tax compliance costs	5,769,495	8,089,280	537,500	3,000,000	12,280,000	1,939
Panel B: Relative compliance costs						
% of self-reported turnover[2]	7.48	17.4	0.19	1.89	22.7	1,535
% of declared turnover[3]	7.23	17.72	0.04	1.50	18.85	741
% of CIT payable[4]	64.05	41.85	5.77	100	100	508
% of CIT payable, labour costs only[5]	58.43	42.41	3.18	87.55	100	458

Notes: Results are weighted using survey design weights. All measures of compliance costs exclude costs associated with general bookkeeping. The sample size changes across rows as not all firms report incurring all types of costs, and 431 firms do not report their turnover in the survey. Extreme outliers are winsorised at the 99th percentile. See Appendix Table A5 for more details on each variable. [1]Non-labour costs include the cost of acquiring and maintaining technology and digital equipment for tax compliance, as well as other incidental costs such as transportation, transaction fees, and stationery. [2]The ratio of compliance costs to turnover is capped at 100%. This applies to 42 firms in the sample. [3]Ratio calculated using turnover declared in CIT returns for FY2022/23 for firms with positive turnover only. [4]Ratio is reported only for firms with positive CIT payable, which is calculated as 30 percent of chargeable income. [5]Labour costs include outsourcing costs and internal labour costs, with the latter adjusted by the share of total time spent on tax compliance respondents estimated is spent on income tax compliance.

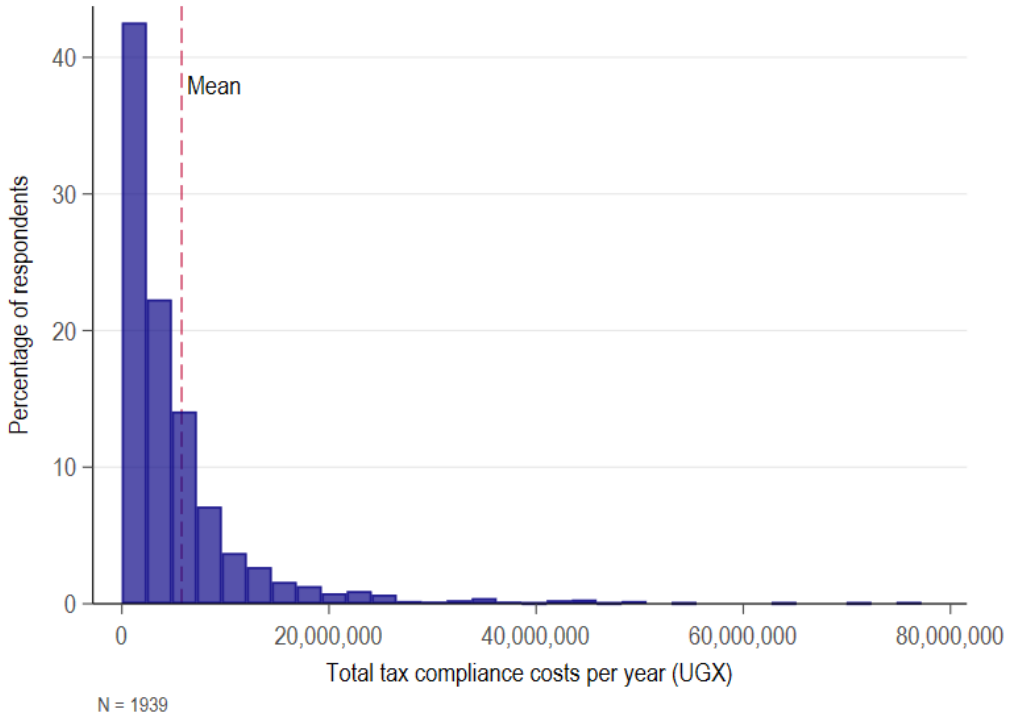
Data sources: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab. Administrative returns data was provided by the Uganda Revenue Authority (2023a).

Using the CIT returns data from FY2022/23, I also calculate the ratio of total tax compliance costs to declared

[43]This pattern is not especially sensitive to the level of winsorisation – see Appendix Table A7 for the same data points winsorised at the 95th percentile.

[44]This phenomenon has been identified in other low-income countries. For instance, Mascagni et al. (2022) describe similar behaviour among taxpayers in Rwanda.

Figure 3: The distribution of tax compliance costs is highly skewed



Notes: Figure shows the distribution of total tax compliance costs excluding costs associated with general bookkeeping. Data are winsorised at the 99th percentile.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

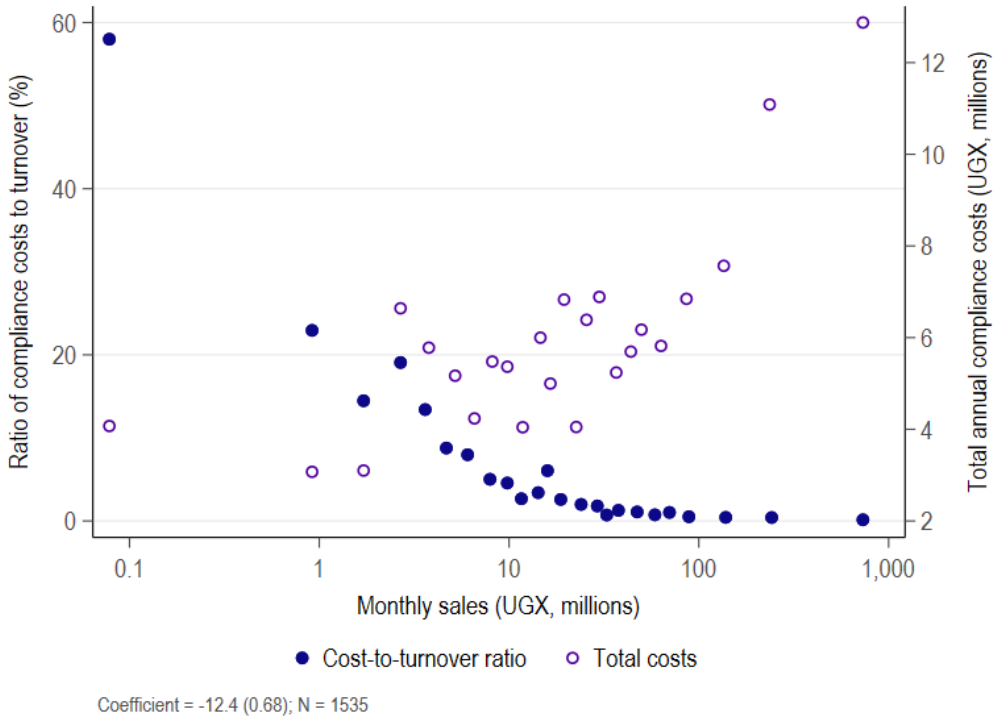
turnover and CIT payable, only for firms with non-zero turnover and a positive CIT liability, respectively. Encouragingly, the distribution of the compliance costs to turnover ratio is similar to that obtained from the survey data (shown in Panel B of Table 3). It is more surprising to see that the ratio of compliance costs to CIT payable is uniformly high. This is true even if I only include compliance costs associated with outsourcing and labour time devoted to income tax compliance.[45] Among firms filing a CIT declaration in FY2022/23, 75 percent reported labour-related CIT compliance costs exceeding their CIT liability (this drops to 45 percent if I only consider those with positive CIT payable). This trend is more common among firms with fewer employees: nearly 80 percent of firms with five or fewer employees incur compliance costs greater than their CIT liability, versus 65 percent of firms with 20 or more employees. Finally, even firms filing a nil return reported incurring compliance costs, with a median of UGX 2.76 million per year. Interestingly, around half of nil-filers reported that they hire an agent to help manage their tax affairs.

Figure 4 shows a binned scatterplot of the ratio of compliance costs to turnover (left-hand axis) and total compliance costs (right-hand axis) against (logged) monthly turnover. Bins contain approximately the same number of observations and each point represents the mean for observations within that bin. Although total compliance costs tend to rise with firm size, relative compliance costs slope sharply downwards, indicating that

[45]Respondents were asked to estimate a distribution of the total time spent on tax compliance between income tax, VAT (if relevant), PAYE (if relevant), and all other taxes.

smaller firms bear a much larger compliance burden relative to their size. While compliance costs for firms in the first decile of monthly sales are over 40 percent of turnover on average, firms in the tenth decile experience costs amounting to 0.3 percent of turnover on average.[46] Figure 4 also indicates that total compliance costs are relatively similar for mid-sized firms, but expand significantly for the very largest firms. This could indicate that there is a substantial component of fixed cost involved in tax compliance.

Figure 4: Regressivity of tax compliance costs



Notes: Graph shows a binned scatterplot of the ratio of total compliance costs to turnover (LHS) and total compliance costs (RHS) against logged monthly turnover. A binned scatterplot is made by partitioning the support of the x variable into a modest number of bins and displaying a single point per bin, showing the average outcome for observations within that bin. "Coefficient" gives the coefficient from an OLS regression of the cost-to-turnover ratio on (logged) monthly sales, with the standard error in brackets. Results are weighted using survey design weights and data have been winsorised at the 99th percentile. *Data source:* Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

Descriptive multivariate regressions confirm the importance of firm size as a driver of compliance costs, with smaller firms having lower absolute costs. In the full specification (column 3), having five or fewer employees and smaller monthly turnover are both associated with lower compliance costs. However, relative compliance costs are significantly higher for smaller firms (positive coefficients in columns 4 and 5). Keeping digital business records, another indicator of the sophistication of the business, significantly decreases relative costs. This also matches respondents' perceptions that using technology makes the process of filing and paying taxes easier (over 80 percent of respondents 'somewhat' or 'fully' agree with the statement). Being registered for PAYE significantly increases total compliance costs, likely due to the frequency of filing (monthly) and

[46]Figures A7b and A7a show a similar pattern when defining firm size by the number of employees.

the detailed information required on compensation for each employee. Interestingly, the dummy variable indicating whether the firm outsources any compliance activities to a tax agent is significant and positive for both absolute and relative tax compliance costs. This is discussed further in Section 6.3.

Table 4: Correlates of total compliance costs

	Total costs (UGX millions)			Cost-to-turnover ratio (%)	
	(1)	(2)	(3)	(4)	(5)
Trade sectors (=1)	-0.04	-0.91	-0.82	-3.20	-3.12
	(1.53)	(1.58)	(2.08)	(4.47)	(4.46)
Services sectors (=1)	0.27	-0.13	-0.17	-0.85	-1.40
	(1.56)	(1.63)	(2.15)	(4.52)	(4.55)
Located in Kampala (=1)	1.33***	1.16***	1.25***	-1.70*	-0.88
	(0.34)	(0.33)	(0.39)	(1.02)	(1.06)
5 or fewer employees (=1)	-2.12***	-1.82***	-0.99**	4.38***	3.53***
	(0.42)	(0.42)	(0.49)	(1.08)	(1.22)
Digital record-keeping (=1)	0.76	0.18	-0.18	-6.34***	-5.49***
	(0.61)	(0.65)	(0.78)	(1.69)	(1.97)
Registered for VAT (=1)		1.50***	0.96		-3.02**
		(0.48)	(0.59)		(1.31)
Registered for PAYE		1.31***	1.32***		-0.11
		(0.41)	(0.46)		(1.17)
Uses eTax (=1)		1.08**	1.59***		0.39
		(0.50)	(0.59)		(1.97)
Uses a tax agent (=1)		4.04***	4.10***		3.75***
		(0.47)	(0.51)		(1.15)
Years since tax registration		0.08	0.09		-0.12
		(0.06)	(0.06)		(0.09)
Tax quiz score (out of 5)		0.40*	0.35		-0.76
		(0.22)	(0.24)		(0.65)
Monthly turnover (IHS transformed)			0.47**		
			(0.23)		
R^2	0.13	0.21	0.24	0.13	0.15
Mean	5.44	5.57	5.74	8.70	8.77
N	1,910	1,732	1,413	1,517	1,413

Notes: Results are weighted using survey design weights. All specifications include enumerator fixed effects. Extreme outliers in total costs and monthly turnover have been winsorised at the 99th percentile. Total compliance costs have been rescaled from Ugandan shillings to millions of Ugandan shillings to make the coefficients more legible. The inverse hyperbolic sine (IHS) transformation has been applied to monthly turnover to account for leftward-skewed distributions. The cost-to-turnover ratio is capped at 100 percent. Total compliance costs exclude costs associated with general bookkeeping. Standard errors reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

While there is no true objective measure of tax compliance costs against which to validate or benchmark the survey measure, I have several reasons for confidence in these results.[47] Firstly, my results are broadly

[47]This is an issue faced by the majority of research on tax compliance costs, as well as survey-based research on many other business outcomes, such as sales, profits, or productivity, which are all prone to various sources of measurement error or recall bias (Anderson et al., 2021; de Mel et al., 2009; de Weerdt et al., 2020).

comparable to other results in the literature. For instance, Yesegat et al. (2017) finds average compliance costs of 5.4 percent of turnover for businesses in Ethiopia and, in a study across several developing countries, Coolidge (2012) documents that small business incur compliance costs of 15 percent of turnover or more. Similarly, in a review of several compliance cost studies across high- and low-income countries, Eichfelder and Vaillancourt (2014) find that costs can make up a significant part of turnover for small businesses, in some cases exceeding 10 percent. Secondly, the correlates of compliance costs described in Table 4 go in the directions one would expect. Thirdly, as expected, firms with greater reporting requirements face higher compliance costs, on average. For instance, the URA requires that firms with annual turnover above UGX 500 million have their financial statements audited by a member of the Institute of Certified Public Accountants of Uganda. A t-test confirms that compliance costs for firms above this threshold are significantly greater than firms below the threshold. Similarly, firms reporting that they have been audited or otherwise investigated by the URA in the last three years have higher compliance costs, on average. In addition, as noted above, firms registered for VAT have significantly higher total tax compliance costs that non-VAT-registered firms.

6.2 Fact #2: Firms of all sizes spend substantial time on tax compliance

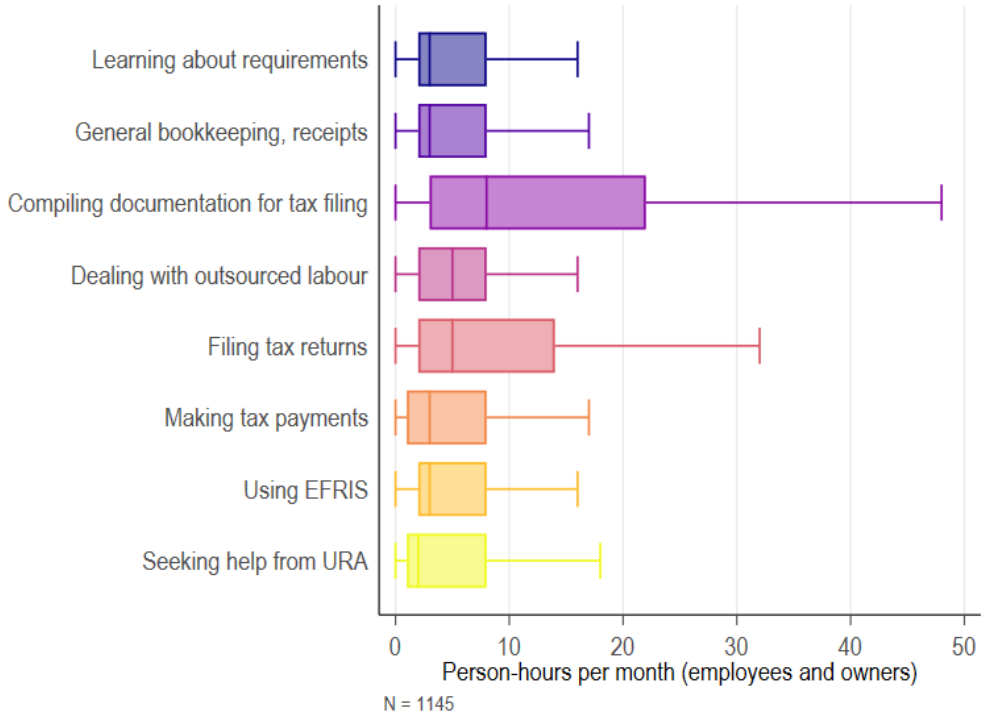
Approximately 40 percent of respondents report that at least one employee is involved in tax compliance activities, predominantly a dedicated tax advisor or accountant, and a quarter report that the firm owner is directly involved in tax compliance. For the median firm, employees and owners spend a combined 34 hours a month on tax compliance activities, excluding general bookkeeping (or 42 hours if bookkeeping is included, see Figure A8).[48] Where firm owners are involved, they spend a median of 31 hours per month on average, equivalent to approximately 20 percent of their working week. Firm employees spend a median of 32 hours per month on tax-related activities. Similar to the total compliance costs results in Section 6.1, the mean time spent on tax compliance is pulled upwards by some high upper estimates: on average, firms devote 51 hours per month to tax compliance activities. As a point of comparison, the World Bank's *Doing Business* index estimated that a 'representative firm' in Uganda would spend 195 hours per year on tax compliance (39 hours on CIT filing and payment, 90 hours on VAT compliance, and 66 hours on social security contributions for employees), equivalent to 16 hours per month (World Bank Group, 2020).[49] Figure 5 shows that the majority of labour time is spent compiling documents for tax filing and preparing and filing tax returns. The average firm reported spending 22 hours per month just on filing returns. For firms filing both CIT and VAT, respondents estimated that approximately half of total compliance time is spent on CIT filing, while VAT accounts for a

[48] Calculating the amount of time spent on tax compliance activities entails some assumptions. If respondents reported time in days or weeks, I assumed an eight-hour working day and a five-day working week. This is reasonable in the Ugandan context: for comparison, the National Labour Force Survey (Uganda Bureau of Statistics, 2021) reported that average hours worked per day was 7.6 and the average working week was 38.1 hours in Uganda.

[49] The *Doing Business* index was discontinued following a data manipulation scandal. It has been replaced by the *Business Ready* index, launched in October 2024, although at the time of writing, Uganda was not covered by this index.

further 30 percent.[50]

Figure 5: Time spent by internal labour on tax compliance activities



Notes: Graph shows a boxplot demonstrating the distribution of hours spent on each tax-related activity. Outside values are not shown.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

To approximate a monetary value of this labour time, respondents were asked to report salaries for the firm owner and employees, as relevant (within pre-specified bands to decrease the sensitivity of the question). Taking the midpoint of the selected salary bracket, I then converted this to an hourly rate, assuming an eight-hour work day, a five-day working week, and 20 working days a month. If more than one employee is involved in tax compliance processes, I used the average of the approximated hourly rates for all relevant employees at that firm. Unfortunately, questions on salaries have a higher non-response rate than most other questions in the survey (around 15 percent of relevant respondents), reducing the overall sample size.

This process generates an average hourly rate of UGX 4,693 for employees and UGX 3,019 for firm owners. For approximately half of respondents to whom the question applied, the owner is not paid a salary, and the resulting density of zeroes brings the average wage rate for owners down. I mitigate this problem by asking respondents for their best estimate of appropriate compensation if the owner were to be paid for their time, for those cases where the owner is not paid. This raises the average hourly wage for owners to UGX 6,111. While

[50]To estimate the relative time burden for different taxes, respondents were asked to distribute, as a percentage, the total time spent on tax compliance between the major taxes they pay (income tax, VAT, and/or PAYE, as relevant), with the residual amount allocated to all other taxes. Other surveys in the literature have asked about time spent on tax activities for each tax separately, however, during pilot testing revealed that this is cognitively taxing and difficult for respondents to understand, as many reported that they typically handle all tax affairs at once, and do not think of each tax separately.

there is a large literature on the complexities of valuing unpaid labour time (for instance, see Agness et al. (2025)), this approach was the most straightforward and transparent in this setting. Appendix Table A8 shows that the resulting approximate wage rates are broadly in line with firm-specific average wages calculated using the PAYE returns data from FY2021/22.[51] In addition, the median hourly wage of UGX 3,750 is in line with the median wage for professionals (UGX 3,343) reported in Uganda's most recent National Labour Force Survey (Uganda Bureau of Statistics, 2021). Finally, I applied the imputed hourly wage rate to the total estimated hours spent on tax compliance activities, for firm owners and employees respectively.

Table 5 gives summary statistics for the calculated value of labour time spent on tax compliance activities in a typical month. The median firm spends just over UGX 120,000 on internal labour per month, or UGX 1,462,500 per year, with a long tail at the upper end of the distribution. Figures 6a and 6b show the average internal labour time spent on tax compliance and the calculated cost of this time over the firm-size distribution, measured by the number of employees. While the amount of time spent on tax compliance does not change substantially between smaller and larger firms, the value of this time is very different. The average cost of labour time devoted to tax compliance for firms with fewer than five employees is just over half the cost of labour for firms with 20 or more employees, due to the higher wages paid at larger firms. Among firms dedicating internal labour time to tax compliance, descriptive regressions indicate that firms with digital business records and greater tax knowledge spend less time on compliance, while being registered for VAT increases time spent on compliance (see Table A9). The coefficient on a dummy indicating if the firm uses a tax agent is also positive, but only significant for employees' time, indicating that firms using outsourced labour do not necessarily save internal labour time. This could be due to firms selecting into hiring a tax agent when they have more complex operations, requiring both external expertise and greater internal labour resources. I expand on the role played by tax agents in the next section.

Table 5: Summary statistics for the monthly cost of labour time (UGX)

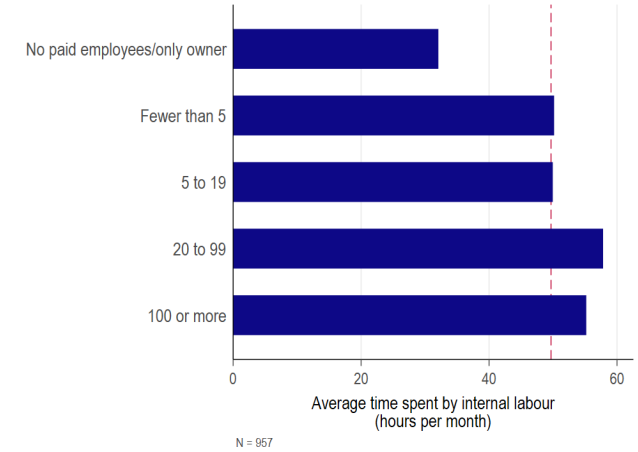
	Mean	SD	Min	p25	Median	p75	Max	N
Panel A: Excluding time associated with general bookkeeping								
Value of employees' time	239,052.3	318,215.5	0	50,000	116,250	281,250	2,587,500	633
Value of owners' time	297,717.6	393,094.7	1,250	56,250	133,125	315,000	2,512,500	414
Total cost of internal labour time	285,631.7	410,984.7	0	56,250	121,875	303,750	3,562,500	957
Panel B: Including time associated with general bookkeeping								
Value of employees' time	311,743.3	453,347.9	0	63,750	142,500	337,500	4,012,500	633
Value of owners' time	347,809.3	457,830.9	1,875	66,562	150,000	360,000	3,487,500	414
Total cost of internal labour time	355,670.1	526,022.9	0	67,500	150,000	360,000	4,562,500	957

Notes: Results are weighted using survey design weights.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

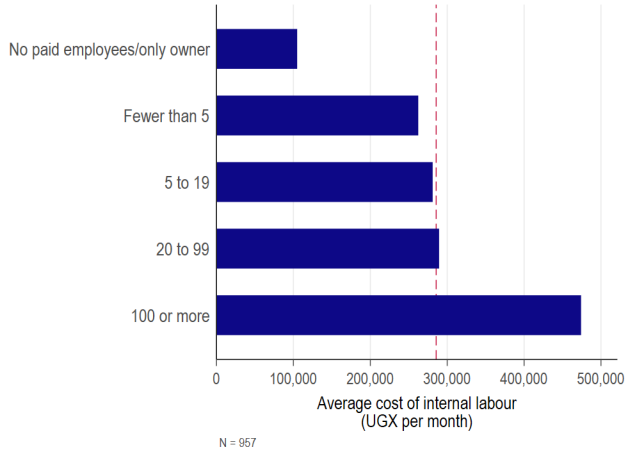
[51] Only 292 firms have non-missing wage information from both sources, the survey and the PAYE returns. For this sub-sample, the average hourly wage calculated from PAYE returns is approximately UGX 2,500 greater than the mean from the survey data.

Figure 6: Internal labour time and cost by firm size

(a) Internal labour time spent on tax compliance in a typical month



(b) Calculated cost of internal labour time



Notes: Graphs show total labour time and the calculated cost of time excluding general bookkeeping activities. Dashed lines show the overall weighted mean.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

6.3 Fact #3: Using a tax agent is common practice

Tax agents are increasingly important intermediaries between the tax authority and taxpayers. They help their clients understand the law, inform expectations about enforcement probabilities, and shape compliance behaviours (Battaglini et al., 2019). Understanding their role is key to minimising the cost of compliance, yet very little is known about these actors (Slemrod, 2019). The survey revealed that the majority of Ugandan firms use a tax agent in some capacity, with nearly 40 percent of surveyed firms fully outsourcing tax compliance, and a further 20 percent using a combination of internal labour and agents to manage their tax affairs.[52] The main reported motivations for outsourcing are (i) that tax is a specialist field or too complex and confusing to handle internally, (ii) to ensure proper compliance, (iii) that there is not enough time internally, and (iv) that it is too difficult to keep updated on tax changes. For firms not using outsourced labour, this is mainly due to having sufficient in-house expertise or the perception that tax agents are too expensive.[53] Figure 7b shows that tax agents usually handle compiling documentation, filing and submitting returns, and calculating tax liabilities, as well as handling queries from URA, audits, and other tax investigations. Descriptive regressions indicate that firms are less likely to use agents if they are located in Kampala, keep business records digitally, and are registered for VAT or PAYE (see Appendix Table A10). This could imply that more sophisticated firms with greater reporting requirements prefer to have dedicated internal accountants or tax specialists to handle compliance.

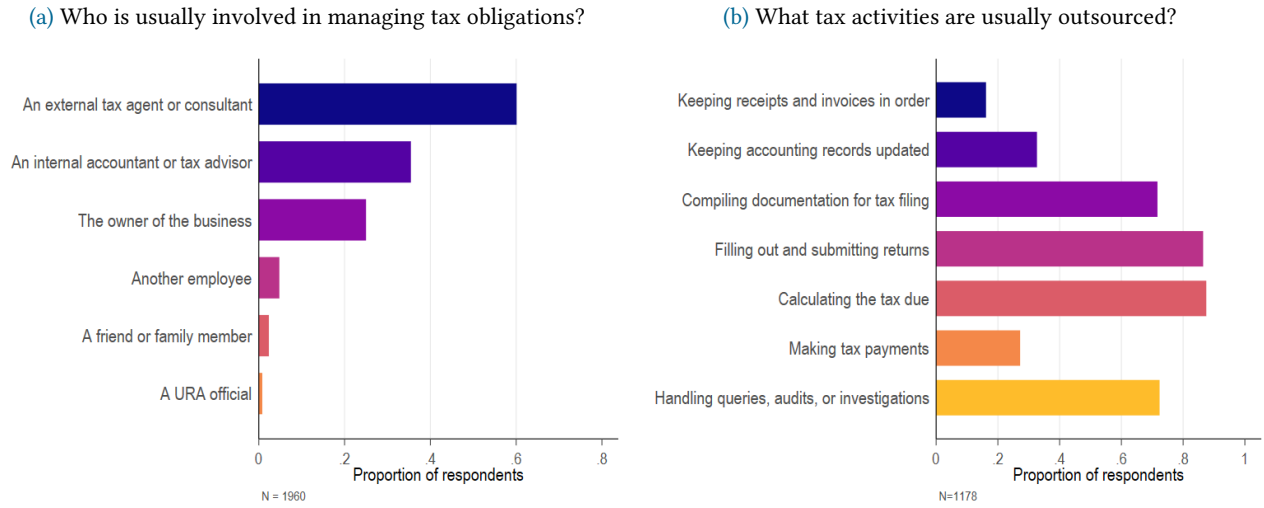
The median firm spends approximately UGX 200,000 (USD 54) per month on outsourcing tax activities to agents, excluding costs associated with general bookkeeping. However, the range of reported costs is wide:

[52] A firm is defined as "fully outsourcing" when they do not report any internal labour as "usually involved" in managing tax obligations.
[53] Appendix Figures A9a and A9b show more detail of responses to these questions.

while the lower quartile (25th percentile) monthly cost of an agent is UGX 100,000 (USD 27), the upper quartile (75th percentile) costs are UGX 350,000 (USD 95).[54] Interestingly, as shown in Figure 8, average outsourcing costs do not seem to vary substantially until the top decile of sales. This could imply that tax agents' fees are fairly uniform, with only the largest firms having tax affairs that warrant substantially more work and higher fees.

I also find that using a combination of outsourced and internal labour to manage tax obligations does not necessarily save labour costs: average internal labour costs are marginally higher for firms using both external and internal labour, although the difference is not statistically significant in a t-test. However, firms using tax agents to complement do, on average, spend significantly more time on tax compliance.[55] This resonates with "saving time" being only the third-ranked reason for outsourcing tax activities. It is more likely that firms involve tax agents because their internal capacity is too limited to handle tax affairs, rather than to minimise compliance time or costs. This is supported by the face that a greater proportion of small firms use tax agents compared to larger firms, as measured by number of employees. Similarly, in a small-scale survey of tax agents, Occhiali and Kalyango (2023) find that the majority of clients are small businesses hiring agents due to a lack of tax knowledge.

Figure 7: Outsourcing practices in Ugandan firms



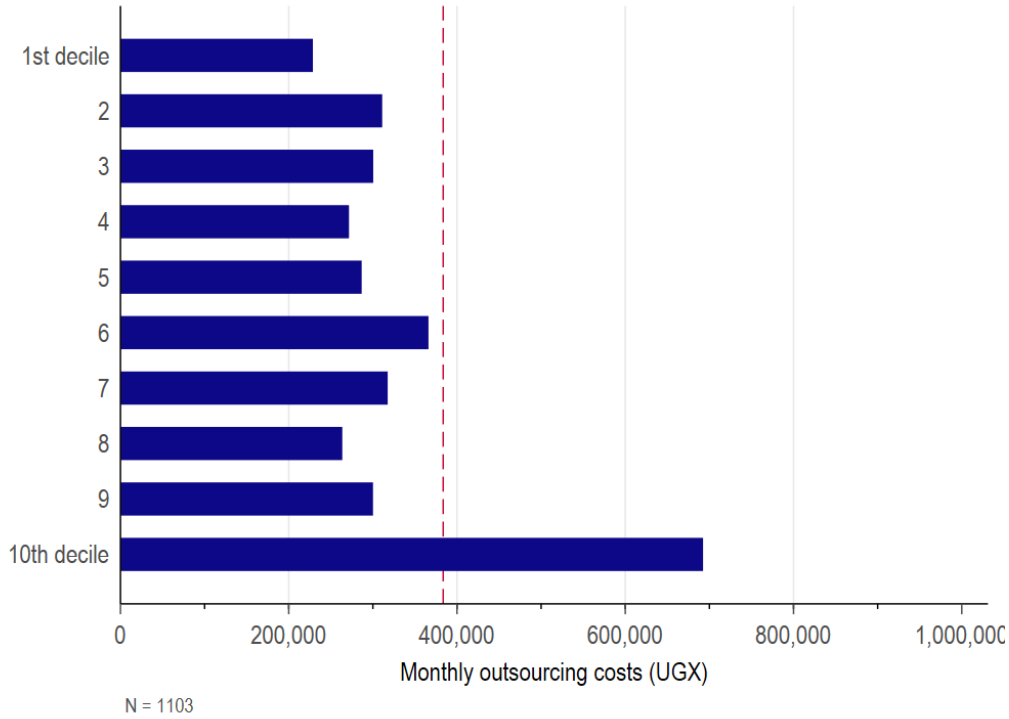
Notes: In both panels, more than one answer can apply to each question.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

6.4 Fact #4: Using digital tax tools may not reduce compliance costs

As shown in Table 4, using eTax, URA's electronic filing platform, is associated with having higher total compliance costs. This is related to the costs of acquiring and maintaining software, hardware, and other digital equipment for tax compliance processes, and the relationship is no longer significant if I just consider the total

[54] Appendix Figure A10 shows boxplots for the distribution of outsourcing costs including and excluding general bookkeeping.
[55] The same pattern holds if I consider the time and cost including bookkeeping activities.

Figure 8: Outsourcing cost by sales decile



Notes: The graph shows the mean monthly cost of outsourcing per sales decile, excluding costs associated with general bookkeeping activities. The dashed line shows the overall mean.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

cost of labour time. Adoption and maintenance costs can be substantial: firms report spending an average UGX 1.1 million per year (nearly USD 300, median of UGX 675,000) on technology to support tax compliance. For firms adopting URA's electronic invoicing tool for VAT compliance, EFRIS, the mean reported cost involved is UGX 1.7 million (approximately USD 500, median of UGX 1 million). High adoption and maintenance costs are the second-most commonly reported challenge regarding EFRIS, after difficulties amending mistakes.

There is some evidence that using eTax or EFRIS is correlated with increased total time spent on tax compliance activities (see Appendix Table A9). This might be explained by a learning curve effect, particularly in the case of EFRIS. This is a relatively new system, first introduced in 2021, which requires taxpayers to adjust to new processes. Especially for smaller, less digitally-enabled firms, the adjustments required might initially outweigh efficiency gains. In the case of eTax, while all returns must be filed electronically, many smaller taxpayers visit tax agents or tax officials for assistance in actually accessing and using the platform (60 percent of those who report that they do not use eTax also report that they hire a tax agent for compliance).

Taxpayers' perceptions of technology are more encouraging. Over 80 percent of respondents agree with the statement 'using digital technology makes the process of filing and paying taxes easier'. Among the firms that have adopted EFRIS, 85 percent say that EFRIS has made VAT compliance easier. While adopting new digital tools might impose significant acquisition and maintenance costs, the majority of firms report that

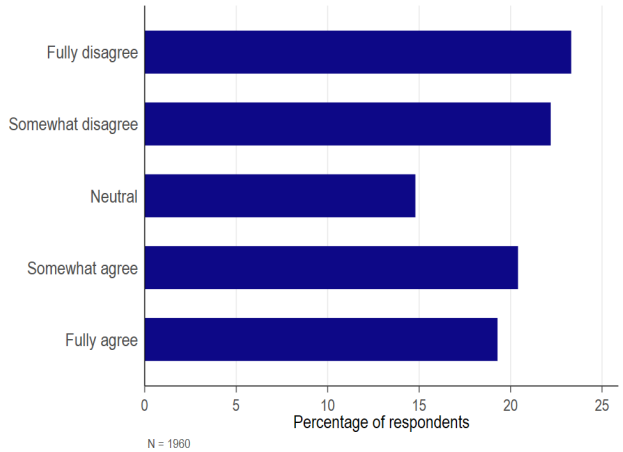
these tools do make tax compliance easier.

6.5 Fact #5: Perceptions of the tax system in general are poor

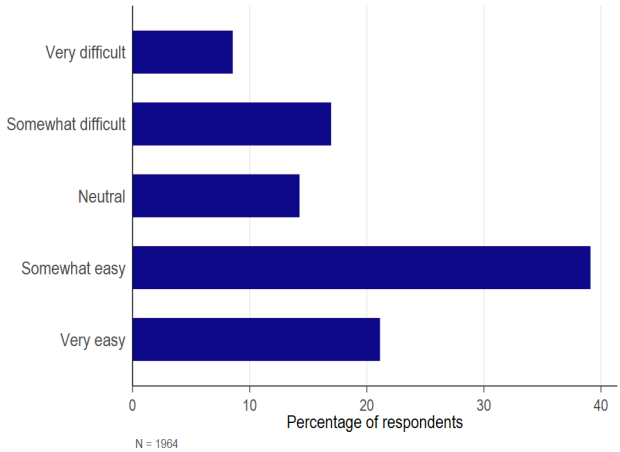
Although firms seem to incur relatively high compliance costs, their perceptions of the compliance burden are relatively mixed. Respondents were roughly evenly split between those who agreed and those who disagreed with the statement "the process of complying with tax obligations is more burdensome than the amount of tax itself", shown in Figure 9a. This result may, in part, be driven by a general perception that tax rates are very punitive: from a list of potential disadvantages of registering for tax, the most common response was that tax rates are too high, followed by the level of taxation not matching services received from government. When asked whether they found complying with tax obligations easy or difficult, respondents were most likely to say that complying with taxes is "somewhat easy" or "very easy", shown in Figure 9b. However, there is some heterogeneity by firm size and between firms employing tax agents compared to those who do not. Smaller firms[56] and those employing agents are significantly less likely to say that compliance is easy, and more likely to agree that the process of compliance is more burdensome than the tax itself. Finally, figure 10 shows the frequency with which firms identified various administrative frustrations as something they experience. The most frequent frustrations are that tax rules are complex, URA services are often offline or disrupted, and the frequency of tax filing and payment.

Figure 9: Perceptions of the compliance burden

(a) The process of complying with tax obligations is more burdensome than the amount of tax itself



(b) Ease of complying with tax obligations

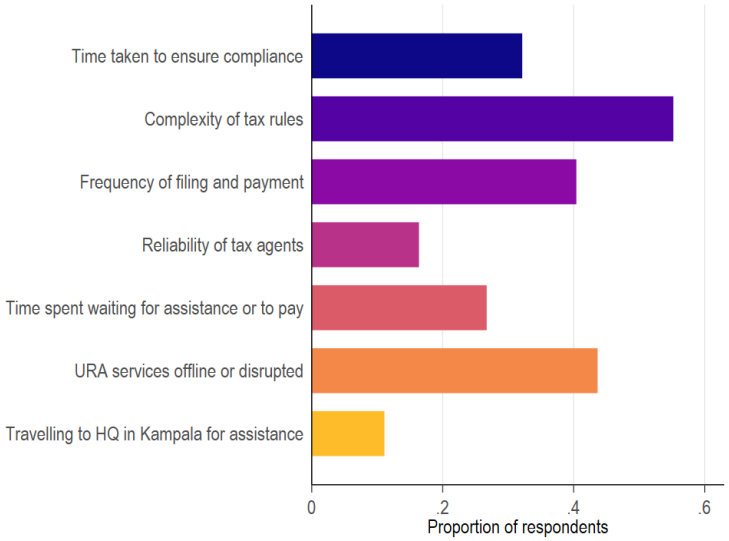


Notes: The question in panel (a) was "How likely are you to agree with the following statement: the process of complying with tax obligations is more burdensome than the tax itself". The question in panel (b) was "How easy or difficult do you find it to comply with tax obligations for this business?"
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

More generally, firms tend to have a negative impression of the tax system overall. Approximately two-thirds of respondents consider the tax system to be somewhat or very unfair to businesses like theirs (Figure

[56] Defined as those with total sales in the first three deciles.

Figure 10: Administrative frustrations

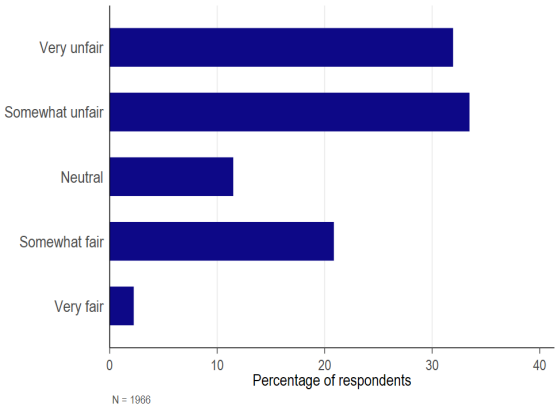


Notes: Question: Do you experience any of the following administrative frustrations? Three percent of respondents answered "none of the above".
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

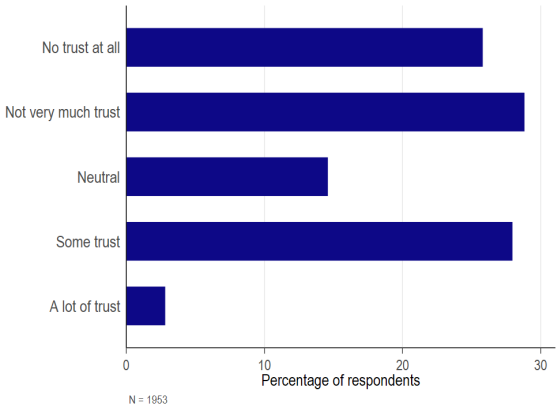
11a). Respondents largely report low levels of trust that the URA acts in the interests of ordinary taxpayers (Figure 11b), and over 75 percent are somewhat or very dissatisfied with public services based on the taxes that they pay (Figure 11c). Nevertheless, over 75 percent of respondents seem in favour of unconditional tax compliance, agreeing that taxpayers must pay their taxes to the government to help the country develop and receive better public services, rather than refusing to pay taxes if they do not receive adequate public services. Respondents largely find it "never acceptable" to take cash payments without giving a receipt to avoid paying tax. These results indicate relatively strong norms against tax evasion, despite finding the tax system unfair and being dissatisfied with service delivery. Finally, on average, respondents believe that there is a 70 percent chance that evasion will be detected by the URA. This is a rather exaggerated perception, especially as only 40 percent of firms in the sample reported being audited or otherwise investigated by the URA in the past three years. Firms that actually appear in the URA audit data (34 percent of the sample) have only a marginally higher average probability that evasion will be detected: 72 percent versus 69 percent.

Figure 11: Perceptions of the tax system

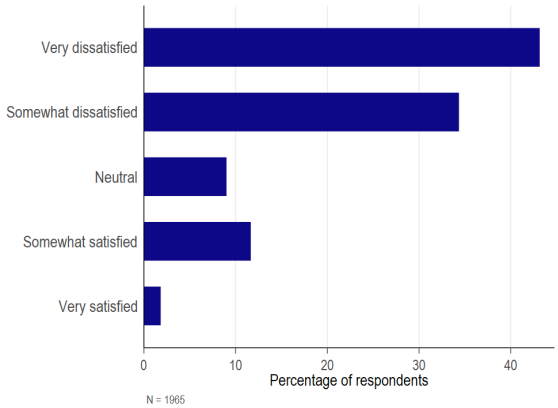
(a) Fairness



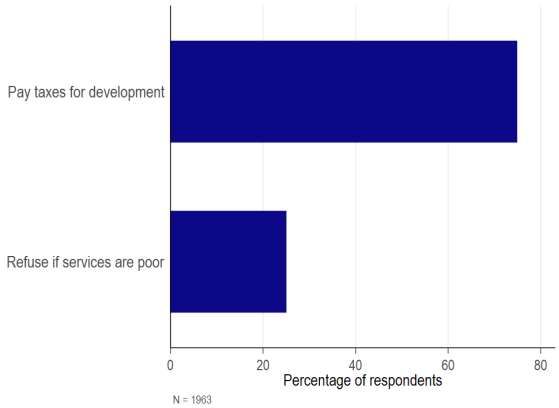
(b) Trust in URA



(c) Satisfaction with public services



(d) Attitude towards tax compliance



Notes: The question in panel (a) was "How fair do you think the tax system is to businesses like this one?". The question for panel (b) was "How much trust do you have that the URA acts in the interests of ordinary taxpayers like yourself?" The question for panel (c) was "How satisfied are you with the provision of public services in your area based on the taxes that you pay? By public services here we mean things like schooling, water and sanitation, roads, electricity and healthcare." The question for panel (d) was "Which one of the following statements is closest to your view? Statement 1: Taxpayers must pay their taxes to the government in order to help the country develop and receive better public services. Statement 2: Taxpayers could refuse to pay taxes if they are not receiving public services of adequate quality."

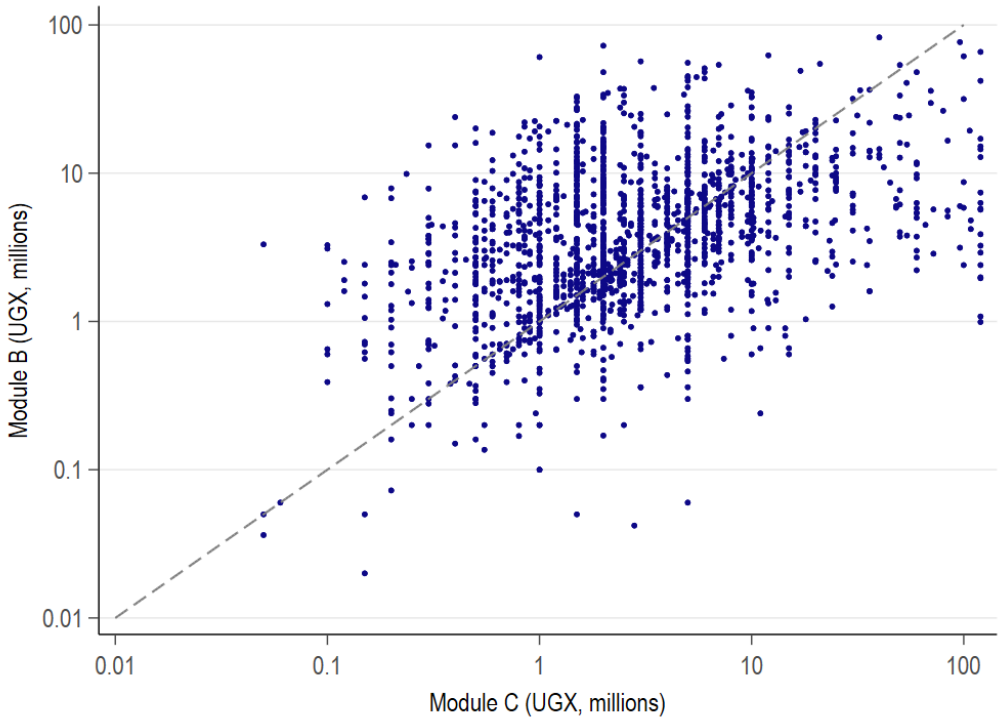
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

7 Survey experiment: Priming effects

7.1 Are aggregate cost estimates larger or smaller than itemised estimates?

As discussed in Section 3.2, Eichfelder and Hechtner (2018) show that the way a question is framed can have a significant effect on the magnitude of reported compliance costs. This is borne out in my data. Figure 12 shows respondents' estimations from the aggregate question in module C plotted against their total compliance costs calculated using the itemised questions in module B.[57] There is substantial dispersion between the two estimation strategies, although no systematic over- or under-estimation: estimates from module B are larger than from module C for 56 percent of the sample. The mean for the module C measure is UGX 8.3 million, significantly higher than the itemised mean of UGX 6.7 million. Figure 13 shows a histogram of the percentage difference between the aggregate and itemised measures. The mean percentage difference is 77.5 percent and only approximately 20 percent of the sample have estimates within 20 percent of each other. There is also significant dispersion between the aggregate and itemised measures of total time spent on tax compliance in a typical month, shown in Figures A11a and A11b. In the case of compliance time, the mean from the itemised measure was 9 hours per month larger than the mean from the aggregate measure.

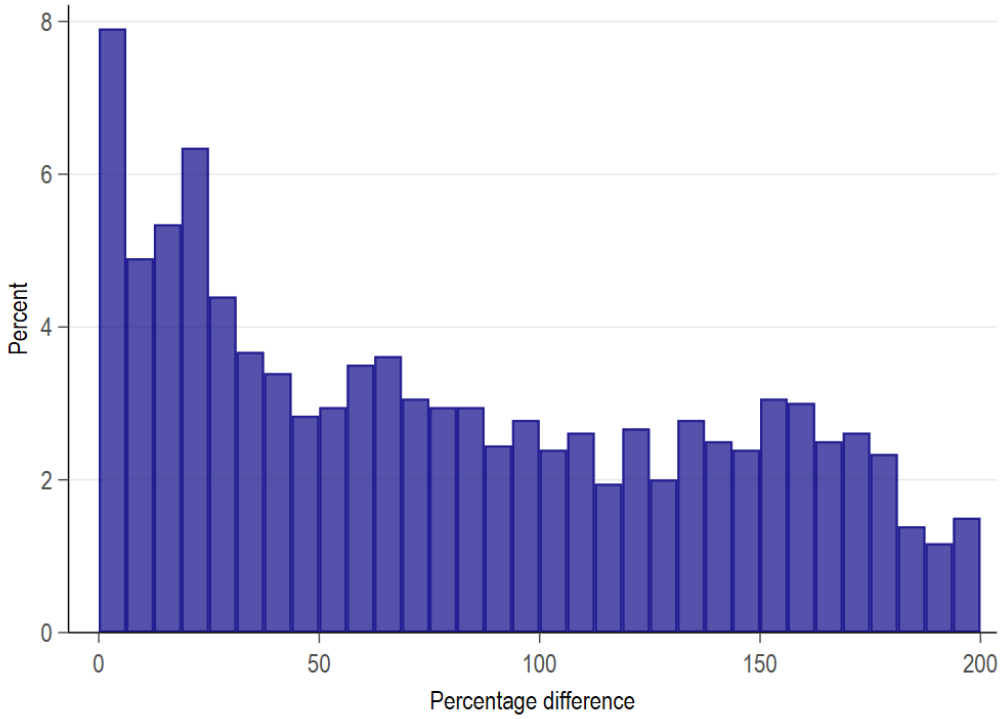
Figure 12: Comparison of compliance costs measures from the itemised module (B) and the aggregate module (C)



Notes: The itemised and aggregate measures both include bookkeeping costs, to be as complete as possible. The figure plots the logged measure in both cases. The grey dashed line indicates the y=x line.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

[57] I have included bookkeeping costs in both measures, to be as complete as possible. However, the results are not sensitive to including or excluding bookkeeping. See Appendix Table A5 for more details on the questions asked.

Figure 13: Distribution of percentage difference between Module C and Module B estimates



Notes: Figure shows the distribution of the percentage difference between the aggregate and the itemised measures of compliance costs. This was calculated by dividing the absolute value of the difference between module C and module B by the average of the two measures, and multiplying by 100.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

Breaking these patterns down by taxpayer subgroups, a t-test shows that larger firms, measured by the number of employees, are significantly more likely to have an aggregate estimate exceeding their itemised estimate (Table 6). Firms are significantly less likely to report aggregate estimates larger than their itemised estimates if they use a tax agent, as well as having smaller average differences between their aggregate and itemised estimates if they use an agent. This could be interpreted as evidence that taxpayers find it easier to consistently estimate overall tax compliance costs when they are smaller and less reliant on internal labour, possibly because it is easier for respondents to consistently recall costs when they are responsible for most of the activities themselves, or because agents' fees are easier to recall than approximating a cost of labour time. To confirm this, I tested whether firms using tax agents are also more consistent in their estimations of labour time spent on tax compliance. The last row in Table 6 compares the means of the difference between the aggregate and itemised measures of labour time. On average, firms without tax agents report significantly higher total estimates of labour time in Module B than in Module C.

Table 6: Mean differences in aggregate versus itemised measures

	Mean	N	Mean	N	Diff.
	>5 employees		<=5 employees		
Dummy =1 if aggregate costs > itemised costs	0.47	1,000	0.37	800	0.10***
Percentage difference in total costs	76.87	1,000	78.06	800	-1.19
Difference in total labour time (aggregate − itemised)	-9.45	1,025	-8.53	780	-0.91
	No tax agent		Uses a tax agent		
Dummy =1 if aggregate costs > itemised costs	0.53	717	0.36	1,083	0.17***
Percentage difference in total costs	88.48	717	68.96	1,083	19.53***
Difference in total labour time (aggregate − itemised)	-27.22	717	3.51	1,095	-30.73***

Notes: The percentage difference in total costs was calculated by dividing the absolute difference between module C and module B by the average of the two measures, and multiplying by 100.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

7.2 Does priming respondents with the itemised measure reduce discrepancies?

By randomising the order of the two compliance costs modules, I am able to test whether priming respondents with itemised questions influences the magnitude of their aggregate estimate. If seeing the itemised module aids recall, this could bring the measures more in line with each other. I tested the effect of seeing the itemised module first on responses to the aggregate module with a standard OLS regression, with and without other controls, shown in Table 7. There is some evidence that priming respondents with cost itemisation *reduces* their aggregate cost estimates, with and without other controls (columns 1 and 2). Seeing module B first also decreases the size of the discrepancy between the two estimates, with and without controls (columns 3 and 4). These results suggest that itemisation prompts respondent to provide an aggregate measure that is more in line with the itemised module.[58] This could indicate that priming survey respondents with detailed questions results in respondents using particular cost categories to answer the aggregate question, rather than answering based on their 'gut feeling'. Priming might also reduce the tendency for respondents to include some element of the psychological cost of taxation in their aggregate estimation (Eichfelder & Vaillancourt, 2014). In contrast, seeing the aggregate question (module C) first had no significant effect on the estimate of total compliance costs from the itemised questions (module B). Thus, it does not appear that respondents use their aggregate estimate as an anchor when answering the itemised module, having seen module C first.

7.3 Does priming respondents to think about compliance costs worsen tax perceptions?

One might expect that perceptions of taxation would be worse if respondents are first primed to think about the size of their compliance costs, by increasing the salience of the full burden of tax compliance. To test this, I converted the five-point Likert scale questions into dummy variables equal to one if the respondent

[58]Table A11 shows results from similar regressions for measures of total time spent on tax compliance. There is no significant effect of survey question ordering on estimates of time spent on tax compliance, particularly once controls are included.

Table 7: Influence of priming on compliance cost estimation

	Aggregate cost measure (UGX millions)		Difference, C–B (UGX millions)	
	(1)	(2)	(3)	(4)
Module B shown first	-1.76	-2.24*	-2.19**	-2.89**
	(1.14)	(1.29)	(1.07)	(1.22)
Trade sectors (=1)		3.81**		4.77**
		(1.79)		(2.15)
Services sectors (=1)		4.05**		3.71*
		(1.71)		(2.16)
Located in Kampala (=1)		0.88		-0.69
		(0.81)		(0.85)
5 or fewer employees (=1)		-1.12		-0.10
		(1.19)		(1.23)
Digital record-keeping (=1)		2.61*		1.89
		(1.47)		(1.40)
Registered for VAT (=1)		2.81***		1.18
		(0.90)		(0.94)
Registered for PAYE (=1)		1.56		0.07
		(0.95)		(0.97)
Uses eTax (=1)		1.57		-0.18
		(1.64)		(1.63)
Uses a tax agent (=1)		0.90		-3.70***
		(1.34)		(1.29)
Years since tax registration		0.31**		0.22*
		(0.14)		(0.12)
Tax quiz score (out of 5)		0.87**		0.57
		(0.38)		(0.39)
Monthly turnover (IHS transformed)		1.20***		0.64**
		(0.32)		(0.31)
R^2	0.13	0.23	0.13	0.19
Mean	7.63	7.61	1.40	1.15
N	1,818	1,380	1,809	1,378

Notes: Results are weighted using survey design weights. All specifications include enumerator fixed effects. Extreme outliers for compliance costs and monthly turnover have been winsorised at the 99th percentile. The dependent variables have been rescaled from Ugandan shillings to millions of Ugandan shillings to make the coefficients more legible. Monthly turnover has been transformed using the inverse hyperbolic sine (IHS) to account for the skewed distribution and high density of zeroes. Standard errors reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

was "very" or "somewhat" in favour of the statement[59] and created a dummy equal to one if the respondent sees the module on perceptions (module A) before any questions on compliance costs (module B or C). In a logistic regression, this dummy would be positive and significant if perceptions of the tax burden are better, on average, before seeing the compliance costs modules. However, logistic regressions show that survey ordering had no significant effect on any of the tax perception variables – the perceived ease of tax compliance, the likelihood of agreeing that the compliance process is more burdensome than the tax liability, perceived fairness of the tax system, satisfaction with public services, and trust in the URA – with and without other controls (results shown in Table A12).[60]

A related question is whether taxpayers with higher compliance costs have worse perceptions of the tax system. Table 8 shows the results from logistic regressions with the same five perceptions dummies. The first row shows that there is no correlation between firms' reported compliance costs (from the itemised module) and their perceptions of the ease of compliance or the overall compliance burden.[61] This has important implications for survey design, as some studies have used similar perceptions questions as a shorthand for measuring actual compliance costs. The results presented here indicate that these questions do not necessarily capture compliance costs, and without further probing, it is difficult to know what is driving the response. For instance, a firm might spend significant time on tax compliance, and therefore have relatively high compliance costs, but report that compliance is "somewhat easy" because although the tasks take a long time, they are routine and not difficult. Finally, related to the discussion in Section 6.3, using a tax agent has a negative association with respondents' perceptions on the ease of tax compliance, and is associated with an increased probability of agreeing that the compliance process is burdensome. This could reflect two things: taxpayers are more likely to use an agent if they find tax compliance difficult, or that agents themselves are difficult to work with, affecting overall views of compliance ease. This second explanation finds some support in the data: approximately 16 percent of respondents report that tax agents and other outsourced labour are unreliable (see Figure 10).

[59] For instance, in the question about the perceived ease of tax compliance, the dummy equals one when the response is "very" or "somewhat easy"; for the question about whether the process of complying with taxes is more burdensome than the tax paid, the dummy equals one when the response is "somewhat agree" or "fully agree"; for the question about satisfaction with public services, the dummy equals one when the response is "very" or "somewhat satisfied".

[60] If the "neutral" category is set to missing or to one, rather than to zero, the results do not meaningfully change.

[61] The results are similar if I instead use the measure of total time spent on compliance or absolute rather than relative compliance costs.

Table 8: Correlation between perceptions and tax compliance costs

	Compliance ease	Compliance burden	Fairness of tax system	Satisfaction with public services	Trust in URA
Compliance costs to turnover ratio	0.00	0.01	-0.01	0.01*	-0.00
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Trade sectors (=1)	-0.07	-0.23	0.43	2.11***	0.62
	(0.45)	(0.41)	(0.50)	(0.76)	(0.42)
Services sectors (=1)	-0.16	-0.30	0.57	2.37***	0.84**
	(0.44)	(0.40)	(0.49)	(0.75)	(0.41)
Located in Kampala (=1)	0.24	-0.14	-0.76***	-1.22***	-0.82***
	(0.16)	(0.15)	(0.16)	(0.21)	(0.14)
5 or fewer employees (=1)	0.01	-0.33*	0.29	0.41	0.08
	(0.18)	(0.17)	(0.19)	(0.26)	(0.18)
Digital record-keeping (=1)	0.40*	-0.18	0.14	0.34	0.20
	(0.22)	(0.20)	(0.24)	(0.32)	(0.22)
Registered for VAT (=1)	-0.09	0.02	-0.08	0.10	-0.33*
	(0.18)	(0.18)	(0.19)	(0.23)	(0.17)
Registered for PAYE	0.14	-0.11	0.45**	0.43*	0.25
	(0.19)	(0.18)	(0.20)	(0.26)	(0.18)
Uses eTax (=1)	0.24	0.35	0.32	0.09	0.76***
	(0.24)	(0.25)	(0.28)	(0.35)	(0.28)
Uses a tax agent (=1)	-0.49***	0.31*	-0.02	-0.08	-0.13
	(0.18)	(0.17)	(0.19)	(0.24)	(0.18)
Years since tax registration	-0.00	-0.02	0.01	0.02	0.01
	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)
Tax knowledge index (1-5)	0.20**	-0.18**	-0.01	-0.05	-0.04
	(0.08)	(0.09)	(0.08)	(0.10)	(0.08)
N	1,411	1,412	1,412	1,410	1,407

Notes: Results are weighted using survey design weights. All regressions include enumerator fixed effects. Extreme outliers for compliance costs and monthly turnover have been winsorised at the 99th percentile. Compliance costs to turnover ratio is capped at 100%. Monthly turnover has been transformed using the inverse hyperbolic sine (IHS) to account for the skewed distriution and density of zeroes. Standard errors reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

8 Conclusion

This paper combines administrative tax returns data with an original survey of nearly 2,000 small and medium-sized firms in Uganda to examine the magnitude and nature of tax compliance costs. I find that compliance costs are substantial with the median firm facing total costs of three million Ugandan shillings (USD 800) annually, equivalent to approximately two percent of turnover. It is common for reported compliance costs to exceed CIT liabilities, particularly among smaller firms. These costs are also highly regressive: smaller firms experience compliance costs in excess of 20 percent of turnover, on average, versus under one percent for the largest firms. Descriptive regressions indicate that costs are highest for firms with fewer than five employees and for those who outsource at least part of their compliance to a tax agent, while keeping digital business records is associated with lower compliance costs.

Tax compliance also consumes substantial amounts of internal labour time. At the median firm, employees and firm owners spend a combined 34 hours a month on tax compliance. For firms where the owner is usually involved, handling tax matters takes up approximately 20 percent of their working hours.[62] Total labour time spent on tax compliance does not vary substantially by firm size, although the imputed cost of this time does, since larger firms typically pay higher wages. While many firms outsource tax compliance, these services are relatively expensive, with the median firm spending 200,000 Ugandan shillings (USD 54) per month. Using a combination of outsourced and internal labour time to manage tax compliance does not necessarily reduce total costs, and firms are more likely to involve agents due to low tax knowledge. Using eTax does not appear to reduce overall compliance costs or time spent on compliance, although taxpayers do perceive that compliance is easier when digital technologies are used.

These results have several policy implications. It is clear that the burden of tax compliance in Uganda is significant, even for firms with very little tax revenue to contribute. Providing relief could unlock greater productivity and growth, improve the equity of the tax system, and potentially boost compliance by improving tax morale. Three immediate policy interventions stand out. Firstly, the administrative thresholds for CIT and presumptive tax have not been adjusted for many years, and may have been eroded by high inflation. It is likely that these thresholds are no longer appropriate and the tax system is capturing firms with very little profit and no tax liability. Yet, these firms still incur compliance costs, and the URA incurs administrative costs registering and monitoring unproductive taxpayers. Secondly, the Ugandan CIT return is particularly long, complex, and possibly more suited to the business structure of large firms rather than the vast majority of small and medium-sized firms. The URA could consider introducing a simplified tax return for firms just above the CIT threshold, in addition to potentially changing the thresholds for the presumptive tax. Thirdly, this paper shows that the market for tax agents is large and that agents provide a form of tax education for their

[62] Assuming 20 8-hour working days per month. In reality, it is likely that many firm owners work significant 'overtime' and anecdotally reported using their evenings and weekends to handle tax matters.

clients. However, the quality of these services is unclear. The URA has good reasons to examine the effects of agents on compliance, and to introduce greater regulation of the market, starting with fully implementing provisions to identify returns prepared and submitted by tax agents on behalf of their clients in eTax.

Finally, the survey experiment showed that measurement technique and question ordering have an effect on estimated compliance costs. Priming respondents with a series of detailed, itemised questions on cost components changes how they respond to an aggregate question about overall compliance costs, by reducing the size of the discrepancy between these two estimation strategies. However, priming taxpayers to think about compliance costs does not appear to influence how they reportedly feel about the burden of tax compliance and the tax system in general. These results indicate the importance of careful questionnaire design and suggest that researchers face a trade-off when measuring compliance costs: while an aggregate question saves survey time, without detailed questions on cost components, it is difficult to unpack what is driving the aggregate estimate and to understand how taxpayers reached their estimation.

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Appendix A Additional tables and figures

A.1 Tables

Table A1: Presumptive Tax Rates for Small Businesses

Gross annual turnover	With records	Without records
< UGX 10 million	0	0
UGX 10-30 million	0.4% of turnover > UGX 10mn	UGX 80,000
UGX 30-50 million	UGX 80,000 plus 0.5% of turnover > UGX 30mn	UGX 200,000
UGX 50-80 million	UGX 180,000 plus 0.6% of turnover > UGX 50mn	UGX 400,000
UGX 80-150 million	UGX 360,000 plus 0.7% of turnover > UGX 80mn	UGX 900,000

Table A2: Business-level taxes in Uganda

Tax type	Application	Tax rates	Filing and payment deadlines
Corporate income tax	Businesses with annual turnover above UGX 150 million	30% of chargeable income (net profit)	*Provisional:* By the end of the 6th and 12th month in the current year of income (e.g. 31 December and 30 June if year of income starts 1 July). *Final:* By the end of the 6th month after the year of income.
Presumptive tax	Businesses with annual turnover between UGX 10 million and 150 million	Up to 1% of turnover, depending on sales and record-keeping practices (see Table A1)	By the end of the 6th month after the year of income
Value-Added Tax	Businesses with annual turnover above UGX 150 million are required to register for VAT and can claim back input VAT	Standard rate of 18%, with some items exempt or zero-rated	By the 15th day of the following month
Pay-As-You-Earn	Charged on employees earning above UGX 235,000 per month, filed by employers	10–30%, with an additional 10% applied to incomes above UGX 10 million per month	By the 15th day of the following month
Excise duty	All persons dealing in excisable goods or services	Rates depend on the product	By the 15th day of the following month for services and the 21st day of the following month for goods
Withholding tax	Tax withheld at source on payments of professional fees, dividends, fees for non-resident contractors, imports, and payments above UGX 1 million for the supply of goods or services	6% on professional fees, imports, and payments above UGX 1 million; 15% on dividends and payments to non-residents	Withholding agents are required to pay tax within 15 days after the end of the month

Table A3: Summary statistics for the URA firm panel and sampling frame

	URA firm panel			Sampling frame		
	2021	2020	2019	2021	2020	2019
Number unique firms	43,576	43,409	39,380	26,078	26,074	24,095
% in Kampala	56.9	57.1	58.2	88.5	88.9	88.8
% in LTO	1.6	1.9	2.1	-	-	-
% nil-filers	35.2	32.6	29.9	35.3	32.5	29.7
Average annual turnover (UGX millions)	3,500	3,390	3,690	1,570	1,440	1,530
Average CIT payable (UGX millions)	31.3	29.1	29.8	5.2	5.5	6.4

Notes: All currency amounts are in Ugandan shillings and adjusted for inflation (CPI base year 2017). Averages for annual turnover and CIT payable exclude those taxpayers filing nil returns.
Data source: Uganda Revenue Authority (2023a)

Table A4: Survey response rate

	N	%
Successful interviews	1,972	50.0
Refusals, eligible non-respondents	934	23.7
Out of scope, ineligible (business closed; tax exempt; out of catchment area)	353	8.9
Not contacted, unknown eligibility (failed to locate business; phone not answered)	686	17.4
Total	3,945	

Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

Table A5: Definitions of tax compliance costs variables

Variable name	Variable definition and calculation	Survey question
Module B: Itemised compliance costs		
Outsourcing costs per month (UGX)	Only asked if respondent reports using outsourced labour for any tax compliance activity. Bracket midpoints are used if the respondent did not estimate a specific number. To limit extreme outliers, the variable is winsorised at the 99th percentile.	How much does this business spend on outsourcing tax compliance tasks in a typical month? For example, this could refer to the fees that an external tax accountant charges. If it is not possible to recall a specific number, can you give a range for the estimated total outsourcing costs for a typical month?[1]
Outsourcing costs, excluding bookkeeping (UGX)	Only asked if respondent confirms that their estimate of total outsourcing costs included bookkeeping costs. The estimate of bookkeeping costs is subtracted from the first outsourcing cost estimate. If reported bookkeeping costs exceed outsourcing costs, the net estimate is set to zero (i.e., the measure cannot be negative).	Can you estimate how much the business would pay the external person for bookkeeping activities in a typical month if this business *did not* have to pay any taxes? If it is not possible to recall a specific number, can you give a range?
Internal labour time (hours per month)	Respondents are asked how much time in a typical month is spent on a list of tax-related activities, for employees and the owner respectively. Assuming an eight-hour work day and a five-day working week, estimates given in days or weeks are converted to an equivalent number of hours. Hours on each activity are summed across employees and owners to reach a total amount of internal labour time. Extreme outliers are winsorised at the 99th percentile. Total time is calculated including and excluding time spent on "keeping receipts, sales slips, invoices and other records in an organised manner", to approximate bookkeeping activities.	We would now like to estimate the amount of time that employees/the owner of this business spend on different tax compliance activities. For each of the following activities, please estimate how much time is spent on average by employees/the owner in a typical month. The activities listed included: learning about tax obligations and requirements, keeping all receipts and other records in an organised manner, compiling the required documentation to file tax returns, dealing with tax agents (if relevant), completing and submitting tax returns and supporting documents, making tax payments (including travel and waiting time), complying with requirements to use EFRIS, and seeking help or assistance from the URA.
Cost of employees' labour (UGX)	Wages are approximated by taking the midpoint of the selected salary bracket and converting this to an hourly rate, assuming an eight-hour work day, a five-day working week, and 20 working days in a month. If more than one employee is involved in tax compliance processes, I take the average of approximated hourly rates. This imputed hourly wage rate is then applied to the total hours spent on tax compliance activities.	The time that people working at this business spend on tax compliance activities is valuable. We would like to be able to calculate a monetary value of this time. (a) Can you tell me how often people working at this business are typically paid? (b) Can you tell me approximately how much each relevant person is usually paid [per day/per week/per month/per year]? Please report the gross salary, rather than the net salary, if you can. [Respondents were asked to select the appropriate salary bracket from seven options, separately for each relevant employee.]

[1]For questions where respondents were asked to estimate costs within specified brackets, the brackets were (all in UGX): <50,000; 50,001-100,000; 100,001-200,000; 200,001-400,000; 400,001-700,000; 700,001-1,000,000; 1,000,001-2,000,000; 2,000,001-5,000,000; and >5,000,000.

Table A5: (continued)

Cost category	Definition and calculation	Survey question
Cost of owners' labour (UGX)	As above, owners' wages are approximated by taking the midpoint of the selected bracket and converting this to an hourly rate. This imputed hourly wage rate is then applied to the total hours spent on tax compliance activities.	Can you tell me how often the owner is paid a salary, or how often you are paid a salary if you are the owner? Can you tell me approximately how much the owner is paid [per day/per week/per month/per year]?
Cost of owners' labour, including compensation estimate if unpaid (UGX)	If the owner is not paid, the respondent was asked to estimate a salary if the owner was to be compensated for their time, using the same salary brackets.	If the owner is not paid, can you estimate how much compensation the owner would receive if they were paid for the time spent working at the business?
Total cost of internal labour (UGX)	Sum of monetary value of employees' and owners' labour time, multiplied by 12 to convert a monthly estimate to an annual figure.	
Technology and equipment acquisition costs (UGX)	Estimate is divided by five to approximate an annual cost of acquiring software, hardware and other computer equipment for tax compliance. Extreme outliers are winsorised at the 99th percentile.	In the past five years (or since registration if the business is younger than five years), how much money was spent by this business on acquiring new software, hardware, or other computer or digital equipment specifically for tax compliance processes?
Technology and equipment maintenance costs (UGX)	Extreme outliers are winsorised at the 99th percentile.	In the past one year, how much money was spent by the business on maintaining software, hardware, or other computer/digital equipment specifically for tax compliance processes?
Other non-labour costs	Extreme outliers are winsorised at the 99th percentile.	In the past one year, how much money was spent by the business on any other tax compliance costs, such as transportation to a tax office or transaction fees for making tax payments?
Total non-labour costs	Sum of equipment acquisition costs, maintenance costs, and other incidental non-labour costs.	
Total tax compliance cost (annual)	Sum of annualised outsourcing costs, cost of internal labour, and all non-labour costs.	
Module C: Aggregate compliance costs		
Total compliance costs (UGX)	Estimates given for a typical month are multiplied by 12 to calculate an annual equivalent. Bracket midpoints are used if the respondent did not estimate a specific number. To limit extreme outliers, the variable is winsorised at the 99th percentile.	Considering all the taxes that this business pays to URA, can you estimate the total cost of tax compliance for this business for a typical year? Please consider the value of your time and other employees' time, as well as direct monetary costs. If it is easier, you could estimate the cost of tax compliance for a typical month. If it is not possible to recall a specific number, can you give a range for your estimated total costs of compliance.

Table A5: (continued)

Cost category	Definition and calculation	Survey question
Total compliance costs, excluding bookkeeping (UGX)	Only asked if respondent confirmed that their total cost estimate included bookkeeping costs. Estimated bookkeeping costs are subtracted from the gross compliance costs measure. If reported bookkeeping costs exceed gross total compliance costs, the net estimate is set to zero. Extreme outliers are winsorised at the 99th percentile.	Can you estimate how much this business would have to spend on general bookkeeping if you did not have to pay any taxes?
Total labour time (hours per month)	Assuming an 8-hour working day and a 5-day working week, estimates given in days or weeks are converted to an equivalent number of hours, with reference to a typical month. Extreme outliers are winsorised at the 99th percentile.	In a typical month, how much time do people working at this business spend on all activities related to tax compliance? This could include time spent on activities such as preparing tax returns, travelling to the tax office, making tax payments, and handling URA queries. Please include time spent by the owner of the business as well.

Table A6: Summary statistics for annual tax compliance costs, including general bookkeeping

	Mean	SD	p10	Median	p90	N
Panel A: Absolute compliance costs (UGX)						
Outsourcing costs	5,176,523	7,726,645	600,000	2,400,000	9,000,000	1,103
Cost of internal labour time	4,268,041	6,312,274	360,000	1,800,000	10,050,000	957
Non-labour costs[1]	1,585,995	2,395,245	0	660,000	3,700,000	1,897
Total tax compliance costs	6,497,151	9,200,234	620,000	3,425,000	13,680,000	1,939
Panel B: Relative compliance costs						
% of self-reported turnover[2]	8.09	18.06	0.22	2.19	24.8	1,535
% of declared turnover[3]	8.08	19.25	0	1.6	100	857
% of CIT payable[4]	73.20	39.26	0	100	100	519

Notes: Results are weighted using survey design weights. All measures of compliance costs include costs associated with general bookkeeping. The sample size changes across rows as not all firms report incurring all types of costs, and 431 firms do not report their turnover in the survey. Extreme outliers are winsorised at the 99th percentile. [1]Non-labour costs include the cost of acquiring and maintaining technology and digital equipment for tax compliance, as well as other incidental costs such as transportation, transaction fees, and stationery. [2]The ratio of compliance costs to turnover is capped at 100%. This is the case for 42 firms in the sample. [3]Ratio calculated using turnover declared in CIT returns for FY2022/23 for firms with positive turnover only. [4]Ratio is reported only for firms with positive CIT payable, which is calculated as 30 percent of chargeable income.

Data sources: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab. Administrative returns data was provided by the Uganda Revenue Authority (2023a).

Table A7: Summary statistics for annual tax compliance costs, winsorised at p95

	Mean	SD	p10	Median	p90	N
Panel A: Absolute compliance costs (UGX)						
Outsourcing costs	3,559,914	3,216,568	600,000	2,400,000	7,200,000	1,103
Cost of internal labour time	3,301,258	4,563,566	303,750	1,440,000	8,100,000	957
Non-labour costs[1]	1,303,114	1,515,919	0	660,000	3,220,000	1,897
Total tax compliance costs	4,856,083	5,269,571	537,500	2,950,000	10,480,000	1,939
Panel B: Relative compliance costs						
% of self-reported turnover[2]	6.99	16.2	0.19	1.85	21.42	1,535

Notes: Results are weighted using survey design weights. All measures of compliance costs include costs associated with general bookkeeping. The sample size changes across rows as not all firms report incurring all types of costs, and 431 firms do not report their turnover in the survey. Extreme outliers are winsorised at the 95th percentile. [1]Non-labour costs include the cost of acquiring and maintaining technology and digital equipment for tax compliance, as well as other incidental costs such as transportation, transaction fees, and stationery. [2]The ratio of compliance costs to turnover is capped at 100%. This is the case for 42 firms in the sample. [3]Ratio calculated using turnover declared in CIT returns for FY2022/23 for firms with positive turnover only. [4]Ratio is reported only for firms with positive CIT payable, which is calculated as 30 percent of chargeable income.

Data sources: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab. Administrative returns data was provided by the Uganda Revenue Authority (2023a).

Table A8: Summary statistics for hourly wage rates (UGX)

	Mean	SD	Min	p25	Median	p75	Max	N
Employees	4,693.3	3,074.6	0	1,875	3,750	5,625	18,750	633
Owner	3,019.2	4,479.9	0	0	312.5	3,750	37,500	416
Owner, incl. estimated compensation if unpaid	6,111.3	4,638.9	156.3	3,750	3,750	9,375	37,500	416
Firm-level average salary (PAYE returns)	6,129.1	11,107.6	0	1,562.5	2,583.7	5,079.4	157,516.8	720

Notes: Means have been weighted using survey design weights.

Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab. Administrative PAYE returns data was provided by the Uganda Revenue Authority (2023a).

Table A9: Descriptive regression for correlates of time spent on tax compliance per month

	Total internal time (hours)			Employees' time (hours)		
	(1)	(2)	(3)	(4)	(5)	(6)
Trade sectors (=1)	-6.47	-4.77	-11.75	-3.88	-0.74	-7.36
	(13.41)	(13.46)	(16.47)	(9.82)	(8.80)	(9.99)
Services sectors (=1)	-8.24	-2.35	-6.39	-6.51	-0.44	-2.87
	(13.12)	(13.04)	(15.93)	(9.38)	(8.29)	(9.56)
Located in Kampala (=1)	3.10	0.74	3.13	0.93	-1.83	-0.70
	(3.07)	(3.27)	(3.95)	(3.62)	(3.79)	(4.52)
5 or fewer employees (=1)	-3.37	-4.36	-3.78	-0.05	2.54	3.62
	(3.29)	(3.66)	(4.32)	(4.02)	(4.18)	(4.57)
Digital record-keeping (=1)	-4.93	-11.33**	-14.26**	-7.34	-18.27**	-22.02***
	(4.83)	(5.73)	(7.15)	(6.46)	(7.34)	(8.42)
Uses EFRIS (=1)		11.33**	9.98*		9.97**	6.54
		(4.57)	(5.15)		(4.83)	(5.61)
Registered for VAT (=1)		7.53*	12.25**		8.44**	14.90***
		(3.85)	(4.84)		(4.28)	(5.35)
Registered for PAYE		-3.91	-6.26		2.88	1.15
		(3.90)	(4.65)		(4.01)	(4.20)
Uses eTax (=1)		9.40*	11.52*		4.86	4.66
		(4.99)	(5.98)		(5.78)	(7.13)
Uses a tax agent (=1)		6.25	5.32		15.35***	15.40**
		(3.81)	(4.44)		(5.31)	(6.13)
Years since tax registration		-0.13	-0.26		-0.10	-0.26
		(0.23)	(0.28)		(0.24)	(0.28)
Tax quiz score (out of 5)		-4.24***	-4.89**		-3.52**	-4.67**
		(1.64)	(1.92)		(1.70)	(2.01)
Monthly turnover (IHS transformed)			0.80			1.34
			(1.02)			(1.20)
R^2	0.30	0.32	0.31	0.33	0.40	0.38
Mean	51.12	50.94	52.16	49.23	49.77	50.55
N	1,129	1,016	819	759	682	539

Notes: Results are weighted using survey design weights. All specifications include enumerator fixed effects. Extreme outliers in the dependent variables and monthly turnover have been winsorised at the 99th percentile. The inverse hyperbolic sine (IHS) transformation has been applied to monthly turnover to account for the leftward-skewed distribution. Total time estimates exclude time spent on general bookkeeping. Standard errors reported in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

Table A10: Descriptive regression for correlates of using a tax agent

Dummy=1 if firm uses a tax agent	(1) OLS	(2) OLS	(3) Logit	(4) Logit
Trade sectors (=1)	0.07	0.05	0.37	0.27
	(0.08)	(0.08)	(0.43)	(0.44)
Services sectors (=1)	0.06	0.03	0.32	0.20
	(0.08)	(0.08)	(0.42)	(0.44)
Located in Kampala (=1)	-0.04*	-0.05*	-0.21	-0.25*
	(0.02)	(0.03)	(0.13)	(0.14)
5 or fewer employees (=1)	0.07**	0.04	0.35**	0.24
	(0.03)	(0.03)	(0.16)	(0.17)
Digital record-keeping (=1)	-0.10***	-0.09**	-0.47***	-0.44**
	(0.04)	(0.04)	(0.18)	(0.20)
Monthly turnover (IHS transformed)	-0.01*	-0.01	-0.06*	-0.03
	(0.01)	(0.01)	(0.04)	(0.04)
Registered for VAT (=1)		-0.07*		-0.30*
		(0.03)		(0.17)
Registered for PAYE (=1)		-0.11***		-0.53***
		(0.03)		(0.17)
Uses eTax (=1)		0.07		0.32
		(0.05)		(0.26)
Years since tax registration		-0.00*		-0.02*
		(0.00)		(0.01)
Tax quiz score (out of 5)		0.01		0.05
		(0.02)		(0.09)
Audited or investigated in past 3 years (=1)		0.03		0.14
		(0.04)		(0.18)
R^2	0.18	0.20		
N	1,517	1,407	1,517	1,407

Notes: Results are weighted using survey design weights. All specifications include enumerator fixed effects. The inverse hyperbolic sine (IHS) transformation has been applied to monthly turnover to account for the leftward-skewed distribution. Standard errors reported in parentheses. $^{*}\ p < 0.10$, $^{**}\ p < 0.05$, $^{***}\ p < 0.01$

Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

Table A11: Influence of priming on compliance time estimation

	Total compliance time (module C, hours)		Difference (C − B)	
	(1)	(2)	(3)	(4)
Module B shown first	1.93*	1.98	2.73	-0.88
	(1.17)	(1.35)	(2.85)	(3.12)
Trade sectors (=1)		-2.46		14.91
		(3.05)		(17.54)
Services sectors (=1)		-0.89		13.18
		(2.97)		(16.90)
Located in Kampala (=1)		-1.58		-4.53
		(1.15)		(3.19)
5 or fewer employees (=1)		-0.94		0.66
		(1.48)		(3.70)
Digital record-keeping (=1)		-0.26		-3.78
		(1.57)		(4.90)
Registered for VAT (=1)		3.34**		-9.98***
		(1.43)		(3.75)
Registered for PAYE (=1)		1.80		-0.94
		(1.25)		(3.64)
Uses eTax (=1)		1.73		-2.99
		(1.92)		(5.18)
Uses a tax agent (=1)		-0.23		27.02***
		(1.55)		(3.19)
Years since tax registration		0.04		-0.05
		(0.15)		(0.29)
Tax quiz score (out of 5)		-0.41		1.71
		(0.70)		(1.67)
Monthly turnover (IHS transformed)		1.00**		-0.84
		(0.43)		(0.84)
R^2	0.40	0.43	0.23	0.33
Mean	29.00	27.62	-9.02	-11.18
N	1,869	1,372	1,812	1,339

Notes: Results are weighted using survey design weights. All specifications include enumerator fixed effects. Extreme outliers for compliance time and monthly turnover have been winsorised at the 99th percentile. Monthly turnover has been transformed using the inverse hyperbolic sine (IHS) to account for the high density of zeroes. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

Table A12: Influence of priming compliance costs on perceptions

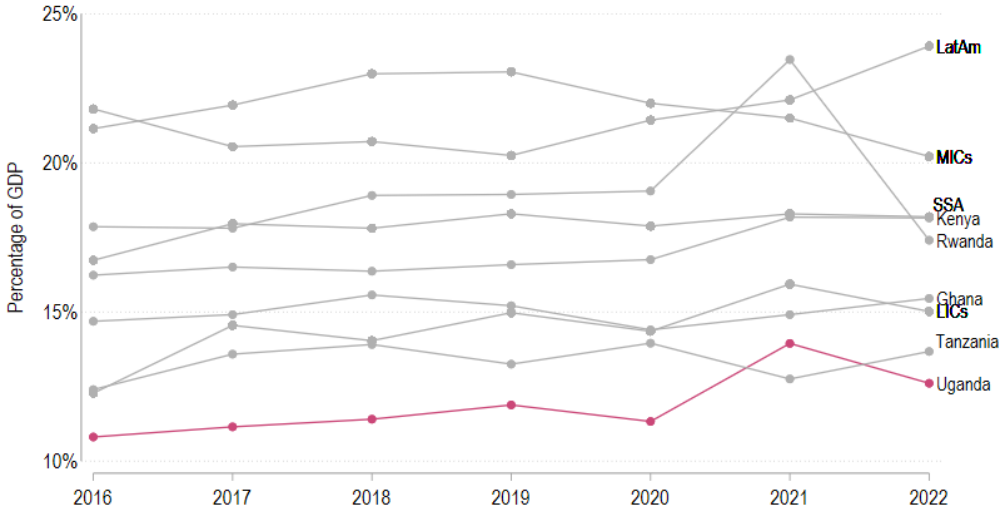
	Compliance ease	Compliance burden	Fairness of tax system	Satisfaction with public services	Trust in URA
No controls	0.231*	0.012	0.049	0.219	0.147
	(0.138)	(0.132)	(0.145)	(0.176)	(0.132)
With controls	0.115	0.004	0.045	0.260	0.115
	(0.175)	(0.161)	(0.175)	(0.222)	(0.159)
Observations	1414	1415	1415	1413	1410

Notes: Coefficients shown are for the dummy variable equal to one if Module A (the perceptions module) was shown before any compliance costs modules. Controls include: sector dummies, location dummy, dummy for having 5 or fewer employees, dummy for keeping digital records, dummy for VAT and PAYE registration, dummy for using eTax, dummy for using a tax agent, years since tax registration, tax knowledge score (1-5), and monthly turnover (IHS transformed). All regressions include enumerator fixed effects. Results are weighted using survey design weights. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

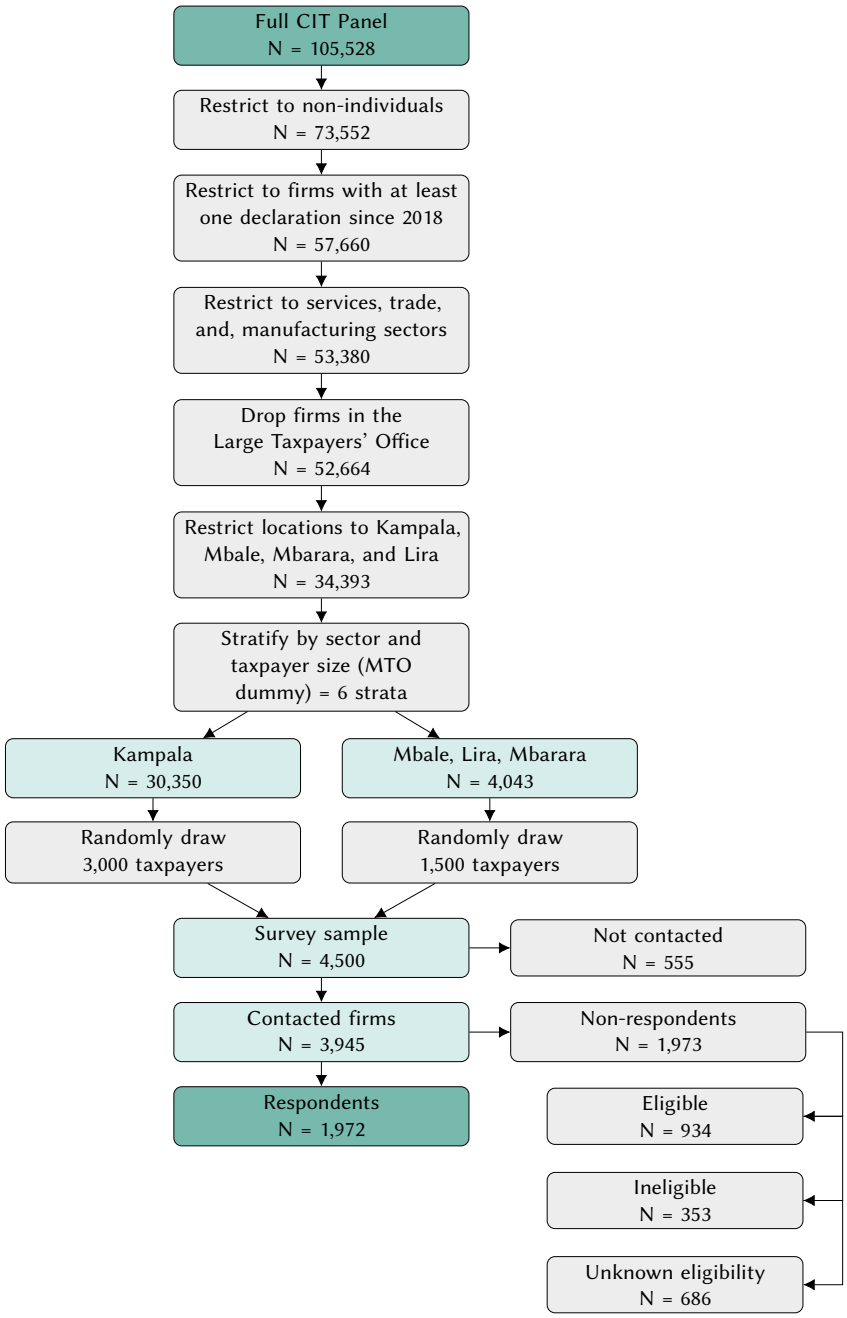
A.2 Figures

Figure A1: Comparison of tax-to-GDP ratios over time



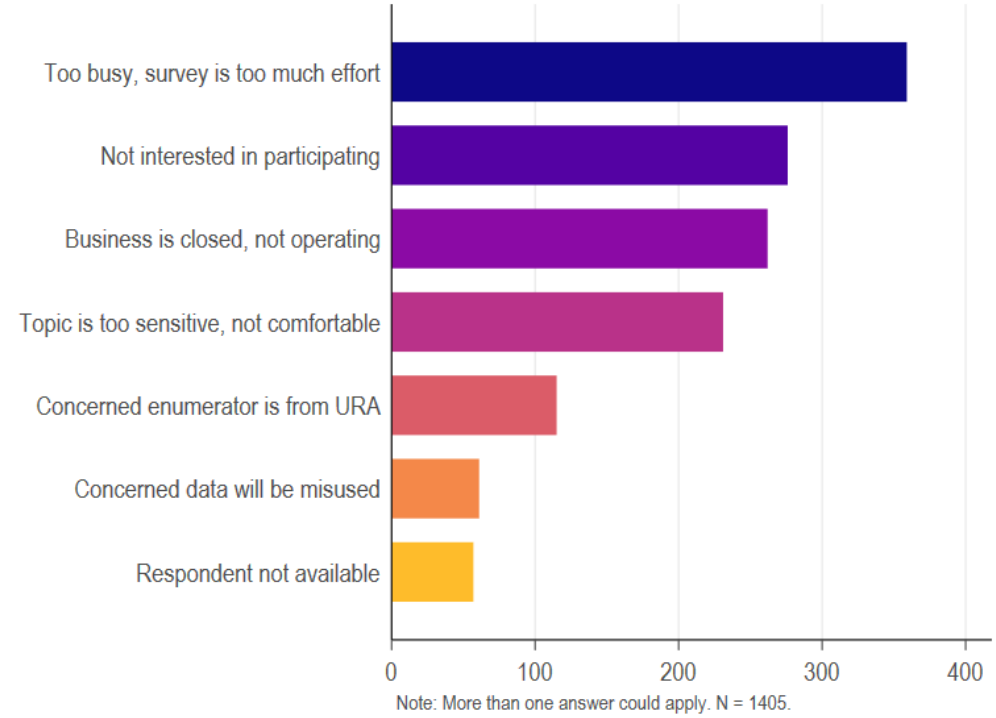
Notes: All data points refer to total revenue as a percentage of GDP, excluding social contributions and grants. MICs shows the average for middle-income countries, LatAm shows the average for Latin American and Caribbean countries, SSA shows the average for Sub-Saharan African countries (excluding Uganda), and LICs shows the average for low-income countries (excluding Uganda).
Data source: UNU-WIDER (2023)

Figure A2: Sampling procedure



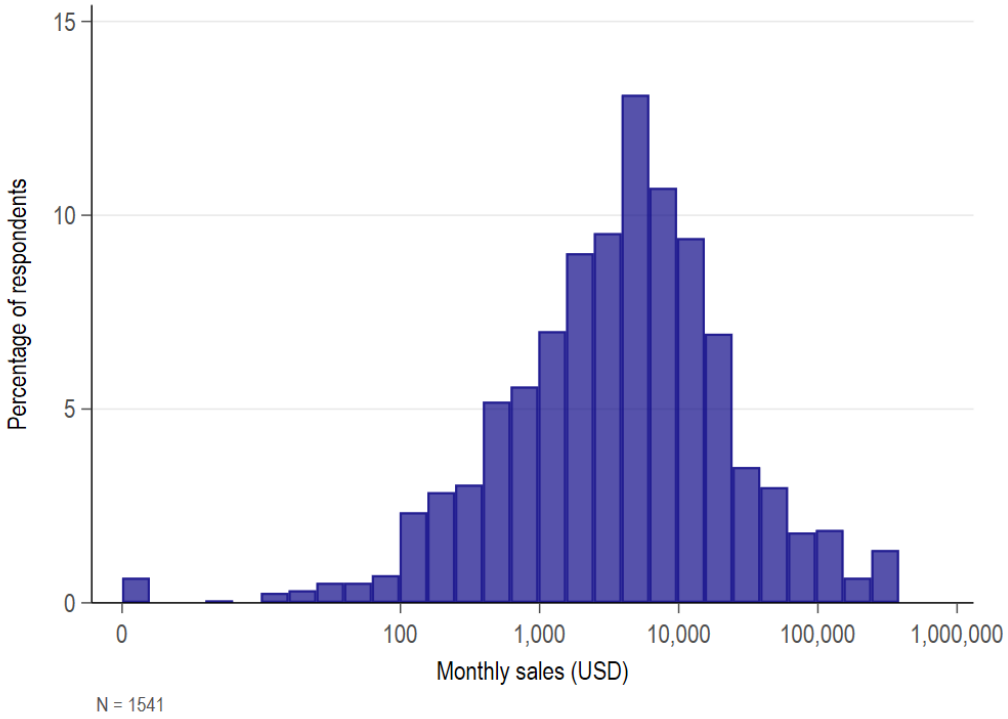
Notes: 'Eligible' non-respondents refer to those who refused to participate in the survey. 'Ineligible' non-respondents refer to those who, once contacted, were deemed ineligible, for instance because the business location is outside of the catchment areas, the business has closed, or the business is exempt from paying tax (and therefore does not file a return or have compliance costs). 'Unknown eligibility' captures those who could not be contacted or were not found.

Figure A3: Reason given for refusing to participate



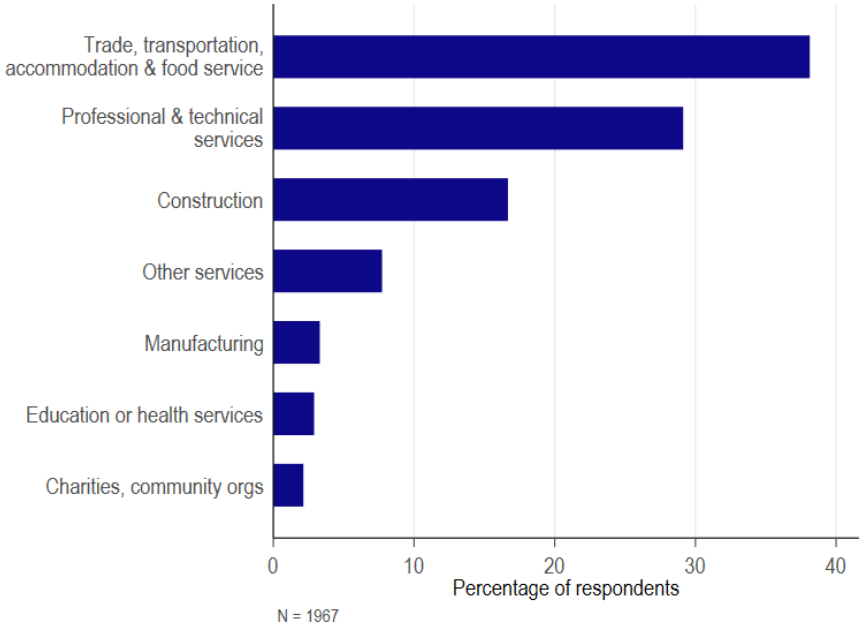
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

Figure A4: Distribution of reported monthly sales



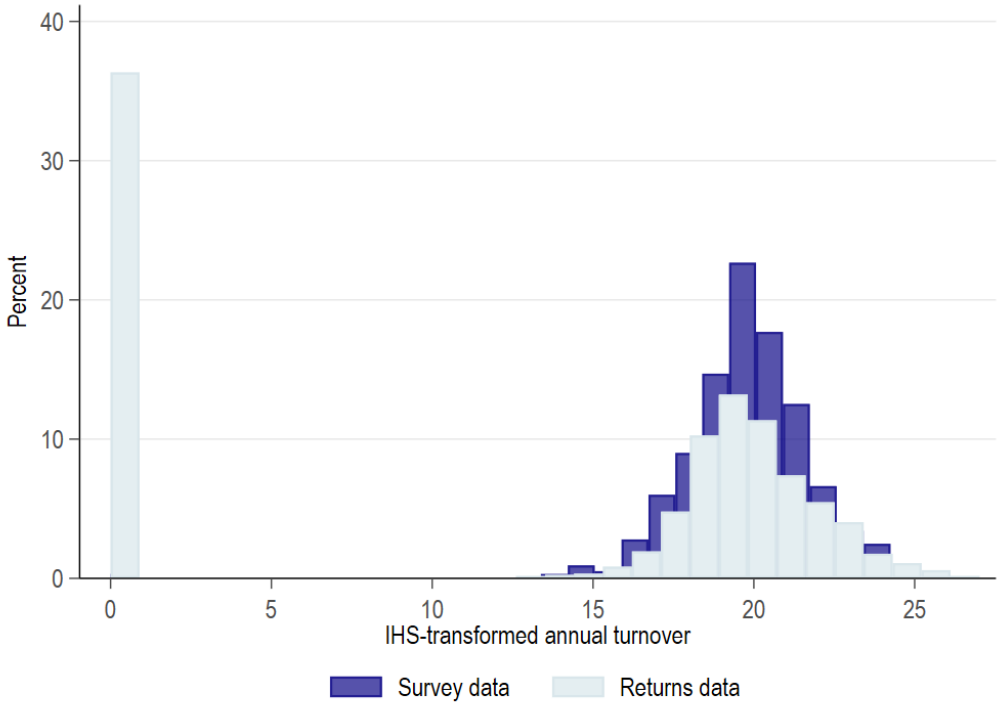
Notes: Figure shows the distribution of logged monthly sales in USD (winsorised at p99).
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

Figure A5: Sectoral distribution



Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

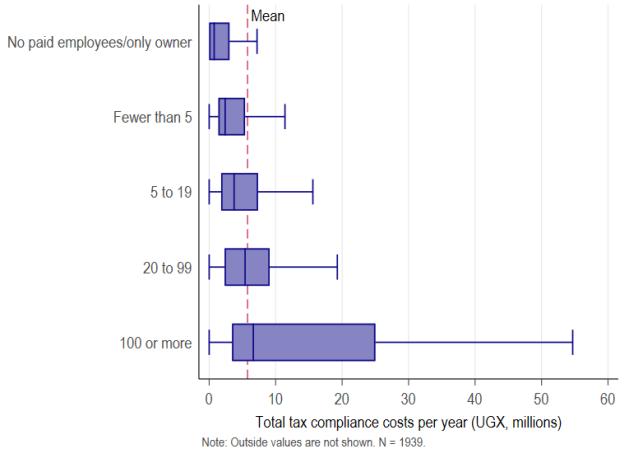
Figure A6: Distribution of reported turnover from the survey vs CIT returns for FY22/23



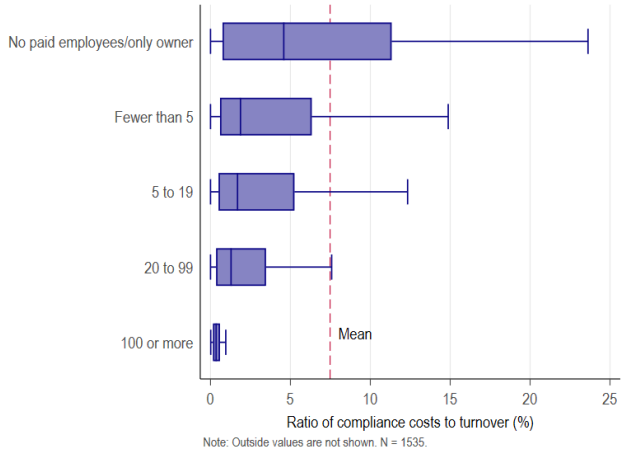
Notes: Both turnover variables are transformed using the inverse hyperbolic sine (IHS) function to account for the skewed distribution without dropping zeroes.
Data sources: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab. Administrative returns data was provided by the Uganda Revenue Authority (2023a).

Figure A7: Distribution of total tax compliance costs by firm size

(a) Total annual tax compliance costs

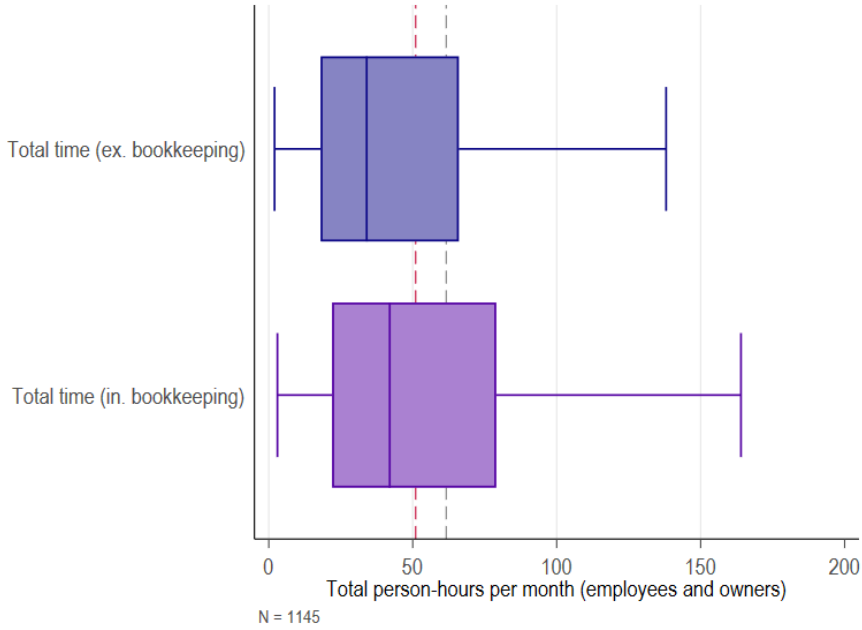


(b) Ratio of tax compliance costs to turnover



Notes: Total tax compliance costs excluding costs associated with general bookkeeping. Results are weighted using survey design weights.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

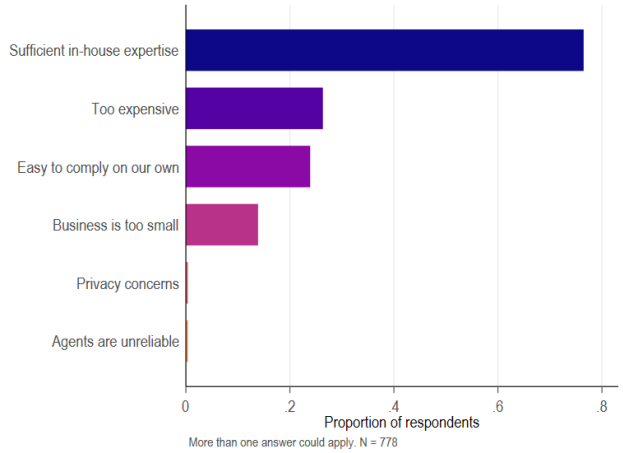
Figure A8: Total time spent by internal labour on tax compliance



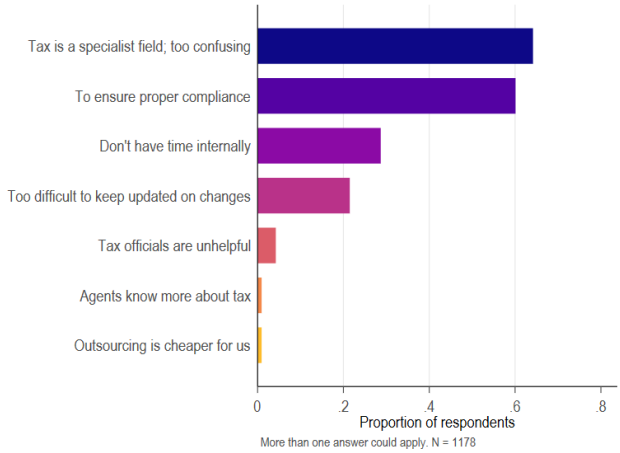
Note: Mean compliance total time excluding and including general bookkeeping activities are shown by the red and grey lines, respectively. Outside values are not shown.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

Figure A9: Motivations for outsourcing tax compliance

(a) What is the main reason for not outsourcing tax activities?

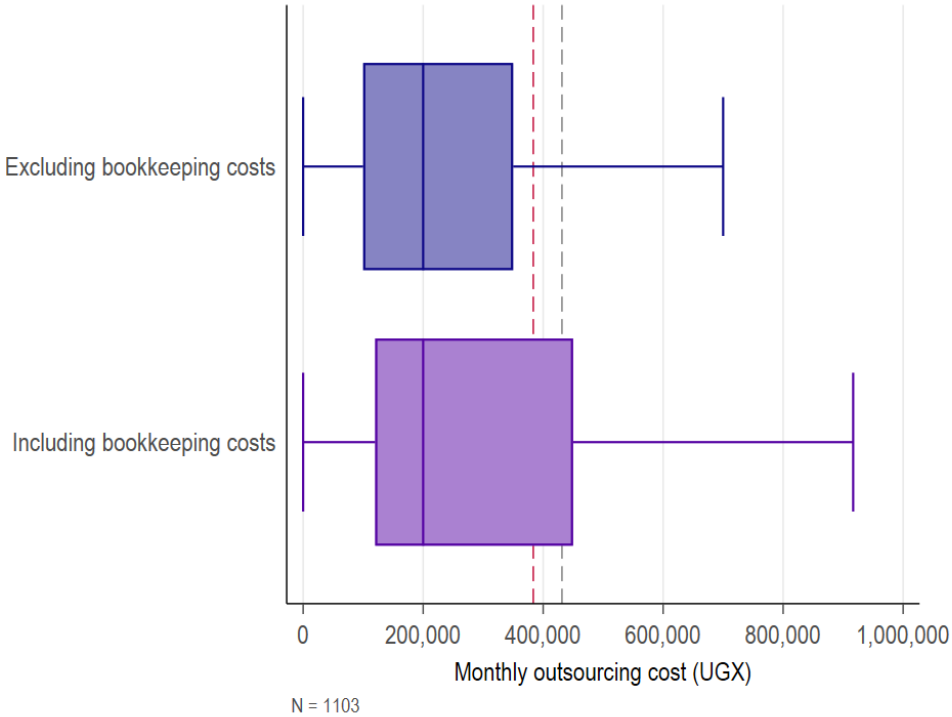


(b) What is the main reason for outsourcing tax activities?



Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

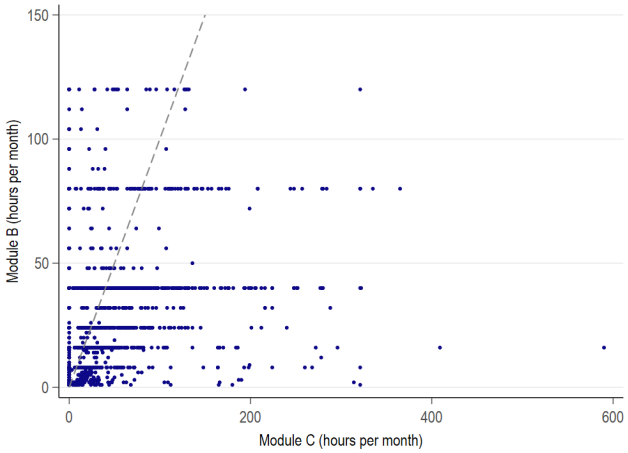
Figure A10: Monthly cost of tax agents



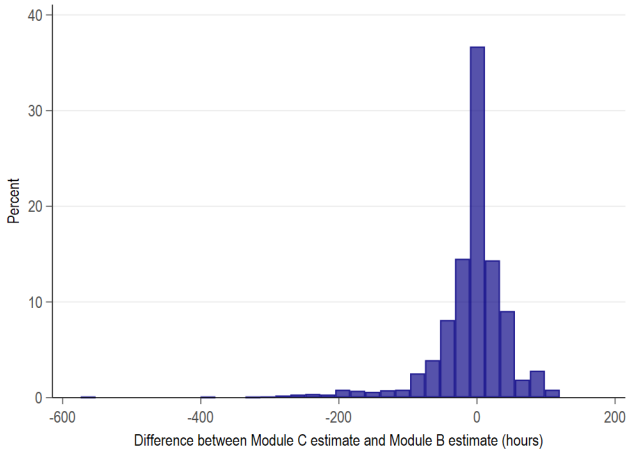
Notes: Means for outsourcing costs excluding and including general bookkeeping are given by the red and grey lines, respectively. Outside values are not shown.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

Figure A11: Comparison of estimates for total time spent on tax compliance

(a) Total time spent on tax compliance per month



(b) Distribution of difference between Module C and Module B



Notes: Grey dashed line indicates the y=x line.
Data source: Data for this study comes from a survey of taxpaying firms in Kampala, Mbale, Lira, and Mbarara, implemented between July and November 2023. The survey was conducted by the author in collaboration with The Field Lab.

Appendix B Survey implementation

B.1 Survey protocols

To implement the survey, I worked with The Field Lab, a research company based in Mbale, who specialise in running lab-in-the-field experiments, but also have experience administering survey questionnaires. Ethics approval for the study was obtained from the University of Sussex and two authorities in Uganda, the Lira University Research Ethics Council and the Uganda National Council for Science and Technology. Funding for the survey was provided by the International Centre for Tax and Development, under a grant from the UK's Foreign, Commonwealth and Development Office.

All interviews were conducted face-to-face using tablets to record answers in SurveyCTO, facilitating built-in logic checks, skip patterns, and high frequency data checks. To recruit respondents, the survey company was given taxpayer names, broad locations, and phone numbers. The enumerators used these details to phone respondents, explain the purpose of the study, and schedule a time to visit the business premises to conduct the interview if they were initially willing to participate. During the interview, all respondents were read the passage below explaining the purpose of the study and data confidentiality, before asking for their consent to be interviewed. The enumerators recorded consent digitally, by ticking the relevant box on their tablets. This was preferable to collecting physical signatures on consent forms for two reasons: (i) the data is captured electronically and cannot be lost subsequently, and (ii) the cultural context in Uganda means that people mistrust the government and are suspicious of signing official-looking forms. During pilot testing, we confirmed that respondents were happy to give verbal consent but did not want to provide their signatures on any form, electronic or paper. Respondents were provided with a printed copy of the information sheet and consent form As a token of appreciation, respondents were offered a branded notebook as a gift and a thank you letter

Pre-interview introduction and consent

> My name is [*insert enumerator name*] and I am working for The Field Lab, a non-profit survey company based in Mbale. Researchers from the University of Sussex in the United Kingdom have partnered with us to conduct a survey of businesses across Uganda. Your business has been randomly selected for the survey. Your participant information pack contains detailed information about the purpose of this research, how data will be treated, and what will happen to the findings from this study. For ease, I will quickly summarise the most important parts. The interview questions are designed to capture the experience of paying taxes among businesses in Uganda. The main purpose of the survey is to understand the costs businesses face when satisfying their tax obligations. Participation is completely voluntary and there are no known negative consequences for you or your business as a result of participating. Depending on your engagement, the interview should take between 45 minutes and one hour. I will be using a tablet and survey software to digitally record your answers. Feel free not to answer any question that makes you feel uncomfortable. No information that you share today will be shared with anyone outside of the research team. The study has been approved by the Uganda National Council of Science and Technology.
> Your answers are important for this research project. The findings from the research will inform policy-makers about how to improve taxpayer services and tax administration and contribute to a University of Sussex PhD project. All reports will discuss findings in general terms, combining the answers from 3000 businesses across Uganda. To thank you for your time, you will receive a thank you letter from the lead

researcher, an invitation to a virtual dissemination event with policymakers, and a small gift.
Do you have any questions at this stage?

It is important to document that we have received your informed consent to participate in this survey. I will now read out a few sentences and ask whether you agree.

1. You have received information about this study, and you have understood this information.
2. You understand that participation is entirely voluntary and that there are no known risks associated with participating.
3. You understand that all information will be treated confidentially.
4. You are willing to be interviewed for this study.

Do you agree with the statements above?

B.2 Data anonymisation and confidentiality

The following anonymisation protocol was used to ensure that data was appropriately handled and kept confidential:

1. Anonymised corporate income tax data was used to draw the main sample and the replacement sample. The list of sampled taxpayers was given to URA staff, who unmasked the taxpayer identification numbers (TINs) using a secure encryption key and matched the list back to taxpayer register information. The URA staff extracted firm names, contact details (phone numbers and email addresses) and broad location information (trade centre and district) for each of the taxpayers in the sample lists.

2. The list of sampled taxpayers with contact information (but no returns information) was shared with the data manager at The Field Lab. Five-digit firm ID numbers were assigned to every firm in the survey list, to keep track of survey progress. The enumerators then used the information supplied by the URA to contact the sampled firms and invite them to participate in the survey.

3. Once all data collection and back-checks were complete, all taxpayer information and survey data was removed from devices and servers held by The Field Lab.

4. Replicable STATA code was used to extract a list of taxpayer names and locations for all contacted respondents, using the same format as the contact information originally supplied by the URA. This list was given to the URA team, who matched the list of contacted taxpayers back to the register data to extract anonymised TINs.

5. The list of anonymised TINs was matched back onto the original survey data. Replicable STATA code was then used to split the data into two parts: (i) the original (master) survey data, and (ii) de-identified data where the anonymised TIN serves as a firm-level identifier but all personal identification information is removed (names, addresses, contact details).

6. Using the anonymised TIN, the survey data was matched to tax return records.

7. Only the de-identified data is used for the analysis and the master data was encrypted and securely stored.

B.3 Ethics approval letters

Uganda National Council for Science and Technology

(Established by Act of Parliament of the Republic of Uganda)

Our Ref: SS1821ES **20 June 2023**

Adrienne Lees
The Field Lab Limited
Mbale

Re: Research Approval: Tax Compliance Costs and Digitalisation in Uganda

I am pleased to inform you that on **20/06/2023**, the Uganda National Council for Science and Technology (UNCST) approved the above referenced research project. The Approval of the research project is for the period of **20/06/2023** to **20/06/2024**.

Your research registration number with the UNCST is **SS1821ES**. Please, cite this number in all your future correspondences with UNCST in respect of the above research project. As the Principal Investigator of the research project, you are responsible for fulfilling the following requirements of approval:

1. Keeping all co-investigators informed of the status of the research.

2. Submitting all changes, amendments, and addenda to the research protocol or the consent form (where applicable) to the designated Research Ethics Committee (REC) or Lead Agency for re-review and approval **prior** to the activation of the changes. UNCST must be notified of the approved changes within five working days.

3. For clinical trials, all serious adverse events must be reported promptly to the designated local REC for review with copies to the National Drug Authority and a notification to the UNCST.

4. Unanticipated problems involving risks to research participants or other must be reported promptly to the UNCST. New information that becomes available which could change the risk/benefit ratio must be submitted promptly for UNCST notification after review by the REC.

5. Only approved study procedures are to be implemented. The UNCST may conduct impromptu audits of all study records.

6. An annual progress report and approval letter of continuation from the REC must be submitted electronically to UNCST. Failure to do so may result in termination of the research project.

Please note that this approval includes all study related tools submitted as part of the application as shown below:

No.	Document Title	Language	Version Number	Version Date
1	Data collection tools	English	3	
2	Informed consent form for the recruitment of research participants	English	2	
3	Community Engagement plan if applicable to your study	English	2	
4	Proof of ethical approval if the protocol originates from outside Uganda/International researchers	English	1	
5	Project Proposal	English	3	
6	Approval Letter	English		
7	Administrative Clearance	English		
7	MOU ICTD-URA	English	1	03 October 2022
8	Letter of affiliation to UNCST	English	1	14 June 2023
9	COVID risk mitigation plan	English	1	14 June 2023
10	Participant information sheet	English and Luganda	1	26 April 2023

Yours sincerely,

Dr. Christopher Ddamulira
For: Executive Secretary
UGANDA NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

LOCATION/CORRESPONDENCE

Plot 6 Kimera Road, Ntinda
P.O. Box 6884
KAMPALA, UGANDA

COMMUNICATION

TEL: (256) 414 705500
FAX: (256) 414-234579
EMAIL: info@uncst.go.ug
WEBSITE: http://www.uncst.go.ug

LIRA UNIVERSITY

P.O. Box 1035
Lira, Uganda
Tel: +256 414-694716
Web: www.lirauni.ac.ug
Email: lirarec@lirauni.ac.ug

RESEARCH ETHICS COMMITTEE

26/04/2023

To: Adrienne Lees

University of Sussex
00447599053792

Type: Initial Review

Re: LUREC-2023-16: Tax Compliance Costs and Digitalisation in Uganda

I am pleased to inform you that at the **4th LUREC Review Meeting** convened meeting on **26/04/2023**, the Lira University Research Ethics Committee (LUREC), committee meeting voted to approve the above referenced application.
Approval of the research is for the period of **26/04/2023** to **26/04/2024.**

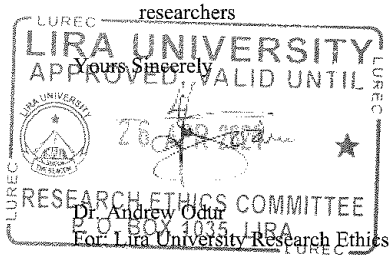
As Principal Investigator of the research, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the research.
2. Changes, amendments, and addenda to the protocol or the consent form must be submitted to the REC for re-review and approval **prior** to the activation of the changes.
3. Reports of unanticipated problems involving risks to participants or any new information which could change the risk benefit: ratio must be submitted to the REC.
4. Only approved consent forms are to be used in the enrollment of participants. All consent forms signed by participants and/or witnesses should be retained on file. The REC may conduct audits of all study records, and consent documentation may be part of such audits.
5. Continuing review application must be submitted to the REC **eight weeks** prior to the expiration date of **26/04/2024** in order to continue the study beyond the approved period. Failure to submit a continuing review application in a timely fashion may result in suspension or termination of the study.
6. The REC application number assigned to the research should be cited in any correspondence with the REC of record.
7. You are required to register the research protocol with the Uganda National Council for Science and Technology (UNCST) for final clearance to undertake the study in Uganda.

The following is the list of all documents approved in this application by Lira University Research Ethics Committee (LUREC):

LUREC
LIRA UNIVERSITY
APPROVED, VALID UNTIL
26 APR 2024
RESEARCH ETHICS COMMITTEE
P. O. BOX 1035, LIRA
LUREC

No.	Document Title	Language	Version Number	Version Date
1	Data collection tools	English	3	--
2	Informed consent form for the recruitment of research participants	English	2	--
3	Protocol	English	3	--
4	Budget	English	2	--
5	Community Engagement plan if applicable to your study	English	2	--
6	Informed consent form for the recruitment of research participants	English and Luganda	1	--
7	Cover letter - URA	English	1	--
8	Cover letter - The Field Lab	English	1	--
9	Proof of ethical approval if the protocol originates from outside Uganda/International researchers	English	1	--



Yours Sincerely

Dr. Andrew Odur
For: Lira University Research Ethics Committee (LUREC)

UNIVERSITY OF SUSSEX

Social Sciences & Arts C-REC
c-recss@admin.susx.ac.uk

Certificate of Approval	
Reference Number	ER/AFL27/1
Title Of Project	Tax Compliance Costs and Digital Technologies in Uganda
Principal Investigator (PI):	Adrienne Lees
Student	Adrienne Lees
Collaborators	
Duration Of Approval	6 months
Expected Start Date	28-Feb-2023
Date Of Approval	28-Feb-2023
Approval Expiry Date	31-Aug-2023
Approved By	Vacancy
Name of Authorised Signatory	Ruth Stirton
Date	28-Feb-2023

*NB. If the actual project start date is delayed beyond 12 months of the expected start date, this Certificate of Approval will lapse and the project will need to be reviewed again to take account of changed circumstances such as legislation, sponsor requirements and University procedures.

Please note and follow the requirements for approved submissions:

Amendments to protocol

* Any changes or amendments to approved protocols must be submitted to the C-REC for authorisation prior to implementation.

Feedback regarding the status and conduct of approved projects

* Any incidents with ethical implications that occur during the implementation of the project must be reported immediately to the Chair of the C-REC.

Feedback regarding any adverse(1) and unexpected events(2)

* Any adverse (undesirable and unintended) and unexpected events that occur during the implementation of the project must be reported to the Chair of the Social Sciences and Arts C-REC. In the event of a serious adverse event, research must be stopped immediately and the Chair alerted within 24 hours of the occurrence.

Monitoring of Approved studies

The University may undertake periodic monitoring of approved studies. Researchers will be requested to report on the outcomes of research activity in relation to approvals that were granted (full applications and amendments).

Research Standards

Failure to conduct University research in alignment with the Code of Practice for Research may be investigated under the Procedure for the Investigation of Allegations of Misconduct in Research or other appropriate internal mechanisms (3). Any queries can be addressed to the Research Governance Office: rgoffice@sussex.ac.uk

(1) An "adverse event" is one that occurs during the course of a research protocol that either causes physical or psychological harm, or increases the risk of physical or psychological harm, or results in a loss of privacy and/or confidentiality to research participant or others.

(2) An "unexpected event" is an occurrence or situation during the course of a research project that was a) harmful to a participant taking part in the research, or b) increased the probability of harm to participants taking part in the research.

(3) http://www.sussex.ac.uk/staff/research/rqi/policy/research-policy

B.4 Uganda Revenue Authority letter of support

Head Office: Plot M193/M194 Nakawa Industrial Area
P.O.Box 7279, Kampala Uganda
Tel: +256417442097
Fax: +256414334419
Toll Free: 0800117000
Email: info@ura.go.ug

Uganda Revenue Authority
DEVELOPING UGANDA TOGETHER

URA/ITI/R&I/2 June 22, 2023

The Regional Manager,
Uganda Revenue Authority
KAMPALA

INTRODUCTION OF THE FIELD LAB SURVEY TEAM

The Uganda Revenue Authority has partnered with researchers from the International Centre for Tax and Development (ICTD) and the University of Sussex to carry out a survey of 3,000 taxpayers, to inform our strategy on tax compliance and service delivery. The survey is focused on **measuring tax compliance costs and understanding the impact of URA's digitalisation initiatives on the taxpaying experience.** The lead researcher is Adrienne Lees, a PhD candidate at the University of Sussex and a researcher with the ICTD. The ICTD has a long-standing and productive professional relationship with the URA, dating back to 2015.

The ICTD have contracted The Field Lab, an independent data collection firm based in Mbale, to collect the survey data on behalf of the URA and the ICTD. The data will be collected through in-person interviews with the sampled firm owners or managers.

The purpose of this letter is to introduce to you Mr. Joshua Balungira Director of The Field Lab, who will lead the team conducting this survey for the duration of the study. For further inquiries regarding this subject, please do not hesitate to contact Ms Tina Kaidu, Manager Research and Revenue Modelling on email: tkaidu@ura.go.ug.

"Developing Uganda Together"

Allen Nassanga
ASSISTANT COMMISSIONER - RESEARCH AND INNOVATION

CC Regional Manager Eastern
Regional Manager Western
Regional Manager Northern

B.5 Participant materials

UNIVERSITY OF SUSSEX

PARTICIPANT INFORMATION SHEET

Business Survey: Improving Taxpayer Experiences in Uganda

Researchers from the University of Sussex have partnered with The Field Lab, a not-for-profit company based in Mbale, to survey businesses across Uganda. The researchers are studying the experience of paying taxes among businesses. The main objective of the study is to understand the costs businesses face while satisfying their tax obligations. Your business has been randomly selected for this survey and if you choose to participate, you will help to complete a survey that will take approximately 1 hour.

Participation in this survey is completely voluntary and there will be no negative repercussions resulting from your voluntary participation. Data will be collected using a tablet and a survey software, which automatically uploads the answers to a secure platform. Only the lead researcher has access to the data after it has been uploaded and your answers will be deleted from the device. All personal information that enables you to be identified will be kept strictly confidential and stored securely on University of Sussex servers. Your answers to the questions will also be confidential and kept anonymous through a computer-generated code. Results will be aggregated so that neither you nor your business will not be individually identifiable in any output or publication. When the research is complete, all identifying personal data will be permanently deleted.

This research will not benefit you directly. However, your answers will be put together with another 3,000 taxpayers we are talking to across Uganda, and you will contribute to informing national tax policy and administration. Your input is therefore extremely important for improving the Uganda Revenue Authority's taxpayer services and the tax system overall. The Uganda Revenue Authority is aware of this study and has committed to incorporating the findings into their administrative policies. Results will only be presented to policymakers in an aggregate way. No official from the Uganda Revenue Authority will be able to access any of your information or your answers.

You will not be required to pay any costs to be a part of this survey. In addition, there are no costs to be paid to you for participating in this survey. However, to thank you for your time and effort, you will be given a small gift and a thank you letter from the lead researcher. We would also like to invite you to join an online dissemination event, where the results will be presented and validated. Policymakers from the Uganda Revenue Authority and the Ministry of Finance will also be invited to attend the event.

The anonymised, aggregated results of the research will also be used for academic purposes, particularly for a PhD dissertation. If you would like a copy of the published research, please contact the lead researcher (details are below). Funding for the research

comes from the Foreign, Commonwealth and Development Office, a department of the government of the United Kingdom, and the International Centre for Tax and Development, an independent research centre.

The research has been approved by the Social Sciences & Arts Cross-Schools Research Ethics Committee at the University of Sussex. The ethical review application number of the study is ER/AFL27/1. The research has also been approved by the Lira University Research Ethics Committee (LUREC) and the Uganda National Council for Science and Technology. The University of Sussex has insurance in place to cover its legal liabilities in respect of this study.

Please answer honestly, try to feel comfortable, and enjoy the survey. You can interrupt the interview at any time for any reason, without any negative consequences. You do not need to answer questions that you do not want to answer or that make you feel uncomfortable. If you would like your survey responses to be withdrawn from the research project, you can request this for up to two weeks from today's date.

If you have any questions or concerns relating to this project please contact the lead researcher, Adrienne Lees (a.f.lees@sussex.ac.uk), her supervisor, Dr Giulia Mascagni (g.mascagni@ids.ac.uk). If you have any questions or concerns about your rights and data privacy, please contact the Chair of the Social Sciences and Arts Cross Schools Research Ethics Committee at the University of Sussex (c-recss@sussex.ac.uk). You may also contact Dr Odur Andrew, the chairperson of the Lira University Research Ethics Committee on 0772 714386 or andyodur55@gmail.com.

Thank you for taking the time to read this information.

If you decide to participate in this study, you will be asked to indicate that you are giving your informed consent.

CONSENT FORM FOR PROJECT PARTICIPANTS

Business Survey: Improving Taxpayer Experiences in Uganda

Project lead: Adrienne Lees, University of Sussex, Department of Economics

C-REC Ref no: ER/AFL27/1

- I consent to being interviewed by the researcher
- I understand that any information I provide is confidential, and that no information that I disclose will lead to the identification of any individual in the reports on the project, either by the researcher or by any other party
- The information sheet has been read to me and I have had the opportunity to ask questions. I understand the principles, procedures and possible risks involved.
- I understand that my personal data will be used for the purposes of this research study and will be handled in accordance with Data Protection legislation. I understand that University of Sussex Privacy Notice provides further information on how the University of Sussex uses personal data in its research.
- I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.
- I agree to take part in the above University of Sussex research project

UNIVERSITY OF SUSSEX

International Centre for Tax & Development

RE: Business Survey – Improving Taxpayer Experiences in Uganda

Dear Respondent,

Thank you for agreeing to participate in this survey of Ugandan businesses. We are very appreciative of the time that you have taken to assist with this research study.

Your answers are very important for improving our understanding of how the tax system affects ordinary taxpayers and businesses like yours. We commit to treating your answers with the utmost discretion. Together with information from 3,000 other interviews across Uganda, your answers will inform the research findings. This study will help to improve the Uganda Revenue Authority's taxpayer services and the tax system overall.

I would also like to extend my personal thanks to you, as your participation has made my PhD research possible. I hope that you found the interview interesting and wish you and your business every success.

Yours sincerely,

Adrienne Lees
PhD Researcher

DEPARTMENT OF ECONOMICS
University of Sussex | Brighton BN1 9RE | United Kingdom
a.f.lees@sussex.ac.uk
www.sussex.ac.uk

B.6 Survey questionnaire

6 July 2023

Measuring tax compliance costs: Taxpayer survey in Uganda

Field Name	Question *Skip logic in italics*	Answer Options
	Pre-interview identifying information	
mod1_enum	Please select your name from the list	
mod1_date	Please confirm today's date	
mod1_sample	Is the respondent from the main or replacement sample?	1 Main 2 Replacement
mod1_resp_key	Search for respondent key	
	Choose the matching respondent	
	You have selected [**mod1_resp_name**] in [**mod1_resp_location**] from the [**mod1_sample**] sample. Continue if this is correct, otherwise go back and enter a different respondent key.	1 Continue
mod1_intro	Before conducting the interview, we need to contact the respondent to check if they are available and willing to participate in principle. We will either phone the respondent or visit their business premises to try and set up an appointment. If we can't find the right respondent, we need to record this information and close the survey. The next few questions are to check whether contact has been made.	
mod1_phonesuccess	Did you manage to speak to the respondent on the phone?	1 Yes 2 No
mod1_phonereason	Why did you not manage to speak to the respondent on the phone? *Question relevant when: selected(${mod1_phonesuccess}, '2')*	1 Phone number was invalid 2 Never answered after multiple attempts 3 Always busy after multiple attemps 999 Other, please specify
mod1_phonereason_oth	Please specify other *Question relevant when: selected(${mod1_phonereason}, '999')*	
mod1_businesspremises	If the phone call was unsuccessful, did you find the respondent at the business premises? *Question relevant when: selected(${mod1_phonesuccess}, '2')*	1 Yes 2 No
mod1_norespondent	Why didn't you find the respondent? *Question relevant when: selected(${mod1_businesspremises}, '2')*	1 The sampled business wasn't found at the location 2 The business doesn't exist 3 The business has closed 999 Other, please specify
mdo1_norespondent_oth	Please specify other *Question relevant when: selected(${mod1_norespondent}, '999')*	
mod1_phoneconsent	Did they consent to meet for the survey during the call? *Question relevant when: selected(${sec1_phonesuccess}, '1')*	1 Yes 2 No
mod1_premisesconsent	Did the respondent agree to meet with you when you found the business? *Question relevant when: selected(${mod1_businesspremises}, '1')*	1 Yes 2 No
mod1_note	Great! We are set to go. When you are ready, please approach the respondent, introduce yourself and begin the interview. The next page has the participant information script ready for you to read. *Question relevant when: selected(${mod1_phoneconsent}, '1') or selected(${mod1_premisesconsent}, '1')*	
mod1_close	You have indicated that you couldn't find the respondent, either by phone or by visiting the business. The survey will now close and we will replace this respondent with someone else. If this is not correct, please go back and change your answers. *Question relevant when: selected(${mod1_phonesuccess}, '2') and selected(${mod1_businesspremises}, '2')*	
	Participant information and consent	
mod2_finperson	Are you the most knowledgeable person concerning the administration and financial management of this business?	1 Yes

1

Field Name	Question *Skip logic in italics*	Answer Options
		2 No
	The interview should be with the person most knowledgeable about the administration and financial management of this business. Please identify this person and arrange an interview time with them. When you are ready, go back and select "yes" for the previous question. *Question relevant when: selected(${mod2_finperson} , '2')*	
	***INSTRUCTIONS**: Read the script below out loud and give the respondent a copy of the participant information sheet and consent form. DO NOT PROCEED with the interview until the participant has confirmed that they have understood the information and agree to participate.* My name is [mod1_enum_name] and I am working for The Field Lab, a non-profit survey company based in Mbale. Researchers from the University of Sussex in the United Kingdom have partnered with us to conduct a survey of businesses across Uganda. Your business has been randomly selected for the survey. Your participant information pack contains detailed information about the purpose of this research, how data will be treated, and what will happen to the findings from this study. For ease, I will quickly summarise the most important parts. The interview questions are designed to capture the experience of paying taxes among businesses in Uganda. The main purpose of the survey is to understand the costs businesses face when satisfying their tax obligations. Participation is completely voluntary and there are no known negative consequences for you or your business as a result of participating. Depending on your engagement, the interview should take between 45 minutes and one hour. I will be using a tablet and survey software to digitally record your answers. Feel free not to answer any question that makes you feel uncomfortable. No information that you share today will be shared with anyone outside of the research team. The study has been approved by the Uganda National Council of Science and Technology. Your answers are important for this research project. The findings from the research will inform policymakers about how to improve taxpayer services and tax administration and contribute to a University of Sussex PhD project. All reports will discuss findings in general terms, combining the answers from 3000 businesses across Uganda. To thank you for your time, you will receive a thank you letter from the lead researcher, an invitation to a virtual dissemination event with policymakers, and a small gift. Do you have any questions at this stage?	
	***INSTRUCTIONS:** Read the text below and confirm whether consent has been given. Do not proceed unless the respondent indicates that they have understood and are willing to participate.* It is important to document that we have received your informed consent to participate in this survey. I will now read out a few sentences and ask whether you agree. • You have received information about this study, and you have understood this information. • You understand that participation is entirely voluntary and that there are no known risks associated with participating. • You understand that all information will be treated confidentially.	

2

Field Name	Question *Skip logic in italics*	Answer Options
	• You are willing to be interviewed for this study.	
mod2_consent	Do you agree with the statements above?	1 Yes 2 No
mod2_pii_name	Please provide your name if you are comfortable doing so.	
mod2_pii_phone	We would like to be able to contact you in case there is any follow-up from our survey team about your answers today. Please provide a phone number if you are comfortable doing so.	
mod2_pii_correctnum	You said your phone number is [mod2_pii_phone]. Please confirm this or go back and adjust it if it is wrong. *Question relevant when: ${mod2_pii_phone} > 0*	1 My phone number is correct - continue survey
	Taxpayer Survey *Group relevant when: selected(${mod2_consent} , '1') and selected(${mod2_finperson} , '1')*	
	Taxpayer Survey > Module 3: Demographics	
	SCRIPT: Thank you for agreeing to participate in this survey. I would like to start by asking you a few questions about yourself.	
mod3_role	What is your role in this business?	1 Owner 2 Chief executive or general manager 3 Tax or general accountant 4 Business partner 5 Secretary 6 Chief or head of administration 999 Other, please specify
	Please specify other *Question relevant when: selected(${mod3_role} , '999')*	
mod3_female	Record gender of respondent	1 Female 2 Male
mod3_age	How old are you?	1 19 or younger 2 20 to 29 3 30 to 49 4 50 to 64 5 65 or older 777 Don't know 888 Refuse to say
mod3_educ	What is the highest level of education that you have finished?	1 No formal schooling 2 Primary school 3 Lower secondary school (S1 to S4; O-level) 4 Upper secondary school (S5 and S6; A-level) 5 Post-secondary qualification, other than university (e.g., technical college) 6 University (bachelor, master, or PhD) 888 Refuse to say 777 Don't know
	Taxpayer Survey > Module 4: Business characteristics	
	SCRIPT: Thank you. Now, I would like to ask a few questions about this business.	
mod4_firm_age	How long has this business been in operation? *Only prompt with options if necessary*	1 Less than 6 months 2 Between 6 months and 1 year 3 1 to 2 years 4 3 to 5 years 5 6 to 10 years 6 More than 10 years 777 Don't know 888 Refuse to say
mod4_legal_status	What is this business's current legal status? *Read options if necessary. Answer could refer to how the company is registered with the Uganda Registration Services Bureau.*	1 Publicly listed company 2 Private limited liability company

Field Name	Question *Skip logic in italics*	Answer Options
		3 Private unlimited company 4 Sole proprietorship/single owner 5 Partnership 777 Don't know 888 Refuse to say 999 Other, please specify
mod3_legal_status_oth	Please specify other *Question relevant when: selected(${ mod4_legal_status} , '999')*	
mod4_sector	What sector best describes the main activity of this business? *Read out options. If they operate in more than one sector, ask for the sector that best describes the majority of the business's sales, income, or turnover.*	1 Wholesale and retail trade 2 Manufacturing 3 Construction 4 Transportation services 5 Accommodation and food services 6 Finance and insurance services 7 Information and communication 8 Professional, scientific and technical services 999 Other services activities, please specify 777 Don't know 888 Refuse to say
mod4_sector_oth	Please specify other *Question relevant when: selected(${mod4_sector} , '999')*	
mod4_main_activity	Over the last year, what was this business's main activity or product? By the main activity or product, we mean the one that represented the largest proportion of annual sales. *Write brief description of goods or services, e.g. "clothing manufacture", "selling groceries", "cleaning services", or "travel services".*	
mod4_num_empl	In addition to yourself, how many employees, full time or part time, does this business currently employ? This could include family members helping with the business. *Allow for spontaneous response but prompt with options if the respondent is unsure. Some businesses might have a core team of permanent staff but hire extra people on a temporary basis during busy times. If this is the case, just record the number of core staff.*	1 No employees (only the respondent works in the business) 2 No paid employees/only unpaid helpers 3 Micro: less than 5 employees 4 Small: between 5 and 19 employees 5 Medium: between 20 and 99 employees 6 Large: 100 or more employees 777 Don't know 888 Refuse to say
mod4_internet	Does this business use the internet for its operations? This could include using mobile internet or data.	1 Yes 2 No 777 Don't know 888 Refuse to say
mod4_online	Does this business do any trading online? This could include using WhatsApp to buy or sell goods and services. *Question relevant when: not(selected(${mod4_internet} , '2'))*	1 Yes 2 No 777 Don't know 888 Refuse to say
mod4_mobile	Does this business use mobile phones for its operations?	1 Yes 2 No 777 Don't know 888 Refuse to say
mod4_sales_period	Now I would like to ask you a question about your typical sales. What is easiest for you to answer – sales in a typical week, typical month, or typical year?	1 Weekly 2 Monthly 3 Annually/yearly 777 Don't know 888 Refuse to say
mod4_sales_wk	Thinking about this business over the past year, in other words from [month] 2022 until today, can you tell me how much you sold in a typical week in Uganda shillings? By typical, I mean not	

Field Name	Question *Skip logic in italics*	Answer Options
	the best or the worst week, but in an average week. Remember that this information will remain completely confidential. *Enter a number without any letters or punctuation, for example 400000 for UGX400,000. BE CAREFUL and pay attention to the number of zeroes you enter. Write -777 (including minus sign) if the respondent doesn't know or refuses to say.* *Question relevant when: selected(${mod4_sales_period} , '1')* *Response constrained to: .>=0 or .=-777*	
mod4_sales_mn	Thinking about this business over the past year, in other words from [month] 2022 until today, can you tell me how much you sold in a TYPICAL month in Ugandan shillings? By typical I mean not the best or the worst, but in an average month. Remember that this information will remain completely confidential. *Enter a number without any letters or punctuation, for example 400000 for UGX400,000. BE CAREFUL and pay attention to the number of zeroes you enter. Write -777 (including minus sign) if the respondent doesn't know or refuses to say.* *Question relevant when: selected(${mod4_sales_period} , '2')* *Response constrained to: .>=0 or .=-777*	
mod4_sales_yr	Can you tell me how much you sold in a TYPICAL year in Ugandan shillings? By typical I mean not the best or the worst, but in an average year. Remember that this information will remain completely confidential. *Enter a number without any letters or punctuation, for example 400000 for UGX400,000. BE CAREFUL and pay attention to the number of zeroes you enter. Write -777 (including minus sign) if the respondent doesn't know or refuses to say.* *Question relevant when: selected(${mod4_sales_period} , '3')* *Response constrained to: .>=0 or .=-777*	
mod4_sales_wk_correct	In the previous question, you said that your typical weekly sales over the past year were UGX [mod4_sales_wk]. Please confirm your answer or go back and adjust it. *Question relevant when: ${mod4_sales_wk} >= 0 and ${mod4_sales_wk} != '777'*	1 This answer is correct - continue survey
mod4_sales_mn_correct	In the previous question, you said that your typical monthly sales over the past year were UGX [mod4_sales_mn]. Please confirm your answer or go back and adjust it. *Question relevant when: ${mod4_sales_mn} >= 0 and ${mod4_sales_mn} != '777'*	1 This answer is correct - continue survey
mod4_sales_yr_correct	In the previous question, you said that your typical sales are UGX [mod4_sales_yr] per year. Please confirm this number or go back and adjust it. *Question relevant when: ${mod4_sales_yr} >= 0 and ${mod4_sales_yr} != '777'*	1 This answer is correct - continue survey
mod4_exports	Does this business export any products or services directly? In other words, do you sell anything to customers overseas, without first selling to a third party? *Potential clarification: By "third party" we mean another business handles the exporting. In this question we are asking whether the business engages in exports themselves.*	1 Yes 2 No 777 Don't know 888 Refuse to say
	Taxpayer Survey > Module 5: Digital financial services	
	SCRIPT: Thank you for your attention so far. In this section, we will talk briefly about the different financial services used by this business.	
mod5_acc	A financial account can be used to save money, to make or receive payments, or to receive credit and other financial help. At the moment, does this business have any of the following accounts? *Read out answer options. More than one answer could apply. Traditional/mainstream bank account could be a savings or current account and refers to the "big name" banks, e.g. Diamond Trust Bank, Absa, Standard Chartered.* *Response constrained to: if(selected(., 777) or selected(., 888) or selected(.,5), count-selected(.) = 1, count-selected(.) >= 1)*	1 Bank account with a traditional or mainstream bank 2 Mobile money account 3 Microfinance bank account 4 SACCO account 5 We don't have any financial accounts 777 Don't know 888 Refuse to say
mod5_acc_type	Is the bank account or microfinance account a dedicated business account or a personal account? *Read out answer options. More than one answer could apply.*	1 Owner's personal account 2 Another personal account 3 A dedicated company account

Field Name	Question *Skip logic in italics*	Answer Options
	Question relevant when: selected(${mod5_acc} , '1') or selected(${mod5_acc} , '3') *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	777 Don't know 888 Refuse to say
mod5_pay_supplier	Which of the following payment methods does this business use to pay suppliers? For example, to purchase raw materials and inputs or to pay for utilities. *Read out answer options. More than one answer could apply.* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 Cash 2 Mobile money via a business account, such as MoMo Pay or Airtel Pay 3 Mobile money via a personal account 4 Bank card (debit or credit) 5 Bank transfers 6 Cheque 777 Don't know 888 Refuse to say
mod5_pay_customer	Which of the following payment methods does this business accept from customers or clients? *Read out answer options. More than one could apply.* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 Cash 2 Mobile money via a business account, such as MoMo Pay or Airtel Pay 3 Mobile money via a personal account 4 Bank card (debit or credit) 5 Bank transfers 6 Cheque 777 Don't know 888 Refuse to say
mod5_pay_empl	Which of the following payment methods does this business use to pay employees their salaries or wages? *Read out answer options. More than one could apply.* *Question relevant when: not(selected(${mod4_num_empl} , '1')) or not(selected(${mod4_num_empl} , '2'))* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 Cash 2 Mobile money via a business account, such as MoMo Pay or Airtel Pay 3 Mobile money via a personal account 4 Bank card (debit or credit) 5 Bank transfers 6 Cheque 777 Don't know 888 Refuse to say
mod5_supp_mm_reason	What were the main reasons this business started to use mobile money to pay suppliers? *Allow for spontaneous response first, but read options if respondent is unsure. Select all that apply.* *Question relevant when: selected(${mod5_pay_supplier} , '2') or selected(${mod5_pay_supplier} , '3')* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 Suppliers asked for it; to satisfy supplier requests 2 Reduce the cost of financial transactions 3 Reduce the time taken for financial transactions 4 Reduce the risks in financial transactions; security reasons 5 Align with competitors' use 6 Concerns about COVID-19 7 Facilitate record-keeping with electronic records 999 Other, specify 777 Don't know 888 Refuse to say
mod5_supp_mm_reason_oth	Please specify other *Question relevant when: selected(${mod5_supp_mm_reason} , '999')*	
mod5_cust_mm_reason	What were the main reasons this business started to accept mobile money payments from customers or clients? *Allow for spontaneous response first, but read options if respondent is unsure. Select all that apply.* *Question relevant when: selected(${mod5_pay_customer} , '2') or selected(${mod5_pay_customer} , '3')* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 Customers asked for it; to satisfy customer requests 2 Reduce the cost of financial transactions 3 Reduce the time taken for financial transactions 4 Reduce the risks in financial transactions; security 5 Align with competitors' use 6 Concerns about COVID-19 7 Facilitate record-keeping with electronic records 999 Other, specify

Field Name	Question *Skip logic in italics*	Answer Options
		777 Don't know 888 Refuse to say
mod5_cust_mm_reason_oth	Please specify other *Question relevant when: selected(${mod5_cust_mm_reason} , '999')*	
mod5_no_mm_reason	In the previous question you indicated that this business does not use mobile money for transactions with suppliers or customers. What are the main reasons for not using mobile money? *Allow for a spontaneous response first, but prompt with options if respondent is unsure. More than one answer could apply.* *Question relevant when: not(selected(${mod5_pay_supplier} , '2')) and not(selected(${mod5_pay_supplier} , '3')) and not(selected(${mod5_pay_supplier} , '777')) and not(selected(${mod5_pay_supplier} , '888')) and not(selected(${mod5_pay_customer} , '2')) and not(selected(${mod5_pay_customer} , '3')) and not(selected(${mod5_pay_customer} , '777')) and not(selected(${mod5_pay_customer} , '888'))* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 Don't know enough about mobile money 2 The network is not available or reliable in this area 3 Charges and fees for mobile money are too high; mobile money is too expensive 4 Taxes on mobile money are too high 5 An agent is too far away 6 Suppliers don't use mobile money 7 Customers don't use mobile money 8 My payments are too large to use mobile money (above the transfer limits) 9 I don't trust the service provider 10 Increased tax visibility; government might use the data to increase my taxes 999 Other, specify 777 Don't know 888 Refuse to say
mod5_no_mm_reason_oth	Please specify other *Question relevant when: selected(${sec5_3c} , '999')*	
	On a typical business day, can you estimate what percentage of sales to customers were paid using … *The total should be equal to 100%.*	
mod5_share_cash	... cash? *Please enter a value between 0 and 100. Write -777 (including minus sign) if the respondent doesn't know or refuses to say.* *Response constrained to: (.>=0 and .<=100) or .=-777*	
mod5_share_mm	... mobile money? *Please enter a value between 0 and 100. Write -777 (including minus sign) if the respondent doesn't know or refuses to say.* *Question relevant when: selected(${mod5_pay_customer} , '2') or selected(${mod5_pay_customer} , '3')* *Response constrained to: (.>=0 and .<=100) or .=-777*	
mod5_share_card	... bank card (debit or credit)? *Please enter a value between 0 and 100. Write -777 (including minus sign) if the respondent doesn't know or refuses to say.* *Question relevant when: selected(${mod5_pay_customer} , '4')* *Response constrained to: (.>=0 and .<=100) or .=-777*	
mod5_share_oth	… any other method? *Please enter a value between 0 and 100. Write -777 (including minus sign) if the respondent doesn't know or refuses to say.* Response constrained to: (.>=0 and .<=100) or .=-777	
mod5_error_note	The answers for the previous questions sum to 0%. This is greater than 100%. Please go back and clarify with the respondent so that the answers sum to 100%. Question relevant when: ${mod5_share_sum} > 100	
mod5_error_note2	The answers for the previous questions sum to 0%. This is less than 100%. Please go back and clarify with the respondent so that the answers sum to 100%. *Question relevant when: ${mod5_share_sum} < 100 and ${mod5_share_sum} > 0*	
mod5_dfs_pay_records	On a scale of 1 to 5, how likely are you to agree with the following statement? **"Using digital payment methods, such as mobile money, credit or debit cards, or online banking, is helpful for record-keeping"**	1 Fully disagree 2 Somewhat disagree 3 Neutral 4 Somewhat agree 5 Fully agree

Field Name	Question *Skip logic in italics*	Answer Options
	1 means that you fully disagree with the statement and 5 means that you fully agree with the statement. *If respondent says "(dis)agree", check whether they mean "fully (dis)agree" or "somewhat (dis)agree". Read options only if necessary to clarify.*	777 Don't know 888 Refuse to say
	Taxpayer Survey > Module 6: Tax filing and payment information	
	SCRIPT: I would now like to ask some questions about how you file and pay your business taxes. All the questions in this section are about taxes related directly to your business, rather than your own personal income taxes. We are only interested in your experience of **taxes that you pay to URA**, so please do not consider local government taxes like business trading licenses when answering. Remember that this survey is anonymous, and it will not be possible for any government authorities to see your answers or to connect them to you or your business. We will start with a few questions about the tax system in general.	
mod6_vat_rate	Can you tell me the standard tax rate for VAT? *Record answer a number without any percentage signs, e.g. 10 for 10%. Write -777 (including minus sign) if the respondent doesn't know.* *Response constrained to: (.>=0 and .<=100) or .=-777*	
mod6_vat_threshold	VAT registration is mandatory in Uganda for businesses of a certain size. Can you tell me the annual sales threshold for VAT registration in Ugandan shillings? *Record a number without any text or punctuation, e.g. 100000 for UGX100,000 or 5000000 for UGX 5 million. Make sure that you have recorded the correct amount of zeroes. Write -777 (including minus sign) if the respondent doesn't know.* *Response constrained to: .>=0 or .=-777*	
mod6_cit_rate	Can you tell me the standard corporate income tax rate? *Record answer a number without any percentage signs, e.g. 10 for 10%. Write -777 (including minus sign) if the respondent doesn't know.* *Response constrained to: (.>=0 and .<=100) or .=-777*	
mod6_filing_freq	How frequently is a business supposed to file a **final** income tax return? *Don't read options (spontaneous response)*	1 Weekly 2 Monthly 3 Quarterly 4 Yearly 777 Don't know
mod6_tin	Is the following statement true or false? **"The URA does not charge a fee for tax registration and obtaining a Tax Identification Number (TIN) is free."** *Potential clarification: We are asking whether the URA is legally allowed to charge a fee for tax registration, not whether some officials ask for bribes or extra fees to facilitate tax registration, or whether some private tax agents or consultants charge fees to do registration on behalf of clients.*	1 True 2 False 777 Don't know
mod6_tax_person	Who is usually involved in taking care of this business's tax obligations? *Read options, select all that apply. Probe to clarify the most appropriate category. For example, if the respondent says "a friend who is a tax consultant", then select option six. For some options, the answer might refer to the respondent themself (e.g. "owner of the business" if you are speaking with the owner, or "internal accountant" if you are speaking with the accountant).* *Response constrained to: if(selected(.,7) or selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 The owner of the business 2 A friend or family member 3 An internal accountant or tax advisor (an employee) 4 Another full-time or part-time employee 5 An external tax agent or consultant (not a URA official) 6 A URA official 7 Nobody 999 Other, please specify 777 Don't know 888 Refuse to say
mod6_tax_person_oth	Please specify other *Question relevant when: selected(${mod6_tax_person} , '999')*	
mod6_no_outsource_reason	In the previous question you said that this business **does not** use the services of an external tax agent or consultant. What are the main reasons for not outsourcing any tax activities to someone else?	1 We have sufficient in-house expertise 2 It is too expensive to outsource or to pay for someone else

Field Name	Question *Skip logic in italics*	Answer Options
	Allow for spontaneous response and select appropriate answer. More than one answer can apply. *Question relevant when: not(selected(${mod6_tax_person} , '5')) and not(selected(${mod6_tax_person} , '777')) and not(selected(${mod6_tax_person} , '888'))* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	3 Tax compliance activities are easy to do by ourselves 4 The business is too small to justify it 999 Other, please specify 777 Don't know 888 Refuse to say
mod6_no_outsource_reason_oth	Please specify other *Question relevant when: selected(${mod6_no_outsource_reason} , '999')*	
mod6_outsource_reason	In the previous question you said that this business **does** use the services of an external tax agent or consultant. What are the main reasons for outsourcing at least some tax activities to someone else? *Allow for spontaneous response and select appropriate answer. More than one answer can apply.* *Question relevant when: selected(${mod6_tax_person} , '5')* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 Tax is a specialist field or too confusing 2 We don't have time to do it internally 3 It is too difficult to keep up-to-date with changes in the tax laws by ourselves 4 Tax officials are unhelpful 5 To ensure proper compliance 999 Other, please specify 777 Don't know 888 Refuse to say
mod6_outsource_reason_oth	Please specify other *Question relevant when: selected(${mod6_outsource_reason} , '999')*	
mod6_outsource_type	How would you describe the person or people involved in assisting this business with its tax affairs? *More than one could apply, read out options.* *Question relevant when: selected(${mod6_tax_person} , '5')* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 A certified accountant, tax agent, or consultant 2 A non-certified accountant, tax agent, or consultant 3 A URA official 999 Other, please specify 777 Don't know 888 Refuse to say
mod6_outsource_type_oth	Please specify other *Question relevant when: selected(${mod6_outsource_type} , '999')*	
mod6_reg_yr	In what year did this business first register for tax? *Record as a number, for example 2013. Help to calculate the year if the respondent says, for instance, "I registered five years ago". Write -777 (including minus sign) if the respondent doesn't know.* *Response constrained to: (.>=1900 and .<=2023) or .=-777*	
mod6_tax_type	Which of the following taxes is this business registered for? *Read options and select all that apply. Income tax could refer to corporate income tax, personal income tax, or presumptive tax depending on the business size. Probe the respondent to be very sure that you have accurately captured all the taxes that the business pays.* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 Income tax (profit tax) 2 VAT (value-added tax) 3 PAYE/payroll tax 4 Rental income tax 5 Local excise duty 999 Other, specify 777 Don't know 888 Refuse to say
mod6_tax_type_oth	Please specify other *Question relevant when: selected(${mod6_tax_type} , '999')*	
mod6_record	I would now like to ask some questions about record-keeping practices for this business. Do you keep any business records?	1 Yes 2 No 777 Don't know 888 Refuse to say
mod6_record_expenses	Do you record BOTH expenses/purchases and sales made by this business? Question relevant when: selected(${mod6_record} , '1')	1 Yes 2 No 777 Don't know 888 Refuse to say
mod6_record_type	In what form do you keep your records? *Read options, select only one. If more than one applies, select the option corresponding to their last stage of record-keeping. For instance, if they keep paper records first then transfer the records to a special software, select 4.* *Question relevant when: selected(${mod6_record} , '1')*	1 Informal, unwritten 2 Formal, paper-based 3 Formal, computer-based 4 Formal, using specialised accounting or bookkeeping software

Field Name	Question *Skip logic in italics*	Answer Options
		999 Other, please specify 777 Don't know 888 Refuse to say
mod6_record_type_oth	Please specify other *Question relevant when: selected(${mod6_record_type} , '999')*	
mod6_no_record_reason	What is the main reason why you don't keep records? *Allow spontaneous response and select appropriate answer. More than one could apply.* *Question relevant when: selected(${mod6_record} , '2')* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 It is too expensive for this business 2 I don't know how 3 I don't need records 4 Concerned that URA will use my records to increase my taxes 999 Other, please specify 777 Don't know 888 Refuse to say
mod6_no_record_reason_oth	Please specify other *Question relevant when: selected(${mod6_no_record_reason} , '999')*	
	Now I would like to ask some questions about how you file and pay your business taxes. Does this business currently use any of the following digital, online, or mobile-based services or tools from the URA to comply with tax obligations?	
mod6_etax	URA web portal (also called eTax)	1 Yes 2 No 3 Not aware of it 777 Don't know
mod6_ura_app	URA mobile app	1 Yes 2 No 3 Not aware of it 777 Don't know
mod6_efris	Electronic invoicing (also called EFRIS) *This is a tool used for managing VAT. If the respondent did not select VAT in the earlier question, probe here to check whether the answers are correct. If they actually do pay VAT, go back and correct the earlier question.*	1 Yes 2 No 3 Not aware of it 777 Don't know
mod6_dts	Digital tax stamps *A digital tax stamp is a marking applied to certain goods or their packaging, to certify the production of these goods. The stamps are used for excise duty management.*	1 Yes 2 No 3 Not aware of it 777 Don't know
mod6_efris_type	Which type of electronic invoicing or EFRIS system does this business use? *Read options, more than one could apply.* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 EFRIS web portal 2 System-to-system integration 3 EFRIS desktop application 4 Electronic fiscal device 5 Mobile app 6 Sending transaction details through USSD 777 Don't know 888 Refuse to say
mod6_efris_ease	On a scale from 1 to 5, has complying with tax obligations become easier or more difficult since adopting EFRIS? 1 means that EFRIS has made it significantly more difficult to comply with tax obligations, and 5 means that EFRIS has made it significantly easier. *If the respondent says "easier/more difficult", make sure to clarify whether they mean significantly or somewhat.*	1 EFRIS has made it significantly more difficult to comply with tax obligations 2 EFRIS has made it somewhat more difficult to comply with tax obligations 3 Neutral 4 EFRIS has made it somewhat easier to comply with tax obligations 5 EFRIS has made it significantly easier to comply with tax obligations 777 Don't know
mod6_efris_challenge	Do you face any challenges when using EFRIS? *Do not read options. First allow spontaneous response and select the appropriate options. Prompt if you need to.* *Response constrained to: if(selected(., 777) or selected(., 888) or selected(.,7), count-selected(.) = 1, count-selected(.) >= 1)*	1 The system is slow 2 The system is difficult to operate 3 It is difficult to amend mistakes 4 No access to the internet

Field Name	Question *Skip logic in italics*	Answer Options
		5 Adopting or maintaining the system is expensive 6 Using EFRIS makes my business uncompetitive 7 I don't face any challenges 999 Other, please specify 777 Don't know 888 Refuse to say
mod6_efris_challenge_oth	Please specify other *Question relevant when: selected(${mod6_efris_challenge} , '999')*	
mod6_digital_ease	On a scale from 1 to 5, how likely are you to agree with the following statement? 1 means that you fully disagree and 5 means that you fully agree. **"Using digital technologies makes the process of filing and paying taxes easier".**	1 Fully disagree 2 Somewhat disagree 3 Neutral 4 Somewhat agree 5 Fully agree 777 Don't know 888 Refuse to say
mod6_efris_compl	Now think about businesses who have adopted electronic invoicing (EFRIS). Out of the total sales that they make in a day, how often do you think that they **actually use** the electronic invoicing system (EFRIS) to issue receipts? *Read out options, select one.*	1 Never 2 Occasionally (less than 50% of the time) 3 Quite often (about 50% of the time) 4 Usually (more than 50% of the time) 5 Always 888 Refuse to say 777 Don't know
mod6_tax_payment	What payment method does this business usually use to pay taxes to URA? *Read options, select all that apply* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 Cash payment at a URA office 2 Cash payment at a bank branch 3 Cash payment with a bank agent 4 Bank card payment (debit or credit card) 5 Mobile money transfer 6 Electronic or online bank transfer 888 Refuse to say 777 Don't know
mod6_no_digitalpay_reason	In the previous question you said that this business does not usually pay taxes using digital methods. Why do you prefer to use cash to pay taxes for the business? *Allow spontaneous response then select all that apply based on response.* *Question relevant when: not(selected(${mod6_tax_payment} , '4')) and not(selected(${mod6_tax_payment} , '5')) and not(selected(${mod6_tax_payment} , '6')) and not(selected(${mod6_tax_payment} , '777')) and not(selected(${mod6_tax_payment} , '888'))* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 Business tax payments are larger than the mobile money transfer limit 2 I don't trust digital methods 3 I prefer to get a paper receipt 4 The network is unreliable or there is no network coverage in my area 5 Digital payment services are often offline or unresponsive 6 I don't trust that the URA will accept an electronic receipt 7 There is room to negotiate when you pay cash at the URA office 8 It is more convenient to pay cash 9 Business is mostly conducted in cash 999 Other, please specify 888 Refuse to say 777 Don't know
	Please specify other *Question relevant when: selected(${mod6_no_digitalpay_reason} , '999')*	
	Taxpayer Survey > Module randomisation	
	INSTRUCTIONS: Click "continue" when you are ready to randomise the ordering of the next three survey modules.	1 Continue
	Random value is 0.46233688608344103	
	You have been assigned to route 3	
	Go to Section A: Tax perceptions	

Field Name	Question *Skip logic in italics*	Answer Options
	You must click on the link to go forward *Question relevant when: ${route} = 1*	
	Go to Section B: Itemised compliance costs *You must click on the link to go forward* *Question relevant when: ${continue} != 1*	
	Go to Section C: Summarised compliance costs *You must click on the link to go forward* *Question relevant when: ${continue} != 1*	
	Taxpayer Survey > Section A: Tax Perceptions	
	SCRIPT: In this section, we will talk about your perceptions of tax compliance and the tax system in general.	
	SCRIPT: First I would like to ask about the main advantages and disadvantages of registering for business taxes in your opinion. There are no right or wrong answers, these questions are just about your own experience of becoming a taxpayer.	
mod_a_tax_advant	What, if anything, would you say are the biggest three advantages of registering for tax? *Do NOT read the options. Allow a spontaneous response, then choose the most appropriate three categories. You can also have less than three selected.* *Response constrained to: if(selected(., 777) or selected(., 888) or selected(.,8), count-selected(.) = 1, count-selected(.) <= 3)*	1 Being tax compliant allows the business to access other opportunities, such as exporting, larger contracts, or government tenders 2 Helps to assess business performance; promotes accurate record-keeping 3 Paying taxes means that we are contributing to the growth and development of the country; improves government service delivery 4 Being tax compliant allows the business to access formal financial credit or loans 5 Helps the business to be recognised by customers and clients; improves the corporate image 6 Avoids the business being harassed or inconvenienced by the authorities 7 We are fulfilling our civic obligation; it is a legal requirement 8 There are no advantages to being registered for tax 999 Other, please specify 777 Don't know 888 Refuse to say
mod_a_tax_advant_oth	Please specify other Question relevant when: selected(${mod_a_tax_advant} , '999')	
mod_a_tax_disadvant	What, if anything, would you say are the biggest three disadvantages of registering for tax? *Do NOT read the options. Allow a spontaneous response, then choose the most appropriate three categories. You can also have less than three selected.* *Response constrained to: if(selected(., 777) or selected(., 888) or selected(.,8), count-selected(.) = 1, count-selected(.) <= 3)*	1 Reduces profit margins and cash flow 2 Frequent visits and monitoring from the authorities to ensure your compliance; potential harassment 3 Ensuring tax compliance is expensive and time consuming 4 The taxes paid don't match services from government 5 Taxes are too high; business is over-taxed; government continues to raise taxes 6 URA continues to follow you even if the business is struggling or collapsed 7 Penalties and fines are very high if you delay or don't comply 8 There are no disadvantages to paying taxes 999 Other, please specify 777 Don't know

Field Name	Question *Skip logic in italics*	Answer Options
		888 Refuse to say
mod_a_tax_disadvant_oth	Please specify other Question relevant when: selected(${mod_a_tax_disadvant} , '999')	
mod_a_compliance_ease	On a scale of 1 to 5, how easy or difficult do you find it to comply with tax obligations for this business? 1 means very difficult and 5 means very easy. *Read options. Make sure to clarify with the respondent whether they mean "somewhat" or "very" if they answer easy/difficult.*	1 Very difficult 2 Somewhat difficult 3 Neutral 4 Somewhat easy 5 Very easy 777 Don't know 888 Refuse to say
mod_a_compliance_burden	On a scale of 1 to 5, how likely are you to agree with the following statement: **"The process of complying with tax obligations is more burdensome than the amount of tax itself"** 1 means that you completely disagree and 5 means that you completely agree.	1 Fully disagree 2 Somewhat disagree 3 Neutral 4 Somewhat agree 5 Fully agree 777 Don't know 888 Refuse to say
	SCRIPT: I am now going to read a list of tax-related activities. Using a scale from 1 to 5, where 1 is "very difficult" and 5 is "very easy", please tell me how difficult it is to do these things.	
mod_a_records_ease	Keep accounting records up-to-date	1 Very difficult 2 Somewhat difficult 3 Neutral 4 Somewhat easy 5 Very easy 777 Don't know 888 Refuse to say
mod_a_requirements_ease	Understand what is required from the questions on the tax returns	1 Very difficult 2 Somewhat difficult 3 Neutral 4 Somewhat easy 5 Very easy 777 Don't know 888 Refuse to say
mod_a_documentation_ease	Compile the required documentation for tax compliance	1 Very difficult 2 Somewhat difficult 3 Neutral 4 Somewhat easy 5 Very easy 777 Don't know 888 Refuse to say
mod_a_filinginctax_ease	Fill out and submit income tax returns	1 Very difficult 2 Somewhat difficult 3 Neutral 4 Somewhat easy 5 Very easy 777 Don't know 888 Refuse to say
mod_a_filingvat_ease	Fill out and submit VAT returns and supporting schedules *Question relevant when: selected(${mod6_tax_type} , '2')*	1 Very difficult 2 Somewhat difficult 3 Neutral 4 Somewhat easy 5 Very easy 777 Don't know 888 Refuse to say
mod_a_filingpaye_ease	Fill out and submit PAYE returns *Question relevant when: selected(${mod6_tax_type} , '3')*	1 Very difficult 2 Somewhat difficult 3 Neutral

Field Name	Question *Skip logic in italics*	Answer Options
		4 Somewhat easy 5 Very easy 777 Don't know 888 Refuse to say
mod_a_payments_ease	Make tax payments	1 Very difficult 2 Somewhat difficult 3 Neutral 4 Somewhat easy 5 Very easy 777 Don't know 888 Refuse to say
mod_a_assistance_ease	Get assistance from the URA on tax matters	1 Very difficult 2 Somewhat difficult 3 Neutral 4 Somewhat easy 5 Very easy 777 Don't know 888 Refuse to say
mod_a_irritations	The administrative process of complying with tax obligations can also cause various frustrations, which are important for subjective wellbeing and customer satisfaction. Please tell me whether you experience any of the following potential frustrations. *Read out options. Select options when the respondent says that they experience this.* *Response constrained to: if(selected(., 8), count-selected(.) = 1, count-selected(.) >= 1)*	1 The time taken to ensure compliance 2 The complexity of tax rules 3 The frequency of tax filing and payment 4 The reliability of external tax accountants or other outsourced labour 5 Time spent waiting for tax assistance or queuing to pay taxes 6 URA services being offline or disrupted 7 Travelling to the URA headquarters or offices in Kampala to access information or assistance, or for decisions to be taken on your tax affairs. 8 None of the above apply to this business
mod_a_fairness	On a scale from 1 to 5, how fair do you think the tax system is to businesses like this one? 1 means very unfair and 5 means very fair.	1 Very unfair 2 Somewhat unfair 3 Neutral 4 Somewhat fair 5 Very fair 888 Refuse to say 777 Don't know
mod_a_justify_evasion	On a scale from 1 to 5, please tell me whether you think that the following statement is always acceptable, never acceptable, or somewhere in between. 1 means never acceptable and 5 means always acceptable. **"Taking cash payments without giving a receipt to avoid paying VAT or other taxes"** *Potential clarification: the statement refers to businesses accepting cash payments for sales without giving a receipt.*	1 Never acceptable 2 Sometimes acceptable 3 Neutral 4 Mostly acceptable 5 Always acceptable 888 Refuse to say 777 Don't know
mod_a_ura_trust	On a scale from 1 to 5, how much trust do you have that the URA acts in the interests of ordinary taxpayers like yourself? 1 means no trust at all and 5 means a lot of trust.	1 No trust at all 2 Not very much trust 3 Neutral 4 Some trust 5 A lot of trust 888 Refuse to say 777 Don't know
mod_a_services_satisfaction	On a scale from 1 to 5, how satisfied are you with the provision of public services in your area based on the taxes that you pay? By public services here we mean things like schooling, water and sanitation, roads, electricity and healthcare. 1 means very dissatisfied and 5 means very satisfied.	1 Very dissatisfied 2 Somewhat dissatisfied 3 Neutral 4 Somewhat satisfied 5 Very satisfied 888 Refuse to say 777 Don't know

Field Name	Question *Skip logic in italics*	Answer Options
mod_a_cond_compliance	Which one of the following statements is closest to your view? Choose statement 1 or statement 2. **Statement 1:** Taxpayers must pay their taxes to the government in order to help the country develop and receive better public services. **Statement 2:** Taxpayers could refuse to pay taxes if they are not receiving public services of adequate quality.	1 Statement 1 2 Statement 2 888 Refuse to say 777 Don't know
mod_a_detect_evasion	Imagine that a business is evading taxes, what is the chance that this non-compliance will be detected by the URA, from 0% to 100%? *Record a number between 0 and 100, without % signs. Write -777 (including minus sign) if the respondent doesn't know.* *Response constrained to: (.>=0 and .<=100) or .=-777*	
	You have finished Section A. Please go to Section B: Itemised compliance costs *Question relevant when: ${continue} != 1*	
	You have finished Section A. Please go to the End of interview *Question relevant when: ${continue} != 1*	
	Taxpayer Survey > Module B: Itemised Tax Compliance Costs	
	SCRIPT: Thank you for your attention so far. The process of tax compliance imposes some important costs on businesses, over and above the actual taxes that you pay. These **costs of compliance include the monetary value of your time**, for instance the time that you or your employees spend on preparing and submitting tax returns, handling queries from URA, or learning about new tax regulations. They could also include **outsourcing costs**, such as the fees that you pay to an external tax advisor, agent or consultant for help with filing your taxes or handling other URA matters. Finally, there might be **indirect costs such as transaction fees, tax-related software or hardware, and travel costs**. In this section, we will discuss these costs of compliance. For all cost-related questions, please answer in Ugandan shillings. *Question relevant when: ${route} = 1 or ${route} = 2*	
	Earlier in our interview, you said that the business outsources some tax-related activities, meaning that you pay someone external, like a tax consultant or agent, to take care of certain tax activities. I would now like to ask a few questions about outsourcing. *Relevant when: selected(${mod6_tax_person}, '5')*	
mod_b_outsource_activity	In general, which of the following tax activities does this business outsource to someone external? *Read the list of activities and select those that the respondent says they outsource.* *Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)*	1 Keeping receipts, sales slips, or invoices from the business up-to-date 2 Keeping accounting records up-to-date (bookkeeping) 3 Compiling the required documentation for tax compliance 4 Filling out and submitting tax returns 5 Calculating the amount of tax due 6 Making tax payments 7 Handling queries, audits or investigations from URA officials 999 Other, please specify 777 Don't know 888 Refuse to say
mod_b_outsource_activity_oth	Please specify other *Question relevant when: selected(${mod_b_outsource_activity} , '999')*	
mod_b_outsource_cost	How much does this business spend on outsourcing tax compliance tasks in a **typical month**? For example, this could refer to the fees that the external tax accountant charges. *You may need to help the respondent to add up the costs if they answer for each tax separately. Enter a number only, for example 400000 for UGX400,000. Make sure that you have entered the right number of zeroes. Enter -777 (including minus sign) if the respondent is not sure and move to the next question to prompt the respondent with*	

Field Name	Question *Skip logic in italics*	Answer Options
	cost brackets. The field can only accommodate up to 9 digits. If the answer is larger than UGX 1 billion, enter 999,999,999. *Response constrained to: .>=0 or .=-777*	
mod_b_outsource_cost_br	If it is not possible to recall a specific number, can you give a range for the estimated total outsourcing costs for a typical month? *You may need to help the respondent to add up the costs if they answer for each tax separately.* *Question relevant when: ${mod_b_outsource_cost} = '-777'*	1 0 to 50,000 2 50,001 to 100,000 3 100,001 to 200,000 4 200,001 to 400,000 5 400,001 to 700,000 6 700,001 to 1 million 7 1 million to 2 million 8 2 million to 5 million 9 Above 5 million 777 Don't know
mod_b_outsource_taxbooks	Does this outsourcing cost include costs for both tax-related processes AND general bookkeeping? *Question relevant when: ${mod_b_outsource_cost} > 0 or not(selected(${mod_b_outsource_cost_br} , '777'))*	1 Yes 2 No 777 Don't know
mod_b_outsource_cost_notax	In the previous question you said you pay someone outside of this business for **general bookkeeping and tax-related tasks**. Can you estimate how much the business would pay the external person for bookkeeping activities in a typical month if this business DID NOT have to pay any taxes? *You may need to help the respondent to add up the costs if they answer for each tax separately. Enter a number without any letters or punctuation, for example 400000 for UGX400,000. Make sure that you have entered the right number of zeroes. Enter -777 if the respondent is not sure and move to the next question to prompt the respondent with cost brackets. The field can only accommodate up to 9 digits. If the answer is larger than UGX 1 billion, enter 999,999,999.* *Question relevant when: selected(${mod_b_outsource_taxbooks} , '1')* *Response constrained to: .>=0 or .=-777*	
mod_b_outsource_cost_notax_br	If it is not possible to recall a specific number, can you give a range for the estimated outsourced bookkeeping costs if this business DID NOT have to pay any taxes? *Question relevant when: ${mod_b_outsource_cost_notax} = '-777'*	1 0 to 50,000 2 50,001 to 100,000 3 100,001 to 200,000 4 200,001 to 400,000 5 400,001 to 700,000 6 700,001 to 1 million 7 1 million to 2 million 8 2 million to 5 million 9 Above 5 million 777 Don't know
mod_b_outsource_error	The answer for the previous question is greater than the estimate for outsourcing costs including both tax activities and bookkeeping. We would have expected the answer for bookkeeping alone to be smaller. Please go back and clarify with the respondent before continuing. *Question relevant when: ${mod_b_outsource_cost} !='-777' and ${mod_b_outsource_cost_notax} !='-777' and (${mod_b_outsource_cost_notax} > ${mod_b_outsource_cost})*	
	For each of the following taxes, can you tell me the number of times the business completes a return and makes a payment per year? *This should include final and provisional returns and payments. Record as a number. For example, if the respondent says "every month", write 12. Write -777 (including minus sign) if the respondent doesn't know or refuses to say. The maximum should be 12, if the respondent says more than this, probe to be sure they have understood the question.*	
mod_b_subs_inctax	Income tax *Income tax could refer to corporate income tax, personal income tax (for self-employed individuals) or presumptive tax, depending on the size of the business.* *Response constrained to: .>=0 or .=-777*	
mod_b_subs_vat	VAT *Question relevant when: selected(${mod6_tax_type} , '2')*	

Field Name	Question *Skip logic in italics*	Answer Options
	Response constrained to: .>=0 or .=-777	
mod_b_subs_paye	PAYE/payroll tax *Question relevant when: selected(${mod6_tax_type} , '3')* *Response constrained to: .>=0 or .=-777*	
mod_b_num_tax_empl	Earlier you said that at least one person working at this business does some activities related to tax compliance. How many people work on tax compliance activities, either full-time or part-time? *Write -777 (including minus sign) if the respondent doesn't know or refuses to say. This should include the respondent if they are an employee who works on tax, but should not include the owner. The field can accommodate up to 5 employees. If more than 5 employees work on tax activities, enter 5 and move to the next question.* *Response constrained to: (.<=5 and .>=0) or .=-777*	
	SCRIPT: We would now like to estimate the amount of time that employees of this business spend on different tax compliance activities. For each of the following activities, please estimate how much time is spent on average by employees in a typical month. *We are asking about the time spent on each activity per month, on average, for all of the taxes that the business pays.*	
mod_b_empl_time_learning	Learning about tax obligations and requirements, or updating tax knowledge, for instance by attending URA trainings *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Response constrained to: .>=0 or .=-777*	
mod_b_empl_time_learning_unit	Unit of time (learning) Question relevant when: ${mod_b_empl_time_learning} > 0	1 Hours 2 Days 3 Weeks
mod_b_empl_time_receipts	Keeping all receipts, sales slips, invoices and other records in an organised manner *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Response constrained to: .>=0 or .=-777*	
mod_b_empl_time_receipts_unit	Unit of time (keeping receipts) *Question relevant when: ${mod_b_empl_time_receipts} > 0*	1 Hours 2 Days 3 Weeks
mod_b_empl_time_docs	Compiling the required information to file tax returns *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Response constrained to: .>=0 or .=-777*	
mod_b_empl_time_docs_unit	Unit of time (compiling documents) *Question relevant when: ${mod_b_empl_time_docs} > 0*	1 Hours 2 Days 3 Weeks
mod_b_empl_time_outsource	Dealing with an external tax advisor, consultant or agent (for instance, providing them with information and documents) *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Question relevant when: selected(${mod6_tax_person} , '5')* *Response constrained to: .>=0 or .=-777*	
mod_b_empl_time_outsource_unit	Unit of time (dealing with external person) *Question relevant when: ${mod_b_empl_time_outsource} > 0*	1 Hours 2 Days 3 Weeks
mod_b_empl_time_filing	Completing and submitting the tax return form and any supporting documents *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Response constrained to: .>=0 or .=-777*	

Field Name	Question *Skip logic in italics*	Answer Options
mod_b_empl_time_filing_unit	Unit of time (completing returns) *Question relevant when: ${mod_b_empl_time_filing} > 0*	1 Hours 2 Days 3 Weeks
mod_b_empl_time_pay	Making tax payments, including travel time and time spent waiting in queues *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Response constrained to: .>=0 or .=-777*	
mod_b_empl_time_pay_unit	Unit of time (making payments) *Question relevant when: ${mod_b_empl_time_pay} > 0*	1 Hours 2 Days 3 Weeks
mod_b_empl_time_efris	Complying with requirements to use EFRIS (e.g. time learning how to use the system, configuring, capturing receipts, fixing errors, etc.) *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Question relevant when: selected(${mod6_efris} , '1')* *Response constrained to: .>=0 or .=-777*	
mod_b_empl_time_efris_unit	Unit of time (complying with EFRIS) *Question relevant when: ${mod_b_empl_time_efris} > 0*	1 Hours 2 Days 3 Weeks
mod_b_empl_time_help	Seeking help or assistance from URA officials *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Response constrained to: .>=0 or .=-777*	
mod_b_empl_time_help_unit	Unit of time (seeking help) *Question relevant when: ${mod_b_empl_time_help} > 0*	1 Hours 2 Days 3 Weeks
	SCRIPT: Earlier you said that the owner of this business spends some time on tax-related activities. We would now like to estimate the amount of time that the owner spends on these activities in a typical month. *If you are speaking with the owner of the business, these questions are about their own time spent on tax activities. If your respondent is someone else, please ask them for their best guess of the owner's time. We are asking about the time spent on each activity per month, on average, for all of the taxes that the business pays.*	
mod_b_owner_time_learning	Learning about tax obligations and requirements, or updating tax knowledge, for instance by attending URA trainings *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Response constrained to: .>=0 or .=-777*	
mod_b_owner_time_learning_unit	Unit of time (learning) *Question relevant when: ${mod_b_owner_time_learning} > 0*	1 Hours 2 Days 3 Weeks
mod_b_owner_time_receipts	Keeping all receipts, sales slips, invoices and other records in an organised manner *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Response constrained to: .>=0 or .=-777*	
mod_b_owner_time_receipts_unit	Unit of time (keeping receipts) *Question relevant when: ${mod_b_owner_time_receipts} > 0*	1 Hours 2 Days 3 Weeks
mod_b_owner_time_docs	Compiling the required information to file tax returns *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month,*	

Field Name	Question *Skip logic in italics*	Answer Options
	then round up to 1 hour. If no time is spent on this activity, then enter 0. *Response constrained to: .>=0 or .=-777*	
mod_b_owner_time_docs_unit	Unit of time (compiling documents) *Question relevant when: ${mod_b_owner_time_docs} > 0*	1 Hours 2 Days 3 Weeks
mod_b_owner_time_outsource	Dealing with an external tax advisor, consultant or agent (for instance, providing them with information and documents) *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Question relevant when: selected(${mod6_tax_person} , '5')* *Response constrained to: .>=0 or .=-777*	
mod_b_owner_time_outsource_unit	Unit of time (dealing with external person) *Question relevant when: ${mod_b_owner_time_outsource} > 0*	1 Hours 2 Days 3 Weeks
mod_b_owner_time_filing	Completing and submitting the tax return form and any supporting documents *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Response constrained to: .>=0 or .=-777*	
mod_b_owner_time_filing_unit	Unit of time (completing returns) *Question relevant when: ${mod_b_owner_time_filing} > 0*	1 Hours 2 Days 3 Weeks
mod_b_owner_time_pay	Making tax payments, including travel time and time spent waiting in queues *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Response constrained to: .>=0 or .=-777*	
mod_b_owner_time_pay_unit	Unit of time (making payments) *Question relevant when: ${mod_b_owner_time_pay} > 0*	1 Hours 2 Days 3 Weeks
mod_b_owner_time_efris	Complying with requirements to use EFRIS (e.g. time learning how to use the system, configuring, capturing receipts, fixing errors, etc.) *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Question relevant when: selected(${mod6_efris} , '1')* *Response constrained to: .>=0 or .=-777*	
mod_b_owner_time_efris_unit	Unit of time (complying with EFRIS) *Question relevant when: ${mod_b_owner_time_efris} > 0*	1 Hours 2 Days 3 Weeks
mod_b_owner_time_help	Seeking help or assistance from URA officials *Record -777 (including minus sign) if the respondent doesn't know or refuses to say. If less than one hour is spent on the activity per month, then round up to 1 hour. If no time is spent on this activity, then enter 0.* *Response constrained to: .>=0 or .=-777*	
mod_b_owner_time_help_unit	Unit of time (seeking help) *Question relevant when: ${mod_b_owner_time_help} > 0*	1 Hours 2 Days 3 Weeks
	SCRIPT: We have just discussed the time spent by people working at this business on various tax activities. Considering all the taxes that this business pays, how would you distribute the total time spent on tax compliance between the different taxes this business pays? Please estimate as a percentage of the total time spent on tax compliance per month. *Record a number between 0 and 100 for each category. The sum of the categories should be 100%. Write -777 (including minus sign) if the respondent doesn't know or refuses to say. Here we are referring to*	

Field Name	Question *Skip logic in italics*	Answer Options
	the time spent on tax compliance activities by anyone working at the business - including the owner and any employees, if relevant.	
mod_b_time_share_inctax	Income tax *Response constrained to: (.>=0 and .<=100) or .=-777*	
mod_b_time_share_vat	VAT *Question relevant when: selected(${mod6_tax_type} , '2')* *Response constrained to: (.>=0 and .<=100) or .=-777*	
mod_b_time_share_paye	PAYE *Question relevant when: selected(${mod6_tax_type} , '3')* *Response constrained to: (.>=0 and .<=100) or .=-777*	
mod_b_time_share_oth	All other taxes *Response constrained to: (.>=0 and .<=100) or .=-777*	
	The answers for the previous questions sum to 0%. This is greater than 100%. Please go back and clarify with the respondent so that the sum is equal to 100%. *Question relevant when: ${mod_b_share_sum} > 100*	
	The answers for the previous questions sum to 0%. This is smaller than 100%. Please go back and clarify with the respondent so that the sum is equal to 100%. *Question relevant when: ${mod_b_share_sum} < 100 and ${mod_b_share_sum} > 0*	
	***SCRIPT:** The time that people working at this business spend on tax compliance activities is valuable. We would like to be able to calculate a monetary value of this time.*	
mod_b_empl_salary_freq	Can you tell me how often people working at this business are typically paid? *Question relevant when: (selected(${mod6_tax_person} , '3') or selected(${mod6_tax_person} , '4')) and ${mod_b_num_tax_empl} != -777*	1 per day 2 per week 3 per month 4 per year 777 Don't know 888 Refuse to say
	Earlier you said that [mod_b_num_tax_empl] people (person) work(s) on tax compliance activities. *If the respondent earlier said that more than 5 people work on tax compliance activities, ask about the salaries for the 5 people who are most involved.*	
mod_b_empl_salary	Can you tell me approximately how much each relevant person is usually paid [mod_b_salary_period_name]? Please report the gross salary, rather than the net salary, if you can. *Show the respondent the ranges or read them out if they are hesitant to give you an exact number. The question will repeat for the number of employees that they indicated are involved in tax activities.*	1 0 - they are not paid 2 1 to 100,000 3 100,001 to 200,000 4 200,001 to 400,000 5 400,001 to 800,000 6 800,000 to 1 million 7 1 million to 2 million 8 Above 2 million 777 Don't know 888 Refuse to say
mod_b_owner_salary_freq	Can you tell me how often the owner is paid a salary, or how often you are paid a salary if you are the owner? Question relevant when: selected(${mod6_tax_person} , '1')	1 per day 2 per week 3 per month 4 per year 666 The owner is not paid a salary 777 Don't know 888 Refuse to say
mod_b_owner_salary	Can you tell me approximately how much the owner is paid [mod_b_salary_period_name_owner]? *Show the respondent the ranges or read them out if they are hesitant to give you an exact number. Here we are asking about the gross salary paid to the person.* *Question relevant when: selected(${mod_b_owner_salary_freq} , '1') or selected(${mod_b_owner_salary_freq} , '2') or selected(${mod_b_owner_salary_freq} , '3') or selected(${mod_b_owner_salary_freq} , '4')*	1 1 to 100,000 2 100,001 to 200,000 3 200,001 to 400,000 4 400,001 to 800,000 5 800,000 to 1 million 6 1 million to 2 million 7 Above 2 million 777 Don't know 888 Refuse to say

Field Name	Question *Skip logic in italics*	Answer Options
mod_b_owner_comp	Imagine the owner of the business was compensated for their time spent working at the business. Can you estimate what this compensation would be within the following ranges? *Show the respondent the ranges or read them out if they are hesitant to give you an exact number.* *Question relevant when: selected(${mod_b_owner_salary_freq} , '666')*	1 1 to 100,000 2 100,001 to 200,000 3 200,001 to 400,000 4 400,001 to 800,000 5 800,000 to 1 million 6 1 million to 2 million 7 Above 2 million 777 Don't know 888 Refuse to say
mod_b_software_cost	Now I would like to ask about other non-labour costs incurred by this business for tax-related activities. In the **past five years** (or since registration if the business is younger than five years), how much money was spent by this business on **acquiring new software, hardware, or other computer/digital equipment specifically for tax compliance processes**? *Emphasise that we are talking about purchases made specifically for tax compliance, not general business activities. Enter a number only. Make sure that you enter the right number of zeroes. Write -777 (including minus sign) if the question is not applicable, the respondent doesn't know or refuses to say. The field can only accommodate up to 9 digits. If the answer is larger than UGX 1 billion, enter 999,999,999.* *Response constrained to: .>=0 or .=-777*	
mod_b_efris	Does this include software or hardware required to adopt the URA's electronic invoicing (EFRIS) system? *Question relevant when: ${mod_b_software_cost} > 0 and selected(${mod6_efris} , '1')*	1 Yes 2 No 777 Don't know
mod_b_efris_cost	Please provide an estimate of the monetary costs involved in adopting the electronic invoicing (EFRIS) system. *Enter a number only. Make sure that you enter the right number of zeroes. Write -777 (including minus sign) if the respondent doesn't know or refuses to say. The field can only accommodate up to 9 digits. If the answer is larger than UGX 1 billion, enter 999,999,999.* *Question relevant when: selected(${mod_b_efris} , '1')* *Response constrained to: .>=0 or .=-777*	
mod_b_software_cost_error	The estimate for EFRIS adoption costs is greater than the estimate for all software, hardware, and other digital equipment. We would expect EFRIS costs to be lower than the total costs. Please go back and clarify the answers with the respondent. *Question relevant when: ${mod_b_efris_cost} !='-777' and ${mod_b_software_cost} !='-777' and (${mod_b_efris_cost} > ${mod_b_software_cost})*	
mod_b_maintenance_cost	In the **past one year**, how much money was spent by the business on **maintaining software, hardware, or other computer/digital equipment** specifically for tax compliance processes? *Enter a number only. Make sure that you enter the right number of zeroes. Write -777 (including minus sign) if the question is not applicable, the respondent doesn't know or refuses to say. The field can only accommodate up to 9 digits. If the answer is larger than UGX 1 billion, enter 999,999,999.* *Response constrained to: .>=0 or .=-777*	
mod_b_other_costs	In the **past one year**, how much money was spent by the business on **any other tax compliance costs**, such as transportation to a tax office or transaction fees for making tax payments? *Enter a number only. Make sure that you enter the right number of zeroes. Write -777 (including minus sign) if the question is not applicable, the respondent doesn't know or refuses to say. The field can only accommodate up to 9 digits. If the answer is larger than UGX 1 billion, enter 999,999,999.* *Response constrained to: .>=0 or .=-777*	
mod_b_costs_type	Please specify what costs you considered for the previous question. *Allow spontaneous response first and record as many answers as apply. Do not read out options.* *Question relevant when: ${mod_b_other_costs} > 0*	1 Transportation to make tax payments or visit URA offices 2 Transaction fees 3 Stationery, printing, other materials

Field Name	Question *Skip logic in italics*	Answer Options
	Response constrained to: if(selected(., 777) or selected(., 888), count-selected(.) = 1, count-selected(.) >= 1)	4 Unofficial payments made to tax officials 999 Other, please specify 888 Refuse to say 777 Don't know
mod_b_costs_type_oth	Please specify other *Question relevant when: selected(${mod_b_costs_type} , '999')*	
mod_b_unusual_tcc	In the past one year, were there any unusual circumstances that made your total tax compliance costs larger or smaller than in a typical year?	1 Yes, larger than normal 2 Yes, smaller than normal 3 No 888 Refuse to say 777 Don't know
mod_b_tcc_smaller	Can you estimate how much smaller your compliance costs were compared to a typical year? *Write -777 (including minus sign) if the respondent doesn't know or refuses to say. Otherwise, record a number larger than 0.* *Question relevant when: selected(${mod_b_unusual_tcc} , '2')* Response constrained to: .>=0 or .=-777	
mod_b_tcc_larger	Can you estimate how much larger your compliance costs were compared to a typical year? *Write -777 (including minus sign) if the respondent doesn't know or refuses to say. Otherwise, record a number larger than 0.* *Question relevant when: selected(${mod_b_unusual_tcc} , '1')* *Response constrained to: .>=0 or .=-777*	
mod_b_audit	I would now like to ask a few questions about interactions with URA officials. **In the last three years** (or since registration if the business is younger than 3 years), has the business been audited or otherwise investigated by the URA?	1 Yes 2 No 777 Don't know 888 Refuse to say
mod_b_audit_num	How many times has the business been audited or investigated by the URA in the last three years (or since registration if the business is younger than 3 years)? *Write -777 (including minus sign) if the respondent doesn't know or refuses to say. Otherwise, record a number larger than 0.* *Question relevant when: selected(${mod_b_audit} , '1')* *Response constrained to: .>=1 or .=-777*	
mod_b_audit_taxtype	Which tax was the **most recent** audit or investigation in relation to? *Do not read options. More than one tax could apply.* *Question relevant when: selected(${mod_b_audit} , '1')*	1 Income tax (profit tax) 2 VAT (value-added tax) 3 PAYE/payroll tax 4 Rental income tax 5 Local excise duty 6 Withholding tax 999 Other, specify 777 Don't know 888 Refuse to say
mod_b_audit_taxtype_oth	Please specify other *Question relevant when: selected(${mod_b_audit_taxtype} , '999')*	
mod_b_audit_hours	Please estimate the amount of time **in hours** people working at this business spent handling your **most recent** audit or other investigation by the URA. *Write -777 (including minus sign) if the respondent doesn't know or refuses to say. Write 0 if no time was spent handling the audit or investigation by URA.* *Question relevant when: selected(${mod_b_audit} , '1')* *Response constrained to: .>=0 or .=-777*	
mod_b_audit_outsource_cost	Please estimate the **outsourcing cost** incurred handling the **most recent** audit or other investigation by the URA, if applicable. By outsourcing cost, we mean the costs involved in hiring someone external to handle tax matters, such as a tax agent, advisor, or consultant. *Write -777 (including minus sign) if the respondent doesn't know or refuses to say. Write 0 if there were no outsourcing costs for handling the audit or investigation by URA.* *Question relevant when: selected(${mod_b_audit} , '1')* *Response constrained to: .>=0 or .=-777*	

Field Name	Question *Skip logic in italics*	Answer Options
mod_b_ura_interaction	In the last year, did this business have any interaction, other than audits, with a URA official related to the business's taxes?	1 Yes 2 No 777 Don't know 888 Refuse to say
mod_b_ura_interaction_num	How many interactions did the business have in the last year? *Write -777 (including minus sign) if the respondent doesn't know or refuses to say. Otherwise, record a number larger than 0.* *Question relevant when: selected(${mod_b_ura_interaction} , '1')* *Response constrained to: .>=1 or .=-777*	
mod_b_ura_interaction_reason	What was the last interaction about? *Allow spontaneous response, select most appropriate answer.* *Question relevant when: selected(${mod_b_ura_interaction} , '1')*	1 Help filing a tax return 2 Help paying taxes 3 Objecting against or disputing a URA assessment or decision 4 Getting information on the tax system 5 Getting information on public expenditure or how revenues are used/spent by government 6 Obtaining a document 7 Unexpected visit from a URA official asking about tax payments 8 Something else
mod_b_ura_interaction_hours	How much time **in hours** did people working at this business spend in the last interaction with a URA official? *Write -777 (including minus sign) if the respondent doesn't know or refuses to say.* *Question relevant when: selected(${mod_b_ura_interaction} , '1')* *Response constrained to: .>=0 or .=-777*	
	You have finished Section B. Please go to Section C: Summarised compliance costs *Question relevant when: ${continue} != 1*	
	You have finished Section B. Please go to the End of interview *Question relevant when: ${continue} != 1*	
	Taxpayer Survey > Module C: Summarised compliance costs	
	SCRIPT: Thank you for your attention so far. The process of tax compliance imposes some important costs on businesses, over and above the actual taxes that you pay. These **costs of compliance include the monetary value of your time**, for instance the time that you or your employees spend on preparing and submitting tax returns, handling queries from URA, or learning about new tax regulations. They could also include **outsourcing costs**, such as the fees that you pay to an external tax advisor, agent or consultant for help with filing your taxes or handling other URA matters. Finally, there might be **indirect costs such as transaction fees, tax-related software or hardware, and travel costs**. In this section, we will discuss these costs of compliance. For all cost-related questions, please answer in Ugandan shillings. *Question relevant when: ${route} = 3*	
mod_c_tot_tcc	Considering all the taxes that this business pays to URA, can you estimate the total cost of tax compliance for this business for a typical year? Please consider the value of your time and other employees' time, as well as direct monetary costs. If it is easier, you could estimate the cost of tax compliance for a typical month. Remember, we are not asking about the amount of tax that the business actually pays, but just the costs that the business incurs when complying with tax obligations. *Make sure that you enter the right number of zeroes. Write -777 (including minus sign) if the respondent doesn't know or refuses to say. You may need to help the respondent to add up the costs if they answer for each tax separately, or if they answer for each type of cost separately. The field can only accommodate up to 9 digits. If the answer is larger than UGX 1 billion, enter 999,999,999.* *Response constrained to: .>=0 or .=-777*	
mod_c_tot_tcc_br	If it is not possible to recall a specific number, can you give a range for your estimated total costs of compliance?	1 0 to 50,000

Field Name	Question *Skip logic in italics*	Answer Options
	You may need to help the respondent to add up the costs if they answer for each tax separately, or if they answer for each type of cost separately. *Question relevant when: ${mod_c_tot_tcc} = '-777'*	2 50,001 to 100,000 3 100,001 to 200,000 4 200,001 to 400,000 5 400,001 to 700,000 6 700,001 to 1 million 7 1 million to 2 million 8 2 million to 5 million 9 Above 5 million 777 Don't know
mod_c_tot_tcc_period	Is your estimate per month or per year? *Question relevant when: ${mod_c_tot_tcc} != '-777' or not(selected(${mod_c_tot_tcc_br} , '777'))*	1 per month 2 per year
mod_c_tcc_confirm	In the previous question, you said that [mod_c_tcc_period_name] tax compliance costs for this business are approximately UGX [mod_c_tot_tcc]. Please confirm your answer or go back and adjust it. Question relevant when: ${mod_c_tot_tcc} >0	1 This answer is correct - continue survey
mod_c_tcc_incl_books	Does your estimate for the previous question include costs incurred for **both** tax-related processes and general bookkeeping? *Question relevant when: ${mod_c_tot_tcc} > 0 or not(selected(${mod_c_tot_tcc_br} , '777'))*	1 Yes 2 No 777 Don't know
mod_c_tot_notaxes	Can you estimate how much this business would have to spend on general bookkeeping if you DID NOT have to pay any taxes? *Make sure that you enter the right number of zeroes. Write -777 (including minus sign) if the respondent doesn't know or refuses to say. You may need to help the respondent to add up the costs if they answer for each tax separately, or if they answer for each type of cost separately. The field can only accommodate up to 9 digits. If the answer is larger than UGX 1 billion, enter 999,999,999.* *Question relevant when: selected(${mod_c_tcc_incl_books} , '1')* *Response constrained to: .>=0 or .=-777*	
mod_c_tcc_error	The answer for the previous question is greater than the estimate for total tax compliance costs including both tax activities and bookkeeping. We would have expected bookkeeping costs alone to be less than total tax compliance costs. Please go back and clarify with the respondent before continuing. *Question relevant when: ${mod_c_tot_tcc} !='-777' and ${mod_c_tot_notaxes} !='-777' and (${mod_c_tot_notaxes} > ${mod_c_tot_tcc})*	
mod_c_tot_time	In a typical month, how much time do people working at this business spend on all activities related to tax compliance? This could include time spent on activities such as preparing tax returns, travelling to the tax office, making tax payments, and handling URA queries. Please include time spent by the owner of the business as well. *Record a positive number. Write -777 (including minus sign) if the respondent doesn't know or refuses to say. If you are speaking with the owner of the business, they should include their own time spent on tax compliance activities.* *Response constrained to: .>=0 or .=-777*	
mod_c_tot_time_period	Does your estimate of total compliance time refer to hours, days, or weeks? Question relevant when: ${mod_c_tot_time} > 0	1 Hours 2 Days 3 Weeks
mod_c_govt_comp	Imagine that the government decides to compensate this business for **all of the costs of tax compliance** incurred in a **typical year**. How much would this compensation need to be? Remember, this should not include compensation for the actual taxes that the business pays. *Make sure that you enter the right number of zeroes. Write -777 (including minus sign) if the respondent doesn't know or refuses to say. You may need to help the respondent to add up the costs if they answer for different taxes separately or give a monthly instead of yearly number. The field can only accommodate up to 9 digits. If the answer is larger than UGX 1 billion, enter 999,999,999.*	

Field Name	Question *Skip logic in italics*	Answer Options
	Response constrained to: .>=0 or .=-777	
mod_c_govt_comp_correct	In the previous question, you said that the government would need to give this business UGX [mod_c_govt_comp] to compensate for **all of the costs of tax compliance** that this business incurs in a typical year. Please confirm this answer or go back and adjust it. *Question relevant when: ${mod_c_govt_comp} >= 0*	1 This answer is correct - continue survey
mod_c_govt_comp_reason	What factors did you consider in your estimate for the previous question? *Record in brief what the respondent says* *Question relevant when: ${mod_c_govt_comp} >= 0*	
	You have finished Section C. Please go to the End of interview *Question relevant when: ${continue} != 1*	
	You have finished Section C. Please go to Section A: Tax perceptions *Question relevant when: ${continue} != 1*	
	Taxpayer Survey > End of interview	
	SCRIPT: We have reached the end of the survey. Thank you for your time and attention throughout this interview. Your responses are very valuable for this research project and we hope that you enjoyed the interview. Please feel welcome to contact the research team using the details provided in your participant information sheet if you have any concerns or questions later. *Response constrained to: ${mod_a_fin} =1 and ${mod_b_fin} =1 and ${mod_c_fin} =1*	1 Continue
mod7_report	Would you like to receive a copy of the full research report when it is finalised?	1 Yes 2 No
mod7_event	Would you like to attend an online dissemination event with policymakers?	1 Yes 2 No
mod7_email	Please provide an email address so that we can send you the report or an invitation to the event, or both, depending on your preference. *Double check spelling with the respondent. If they don't want to share their email address, please make sure that they understand that this is needed to share the report or the event invitation. If they still don't want to share an address, write "refused".* *Question relevant when: selected(${mod7_report} , '1') or selected(${mod7_event} , '1')*	
mod7_confirmemail	You said your email address is [mod7_email]. Please confirm this or go back and adjust it if it is wrong. Question relevant when: (selected(${mod7_event} , '1') or selected(${mod7_report} , '1')) and ${mod7_email} != 'refused'	1 Email address is correct - continue survey
	Taxpayer Survey > Post-interview information	
mod8_refuse_reason	Why did the respondent refuse to participate? *Question relevant when: selected(${mod1_phoneconsent} , '2') or selected(${mod1_premisesconsent} , '2') or selected(${mod2_consent} , '2')*	1 Too busy, survey is too much effort 2 The topic is too sensitive to talk about, not comfortable 3 Respondent wasn't the right person to answer the questions 4 The purposes don't seem legitimate; concerned that you are associated with URA 5 Concerned about data being misused 999 Other, specify
mod8_refuse_reason_oth	Please specify other reason *Question relevant when: selected(${mod8_refuse_reason} , '999')*	
mod8_close	You have indicated that the respondent did not want to meet with you or did not consent to being interviewed. The survey will now close and we will replace this respondent with someone else. If this is not correct, please go back and change your answers. *Question relevant when: selected(${mod2_consent} , '2') or selected(${mod1_phoneconsent} , '2') or selected(${mod1_premisesconsent} , '2')*	

Field Name	Question *Skip logic in italics*	Answer Options
mod8_pii_gps	Record the location of the interview *GPS can only be recorded outside*	
mod8_consulted_records	Did the respondent consult any records or accounts during the interview?	1 Yes 2 No 777 Don't know
mod8_lang	In what language did you administer this survey?	1 English 2 Luganda 3 Combination of English and Luganda 4 Another local language
mod8_fluency	How fluent was the respondent in English?	1 Not very fluent 2 Comfortably fluent 3 Very fluent/native speaker
mod8_patience	Did the respondent feel at all impatient during the interview?	1 Not at all impatient 2 At times impatient 3 Very impatient
mod8_difficulty	What proportion of the questions do you feel the respondent had difficulty answering? *Record as a number from 0 to 100* *Response constrained to: .>=0 and .<=100*	
mod8_confidence	How confident are you in the quality and honesty of the responses in general?	1 Not at all confident 2 Somewhat confident 3 Neutral 4 Confident 5 Very confident
mod8_comments	Please record any further comments for the research team. This could include recording whether the respondent changed during the interview, or if more than one person was present during the interview.	