The social dimensions of tax compliance

A conjoint experiment among small enterprises in Zambia

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Introduction

An efficient and well-functioning tax system is a necessary foundation for any country to achieve economic development (Kleven et al. 2016). One of the key features of a good tax system is the level of tax compliance amongst economic players. While institutional drivers of “coerced” business tax compliance - such as risk of audit and punishment for noncompliance - are relatively well understood, less is known about the social dynamics that may induce voluntary tax compliance in the absence of large-scale tax collection infrastructure.

The drivers of voluntary tax compliance are particularly important to understand among firms operating in the informal economy, who are less bound by formal institutions, and within developing countries, where state capacity is limited (Joshi and Ayee 2008, Joshi et al. 2014). More generally, very little is known about the tax behavior of the informal sector, especially as it relates to social drivers of tax morale such as norms and social recognition. For example, in the country in which we base our study, Zambia, tax compliance rates are very low, especially among micro and small businesses who operate in the informal economy. Filing compliance among these taxpayers has been declining since 2010 (ZRA 2017). Multiple measures of tax compliance from our survey among micro and small businesses estimate tax compliance in this group to be hovering around 30%. Further, Zambia displays many of the institutional weaknesses that are typical of countries in the region, including low state capacity to enforce the tax system and high corruption levels across government, providing a “typical case” for a study of voluntary tax compliance in the informal market.

We argue that tax compliance is an inherently social behavior, as one’s decision to pay taxes or not is partially influenced by what one expects others to do. Specifically, we hypothesize that business tax compliance may be affected by social norms, the involvement of social organizations in the tax collection system, and whether or not one’s tax behavior is publicized among their social network. To test these expectations, we conduct a conjoint experiment among small-scale business enterprises in Zambia. We provide information about a pair of hypothetical tax situations, and randomly introduce variation in social norms, the involvement of a social organization (a business association), and the publication of tax behavior to others. After learning about the pair of hypothetical tax situations, the respondent chooses the situation in which he would be more likely to pay his business taxes and which of the plans would he be more likely to support.

We find evidence contrary to our hypotheses. First, publicizing behaviour to other businesses has no effect on anticipated tax compliance in the conjoint experiment. Second, contrary to our hypothesis, priming social norms regarding paying business taxes significantly decreases anticipated tax compliance, as does involving a social organization in the collection of taxes. We provide qualitative evidence that the possible causal mechanism underpinning these somewhat surprising findings is a social norm of non-compliance motivated by a general view among respondents that they are unable to pay taxes primarily due to low business profitability. This coupled with a lack of trust in the leaders of social organisations in these communities. We believe these are the first findings that provide experimental evidence on the social, group-level tax behavior of small businesses in the informal sector in a developing country.

Theory and Hypotheses

Tax compliance was first modeled economically by Allingham and Sandmo (1972) and is rooted in rational choice theory, as it makes the claim that each taxpayer decides how much income to declare
through assessment of the benefits of concealing it and the costs of being caught. Although the costs that this model focuses on are direct punishments and fines, the social consequences of tax evasion or conversely the benefits of compliance are overlooked (Noguera et al., 2014). There is a growing body of academic literature focused on the importance of non-pecuniary motivations of tax compliance such as overall tax morale, social pressure, and perceived levels of audit and punishment.

Tax morale is an umbrella term capturing nonpecuniary motivations for tax compliance as well as factors that fall outside the standard, expected utility framework (Luttmer and Singhal, 2014). One of the primary transmission mechanisms of tax morale is through the creation of a social norm of compliance in a society.¹ Social norms of compliance support compliance in an overarching way, by strengthening intrinsic motivation, reciprocal motivation and sensitivity to peers of taxpayers. Social norms are strongly interlinked with tax paying culture, or the social norms that persist over time and over generations (Luttmer and Singhal, 2014). These norms tend to encourage voluntary compliance, leading citizens to collaborate with their government when compliance is considered positive and socially desirable. These dimensions are particularly important for developing countries to consider, as they have limited funds and infrastructure to enforce taxes. Direct enforcement of micro and small enterprises tax compliance is particularly difficult and cost-ineffective. These small and informal firms may be made more compliant through a focus on policy solutions involving social dimensions, which may be more feasible and affordable.

In developed countries, research findings have revealed that relatively high levels of compliance exist despite low chances of detection and fairly low penalties for noncompliance (Alm et al, 1999; Dwenger et al, 2016). The standard models predict that evasion should be much higher but many studies (Graetz and Wilde 1985, Elffers 1991, Webley, Robben, Elffers and Hessing 1991) in developed country contexts find high rates of compliance. The reasons for this relatively high compliance have broadly been grouped into three: the use of third party reporting from firms and the financial sector, that tax payers tend to overestimate the probability of audit and the penalties associated with evasion and finally non-pecuniary motivations or tax morale factors which our study focuses on (Dwenger et al, 2016).

Several studies that specifically focus on social norms have been undertaken in developed countries. Hallsworth et al. (2014) conduct a large-scale field experiment in the UK which examines the role of moral factors in compliance by unpacking them into social norms and concerns over public goods. The social norms message highlighted that the majority of people were compliant with their taxes. The strongest message indicated to the treatment group that 9 out of 10 UK taxpayers comply. This treatment (together with other treatment arms) resulted in an increase in the probability to pay outstanding taxes, with the strongest effect coming from the treatment that emphasized social norms. This study highlights the important role that social norms can play in inducing compliance. Besley, Jensen and Persson (2014) find evidence for considerable persistence in social norms for tax compliance in the UK. Dewger et al (2016) carry out a natural field experiment involving a church tax

¹ A social norm “represents a pattern of behavior that is judged in a similar way by others and that therefore is sustained in part by social approval or disapproval. Consequently, if others behave according to some socially accepted mode of behavior, then the individual will also behave appropriately; if others do not so behave, then the individual will respond in kind” (Alm et al, 1999). Social norms are alternatively referred to as tax paying norms.
in Germany. The environment was optimal for a test of the effect of tax morale, with zero third party monitoring. There was also zero deterrence at baseline, meaning intrinsic motivation could be observed. The study finds that with zero deterrence, 20 percent of individuals still comply with the tax payment and thus attribute this compliance to intrinsic motivation. The majority of respondents, however, behave consistently with the predictions of the rational choice model.

These studies highlight the important role of social norms. However, one thing they have in common is that they take place in developed countries. Developed countries typically have a more established tax paying culture than developing countries in sub-Saharan Africa, owing to stronger institutions and greater accountability (Besley and Persson, 2014). Few works have considered the effect of norms in developing countries, due in part to the lack of availability of high-quality data. In this smaller body of literature, it has been found that developing countries see systematically lower rates of tax morale, through studies in Latin American (Torgler, 2005) and African countries (Daude et al., 2012). Daude et al. (2012) find that tax morale in African countries is negatively correlated with perceived level of corruption within country governments and Torgler (2005) finds a positive correlation in Latin America between tax morale and trust in the president and government officials, the belief that other individuals obey the law, and pro-democratic beliefs (Daude et. al 2012, Torgler 2005). Particularly regarding tax morale for Micro Small and Medium Enterprises (MSMEs), Terkper (2003) finds that ignoring low tax compliance in small businesses leads to drops in tax morale and compliance in other larger and more formal sectors as well.

An important question that arises is how social norms form in the first place or, more importantly, whether they can be changed by deliberate government policy (Alm et al, 1999). Social norm formation has been found to be influenced by factors such as a strong national identity. National identities in sub-Saharan Africa however tend to be weak, partially because colonial powers drew national borders in a way that split ethnic groups across countries (Besley and Persson, 2014). In some developed countries social norms were strengthened during times of national war when national identity was felt very keenly (Hintze 1906, and Tilly 1990). These norms then persisted over time after the war. Social norms can also be affected by the levels of corruption, perception of an unfair tax system and government accountability in a country (Besley and Persson, 2014). Low corruption and government accountability have been defined as pre-conditions for a country’s tax performance in general (Bird et al, 2008).

Alm et al (1999) argue that there is a social norm of tax compliance that exists in society that can be shifted by deliberate government policy action. They conduct an experiment that shows the role of social norms in individual compliance behavior and how these norms can be affected by voting on the fiscal system. They find that when participants vote as a group to reject greater tax enforcement at the individual level participants take it as a signal that noncompliance will be tolerated and so compliance decreases drastically relative to the identical pre-vote fiscal regime. It essentially sends a signal that others do not wish to enforce the tax laws and it is now socially acceptable to evade one’s taxes as everyone else will do the same. Compliance correspondingly increases when the group selects greater enforcement. These findings show that the process of voting has the capacity to destroy the
social norm of compliance. They also find that a social norm of compliance can also be created by
highlighting the benefits of greater enforcement effectively allowing an individual to transform a group
decision into an individual one.

Generally, the literature is not conclusive on the effects of trying to increase compliance by
highlighting social norms, even in developed countries. This study contributes to further
understanding regarding the relationship between social norms and tax compliance. This leads to our
first hypothesis:

**Hypothesis 1:** MSME operators are more willing to pay their taxes when social norms supporting
tax-paying are high.²

There is also little academic research regarding the use of business associations as tax collectors,
however, the perceptions and functions of these associations contribute to this study and serve as a
foundation for our second hypothesis. The impact of business associations on outcomes for the joined
businesses has mixed conclusions in academic research. Through analysis of performance data of 200
firms in Zambia, Qureshi and Velde (2013) find that business associations have had a generally positive
impact on the productivity of MSME members in Zambia, attributed to their position as an organized
and influential voice holding corrupt and disorganized government officials accountable. A positive
perception of business associations is also backed by Goldsmith’s (2002) finding that these
organizations have had success in African countries as a mediator and by engaging and collaborating
with government officials on business policy. However, there is also evidence from studies conducted
in developing countries and transitioning economies that finds business associations themselves
promoting corruption, taking bribes enabling tax evasion, and colluding with government officials at
the cost of their members (Olson 2000, Duvanova 2007).

Cooperatives or rural producer organizations are another variant of business associations that are
popular in many developing countries. These are private entities that, through their members or
governing bodies, maybe directly involved in primary production of rural-based goods for profit (Bosc
et al., 2001). These cooperatives are particularly common in the agriculture and mining sectors and
now as our study finds in urban markets. These cooperatives function like business associations
representing the collective interests of members. Siwale (2018), in what represents one of the first
studies on the internal workings of these groupings in the artisanal and small scale mining sector
(ASM), highlights three important characteristics of these associations in Zambia ASM sector. The
study finds that corrupt and ineffective leaders have captured some of the associations in the sector.
These individuals are primarily driven by personal interest acting as gatekeepers, using the associations
as conduits to direct benefits coming from government and donors to themselves and loyalists. The
study further finds a clear lack of accountability and weak democratic structure with elections rarely
held and succession often by inheritance. Kenyan cooperatives in the coffee sector have been found
to exhibit similar characteristics (Mude 2006). The study also finds a skills gap in terms of the
competencies needed to run associations effectively. Membership registers are rarely kept, annual

² In our pre-analysis plan, this was Hypothesis 2.
reports are unavailable and general meetings rarely held. Consequently, these associations have brought limited benefits to their members and have in many instances lowered the trust that individuals working in the sector have in them as leaders have extorted money but delivered very few benefits.

The literature on the role of business associations in developing countries is therefore very mixed. In a developing country, the benefits a business perceives it may gain from its government are often low, however through the use of a business association as a tax collector, the perceived benefits of the businesses association may influence tax morale and increase government revenue. Especially if this is tied to other benefits such as training opportunities and access to credit and public service delivery. One directly relevant finding comes from Nugent and Sukiasyan (2009) who used data from a large number of firms in 25 countries experiencing transitional economies and found that business association membership reduced the need or ability of tax evasion for the businesses. They found that the incentives of formalizing in order to receive the benefits that a business association provides (such as lobbying, providing information, resolving disputes, providing networking opportunities, assisting in obtaining licenses, etc.) exceeded the costs of formal taxation. However, they also concluded that membership in business associations did not benefit small businesses to the extent that it did larger ones, and concluded that smaller firms are more likely to remain informal and evade taxation than join an association (Nugent and Sakiassyan, 2009). Another study concluded that in Shanghai business associations provide insights into taxation and offered government assistance and trainings in order to minimize the obstacles and costs of taxes and to encourage growth and formalization of informal businesses (Howell, 2002).

One of the most relevant works is research conducted by Joshi and Ayee (2008), who assessed the effectiveness of associational taxation in the informal business sector in Ghana a strategy known as Identifiable Grouping Taxation (IGT), which was in operation from 1987 until 2003. Small businesses were more willing to pay taxes due to the ability of associations to more directly identify and ensure compliance as well as their ability to provide a system which was tailored to smaller businesses—such as the use of micropayments. Tax collection through the associations allowed small businesses to remain less visible to the state, which prevented the implementation of further regulations that national recognition may incur (Joshi and Ayee, 2008). However, the IGT system had issues with corruption and being taken advantage of by larger businesses who looked to avoid full liabilities (Joshi et al., 2013).

This leads to the following hypothesis:

**Hypothesis 2:** MSME operators are more willing to pay their taxes when business associations act as tax collectors.³

Another social dimension of tax compliance relates to the relationship that a firm has with other firms in its peer group. The level of compliance of other firms coupled with the possibility of other firm owners’ learning about a firm’s compliance record can affect tax compliance. Social recognition and peer effects are the terms that refer to the factors that affect compliance through this means (Luttmer and Singhal, 2014). Social recognition can be an ideal tool to increase compliance as it uses a firm, already existing, desire to be viewed positively by one’s peer group to exert social pressure to encourage

³ In our pre-analysis plan, this was Hypothesis 3.
compliance (Ahmed et al. 2012). The behavior of peers may also influence a firm owner’s beliefs about the consequences of evasion, especially in low enforcement contexts where this information might otherwise be unavailable (Luttmer and Singhal, 2014). There are two prerequisites that, Ahmed et al (2012) identify as needing to be in place for social recognition to work. Firms must perceive tax compliance as a desirable behavior and secondly firms must have sufficient information of their neighbors’ business activity to be able to accurately assess how much their neighbors should be paying. Dewger et al (2016) in their study of a church tax in Germany find that the recognition for compliance raises or reduces tax payments depends on what motivated compliance in the first place.

There is limited research isolating the impacts of social pressure on businesses from other businesses regarding tax compliance, particularly in developing countries. However, at the individual tax-paying level, Battiston and Gamba (2016) conducted surveys regarding compliance of Tanzania’s poll tax, finding that the direct knowledge of compliance behavior of others influences an individual’s decision to comply. In several studies it is found that when the injunctive norms of one’s social group, what the group thinks is right, is clear and individual behavior is publicized, these norms have a significant influence on individual behavior due to the perceived costs of social disapproval (Cialdini & Trost, 1998; Lapinski & Rimal, 2005). This theory of social norms may affect businesses similarly if tax evasion transgressions are publicized to other businesses and there is a condemnation of the practice overall. Another study carried out in Bangladesh conducted a field experiment with a peer recognition treatment arm to test the use of social recognition to increase tax compliance for VAT registered firms. The study finds that firms that received peer information treatment registered an increase in tax payments and paid more than the non-treatment control group in areas that already exhibited signs of high compliance (above 15% compliance rate). For firms located in areas with a record of low compliance there was no statistically significant difference (Chetty et al. 2014).

Using social recognition and peer effect mechanisms presents unique opportunities for developing countries such as Zambia. Social based interventions are relatively easier and less costly to implement. They also work outside the governance structures and institutional constraints that are so difficult to change. Such interventions also present fewer concerns about corruption and extortion by tax collectors than other more traditional interventions, such as audits.

This leads to our final hypothesis regarding the social drivers of tax compliance:

**Hypothesis 3:** MSME operators are more willing to pay their taxes when other business owners will learn about their tax compliance.4

**Context**

**Taxation in Zambia**

Zambia, like many developing countries in sub-Saharan Africa, continues to collect relatively low levels of tax revenue, with a 14 percent tax to GDP ratio on average, which falls within the range of 10-20 percent that many developing countries collect. Yet this ratio falls far below the 30-40 percent of GDP that developed countries collect (Pomeranz, 2018; IMF, 2017). Zambia, like many developing countries also possesses characteristics, and face barriers, that make it difficult to collect higher levels of revenue: economic structures are encumbered by the presence of large informal sectors; aid

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4 In our pre-analysis plan, this was Hypothesis 4.
dependence lowers tax effort; and institutional constraints emanate from weak governance structures (Besley and Persson, 2014). Furthermore, many of the traditional interventions—increasing tax capacity and digitization of tax records—that could increase revenue collection in these contexts, often require high capital outlays and institutional environments that these countries do not possess (Ahmed et al. 2012). The absence of strong institutions, and limited capacity, amplify the importance of understanding whether leveraging inventions that engage social dimensions can be effective in raising revenue in these countries. Many of the interventions that involve social dimensions tend to be lower cost than mechanisms of enforcement and have been found to be effective in raising compliance even in environments with weak institutions (Luttmer and Singhal; 2014). Tax morale has also been found to vary across countries, tax types and even within countries (Luttmer and Singhal 2014). With most studies focusing on developed countries, our study provides country specific findings for Zambia which will feed into policy debates.

In the Zambian tax system, enterprises that fit the description of an MSME\(^5\) are classified as small taxpayers and regarded as being in the informal sector.\(^6\) One of the defining features of the informal sector are the low levels of tax compliance among enterprises who choose to locate there although this view is now being reconsidered as informal sector workers have been found to be paying a number of users fees and taxes (Resnick, 2018).

The taxation of MSMEs in Zambia has undergone a number of transitions over the years. The most significant attempt to reform the taxation of the MSME sector took place in 2004 with the creation of a presumptive tax regime designed for the sector. Prior to 2004, MSMEs in Zambia were taxed in the same way as all other enterprises through a profit-based tax system. Through this system, three presumptive taxes targeted at the informal sector exist. A turnover tax of four percent on gross sales for MSMEs with an annual turnover of less than K800,000.00 (~US$80,000), a daily base tax levied on market traders that translates into K150 (~US$15) annually, as well as a presumptive tax on public service transport operators which is based on the sitting capacity of the vehicle (Nhekairo, 2014, Resnick, 2018). The introduction of these presumptive taxes was meant to create a nursery environment in which MSMEs would grow into larger firms that could then be mainstreamed into the normal profit-based tax system (Nhekairo, 2014). Other reforms over the years include the creation of a specific tax office to address the needs of small taxpayers, the introduction of an online payment and filing system and most recently the use of business associations to first register MSMEs and then potentially collect revenue in central locations where these MSMEs are concentrated (Lusaka Times, 2018).

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\(^5\) The terms MSME and SME are used in an interchangeable way and generally refer to the same type of enterprises. A universal definition of MSMEs does not exist, and attempts to define MSMEs have been largely unsuccessful, due to vast differences in country contexts with various factors such as business culture, country’s population, industry and the level of international economic integration (Kushnir, 2010). The most credible attempt at providing a definition comes from (Gibson & van der Vaart, 2008) who define an SME in the context of a developing country as, ‘… a formal enterprise with annual turnover, in U.S. dollar terms, of between 10 and 1000 times the mean per capita gross national income, at purchasing power parity, of the country in which it operates.’

\(^6\) The definition of the informal sector is a contested one. Some argue that the payment of tax qualifies a firm to be considered formal. However, the term informal sector is generally used to make a distinction between firms that started out informal and later formalised and firms that carry out some of their operations in an informal way.
Theoretical Population

This study focuses on Medium, Small and Micro Enterprises (MSMEs) in two provincial centers in Zambia. MSMEs dominate the firm landscape in the majority of developing countries and the size of the sector is large and growing in importance as a source revenue and job creation (Webb et al., 2013). In Zambia, a recent census of firms estimated the number of MSMEs in Lusaka, the nation’s capital at 47,428 firms (Ashraf et al., 2017). Beyond size, the sector is responsible for the employment of a large segment of the labor force, with two-thirds of the workforce in Zambia located in the informal MSME sector (CSO, 2017).

Project Background

This project is a result of a dynamic and growing partnership between the Zambia Revenue Authority (ZRA), the International Growth Center (IGC), and the research team. It arose out of initial interest by the ZRA to understand the potential uptake of mobile tax payment solutions amongst MSMEs in Zambia. The research team broadened the study design to look into the various barriers to tax compliance that MSMEs face with the aim of better understanding the tax behavior of MSMEs in Zambia and possibly providing insights applicable in other sub-Saharan African countries. In keeping with the IGC’s model of cogeneration of knowledge, the research team worked in close partnership with ZRA counterparts in the Department of Research and Policy to produce findings rooted in evidence and targeted at improving policy design and implementation.

Research Design

We test our hypotheses regarding the social drivers of tax compliance using a conjoint experiment embedded in a survey conducted among approximately 1400 MSME owners in Zambia in mid-2018.

Sampling Strategy

We employed a three-stage sampling strategy to sample MSMEs. First, after discussions with ZRA, we purposively selected two commercially active provinces within Zambia: Central and Lusaka. Then, with the assistance of the local council authorities in these provinces, we compiled a list of markets in the metropolitan areas of Lusaka, Kabwe, and Kapiri Mposhi, the primary cities in Central and Lusaka provinces. We draw a stratified random sample of markets off of this list, removing the markets selected for the pilot and stratifying on market size. A replacement list of markets provides additional sampling locations; in the event the sampled markets are inactive or smaller than anticipated. The sample includes 41 markets in Lusaka, 7 markets in Kabwe, and 4 markets in Kapiri Mposhi.

At each sampled market, the research manager completes a random walk protocol to randomly assign a team of three enumerators to survey throughout the market and surrounding businesses. The three enumerators also employ a random walk protocol to sample individual respondents dispersed throughout their enumeration area. The sampling protocol results in an average of 23 respondents per market and 1390 respondents in the sample in total. The survey also sampled businesses in the central business districts of these towns. Within MSMEs, the survey was aimed at collecting data from two sub-groups: MSMEs owners and providers of transport services – taxi and bus operators who provide services to the public.
We assert that the sampling strategy generally yielded a representative sample of MSMEs in Lusaka and Central provinces (though of course we lack the data on MSMEs that would be required to formally test this assumption). It is important to note that MSMEs in other provinces likely differ from the survey sample in critical ways.

Survey Instrument

The data collection tool that we employed was a survey containing questions on five key sections: general demographic data, socioeconomic factors, business information, tax compliance measures, political participation and attitudes, and reliance on services. It also explored many of the oft-cited barriers to tax compliance, such as low rates of monitoring and enforcement of the tax law. A list experiment provides a measure of tax compliance less prone to social desirability bias than direct questions.

Data Collection

Data collection took place during the months of April and May 2018 in Lusaka and Central Province. The data collection team was compromised of a lead enumerator, 3 senior enumerators and 8 enumerators. Two of the eight enumerators were interns from the Zambia Revenue Authority. This was a mutually beneficial arrangement with the addition of the interns to the data collection team increasing the number of data collectors and enabled us to collect more data. The interns in turn got an opportunity to participate in a survey and acquire data collection skills. The team was divided into four individual teams who were assigned separate and distinct markets from which to collect data. One of the four teams conducted the survey in Central Province and covered the two towns of Kapiri Mposhi and Kabwe.

One of the major challenges encountered when conducting the study was the recruitment of respondents for one of the sub-groups: public bus operators and taxi owners. The public bus operators were difficult to access due to the heavy politicization of bus stations in Zambia where these operators predominantly operate from. Consequently, they were dropped out of the sample. While it was possible to recruit taxi operators, the challenge that arose was that some of the taxi operators were unable to commit to the 45-minute survey due to the nature of their business, which requires them to drive off unexpectedly when they source a client. This challenge was addressed with the enumerators being strategic in targeting the taxi operators during off-peak hours or pre-scheduling interviews.

Some alteration also had to be made to the initial design as we had intended to sample 25 market hubs in Zambia but ended up sampling 52 hubs partially due to some of the sampling sites being too small for the effective implementation of the sampling protocol to be carried out fully. Data collection also had to be extended by four days due to the length of the survey instrument. The extra four days enabled the research team to collect the required number of surveys. Some sampling sites also had to be dropped due to refused entry by political operatives who were uncomfortable with the survey being conducted. This issue was addressed by drawing a replacement site off of the replacement sampling list.

Conjoint Experiment
A conjoint experiment provides a test of our hypotheses. In our conjoint experiment, we provided information about a pair of hypothetical business tax situations, and randomly varied four traits of these situations. The text for the experiment was as follows:

Now we are going to ask your opinion about business taxes. We will show you two pairs of hypothetical business tax situations. Please remember that these are situations that we have made up, not proposals that your representatives have made or real scenarios. For each pair of tax situations, we will ask you to pick the situation you would most support, and the situation in which you would be most likely to pay your business taxes. There are no right or wrong answers.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value A</th>
<th>Value B</th>
<th>Value C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability of Audit (Control Variable)</td>
<td>Approximately half of businesses will be audited every year.</td>
<td>Approximately one quarter of businesses will be audited every year.</td>
<td>Very few businesses will be audited every year.</td>
</tr>
<tr>
<td>Tax Paying Norms (H1)</td>
<td>Members of the business community look down on those who do not pay as they should</td>
<td>Members of the business community respect each business’ decision regarding whether or not to pay</td>
<td></td>
</tr>
<tr>
<td>Tax Paying Collective (H2)</td>
<td>Businesses will pay taxes directly to ZRA</td>
<td>Businesses will pay fees and taxes to a business association in their area, who will pass on the taxes to ZRA.</td>
<td></td>
</tr>
<tr>
<td>Tax Paying Reputation (H3)</td>
<td>Other small businesses will find out whether or not a business pays its taxes and fees</td>
<td>Tax and fee paying is confidential</td>
<td></td>
</tr>
</tbody>
</table>

After learning about the two hypothetical business tax situations, the respondent answered the following two questions, in randomized order:

For which of these two plans would you be most likely to pay your business taxes?
   a. Plan A
   b. Plan B

Which of these two plans would you most support being introduced?
   a. Plan A
   b. Plan B

These two questions provide the primary outcome variables for our analysis.
We analyze the conjoint experiment following Hainmueller, Hangartner, and Yamamoto’s (2015) approach to non-parametrically estimate the effects of each conjoint dimension, simultaneously testing the three hypotheses depicted above. We also conduct unplanned exploratory analyses to test for interactions between main effects. We fit four linear regressions. First, we fit two main effects models; model 1 includes dummies for both the 25 per cent and “very few” audit treatments, while model 2 collapses these two categories into a low audit probability dummy. Model 3 extend model 2 and includes all interactions between main effects. Model 4 extends model 2 by adding the two-way interaction between taxpaying norms and reputation. All models include fixed effects for participant and we cluster standard errors on participants.

Results

Figure 1. Conjoint Experiment Results

Figure 1 plots coefficients for each of the four regression models that we used to examine our conjoint experiment. Models 1 and 2 speak directly to our hypotheses. Specifically, contrary to hypothesis 1, the coefficient for high tax-paying norms is positive and statistically significant, meaning that tax compliance and support is higher in situations in which members of the business community respect.

7 We analyze the results of the probability of audit dimension in a separate paper. Per our pre-specified analysis approach, we control for treatment condition on this dimension in all analyses presented here.
each business’ decision whether or not to pay. In other words, participants are about 19 per cent more likely to anticipate paying their taxes in situations where norms are absent.

Contra hypothesis 2, participants are about 15 per cent less likely to anticipate paying taxes when a business association provides collection services. While hypothesis 3 suggests that MSME operators should be more likely to expect to pay their taxes when non-compliance would be common knowledge within the business community, the coefficient for reputation is statistically insignificant and close to zero; participants anticipate little difference in their tax-paying behavior regardless of whether or not that behavior would become public.

Model 3 finds no evidence for interaction effects in a fully saturated model. Model 4 examines the possibility that reputation effects are conditional on taxpaying norms. In particular, we might expect that reputation effects would only obtain where tax-paying norms are strong, and we might not find a positive effect in our sample because of the weakness of existing taxpaying norms among Zambian MSME operators. While the coefficient on the interaction between reputation and norms is positive in model 4, it fails to reach statistical significance, implying that the reputation effect is invariant to norms, at least in anticipation.

Discussion
Follow up qualitative interviews were carried out in December 2018 and January and May 2019 to better understand the findings from the quantitative results. Twenty post survey qualitative interviews were conducted in three markets in Lusaka – Matero, Chilenje and Mandevu markets. These interviews were conducted with business operators similar to those who participated in the survey. Two of the interviews were conducted with two business association leaders. The President of the Zambia National Marketeers and Credit Association (ZANAMACA) and the Secretary General of the Zambia Cross Border Traders Association.

Hypothesis One
Our results present an interesting picture of the state of social norms among small business owners in Zambia. Specifically, contrary to Hypothesis 1, the coefficient for social norms is positive and statistically significant, meaning that tax compliance and support is higher in situations in which members of the business community respect each business’ decision whether or not to pay. In other words, we find that participants are about 19 per cent more likely to anticipate paying their taxes in situations where norms are absent.

Though this is a post hoc explanation, we believe that the casual mechanism for this result is through a social norm of noncompliance that exists among these small business owners. We follow the view by Alm et al. (1999) that an individual will comply if they believe that compliance is a social norm and if noncompliance is pervasive then the social norm of compliance disappears. In this case, noncompliance has become a pattern of behavior that is judged as not only acceptable but also rational and laudable by the majority of respondents. The collective view seems to be that business profitability among small businesses is low, so each business’ decision to pay taxes should be respected, even (or perhaps especially) in the presence of pressure to pay taxes from those outside the community. In essence, some of these informal sector vendors view themselves as survivalist and poverty-driven, and believe they should be allowed to comply with taxes when they decide that they are capable of doing so. They therefore anticipate that their compliance levels will go up at some point when business profitability rises. The lack of embarrassment in other business owners finding out about their non-compliance implies that this notion is widespread and respondents know that many of their fellow
business owners do not pay taxes and therefore would not judge them for making that choice (more on this in the discussion of Hypothesis 3).

We deduce this from both descriptive survey questions and in qualitative interviews. From the survey, over 63 percent of respondents identified the most significant personal barrier to paying taxes as low business profitability (or something closely related to that issue). The next most common choice was that taxes were too high (20.5 percent). Together, these account for over 80 percent of the sample. The majority of respondents further identified business income as their sole source of income with 64 percent reporting that this income falls below the tax-free threshold of K3, 300.00 that formal sector employees enjoy. This is a relatively low income, which in the formal economy is treated as tax exempt.

The descriptive measures in our survey further argument this finding with results that suggest that social norms supporting compliance may be very weak. For instance, we find that 54.4 percent of respondents indicated that other businesses not paying their taxes did not reduce their willingness to pay taxes; and 52.9 percent disagreed that they find it difficult to pay taxes because competitors evade their own. The majority (58.4 percent) also strongly disagreed with the idea that they pay taxes to ZRA to avoid embarrassment from admitting tax evasion to other business owners. During qualitative interviews, low profitability was highlighted as a reason why many businesses do not pay their taxes. This can be seen by the response from several respondents to the question, ‘How does the community in the market feel about people who don’t pay their business taxes? Why do you think this is so?’ One respondent stated, ‘Nothing. Everyone knows that business is slow.’ Another in response to the same question stated, ‘They sympathize with them because business is not that good these days.’ When asked what would the other businesses think of you if you do not pay? Respondents echoed similar sentiments with one respondent indicating, ‘They would understand because business is too slow in this market.’ One respondent put it aptly, ‘Small business owners actually believe that the Zambia Revenue Authority (ZRA) should stay away from markets as we don’t make much to be able to pay them.’

What is interesting is that respondents anticipate that they are more likely to pay their taxes in the absence of norms. Since currently norms are absent and compliance is low, the reasons why these businesses anticipate higher compliance when they are currently not practicing it is important. What is the threshold of profitability that they believe needs to be attained for them to comply? Is this threshold universally agreed upon by all of them? Will the norm of noncompliance disappear once that threshold is reached? Will businesses then become disapproving of those who are noncompliant? These are important questions that warrant further research.

Hypothesis 2

Our results represent some of the first findings on the proposition of a social organization collecting revenue on behalf of the state in a developing country in sub-Saharan Africa. Contra to Hypothesis 2 we find that small businesses do not support the idea of a business association from their community.

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8 To perform this calculation, we removed the responses “other” and “none,” as this could mean any number of unclear reasons.
9 Qualitative interview 7
10 Qualitative interview 3 (latest set of interviews)
collecting tax from them on behalf of the government. Participants are about 15 per cent less likely to anticipate paying taxes when a business association provides collection services. A key factor influencing this result seems to be that the majority of small business owners are not part of any business association in the first place. We find that 91 percent of respondents do not belong to any association. It may carry that they therefore feel resistance to any social group carrying out the mandate of collecting tax on behalf of the government.

The lack of organization representation and affiliation however may not fully account for why small business owners are not in support of a business association playing this role. Another contributing factor seems to be a lack of trust in business association leaders in these communities. It is interesting to note that of the 9 percent of respondents who were members of a business association, 36.7 percent of them had held a leadership position. In other words, most respondents are not members of business associations, but just over a third of those who were have had some leadership role. During qualitative interviews, we found participants expressed strong concerns about transparency and accountability concerning business associations especially around the leaders of these organizations. Some MSME operators shared past experiences where association leaders had mismanaged contributions they had made to the business association. To quote one respondent who was asked if they would like a business association from the market made up of market traders to collect taxes on behalf of government, “Not at all as most of the marketeers here are unlearned. Besides, marketeers don’t make enough money to start paying taxes and marketeers are crooked, they cannot be trusted with collecting taxes.”11 This respondent highlights concerns around the competency levels of those managing these organizations. Another respondent expressed similar sentiments, ‘…some associations do come to the market and they organize meetings and marketeers are sometimes made to make monetary contributions, but these usually come to nothing at the end as the people who bring such associations tend to disappear in the end. There was an association that once came to the market and made promises of empowering women, they only ended up empowering just a few women, marketeers made monetary contributions and then the association disappeared’.12 Another respondent related another incident regarding a group in the market that was appointed by marketeers, ‘We already have issues with the payment of electricity bills in the market. There is a group of marketeers that has been put in charge of this task, marketeers contribute monthly for electricity, but the ZESCO units (electricity units) bought usually finish before the end of the month and we have black-outs every now and then.’13

The social norm of noncompliance as discussed above regarding Hypothesis 1 may also be partially responsible for the reluctance to have a social organization collect tax. We asked respondents about the likelihood of paying taxes to ZRA if the money was collected by another agency. Specifically, we asked, “Would you be more willing to pay business taxes if the money was collected by another agency? The alternative listed agencies were the City Council, a Market Cooperative, a Market Committee, the Road Safety and Transport Agency (RSTA) and the Zambia National Market and Credit Association (ZANAMACA). The only organization that a majority of respondents indicated a willingness to pay to is the Council with 35.5 percent of respondents much more willing to pay to the council. For the rest of the organizations the majority of respondents

11 Qualitative interview 4
12 Qualitative interview 1
13 Qualitative interview 7
indicated that they would be much less willing to pay if any of the other agencies provided the service. The business association option-ZANAMACA- led to the greatest resistance with 74 percent less willing. The willingness to have the Council provide collection services may be linked to the fact that it is the agency that provides the public services in these markets- waste collection; market maintenance etc. Respondents are better able to make a connection between their taxes and public service delivery. The reluctance to have any organization collect tax coincides with the findings under hypothesis 1 of the absence of tax paying norms in this community. More overarching, it might be that the issue is not really the organization collecting the taxes that is the problem but the notion among business owners that they will pay taxes when they decide to do so regardless of who collects them. This finding would however require further investigation.

**Hypothesis 3**

Under Hypothesis 3, we find that there is likely to be no discernable effect of revealing the tax compliance behavior of small businesses to other firms in their social network. Participants anticipate little difference in their tax-paying behavior regardless of whether or not that behavior would become public. In the literature, the effectiveness of social recognition is closely related to a firm’s perception of the compliance levels of other firms. In our survey, we find that respondents believe that between 30% and 40% of business owners pay their taxes in full, that between 10% and 20% pay their taxes in part, and that nearly 50% do not pay taxes at all. The typical firm perceives a compliance rate as low as 30 percent, which is what we find as the average level of compliance in the sample using a variety of measures. Business owners’ awareness of the low level of compliance in their area might explain why publicizing tax compliance behavior may be having no effect.

The lack of any effect due to social pressure may be closely related to the finding under Hypothesis 1 of the prevalence of a norm of noncompliance. Under Hypothesis 1, firms indicate that they will increase compliance when other businesses respect other businesses’ decision to pay taxes. The publicizing of information on a firm’s compliance to peers would therefore likely have a limited effect on compliance due to the absence of norms. There is little perceived social risk if information on a firm’s tax behavior is publicized as firms would prefer that every business’s decision be respected. We test this in model 4 to examine the possibility that reputation effects are conditional on taxpaying norms. In particular, we might expect that reputation effects would only obtain where tax-paying norms are strong, and we might not find a positive effect in our sample because of the weakness of existing taxpaying norms among Zambian MSME operators. While the coefficient on the interaction between reputation and norms is positive in model 4, it fails to reach statistical significance, implying that the reputation effect is invariant to norms, at least in anticipation.

**Conclusion**

In this study, we have analyzed the important role of social dimensions, specifically social norms, the use of a social organization and publicizing the compliance behavior of a firm- in affecting anticipated tax compliance among small businesses in Zambia. The results from the first hypothesis that anticipated compliance would be higher in an environment where social norms are absent is an intriguing one. Especially as it is contrary to the dominate view in the literature that anticipates low

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14 Note about the measures used to arrive at the 30 percent compliance rate.
compliance where norms are absent. While qualitative interviews point to a pervasive norm of noncompliance due to small businesses anticipating weak compliance due to low business profitability it is an important finding that warrants further research. Particularly to better understand why there is a norm of noncompliance and whether it can be shifted through policy prescriptions. Our other finding that a social organization collecting taxes on behalf of the government leads to a reduction in anticipated compliance further arguments the importance of understanding the drivers of compliance among informal MSMEs in sub-Saharan Africa and which collecting agents are best suited to collecting revenue.
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