



# State of the Fiscal Contract in Lagos' Informal Settlements

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## Abstract

Governments often have contentious relationships with residents of urban informal settlements. Motivated by the desire for rents and dreams of becoming the next luxury destination, city governments worldwide have forcefully evicted and demolished informal communities in this pursuit. In such instances it would seem that the state has broken the social contract with its most vulnerable citizens. How do citizens respond? We might expect them to reciprocate in kind, by withholding taxes owed to the government. Using a survey of citizens living in informal settlements across Lagos State in Nigeria, we explore what predicts citizens' willingness to comply with government taxation. In this unlikely context for voluntary compliance, we observe that a third of respondents pay taxes and a majority are willing to pay absent enforcement. We find minimal support for standard theories of tax payment — trust in or reciprocity toward the government, or identification with the nation. Instead, we find that willingness to pay taxes is correlated with group membership, believing that community members respect taxpayers, and donating to the community. Our data suggest that local institutions and social relations are associated with citizens' willingness to comply with tax policy.

**Keywords** Taxation · Informal settlements · Social contract · Lagos · Nigeria

## Introduction

The social contract between citizens and the state is considered to be rooted in a *fiscal* contract. In this implicit agreement, citizens pay taxes to the state that — in exchange — provides public goods such as security, education, and healthcare (Levi 1988; Tilly 1990). But what happens when the state neglects its responsibility to

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citizens and fails to provide these goods? Do citizens uphold their end of the agreement by paying taxes? This paper examines how individuals' attitudes and expectations, as well as community dynamics, influence citizens' willingness to comply with taxation policy. Answering these questions not only informs academic theories of state building and political engagement, but is also essential for effective policy making.

We consider these questions in the context of informal settlements in Lagos, Nigeria.<sup>1</sup> Cities are both socially and institutionally complex. While Lagos — the most populous city in Africa — has made great improvements in infrastructure and service delivery over the last few decades, vast inequalities remain (De Gramont 2015). These structural factors can have important implications for citizen-state relations. While there have been innovative attempts to understand claim making and service delivery, comparatively little research has considered the state's attempts to extract resources from citizens living in informal settlements and citizens' willingness to comply (Auerbach et al. 2018). Using data from a survey of 502 respondents across 42 informal settlements in Lagos, we examine whether these often neglected — and sometimes actively victimized — citizens pay taxes. Further, we investigate what predicts citizens' willingness to comply with tax policies and examine variation across and within these communities.

To date, most of the empirical evidence supporting the fiscal contract theory prediction — that citizens will withhold taxes in order to bargain with the state for their preferred policies (Levi 1988) — comes from wealthy citizens in wealthy countries (Meagher 2018). Here, it is assumed that tax compliance is “quasi-voluntary” and citizens have the opportunity to bargain with the state. Knowledge of citizen tax paying behavior and attitudes in developing democracies is limited due to challenges of reaching populations of interest and comprehensive administrative data on taxation only rarely available to researchers. Using data from an important, yet understudied, empirical case, we evaluate existing theories of tax payment and generate new hypotheses related to why some of the poorest and most marginalized citizens in the city are willing to pay taxes to the government.

We find that while many respondents do, in fact, pay taxes, reciprocity toward the state does not fully explain this decision. Moving beyond popular theories of reciprocity, government performance, and national identification, we examine whether expectations of esteem from peers for paying taxes, group membership, and care for one's community are associated with attitudes toward taxes and behavior. Our analysis suggests that additional attention should be paid to the *social* motives of tax payment and more broadly how individual-community relations may play a role in this important citizen-state exchange.

Examining citizen attitudes and behaviors toward taxation also contributes to a broader understanding of citizen-state relations across a variety of policy areas

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<sup>1</sup> UN-Habitat (2015) defines an informal settlement as a neighborhood that lacks secure tenure, and is also typically cut off from formal basic services and non-compliant with building and planning regulations. However, we recognize that “informality” exists on a spectrum, and the communities in our sample fit these criteria to varying degrees.

where governments require citizen cooperation, co-production, or at a minimum compliance (Ostrom 1996). For instance, the state relies on citizen cooperation with vaccination campaigns (Grossman et al. 2018), during emergencies including natural disasters or outbreaks of disease (Tsai et al. 2019), and with police enforcement (Blair et al. 2019). Such instances requiring citizen cooperation regularly occur in cities, where interactions with the state are more frequent than in remote rural areas. Tax compliance is a particularly important policy area to investigate because it is often an important source of government revenue and simultaneously particularly challenging to enforce.

This paper contributes to the empirical literature on tax compliance and tax morale in Global South contexts, focusing specifically on the most marginalized citizens. In the context of population growth and urbanization, understanding urban citizens' preferences over tax payment is increasingly critical. Understanding how informal settlement residents in Lagos respond to deficient state service provision and predation has implications for state building, tax policy, and policy compliance in urban informal communities in cities across the globe.

## Standard Explanations of Tax Compliance

While early economic models generally explained tax compliance based on the relative costs of evasion and payment (Allingham and Sandmo 1972), “tax morale” is often used to describe all of the residual, largely intrinsic, reasons why one might be willing to voluntarily pay taxes even when the benefits of evasion outweigh the expected costs (Luttmer and Singhal 2014; Torgler 2002). Theories of tax morale and payment that are generally derived from the Global North often focus on an individual's orientation toward the state. Facets of this relationship include citizens' trust in government, the extent to which they identify with the nation, and their satisfaction with public service delivery.

The numerous contextual factors that differ between wealthier and poorer countries make it challenging, and unlikely, that theories of tax compliance based on the former can be directly applied to the latter. For instance, in the Global South state capacity is generally lower, making the link between taxation and performance more tenuous, since increased revenue may not automatically translate to improvements (Moore et al. 2018). In addition, the most salient public goods are often infrastructure-based goods targeted to particular geographic areas, rather than broader welfare policies. If the benefits of taxation are more geographically targeted — or are at least perceived to be — this potentially increases neighbors' stake in each other's tax payment behavior. Moreover, individuals' *ability* to pay is an under-explored component of compliance decision-making. Taking this constraint into account might challenge the assumed direct link between willingness to pay and actual payment.

Until relatively recently scant empirical work on tax morale had been conducted in the Global South, despite its greater importance in contexts where the state's enforcement capacity is limited. Across Africa, the evidence linking trust to tax compliance is mixed. Some studies find empirical support for the claim that those who trust the state are more likely to be willing to pay (Kouame 2019; McCulloch

et al. 2020) and others fail to find such a correlation (Ali et al. 2014). There has been more consistent support for the argument that identity matters for tax morale because a strong sense of shared national identity among citizens can help countries overcome the collective action problem of taxation (Persson 2008; Lieberman 2002). A larger body of literature focuses on citizens' satisfaction with public service provision as the root of the fiscal contract (Timmons 2004). Many studies assume that receiving state services increases citizens' willingness to pay taxes through feelings of reciprocity. Bodea and LeBas (2016) find that among urban citizens in Nigeria, positive experiences with state services are correlated with the belief that citizens are obliged to pay tax. Citizens in Kenya, Tanzania, Uganda, and South Africa who are more satisfied with public goods also have higher tax morale (Ali et al. 2014). By contrast, McCulloch et al. (2020) do not find an association between the quality of service delivery and tax morale among Nigerians.

In total, standard theories would predict that *tax payment and tax morale in informal settlements — which are characterized by informal employment, temporary housing, and a dearth of government services — will be low, given that the state has seemingly not upheld its end of the social contract.* We might expect these citizens to refuse payment in hopes of improving accountability and government responsiveness (North and Weingast 1989; Levi 1988). Also, in settings where state presence is limited, an array of non-state actors often provide important services to citizens (Cammett and MacLean 2014). The alternatives to state service delivery that these actors offer may further undermine feelings of reciprocity toward the state (Bodea and LeBas 2016). Beyond issues of service delivery, in many of these communities the state is actually endangering citizens' livelihoods and well-being by threatening (and sometimes carrying out) eviction. As a result, trust in government may be low. We might also expect that citizens are less willing to identify with a national political community from which they feel excluded (Ahlerup et al. 2017). Finally, evading enforcement may also be practically easier among these less legible populations (Scott 1985).

## Social Motivations for Tax Payment

In addition to citizens' attitudes toward and experience with the government, there may be social influences of tax payment and morale because taxes present a collective action problem for communities and societies. In a collective action problem, the group benefits from individual contributions — assuming taxes are used to provide public goods — but in places without strict enforcement, citizens may be motivated to free ride on the contributions of others. Much of the literature on the social aspect of tax compliance focuses on descriptive norms, or peoples' expectations of what other people do. For instance, scholars use messages with information about the percentage of other people who pay to try and increase compliance (Fellner et al. 2013; Kettle et al. 2016). If the connection between paying taxes and contributing to public goods in the community is clear and commonly held, then tax payment may be seen as something good citizens *should* do to contribute to the community — a prescriptive norm. Individuals may then be motivated to pay taxes

out of a desire to signal to their peers their willingness to contribute to the good of the community out of a desire to gain respect. For instance, Besley et al. (2019) develop a model of socially-enforced tax compliance that is driven by individuals' desire to have a reputation of being prosocial. Where an individual's well-being is affected by their neighbors' tax paying behavior, we might expect citizens to take an interest in their peers' tax compliance. Looking beyond the *vertical* relationship between a citizen and the state, this *horizontal* aspect of tax compliance may be particularly relevant in contexts where state enforcement is weak and community bonds are strong (D'Arcy 2011).

Fiscal exchange theories also consider the behaviors of other citizens in individuals' tax compliance behavior. For example, Levi (1988) argues that the state must not only provide services, but also ensure that *other* citizens comply so that no one is a "sucker" for paying when others do not. Willingness to pay may also depend on one's trust that other citizens will also contribute (Kouame 2019). This trust can come from confidence in the state's enforcement capacity, as Levi describes. While the state can promote compliance by ensuring that citizens who shirk are caught and punished, pressure to comply may also come directly from one's peers. Social pressure to pay taxes could derive from a variety of motivations: wanting to minimize free riding out of a desire for fairness, wanting to maximize available resources, or believing that paying taxes is a civic duty (Isbell 2017).

Much of the existing literature treats tax payment as an individual decision. Recent evidence, however, demonstrates how citizens' (non-)compliance with other government policy can be coordinated and collective (Grossman et al. 2018). Scholars similarly note how citizens' attitudes toward taxation and their compliance decisions can be influenced by their peers. Fellner et al. (2013) use a mailer intervention in Austria to provide information about the high level of tax compliance in the country. Among individuals who believed evasion to be common, the treatment had a weak positive effect on compliance, but it had a negative effect among those who believed evasion to be rare. Kettle et al. (2016) ran a similar mailer experiment in Guatemala and found that sharing the percentage of others who paid taxes increased both likelihood of payment and the average amount paid. Beyond information about how others behave, individuals may also be wary of what others think. Fear of social sanctions, such as loss of respect for non-compliance, or a desire to send a signal of one's prosociality to peers may also motivate compliance (Besley et al. 2019).<sup>2</sup>

In informal settlements in Lagos, where government neglect is highlighted by stark inequalities and a dearth of service provision, tax compliance may be more closely tied to community life and connections to peers than to attitudes about government. We examine whether individuals' decisions to pay taxes and attitudes toward tax payment are correlated with expectations of peers' attitudes toward tax payers, costly signals of prosociality, and group membership. We expect *citizens*

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<sup>2</sup> In some contexts a norm of non-compliance may exist. For instance, Pemstein et al. (2019) find — contrary to their initial expectation — that priming social norms actually decreased willingness to pay taxes among small businesses in Zambia. They hypothesize that this is because of low business profitability, which justifies non-payment. We might expect a similar situation in informal settlements.

*will be more likely to pay taxes and have higher tax morale when they believe other community members respect taxpayers. We also expect donating to the community will be positively correlated with tax morale and payment. Finally, we anticipate that individuals who are members of local community groups will be more likely to pay, perhaps due to stronger kinship ties and norms (De Weerd and Fafchamps 2011) or because these groups engage in enforcement of tax payment (Auerbach 2017; Auerbach et al. 2018).*

## Research Setting

With an estimated population of over 20 million, Lagos, Nigeria, is a complex ecosystem of citizen-state interactions. Informal settlements in Lagos are an important place to study tax compliance for several reasons. First, the Lagos State Government has recently made a concerted effort to increase their tax extraction capacity. This is, at least in part, because of the Lagos State Government's ambition to build a model megacity — the Dubai of Africa (De Gramont 2015). Given both the rapid population pressures and these grand development aspirations, the government will increasingly need a sustainable revenue stream via tax collection. Informal settlements are typically considered to be, by definition, beyond the scope of government regulation or taxation but have not avoided the Lagos State Government's expansion of the tax regime.

The tax system in Nigeria largely fell apart after the discovery of oil in the 1970s. There is, however, sub-national variation in tax collection given the federal system. In 2018, Lagos State had an Internally Generated Revenue (IGR) of 382 Billion NGN and a Federal allocation of 119 billion NGN, making IGR approximately 76% of Lagos' total revenue. Lagos is one of only two states in Nigeria where IGR exceeds the federal allocation and stands out as an example for other states looking to improve their financial sustainability (BudgIT 2019).

Over the last few decades, Lagos State has invested heavily in widespread tax reforms to generate the revenue necessary to support its large and rapidly-growing population. The push to expand tax collection has included improved enforcement as well as efforts to engender voluntary tax compliance from Lagosians. Most of Lagos State's overall tax revenue comes from Personal Income Tax, primarily via tax withholding from formal sector employees (De Gramont 2015), however the government is also actively working to improve and expand property tax collection (Goodfellow and Owen 2020).

Second, Lagos presents a good case to examine these questions because it exemplifies many counter pressures cities across the globe face, such as the desire for development, mounting inequality, and extreme poverty within its boundaries. In particular, this study focuses on tax payment in informal settlements in Lagos because of the contentious relationship these communities often have with the state and because they appear to be the least-likely cases for the social contract to be upheld. While often characterized by a dearth of public service delivery, informal settlements in Lagos also exist in a setting of high uncertainty and fear of state intervention.

In October of 2016, Lagos State Governor Akinwunmi Ambode issued a statement that all “illegal” structures on the waterfronts in Lagos should be vacated.<sup>3</sup> In 2017, an estimated 30,000 residents of the Otodo-Gbame community were left homeless, in an eviction that drew international attention. A luxury estate is now being built where the community was once settled (Amnesty International 2017). In this context, where the state has demonstrated its coercive capacity to citizens but may have lost its basis of trust and legitimacy in the process, we seek to understand whether these citizens comply with taxation policy or not, and why.

This study focuses specifically on property tax payments, which despite being underutilized in many countries is typically considered an equitable form of taxation and a stable source of funding, particularly for sub-national governments (Franzsen and McCluskey 2017). Relative to income tax, property tax can be more easily assessed among unbanked citizens and those in the informal sector, which describes a large proportion of the Lagos population (Bolarinwa et al. 2018).

Property taxes in Lagos take the form of the Land Use Charge (LUC), which was introduced in 2001 and is a consolidation of several prior taxes and fees related to property. It replaced ground rent, previously paid by property owners to the State government, as well as the tenement rate, which was paid by occupants to the local government. LUC is charged annually and is administered by the Lagos State Ministry of Finance. Demand notices for payment are delivered to enumerated properties, in an envelope stuck to the gate or door, and can be paid either online or in-person at a bank or designated government office. Given the generally strained citizen-state relations in informal settlements in Lagos, they are an important context to examine tax policy compliance and tax morale.

## Research Design

### Survey Sampling

To answer our research questions our team of eight research assistants conducted a survey of 502 residents living in 42 informal settlements in Lagos. To create a sampling frame of informal settlements across Lagos State, we worked closely with the Justice and Empowerment Initiatives (JEI) and the Nigerian Slum/Informal Settlement Federation who provided a list of informal settlements. This list included communities that had participated in at least one of the Federation’s programs: community profiling or savings groups.<sup>4</sup> Some of these communities were identified for outreach by the Federation using Open Street Map, based on having the characteristics of a typical informal community, such as lack of planned streets. Others were identified via word of mouth; as the network of Federation volunteers (who are all community members themselves) grew, they referred other communities similar to

<sup>3</sup> <https://twitter.com/AkinwunmiAmbode/status/785150503864954881>

<sup>4</sup> Community profiling involves recording the history and some basic details of a community, including their most urgent needs. Savings groups, in which individuals pool funds, may involve just a few people in a community.



their own. JEI and the Federation primarily work with communities based on need, either on the basis of tenure security or public service delivery. We randomly sampled 42 communities from this list, stratifying by LGA and whether they had been profiled.<sup>5</sup>

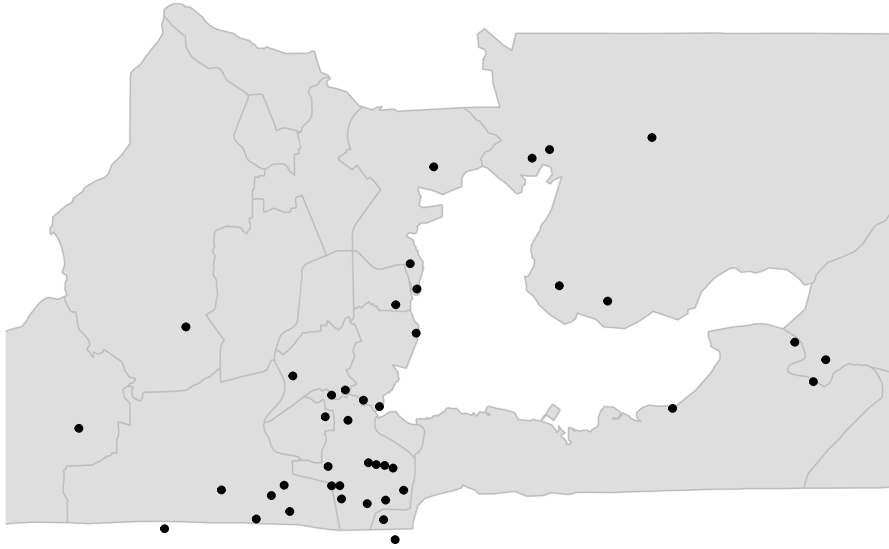
Although we would ideally sample from the population of *all* informal settlements in Lagos, to our knowledge no such comprehensive list exists and creating one was outside the scope of this project. Here we consider how our sample might differ from the broader population of interest. First, there is a possibility that these areas are more likely to be community-oriented given their activities with JEI and the Federation. However, the nature and level of individuals' involvement with the organizations varied. For instance, in a community with just one savings group of a few people, it is possible that JEI had minimal interaction with the broader community. In fact, 70% of our sample said they were unaware of the presence of Federation savings groups and only 11% were members of such a group. Community profiling, on the other hand, is a more involved process that requires broader community and leader buy-in. Some communities on the list had completed that process and others were still in the very early stages. In short, not all communities on the list necessarily had a very large NGO presence. Second, given the advocacy goals of the organizations, the communities targeted are potentially more likely to have been under threat of eviction by the government. Such threats could theoretically either unite or divide communities. While we cannot bring statistics to the question of how representative our sample is of the population of informal settlements across Lagos State, we believe the results are still worth considering as an initial insight into some of these hard to reach communities.

Our sampled communities come from 13 of the 20 local government areas (LGAs) across Lagos State and many lie along the waterfront (see Fig. 1). While all of these communities were categorized as “informal” by JEI, they vary in the level of informality on a range of characteristics. Most of the informal settlements in Lagos are categorized by a lack of public services, unplanned roads, as well as challenges of flooding and trash. On average the local leaders estimated that 58% of households in our 42 communities are connected to the electrical grid. However, this masks variation between communities — in 36% of communities the leader estimates that not even a single household is connected to the grid. In terms of access to other state services, in 73% of communities there is no public health facility and in 51% of communities there is no public school. 33% of communities do not have access to any government service within the community (health, school, or water). The biggest challenges facing these communities, according to our respondents, are water, roads, and electricity.

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<sup>5</sup> We excluded communities that were too small to produce a sample of 12 people, those that had already been demolished, and those for which we had concerns about safety or access. When we added replacement communities we prioritized places under threat of eviction and those that gave us the most geographic diversity across LGAs.





**Fig. 1** Map of (jittered) sampled informal settlement communities in Lagos

To randomly sample individuals from across the entire community, we worked with local community leaders to map the community. Given the lack of existing sampling frames or reliable micro-level census data from these communities, we relied on local leaders to help identify the boundary of the community. Our research assistants started at different points along the community boundary and used a random walk technique to randomly sample households, and individuals within each household, alternating between selecting male and female respondents to ensure gender balance, as they walked toward the center of the community. Using the random walk technique that selected the  $n$ th structure, with  $n$  based on the size of the community, we obtained 12 randomly selected respondents in each community.<sup>6</sup> Table 1 presents descriptive characteristics of our sample alongside the sample of respondents surveyed by the Afrobarometer in Lagos in 2017, for comparison.

Unsurprisingly—given our target population of interest and sampling frame—our sample is less educated and poorer than the Lagos sample from Afrobarometer. According to community leaders, the average daily wage for women in our communities is estimated to be 2413 NGN (~\$7) and 6055 NGN (~\$17) for men. The two main occupations in our sample communities are hawker/trader and fisherman. In our sample, a majority of respondents are Christian (73%). Though megacities like

<sup>6</sup> In three communities we under-sampled due to their small size ( $N = 3, 7, 9$ ). To compensate and reach our overall target sample size, we slightly over-sampled in five other randomly-chosen communities ( $N = 13, 14, 16, 16, 16$ ).

**Table 1** Survey sample descriptives compared to Lagos sample from Afrobarometer Round 7

	Our Sample	Afrobarometer Lagos
Female	50%	50%
Age (mean)	40	33
Support APC	31%	16%
Support PDP	14%	5%
No political party	55%	78%
<i>Religion</i>		
Christian	73%	65%
Muslim	26%	35%
<i>Ethnic Group</i>		
Yoruba	53%	71%
Egun	29%	0%
Other	19%	29%
<i>Education</i>		
None/less than primary	29%	2%
Primary completed	20%	17%
Secondary completed	42%	37%
Post-secondary	10%	45%
<i>Poverty</i>		
“Never” gone without food	19%	49%
“Never” gone without water	35%	64%
“Never” gone without cash income	10%	26%

Lagos are often thought of as housing many migrants, the majority of respondents in our sample (61%) were born in Lagos, and many (21%) were born in the community in which they currently live.

## Interview Data

In addition to the survey data collected in July–August 2018, the paper also draws on qualitative interview data. Interviews were conducted by the authors and trained research assistants in several informal settlements in Lagos between January 16, 2018, and November 20, 2018. The goal of earlier interviews was to inform the design of questions included in the quantitative survey. Interviews conducted after the survey were organized to help interpret and explore themes uncovered from the survey. Respondents were sampled using random walk and snowball sampling techniques, were 18 years or older and residents of informal settlements. Table 8 in the Online Appendix lists the interviews referenced throughout the paper.

## Measurement

### Dependent Variables: Tax Payment and Morale

To date, studies of taxation usually focus on one of two outcomes — actual tax payment or general willingness or sense of obligation to pay taxes, known as “tax morale.” While most scholars and policymakers are ultimately interested in the former, it is difficult to actually observe tax paying behavior. In addition to greater ease of measurement, tax morale is also important to understand in its own right. Even the most high-capacity states are unable to perfectly enforce compliance and rely on some level of voluntary compliance. Furthermore, understanding stated willingness to pay taxes absent enforcement can help policy makers understand which people and areas to focus their collection efforts. This study focuses on both payment (compliance) and morale.

To examine tax compliance in the survey, we asked citizens whether or not they paid different types of taxes. We asked about Land Use Charge, tenement rate,<sup>7</sup> personal income tax, radio and TV tax, and, for those with small businesses, shop taxes. For the reasons described above, we focus on property tax payments. Property taxes are especially important because they tend to be both progressive and typically more closely linked to local service delivery than other types of taxes, since they are more often collected and spent at a sub-national level (Moore et al. 2018). We combine those who pay tenement rate and/or LUC into one measure that takes on a value of 1 for those who report paying either or both and 0 otherwise.

As with all studies of tax payment that rely on self-reported measures, we must consider reporting bias. Since not paying taxes is illegal, respondents may be hesitant to admit to a stranger that they did not pay.<sup>8</sup> The main concern for our findings would be if there is a correlation between wrongly claiming to the enumerator that you have paid and being more community-minded. Unfortunately we have no way to test this. However, we believe that people would be most motivated to falsely claim that they pay taxes if they believed that our enumerators were from the government. At the end of the survey, we asked respondents to indicate who they think sent our enumerators to conduct the interview. Among those who thought the survey was

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<sup>7</sup> Although the Land Use Charge technically replaced the tenement rate, there are two reasons respondents might still report paying it. First, some may still refer to what is now called LUC as the tenement rate, out of habit. Second, local governments could continue to collect outstanding amounts. Among those who reported paying tenement rate ( $N = 31$ ), about 2/3 also reported paying LUC.

<sup>8</sup> While we attempted to sidestep this concern and verify self-reported claims by recording pictures of respondents' payment receipts to verify their self-reported claims, unfortunately this effort largely failed. Among those who reported paying either Land Use Charge or Tenement Rate, 28% were not asked our battery of follow-up questions, including about the receipt, due to a survey error. Among those who were asked this battery, 77% reported receiving a receipt. Since payers should theoretically be receiving receipts, the fact that approximately 20% did not receive a receipt could point to the occurrence of unofficial payments to Land Use Charge or local government officials, or mismanagement or lack of capacity of the respective offices. Finally, only four people who reported receiving a receipt consented to show their receipt to our enumerator, and only one person was willing to allow our enumerator to record a picture of it on the survey tablet. Since we prioritized our respondents feeling secure, enumerators did not push people who were unwilling to show their receipts.

being conducted by the government ( $N = 92$ ) there is not a substantive nor statistically significant difference in either reported tax payment or tax morale relative to those who did *not* think that the government was conducting the study. Further, the fact that a majority of our respondents (68.7%) willingly reported paying *none* of the taxes we asked about, only one person answered that they “don’t know” whether they paid any taxes, and no respondents refused to answer the tax payment question lessens the concern about widespread social desirability bias. Also noteworthy is how candid interviewees were about their (non-)compliance with government tax policy. Many spoke openly about not paying taxes and expressed feeling morally justified about not paying. For instance, one man said, “should someone like me who has got nothing tangible or of much value, who does not work for the government be compelled to pay taxes?”<sup>9</sup> Although these patterns strengthen our confidence in our results, we of course cannot rule out reporting bias in this measure.

We also use tax morale as a dependent variable, because whether respondents paid taxes is not only a reflection of whether they are willing to pay but also their ability to pay. In places with weak or nonexistent state enforcement, tax morale can play an important role in influencing tax compliance (Luttmer and Singhal 2014). In the survey, tax morale is measured by a question that asks: “On a scale of 0 to 10 (where 0 means not at all and 10 means completely), if the government did not check to make sure that you had paid them, how willing would you be to pay taxes?” The modal response to this tax morale question is 0 (see Fig. 2). Given that 38% of our respondents answer that they would be “not at all” willing to pay, we do not believe that respondents are simply responding with cheap talk. Only 11 respondents (2%) said they didn’t know or refused to answer.

This measure provides insight into citizens’ attitudes that are both useful for understanding theory and important for policy. While this variable is not about willingness to voluntarily pay *property* tax specifically, we conceptualize tax morale as a more general construct, as it is usually treated in the literature, that is not specific to a particular type of tax. Additionally, given the socioeconomic status of our sample, we are interested in whether people theoretically support paying even if they are unable to. For policy, if tax morale is high but payment is low this could reflect a lack of enforcement in a place where the state might have an easier time increasing revenues.<sup>10</sup> Interestingly, our tax morale and property tax payment measures are only weakly positively correlated (correlation coefficient of .10), again highlighting that there is not a one-to-one relationship between willingness to pay and actual paying behavior.

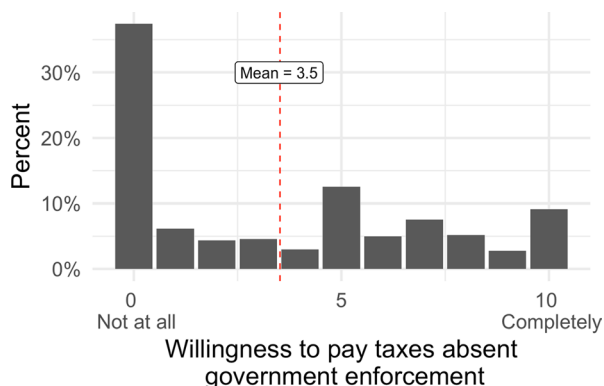
## Independent Variables

Our main predictors of tax compliance and morale are derived from standard theories of tax payment as well as our ideas about the social predictors that might matter for tax compliance. These variables and the concepts to which they correspond are

<sup>9</sup> RA interview November 20, 2018. Interview ID A-1.

<sup>10</sup> This lack of enforcement could mean that these areas are not registered or charged at all or that there are no penalties for non-payment.

**Fig. 2** Distribution of Tax Morale



presented in Table 2. In addition to these variables we include individual-level controls and community-level variables described below.

To understand whether respondents' desire for esteem from their neighbors matters, we include a *respect taxpayers* measure which asked respondents to indicate how much they think community members respect someone who pays taxes on a 0 (not at all) to 10 (completely) scale. The mean in our sample is 5.2. We focus on expectations of others' respect for tax paying following the idea that because the desire for respect or esteem is a human trait (Anderson et al. 2015) this might serve as a motivation for tax payment.

Further, we asked for respondents' opinion on whether taxes help their community. Overall, 34% of the sample agreed, and 42% disagreed, with most of those (28% overall) "strongly" disagreeing. We asked respondents about their membership in different community groups and count the number of groups in which they say they are an active member from among a landlord and tenants association, Community Development Association (CDA), and a religious group that meets outside of regular services.

Finally, we also include a measure of respondents' willingness to materially contribute to the community in the form of a donation. At the very end of the survey we offered respondents 200 Naira (about \$0.50) that they could either keep for their own use or choose to donate the money to the community, in which case the research team would double it to 400 Naira.<sup>11</sup> The goal of this exercise was to obtain an objective, behavioral measure of care for the community.<sup>12</sup> About half (46.8%) of the respondents chose to donate.

<sup>11</sup> The question read, "I have #200 here, that I would like you to choose where this money goes. Either you can decide to donate this money to the community OR you can choose to keep the money for yourself. If you choose to donate the money to the community, I will also add another #200 to the community, so that a total of #400 will go to the community. We will be giving this money to the (CDA CHAIRMAN/BAALE) at the end of the day. If you choose to keep the money, you will keep only the #200. Would you prefer to donate this #200 to the community and I will also add #200 for a total of #400 to the community [SHOW WITH BILLS] or would you like to keep the #200 for yourself?" Respondents were randomly assigned whether they were told the Chairman or the Baale (a local traditional leader who is typically the custodian of the land) would be the one given the money for the community. We found no difference in donation rates between the two leaders and for the purposes of this paper use the binary measure (donated / not) as our independent variable of interest in predicting tax morale.

<sup>12</sup> This variable could of course also be measuring altruism.

**Table 2** List of independent variables

Concept	Measurement
Ability	Poverty index constructed by taking the mean of reported frequency going without each water, food, and cash income as asked in Afrobarometer, where 4=Always, 3=Many times, 2=Several times, 1=Just Once or Twice, and 0=Never.
Liability	Whether respondent is a tenant or a landlord.
Enforcement	Distance to the state capital and distance to the nearest LUC tax office (where citizens can go to pay their tax bills). We calculate the shortest geodesic distance (as the crow flies) between an individual survey respondent and the location.
Trust in government	Mean of reported trust in the president and in the governor. Question: How much do you trust each of the following, or haven't you heard enough about them to say? [0—Not at all, 10—Completely]. For the 32 who did not answer, we imputed the community mean.
Service Delivery	Distance to public water points, public schools, and public health clinics, using facilities data from the Geo-Referenced Infrastructure and Demographic Data for Development (GRID <sup>3</sup> ) program in Nigeria. We calculate the shortest geodesic distance (as the crow flies) between an individual survey respondent and a service location (i.e., school, clinic, or water point).
National identity	Afrobarometer question: Let us suppose that you had to choose between being a Nigerian and being a [R's ETHNIC GROUP]. Which of the following statements best expresses your feelings? [I feel only Nigerian, I feel more Nigerian than [ETHNIC GROUP], I feel equally Nigerian and [ETHNIC GROUP], I feel more [ETHNIC GROUP] than Nigerian, I feel only [ETHNIC GROUP].] Recoded to be –1 only or more ethnic group, 0 equal, 1 only or more Nigerian.
Taxes help community	Please tell me whether you agree or disagree with the following statement: <i>Paying taxes helps/benefits my community</i> [1—Strongly disagree, 5—Strongly agree].
Taxpayers are respected	How much do other people in your community respect someone who pays taxes? [0—Not at all, 10—Completely]. For the 92 who did not answer, we imputed the community mean, given that this is theoretically a community-level variable.
Altruism/Care for Community	At the end of the survey, respondents were offered 200 NGN for their participation and told they could keep the money themselves or could donate it to the community, and the research team would match the donation. [1—Donated, 0—Kept the money]
Group membership	Tallies the number of community groups the respondent is at least an active member of [0–3]: Community Development Association, Religious Group, Landlord/Tenant Association

In the following models, we include a host of individual-level characteristics including age, gender, education, poverty, religion, ethnicity, partisanship, house structure type (proxy for poverty), whether the respondent is a tenant or a landlord, and whether they were born in Lagos.

## Results

Before presenting the main findings exploring what predicts tax payment and tax morale among informal settlement residents in Lagos, we first provide descriptive statistics of tax payment within our sample. We put rates of payments into perspective by comparing these to a nationally representative sample of Nigerians and a subset of Lagos-based respondents. Next we examine which people are more likely to pay taxes in our sample. Finally, we evaluate how well standard theories predict tax compliance and morale in this case and explore social predictors of these two outcomes.

### Tax Payment in Informal Settlements in Perspective

How do overall levels of tax payment among informal settlement residents compare to national averages and state-level estimates for Lagos? Figure 3 displays the percent of respondents who report paying different types of taxes among a nationally representative sample in Nigeria ( $N = 16,228$ ), the subset of respondents living in Lagos State in particular ( $N = 651$ ), and our survey sample ( $N = 502$ ).<sup>13</sup> Unsurprisingly, a smaller percentage of respondents from informal settlements in Lagos report paying income (4%) or shop (11%) taxes compared to both the state-wide and national samples. Interestingly, 13% of our sample report paying property taxes which is equivalent to the national average (12%).<sup>14</sup> 32% of the Lagos-specific sample report paying property taxes — double the national average — perhaps a reflection of the increased effort the Lagos State Government has put toward collection in recent years. Finally, looking at the right most bars in Fig. 3, we see that almost half of the Lagos sample pays any form of tax, compared to 36% of all Nigerians. As expected, rates of overall tax payment are lower in our sample. Yet, the fact that nearly one third of informal residents surveyed pay any kind of tax is unexpected given the lack of public goods provision in these communities and their contentious relationship with the state.<sup>15</sup>

### Who Pays in Informal Settlements?

With this comparative perspective of payment rates and among informal residents in Lagos in mind, we now turn to understanding who pays property taxes. In our sample, the majority of property taxpayers are landlords.<sup>16</sup> This is unsurprising, given

<sup>13</sup> These data come from a survey of 16,228 respondents across Nigeria conducted by the Nigerian Economic Summit Group. We subset these data to the 651 respondents from Lagos State and analyze responses among those respondents. More information about the survey and access to the data set is available here: <https://www.ictd.ac/dataset/nescg-nigeria-tax-subsidy-perception-dataset/>. Note that the Lagos subset is not necessarily representative of the State.

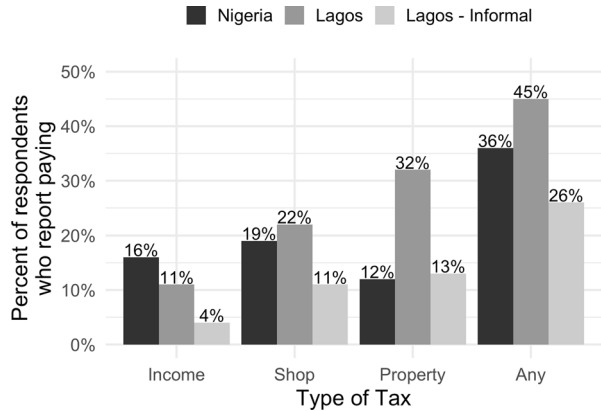
<sup>14</sup> These data support the idea that property taxes are a better way to reach the informal sector, although if the poor are carrying a larger tax burden it raises equity concerns.

<sup>15</sup> See Online Appendix section D for comparisons of payment amounts.

<sup>16</sup> Colloquially, “landlord” also typically refers to owner-occupiers, even if they do not have other tenants.



**Fig. 3** Percentage of respondents who report paying different types of taxes for a nationally representative sample, Lagos-only sample, and our sample



that the liability for LUC officially falls on landlords. Landlords, having more to lose, may also be less likely to take the risk of not paying. The law, however, explicitly allows tenants to pay on the owner's behalf, and extract this cost from their rent or seek reimbursement from their landlord. We find — consistent with earlier research on property tax payment in Lagos informal settlements (Goodfellow and Owen 2020) — that some tenants do report paying property taxes. In our sample, 21% of those who report paying property taxes are tenants.

Individuals in our sample who report paying are also typically older than those who do not pay and are more likely to have completed a post-secondary education. Those belonging to the Yoruba ethnic group are more likely to pay than residents from other groups. This is consistent with other work suggesting that when you expect that taxes are more likely to benefit your own group, you are more likely to pay (Bodea and LeBas 2016; Lieberman 2002; Lust and Rakner 2018). If Yorubas, as the dominant ethnic group in Lagos, see themselves as benefiting more from what the government distributes, for instance via patronage, they also may be more willing to pay. Being from the majority ethnicity in a given community also predicts payment, regardless of which ethnic group one is from. Muslims are more likely than Christians to report paying, although this relationship disappears once you account for ethnic group, since non-Yoruba groups are much more likely to be Christian in our sample. Finally, those who are poorer are less likely to report having paid, but no less likely to express willingness to pay. Having explored overall rates of payment, amounts, and who is more likely to report paying taxes the following section turns to evaluating theories about *why* some citizens pay taxes and feel a sense of obligation to pay.

### Testing Standard Theories of Tax Compliance

Most standard theories of tax compliance focus on the vertical relationship between citizens and the state. The state may either negatively induce payment through strict enforcement and the threat of punishment, or positively induce payment by supplying public services. Citizens may also be motivated to pay taxes by their trust in the

state or their identification with the nation. This section evaluates how well these theories predict tax morale and payment among informal settlement residents in Lagos.

## Enforcement

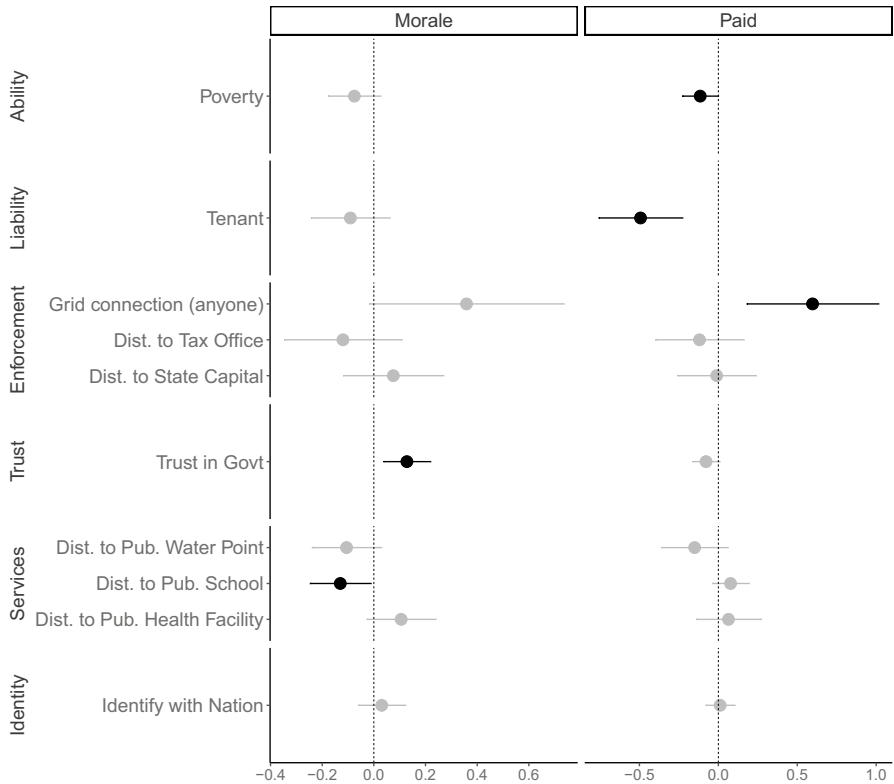
To understand whether enforcement is a significant predictor of tax payment, we first observe whether citizens have expectations of enforcement. From a nationally-representative survey of Nigerians about tax payment — subset to the sample of 651 respondents from Lagos State — when asked about the anticipated punishment for failing to pay taxes, 45% of respondents said they would expect *no* punishment and 35% reported they would expect a “small penalty.” We might expect our sample of respondents living in informal settlements to have even lower expectations of punishment, although there does seem to be variation in the state’s enforcement across geographic areas. On the other hand, the consequences of enforcement could be more severe for those who are already vulnerable. The main punishment for non-payment of LUC is the accumulation of money due, with penalties that also accrue. However, some citizens also mention having your house sealed or locked up.

In our data, we find that tax payment is clustered by community, which suggests that some of the between-community variation may be due to differential enforcement. In 19 of the 42 communities surveyed, not a single respondent reported paying property taxes. This likely reflects that there is a complete lack of enforcement in these communities. This lack of enforcement could take one of two forms. Either these areas are not registered or charged at all (e.g., authorities do not come and stick demand notices on the gate or door of households) or there are no follow-ups or penalties in these places for those who do not pay. The communities where no one pays tend to be more remote; some are only accessible by boat from the city center.<sup>17</sup> Given that these communities are also poor, it may not be worth the cost and effort to send collectors to these locations for the small sums of tax revenue that could be gained. It is also possible that if the government is planning to evict these communities in the future, they may want to avoid collecting taxes from residents here so not to provide legitimacy and invite later claims of rights from those with paid property tax receipts (Goodfellow and Owen 2020).

To evaluate whether enforcement-related variables predict tax payment we regress our outcome of interest — self-reported property tax payment — on these variables as well as our other independent variables of interest and individual and community-level controls. Figure 4 displays standardized coefficients from a linear regression.<sup>18</sup> We see that respondents who live in a more accessible community, proxied by whether anyone in the community is connected to the electricity grid, are more likely to report paying property taxes. In addition, the pairwise correlation between distance to the State capital and reported property tax payment is significant, with those further away being less likely to pay. However,

<sup>17</sup> On average, communities where no one pays property tax are about six kilometers farther from the state government offices than communities where at least one person pays.

<sup>18</sup> The unstandardized coefficients, as well as results from logistic regression models can be found in the Online Appendix, in section A.1



**Fig. 4** Standard Predictors of Tax Compliance. Note: Variables have been standardized such that coefficients represent standard deviation changes, with the exception of binary variables (tenant, grid connection). Control variables include age, gender, education, religion, ethnic group, partisanship, whether born in Lagos, and RA fixed effects. Error bars represent 95% confidence intervals and statistically significant relationships are marked in black. Standard errors are clustered at the community level

the distance to the capital coefficient is not significant in the full model displayed in Fig. 4. None of the enforcement variables significantly predict tax morale, which makes sense since conceptually “morale” should be independent of expectations of enforcement.

Although the state may send tax officials with bills in hand to contact entire communities, it is likely that individuals, even within the same community, vary in their expectations of enforcement. Some residents refer to the state as “almighty”<sup>19</sup> and willing to “use force”<sup>20</sup> to get what it wants. As one man said, “Since it is government instructions, we simply obey... We pay Tenement rate and Land Use Charge, we have paid this year’s own already. I don’t think we have any other choice.”<sup>21</sup> Another respondent was amused at the idea of *voluntarily* choosing whether or not to pay the Land Use Charge.<sup>22</sup> By contrast, other respondents

<sup>19</sup> Author interview, January 27, 2018. Interview ID B-2.

<sup>20</sup> RA interview, October 26, 2018. Interview ID C-1.

<sup>21</sup> RA interview, October 26, 2018. Interview ID C-1.

<sup>22</sup> Author interview, January 27, 2018. Interview ID B-2.

admitted to not paying any kind of tax and guessed that few of their fellow community members pay taxes. One man, who estimated that only 2–3 out of 10 other community members in his area pay taxes, articulated how times are hard in the country. Therefore, he suggested, it is nearly impossible for the government to ensure that people pay taxes.<sup>23</sup>

### Trust in Government

With respect to ideological motivations to pay taxes, we find that trust in government is a significant, and positive, predictor of tax morale but does not predict reported payment. This finding suggests that individuals who have a more favorable view of the state are more likely to be willing to support it financially, even absent enforcement. This suggests that the *expectation* of reciprocity is a more important predictor of compliance than current receipt of services. For instance, even if the government has not yet improved the main road in a community, residents may trust that it will in the future. Two survey respondents specifically mentioned seeing the improvements made elsewhere in the state and hoping that those improvements would come to their communities next.<sup>24</sup> However, this greater trust does not translate into a greater likelihood of *actual* payment. This may reflect constraints on the basis of ability of pay or enforcement. No matter how legitimate you think the government is, you still may not pay your taxes if you are struggling to feed your family or if the government does not provide you with a bill.

### Service Delivery

In Lagos, people living in informal settlements have few interactions with government representatives, often complaining that politicians come to ask for their votes but then disappear after an election. While some communities do have public clinics, schools, or boreholes, citizens in these areas are generally unsatisfied with what they receive from the state. They often share complaints about both the presence and quality of government services. People describe the government as generally inaccessible to ordinary people and unconcerned with their welfare.<sup>25</sup> One woman summed it up by saying, “There is no government. People are the government of themselves.”<sup>26</sup> Survey respondents were given a chance at the end of the questionnaire to share a message with the state governor.<sup>27</sup> 169 declined to give any message. Among the 333 who did, while some did express appreciation, the majority (98%) expressed some sort of complaint or request. The most common complaint was about the lack of jobs or support for businesses (29%

<sup>23</sup> RA interview, November 20, 2018. Interview ID A-3.

<sup>24</sup> “I have heard of the infrastructures the governor has put in place in some communities. He has not done anything for us here. He should kindly remember us and stop treating us like animals.”; “Help implore the governor to please sort out more roads in the area. The street lights are not working. I have heard that Governor Ambode has done awesome things in other areas of Lagos. He should please get to our area as well.”

<sup>25</sup> RA interview, October 4, 2018. Interview ID A-2.

<sup>26</sup> Author interview, January 25, 2018. Interview ID B-5.

<sup>27</sup> We later anonymized and collated these comments and summarized them into a report that we shared with the governor’s office.

of messages), followed by electricity (25%), water (22%), and education (19%). Contrary to existing theory, we do not find a robust relationship between distance to public services and either tax morale nor payment. Tax morale, however, is decreasing as one gets farther away from a public school.<sup>28</sup> It does not appear to be that case that informal settlement residents are conditioning tax compliance on access to public services. Of course, distance to these services tells us nothing about their quality. While it could be the case that people are simply unsatisfied with what has been provided, McCulloch et al. (2020) similarly find no relationship between the quality of services or service improvements and tax morale among a representative sample in Nigeria.

Despite the lack of a robust statistical relationship between services and tax morale or compliance, residents do indeed notice the lack of provision from the state. In interviews, people tend to bring up taxes in response to discussions about the government's provision of services. The general narrative from residents is: we have been loyal to the government, both by voting for them and by paying taxes — so why is there no reciprocation? One woman expressed her confusion as to why citizens have not reaped the benefits of government, despite paying taxes, especially the Land Use Charge.<sup>29</sup> In one informal community where LUC is collected, an interviewee reported that, "The government has not been doing anything to support us. They're just like robbing us... If you look at the drainage it has been ignored, you can see it's in solid state, which is threat to our survival, but we are just coping anyway."<sup>30</sup>

In Lagos, as in other contexts across the Global South, self-help often substitutes for public services, as community members come together to repair transformers, fill potholes, and arrange private vigilante security. In some cases every landlord pays a fee, around 500–1000 NGN (approx. \$1.40–\$2.80) and then this money is pooled to pay for things like mosquito nets for the community or supplies to fix the gutters on the side of the road. As one community leader stated, "Most of these things we did by ourselves gradually... without the government intervention."<sup>31</sup>

In some communities, neighbors come together not only to provide substitutes for the state's presence, but also to make a demand for it by writing letters or protesting. Despite the potential threat posed by the state, many citizens do wish the government was more present in their communities. One interviewee suggested that the government is in the best position to help the people since they have more power than the people — in terms of machinery and finance — to improve and hasten development in the area.<sup>32</sup>

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<sup>28</sup> These results are robust to squared and cubed distance measures, as provided in the Online Appendix. None of the distance measures in these alternative models are significantly associated with either payment nor morale. This is also true for the bivariate relationships between each distance and outcome measure. However, in the logit specification, tax payment is decreasing in distance to a public water point.

<sup>29</sup> RA interview, October 26, 2018. Interview ID C-2.

<sup>30</sup> Author interview, January 19, 2018. Interview ID B-3.

<sup>31</sup> Author interview, January 19, 2018. Interview ID B-6.

<sup>32</sup> RA interview, November 18, 2018. Interview ID E-1.

## National Identity

Finally, with respect to national identity, we observe no relationship between identifying with the nation and either of our two outcome measures. In other words, it is not the case that respondents in our sample who report identifying more with their national, rather than ethnic, identity are also more likely to pay taxes or report greater willingness to pay absent enforcement. There does not seem to be evidence to support these theories among this particular sample.

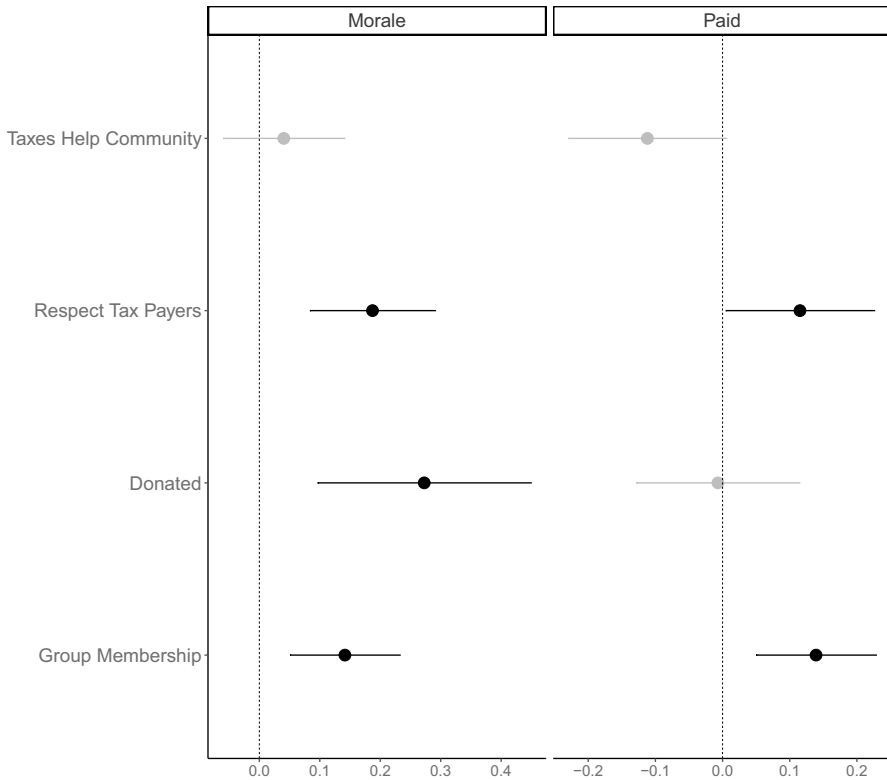
Together, these data highlight that among our sample of respondents, property tax payment is not very well predicted by existing theories that emphasize the importance of service delivery and national identification. Those who report higher trust in government officials also report a greater willingness to pay, but are not actually more likely to comply with tax policy. Rather, state enforcement — which may vary more between than within communities — and one's *ability* and *liability* to pay, as discussed in the previous section, are among the stronger predictors of tax payment among informal settlement residents in Lagos.

## Social Predictors of Tax Compliance and Morale

Lastly, we consider whether social variables predict tax compliance and morale, exploring the possibility that tax payment in informal settlements may have less to do with access to public services and more to do with one's relationship with their local community and neighbors' expectations. We ask whether in these communities — where the state is often absent and sometimes acts as predator rather than protector — an individual's behavior toward their community, their expectations of peers' attitudes toward taxpayers, and their position in community groups are related to tax outcomes. Figure 5 displays the coefficients of a regression of tax morale and self-reported property tax payment on the variables listed in addition to individual controls.

While the belief that paying taxes benefit the community is not correlated with self-reported property tax *payment* (correlation coefficient =  $-0.005$ ,  $p$ -value =  $.91$ ), these beliefs are positively correlated with tax morale (correlation coefficient =  $0.15$ ,  $p$ -value <  $.001$ ). When we include *taxes help community* beliefs into our regression to predict tax morale and payment the coefficient is not statistically significant (see Fig. 5), perhaps because it is highly correlated with the belief that taxpayers are respected.

Next, we see that believing fellow community members respect taxpayers is positively and significantly associated with both tax morale and payment. Of course this correlation could be a reflection of individuals who pay taxes simply wishing to believe that other community members respect taxpayers. We do find that a community-level mean of reported respect for taxpayers also significantly predicts the tax morale and payment of individuals within that community — suggesting that it's not just an individual's wishful thinking; however, the relationship is insignificant (though still positive) when control variables are included. In other words, people



**Fig. 5** Social Predictors of Tax Compliance. Note: Variables have been standardized such that coefficients represent standard deviation changes, with the exception of binary variables (donated). Control variables include age, gender, education, poverty, religion, ethnic group, partisanship, landlord or tenant, whether born in Lagos, and RA fixed effects. Error bars represent 95% confidence intervals and statistically significant relationships are marked in black. Standard errors are clustered at the community level

living in communities with overall greater expectations that taxpayers are respected are more likely to comply with tax policy and have higher tax morale.

Is it plausible that individuals know whether their neighbors pay their property taxes? In order for the fear of sanctions or desire to appear prosocial to motivate tax compliance, payment must somehow be observable to one's peers. One man shared that, in general, he does not know for sure whether other people pay their taxes. However, he was very confident that the houses in his area pay the Land Use Charge. He noted that when the local government officers arrive to paste the bills on peoples' front doors, he and his neighbors discuss how much they are charged. Additionally, he mentioned he sometimes coordinates payment with his neighbors — giving them money to pay his land use bill when they go to the bank rather than making the payment himself.<sup>33</sup>

<sup>33</sup> RA interview, November 18, 2018. Interview ID E-1.



Tax morale is also significantly predicted by *donated*, a measure of whether respondents chose to donate 200 Nigerian Naira (NGN) (approximately \$0.50) to the community, where it was doubled, instead of keeping it for themselves.<sup>34</sup> There are several potential rationales for why willingness to donate and tax morale are positively correlated. The relationship may be driven by individuals who simply have higher levels of altruism. But in this case we might also expect donating to be positively associated with paying taxes, not just morale. It may also be more specifically about one's willingness to bear a personal cost for a collective good, a similar logic to paying taxes when taxes are seen as contributing to the community.

Both property tax payment and morale are also predicted by group membership. Individuals involved in more local groups are more likely to pay their property taxes.<sup>35</sup> Being an active member of one additional group increases the probability of paying taxes by approximately 5 percentage points. Membership in one additional group is also associated with a 0.15 standard deviation increase in tax morale. While this is a relatively small substantive effect, it suggests that someone who is a member of all three of these groups is, on average, almost half of a standard deviation (.45) higher on the tax morale scale than someone who is not involved in any local groups. The following section looks more closely at how different types of community groups are associated with tax morale and compliance.

## Group Membership

Group membership could be related to tax compliance through several different mechanisms. First, it could speak to social pressure to pay from peers — for instance, if it is harder for better connected individuals to hide and evade detection. In contexts where state presence is limited, informal community groups may organize to fill the gaps, such as by providing local infrastructure or services. In some cases, they may collect dues or fees from members to fund these efforts (Lust and Rakner 2018). On the other hand, these organizations may also be a tool for making claims on the state (Auerbach 2017). Recent work is beginning to consider the role that these informal associations may play in facilitating tax compliance (Gottlieb et al. 2021). If citizens believe their ability to make demands on the state is perceived to be linked to tax payment, then it would be in the group's interest to motivate and enforce payment among its members to enhance their *collective* claim making potential.

Given that we cannot make a causal claim, it could also be the case that tax payment motivates participation in community organizations rather than vice versa. Existing theories do link taxation to greater accountability by citizens; if local groups are in fact channels through which communities make claims on the state and hold the state accountable, then paying taxes might encourage greater individual involvement in these groups. Although we think this is less likely, this behavior would be interesting in its own right and still consistent with our more general argument that tax payment is more social than individual in this context.

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<sup>34</sup> We also randomly varied whether this donation would be in the care of the chairman of the local Community Development Association or the local traditional leader, but found no differences across these two conditions so pool them here.

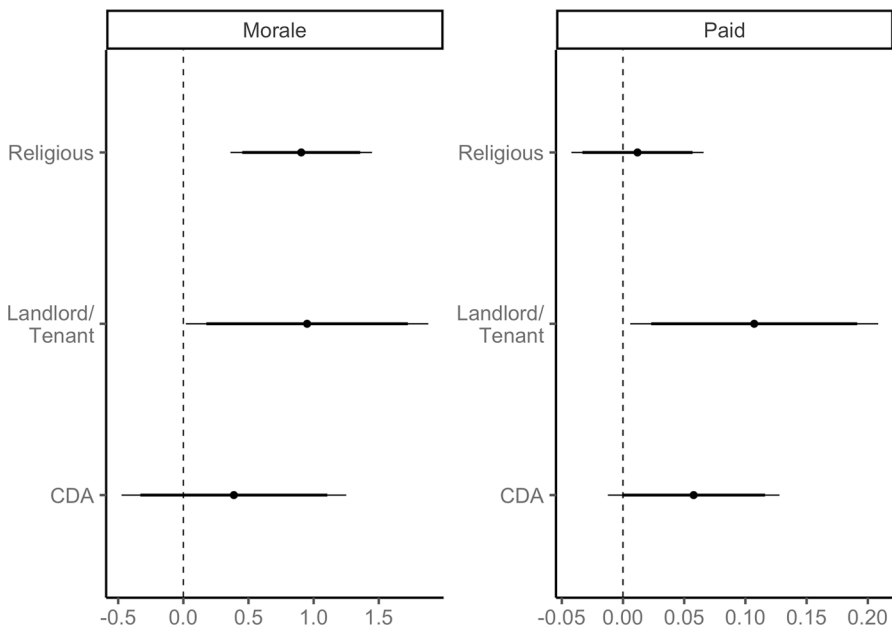
<sup>35</sup> The local groups included in the count are Landlord and Tenants Association, Community Development Association (CDA), and a religious group that meets outside of regular services.

Interviews help shed light on the roles that associations may play in facilitating tax payment. One community leader suggested that there might be an enforcement role played specifically by the landlord or tenant association.

If any of them [community members] say that they don't want to pay the tax, the Landlord Association will call them and explain to them the reason why they have to pay... The explanation they give is that it is their right, their duty, to pay the money so that they will have the right to go to the government to ask for their rights from the government whenever they need it. *So if people in this community don't pay tax, they can't ask government for help with things?* They have the right, but because other people are paying it, they too need to pay it. (Author interview with a community leader, January 17, 2018. Author's question in italics. Interview ID B-4.)

Alternatively, it could be that individuals with more group ties have stronger feelings of connectedness to the community and a greater sense of obligation to contribute to it through tax payment. To better interrogate this, we disaggregate the different group types.

Figure 6 shows the association between particular types of group membership and tax morale as well as payment. Interestingly, membership in a landlord/tenant association predicts both payment and morale, while membership in a religious organization predicts only tax morale. This could indicate that it is not the number



**Fig. 6** Correlations between types of group membership and tax morale and compliance. Note: The thin line is the 95% confidence interval while the thicker line is the 90%. Control variables include age, gender, education, poverty, religion, ethnic group, partisanship, landlord or tenant, whether born in Lagos, and RA fixed effects. Standard errors are clustered at the community level

of group ties that matter, but the type. For instance, landlord/tenant associations might be quite interested in promoting property tax payment among their members in order to avoid government attention and possible punishment for non-compliance. Paying could also be a forward-looking strategy when considering bringing claims to the government for unprovided services as a community.

Religious organizations may be where shared morals of obligations to the community and the state are articulated. As one interviewee said when asked whether he pays taxes, “Yes, it is not because we fear government but because the Bible said we should give honour to whom honour is due.”<sup>36</sup> Membership in religious groups could also be a proxy for religiosity. Others have similarly observed a positive correlation between religiosity and tax morale. For instance, using a cross-national data set from 30 countries, Torgler (2006) finds that being an active member of a religious organization increases the probability that respondents say tax evasion is never justified.

## Conclusion

The state’s ability to collect revenue via taxation is critical to its ability to provide for its citizens. Scholars suggest that expanding tax collection can also, under the right conditions, contribute to building accountability and legitimacy (Moore et al. 2018; Weigel 2020; Paler 2013). But where the state is clearly not using its tax revenues to provide for certain citizens, these state building benefits of taxation may be lost. This may be particularly true for vulnerable groups with low levels of political voice (Meagher 2018).

This paper demonstrates that in informal settlements where the state has neglected its service provision duties, a third of citizens still uphold their end of the social contract by paying taxes. Focusing on property taxes, which are the most frequently paid tax in these contexts, standard theories of service provision and identification with the nation are less helpful in explaining tax morale and tax payment in informal settlements in Lagos, Nigeria. While trust in the government is positively associated with tax morale, it is unrelated to tax payment. Instead, one’s ability and liability to pay taxes are significant predictors of payment in these communities. Looking beyond the traditional predictors of tax compliance, we find that prosocial motivations and one’s participation in local organizations are correlated with tax morale and payment.

This paper provides a preliminary look into questions of tax morale and payment among residents of informal residents in an African megacity. Although this study provides simple correlations from a relatively small sample, it adds to the growing literature exploring tax compliance in the Global South and further suggests that theories of tax payment largely derived from rich Global North cases may not apply. We hope this paper motivates future work examining related questions in other urban contexts and supports the development of new theories of tax compliance more appropriate to the institutional and social contexts in the Global South. Future work could also explore how tax payment relates to claim making in these communities and further investigate

<sup>36</sup> RA interview, October 26, 2018. Interview ID C-1.

whether social motivations play a role in these decisions. Specifically, future work should examine precisely how different community groups might influence tax morale and payment — through creating shared norms or through social pressure and horizontal enforcement. In places where the state is less active in tax enforcement, examining local avenues for building tax morale and enforcement is important.

Finally, our data suggest that forging the social contract between state and citizen may require more than service provision in informal settlements in Lagos. In some cases, the non-state actors that play a role in service delivery may also play a role in undermining the fiscal contract. Additional research is required to understand in what circumstances greater government accountability can be facilitated and how local institutions can be strengthened to support citizen-state bargaining, especially among a country's most vulnerable.

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**Data Availability** Data analysis was pre-registered on the EGAP Registry under ID#20180920AB and is available at: <http://egap.org/registration/5186>.

#### Declarations

This project was approved under MIT COUHES protocol no. 1806399516. Community leaders were surveyed under MIT COUHES protocol no. 1807455662, and some quotes were from interviews approved under MIT COUHES protocol no. 1712176840.

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