

On the mechanics of kleptocratic states

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Abstract

Powerful state administrators can take advantage of their positions to extract resources, especially when political accountability is broken. We conjecture that administrators' power depends on their ability to inflict harm using the power of office, their ability to mobilize powerful networks, and on their privileged access to information. Measuring transfers to administrators is challenging, because they often involve secrecy, and surveys often draw on recall. To circumvent this challenge, we develop a smart phone application, and provide an opportunity for 400 households and small businesses in the Democratic Republic of the Congo to privately report every day the universe of payments made during 5 months. We also deploy three randomized interventions aimed to affect the balance of power between administrators and households. First, since administrators systematically take advantage of a tax code that is extremely confusing, we organize pro-bono weekly tax consulting to a group of households. Second, to affect the bargaining power that stems from unequal access to social networks, we extend a link from a reputed civil society organization to randomly selected citizens. The organization uses its political leverage to protect the selected citizens. These treatments were coupled with a city-wide campaign to expose administrators known to have committed abuses in a random sample of neighborhoods. *This document develops the theoretical framework and analysis plan.*

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1 Introduction

Current welfare states, with a functioning rule of law that constrains the state and its administrators, are an historical aberration. Since their creation, states were mostly motivated to extract from the citizens they controlled; only more recently have rulers conceded power to large parts of the population (Acemoglu and Robinson, 2006; Acemoglu, Ticchi, and Vindigni, 2006; Bates, Greif, and Singh, 2002; Chrétien, 2000; Claessen and Skalník, 1978; Greif, 2008; Sanchez de la Sierra, 2016; Scott, 1999; Tilly, 1990).

In most states in recorded history, as well as in undemocratic states today, predatory administrators (whether organized or in isolation) serve as a pervasive vehicle for economic redistribution by expropriating wealth from the weakest parts of society. The transfer of economic resources to administrators is often the outcome of a bargain conducted in the presence of both asymmetric information and an asymmetric endowment of power vis-a-vis citizens (Olken and Singhal, 2011; Khan, Khwaja, and Olken, 2016).¹

In this paper, we study strategies in the Democratic Republic of the Congo (the DRC) for empowering citizens vis-a-vis administrators. First, we provide citizens an opportunity to privately report tax payments on a weekly basis using a smartphone application. Second, given that citizens are frequently extorted to give “false confessions” of inexistent tax liabilities by tax collectors, we provide high frequency, customized tax consulting to citizens. Third, since the social networks of citizens can protect them from administrators’ abuse, we extend new social networks links (protection) to citizens in order to empower citizens to bargain over their tax payments. These treatments were coupled with a city-wide campaign

¹While it is possible that informal taxation sometimes represents a mutually beneficial collusive bargain between citizens and tax collectors, the two are isomorphic as described below.

to expose administrators known to have committed abuses in a random sample of neighborhoods. To implement such interventions, we partnered with the *Observatoire de la Depense Publique* (ODEP), a Congolese civil society organization with expertise on tax law and with leverage and shaming potential with the government and the parliament.

The context in the DRC is well suited to examining power relations between administrators and citizens. State institutions in the DRC are considered among the weakest and most predatory in the world today. The state collapsed under the rule of Mobutu Sese Seko, who established a highly kleptocratic system in which administrators could take advantage of the asymmetry of power to systematically extract payments from citizens. Today, dozens of state agencies systematically take advantage of an extremely confusing tax code; confusion that was recently worsened by decentralization, which multiplied the number of taxes and agencies authorized to collect taxes. Economic activity is systematically subject to numerous obstacles imposed by state officials who argue—often arbitrarily—that taxes must be collected. This discourages investment and is a driver of inequality.

The importance of bargaining over bribes between administrators and subjects suggests that increasing the power and outside option of citizens in states with abuse by administrators can improve the terms of bilateral bargaining in favor of the citizens, the weakest segments of society. This can be especially promising when collective bargaining, through institutions of democratic accountability, are largely unavailable and costly to develop. A challenge for research and policy, however, is how to empower citizens to bargain over their informal tax payments. A careful consideration of the structure of societies in predatory states provides a useful motivation. Administrators use their power to redistribute wealth in society, where social networks are a major source of power. It is thus natural to expect that

interventions that redistribute social networks towards the weakest segments of society can empower the citizens against abuse by individual state officials. Similarly, to the extent that administrators often take advantage of the citizens' confusion about the tax code, and thus about the payments whose refusal can lead to harmful consequences, interventions that train households to navigate the tax system potentially empower citizens against administrators, and decrease the opportunities for coercive manipulations of their outside option.

The smartphone application provides an innovative measurement technology to assess the impact of these interventions. A fundamental challenge with measuring illicit payments is precisely that they are hidden, making it difficult to obtain such data from administrative sources. Some researchers (Sanchez de la Sierra, 2016; Jibao, Prichard, and van den Boogaard, 2016) have attempted to collect similar data using surveys, but such approaches often require relying on recall data, which can be problematic due to classical and particularly, non-classical measurement error. Specifically, we provided households and enterprises with smart phones, loaded with an application that we developed, that would enable them to record daily data on their tax payments, and upload this data on a weekly basis to a server. This approach allowed us to track payments made to state administrators on a daily basis for households and small businesses for up to five months. We worked to ensure that the smart phone data collection activities were separate from the tax consulting activities and the network links we induced, to minimize concerns about reporting bias.

The consulting and network interventions were coupled with a city-wide anti-corruption campaign aimed at making bribe taking riskier. While the tax consulting and protection interventions acted on the beliefs of households—beliefs about their bargaining power, and beliefs about the tax system—the campaign was designed to act on the payoffs of the tax

officials. Since we promised households selected in the protection intervention that ODEP would launch a campaign against recorded abuses by tax officials, we worked with ODEP to organize such a city-wide campaign after three months of smart phone data collection. To be able to estimate the effects of this intervention, we randomly selected half of the neighborhoods of Kinshasa to receive the campaign while administrators in the remaining half were able to continue to operate with impunity. This allows us to estimate the impact of a city-wide anti-corruption campaign on the ability of administrators to extract payments from households and small enterprises.

In what follows, we present the institutional context, the treatments, analytical framework, and our analysis plan.

2 Institutional context

Responding to the challenges of conflict, state weakness and limited accountability, the government embarked on a formally ambitious program of decentralization beginning in 2008. Among other things, the decentralization reforms offered local authorities substantially expanded tax powers, and all provinces had established revenue authorities by 2009. Proponents of revenue decentralization, both in the DRC and elsewhere, offer a series of potential benefits. Decentralization may encourage expanded revenue collection and service delivery, thus spurring broader state building; bring government close to the population, thus more closely aligning tax and expenditure policies with popular preferences and characteristics; encourage popular engagement, greater access to knowledge about the tax code, and substantially greater scope for citizens to bargain with local governments. Expanded taxation is, in

turn, critical to accounts of the potential governance benefits of decentralization. Expanded local government taxation helps local governments to become more autonomous, spur state building and promote accountability (Jibao and Prichard, 2015; Paler, 2013).

However, while the potential benefits of decentralization are well known, the decentralization of local revenue collection can have important adverse effects on households and businesses. These include the promulgation of complicated and poorly understood tax regimes, which are frequently regressive in their incidence on poor households (Olken and Singhal, 2011) — and often arbitrary owing to weak oversight; the duplication of taxes on the same tax base by multiple levels of government, leading to double (or triple) taxation; the proliferation of formal taxes, often referred to as “nuisance taxes”, which raise little revenue but can be damaging to local businesses and open opportunities for corruption; the expansion of informal taxes by state and non-state agents, as the withdrawal of central agents, the complexity of new tax rules, and weak monitoring opens new space for abuse. For these reasons recent research on fiscal decentralization has stressed the importance of rationalizing the tax system across levels of government and empowering local civil society actors to monitor outcomes (Jibao and Prichard, 2015; Bird, 2011; Lough, Mallett, and Harvey, 2013).

The DRC is particularly well-suited to examine this environment. State weakness and extended legacies of conflict offer an enhanced risk of both uncoordinated tax activities and pervasive informality. Work by Englebert and Kasongo (2014) details these dynamics in the DRC, arguing that decentralization appear to have accelerated the proliferation of local government taxes, and enhanced the fiscal burden on households. Weijs, Hilhorst, and Ferf (2012) highlight evidence of pervasive informality by state actors, which they attribute to the legacy of the Mobutu era in which public servants, including the military and police, were

encouraged to self-finance their salaries and operating costs through informal and predatory taxation. De Herdt and Wagemakers (2010) similarly demonstrate that the weak central state in the DRC enables local state actors to use their political influence or feigned ignorance to extract taxes with no legal foundations. In the conflict-affected regions of Eastern Congo, Van Damme (2012) shows that ‘improving’ the security situation involved the entry of a large number of state actors (including the military, the national police, the national intelligence services, and other government departments) where “the vast majority of state services collected illegal taxes, arbitrarily arrest or illegally detain people for money or demand large payments just to do their job”. Meanwhile, even in more secure and urban areas, ODEP (2013) documents the wide range of market taxes confronted by small businesses in Kinshasa’s central market. Research undertaken by Titeca and Kimanuka (2012) at Congolese border crossings reveals that informal taxes collected by customs agents are widespread and that traders often prefer to pay, cheaper, informal taxes than paying the formal tax. At the same time, traders argue that the unpredictability of informal taxation and the need to constantly renegotiate payments makes it hard to do business. The collection of taxes at border crossings has also exposed women to potentially higher levels of informal taxation both because they are more likely to be traders and more likely to be physically and sexually intimidated into making payments (World Bank 2011). Importantly, Titeca and Kimanuka (2012) find that military personnel — up to seven different units near one border crossing — were also extorting taxes in exchange for protection, along with unauthorized local authorities and non-contracted customs agents operating on behalf of various state agencies.

While these studies focus on informal taxation by state agents, it is equally important

to note the potential for significant informal taxation by non-state actors. Recent research in Sierra Leone, for instance, has provided the most formal evidence of the widely cited suspicion that traditional authorities are often heavily involved in revenue collection in local government areas, straddling the line between the formal and informal (Jibao, Prichard, and van den Boogaard, 2016).²

3 The interventions: motivation and design

To influence the bilateral balance of power between administrators and citizens, we develop a partnership with the leadership of ODEP (*Observatoire de la Depense Publique*), a major Congolese civil society organization widely respected for its effectiveness at combating abuses by tax officials. ODEP is a reputed organization that combats the leakage of tax revenues and corruption at the highest levels of the government. ODEP has leverage: they are recognized at multiple levels of the government administration and they hold a seat at the parliament and government meetings. Importantly, ODEP is an organization of tax experts. Figure 1 shows the distribution of trust to different state and civil-society organizations, as reported in a survey by the subjects that were part of this experiment. Clearly, civil-society organizations enjoy much more trust than state agencies, and this applies to general civil-society organizations as well as ODEP. The choice to partner with ODEP is also a policy relevant one. In a state like the DRC, which does not have a credible internal mechanism to ensure that corrupt tax officials are sanctioned, non-state, civil-society organizations are in most cases the only alternative to such otherwise fundamental guarantors of the state of law.

²Research in other parts of Africa has similarly highlighted the role of community development or self-help organizations in mobilizing resources for local service provision (Olken and Singhal, 2011).

We examine a first step to explore the potential of homegrown civil society organizations to expand their scope of action when the state has failed to do so.

3.1 The tax consulting intervention: information is power

When one talks to citizens across all communes of Kinshasa, it does not take long before one is struck by the complaints of citizens and businesses that tax officials, and administrators in general, abuse their power and take advantage of public ignorance about the tax code. Tax officials often come to collect the rental tax on tenants, despite the fact that it is supposed to be collected on landlords, with the explanation that the incidence of the tax is passed onto the tenant, so the tenant must pay, even if they also collect the same tax from the landlord. Examples of this phenomenon abound: small businesses are often told false liabilities on the basis of false size restrictions or turnover thresholds. If businesses fail to pay, not knowing if the rule is a false one, tax officials may be able to inflict harm on the businesses — more so than if the rule violation was false. Facing such uncertainty and risk, citizens and small businesses often pay without knowing if the payment is legal in order to be protected from potential sanctions. The tax code is extremely confusing, and popular narratives support the view that this confusion is intentionally created to increase the power of administrators to take advantage of uninformed households.³ Whatever the source of the extreme ambiguity in the tax code, citizens claim that if they were better informed, they would be in a better position to negotiate, since tax officials would need to prove to their superiors and other actors that citizens are in violation, exposing the citizens to a non-trivial risk if they are

³Yet it is also partly the result of a complex decentralization process that assigns the right to tax to a multiplicity of agencies for political reasons.

caught collecting illegal taxes. Our survey data provides support for this information asymmetry. Figure 2 shows the distribution of self-reported knowledge of the tax code among the experimental subjects using the pre-treatment survey data. More than 70% of subjects report that they do not know much the relevant tax code, or not at all.

To manipulate the informational foundation of citizens' bargaining power, we thus designed an intervention that provides, on a weekly basis, customized tax consultancy on the tax code to a random sample of citizens and businesses. Instructed and funded by our research team, the tax law experts of ODEP provided personalized weekly phone tax consultancy on what taxes are legal as well as the legal rates (based on the taxes paid in the previous week or expected to be paid in the coming week). As part of the tax consulting package, the ODEP experts also provided advice on how to navigate the administration in the event that the citizen was discontent with specific payments or interactions, usually a complex mechanism as well. For the sample of citizens in this treatment group, there was no claim that ODEP would take any action on the citizens' behalves: it was clearly communicated that the involvement of ODEP in this group was strictly limited to providing tax consulting in the form of weekly personalized tax consultancy by phone for 5 months.

3.2 The protection intervention: the power of social networks

When one witnesses any episode of bargaining for taxes or fees between citizens and administrators in the Democratic Republic of the Congo, it is straightforward to observe the importance of the unobserved power of the social network. Since the social connections of an individual or business are unobserved unless that citizen is known to the tax collector,

administrators often engage in a lengthy negotiation process mostly aimed at extracting a costly signal about the connections of the citizen.⁴ The importance of social networks, and the profoundly unequal access to powerful networks underscores Olken and Singhal (2011)’s finding that informal taxation is regressive. The equilibrium payments ultimately depend on the allocation of bargaining power in society, mostly determined by the power of citizens’ social networks—power that is unequally distributed. Households’ connections have strong impacts on the payments that administrators are able to extract. Usually, connections with high ranks in the most powerful state agencies are the most protective connections, because of the harm the network can inflict on the official intending to tax. For instance, high ranked Army officers, police officers, agents of the intelligence services, or officials in Ministries, offer the most protective connections.⁵ A major channel to empower citizens against administrators, thus, is to directly (re)distribute network links with powerful individuals or organizations, expanding access to bargaining power to protect against expropriation.⁶

We randomly assigned protection by ODEP to a separate sample of households and businesses. In this group, ODEP implemented weekly calls to gather data from the household

⁴A few anecdotes may provide useful motivating examples. In 2012 one of the authors of this paper was traveling through red zone, in the state controlled part, where Army battalions well known to be predatory and extremely violent raised barriers along the route in order to extort drivers. In each barrier, the author had to hide to avoid indicating that the car had international connections, which could raise expectations about a bribe, but could also signal that the car had powerful connections; thus to reduce the risk, the foreign author had to hide. However, in each roadblock, the driver barely stopped, showing a sticker facilitated by the drivers’ uncle, which showed that the car had links to the intelligence services, one of the most powerful networks within the state administration. As a result, each time soldiers saw the sticker, they were intimidated: they realized the driver may have powerful connections (protectors), and extorting nuisance taxes could generate harmful retaliation.

⁵Sanchez de la Sierra and Titeca (2016a,b) demonstrate the existence, and estimate the value of protection markets within the police administration.

⁶For obvious ethical reasons, we did not consider creating links with powerful Army commanders, an example of useful patrons, but instead, with an internationally and nationally renowned organization that has leverage at the top level of the administration, ODEP. “Re”-distribution indicates that, potentially, there is a limited supply of resources, and thus network links that can be maintained, and thus extending links to the weakest citizens potentially redistributes them away from where they would otherwise have existed. This, however, is a general equilibrium effect that we do not study in this paper.

about the universe of interactions with tax officials and administrations for the week. ODEP did not provide any tax consulting content received by the tax consulting treatment group described above. After collecting the data by phone on interactions, ODEP then guaranteed that they would investigate and act on instances of abuses through campaigns aimed at sanctioning the responsible administrators. Thus, ODEP took on the role of a powerful connection, as well as an intermediary with powerful networks within the state administration who can inflict harm on tax officials who commit abuses. In addition to passing along abuses reported by phone, however, ODEP can also draw on its credibility to undermine the reputation of individual tax collectors and tax collection agencies, thus allowing it to exert influence on the behavior of the supervisors towards mis-behaving tax officials.

Equipped with the credible backing of ODEP’s involvement, drawing on the baseline knowledge of their tax liabilities, the selected citizens can credibly threaten tax officials who commit abuses, thus effectively reducing the equilibrium payments to administrators that they are not supposed to make. Later, ODEP then followed up with an anti-corruption campaign targeting tax officials in selected neighborhood. We analyze the impact of the campaign in Section ??.

4 Theoretical framework and testable implications

To illustrate the relationships that arise between citizens and administrators, we develop a simple model. There are two players, the “official” and the “citizen.” The citizen has a true tax liability τ^* , which the official knows but the citizen does not. Instead, the citizen has a common knowledge distribution of prior beliefs about his tax liability, $\hat{\tau} \sim F(\mu_\tau, \sigma_\tau)$.

Since the citizen does not know how much she owes the government, she has the option of verifying her true tax liability at a cost. The cost of verifying τ^* is c_V . The term c_V captures the difficulty of gaining access to the tax code and the difficulty of understanding the tax code. If the citizen decides to verify, then she pays the formal tax, and her expected payoff is $-\mu_\tau - c_V$, and the official's expected payoff is $r\tau^*$. We allow the official to receive a fraction $r \in \{0, 1\}$ of the total tax paid, τ^* , since in practice, this “formal” payment is formal insofar as it follows the liabilities established by the law, but nothing prevents the tax official from keeping a share of it, or engaging in rent sharing with his supervisor. Unlike in Khan, Khwaja, and Olken (2016), r thus does not capture the official piece rate to the tax collector: it may reflect simply that he is able to keep a share of payments we observe as formal. The official and the citizen may prefer to avoid the costly verification — note that the expected payoff of verification decreases in c_V but also on μ_τ , hence if the tax collector could, he has an incentive to manipulate μ_τ and c_V . In a collusion equilibrium, the tax official and the citizen are able to forgo the socially costly verification process, and bargain over the surplus left by not verifying the tax liability. Note that a collusion equilibrium may be extortionate or coercive: the tax official may know that $\tau^* < \mu_\tau$ and fool the citizen to extract a larger surplus; similarly, even if not credible, he may try to convince the citizen that $\tau^* - \mu_\tau$ is large, if he is able to overcome the problem of cheap talk; alternatively, he may be able to increase c_V through his actions, thereby increasing the surplus he can extract. Extortion can coexist with collusion here, as long as the parameters that determine the outside option can be manipulated by the tax official, or that he can take advantage of the citizen's wrong

priors.⁷ In a collusion equilibrium, the two players Nash bargain over a transfer, b , from the citizen to the official. The parameter γ is the official's bargaining power and $1 - \gamma$ is the citizen's. If the players decide to collude, however, they face a cost of collusion that captures the risks associated with illicit transfers. Let the official's and household's payoffs under collusion be $b(1 - c_c^O) - C_c^O$ and $-b(1 + c_c^H) - C_c^H$ respectively. The joint surplus from collusion is now $S = \mu_\tau + c_V - (C_c^O + r\tau^* + C_c^H) - b(c_c^O + c_c^H)$. Note that the surplus decreases in b because the level of bribes increases the cost of collusion.⁸ The Nash bargaining solution implies:

$$b^* = \gamma \frac{\mu_\tau + c_V - C_c^H}{1 + c_c^H} + (1 - \gamma) \frac{C_c^O + r\tau^*}{1 - c_c^O}$$

The dollar amount of bribes that are non-zero increases in the bargaining power of the tax official, the mean of the household's prior distribution about her tax liability, and the cost of verifying such liability, which the tax official can take advantage of. The observed bribe decreases in the household's marginal and fixed costs of paying the bribe, and increase in the tax official's fixed and marginal costs of bribery. We can rewrite the total surplus as

$$S = \frac{1 + (1 - \gamma)c_c^H - \gamma c_c^O}{1 + c_c^H} (\mu_\tau + c_V) - \frac{1 + (1 - \gamma)c_c^H - \gamma c_c^O}{1 - c_c^O} (r\tau^* + C_c^O) - C_c^H \left(1 + \gamma \frac{c_c^O + c_c^H}{1 + c_c^H} \right)$$

⁷In an extension, we examine the possibility of tax officials to communicate with households. While a message about the true liability may be cheap talk if all tax officials are opportunistic, as long as there exists a proportion of honest officials, it is possible that opportunistic investors take advantage of this to increase μ_τ .

⁸Note that in this case, the collusion payoffs are no longer the outside option payoff plus the bargaining weight times the joint surplus. To see this, let u_O be the payoff of the official and u_H the payoff of the household. Let $h(u_O)$ be defined as: $u_H = h(u_O)$. The Nash bargaining payoffs are given by: $-h'(u_O) = \frac{\gamma}{1-\gamma} \frac{u_H - d_H}{u_O - d_O}$, where d_i $i = O, H$ indicate respectively the no collusion outside options of the officer and household. Since the costs of collusion increase in the amount of the bribe, we have $h'(u_O) = -\frac{1+c_c^H}{1-c_c^O}$, thus, the NBS bribe is given by: $\frac{1+c_c^H}{1-c_c^O} = \frac{\gamma}{1-\gamma} \frac{\mu_\tau + c_V - C_c^H - b(1+c_c^H)}{b(1-c_c^O) - C_c^O}$ In simple problems of transferable utility, however, $h'(u_O) = -1$

Table 1 presents the testable implications. Bargaining is more likely to occur the higher is μ_τ , c_V , and the fixed and marginal cost of colluding to the tax official, c_c^O and $C_c^O + r\tau^*$. It is also increasing in the marginal cost of colluding to the household only if $c_c^O > 1$, because while c_c^H decreases the surplus, for a given bribe level, it also nonetheless decreases the level of the bribe paid, which increases the surplus. The household fixed cost of bribery naturally decreases the likelihood of bribes. Overall, μ_τ increases the level of bribes and the likelihood of bargaining (hence overestimation of the liability increases bribes and their occurrence), the cost of verification c_V increases the level of bribes and their occurrence, the marginal cost of the level of the bribe to the tax official increases the level of the bribe, but decreases the likelihood of bargaining because it decreases the surplus, and the marginal cost of the bribe to the household decreases the level of the observed bribes, and decreases the occurrence of bribery if the marginal cost of the tax official, c_c^O is small enough (smaller than 1). The fixed costs of colluding decrease the likelihood of bribery; however, while the household's private fixed cost of colluding decreases the average bribe, the fixed cost of colluding to the tax official increases the average bribe. Finally, note that the household's misinformation, $\mu_\tau - \tau^*$ increases the likelihood of bribes, whereas the true liability, τ^* , and the rate the inspector is able to keep, r , decrease the likelihood of bribes and increase the level of the bribes that do occur.⁹

⁹To introduce coercion explicitly, consider that the tax official can manipulate the prior mean of the household at a cost. Concretely, consider that the cost of increasing μ_τ in one unit is $\Phi(m)$, where $\Phi(\cdot)$ is an increasing and convex function and m stands for manipulation, whereby after manipulation, the posterior belief of the household is $\mu_\tau + m$. Rather than considering a communication game, simply allow the tax official to use his persuasiveness to intimidate the household about the true tax liability and influence his belief. Then, the tax official will maximize his payoff by choosing $\mu^* = \Phi'^{-1}(\gamma \frac{1-c_c^O}{1+c_c^H})$. Whenever $S = \frac{1+(1-\gamma)c_c^H-\gamma c_c^O}{1+c_c^H} \left(\Phi'^{-1}(\gamma \frac{1-c_c^O}{1+c_c^H}) + c_V \right) - \frac{1+(1-\gamma)c_c^H-\gamma c_c^O}{1-c_c^O} (r\tau^* + C_c^O) - C_c^H \left(1 + \gamma \frac{c_c^O+c_c^H}{1+c_c^H} \right) < 0$, then $m = 0$ and bargaining will not occur. However, m may not be zero when bargaining occurs, which depends on the shape of $\Phi(\cdot)$, the cost of manipulating the household's beliefs. Similarly if we allow the tax official to manipulate the cost of verification.

4.1 Heterogeneous effects

Note that the main effect of changing the cost of verifying the true liability is $\frac{\partial b^*}{\partial c_V} = \frac{\gamma}{1+c_C^H}$. Two observations follow. First, since $\frac{\partial^2 b^*}{\partial c_V \partial \gamma} > 0$, interventions that decrease the cost of verification, have particularly large effects for households with weak bargaining power, the most marginalized. Second, since $\frac{\partial^2 b^*}{\partial c_V \partial c_C^H} = -\frac{\gamma}{(1+c_C^H)^2} < 0$, a reduction in the verification cost reduces the observed bribes, and less so if the cost curve of colluding for the household is steep. Thus, interventions that reduce the cost of verifying the tax liability have particularly strong effects on households for whom the cost of colluding does not increase very steeply in the amount of the bribe.

4.2 Treatment interactions

From the bribe and collusive surplus expressions it is straightforward to see that $\frac{\partial^2 b^*}{\partial c_V \partial c_C^O} = 0$, $\frac{\partial^2 b^*}{\partial c_V \partial C_C^O} = 0$. However, $\frac{\partial^2 S^*}{\partial c_V \partial c_C^O} < 0$, suggesting that while the tax consultancy treatment reduces the surplus available for bargaining, and thus reduces the occurrence of bribes, the tax consulting treatment is less effective if the protection treatment is also deployed.

5 Empirical strategy and analysis plan

This section presents the experiment design, the measurement strategy, and motivates with analysis plan with descriptive statistics.

5.1 Experiment design

We randomly sampled 576 households and 384 businesses on 96 avenues in Kinshasa to participate in household and business surveys.¹⁰ From this pool, the research team recruited households and businesses to participate in an additional smart phone data collection activity.¹¹ A respondent was considered eligible for recruitment into the smart phone data collection activity if they were literate enough to read or write a letter in French and if the enumerator assessed them as having been willing to participate in the survey. If a respondent met these conditions and the target for the avenue had not yet been reached, the enumerator invited the respondent to take part in the smart phone data activity. Note that the targets for the avenues were pre-determined and based on the first step of the random assignment, with a target of 200 households and 200 businesses. To ensure that the subsample of participants in the smart phone survey was random conditional on eligibility constraints, enumerators visited households on each avenue in a random order. Enumerators then invited households who agreed to participate in the smart phone data collection activity to attend training at the office of the research team in Kinshasa. A local research team then provided, at the trainings in the office, instructions on how to use the smart phones and on how to enter and upload their tax data on a weekly basis for up to 20 weeks. The research team recruited households on a rolling basis as enumerators implemented the survey.¹² In return for their regular reporting, participants received a small compensation.¹³ The training emphasized that the smart phone data collection activity was being undertaken by the same research

¹⁰Sampling was implemented in August and September 2015

¹¹We further randomized how we framed the invitations to participate in the smart phone data collection activity for all those who were eligible. This is a separate experiment.

¹²Approximately eight weeks of training were held.

¹³Participants were allowed to keep the smart phones at the conclusion of the study.

team that had conducted the household and business surveys. A few days after the end of the smart phone training, individuals were contacted by an ODEP advisor to learn about the ODEP tax activities and to indicate their willingness to participate.¹⁴

The design followed the following protocols. First, ODEP activities are separate from the smart phone data collection activities to minimize the potential for reporting or social desirability bias. Second, participation in the smart phone reporting system was voluntary and unconditional. Third, the introduction script was generic and conveyed no mention to ODEP. A list of participants to the training activities was then passed to the research team, which implemented the randomization as described in the next section.

Two trained ODEP advisors (one specializing in household taxes and the other business taxes) implemented the treatments by calling participants on a weekly basis for five months. Each call followed a protocol with a highly structured format that followed the requirements of each treatment and minimized potential spillover in treatment content. Both treatments also emphasized that any data about payments provided by citizens would be kept strictly confidential so that any reports of abuses would not be linked back to them. In partnership with ODEP, we implemented the interventions described in Section 3, over-lapped in a 2x2

¹⁴The ODEP advisors used the following script: “ I am a representative from ODEP, an emerging organization that works to improve the fiscal system in the DRC and to help households better confront the complex fiscal administration of the DRC, and the frequency of abuses by tax collectors. We are partly funded by DFID, the British development organization, and we sit at the table with the government in order to guarantee transparency of their decisions. We represent no political interest, except the interest of the people, and aim to improve the Congolese ability to operate in this predatory and confusing tax environment. You can contact us at x and our website is xxxx.xxx. We are in no way connected to the data collection training that you received or the data collection itself. We are contacting you because we have been informed you are concerned about your taxes, and we are going to make weekly calls to you in order to provide you with support on your taxes. We really hope that our support will help improve the fiscal problem in the DRC. Too many taxes are paid to private interests as a burden to households and we want to help you. Everyone would rather prefer that what you pay goes to public coffers so you can benefit from services the state owes you, isn’t it the case?” The ODEP tax advisor then proceeded to obtain consent and record the contact information for those who were willing to participate in the ODEP consulting activities.

factorial design. The two treatments are summarized in Table A1 in the online appendix.

While the target sample of the experiment was 200 households and 200 businesses across the four experimental conditions, our final sample is 310 individuals, reporting daily data for up to 5 months. Taking into account the likelihood of potential spillovers if we were to assign individuals within avenues, we first randomly assigned avenues to treatment and control groups. In other words, of 96 avenues within Kinshasa, we assigned 48 to serve as a pure control and the other 48 to have ODEP activities. Within each of the pure control avenues, we set a target of one household and one business for the smart phone reporting (on two avenues we recruited an additional respondent), yielding a goal of 50 households and 50 businesses in the pure control.

The random assignment to specific ODEP treatments was done at the individual household or business level after obtaining consent. Taxpayers were randomly assigned to one of the three treatment groups (tax consulting, protection, and tax consulting + protection) blocking on strata formed by whether they were a household or business, commune, and framing experiment assignment. The target number of households and businesses to recruit into the smart phone data collection on ODEP treatment avenues was 200 households and 200 businesses across 48 avenues. Our final sample had 310. While we did not reach our recruitment goals, this does not create bias because randomization occurred within the recruited households and businesses, although it hurts our statistical power.¹⁵

¹⁵In actuality, due to challenges in the field, we recruited half of the target number of households and businesses. Note that this is not a compliance issue, rather an implementation failure that arises from management failures among the field teams.

5.2 Data collection strategy and measurement of outcomes

Our key outcome data comes from a smart phone application we developed for this project and distributed to households and businesses for daily entry, and weekly upload.¹⁶ Participants in treatment and control groups reported weekly on what they had paid in formal and informal taxes, whether they had negotiated to lower their tax payments, whether that negotiation was successful, and their attitudes towards paying taxes. Since we made sure that the smart phone data collection activity and the ODEP tax intervention activities were independent of one another, we can be confident that any reporting bias is orthogonal to treatment assignment. We also draw on household and business surveys for key variables for checking balance, analysis of heterogeneous effects, and controls. To analyze payments, we use the estimated payments of informal and formal taxes. We allow for informal (and formal) payments to non-state actors. In addition, we also collected the following variables, which we will exploit in the analysis: Whether a negotiation occurred (HH Q9); starting amount, final amount, and difference (HH Q11-Q12); satisfaction with tax payment (HH Q15); and reasons for paying or not paying associated with bargaining (HH Q17-Q18). We next provide a rationale for the categorization of taxes by their degree of formality. Additionally, we use project implementation data that informs how the treatments were actually implemented.¹⁷ In the remainder of the paper, we use the data collapsed at the week level

¹⁶Humphreys and Van der Windt (2014) use a similar strategy to collect village-level information about conflict events about 18 villages of Eastern Congo. The strategy in the current paper focuses on household-level payments to state officials, as opposed to publicly observable violent events, and we use a smart phone user friendly application. This allows us to decentralize the encoding of the information to the respondents thereby increasing the complexity of the information one can gather.

¹⁷This data includes information on how often participants were called by the ODEP advisors (client dataset), tracking sheets that provide detailed tracking data on the nature of each phone call (including what taxes were discussed, abuses reported, etc), and qualitative exit interviews conducted with recruited citizens at the end of the smart phone reporting period that checked on the quality of ODEP consulting.

for each respondent.

Figure A4 uses the survey data to validate the usefulness of the smart phone system. The smart phone system allows us to overcome under-reporting that may arise in retrospective surveys. As the figure shows, the average payments are higher in the smart phone system, likely because respondents do not need to recall their payments over long periods of time, and the proportions of formal and informal are similar.¹⁸

A key challenge is how to measure formal and informal payments. Definitions of what constitutes formal and informal taxation have been highly contested within existing research. Following recent work (Lough, Mallett, and Harvey, 2013, pg.3), we define taxation as “all payments—whether cash or in kind, including labor time—that are made as a result of the exercise of political power, social sanction or armed force.” Within this definition, identifying and defining formal taxes is straightforward: Formal taxes refer to any compulsory tax or tax like payment stipulated in the statutory legal framework. At the local government level this includes levies formally referred to as “taxes”, but includes licensing fees, rate and user fees for particular services. In practice, user fees are often particularly prominent as a means to finance services provision (Gibson, 1997). User fees are “imposed on specific persons, activities, or properties that receive a service or benefit” in return (Spitzer, 2012, pg.3). Common fees in developing countries like the DRC include those to access education and health services, obtain businesses licenses, or operate in markets (Weijs, Hilhorst, and Ferf, 2012) De Herdt and Poncelet (2011). Fees are often viewed as distinct from taxes because,

¹⁸Furthermore, the survey data contains outliers that the smart phone data does not, suggesting potentially that recall induces distortions in the value of unusually large amounts. Note that because the baseline survey data covers the previous period, it is possible that the baseline survey has high seasonal payments that the smart phone period did not cover. The two measurements were not designed for comparison purposes, but instead the baseline survey role is to collect pre-treatment measurements.

unlike with taxation, there is a direct and immediate relationship between fee payments and the goods and services received in return. Yet, given the prevalence of user fees and the fact that they constitute compulsory payments in exchange for government provided goods and services, we also measure them.

Defining informal taxation is complex. This has given rise to contrasting definitions within existing research and policy discussion. In his classic work on informal taxation, Prud'Homme (1992) describes three types of informal taxes collected by state actors: 'pinch' informal taxes (the share of formal taxes that are siphoned off by tax collectors and do not enter the formal budget); extortion (payments made to employees of semi-local governments in relation to authorization and rules); and requisitions (when government authorities ask enterprises and households to contribute to their activities). At the other end of spectrum, a recent study by Olken and Singhal (2011) defines informal taxes as a system of local public goods finance coordinated by public officials but enforced socially rather than through the formal legal system, thus focusing attention of informal taxation that gives rise to public services, and which may be collected by a combination of state and non-state actors, including traditional authorities. We define informal taxation as "all non-statutory payments—whether cash or in kind, including labor time—that are made as a result of the exercise of political power, social sanction or armed force (as opposed to market exchange)." This definition incorporates informal taxes by both state and non-state actors. Our research elsewhere indicates that informal taxation by non-state actors can be a critically important component of local tax collection. Furthermore, this definition is independent of how the funds are used. Whereas previous studies have, in some cases, focused attention only on informal taxes collected in exchange for public goods, or only on informal taxes embezzled

by state officials, this definition avoids arbitrary distinctions. It can accommodate potential ambiguity about whether particular taxes are best understood as formal or informal.¹⁹

In this paper, we use multiple approaches to examine formal and informal taxation. We use three approaches to measure informal taxes (which we equally refer to as bribes here, and correspond to b in the theoretical framework).

We first obtain formality from the households and businesses self-reports if the payments they make are formal, state law backed payments, or instead informal payments to facilitate the process for instance. However, relying on households' self assessment of formality is problematic on multiple grounds. To begin with, a motivation of this paper is precisely that households do not know what their legal liabilities are, hence relying on self-reported formality may contain biases. Furthermore, the treatments themselves may induce households to relabel taxes between formal and informal in their reporting, without changing the payments. This can induce non-classical measurement error correlated with the treatment. Also, we know that a large fraction of payments made by household are "formal" in the sense that they are payments they should make according to the law, but are nonetheless bribes. There is a sense of formality in the social convention of paying the statutory taxes to tax officials, even if it is common knowledge that these will be used for private consumption of the official and his superior.²⁰

Second, we use the pre-treatment survey data to construct scores of formality of each tax category. There is variation in the proportion in the survey of self-reported proportion of formal taxes in each category. To construct a measure of formality of payments where

¹⁹See Prichard (2015).

²⁰Figure A3 corroborates this interpretation: even though we know the level of illicit payments is huge, only 20% are self reported as "informal" by households.

self-declared formality is not endogenous to the treatments, we use these scores in the main subsequent smart-phone analysis to estimate, probabilistically, the share of payments that are formal. This allows us to capture changes in payments that are immune to relabeling/non-classical measurement bias, since relabeling would only occur within categories.

Third, since self-reporting the formality of a payment, and its meaning, raises concerns of non-classical measurement error, we can focus on total payments, where predictions are immune to endogenous relabeling by households. Any payment to a tax official in the DRC has no guarantee to end up in the state coffers, hence one approach is to consider payments to tax officials who conduct visits to be bribes — formal taxes would instead be paid at the office.

6 Analysis Plan

6.1 Protection and tax consulting

We presented our main testable implications for the average treatment effect for each treatment in Table 1. As shown in Table 1, in addition to estimating average and conditional treatment effects, we are also interested in exploring how treatment effects vary for different subpopulations. For the heterogeneous effects, to measure the social connections of households, we use the knowledge of their networks as well as formal registration status for businesses. To measure the distance of their priors from the statutory levels, we use the levels of education as well as self-reported measures of how well they know the tax code.²¹

²¹Additional heterogeneous effects will be estimated on prior history of tax bargaining (from the HH/business surveys), support for collusive taxation (from the HH/business surveys). We also use variables that are strong predictors of informal tax payments or select a priori, such as: Reporting duration (in

Given random assignment, the main specification is a straightforward OLS equivalent to a comparison in means. We also account for the randomization blocks, treatment propensity, and the structure of correlations within the relevant units of randomization. Let Y_{it} indicate household (or business) i tax outcome (such as level of total tax payment) at week t ; $P_i \in \{0; 1\}$ indicates whether household (or business) i was assigned to the *Protection* treatment (creation of a network link with a powerful civil society organization), $K_i \in \{0; 1\}$ indicates whether household (or business) i was assigned to the *Tax consulting* (weekly tracking and support to navigate the tax code), X' is a vector of pre-treatment controls, and ϵ_{it} is an additive error term. The main effects regression is:

$$Y_{it} = \alpha + \beta_P P_i + \beta_K K_i + X' \gamma + \epsilon_{it}$$

From this regression we can immediately recover the sample average treatment effects. The coefficient β_P is the marginal effect of the Protection treatment and β_K is the marginal effect of the Tax consulting treatment. The covariates include randomization block fixed effects. Since the treatment was assigned within recruitment week, commune, household/business, we use block cells defined by these dimensions. The experiment assigned treatment conditions in two stages: first at the avenue level and then at the household or business level within avenues. Thus our standard errors account for clustering at the avenue level. Our main specification includes covariate controls for a week trend, gender, education level, pre-treatment tax payments in the preceding year, and pre-treatment number of visits by tax administrators in the previous year. For households we also include asset wealth, household

case there was learning over time); Number of people doing smart phone reporting on each avenue (in case people helped each other).

size, and age of head of household. For businesses we include number of employees, registration status, and pre-treatment profits over the preceding year. Regressions with covariate control employ the centered interaction specification proposed by Lin (2013). For outcomes, we focus on amounts paid, number of challenges (whether refusals or negotiations), and the frequency of visits by tax collectors.

For the advocacy campaign, the lowest administrative level at which action can be taken against tax officials is the commune. We were able to contact each of the 24 communes of Kinshasa, and within each, randomize the neighborhood where ODEP targeted the anti-corruption campaign. We drew lists of the universe of neighborhoods within each commune, and randomly selected half of the neighborhoods with equal probability. The selected neighborhoods are the target of the campaign: ODEP organized meetings where they announced the launch of the campaign, shared publicly the list of target neighborhoods, as well as shared the anonymized list of abuses that had been recorded in the first 3 months of data collection and ODEP communication with households and businesses part of the study. This provided a credible signal that ODEP had the capacity to watch, and that ODEP was ready to activate layers to sanction abusive tax officials in the selected neighborhoods. Yet, importantly, ODEP also guaranteed that they will never act on the information they have at hand in the control neighborhoods, and that tax officials could behave how they wish, because ODEP will not target corruption in such neighborhoods. To estimate the effect of the campaign, we simply expand the regression specification to incorporate a dummy variable for whether the neighborhood was included in the campaign and then the interaction of this dummy with the Protection and Tax consulting treatment variables.

Tables and figures

Table 1: Testable implications

Quantity	Parameter	Average bribe	Frequency of bribes
Bargaining power, official	γ	$b \uparrow$	more iff $\mu_\tau + c_V$ large
Prior mean	μ_T	$b \uparrow$	more ^a
Cost of verification	c_V	$b \uparrow$	more ^b
Fixed cost of collusion, HH	C_c^H	$b \downarrow$	less
Marginal cost of collusion, HH	c_c^H	$b \downarrow$	less
Fixed cost of collusion, official	C_c^O	$b \uparrow$	less
Marginal cost of collusion, official	c_c^O	$b \uparrow$	less

Main effects			
Tax consulting (if over informed)	$c_V \downarrow, \mu_\tau \downarrow$	$b \downarrow$	less
Protection	$c_c^O \uparrow, C_c^O \uparrow$	$b \uparrow$	less

Other possible main effects			
Tax consulting (if under informed)	$c_V \downarrow, \mu_\tau \downarrow$	$b \downarrow$	less
Protection, $\mu_\tau + c_V > c_C^H + \frac{1+c_c^H}{1-c_c^O} C_c^O$	$\gamma \downarrow$	$b \uparrow$	less iff $\mu_\tau + c_V$ large ^c
Protection, $\mu_\tau + c_V < c_C^H + \frac{1+c_c^H}{1-c_c^O} C_c^O$	$\gamma \downarrow$	$b \downarrow$	less iff $\mu_\tau + c_V$ large

Heterogeneous effects			
Tax consulting, by initial prior μ_τ	$\mu_\tau - \tau^*$	increases effect	increases effect
Tax consulting, by HH weakness	γ	increases effect	increases effect
Tax consulting, by HH marginalization	c_c^H	dampens effect	dampens effect
Protection, by initial prior μ_τ	$\mu_\tau - \tau^*$	no difference	no difference
Protection, by HH weakness	γ	dampens effect	dampens effect
Protection, by HH marginalization	c_c^H	no difference	widens effect

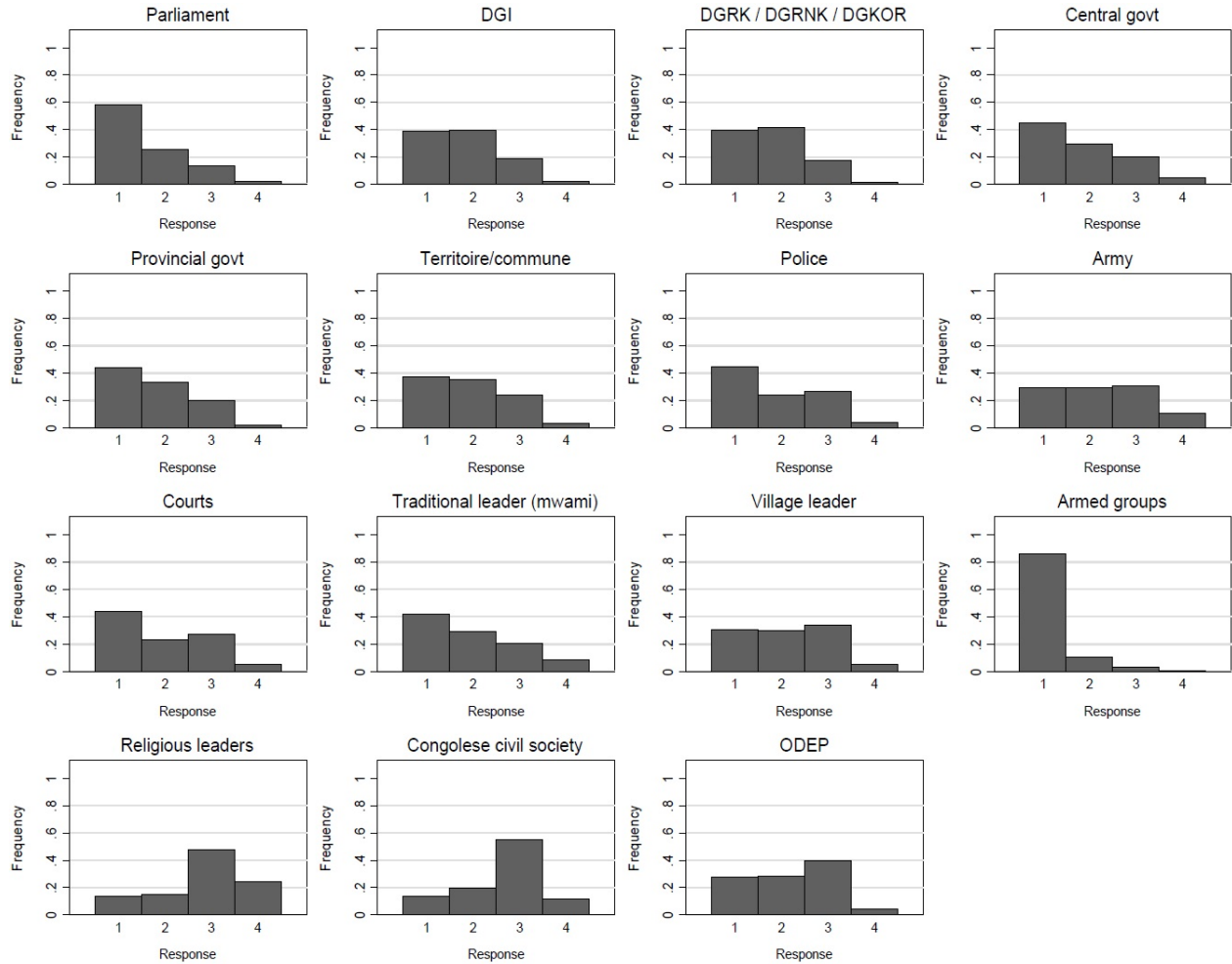
Interactions			
Protection, Tax consulting		zero interaction	negative interactions

^aThis is true whenever $\gamma c_c^O + (1 - \gamma)c_c^H < 1$. Since, by assumption, $c_c^O < 1$ and $c_c^H < 1$, this is always true.

^bThis is true whenever $\gamma c_c^O + (1 - \gamma)c_c^H < 1$. Since, by assumption, $c_c^O < 1$ and $c_c^H < 1$, this is always true.

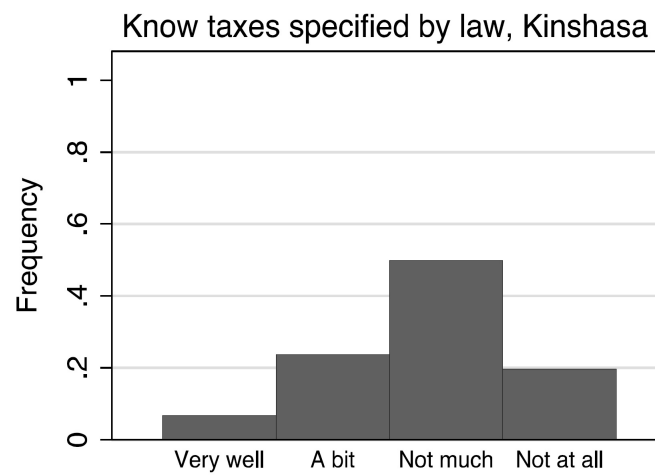
^cNote that $\mu_\tau + c_V > c_C^H + \frac{1+c_c^H}{1-c_c^O} C_c^O$ will always be true if $b > 0$ as long as $\gamma \leq 1/2$. However, since we assume $\gamma > \frac{1}{2}$, this inequality is not always true. This is not always increasing since, while the payoff of the tax official always under bribery increases in γ , the bribe comes with a marginal cost so it may not.

Figure 1: *Trust in state agencies and in civil society organizations*



Notes: This figure shows the distribution of categorical answers to the question “How much do you trust the following organizations?” The possible answers were (1) very distrustful, (2) a little distrustful, (3) a little trusting, and (4) very trusting. The graphs display the share of respondents selecting each answer choice. Calculations incorporate survey weights. Source: total tax burden survey and authors’ calculations.

Figure 2: *Knowledge about the relevant tax code*



Notes: The graph shows opinions on how well respondents know the taxes that they have to pay according to the law. Results indicate shares of respondents indicating each of the choices. Respondents had to pick one of the following 4 choices: very well, a bit, not much, not at all. Shares add up to 1. Calculations incorporate survey weights. Source: total tax burden survey and authors' calculations.

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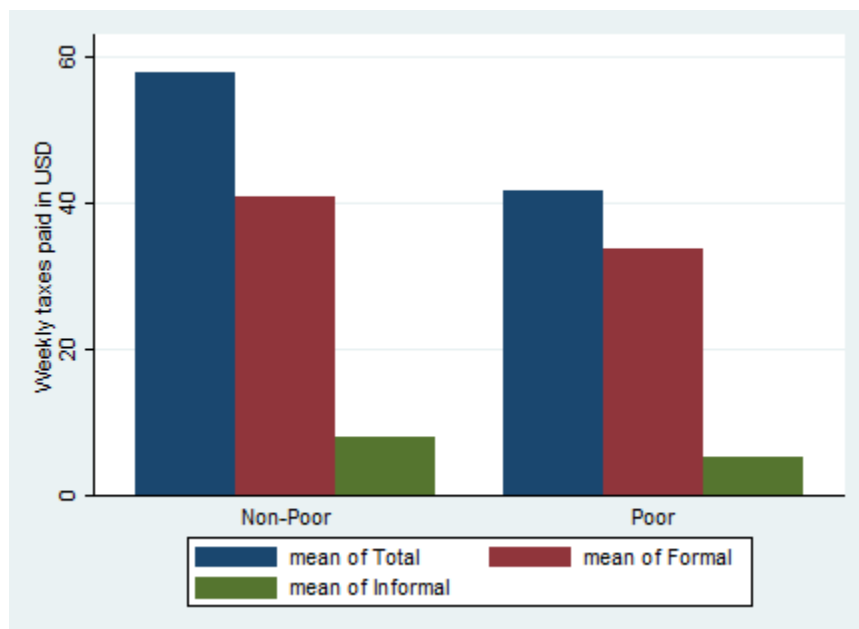
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Online Appendix

A Additional tables and Figures

Figure A1: *Taxes by household wealth*

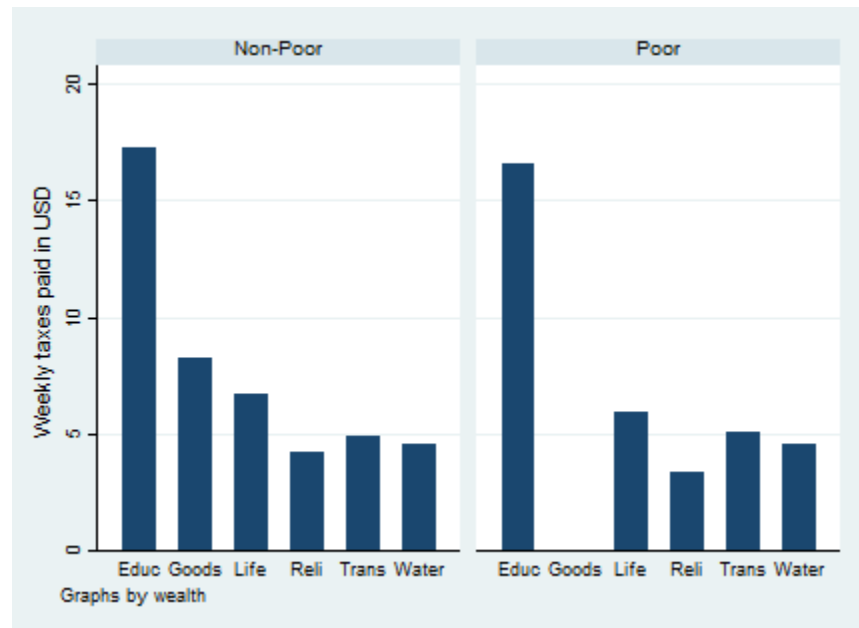


Notes: This figure shows average weekly total, formal, and informal taxes by household wealth. The measure for household wealth was calculated using a thorough household inventory in the baseline survey. The median household wealth was then calculated and everyone below the median was designated “poor” and everyone above “non-poor”. Extreme outliers both in terms of tax payments as well as household wealth were cut from the analysis.

Table A1: Treatment Description

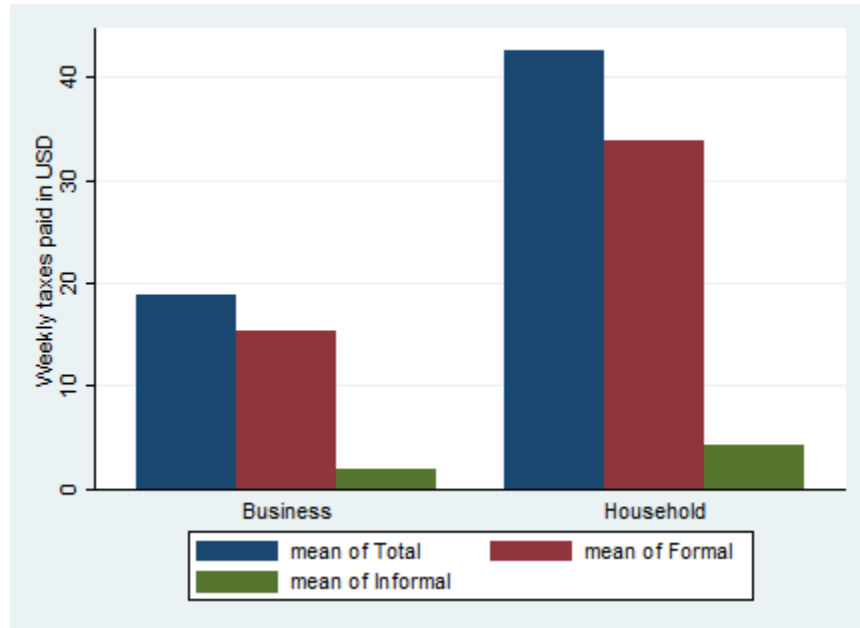
I. Retrospective taxes	ODEP advisors begin by collecting information on any taxes paid in the previous week and the amounts paid. The advisor discusses with the citizen whether s/he felt that those taxes were legal and whether the amounts paid were legal without offering a judgment		
II. Abuse diagnostic	Tax consultancy treatment The ODEP advisor assesses whether an abuse occurred, verifying with the Arretes Ministeriels to ensure the provision of correct information. If the ODEP expert suspects an abuse, he does inform the citizen of this	Protection treatment The ODEP advisor assesses whether an abuse occurred, verifying with the Arretes Ministeriels to ensure the provision of correct information. If the ODEP expert suspects an abuse, he does not inform the citizen of this.	Combined (same as info treatment) The ODEP advisor assesses whether an abuse occurred, verifying with the Arretes Ministeriels to ensure the provision of correct information. If the ODEP expert suspects an abuse, he does inform the citizen of this.
III. Abuse tracking	The ODEP advisor collects basic information on abuses including commune, avenue, date of abuse, and agency involved. The ODEP advisor emphasizes that this is for research purposes only and that ODEP will not provide any follow-up of any kind . The ODEP advisor also does not ask for information on the identity of the tax collector to further avoid leaving the impression that they will investigate the case. If the citizen offers that information it is recorded.	The ODEP advisor collects basic information on abuses including commune, avenue, date of abuse, and agency involved. The ODEP advisor emphasizes that ODEP will (possibly) use this information to investigate the incident and advocate on the citizens' behalf . The ODEP advisor also did ask for information on the identity of the tax collector , reminding the citizen that they did not have to provide this information but that any information they did provide would be kept strictly confidential.	(same as protection treatment) The ODEP advisor collects basic information on abuses including commune, avenue, date of abuse, and agency involved. The ODEP advisor emphasizes that ODEP will (possibly) use this information to investigate the incident and advocate on the citizens' behalf . The ODEP advisor also did ask for information on the identity of the tax collector , reminding the citizen that they did not have to provide this information but that any information they did provide would be kept strictly confidential.
IV. Prospective taxes	The ODEP advisor inquires into taxes that were likely to be paid in the coming week, including the anticipated amounts. The ODEP advisor then proceeds to discuss with the citizen whether that tax is legal or not, and the statutory rates.	The ODEP advisor inquires into taxes that were likely to be paid in the coming week, excluding the anticipated amounts. The ODEP advisor provides no additional information on anticipated taxes.	(same as info treatment) The ODEP advisor inquires into taxes that are likely to be paid in the coming week, including the anticipated amounts. The ODEP advisor then proceeds to discuss with the citizen whether that tax is legal or not, and the statutory rates.
V. Navigation support	Whether the ODEP advisor anticipates an abuse or not, he proceeds to provide information on the different actors and agencies that constitute the upstream chain leading up to the citizen's payment. For instance, in the case of a commune tax, the tax advisor will explain whom the tax collector is accountable to, how the commune tax structure works, etc. All relevant actors must be described, with their points of entry, INCLUDING but not only actors that are not directly in the vertical chain of tax flows preceding the payments that the household makes.		
VI. Abuse complaints support	The ODEP advisor offers advice on what SPECIFIC steps the household/business can take to voice his/her complaint in the event of an abuse. All advice is tailored to the specific situation of the household/business examined in this phone call.	No information on how to redress abuses is provided.	(same as info treatment) The ODEP advisor offers advice on what SPECIFIC steps the household/business can take to voice his/her complaint in the event of an abuse. All advice is tailored to the specific situation of the household/business examined in this phone call.
VII. Protection	No promise of protection is provided.	The ODEP advisor reminds the respondent that if there is an abuse with respect to these payments, they can inform the ODEP expert during the next call for possible future ODEP investigation and campaign	(same as protection treatment) The ODEP advisor reminds the respondent that if there is an abuse with respect to these payments, they can inform the ODEP expert during the next call for possible future ODEP investigation and campaign action.

Figure A2: *Average weekly taxes by category and household wealth*



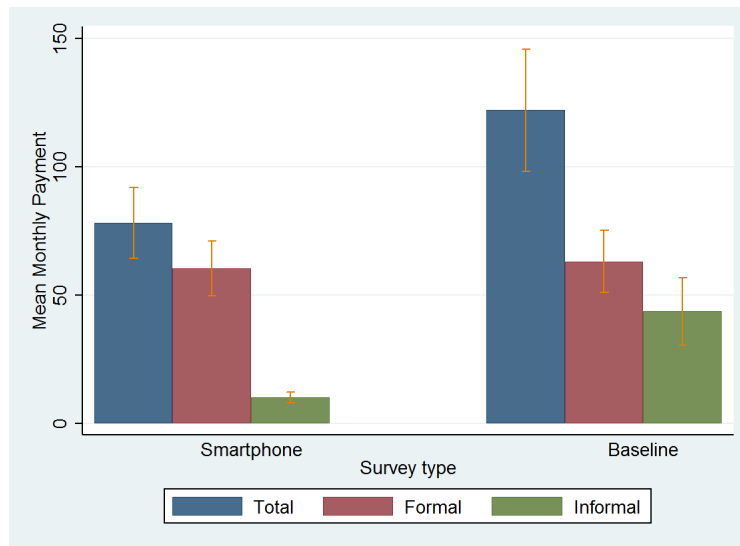
Notes: This figure shows average weekly total taxes by tax category and household wealth. The measure for household wealth was calculated using a thorough household inventory in the baseline survey. The median household wealth was then calculated and everyone below the median was designated “poor” and everyone above “non-poor”. Extreme outliers both in terms of tax payments as well as household wealth were cut from the analysis. We only show the totals for the six tax categories with the highest weekly average.

Figure A3: *Household vs Business*



Notes: This figure shows mean weekly total, formal, and informal tax payments by type of respondent — whether they were households or businesses

Figure A4: *Smart phone versus Baseline survey mean monthly tax payments*



Notes: This figure compares the mean monthly tax payments of the smart phone survey to the baseline survey. Payments are broken into Total, Formal, and Informal Payments. The sample is 233 respondents after having removed observations without baseline tax burden and extreme outliers (18 outliers).

B Minutes from city-wide campaign against tax corruption

COMPTE RENDU DE LA REUNION AVEC LES BOURGMESTRES

POINT INSCRIT A L'ORDRE DU JOUR :

*Un seul point était inscrit à l'ordre du jour : **plaidoyer en faveur des ménages et entreprises afin de réduire de 30 % les tracasseries et les prélèvements informels et illégaux***

Lieu : Maison communale de NGABA

Modérateur : Olivier LUTUMBA

Heure de début : 10h45

Date : le 1^{er} décembre 2015

Mot de bienvenue du Bourgmestre de la commune de Ngaba en sa qualité du Président du groupe de pilotage de la ville de Kinshasa, hôte de la rencontre.

La réunion a commencé par une brève présentation des personnes présentes en déclarant chacun son nom et sa fonction dont liste de présence en annexe.

Après la présentation, le modérateur Monsieur Olivier Lutumba a introduit Monsieur Valery Madianga en charge de la communication de l'ODEP commis à la tâche à présenter avec brio, le bien-fondé de l'ODEP structure, puis vint le tour de Monsieur Jacques KATCHELEWA le chargé des programmes de l'ODEP commis à la charge de la présentation des résultats de l'étude, a expliqué à l'assistance et motivé, **les résultats des enquêtes et la démarche poursuivie dans les 22 communes concernées de la ville province de Kinshasa.**

Monsieur le chargé des programmes dans son allocution a commencé par remercier tous les bourgmestres présents et ceux représentés respectivement par leurs adjoints ainsi que les Chefs de Bureau, pour la réussite des différentes rencontres organisées le 19 novembre 2015 comme prélude à la rencontre du jour avec les différents services générateurs des recettes ou service d'assiettes dans les trois districts concernés par les plaintes notamment, les districts de la Tshangu (communes de Ndjili, Kimbanseke, Masina) , Funa (Kalamu, Ngiri-Ngiri, Bumbu, Bandal et Selembao) et Mont Amba (Lemba, Ngaba, Matete) objet des tracasseries et des prélèvements informels.



Observatoire de la Dépense Publique

GAT – LICODEF - RECIC national – REGED – RODHECIC – RRN – SOS KINSHASA

INVITATION

Chef de service :

L'Observatoire de la Dépense Publique, ODEP en sigle vous convie à prendre part à **une** rencontre avec les responsables des services Environnement, IPEMEA, DGM, ANR, Police, SNEL, REGIDESO, Etat Civil et Population.

Jour : Jeudi, 19 novembre 2015

Heure : 10 H 00 à 12 H 00

Lieu : Sise sur avenue
....., Commune de, Référence :

Soyez les bienvenus

Fait à Kinshasa, le 17 novembre 2015.

Pour l'ODEP

Monsieur Rycky MAPAMA

Directeur Exécutif

191, avenue Buta
Commune de Lingwala
Kinshasa/ REP. DEM du CONGO
Tél : 0810783751
e-mail : odeprdc@yahoo.
www.odeprdc.cd



Observatoire de la Dépense Publique

GAT – LICODEF - RECIC national – REGED – RODHECIC – RRN – SOS KINSHASA

Kinshasa, le 20 novembre 2015

N/REF : ODEP/DE/...../2015

A Monsieur le Bourgmestre
Commune de
à Kinshasa

Objet : **Informations sur les cas des prélèvements illégaux
des taxes par les Agents de vos juridictions respectives**

Messieurs les Chefs de Bureau,

L'Observatoire de la Dépense Publique, ODEP en sigle, avait reçu de ses partenaires un appui pour entreprendre des enquêtes auprès des ménages et des entreprises dans 22 communes de la Ville Province de Kinshasa.

Le but de cette enquête a été de recueillir des informations détaillées sur combien des ménages et entreprises paient les impôts et taxes formelles et informelles dans le cadre de leurs activités quotidiennes.

C'est dans ce cadre que l'ODEP avait recruté deux Experts en Fiscalité, l'un chargé des ménages et l'autre des entreprises en République Démocratique du Congo. Ces Experts ont été chargés de communiquer régulièrement avec environ 200 ménages et entreprises par téléphone et message texte pour :

- Enquêter sur les questions et préoccupations liées au paiement des taxes formelles et prélèvements illégaux ;
- Concevoir des conseils personnalisés pour fournir aux ménages et aux entreprises des informations qu'ils peuvent utiliser pour réduire leurs paiements d'impôts informels et illégaux.

Cela inclut aussi des informations sur la nomenclature et la procédure à la matière.

Pour ce faire, les Experts tiennent des registres détaillant chaque jour la nature des questions et des conseils qu'ils donnent à leurs interlocuteurs.

C'est ainsi que du 9 septembre au 15 novembre 2015, les Experts de l'ODEP ont enregistré des plaintes des ménages et entreprises des prélèvements illégaux ci-dessous :

191, avenue Buta
Commune de Lingwala
Kinshasa/ REP. DEM du CONGO
Tél : 0810783751
e-mail : odeprdc@yahoo.
www.odeprdc.cd

C Self-reported results

Table A2: The impact of the interventions, in words

Parce que je ne pay plus de taxe un agent qui n'a pas tous les documents ncessaires et qui me demande de payer une taxe que je ne connais pas

Parce que je ne pai plus en dsordre

Je ne donne plus l'argent n'importe quel agent collecteur

Parce que je ne paie plus le mme montant qu'avant. J'ai dcouvert qu'on me vol 7 dollars sur chaque paiement

Parce je suis maintenant inform des taxes qui sont formelles que je dois payer et informelles que je ne dois plus payer

Parce que a nous a plus clair sur les taxes que nous devons pays et sur celles que nous ne devons plus pays vu qu'elles sont informelles

Parce que nous ne sommes plus dans l'ignorance Parce que j'ai fini par prendre la dcision de ne plus jamais pay une taxe juste pour payer

Parce que je paie dj au bureau moi mme et non plus dans les mains des collecteurs qui passent dans les avenues et qui nous facture plus que ce que nous devons lgalement payer Parce que je ne paie plus les taxes que je juge informelles

Parce qu'on remarqu que beaucoup des collecteurs des taxes nous bouff l'argent et aujourd'hui nous mme allons jusqu' leur bureau pour payer

Je paie maintenant les taxes au bureau du service comptent

Parce que je paie maintenant les taxes moi mme dans le bureau spcifique au lieu de remettre aux agents qui circulent souvent dans les avenues

Parce que je ne paie plus l'impt sur place la maison. Je paie maintenant la commune Parce que nous avons retrouv notre catgorie de paiement et on paie maintenant moins que ce qu'on payait avant

Parce que nous connaissons dj le montant fixe de certaines taxes prvu par l'tat
Je connais dj le montant exacte de certaines taxes que je paie Parce que je paie maintenant mes taxes la banque et en montant fixer par la loi. Je n'accepte plus me faire escroquer par les collecteurs ambulants

Je ne paie plus les taxes n'importe qui En l'aidant viter les abus des taxes

Parce que je connais dj le montant formel prvu pour certaine taxe que je paie

Parce que je commence payer mes taxes la banque ce que je ne faisait pas avant

Parce que maintenant je connais le montant exacte prvu par la loi de certaines

Je commence moi mme payer mes taxes formellement la DGI Parce que nous payons maintenant des taxes que nous sommes senss pay formellement

Parce que je connais dj les taxes que je suis obliger de payer et la manire dont je dois procder pour le paiement

Parce que je sais maintenant le montant exacte des certaines taxes que je paie

Notes: This table indicates the respondents' self provided answers about the impact of ODEP interventions.