

# LEGAL ANTECEDENTS OF FISCAL CAPACITY\*

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## Abstract

This project studies a low-capacity state, the D.R. Congo, seeking to establish legal capacity and how its efforts to do so shape citizens' demand for the state. We examine the randomized rollout of a legal capacity-building program implemented at scale in the city of Kananga by the Provincial Ministry of Justice. Local property disputes are randomly assigned to receive free arbitration offered by state-licensed lawyers. We study how this legal capacity program shapes property rights security, social cohesion and trust, and citizens' willingness to fund the formal state through taxes. An information treatment helps shed light on mechanisms.

## 1 Introduction

For economists and policymakers in developing countries, state capacity is often equated with fiscal capacity.<sup>1</sup> However, a long tradition in political thoughts, emanating from Hobbes and Locke, sees dispute resolution and justice, not taxation, as the path to accumulating state capacity. For example, the enclosure of the common lands of England — which regularized property rights and thereby laid the groundwork for state centralization — took place in the 18th and 19th centuries without the government raising (or spending) a penny. It simply provided a system of rules to resolve disputes that arose in the process (Heldring et al., 2021). Most historical states in Africa arose in a similar fash-

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<sup>1</sup>For instance, a country's tax-GDP ratio is perhaps the most common means of evaluating state capacity at least when making cross-country comparisons (Besley and Persson, 2009).

ion, with power vested primarily in lineage systems and state authority emerging only to help arbitrate disputes and prevent feuds.<sup>2</sup> Even relatively centralized states, such as the Nyiginya Kingdom in Rwanda, had no fiscal bureaucracy and were chiefly preoccupied with dispute resolution (Vansina, 1990). The social contract in most pre-colonial African states thus hinged on legal, not fiscal, capacity.

In this project, we investigate the impact of legal capacity building in a fragile state in Africa, the D.R. Congo (DRC), on beliefs about the government, social cohesion, and citizens' willingness to fund the government through taxes. In particular, we evaluate the randomized implementation of a large-scale legal capacity building program in the city of Kananga (DRC). This program, overseen by the Provincial Ministry of Justice, sought to help resolve local disputes over property, petty theft, and debt collection. The program provides subsidized access to state licensed lawyers to serve as arbitrators. Cases are randomly assigned to this treatment or to the control group.<sup>3</sup> In this paper, we examine the effects of the program on citizens' views and willingness to fund the formal state. With an information treatment, we identify the mechanisms through which legal capacity building shapes citizen demand for the state.

## 2 Background and Setting

This study is conducted in Kananga, a city in the Kasai Central Province of the Democratic Republic of the Congo (DRC). The DRC ranks 122nd out of 125 countries in property rights protection (Property Rights Alliance, 2023). Property disputes are widespread: 41% of property owners report experiencing a recent dispute. However, access to the formal justice system is limited to a small fraction of the population due to prohibitive costs and perceptions of bias. The legal capacity-building program examined in this study aims to address these barriers by facilitating access to the formal justice system.

One explanation for the Congolese state's frequent failure to provide essential public goods, such as secure property rights, lies in its extremely low tax revenue. The DRC collects less than 10% of its GDP in taxes, compared to 30%-40% in most developed countries. The challenge of low tax collection is common across low-income countries but is particularly severe in fragile states. Most state-building initiatives thus focus on strengthening the fiscal side of the state, e.g., training tax inspectors and auditors, implementing e-filing and digital payment systems, updating property valuation rolls, and computerizing government systems.

Yet such fiscal interventions often falter due to the state's inability to credibly commit to providing public goods in return for taxes. Building state capacity through legal mechanisms may be more feasible because it avoids these commitment problems, enabling the state to build a reputation for probity and even legitimacy. Consider the fiscal approach: the state must first collect taxes (the 'quid') before delivering public goods

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<sup>2</sup>Southall (1988) calls this hybrid type of polity a segmentary state.

<sup>3</sup>There is another treatment arm, in which cases are assigned to customary chief arbitrators, which is the subject of a different paper comparing formal and informal justice paradigms.

(the ‘pro quo’). In weak states, citizens mistrust the state and expect little in return for their taxes; while the state’s inability to provide public goods without tax revenue perpetuates a low-capacity trap. In contrast, dispute resolution may circumvent this trap because it aligns the timing of service delivery (the ‘pro quo’) and payment (the ‘quid’). The ‘service’ — arbitrating disputes — is typically provided upfront, with fees collected afterward. This sequencing allows states to use dispute resolution to establish a reputation for delivering on promises and acting in the public interest, as the historical examples suggest. These dynamics may be especially pronounced in Africa, where the fiscal contract was often absent in pre-colonial states.

### 3 Experimental Design

We evaluate the randomized implementation of a large-scale legal capacity-building program in Kananga, a city in the Democratic Republic of the Congo (DRC). Overseen by the Provincial Ministry of Justice, the program aims to improve the resolution of local disputes concerning property, debt, and petty theft. It provides subsidized access to state-licensed lawyers who act as arbitrators in local disputes.<sup>4</sup>

#### 3.1 Experiment 1: Access to Formal Dispute Resolution

We collaborated with the Ministry of Justice (MOJ) to roll out the dispute resolution program as a randomized controlled trial (RCT). The program was implemented in several steps:

**Step 1: Dispute Registration.** The program begins with a door-to-door dispute registration campaign. MOJ enumerators inform property owners about the government’s goal to catalog disputes related to property, debt, and theft across Kananga in an effort to improve the government’s dispute resolution policies. Residents are invited to report ongoing disputes without mention of free arbitration. This is to avoid creating expectations about receiving services which could have influenced reporting rates. After registration, MOJ enumerators also visit the other party in the dispute to record their perspective. As part of registration, both parties were asked to record a brief video explaining their side of the dispute. Enumerators also record similar videos with neighbors and local avenue chiefs, who often play informal mediation roles and are knowledgeable about local disputes.

**Step 2: Random Assignment to Arbitration or Control.** After registration has concluded in a neighborhood, in collaboration with the MOJ, we randomize cases to one of two groups: free arbitration by state-licensed lawyers or a control group. In the control group, citizens can pursue resolution through existing formal or informal channels, such as local avenue chiefs who frequently mediate disputes. In the arbitration

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<sup>4</sup>We use the term “arbitration” because the lawyers bring the parties together and facilitate structured discussion between the parties to guide them toward a resolution. The process is similar to mediation, but the lawyers typically play a more directive role in shaping the process than is typically connoted by the term mediation.

group, three Lawyers are randomly assigned to resolve cases assigned to mediation within a neighborhood over a two-month period. They operate from local offices or conduct arbitrations at participants' homes as needed. Lawyers receive a monthly salary and a performance bonus for completing their caseload within two months.

**Cross-Randomizations.** To help unpack key features of the formal justice system, two cross-randomized sub-treatments are introduced:

1. *Formal Documentation*: a share of cases is randomly assigned to receive a formal letter issued by the arbitrators outlining the arbitration details and outcomes, signed by all relevant parties. This treatment tests whether the impact of arbitration (over time) hinges on creating a paper trail.
2. *Escalation to Higher Court*: a share of cases is randomly assigned to receive the option of escalation of the case to the public prosecutor if arbitration fails. The logic of this treatment is to help shed light on the importance of more “punitive” justice-style enforcement threats in the formal legal system.

The randomization of cases to treatment is stratified on conflict type, co-ethnicity of the arbitrator and plaintiff (proxied by their territory of origin), the gender of the plaintiff, and the difficulty of the case (proxied by how long the dispute has been unresolved).

### 3.2 Experiment 2: Information about the Dispute Resolution Program

This second experiment investigates how credible information about the dispute resolution program influences average citizens' perceptions of and willingness to fund the state through taxes. Unlike the first experiment, which focused on households involved in disputes, this experiment also targets those who did not register a dispute and thus did not participate in the dispute resolution program.

This experiment is administered after the arbitration program concludes among individuals in the endline survey sample. The information experiment is embedded within the endline survey. We elicit detailed priors and posteriors about the perceived competence and bias of the government. Competence refers here to the ability of the arbitrator to reach a just outcome, while bias refers to their tendency to favor their coethnics using incentivized methods.<sup>5</sup>

Citizens are randomly assigned to receive statistics summarizing the arbitration process. To help disentangle arbitrators' competence from their bias, the information provided focuses on cases where one party is a coethnic of the arbitrator and the other is not (referred to as “informative matches”).

The information experiment includes several treatments, assigned at the individual level. The information is presented on fliers distributed by enumerators, who read and explain the content to respondents.

1. *Competence Information*: Respondents receive information about the share of cases where arbitrators ruled correctly and there is no tradeoff between the just outcome

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<sup>5</sup>We discuss how we assess the “just” outcome in Section 4.1.

and favoring coethnics. In other words, we take the set of cases in which the coethnic of the arbitrator was viewed by an independent panel of legal experts to be in the right. Incorrect ruling in these “no tradeoff” cases suggests incompetence.

2. *Type information*: Respondents receive information about the share of cases arbitrators correctly resolved when there is a tradeoff between the just outcome and favoring coethnics. Here we take the set of cases in which the coethnic of the arbitrator was viewed by the independent panel of legal experts as in the wrong. Such cases provide a sharp test of the bias of the arbitrator: incorrect ruling (favoring coethnics) in these “tradeoff” cases suggests bias.
3. *Capacity and type information*: Respondents receive information about both competence and bias.
4. *Control*: Respondents are given general information about the dispute resolution campaign without details from informative matches.

We examine changes in beliefs by measuring the difference between the endline respondents’ prior and posterior beliefs, as well as broader attitudes toward the government. Additionally, we measure impacts on tax compliance.

## 4 Data

An independent team of enumerators administers a series of household surveys. First, we conducted a baseline survey with a random sample of approximately 4,100 households to assess perceptions of justice and the state. These households are randomly selected and not limited to those with disputes. Second, we will conduct an endline survey after the conflict resolution program ends. This survey revisits baseline respondents, case participants and their neighbors, as well as a random sample of additional households.

In addition to survey data, we collect administrative data from both the dispute resolution program and the tax authority. These data include:

1. Characteristics of the lawyers involved in the program
2. Intake surveys with arbitrators (when assigning a case)
3. Outtake surveys with arbitrators (after arbitration)
4. Property tax payments

### 4.1 Measuring the “Just” Outcome

To provide the information treatments described above, and to evaluate the legal system’s impartiality more broadly, we need a reliable measure of the truly just outcome for each conflict case. We develop a measurement strategy using the videos recorded during case registration as our source of ground truth. Specifically, we convene a panel of three formal legal experts and three citizens from other parts of the city. The panel views the videos collected during case registration, including statements from each party involved in the

conflict, the local avenue chief, and a neighbor of each party involved in the conflict.<sup>6</sup> After viewing the videos, enumerators survey each panel member to determine which party they believe to be primarily in the right.

To decide what would be the “just” outcome, we take the majority opinion among these six independent judges. We will also examine separately the just outcome according to formal experts and according to citizens (who are similar to a jury in common law systems).

## 5 Hypotheses

The primary outcomes of our study are citizens’ posterior beliefs about the government, tax compliance and revenue, and perceptions of local social harmony.

### 5.1 Experiment 1

1. **Tax compliance and revenue.** We hypothesize that the legal capacity-building program will increase citizens’ willingness to fund the state through taxes. On average, we expect that individuals randomly assigned to receive arbitration will be more likely to pay their property taxes. Property tax compliance is our focus since it is a universal levy and is collected by the provincial government, which is also responsible for administering the legal campaign under study.

However, we also expect considerable heterogeneity based on two key factors:

- (i) *Case Outcome*: whether case respondents won or lost their case;
- (ii) *Just Outcome*: whether the “just” outcome was reached, according to the above-described measure.

We expect a stronger positive effect among case respondents who “won” their case. For those who “lost,” the impact is less clear. While disappointment might make them less inclined to pay, a procedurally fair arbitration could still lead them to positively update about the government, resulting in a higher willingness to pay taxes. Similarly, achieving the “just” outcome should result in stronger updates and increased tax compliance for both winners and losers under a strong version of this hypothesis, or only for winners under a weaker version. Conversely, we expect the weakest or even negative effects, among those who lose “unjustly.”

A potential challenge with these heterogenous effects is that they condition on outcomes, which may introduce bias. To address this, we will use a leave-one-out JIVE approach, instrumenting the outcome from a given arbitrator (randomly assigned) using their observed outcomes in other cases. The logic is that a case that happens to be assigned to an arbitrator who is rarely biased is likely to be handled in a procedurally fair manner, independent of the specific case characteristics. Furthermore, Experiment 2 will help disentangle the importance of unbiased judgments in shaping the pattern of belief updating observed after the program.

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<sup>6</sup>Additionally, three customary leaders (“experts” in customary law) attend the video session, but their assessments will be analyzed in a companion paper.

2. **Perceptions of local social harmony.** We hypothesize that assignment to the arbitration program will, on average, improve perceptions of property rights security and social harmony and cohesion, as measured through surveys. As with tax compliance, we will explore heterogeneity in these effects based on case outcomes and whether the “just” outcome was achieved.

## 5.2 Experiment 2

We also formulate hypotheses for experiment 2.

1. **Posterior beliefs about the government.** We hypothesize that information about the legal capacity-building program will lead to heterogeneous updating based on participants’ priors:
  - (i) Citizens who initially believed the government to be incompetent and learn that it demonstrated greater competence than expected during this campaign are expected to revise their beliefs upward
  - (ii) Conversely, those who believed the government to be highly competent but learn that the government demonstrated less competence during the campaign than they expected may revise their beliefs downward.

Similar heterogeneous belief updating is expected concerning the information about bias. We also expect broader perceptions of the government to co-move with these beliefs.
2. **Tax compliance and revenue.** We hypothesize that willingness to pay taxes will align with the direction of belief updating. Among participants for whom we lack prior beliefs, we expect that both competence and bias information will positively affect tax compliance, given that we think people hold dim views of the government’s competence and bias.
3. **Perceptions of local social harmony.** We hypothesize that perceptions of social harmony and cohesion will similarly co-move with updates in beliefs about competence and bias.

For all outcomes, we expect differential responses for case respondents — i.e., participants in experiment 1 who registered a dispute — and non-case respondents. Case respondents have firsthand experience with the legal campaign, which could amplify or diminish their response to the information provided in Experiment 2. If participation in the campaign reinforces the credibility of the information, case respondents may exhibit stronger responses to the information. However, if the information about average case outcomes contradicts their personal experience, they may discount it, leading to weaker responses. While we do not make a strong prediction about which effect will dominate, we plan to analyze heterogeneous responses within the case respondent subgroup.

## 6 Mechanisms

Investing in dispute resolution could impact demand for the state and willingness to pay taxes through several potential mechanisms.

- **Income.** Building on [Besley and Persson \(2009\)](#), we argue that there might be a complementarity between legal and fiscal capacity through an income channel. Enhancing legal capacity might strengthen property rights, which stimulates the local economy and, in turn, mechanically expands the tax base. We will test this mechanism using detailed household surveys capturing perceptions of property rights security and economic outcomes such as investment. We anticipate larger effects among case respondents in Experiment 1 but will also examine data from Experiment 2.
- **Information.** We hypothesize that citizens face uncertainty about both the state’s capacity — i.e., its ability to implement policies and transform tax revenue into public goods — and its type/bias, i.e., whether it honors the social contract by using tax revenue to provide universal public goods rather than favoring coethnics. Citizens are willing to pay taxes when they perceive the probability of the state being both high capacity and a good type to be sufficiently high.

Dispute resolution provides critical information about the state’s type, as observing case outcomes allows citizens to update their beliefs that it will spend tax money on universal public goods. Importantly, dispute resolution is a richer informational environment compared to public goods provision because it allows for the observation of “informative match” cases, which help disentangle perceptions of capacity and type, as noted above. These cases allow citizens to form more nuanced beliefs about the state’s likelihood of using tax revenue for public goods in general (capacity) and whether they are provided universally (type).

We will test this mechanism primarily by leveraging the results of Experiment 2, which was specifically designed to isolate the effects of updating beliefs about capacity, type, and their interaction. Additionally, we might be able to assess this mechanism within Experiment 1, focusing on respondents involved in informative match cases. While we anticipate more belief updating in this sample, we recognize that the limited number of such cases may limit statistical power.

- **Property Rights Security.** Dispute resolution may enhance property tax compliance by improving the property rights security of households. Indeed, a key barrier to property tax compliance is often the insecurity of property rights. To assess this mechanism, we will analyze endline data on perceived security of property rights.<sup>7</sup>

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<sup>7</sup>As an additional approach, we may also leverage variation in beliefs about property rights security induced by the formal document sub-treatment.