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# CAN THERE BE BENEFITS FROM COMPETING LEGAL REGIMES?

Pedro NASO, Erwin BULTE, Tim SWANSON

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# Can There Be Benefits from Competing Legal Regimes?

The impact of legal pluralism in post-conflict Sierra Leone

Pedro Naso\*

Erwin Bulte<sup>†</sup>

Tim Swanson<sup>‡</sup>

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## Abstract

We investigate the impact of competition between legal regimes on the number of authoritative acts and amount of fines occurring in rural Sierra Leone. We model state and traditional legal systems as competing authorities with a potential for overlap in their jurisdictions. We are interested in the sign and magnitude of the legal pluralism externality in this region of overlapping authority. We then test the model and estimate the size of the externality coefficient in the context of post-conflict Sierra Leone. Our results show a negative externality between regimes for civil disputes—that is, an increase in the cost of apprehending a person. We also show that there is a reduction in the amount of fines per dispute collected in this shared space. Overall, this indicates that a potential benefit to the local people from multiple competing regimes is a reduction in expected authoritative expropriation.

**Keywords:** Legal Dualism, Enforcement Externalities, Civil War, Africa.

**JEL Classification:** O17, H11, P48, K42.

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\*Department of Economics, Graduate Institute of Geneva (IHEID). Maison de la Paix, Ch. Eugene-Rigot 2, CH-1211, Geneva, Switzerland. E-mail: pedro.guimaraes@graduateinstitute.ch

<sup>†</sup>Department of Economics, Utrecht University and Wageningen University, P.O. Box 8130, 6700, EW Wageningen, The Netherlands. E-mail: erwin.bulte@wur.nl

<sup>‡</sup>Department of Economics, Graduate Institute of Geneva (IHEID). Maison de la Paix, Ch. Eugene-Rigot 2, CH-1211, Geneva, Switzerland. E-mail: tim.swanson@graduateinstitute.ch

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# 1 Introduction

As is often the case in post-colonial societies, Sierra Leone is an example of a nation governed under multiple legal regimes, one instituted by the nation-state and one existing before the state came into being.<sup>1</sup> The traditional legal regime evolved within local rural communities and existed over many years, while the colonial legal regime was transplanted from the ruling European power (here, the United Kingdom) by means of its establishment primarily within a colonial capital (here, Freetown). With time, there was an attempt to diffuse the authority of the state regime outside of the capital, through the establishment of a set of rural authorities (labelled the “Paramount Chieftaincy”) (Jackson (2011)). For most of a hundred years, the two regimes have operated in tandem, albeit with a significant amount of dissatisfaction regarding their method and mode of operation.<sup>2</sup>

Sierra Leone’s long civil war (1991-2002) severely damaged both the country’s state and non-state (or traditional) legal regimes (Fanthorpe (2006), Bellows and Miguel (2006), and Mokuwa et al. (2011)). The Revolutionary United Front (RUF) inspired by Muammar Gaddafi, sought out and killed many of those who administered the law. In rural areas, the state legal structure was “entirely destroyed” during the war. In certain villages, the non-state legal system also suffered a significant weakening of capacity due to the killing of large numbers of village chiefs and elders (the primary administrators of non-state courts) (Jackson (2011)).<sup>3</sup> The entirety of both regimes was moved back towards “year zero” by the end of the conflict.

Following concerted efforts by international donors, the state legal infrastructure was completely rebuilt from 2005, and commenced functioning as a newly initiated state regime. At the same time, the non-state system was also re-established in many places, and new chiefs and elders came into being. For this reason, since the end of the conflict, rural Sierra Leone has continued to exist within the general context of two over-lapping regimes. Similar to other research that has analyzed the roles of legal regimes in Africa (Gennaioli and Rainer (2007), Platteau (2009), Glennerster et al. (2013), Logan (2013) and Cecchi and Melesse (2016)), this paper attempts to analyze how these two institutional authorities—state and non-state or traditional—have interacted in their administration of the populace in a given region, here in regard to the people of the Gola forest in post-

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<sup>1</sup>Throughout this paper, we will refer to the institutions emanating from the establishment of the nation-state as the “state” institutions, and those that existed prior to the nation-state as the “non-state” or “traditional” institutions.

<sup>2</sup>Both the customary leadership and state justice system had been severely criticized in the aftermath of the civil war. Each institutional authority in Sierra Leone was believed to have some malign impacts on the people subject to its jurisdiction. The administration of justice by the Paramount Chieftaincy (the local courts operated for the state) and the local village chiefs have been described by various commentators as ‘despotic’, ‘corrupt’, ‘arbitrary’ and ‘harsh’ and operating for the benefit of a small, elderly male elite (see Jackson (2005), Fanthorpe (2006), Jackson (2007), Gennaioli and Rainer (2007), Acemoglu et al. (2014a) and Acemoglu et al. (2014b)).

<sup>3</sup>On this Jackson (2011) states that ‘the governance infrastructure of state institutions symbolising the power structures that RUF fought against, had been entirely destroyed. In the countryside there were no government records or buildings and the chiefs had largely fled or been killed. In sum, the situation after the war was one of rather literal state-building. There was no existing state left at almost any level’.

conflict Sierra Leone.

Most work on legal pluralism has considered the impact of one regime on the other as a question of interacting legal frameworks or interacting monitoring systems (e.g. Larcom and Swanson (2015)), but always within a single governance unit.<sup>4</sup> In this paper we take a slightly different approach by examining legal authorities as competing governance units. Building upon the idea of governance systems or authorities in newly developing areas (see Olson (2000), McGuire and Olson (1996) and van Besouw et al. (2016)), we model both regimes as organs seeking to assert authority over the same populace in a given territory.<sup>5</sup> Each unit would like to maximize its area of governance, and the numbers of people from which it is able to appropriate rents (or fines in this case). Here, pluralism is more like a contest between regimes competing to assert governance, and we are interested in the question of the nature of the interaction in such a context.

Such a contest in governance may occur in a place such as Sierra Leone on account of the use of the legal system as a means for appropriating gains for the local elites. In Sierra Leone, the outcome of any legal claim frequently results in a benefit primarily for the court authority (either by reason of the authority placing a general fine or “labour penalty” on the person concerned, or by asserting a claim on behalf of the rights of the same elite). Evidence for this sort of practice in Sierra Leone is observed in the relationship between actionable offenses and the work cycle, where the elite’s need for workers is seen to be related to the number of actions being prosecuted (Mokuwa et al. (2011)). It is also evident in the prevalence of claims for items such as “woman damage”, where the elite make use of their rights over women to generate actions against unentitled men.<sup>6</sup> So, unlike places where courts are reactive, claims prosecuted within these sorts of legal regimes are more proactive, and can be used as a general mechanism for placing claims upon the labour or other resources of the subject populace.<sup>7</sup>

A regime may attempt to exert authority over a population, but be limited in its ability by reason of the costs of doing so. One reason that there may be costs in asserting authority is the spatial cost of governance; that is, a regime’s ability to exercise authority may be potentially wasting with distance.<sup>8</sup> This is because a regime requires the use of subordinates to assert its authority over the population, and these subordinates may find it more costly to exercise authority the further they move away from the seat of authority.

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<sup>4</sup>Two exceptions to this are Aldashev et al. (2012b) and Aldashev et al. (2012a).

<sup>5</sup>In Olson’s model, the incentive for the establishment of authority is to capture a flow of rents from the provision of governance, but at the earliest stages of government there may be far more appropriation in evidence than there is governance. Three other papers have also used Olson’s concepts to model the behavior of rudimentary governments as potentially predatory agents (Kurrild-Klitgaard and Svendsen (2003), Acharya et al. (2017) and van Besouw et al. (2016)).

<sup>6</sup>Claims for “woman damage” (interference by one man with the claimed rights of another man in a designated woman) represent about 30% of the total number of claims in the database (Mokuwa et al. (2011)).

<sup>7</sup>This is of course consistent with Olson’s theory concerning the early-development of governance systems, commencing from banditry and proceeding through the establishment of order and investment, and onto taxation (Olson (2000)).

<sup>8</sup>By adding a spatial component to authorities’ optimization problem, we approximate our work to the research on institutional choice strategies in Africa (see e.g. Herbst (2014), Boone (2003) and Baldwin (2014)). For a more general treatment of institutional change and design see Brousseau et al. (2011).

Another reason that the costs of asserting authority may vary is the existence of other, competing regimes. Does the existence of an intersection, i.e. two regimes operating in the same territory, increase or decrease costs of operation and enforcement? It might be the case that multiple governance regimes complement one another in enforcement, resulting in reduced costs at the intersection. Alternatively, it could be the case that the intersecting regimes create interference for one another, resulting in extra costs.

Our modelling of the problem leaves the nature of this externality between regimes an open question, which we then assess empirically. Our empirical work relies on variations in the existence of non-state legal system in a village effected by the civil war. By indiscriminately killing village chiefs in many areas, the rebel forces destroyed the traditional justice system in some villages and not others. This allows us to compare villages where there were two legal regimes, with villages where only the state regime operated.<sup>9</sup>

In our empirical analysis, we find evidence of negative externalities for civil disputes. Two overlapping legal regimes generate extra costs of apprehension on one another when dealing with this type of disputes. This means that the total number of disputes per person is smaller than what it would be if there were no externalities. We also examine how the amount of fines charged by authorities changes with the number of legal regimes. We show that there is a decrease in the magnitude of fines per dispute when state and non-state regimes coexist. It seems that authorities' ability to extract rents from villagers is reduced when there is legal competition.<sup>10</sup>

These two empirical findings suggest that these legal regimes interact in two ways. Their competition is based on quantities (number of disputes), but also on prices (fines). Overall, this indicates that legal competition might reduce the expected amount of authoritative expropriation that occurs in this society. That is, the probability of being apprehended *times* fine paid is smaller for a typical villager when two legal regimes coexist. Thus, in the context of the interaction of these sorts of appropriative institutions, one potential benefit of pluralism lies in the fact that each regime withdraws somewhat in the face of the other.

The paper proceeds as follows: Section 2 relates this paper to existing literature. Section 3 outlines the institutional characteristics of the country and the conflict. Section 4 presents our theoretical framework. Section 5 provides a basic empirical analysis of this model. Section 6 concludes.

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<sup>9</sup>In effect, we are making the following three assumptions to substantiate the conclusions from our empirical analysis: (i) the assumption of indiscriminate killing of chiefs by rebels. The results may be driven by selection if chiefs with specific characteristics were targeted, or if chiefs in villages with specific characteristics were targeted (if these characteristics are associated with judicial authority); (ii) the assumption that dismantling institutional capacity leaves an institutional legacy. If village chiefs are murdered, it takes considerable time to restore the full capacity of the local judicial system; (iii) the assumption that destroying local legal capacity (murdering the chief) does not affect the flow of actionable disputes or offenses.

<sup>10</sup>In a laboratory study, Abbink and Wu (2017) show that having two agents involved in a contest over corruption rents results in reduced size of bribes, as there is an incentive to compete. This supports our finding that fines are lower when there are two overlapping legal regimes in a village.

## 2 Related Literature

Our study is closely related to the literature on the interaction between rural authorities in Africa. Part of this literature examines the impact of pre-colonial institutions (Acemoglu et al. (2014a) and Platteau (2009)) and ethnic divisions (Glennerster et al. (2013) and Michalopoulos and Papaioannou (2013)) in Africa's current economic development. Similar to our work, these studies are concerned with understanding the outcome of the interaction between state and traditional institutions on the people subject to them. A second branch of this literature studies the effects of different types of land property rights—statutory (state) and customary(non-state)—on land investment, and why customary property rights are so persistent (Fergusson (2013) and Goldstein and Udry (2008)). Finally, a third branch analyses the political outcome of the competition between authorities (Baldwin (2013) and Kasara (2007)).

More specifically, our paper is related to research from that literature that models explicitly competition between two institutional authorities. Analogously to Mizuno (2016), we model how two different overlapping authorities—state and non-state—compete for rent-extraction in a rural setting. Our theoretical set up is somewhat similar to the one in his first model, where the relative power of the competing authorities ends up determining the revenue they are able to extract from farmers. However, in our model, local people are immobile and do not respond to authorities' actions.

As in Aldashev et al. (2012b), we develop a model of legal dualism with competing jurisdictions. They study how changes in the state legal regime affects customary law, and allow for the possibility of a legal reform. In the sense that we allow for externalities between legal regimes, our model also captures this idea of one regime impacting the other. Their conclusion is that state legislation can make customs evolve to a more welfare enhancing outcome depending “upon the incentives of the customary authorities to keep their people within the fold”.

Our inquiry is also part of a growing literature analysing the interaction of state and non-state legal institutions under the broad headings of ‘law and norms’ and ‘legal pluralism’. Analysts have modelled various aspects of how state and non-state legal institutions can interact with one another: these include modelling fundamental relationships in terms of substitutability (Zasu (2007)), complementarity (Kaplow and Shavell (2007)), convergence (Aldashev et al. (2012b)), and dissonance (Larcom and Swanson (2015)). Despite these theoretical works, there is virtually no empirical work quantifying the effect on disputes and fines resulting from a move from legal monism to legal pluralism in either the developed or developing world.

To a lesser extent, this paper also relates to the literature on state capacity formation (Acemoglu (2005), Acemoglu et al. (2010), Besley and Persson (2009), Besley and Persson (2010) and Besley (2011) ). Acemoglu (2005) and Acemoglu et al. (2010) discuss the concepts of weak and strong states and which equilibria allow the existence of them. They view strong states as political authorities that achieves the monopoly of violence—similarly to the idea we use here that predatory authorities compete for the monopoly of fine extraction in a given domain (Olson (2000)). Besley and Persson (2009), Besley and Persson (2010) and Besley (2011) analyze incentives weak states have to invest in state

formation and in capacities to raise revenue and support markets.<sup>11</sup>

To this long list of assessments of the impacts of pluralism, we add the seminal work of Olson in considering the origins of governance regimes (Olson (2000); McGuire and Olson (1996)). In Olson's framework, the origins of governance rest on the activities of roving bandits. They are organized groups that control means of coercion, and extract rents from a given population. Once these bandits realize that they can increase rents by encouraging local production, they become stationary and rationalize theft in the form of taxes. We consider the problem of governance in post-conflict Sierra Leone to be similar to this situation. In our model, traditional and state authorities behave as roving bandits, competing for rents, extracted in the form of fines.

We are not the first to apply Olson's framework in such a situation. Previously, Acharya et al. (2017) has employed a similar framework to study how institutions limiting predation have emerged in Northern Somalia.<sup>12</sup> Kurrild-Klitgaard and Svendsen (2003) also draws upon this work to study the actions of Viking forces and their settlements. Our work is distinct in that we attempt to quantify the nature of interaction between authorities in this context. In sum, there is an interesting literature based on the Olson framework of competing authorities, but we are the first to use it to look at the interaction of governance units within a post-conflict context, and to attempt to quantify how this competition impacts upon the subject populace.

### **3 Institutional Facts – Legal Pluralism in Sierra Leone and the Impact of Conflict**

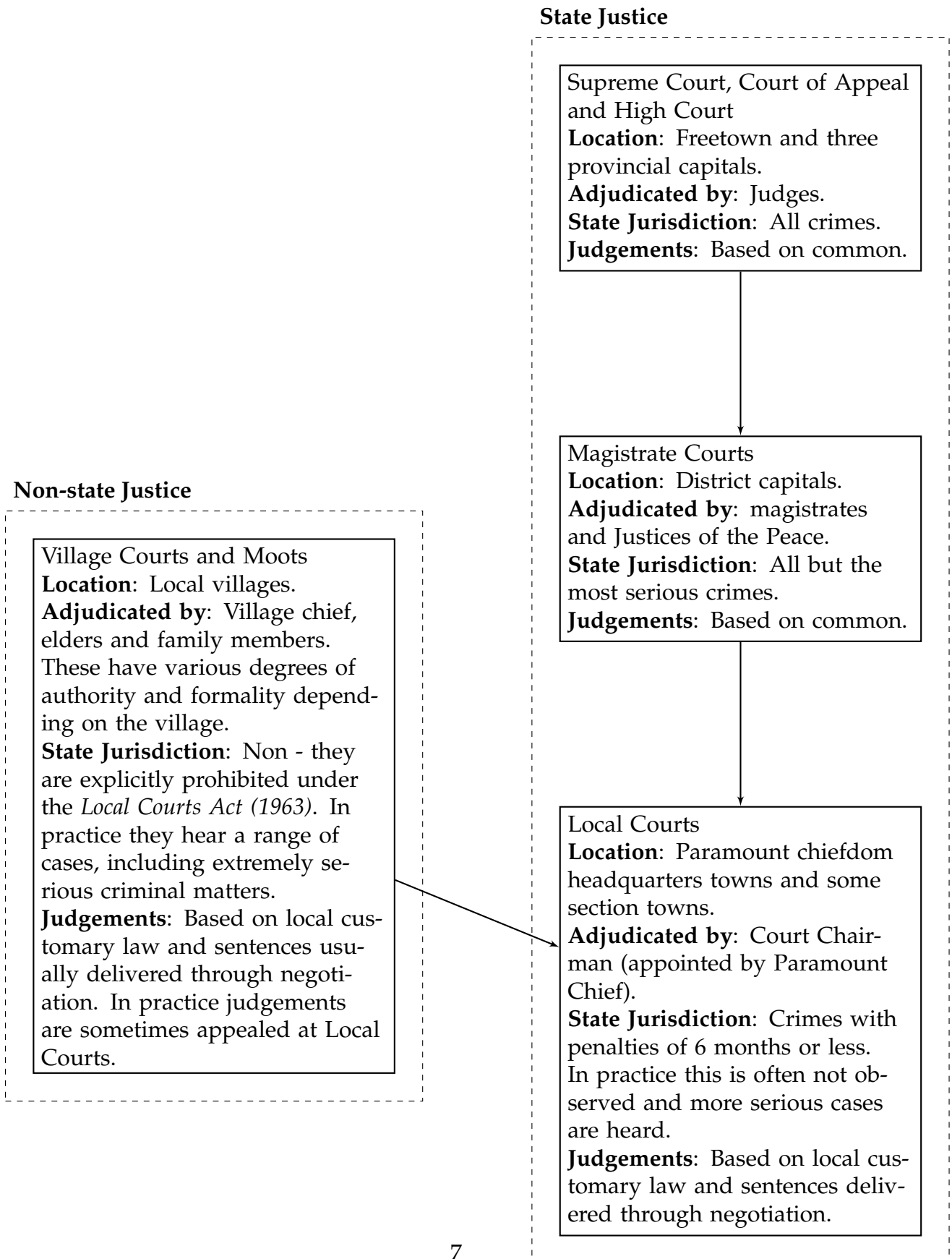
Sierra Leone's colonial history is one of legal bifurcation between the colony of Freetown and the very different rural protectorate of Sierra Leone. The coastal Crown Colony of Freetown was established in 1808 and consisted primarily of repatriated slaves, while the larger rural Sierra Leone Protectorate was added much later in 1896 and was governed by indirect rule. As noted by Jackson (2005), the protectorate was a 'completely separate area of "native administration" and the two units continued in complete separation' up until 1951, ten years before independence. While a western colonial legal infrastructure existed in Freetown, it at first made little effort to project its authority into the rural interior of the protectorate of Sierra Leone.

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<sup>11</sup>To a much lesser extent, our work is also related to the literature on spatial variation in institutional design (Herbst (2014), Boone (2003) and Baldwin (2014)). Our theoretical framework relates to this literature by relating distance costs to levels of enforcement and geographic reach. We show how an optimizing appropriative authority might choose its area of control when competing with an already established second authority.

<sup>12</sup>Similar to Sierra Leone, Somalia's lack of a strong state has encouraged local authorities (traditional clan-based authorities) to compete for rents and, eventually, to function as a state.

Figure 1: Legal Pluralism in Sierra Leone: State and Non-State Justice





This changed with the 1896 ordinance that established the Protectorate of Sierra Leone, which also established 'Courts of the Native Chiefs' to deliver customary law (non-state system) to the rural populace. To confuse matters more, these newly created state courts (projecting the authority of the colonial power outside of Freetown) were later named 'local courts'. They were also administered by a newly created authority confusingly entitled the "Paramount Chieftaincy" (see below). Jackson (2011) states that since Independence in 1961 this dualism was 'reinforced by a continuation of the colonial bifurcation of western legal systems in Freetown and of a form of indirect rule in the countryside based on a system of District Officers and Chiefs'.

Therefore, Sierra Leone can be described as a society that has been subject to a legal transplant, where the state has also tried to accommodate elements of the 'traditional' legal institutions into its own, but where large parts also remain outside of it. Sierra Leone's legal circumstances are represented in Figure 1 below.<sup>13</sup> As can be seen, a distinction is made between state legal institutions and the non-state legal institutions. The state legal institutions consist of western style courts, police, prisons and Local Courts administered by paramount chiefs (sometimes referred to as 'chief courts' or 'customary courts'). The non-state institutions consist of village courts, moots, and other non-state dispute settlement mechanisms and are usually administered and enforced by village chiefs, elders and respected family members. While Local Courts (i.e. state courts that administer local customary law) are empowered by the Local Courts Act 1963, the existence of courts at the village level is expressly forbidden by this same act. The key attributes of state and non-state justice are outlined above.

### 3.1 State Justice

The Formal state courts of Sierra Leone, based on common law and statutes, consist of a Supreme Court, Court of Appeal, High Court and district level Magistrates' courts. The High Court is based in Freetown and visits the three provincial capitals of Bo, Kenema, and Makeni. The magistrates' courts are usually located in the district capitals, hear serious cases involving larceny, assault, sexual assault, fraud, and arson (Jackson (2011)). The geographic reach of the formal state legal apparatus based on common law and statutes remains highly urbanised with Jackson (2011) reporting that of the approximate 100 barristers who are in private practice in Sierra Leone, only seven reside outside Freetown.<sup>14</sup>

The most widely used state courts are Local Courts, which are found in each chiefdom headquarters town and a number of section towns. The intention of these courts is to administer state-sanctioned 'customary law'; each court has the ability to establish customary bye-laws, and lawyers are expressly barred from practicing in them (Local Courts Act 1963). Local court chairmen are required to be knowledgeable in local custom and history, and are appointed by the paramount chief with central government approval. While these courts are empowered to hear only minor cases (crimes punishable by less than six months imprisonment) central oversight is minimal and in practice they often

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<sup>13</sup>Manning (2009) provides a thorough and in-depth description of the interaction of state and non-state courts and dispute settlement mechanisms in Sierra Leone.

<sup>14</sup>Jackson (2011) reports that in 2008 there were approximately 200 members of the Sierra Leone Bar Association.

exceed their jurisdiction both in terms of cases and penalties (Jackson (2011), Castillejo (2009)). Consistent with notions of customary law, sentences (usually in the form of a fine) are a process of negotiation between the parties involved with consideration paid to the financial resources of the accused (Fanthorpe (2006) and Kelsall (2006)). Sentences are enforced by court officers referred to as 'chiefdom police', and those unwilling or unable to pay the fines are forced to flee the chiefdom or go to prison (Jackson (2011)). There is a right to appeal decisions, to a customary law officer at district level (and theoretically all the way to the Supreme Court) and judgements deemed to be inconsistent with the national law can be struck down (Manning (2009)).

### **3.2 Non-State Justice**

Despite the existence of both western style state courts and customary style state courts, many Sierra Leoneans rely on non-state customary courts, moots, and unofficial mediation processes to seek redress, punish criminals and solve disputes.<sup>15</sup> These non-state customary mechanisms range from family moots to official looking village chief courts. Indeed, Maru (2006) notes that '[t]he vast majority of village and section chiefs adjudicate claims within their localities, issuing summonses, conducting hearings, making judgments, and collecting fines and that [t]hese courts have existed for generations, though they are outlawed by the statute' (under the Local Courts Act 1963). Despite having no state authority, these courts often mimic the state sanctioned customary courts with village chiefs issuing fines and fees for their services in a similar manner to Local Courts (Maru (2006)).

One of the traditional roles of chiefs at all levels in Sierra Leone was to help their constituents resolve conflicts. Therefore, even though village chiefs are prohibited from operating courts by statute, nonetheless their courts maintain legitimacy through non-state means. As noted by Maru (2006), Sierra Leone's much famed patrimonial society, where power is concentrated in big persons, extends from the mightiest in Freetown to the village. If an individual objects to a village court's ruling, he or she can choose to refuse to pay the fine and abscond from the village. Another option available to a dissatisfied disputant at village justice level is to appeal to the paramount chief directly or to one of the Local Courts in his chieftaincy. This scenario can see a disputant appealing the decision of an illegal court (i.e., the village court) within a legal court (i.e. the local court). Indeed, both Maru (2006) and Jackson (2011) highlight the fact that disputants often negotiate settlements in the shadow of state and/or non-state courts.

### **3.3 The Impact of the Sierra Leone Conflict on Pluralism**

This study builds on individual and village level data collected in the area in and around the Gola forest in south-eastern Sierra Leone. The Gola region has suffered from the effects of the civil war since its earliest stages. RUF rebels invaded the country from the Liberian border and settled in this area with the conflict subsequently spreading to the

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<sup>15</sup>Jackson (2011) suggests that 'around 80% of people access justice through traditional mechanisms', although he acknowledges that this is difficult to verify. It is also unclear whether this figure refers to both state and non-state customary courts or only refers to non-state courts.

rest of Sierra Leone (Bellows and Miguel (2006)). Throughout the war, the Gola forest reserves sheltered the RUF headquarters, and 'there were foci of support for the RUF in Pujehun District and Kailahun District, ... in the south and north of the main forest belt respectively' (Mokuwa et al. (2011)). Bellows and Miguel (2009) also show that the eastern region along the Liberian border consistently experienced the highest level of war victimisation. They also suggest that war violence was locally correlated with recruitment, as many RUF fighters were ruthlessly sent to raid their own villages. The Gola region is indeed the only region where rebels exerted a significant degree of voluntary participation from marginalised rural youth with no patronage and poor marriage opportunities (Mokuwa et al. (2011)).

There is a strong narrative in the literature that in pre-war times ruling elites were despotic and unjust, and that they frequently abused their powers and implemented laws to their own benefit. Some suggest that years of grievances fuelled the rebellion and many youths joined the RUF to settle 'old scores for justice gone sour' (Archibald and Richards (2002)). Other state bodies, such as the Sierra Leone Police, were also reportedly 'corrupt', 'nepotistic' and 'oppressive', and engaged in acts of human rights violation (Baker (2005)). Even produce traders were targeted by the RUF because they were perceived to have contributed to this exploitative system (Baker (2005)).<sup>16</sup> Some suggest there was a sentiment of hatred against all kinds of visible hierarchical authorities, from paramount chiefs down to administrators and village chiefs.<sup>17</sup> As summarised by Fanthorpe (2006), "'custom" ha[d] become an instrument of oppression'. As a result, paramount and local chiefs, district officers, and other authority figures, were targeted as representatives of a despotic hierarchical system (Jackson (2005)). Many were humiliated and arbitrarily executed by rebels out of a spirit of revenge against their prolonged bad governance (Jackson (2011)). There is reasonably strong evidence for the belief that both legal systems (state and non-state) were applied in an oppressive manner, and were used as systems for advancing the interests of the authorities in both systems.

The impact of the conflict on pluralism was first and foremost the incapacitation of the state system. All paramount chiefs (in the survey area) fled at the beginning of the conflict. Some died outside of the chiefdom and only one came back after the war. None of them were replaced during the conflict (Reed and Robinson (2013)). The civil war essentially left the state judicial system incapacitated until 2005 when it was re-instated throughout outside interventions. The second impact of note is that the non-state justice system was destroyed in some villages and not others. Rebel forces sought out and killed village chiefs in many of the local areas in which they were active. Around 40 percent of villages in the sample area reported the killing of the incumbent chief during the civil war. For those villages, there was a severe shock to the administration of the non-state

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<sup>16</sup>Testimonial data report 'the murder [by rebels] of a local trader notorious for turning every fuel shortage into his own benefit' and the unfair appointment of non-local traders to the chiefdom council (Fanthorpe (2006)).

<sup>17</sup>One of the consequences of this spirit of resentment against state and traditional authorities was that people sought alternative sources of public services provision and crime prevention, e.g. policing and security. Communities created local committees for peace monitoring, dispute settlement and guarding that were arguably more accessible and less costly (Baker (2005)). This further reinforces our view that legal pluralism in Sierra Leone has crucial effects on development outcomes and institutional performance.

regime.

So, the stylised facts of pluralism in Sierra Leone before and after the conflict may be summarised as follows: a) the local village chiefs provided one level of jurisdiction over all local people; b) the state-instituted paramount chiefs provided a more distant but potentially pre-eminent system that applied primarily to those over whom jurisdiction could be asserted (or to those who sought state jurisdiction); c) the local people believed themselves to be oppressed by both of the existing regimes; d) the two regimes competed for jurisdiction over the individuals within their realms of authority in order to maximise their own benefits from positions of authority; e) the conflict resulted in the total dismantling of the state system of authority until its re-initiation in 2005; and f) the conflict resulted in the piecemeal dismantling of the local chieftain system of authority depending on whether the chief had been killed or removed in the conflict.

## 4 A Model of Competing Regimes – externalities between overlapping legal systems

The theoretical framework we follow is the one of appropriative authorities competing over a populace within a largely ungoverned environment. This is similar to the models of early-developing authorities which was developed by Olson (Olson (2000) and McGuire and Olson (1996)). We are interested in the nature of the interaction between such competing regimes.

Following a recent literature that models explicitly how state and non-state or traditional authorities interact (Aldashev et al. (2012b), Baldwin (2014) and Mizuno (2016)), we construct a dynamic game in which institutional authorities may choose their level of appropriative effort—or enforcement—and geographic reach within such a competitive system. And we model whether an authority’s level of effort might generate extra costs or benefits—“*pluralism externalities*”—for the other authority, in the region of their intersection. Our objective is to assess the sign and magnitude of these externalities between these overlapping authorities at their intersection.

Given Sierra Leone’s post-conflict socioeconomic context, we will assume that its level of institutional governance is similar to the level of a pre-state society, in which different groups still compete for control over the right to assert authority over the governed populace:

**Assumption 1** In the context where the state is weak or absent, the objective of a legal regime is to assert jurisdiction over the largest possible group of people, in order to maximise its appropriation of value from the populace.

Individuals managing implementation of each legal regime pursue the objective of appropriation of rents with regard to enforcement activity—in that they are usually allowed to retain a high proportion of fines levied in the course of such activity.<sup>18</sup> They extend or

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<sup>18</sup>We assume that courts identify individuals who may be found to be in violation of either civil, criminal, or even simple social norms (such as paying respect toward authority), and then pursue enforcement ac-

restrict their geographic reach and level of enforcement in order to maximize the amount of rents they appropriate from society.

We wish to investigate how spatial competition between regimes changes the amount of rents they are able to appropriate when compared to a situation of no competition. We begin by modelling the behavior of one fine-seeking regime, and then extend the analysis to the case of two coexisting legal regimes.

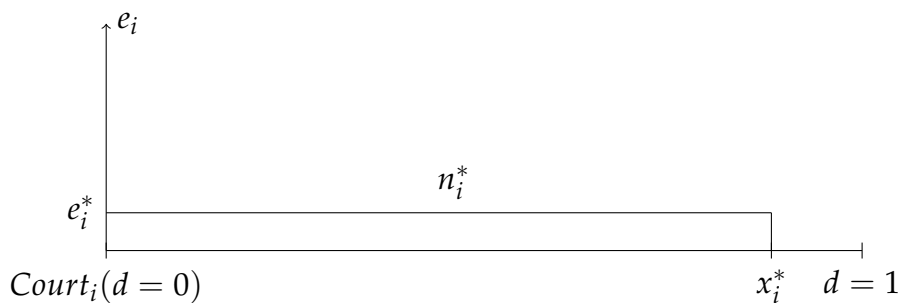
## 4.1 A Model of an Appropriative Authority

Consider a society where there is *one* proactive legal regime, i.e. it has its own demand for actions because they provide a potential source of income.<sup>19</sup> Essentially, we think of an opportunity for appropriation arising out of any manner of disagreement or undesired behaviour within a community which might result in a fee (for dispute resolution) or a fine (for a misdemeanor).

Given that the regime seeking out such disputes acts in both prosecutorial and judicial capacities (judge and jury), the number of disputes administered within a given jurisdiction depends much less on the actual flow of disputes (the supply of disputes) as compared to countries where legal systems are reactive.<sup>20</sup> Thus, we make the following assumption:

**Assumption 2** The number of disputes is within the control of the regime administrator, subject to the costs of bringing action against any individual.

Figure 2: Territorial Extension



This diagram represents the spatial setup in which society is located. We assume individuals are distributed uniformly across space and are immobile (similarly to the model in Hotelling (1990)). The authority chooses its geographic reach and enforcement level given costs to capture an individual.

tions against anyone in these three categories in pursuit of profit. The assumption implies that the definition of the actionable offence and the pursuit of enforcement are both within the control of a single authority. That is, there is no distinction between prosecutorial and judicial arms of governance. For this reason the numbers of actions that occur can be indicative of both the number of violations of local norms or codes and the degrees of pursuit of self-interest by the local authority.

<sup>19</sup>As Castillejo (2009) points out, court fines are a key source of chiefdom income in Sierra Leone.

<sup>20</sup>Of course the definition of a dispute or a misdemeanor lie within the discretion of the regime, so identifying such opportunities is never an entirely objective matter.

Regime  $i$  has its own production function with regarding to the production of appropriate actions against individuals under its jurisdiction. Individuals are uniformly distributed along a line of length one and are immobile.<sup>21</sup> This line represents the territorial extension of the society we are studying. The regime is located at the point  $d = 0$ , according to figure 2. Regime  $i$  chooses its level of enforcement and geographic reach, i.e. how far it should extend its authority.

The *production of actionable disputes* by this authority is given by

$$n_i(e_i, x_i) = e_i \cdot x_i, \quad (1)$$

where  $n_i$  is the number of people against which enforcement takes place,  $0 < e_i < 1$  is the level of enforcement and  $0 < x_i < 1$  is the geographic reach. We can interpret  $e_i$  as the likelihood of an individual to be captured by regime  $i$ . Increases in either of the arguments of  $n_i(e_i, x_i)$  increase the number of people against which action occurs.<sup>22</sup>

The *cost of capturing one individual* is an increasing function of both enforcement and reach,

$$c_i(e_i, x_i) = e_i + \tau x_i, \quad (2)$$

where the positive constant  $\tau$  captures costs of extending authority from the seat of power to capture an individual. The farther this regime decides to extend its authority, the greater are incurred costs of enabling its subordinates to exercise that jurisdiction (in terms of wages, transport, infrastructure and risks involved).

Regime  $i$ 's optimization problem is given by

$$\underset{0 < e_i < 1, 0 < x_i < 1}{\text{maximize}} \quad n_i(e_i, x_i) \cdot (F - c_i(e_i, x_i)),$$

where  $F$  is the fine that is obtained from one individual. We assume that this amount is fixed and exogenous.<sup>23</sup>

In equilibrium, we have that  $x_i^* = \frac{F}{3\tau}$ ,  $e_i^* = \frac{F}{3}$  and  $n_i^* = \frac{F^2}{9\tau}$ . Therefore, authority  $i$ 's geographic reach is equal to one third the ratio between the gain of capturing one more individual and the cost of reaching that individual.

## 4.2 Competition between Authorities

We are interested in the impact of multiple regimes operating at the same time on the total number of actionable disputes. Competition between regimes may have no impact other than to provide subjects with potentially-preferred outcomes (as in a competition in fines), but they might also provide competition in other dimensions (such as the production of

<sup>21</sup>Our spatial set up is based on the classic model developed in Hotelling (1990).

<sup>22</sup>In an anarchic environment, roving bandits are only concerned with stealing as much output as they can (Olson (2000)). Although they have coercive power, they do not have operational capacity to appropriate 100% of output in a given territory. Our production function captures this idea: for a given  $x_i$ , court  $i$  can increase the number of people against which enforcement takes place simply increasing its predatory effort.

<sup>23</sup>We assume that  $1 + \tau < F < 3\tau$ . This assumption guarantees that: i) enforcement level and geographic reach are always smaller than one; and ii) authority  $i$  always wants to set positive levels of these variables.

enforcement effort). We are interested in the latter, a measurable indicator of the impact on outcomes in overlapping jurisdictions.<sup>24</sup> In particular, we will assume that this legally pluralistic relationship in Sierra Leone will result in externalities between the state and non-state regimes, depending upon the existence of an area of common jurisdiction.

Consider the same society described previously. We now have *two* different regimes, a **state** legal regime and a **non-state** legal regime.

The state regime (subscript  $s$ ) is located at the point  $d = 0$  in figure 2, whereas the non-state regime (subscript  $ns$ ) is located at  $d = 1$ . We assume that the non-state regime is able to cover the whole territory of society,  $x_{ns} = 1$ .<sup>25</sup> Then, the non-state regime will only have one control variable, enforcement level. As we will see later, this assumption implies that there will always exist an overlapping area between the two regimes.

**Assumption 3** The cost of extending non-state authority is equal to zero,  $\tau_{ns} = 0$ .

State and non-state authorities will play the following **dynamic game**:<sup>26</sup>

- $t = 0$ : The non-state regime exists and operates;
- $t = 1$ : State regime chooses extension of its authority,  $x_s$ ;
- $t = 2$ : State and non-state regimes choose levels of enforcement,  $e_s$  and  $e_{ns}$ .

At  $t = 2$ , the non-state regime updates its level of enforcement according to the state regime's decision at  $t = 1$ . At  $t = 0$ , the non-state regime enforces its monopolistic level of  $e_{ns}^* = \frac{F}{2}$ . Note that, because there will always be an overlapping area between regimes, it is optimal for the non-state regime to update its enforcement level at the last period.

We define two new *cost of capture* functions,

$$c_s(e_s, e_{ns}, x_s) = e_s + be_{ns} + \tau x_s \tag{3}$$

$$c_{ns}(e_{ns}, e_s) = e_{ns} + be_s,$$

where  $c_s$  refers to the cost of capture of the state legal regime, while  $c_{ns}$  refers to the cost of capture of the non-state legal regime. The coefficient  $b$  measures the effect of regime  $j$ 's enforcement level on regime  $i$ 's cost.

<sup>24</sup>In section 5.5, we address empirically the question of competition in fines between legal regimes.

<sup>25</sup>This assumption is motivated by the features of the empirical problem we examine later on. We will study competition between "Local courts" (state regime) and "Village courts" (non-state regime). Our basic unit of analysis will be the *village*. Local courts are located far from the villages we examine—in some cases it takes half a day by car from the local court to a village—whereas village courts are located inside these villages. Hence, it seems reasonable that village courts do not incur in any transportation costs to capture individuals.

<sup>26</sup>This time structure was motivated by the timing of events in Sierra Leone. The civil war lasted until 2002. The state legal apparatus was completely destroyed during the war, leaving only non-state courts (in villages where chiefs were not killed). These courts were operating alone until the state regime was rebuilt in 2005. After the state regime was restored, state courts decided how farther to extend their authority, and, together with non-state courts, set new enforcement levels.

**Definition** The impact of one legal regime on another depends entirely on the interaction of costs with each regime's efforts of appropriation. This is measured by the *externality parameter*,  $b$ :

$$b = \begin{cases} b > 0, & \text{negative externalities;} \\ b < 0, & \text{positive externalities;} \\ b = 0, & \text{no externalities.} \end{cases}$$

A negative  $b$  means that regime  $i$ 's activity decreases regime  $j$ 's cost—*i.e.* *complementarity*; whereas a positive  $b$  means that the two courts behave as *substitutes*.

We solve this game by backward induction. At  $t = 2$ , state and non-state regimes solve the following simultaneous optimization problem:

$$\begin{aligned} & \underset{0 < e_s < 1}{\text{maximize}} && e_s x_s \cdot (F - e_s - b e_{ns} - \tau x_s), \\ & \underset{0 < e_{ns} < 1}{\text{maximize}} && e_{ns} \cdot (F - e_{ns} - b e_s), \end{aligned}$$

We have that the optimal levels of enforcement are given by

$$e_s^* = \frac{F - \tau x_s}{2} - \frac{b}{2} e_{ns}^* \text{ and } e_{ns}^* = \frac{F}{2} - \frac{b}{2} e_s^* \quad (4)$$

Thus, if  $b > 0$ , the enforcement level of one regime decreases the enforcement level of the other one. This means that for a given  $\tau$  and a point in the line where both courts operate, a positive  $b$  guarantees that  $n_i$ —total number of people apprehended by  $i$ —decreases with  $n_j$ .

At  $t = 1$ , the state regime solves the following problem:

$$\underset{0 < x_s < 1}{\text{maximize}} \quad e_s x_s \cdot (F - e_s - b e_{ns} - \tau x_s).$$

Solving for the Subgame Perfect equilibrium of this game, we have that:  $e_s^* = \frac{F(2-b)}{6-b^2}$ ,  $e_{ns}^* = \frac{F(3-b)}{6-b^2}$  and  $x_s^* = \frac{F(2-b)}{\tau(6-b^2)}$ .

There are two things worth noting here. First, geographic reach and enforcement level of the state regime are always smaller than the monopolistic values calculated in the previous section. This means that the non-state authority undermines the operation of the state authority for any value of  $b$ , the externality coefficient. Second, non-state enforcement level is always greater than state enforcement level. This happens because non-state court does not have to pay for  $\tau$ , the cost of extending its authority, and concentrates all its resources on enforcement levels.

The following proposition states what happens to the total number of people apprehended when  $b$  changes.

**Proposition** Define  $N^* = n_s^* + n_{ns}^*$  as the aggregate number of people apprehended when two regimes are operating together. Then, we have that:

$$\frac{\partial N^*}{\partial b} < 0 \quad (5)$$



*Proof.* See Appendix.

That is, the total number of people apprehended when two legal regimes operate in this society decreases with the externality coefficient,  $b$ . The greater is  $b$ , the more difficult it is to apprehend people.

Our model develops a framework to examine how two authorities compete over appropriation of rents, and how this competition affects the total number of actionable disputes. We show that the aggregate actionable disputes function decreases with the externality coefficient. We turn now to the examination of the empirical case of the situation within Sierra Leone. What is the effect of multiple overlapping authorities on the number of actionable disputes? That is, is legal pluralism in Sierra Leone of a complimentary or substitute nature?

## 5 An Empirical Analysis of Externalities between Legal Systems

Our empirical work derives from two large randomised surveys, both undertaken in 2010 in seven chiefdoms in and around the Gola forest, namely the chiefdoms of Barri, Gaura, Koya, Makpele, Malema, Nomo and Tunkia (Mokuwa et al. (2011)). The first survey contains individual and socioeconomic observations regarding 2,239 households and 173 villages. Household members were asked to list the number and type of conflicts they have been involved in during the previous ten years, which allowed to compile a dataset of 3,202 cases. The second survey, administered in the same villages, provides information on village characteristics, facilities and history.<sup>27</sup>

We look at the data on all matters (civil and criminal) handled by either regime, state or non-state. These are usually handled by a court administered by one authority or the other. From a preliminary analysis of the data, we observe that nearly half of all civil disputes—family and land issues, debt and inheritance conflicts—are adjudicated by non-state justice, i.e. village or section chiefs. This number increases to approximately 90 percent for criminal disputes, which include violation of bye-laws, public violence and theft. Moreover, almost 30 percent of all disputes in our dataset are ‘woman damage’ (adultery) cases. As Mokuwa et al. (2011) show, these are used by the village elite to mobilize young men to labor in farms. Importantly, these percentages remain essentially constant throughout time.<sup>28</sup>

It is important to mention that our empirical analysis is constrained by the quality of our data. We do our best to obtain econometric coefficients that can be interpreted as

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<sup>27</sup>The village survey also contains data on wrongs and dispute settlement. However, from comparison with household-level data, there seems to be an underreporting issue, as the number of observations is drastically lower. In addition, data are compiled from responses by local chiefs and deputies, with this determining potential bias. Therefore, we only use the 3,202 cases reported in the household-level data.

<sup>28</sup>From now on, we use the term *state court* to refer to the statutory legal regime, composed of paramount chiefs and magistrate courts; and the term *non-state court* to refer to the traditional legal regime, run by village or section chiefs. The terms *disputes* and *cases* are used interchangeably.

causal. However, we are aware of the potential problems in our identification strategy. In any case, we think that the question we are answering here is interesting enough to deserve an empirical analysis—even if an imperfect one.

## 5.1 Descriptive statistics

We group disputes reported by households into three categories: total number of disputes, civil disputes and criminal disputes. They are compiled from observations dating from 2005 to 2010 and aggregated by village. In particular, criminal disputes include theft, public violence and alcohol abuse (often associated with violence).<sup>29</sup>

Descriptive statistics of the variables we use in our regressions are shown in Table 1. We also provide definitions for each variable. There are three things to notice here. First, that 38% of villages in our sample had their chief targeted and killed. Second, average distance to the nearest court is around 2. This means that it takes, on average, less than 30 minutes to go from a village to the state court. Finally, we use consumption expenditure in 2010 as a control for economic output in a village. Since we are studying an agrarian society, and most of the expenditure is in agricultural goods, this variable also captures some region-specific effects related to soil fertility and availability of technology. As it will be clear in the next section, we would like to use consumption expenditure in 1990—before the war began—to control for possible targeting of chiefs that ruled wealthier villages. Unfortunately, we do not have this information in our dataset.

Table 6 in the Appendix presents the percentage of civil and criminal disputes involving a fine (either in money, labour or both) and the average amount of fines. The fact that almost 70 percent of civil cases and about 90 percent of criminal cases involved payment of a fine (to the authority) arguably speaks for the ‘proactivity’ of both legal regimes.

## 5.2 The Impact of Pluralism on Disputes – an empirical analysis

**Baseline specification** We use the following model to investigate the effects of legal pluralism on the total number of disputes:

$$N_i = \beta_0 + \beta_1 \cdot \mathbb{1}(\#courts_i > 1) + \beta_2 \cdot distance_i + X_i' \theta + \lambda_i + \epsilon_i \quad (6)$$

Our dependent variable,  $N_i$ , is the number of actionable disputes for which fines were greater than zero in a village per person. That is, the number of disputes that were taken to a court, and for which a fine was paid by the household, divided by 2010 village population. We use disputes *per capita* to control for possible differences in the capacity to process cases.

The variable  $\#courts_i$  captures the existence of two legal regimes in a village. This is the variable of interest, taking the value 1 if only the state court operates in that village and 0 if state court and non-state courts operate together. We use the killing of a village

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<sup>29</sup>Public violence is probably a large category that includes different types of violent wrongs, such as robbery, assault and homicide. Unfortunately, codes in the survey do not allow for any differentiation of this kind.

chief during the war as a proxy for the absence of the non-state regime. Thus, the killing of a village chief is our *treatment*.

The variable  $distance_i$  is the distance from village  $i$  to the state court. This is the distance from the village to the nearest Local court (see figure 1), which can be located in Paramount chiefs' headquarter towns or section towns. Note that the non-state courts are located inside each village.<sup>30</sup>

Table 1: Descriptive statistics of variables used in our main regressions.

	Definition	Obs	Mean	S.D	Min	Max
<b>Dependent variables</b>						
<i>(per capita)</i>						
Total Disputes	Overall number of disputes reported in the village.	170	0.13	0.17	0	1.1
Civil Disputes	Number of civil disputes (e.e. land issues, debt matters, marriage conflicts).	170	0.08	0.10	0	0.63
Criminal Disputes	Number of criminal disputes (e.e. public offenses, failure to do community work, violence).	170	0.06	0.08	0	0.47
<b>Independent variables</b>						
Chief being killed	It indicates whether village chiefs were targeted and killed during the war.	173	0.38	0.49	0	1
Distance to court	Distance to nearest court in travel time.	155	2.24	1.12	1	7
Population 1990	Population of the village in 1990.	168	582	858	40	8000
Population growth	Population growth from 1990 to 2010.	168	1.15	2.22	-0.84	14
War victims	Violent events: road ambush, kidnapping, rape, forced labour and property theft (1990-2002).	173	36	13	2	69
NGO activities	Number of NGO activities in the village before the war.	170	0.49	0.97	0	5
Consumption Expenditure 2010	Consumption expenditure in rice, fruits, roots, beans, fish, meat and palm oil.	173	28912	84915	1104	1124040

<sup>1</sup>Consumption expenditure is expressed in local currency units (leones).

<sup>30</sup>We look at cases that were adjudicated by village chief courts.

The term  $X_i$  refers to a vector of controls we add in our baseline specification to control for potentially omitted variables. We include controls that might be correlated to our variable of interest—the killing of a village chief—and that might also determine the number of disputes generated. These are: population of a village before the war, population growth (1990-2010), war victims, NGO activities before the war and consumption expenditure in 2010.<sup>31</sup> Additionally, we include chiefdom dummies<sup>32</sup>,  $\lambda_i$ , to capture region-specific non-random variation.

Therefore, we look across local jurisdictions to see how the existence of a second legal system might impact upon the total number of disputes that are generated. We compare villages where the non-state regime was maintained to villages where this regime was severely damaged or destroyed, and only the state legal regime functioned properly.

### 5.3 Identification

Our identification strategy relies on three conditions:

1. the flow of actionable disputes in a village was not affected by the destruction of local legal capacity (killing of a chief);
2. if the village chief was killed, then the non-state legal regime was seriously undermined in the period thereafter for a long time;
3. village chiefs were indiscriminately killed by rebels during the war.

Hence, if conditions (1) and (2) are satisfied, the coefficient  $\beta_1$  will give us the difference—in number of disputes—between a situation in which there is only the state legal regime and a situation in which two legal regimes coexist. We need condition (3) to guarantee that our results are not driven by selection bias (i.e. rebels targeting specific chiefs or villages because of characteristics that are correlated to our dependent variable).

There are reasons to believe that these conditions might hold for villages in the Gola forest, our region of interest. We provide some of them in the following paragraphs. We begin by condition (1), that is, that the flow of disputes remained constant after the killing of a chief.

As we mention in section 3, historical literature on the civil war offers the narrative that, in pre-war times, elites were despotic and unjust (Baker (2005)). There are accounts of abuse of power and corruption by both the state and non-state legal regimes (Jackson (2005)).<sup>33</sup> Some authors even support the view that one of the key causes of conflict was the social exclusion of the young and poor—many of which joined the RUF (Richards

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<sup>31</sup>Consumption expenditure in 2010 proxies economic conditions in a village before the war (1990). Unfortunately, we do not have information on any economic variable for a village before the war started. It can be argued, for example, that wealthier villages have greater chances to have their chiefs killed during the war. And also that economic outcomes partially determine number of disputes and fines in a village. Considering these issues, we decide to add consumption expenditure in 2010.

<sup>32</sup>Chiefdoms are administrative units that were formalized by the British in the 1930s (Bellows and Miguel (2009)). We have seven chiefdoms in our dataset.

<sup>33</sup>According to Archibald and Richards (2002), “many villagers considered customary justice expensive, unpredictable and open to bribery”.

(2003) and Peters and Richards (1998)). As a result, Paramount and village chiefs were targeted as representatives of a despotic hierarchical system. This suggests that, although there were many civilian casualties during the war, the violence was directed. The RUF did not intend to attack every villager or to disrupt village life entirely, but to undermine what was considered to be an unfair hierarchical arrangement.

Our dataset provides some evidence of this. For example, in 1990, the average percentage of total population of villagers killed during the war in villages where the chief was also killed is 7%. This number increases to 11% if we consider victims of the war in general—villagers that were killed, kidnapped, subjected to forced labour etc. These two figures are similar to the percentage of villagers killed during the war, 4%, and war victims, 14%, in villages that did not have their chief killed. This does not indicate that village life was normal during the war, but suggests that the killing of a chief did not bring complete social deterioration in an already shaken society. That is, the vast majority of villagers were not directly affected by the conflict. Our baseline assumption here is that if population levels are constant and villagers' land is not destroyed, then there will not be great changes in the natural flow of disputes—that is, in the equilibrium number of disputes arising from the interaction between villagers.

Even if we assume that the equilibrium number of disputes was substantially altered after the village chief was killed, condition (1) might still hold if the flow of disputes was normalized within three years. In other words, if the flow of disputes went back to equilibrium levels that are not a function of variables related to our treatment. This is so because of the timing of the information we collected. Our survey asked respondents to list any disputes for which they were fined in the period from 2005 to 2010. The civil war in Sierra Leone ended in 2002. Hence, the number of disputes and fines collected by authorities are comparable across our sample if, in 2005, the flow of disputes in all villages reached levels that were unrelated to our treatment variable, and remained unaffected until 2010.

To make the flow of disputes comparable across villages, we control for intensity of violence during the war. We use the total number of victims of acts related to the war in a village. This variable includes villagers that were killed, kidnapped, raped, robbed, forced to work, ambushed etc. We also include population in 1990 and population growth from 1990 to 2010 to account for other possible endogenous differences in the natural flow of disputes.

Condition (2) states that the killing of a village chief destroyed or severely damaged the non-state legal regime of a village. From the literature, we know that village chiefs adjudicate claims within their villages, conduct hearings and collect fines (Mokuwa et al. (2011) and Jackson (2005)). Village chief courts have existed for generations, and have an important role as conflict resolution arenas. In the early days of the war, the RUF targeted and killed village chiefs and court chairmen (Archibald and Richards (2002)). Attacks and threats by rebels closed many courts across Sierra Leone. Without a chief, courts in villages were not able to function properly. Thus, because of all these features, we believe that the killing of a chief can be considered a severe shock to the non-state legal regime.<sup>34</sup>

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<sup>34</sup>As Mokuwa et al. (2011) points out, the village chief is a key actor in local arbitration, settling 40 percent of all cases in the data we have.

Table 2: Probit Regression: Chief being killed dummy

	<b>Chief being Killed</b>
Population in 1990	0.268 (0.182)
War victims	0.579 (0.400)
NGO activities before the War	-0.252 (0.189)
Consumption Expenditure in 2010	0.379 (0.233)
Distance to the Gola Forest	-0.089 (0.105)
Permanent migrants	-0.124 (0.108)
Recruited combatants	-0.199 (0.260)
Distance to the police in 1990	-0.034 (0.093)
Constant	-6.97** (2.813)
Obs.	140
$R^2$	0.11

Standard errors are in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Number of cases, distance to the nearest court, population, income from non-agricultural activities and consumption expenditure are in logs.

All standard errors are heteroskedastic standard errors.

Distance is in travel time and coded as follows: 1 in the village; 2 less than 30 min, 3 between 30 min and one hour, 4 one hour to one and a half hour, 5 one and a half hour to two hours, 6 two hours to half a day, 7 half a day to a full day, 8 more than a full day (source: Village survey).

Our dataset offers some evidence of this claim as well. We see that by comparing the number of disputes per person in treated and untreated villages. There is a drop of approximately 33% in the number of cases adjudicated by the non-state court in villages that had their chief killed as compared to other villages (2005-2010). The average number of civil cases per person adjudicated by the non-state court in these villages is roughly 0.03, whereas the average number of criminal cases per person is equal to 0.02.<sup>35</sup>

Inhabitants of treated villages, then, from that point in time onward (murder of village chief), were subject only to the state legal regime. For identification, we need to guarantee that the state maintained the monopoly over the legal system for most of the period from 2005 to 2010. That is, even if another village chief was appointed after the war, and the non-state system showed signs of recovery, it was the state legal regime that mostly oper-

<sup>35</sup>Note that these figures consider total number of cases for the whole period 2005-2010.

ated in the village. Unfortunately, we do not have dynamic information on the number of disputes and fines in each village, so it is difficult to verify empirically this assumption.

Condition (1) requires that the distribution of chiefs killed is exogenous to total number of disputes. Table 2 shows the results of a probit regression where the dependent variable is  $\#courts_i$ , that is, whether the village chief was killed. Independent variables in this regressions are: village population in 1990, number of war victims, number of NGO projects before the war began, village consumption expenditure in 2010, distance to the Gola forest in travel time, number of permanent migrants, number of recruited combatants in a village and distance to the nearest police station in travel time in 1990. All these variables are used in logs.

It seems that our variable of interest is not determined by any of the variables in that regression. Chiefs in more populous villages in 1990, or in villages that were closer to a police station, were not more targeted than chiefs in other villages. Distance to the Gola forest—the region that sheltered the RUF headquarters—also does not determine whether a chief was killed or not. Moreover, variables that are function of war intensity, such as war victims, permanent migrants in a village and recruited combatants, are also not correlated to the chief-being-killed dummy. This suggests that villages that suffered more during the war did not necessarily have their chief killed as well. Finally, in places where economic and NGO activities were more intense, chiefs were not targeted when compared to chiefs in other villages. Hence, chiefs of more prosperous villages or villages that received more external aid were not more targeted than other chiefs.

This evidence suggests that there was no particular pattern—spatial or economic—in the killing of village chiefs in our sample. The literature on Sierra Leone does not offer a clear description of the way village chiefs were targeted and killed during the war. As the literature on political violence suggests, a motive that might have led rebels to fight is grievance (Cederman et al. (2013) and Azam (2001)). As mentioned earlier, part of the RUF's motivation was to destroy what they considered a despotic and corrupt system (Richards (2003) and Mokuwa et al. (2011)). Thus, chiefs that were perceived as corrupt or authoritarian might have been targeted. This indicates that our variable of interest might be correlated with political variables, such as trust in a village chief before the war. Unfortunately, this is a limitation of our work since we cannot test this correlation with the data we have.

The proposition we presented in our theoretical section motivates the following testable hypothesis:

**H1** State and non-state legal regimes generate negative externalities on each other, and this decreases the total number of disputes per person in a village when compared to the case of zero externalities.

We are mainly interested in measuring the sign of the externality generated by each authority. This influences the total number of disputes. As our model shows, if there is a positive externality parameter (negative externalities),  $b > 0$ , then authorities generate costs to each other, and the total number of disputes is smaller compared to the case of no externalities.

Given the cross-sectional feature of the data, the estimation is performed with the method of ordinary least squares with clustered standard errors at the village level.

## 5.4 Results

Table 3 presents our first set of results. We run three regressions here: total number of disputes per person, civil disputes per person and criminal disputes per person on the chief-being-killed dummy and several controls. Our variables of interest, chief-being-killed, indicates whether the village has one (state) or two (state and non-state) legal regimes. The coefficient associated to this variable is equal to the percentage variation in number of disputes per person when we move from one to two legal regimes.<sup>36</sup>

We see that there is a drop in the number of disputes per person in every category analyzed. The number of total cases decreases in roughly 28% when only the state court exists in a village. When we break total cases in two categories, we see that the number of civil and the number of criminal cases decrease by approximately 27% and 38%, respectively.

These figures describe what happens in absolute terms to the number of disputes per person when only one legal regime exists in a village. That is, they show that a villager that lives in a locality under one regime is less likely to be fined when compared to a villager living in a place where both regimes coexist. However, these figures do not tell us directly about the nature of interaction between both regimes. It can be the case that this reduction in the number of disputes is due to decreased total legal capacity in a village— one court might not be able to apprehend people at the same rate as two courts operating together, even if there are negative externalities between them.<sup>37</sup>

We wish to recover from these regressions what we have called *externality parameter*,  $b$ , in our theoretical section. That is, the costs—positive or negative—that these legal regimes exert in each other in villages where they coexist. To do that, we employ the following strategy. We assume that, if there were no externalities between legal regimes,  $b = 0$ , the number of disputes when two courts coexist would be equal to twice the monopolistic case. This would give us the following relationship:  $\hat{N}_2 = 2\hat{N}_1$ , where the subscripts refer to the duopolistic and monopolistic cases, respectively. We call this our baseline situation. We then calculate the size of the deviation from this baseline situation. That is, using the coefficients we obtained in table 3, we calculate  $\hat{\theta}$  in the equation,

$$\hat{\beta}_1 = \frac{1 + \hat{\theta}}{\hat{\theta} - 2}. \quad (7)$$

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<sup>36</sup>  $\hat{\beta}_1 = \frac{\hat{N}_1 - \hat{N}_2}{\hat{N}_2}$ , where  $\hat{N}_1$  and  $\hat{N}_2$  are the number of disputes when one and two legal regimes exist, respectively.

<sup>37</sup> A parallel might be established here with constant, increasing and decreasing returns to scale from the theory of the firm. When we move from one to two legal regimes in a village, there is an increase in the number of disputes because of increased resources applied to apprehending people. This is similar to the case of labour increasing a firm's production function. Since production function is monotonically increasing in its inputs, any increase in labour also increases output. The nature of interaction between courts, however, will be given by the rate of increase, and not by the mere increase. According to this analogy, constant returns to scale would correspond to zero externalities; increasing returns to scale to positive externalities (complements); and decreasing returns to scale to negative externalities (substitution).



If externalities between regimes are equal to zero, then we have that  $\hat{\theta} = 0$ . Negative externalities—positive costs—imply  $\hat{\theta} > 0$ , and positive externalities imply that  $\hat{\theta} < 0$ .<sup>38</sup> Our estimated externality parameter<sup>39</sup> is then given by  $\hat{b} = \frac{\hat{\theta}}{2}$ , that is, the size of the deviation relative to the baseline situation.

Table 3: Number of disputes per person on chief-being-killed dummy.

	<b>Total cases</b>	<b>Civil cases</b>	<b>Criminal cases</b>
Chiefs killed	-0.284** (0.143)	-0.266* (0.145)	-0.380** (0.165)
Distance to court	0.023 (0.029)	0.021 (0.028)	0.008 (0.034)
Population 1990	-0.806*** (0.080)	-0.842*** (0.081)	-0.800*** (0.083)
Population growth	0.242*** (0.035)	0.227*** (0.038)	0.259*** (0.034)
War victims	0.707*** (0.121)	0.641*** (0.120)	0.609*** (0.126)
NGO act.	0.010 (0.052)	0.002 (0.054)	0.025 (0.052)
Consumption exp.	-0.032 (0.105)	-0.044 (0.096)	-0.030 (0.099)
Constant	-0.951 (1.06)	-0.755 (0.949)	-1.56* (0.939)
Chiefdom dummy	Yes	Yes	Yes
Obs.	151	151	151
$R^2$	0.71	0.71	0.70

Standard errors are in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Dependent variables, distance to the court, population in 1990, war victims and consumption expenditure are in logs.

All standard errors are clustered at village level.

Distance is in travel time and converted to minutes, instead of being a categorical variable.

Dependent variables are always in *per capita* terms.

Table 4 presents our estimates for the externality parameter. Standard errors were calculated by the delta method. There seems to be negative externalities for civil disputes. This means that, when operating in the same village, legal regimes adjudicate 32% fewer civil disputes than they would if there were no externalities. In other words, apprehension of people becomes more difficult—or costly—when a second legal regime operates in the same village.

<sup>38</sup> $\hat{\beta}_1 = \frac{\hat{N}_1 - \hat{N}_2}{\hat{N}_2} = \frac{\hat{N}_1 - (2 - \hat{\theta})\hat{N}_1}{(2 - \hat{\theta})\hat{N}_1} = \frac{1 + \hat{\theta}}{\hat{\theta} - 2}$ . The coefficient  $\hat{\theta}$  measures the size of deviation from what we have called baseline situation (zero externalities).

<sup>39</sup>This parameter is defined in section 4. Note that a positive parameter implies negative externalities.

Table 4: Externality parameters (relative deviation from the situation of no externalities between courts).

	$\hat{b}$
Total disputes:	0.302** (0.139)
Civil disputes:	0.319*** (0.135)
Criminal disputes:	0.194 (0.215)

Standard errors are in parentheses.

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

The coefficient associated to criminal disputes is not statistically significant. We believe the explanation for this lies in the fact that legal authorities cannot be as proactive as they are in civil disputes when dealing with criminal ones. Because of their nature, criminal disputes are embedded in more rigid ethical and traditional codes. Unlike many types of common civil disputes, such as land and debt issues, criminal disputes are closely observed by society. This would reduce authorities' ability to fine villagers at their own will.

Therefore, we can conclude that our testable hypothesis holds. For civil disputes, we have both legal regimes exerting negative externalities on each other, which makes apprehension of people more difficult when compared to the zero externalities situation. Our results are consistent with the existence of legal dissonance. That is, the existence of two overlapping legal regimes imposes costs on one another in the form of reduced disputes per inhabitant.

## 5.5 Discussion – Competition in Fines

This empirical investigation yields two important results. First, the two legal regimes studied here—state and non-state—do generate externalities to each other. As we described in our theoretical model, these externalities can be either positive or negative, and they result in extra costs of apprehension of people. Our results show that these externalities are negative. The second result is that the existence of externalities depends on the type of dispute. There is an important difference in the legal nature of civil and criminal cases, and it seems that this influences whether legal regimes generate costs to each other. As our results show, there are no externalities for criminal cases. One possible explanation is that courts cannot be too proactive—in terms of apprehending people—when dealing with these types of cases.

These findings characterize one way in which state and non-state regimes interact in post-conflict Sierra Leone. Following the framework we construct in section 4, we observe that authorities compete in number of people apprehended. In this section, we discuss another possible channel of interaction between these regimes, competition in fines.

This type of competition is analogous to competition in prices posited by Hotelling (1990). For the situation studied here, this framework can be applied in the following way. Villagers are mobile, and able to choose where to be trialed (state court or non-state court). They solve a cost minimization problem that involves two parameters, expected fines and transportation costs. Authorities know that villagers have agency, and set fines such that profits—fines minus costs of enforcement—are maximized.

Following this rationale, we expect legal competition to reduce the amount of fines authorities are able to charge for each dispute they adjudicate. When there is only one authority, fines are set in a way that is similar to a monopoly setting the price of a good. That is, at the equilibrium, the marginal revenue from fines is equal to marginal costs, given a dispute function. This function describes how the number of disputes changes with respect to the amount of fines charged per dispute. Because authorities are appropriate, this function has a small elasticity. The result is that the average amount of fines per dispute with one regime is greater than when two legal regimes coexist.

To investigate this further, we regress fines per dispute on the number of legal regimes. Our regression is exactly equal to our previous one (expression (6)), except that our dependent variable  $N_i$  is now amount of fines collected by authorities per dispute. Note that our discussion about identification (section 5.3) applies to this regression as well.<sup>40</sup>

Table 5 presents our results. There is an increase in the average amount of fines—in *leones*—per dispute of roughly 39% when only the state court operates in a village. This means that legal competition forces authorities to charge smaller amounts of fines for the same types of disputes. Authorities are not able to extract as much money as they could compared to the monopolistic case.<sup>41</sup>

When we split total fines per dispute into civil and criminal cases, we see that civil fines are driving these results. The state court is able to charge roughly 50% more per civil dispute when it is operating alone in a village. Criminal fines do not follow this pattern. There is no difference in the amount charged per case between the situation with one and two courts.

This indicates that the interaction between legal regimes happens in two ways. First, there is competition based on quantities. Regimes exert negative externalities on each other, and this decreases the total number of disputes as compared to a situation of zero externalities. Second, authorities also compete in fines. Areas of legal overlapping see a reduction in fines collected per dispute. This last result suggests that villagers have some agency in choosing which court to use.

Combined, our results show that one potential benefit of legal pluralism is to reduce the pressure of local institutions on local people. This can be seen by analyzing changes in expected authoritative expropriation, the amount of fines a person expects to pay to authorities in a village. We define this variable as the probability of apprehension times the fine that has to be paid. Using the coefficients of tables 3 and 5 for civil disputes and civil fines, we have that the expected expropriation when regimes coexist is 9% lower than for the situation in which only the non-state regime exists.<sup>42</sup> This means that a typical

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<sup>40</sup>Descriptive statistics for the new dependent variable are presented in table 7 in the Appendix.

<sup>41</sup>This finding corroborates with the view that the amount of fines collected is probably more representative of the financial needs of the chiefs than the actual offence (Castillejo (2009)).

<sup>42</sup>Define expected expropriation as probability of apprehension,  $p$ , times fine charged,  $F$ . When two

villager will expect to pay a smaller amount of rents to authorities when there is legal competition.<sup>43</sup>

Table 5: Amount of fines per dispute on chief-being-killed dummy.

	<b>Total fines</b>	<b>Civil fines</b>	<b>Criminal fines</b>
Chiefs killed	0.389** (0.191)	0.501** (0.208)	-0.370 (0.877)
Distance to court	0.023 (0.094)	0.073 (0.104)	0.013 (0.260)
Population 1990	0.157 (0.147)	0.303* (0.165)	-0.029 (0.467)
Population growth	0.012 (0.043)	-0.044 (0.054)	0.004 (0.162)
War victims	1.13* (0.579)	0.708 (0.484)	1.57* (0.845)
NGO act.	-0.034 (0.085)	0.048 (0.096)	-0.482 (0.379)
Consumption exp.	0.152 (0.158)	-0.004 (0.145)	1.15* (0.669)
Constant	4.08 (2.77)	5.63** (2.25)	-12.6* (6.80)
Chiefdom dummy	Yes	Yes	Yes
Obs.	139	148	140
$R^2$	0.16	0.13	0.09

Standard errors are in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Dependent variables, distance to the court, population in 1990, war victims and consumption expenditure are in logs.

All standard errors are clustered at village level.

Distance is in travel time and converted to minutes, instead of being a categorical variable.

We use amount of fines per case.

regimes coexist, we have that,  $E_2 = p_2 \cdot F_2$ . When there is only one regime, we have that  $E_1 = p_1 \cdot F_1 = (1 - 0.266)p_2 \cdot (1 + 0.501)F_2 = 1.10p_2 \cdot F_2$ . The numbers inside the parentheses are the coefficients we obtained in our regressions. Thus, we have that  $\frac{E_2}{E_1} = 0.91$ .

<sup>43</sup>This is a potential benefit to the local people in this context where legal regimes are more interested in capturing rents than in securing property rights and in providing security. In other situations, where authorities are not appropriative in nature, this benefit would be small in comparison to the increase in villagers' welfare that rule of law would bring.

## 6 Concluding remarks

Our results have important implications for legal pluralistic societies where there is institutional reconstruction. Traditional and statutory legal regimes compete over control of a country's territory, and this has a direct effect on the people living under this shared space. Essentially, two legal regimes generate negative externalities on each other, increasing costs of apprehension of people, and reducing the amount of fines collected per dispute. Spatially, this means that villagers living in regions where regions overlap—i.e. in the intersection of their geographic reach—might benefit from their competition through a reduced expected expropriation.

Thus, in Sierra Leone's case, it seems that the addition of the state-based layer of institutions reduces the expected monetary expropriation that local courts place on the subject populace. Although non-state (village) legal institutions play the most pervasive role in administering rural Sierra Leonean society, the state institutions appear to serve the purpose of reducing the pressure somewhat of local institutions on local people. This is the case despite the fact that state institutions, especially paramount chiefdom courts themselves have been criticised for being unjust and corrupt (especially before the war).<sup>44</sup>

We show that the interaction between legal regimes happens in two ways. Regimes compete in number of people apprehended and compete in the amount of fines they charge. The case of competition in number of disputes can be seen as one more example of legal dissonance through negative enforcement externalities, i.e. the imposition of costs by one regime upon another coexistent one. The reasons for negative enforcement externalities between regimes are many. It may be because the personnel within one administration feel some sort of affinity for the persons within the other administration, as in the case of Papua New Guinea (Larcom and Swanson (2015)). Or it may be on account of the perceived reduction of benefits from pursuing actions, when the other administration is competing with the first, as here. In any event, overlapping legal regimes will often have impacts on one another, resulting in an impact on the overall outcome produced by law within the subject population.

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<sup>44</sup>These findings are consistent with the bargaining in the shadow of the law literature, that suggests that greater access to state courts can increase the bargaining power of victims (thus increasing the deterrent effects of committing crime) even if these courts are rarely used (see Aldashev et al. (2012b)).

## 7 Appendix

**Proof of the proposition** At  $t = 2$ , the state and non-state regimes solve the following simultaneous maximization problem:

$$\begin{aligned} & \underset{0 < e_s < 1}{\text{maximize}} && e_s x_s \cdot (F - e_s - b e_{ns} - \tau x_s), \\ & \underset{0 < e_{ns} < 1}{\text{maximize}} && e_{ns} \cdot (F - e_{ns} - b e_s), \end{aligned}$$

And, at  $t = 1$ , the state regime solves the following problem:

$$\underset{0 < x_s < 1}{\text{maximize}} \quad e_s x_s \cdot (F - e_s - b e_{ns} - \tau x_s).$$

Then, the first-order conditions form a system of linear equations:

$$\begin{aligned} F - 2e_s - b e_{ns} - \tau x_s &= 0 \\ F - 2e_{ns} - b e_s &= 0 \\ F - e_s - b e_{ns} - 2\tau x_s &= 0 \end{aligned} \tag{8}$$

And, equilibrium values are:  $e_s^* = \frac{F(2-b)}{6-b^2}$ ,  $e_{ns}^* = \frac{F(3-b)}{6-b^2}$  and  $x_s^* = \frac{F(2-b)}{\tau(6-b^2)}$ .

Let's define  $n_1$  as the total number of people apprehended when there is one court—monopolistic case—and  $n_2$  as the total number of people apprehended when two regimes operate together. Then, following the notation we used in section 4, we have that  $N^* = n_s^* + n_{ns}^* = \frac{F^2}{\tau} \frac{(2-b)^2}{(6-b^2)^2} + \frac{F(3-b)}{6-b^2}$ .

Differentiating  $N^*$  with respect to  $b$ , we see that  $\frac{\partial N^*}{\partial b} < 0$ . ■

Table 6: Descriptive statistics of civil and criminal disputes where fines are greater than zero.

<b>Panel A</b>							
<i>Type of dispute</i>	<i>Total</i>	<i>Cases involving (money or labour)</i>	<i>In-fines or fines</i>	<i>Percentage of cases involving fines</i>	<i>Average fine (local currency)<sup>1</sup></i>	<i>Minimum fine</i>	<i>Maximum fine</i>
Civil disputes	3016	2061		68.33%	Le 75,000	Le 15.00	Le 2,000,000
Criminal Disputes	2015	1799		89.28%	Le 25,908	Le 1.00	Le 655,000
					<i>Average fine (labour days)</i>	<i>Min fine (labour days)</i>	<i>Max fine (labour days)</i>
Criminal Disputes <sup>2</sup>					3.64	1	30

<b>Panel B</b>							
<i>Type of dispute</i>	<i>Total</i>	<i>N. cases fine ≤ Le 1000 (%)</i>	<i>N. cases fine &lt; 1,000 &lt; 10,000 (%)</i>	<i>N. cases fine &lt; 10,000 &lt; 100,000 (%)</i>	<i>N. cases fine &lt; 100,000 &lt; 500,000 (%)</i>	<i>N. cases &gt; 500,000 (%)</i>	
Civil disputes	1829	23 (1.25%)	337 (18.42%)	1186 (64.84%)	255 (13.95%)	28 (1.54 %)	
Criminal Disputes	1767	54 (3.05%)	754 (42.68%)	902 (51.05%)	54 (3.05%)	3 (0.17 %)	

<sup>1</sup> Descriptive statistics are obtained from nonmissing observations. In some instances, a fine (either in money or labour) was involved, but the corresponding amount is missing in the survey.

<sup>2</sup> For civil disputes, a categorical variable indicates that a fine in labour was involved, although the amount in days is not available.

The exchange rate at the time of the survey is Le 3500/\$ 1.00 (Mokuwa et al. (2011)).

Table 7: Descriptive statistics of the variable fines per dispute.

	<b>Definition</b>	<b>Obs</b>	<b>Mean</b>	<b>S.D</b>	<b>Min</b>	<b>Max</b>
<b>Dependent variables</b>						
<i>(per capita)</i>						
Total Fines	Overall amount of fines collected in the village.	160	66925	48997	0	275000
Civil Fines	Amount of fines collected from civil disputes.	169	60289	47506	0	275000
Criminal Fines	Amount of fines collected from criminal disputes.	162	4697	13287	0	100000

Fines are expressed in local currency units (leones).



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