

# Delivering Justice to the Poor: Theory and Experimental Evidence from Liberia\*

Justin Sandefur<sup>†</sup>      Bilal Siddiqi<sup>‡</sup>

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## Abstract

Can progressive, statutory legal reform improve the lives of the poor in places where formal legal institutions have limited reach? We develop and test a simple model of forum choice that highlights the tradeoff the poor and socially disadvantaged face between the repressive aspects of customary law and the formal system's high costs and punitive approach to justice. Using new survey data on over 4,500 legal disputes in rural Liberia we find that, consistent with our model, plaintiffs facing a disadvantageous pairing under the custom—e.g., women suing men—are more likely to choose the formal system and are relatively happier when they do. We apply these insights to a randomized trial of a legal aid program designed to overcome this tradeoff, by offering *pro bono* mediation by community paralegals trained in the formal law. Plaintiffs offered legal aid are significantly more satisfied with case outcomes, pay fewer bribes, and report large material gains in terms of household and child food-security. Furthermore, both demand for and impacts of the program are greater for plaintiffs facing poor odds in the customary system. Our results suggest that there are large socioeconomic gains to be had from improving access to the formal law, by making its institutions more competitive with the organizational forms of the custom.

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<sup>†</sup>Center for Global Development. [jsandefur@cgdev.org](mailto:jsandefur@cgdev.org).

<sup>‡</sup>Stanford University. [bilal.siddiqi@stanford.edu](mailto:bilal.siddiqi@stanford.edu).

# 1 Introduction

A broad body of evidence developed in recent years suggests that the quality of formal legal institutions is a primary driver of economic growth (Acemoglu et al., 2001; Rodrik et al., 2004), and that extending access to, for example, formal property rights (Besley, 1995; Field, 2005, 2007; Galiani and Scharfrodsky, 2010), credit market institutions (Jappelli et al., 2005; Pinheiro and Cabral, 2001) and the judiciary (Chemin, 2009a,b, 2010) can have significant welfare benefits. Yet most people in the developing world have little, if any, contact with such formal legal institutions—their marriages, property ownership, debts and even crimes are instead governed by informal customs and traditional leaders, i.e., customary law (CLEP, 2008; de Soto, 2000; Harper, 2011). Furthermore, when formal and customary law come into conflict, the poor often choose to seek justice under customary rather than formal law (Isser et al., 2009; Moulton, 2009; Sharma and Sen, 2008).

This forum shopping behavior presents a *prima facie* challenge to models of legal reform that either ignore customary law altogether or assume plaintiffs will seek out formal justice if impediments are removed (Golub, 2003). It implies that formal legal reforms intended to raise the status of women, protect children, or guarantee the economic rights of ethnic minorities will oftentimes be dead letters—i.e., *de jure* rules with little effect on *de facto* outcomes.

In this paper, we present a simple framework for understanding the forum shopping decisions of plaintiffs in rural Liberia. The crux of the model is a trade-off between the more progressive content of the formal law—protecting the rights of women, minorities, and the socially disadvantaged—and the lower costs and less punitive remedies provided by the customary system.

Using new household survey data on over 4,500 disputes in rural Liberia, we show that forum-shopping behavior conforms to the basic theoretical predictions. The relative social position of plaintiffs and defendants predicts both where disputes are taken, and the parties' satisfaction with the outcomes. For instance, women suing women are very unlikely to go the formal system, while women suing men are much more likely to do so. Male defendants who are taken out of the customary system, where they may be privileged, report deep dissatisfaction with formal verdicts. Opposite patterns hold with male plaintiffs and female defendants.

These results suggest potential gains from the provision of low-cost, remedial justice that incorporates the progressive features of the formal law. In the second half of the paper we present the results of a randomized controlled trial of a legal empowerment intervention run by The Carter Center in Liberia and designed around the basic principles highlighted in the model and observational data analysis.

The NGO program provided *pro bono* mediation and advocacy services by means of community paralegals trained in the formal law. Trial participants were recruited through public information meetings about the rule of law and dispute resolution conducted in 76 villages across four of Liberia's fifteen counties. The sample was drawn from individuals who came forward to request

free legal assistance for legal problems or disputes of any type, including debt disputes, land disputes, criminal acts of which they were either accused or victims, and a host of family and custody-related disputes. Half the participants were randomly selected to receive three months of assistance from community paralegals trained in mediation and legal advocacy.<sup>1</sup>

Overall, we find significant impacts on legal and socioeconomic outcomes on the study population. Legal aid yields a large, statistically significant increase in the proportion of clients who report that their case outcome was fair, who are satisfied with the result and feel it left them better off, and who report a good relationship with the other party after the resolution of the case. The program also produced a 10 percentage-point reduction in the share of clients who paid a bribe during the treatment period.

Our findings relate to a growing literature examining the design of development programs in fragile and post-conflict environments.<sup>2</sup> For instance, the World Bank and other development agencies have invested heavily in “community-driven development and reconstruction” (CDD/R) programs which aim to increase social cohesion and reduce violence by replacing indigenous local institutions with *de novo* organizational forms that are more democratic and representative. A growing body of evidence from large-scale randomized controlled trials of this approach have shown mixed and often disappointing results in achieving lasting institutional change (Beath et al., 2012; Casey et al., 2012; Coleman and Lopez, 2010; Fearon et al., 2009).

Other efforts have focused on reforming rather than replacing customary institutions, for instance through curriculum interventions. Blattman et al. (2013) find a significant reduction in unresolved land disputes and property destruction due to community-level training in alternative dispute resolution in Liberia, but mostly null effects on economic behavior, community-level violence, and norms about legal dispute resolution. Staub and Pearlman (2009) and Paluck (2009) find positive effects from curricular interventions on survey measures of social cohesion in Rwanda, but provide no evidence of changes in behavior or real-world outcomes.

Relative to these other common programmatic models among development organizations, the legal empowerment intervention examined here seeks to “pull” rather than “push” social change by expanding the scope of meaningful institutional choice faced by rural Liberians. This emphasis on facilitating choice and competition between institutions differs from programs attempting to either reform or replace customary institutions.

In the remainder of the paper, we lay out our conceptual framework for thinking about the trade-offs faced by plaintiffs who have suffered some legal harm in rural Liberia. Section 2 provides background on customary and formal law in Liberia. Section 3 lays out a formal game-theoretic model of the interactions between plaintiffs, defendants, and customary and formal judges. The

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<sup>1</sup>Treatment villages were themselves randomly assigned to participate in the intervention, and will be compared to randomly assigned control villages as part of a broader study beyond the scope of this paper. The comparison will provide greater insight into the longer-term, community-level impacts of this type of intervention.

<sup>2</sup>See King et al. (2010) and Mansuri and Rao (2013) for systematic reviews.

empirical analysis is then divided into two parts. First, in Section 4 we use baseline, observational data on 4,500 disputes to test several predictions of the model. Second, in Section 5, we present the results of a randomized impact evaluation of a legal aid program designed to overcome the trade-offs discussed in the model. Section 6 concludes.

## 2 Context

Liberia has one of the poorest populations in the world, ranking 182 out of 187 countries in the 2011 Human Development Index. Decades of unrest and civil war have led to “an almost unanimous distrust of Liberia’s courts, and a corresponding collapse of the rule of law” (ILAC, 2003). Formal courts are hard to access, expensive, and slow; few justice practitioners are legally literate; and the laws and procedures of the formal system are alien to most Liberians (Isser et al., 2009).

In contrast, the customary system is both accessible and culturally acceptable, but operates under patriarchal and communal norms rather than the notions of individual rights enshrined in Liberian statutory law (ICG, 2006). Recent anthropological research documents a range of customary practices that violate international standards, such as *sassywood* (trial by ordeal), as well as local laws and practices that run contrary to generally accepted notions of women’s rights and the rights of vulnerable groups (Isser et al., 2009; Pajibo, 2008).

Since the end of the civil war in 2003, the formal law is on the march. The national government has passed progressive legislation reforming the content of the formal law (e.g., banning trial by ordeal, criminalizing statutory rape, etc.) and pushed to extend the reach of formal courts into areas previously under customary jurisdiction. Rapid changes in statutory law and in the allocation of judicial and administrative responsibilities have created widespread confusion about the substance of the law, the proper passage of appeal, and the rights and responsibilities of different actors in the justice system (Isser et al., 2009).

Liberians thus have to negotiate a confusing legally dualistic system that offers starkly different choices in terms of the costs and quality of justice provided. To understand these choices further, we turn briefly to the history of legal dualism in Liberia, and its contemporary manifestation.

### 2.1 Legal dualism

The history of customary law and legal dualism in Africa is well-documented in anthropological scholarship, with scholars largely agreed that these laws were formed out of struggle between fiercely competing groups. In his influential work *Citizen and Subject*, Mahmood Mamdani describes the judicial system in colonial Africa as a deeply bifurcated institution, and equates legal dualism with a “deracialized legal apartheid” that restricts formal rights to a select few while relegating the rural poor to the “decentralized despotism” of customary rule.

While Mamdani’s stylized view is starker than most (Berry, 1975; Chanock, 1989; Moore, 2011), it resonates peculiarly with Liberia’s justice system, which though outside the orbit of British colonialism, displayed many of the hallmarks of discriminatory segregation:

At Liberia’s founding, the state established the dual system to ensure that statutory law would govern ‘civilised’ people—Americo-Liberians and missionaries—while customary law would regulate ‘natives’. The non-Christian, indigenous Africans, who were considered ‘uncivilised’, could not use the statutory system, and chiefs could not adjudicate cases to which a ‘civilised’ person was party. State-sponsored customary law was the compromise between the government’s attempt to coopt the traditional sphere and villagers’ desire to maintain their autonomy. Although the constitution, statutory laws and common law of the formal legal system now govern all Liberians, the archaic Rules and Regulations Governing the Hinterland still refer to the adjudication of cases for ‘civilized people’ and ‘natives’ (ICG, 2006, p. 7).

At present, Liberian statutory law applies, in principle, to all Liberians. The statutory system comprises, for the most part, a vertical hierarchy of statutory courts, including Justice of the Peace (JP) courts, magistrates’ courts, circuit courts, and the Supreme Court. They are supported in their workings by public attorneys, specialized institutions such as land commissioners to arbitrate land matters, and the police. Yet through the ‘Hinterland Regulations’, statutory law explicitly recognizes the dual nature of the legal system in the form of a parallel, idiosyncratic customary system administered by local chiefs. The most direct provider of customary justice is the town chief, who is the *de jure* leader of the community. Outside the village, the town chief is the lowest rung in a vertical hierarchy of chiefs of increasing degrees of formal recognition: the general town chief, the zone chief, the clan chief, and finally the paramount chief. Chieftaincy is recognized and receives some support from the state, and is regulated by state-appointed district commissioners and county superintendents.

Although the two systems are parallel in principle, the boundary between them is complex and contentious. Isser et al. (2009) stress the role of individual agency in navigating the dual system, noting that “cases may jump from the customary chain into the formal one and vice versa at nearly any point, due to the assertion of authority by a member of one or the other chain, or by choice of one of the litigants.” This conceptualization differs notably from recent theoretical work on the issue (e.g. Aldashev et al., 2012) that sees the relationship between the two systems as a unidirectional hierarchy, with the formal system on top acting as the *de facto* court of appeal. Our survey data shows, for instance, that of disputants who visited more than one forum, the proportion that first chose a customary forum and then a formal is similar (in fact slightly less) than the proportion that chose a formal forum first and then reverted to the customary. This suggests both that there is considerable leeway to shop between forums, and that either forum can be treated as a ‘court of appeal’.

To further complicate matters, in reality there exist “a broad range of actors who have no legally or socially recognized roles in formal, state-backed-customary, or even community-based-customary justice institutions become involved in, and are perceived to be able and likely to influence, the resolution of cases ranging from the most trivial to the most serious” (Isser et al., 2009, p. 23-24). Within the village, such actors include village elders, who advise and regulate the town chief’s decisions, as well as family heads, women’s leaders, youth leaders, secret society leaders, religious leaders (pastors and *imams*), and heads of social institutions (savings clubs, markets, unions, etc.). Outside the village, these include national legislators, deputy ministers, immigration officers, city mayors, diplomatic bodyguards, and the police—the latter serving both as “gatekeepers” for decisions over forum choice, as well as mediators or adjudicators of the dispute itself.

To summarize, while in Liberia the system is dualistic both *de jure* and to a large extent *de facto*, it is porous and there is no strict hierarchy between customary and formal, providing genuine opportunity to shop between forums. We now turn to the determinants of this forum choice.

## 2.2 Tradeoffs

We contend that disputants choose between the customary and formal system based on rational tradeoffs salient to their situation. While the customary system is preoccupied with reconciliation and social harmony, in contrast, magistrates—backed by police and prisons—are better equipped to mete out punishment, which provides little or no material or social gain to plaintiffs. Liberians consistently complain that the formal system is rarely capable of enforcing redressive measures, instead providing punishment without compensation. A punishment meted out by the formal system is “regarded as a source of added forms of victimization even of those it determines to be in the right and innocent (through the battery of fees that are imposed in the process), and as the source of accentuated conflict that is ultimately detrimental to all—victims, perpetrators and the community at large” (Isser et al., 2009, p. 49).

In addition, Liberians experience “a bewildering array of fees associated with the formal system, including registration fees, gas money for police investigators, requirements that victims pay the cost of food for the detained accused, lawyers’ fees, bribes, and indirect costs such as money for transportation and time spent away from livelihoods” (Isser et al., 2009, p. 3). Perhaps most importantly, the laws and procedures of the formal system are alien to most Liberians. Formal legal literacy is low, even more so because the formal law has rapidly changed in the years after the civil war (ICG, 2006). Finally, local cultural norms emphasize that community members should not seek recourse from outside institutions, and those who approach formal institutions face the threat of social sanction and possible expulsion from their own communities.

Yet while the customary legal system comes with many benefits, it remains largely unencumbered by the set of egalitarian norms and rights enshrined in the formal law. Thus customary

law may recognize the right of a husband to beat or demand sexual intercourse from his spouse, limit land rights for widows, ethnic minorities, or persons born outside the village, and so forth. For instance, among the Kwa-speaking people in Liberia, sharing a kola nut is a popular form of dispute resolution based on forgiveness, where the perpetrator offers provide kola nuts, cane juice (a local alcoholic drink) or a chicken or goat to the aggrieved party. The aggrieved party is under tremendous social pressure to accept the offering “[i]n most instances. . . as a result of social coercion” (Pajibo, 2008, p. 16).

Furthermore, the system “utilizes a range of practices that violate international standards, most prominently, trial by ordeal and practices that violate women’s rights” (Isser et al., 2009, p. 3). Though trial by ordeal (*sassywood*) is illegal, most ethnic groups use it to settle disputes involving property theft, witchcraft/sorcery, or death. The practice is primarily used to identify the perpetrator of a crime, but in itself constitutes “cruel and inhuman punishment”. In a typical case:

The alleged perpetrator is made to imbibe a mixture or brew made from indigenous plants. If he or she regurgitates the brew, this constitutes a not guilty verdict. Failure to do so demonstrates guilt and the person will be banished from the village (in the case of murder), scorned, shamed and (in the case of theft of property) made to make restitution. Another sassywood method involves the use of a red-hot metal that is brought into contact with the alleged perpetrator’s person (in most cases the leg). If the alleged perpetrator withdraws from the heat, he or she is ruled guilty. If you were not guilty, then you would not get burned (Pajibo, 2008, p. 17).

In the case of conflict between groups, the party that initiated the conflict is typically held responsible, and to prevent future conflict “is made to give away a beautiful unmarried woman from their group to the other group, to be married to the chief warrior of the second group” (Pajibo, 2008, p. 17). Cases of rape are resolved with similar pragmatism: “In most rape cases, the fine may include a he-goat, a black rooster, 50 pounds of rice and three gallons of palm oil.” Among the Bassa, the second-largest ethnic group in Liberia, “the fine is only a white chicken and a white kola nut.” Among the Mende, “[i]n some instances, the rapist is made to marry his victim” (Pajibo, 2008, pp. 20, 22).

The Liberian customary system exhibits many of the repressive features catalogued in other contexts (see e.g. Wojkowska, 2006). Customary systems tend to emphasize peace and social order, often at the expense of violating individual rights and freedoms. Furthermore, customary justice providers are “often selected on the basis of who they know or who they are related to” and “may abuse their power to benefit those who they know or who are able to pay bribes” (Wojkowska, 2006, p. 21). The accused may not always have the chance to be heard or adequately represented, and unequal power relations may simply be reinforced given the system’s vulnerability to elite capture (DIHR, 2010) and its “biases towards patriarchy” (Pajibo, 2008, p. 17). For example,

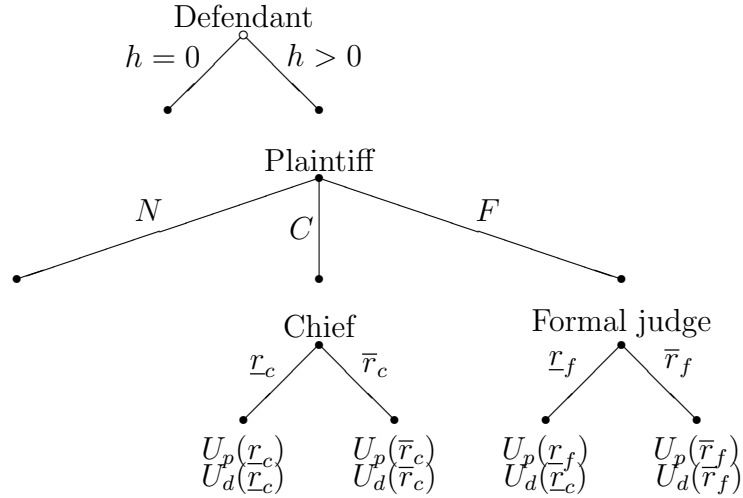


Figure 1: Game Tree

Moult (2009) notes that women in South Africa take cases to traditional authorities in part because of “power relations within their community and economic dependence on their husbands”, and questions “whether informal systems can or will stop forms of violence against women” (Moult, 2009, pp. 9, 19).

The above discussion yields two main stylized facts, which we take as the starting points for the formal modeling exercise in the next section:

1. Despite offering recourse to more progressive, rights-based law, the formal legal system is more costly to access, and less able to provide redress to aggrieved parties or victims of crime. The punitive justice it metes out is at odds with the local emphasis on social reconciliation and harmony.
2. The customary system, though cheaper and more culturally acceptable, is highly susceptible to elite capture and operates under patriarchal, gerontocratic and communal norms that often violate the individual rights of the socially disadvantaged.

The community paralegal intervention studied in this paper attempts to address these tradeoffs, by providing an alternative delivery mechanism for the formal law that bypasses the institutional constraints of the formal system, offering lower-cost access and emphasizing reconciliation and redress over punishment.

### 3 A model of forum shopping

To motivate our theoretical setup, we distinguish two separate approaches towards conceptions of legal pluralism in academic and policy debates. The first view maintains a strict hierarchy between the systems, seeing the custom as a distinctly second-best alternative to the formal law.



Initiatives promoting ‘access to justice’ often equate justice with formal law, and implicitly assume that agents make a constrained choice between forums, where financial costs and ignorance of the law are the most commonly cited obstacles to the formal system. This approach is what Golub (2003) terms ‘rule of law orthodoxy’ in development thinking. This orthodox approach focuses on the promulgation of new laws and reforming formal institutions, often taking for granted the supremacy of the judiciary and central role of trained lawyers.

A second view, with a long pedigree among Western scholars of African law (Adinkrah, 1991; Allott, 1968), contrasts the punitive, “zero-sum, winner-take-all model of justice” of formal courts with an often romanticized view of customary law in which “a high value is placed on reconciliation and everything is done to avoid the severance of social relationships” (Stevens, 2000).

We organize these competing thoughts in a simple economic model of forum shopping that allows for individual agency by plaintiffs in choosing forums, as is implicit in policy debates about access to justice, while also allowing for the positive features of customary justice stressed by many legal anthropologists. In the model, individuals trade off the social bias of the customary system with its relative efficiency and ‘remedial’ approach towards justice. This incorporates basic insights from the law and economics literature (Aldashev et al., 2012; Becker, 1968; Polinsky and Shavell, 2007) as well as contemporary anthropological work (Isser et al., 2009).

The model developed below attempts to capture the tradeoffs listed in Section 2—between the formal system’s punitive approach and high costs, and the customary system’s bias against the socially disadvantaged. The small number of recent papers examining the workings of legal dualism in a developing-country context have focused primarily on the strategic actions of judges rather than disputants. Notably, Aldashev et al. (2012) highlight the strategic actions of customary justices attempting to retain power in the shadow of the formal law. In the extreme, they posit that progressive legal reforms may backfire by encouraging customary institutions to impose stronger penalties on individuals who exit. Similarly, Sterck and Aoust (2012) demonstrate how competition between forums may contribute to rent-seeking and bribery. As these issues are beyond the scope of our empirical analysis, here we focus exclusively on the strategic choices of individual plaintiffs.

### 3.1 Setup

We model three stages of a dispute between a plaintiff and a defendant, and the strategic verdicts of a customary chief and a formal magistrate. The timing of the game is as follows. Defendants and plaintiffs begin with identical utility endowments  $u_0$ . First, the defendant ( $D$ ) chooses whether or not to inflict some harm  $h \in [0, u_0]$  on the plaintiff ( $P$ ). We conceive of harm broadly, to encompass both crimes and economic losses resulting in civil disputes.

Second, in response to this harm, the plaintiff chooses whether to carry the case to either the chief ( $C$ ), the formal magistrate ( $F$ ), or neither ( $N$ ). Finally, the chosen judge offers a judgment, or legal remedy ( $r$ ), which is essentially an offer to redistribute resources from the defendant to

the plaintiff. Judges' decisions are final and, thus, judges lack any ability to commit to deviations from their ex post optimal remedies.<sup>3</sup> We assume that all parties possess full information about each other's utility functions and the structure of payoffs.

In addition to the forum shopping decision, there are just two choice variables in the model to consider, denoted by roman letters:  $h$  denotes harm inflicted on the plaintiff by the defendant, and  $r_j$  denotes the remedy granted by judge  $j$  to the plaintiff. Subscripts  $i$  and  $j$  index the disputants and judges (or forums), respectively. The exogenous parameters of the model that will determine players' strategies are denoted by Greek letters:  $\beta_j$  denotes the bias of judge  $j$ ;  $\beta > 1/2$  denotes pro-defendant bias; and  $\phi_j$  measures 'leakage' in the judge's remedy, with  $\phi > 0$  implying the plaintiff's utility from  $r_j$  is less than the cost to the defendant.  $\beta$  can be conceived of simply as an endowment of personal characteristics (sex, wealth, power, ethnicity) that the custom is more likely to reward.  $\phi$  can be conceived of as a cost to access the formal court paid by the plaintiff that does not accrue to the defendant. Conversely, but also consistent with our model,  $\phi$  may capture the punitive nature of remedies in the formal system, in which the cost borne by the defendant (say physical punishment) does not deliver material gain to the plaintiff.

The core conceit of the model rests on two key assumptions about institutional differences between the customary and formal courts, which derive from the stylized facts listed at the end of Section 2.2. Our first basic assumption relates to judges' preferences or biases.

**Assumption 1** *The custom is biased against certain identifiable social and demographic groups.*

Judges choose remedies  $r$  to maximize social welfare,  $u_j$ , subject to their own biases. Biases, denoted by  $\beta_j \in [0, 1]$ , may be pro-defendant ( $\beta_j > 1/2$ ) or pro-plaintiff ( $\beta_j < 1/2$ ). In the empirical analysis the direction of the bias will hinge on disputant characteristics. In accordance with the full information assumption, players also know each judge's biases in advance of making decisions about inflicting harm or choosing a forum. Judges are primarily concerned with rectifying inequalities between the disputants:

$$\max_{r_j} u_j = (1 - \beta_j) \ln u_p(r_j) + \beta_j \ln u_d(r_j) \quad (1)$$

Assuming *ex ante* equality, this amounts to repairing harms inflicted by defendants on plaintiffs. All other things being equal, judges prefer peace to conflict, and reparation to impunity. We assume that imposing remedies is costless to judges.

Our second basic assumption is technological, relating to the remedies at the judges' disposal.

**Assumption 2** *Formal justice is 'leaky'—i.e., when a formal court rules in favor of a plaintiff, the utility lost by the defendant does not fully accrue to the plaintiff.*

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<sup>3</sup>In this basic setup we do not allow either the plaintiff or defendant to appeal this initial verdict, thus precluding strategic interaction between the judges.

This inefficiency comes both from the overall higher costs borne by the plaintiff in accessing the formal system, and the punitive nature of formal justice that is less able to provide redress. It is reflected in the structure of the payoffs to the two disputants. Defendants derive benefit from the harm  $h$ , and experience the full disutility of the remedy  $r_j$  in both systems:

$$u_D = \begin{cases} u_0 + h & \text{if } j = N \\ u_0 + h - r_j & \text{otherwise} \end{cases} \quad (2)$$

In contrast, punitive formal remedies involve an additional cost to the plaintiff that represents the ‘leakiness’ of the formal system—representing the inability of the judge to fully compensate the plaintiff for the harm done.<sup>4</sup> This follows directly from Assumption 2.

$$u_P = \begin{cases} u_0 - h & \text{if } j = N \\ u_0 - h + r_C & \text{if } j = C \\ u_0 - h + r_F - \phi & \text{if } j = F \end{cases} \quad (3)$$

The key assumption is  $\phi > 0$ , i.e., the formal system is more costly or less efficient at delivering justice to plaintiffs. Note that the simple sum of utilities  $u_P + u_D$  is greater in the customary sector ( $2u_0$ ) than in the formal ( $2u_0 - \phi$ ). We now determine the equilibrium of the game through backward induction.

### 3.2 Solving the model

**Stage 3: Judges make decisions.** In the third and final stage of the game, the chosen judge sets his or her optimal remedy,  $r_j^*(h, \beta_j, \phi_j)$ , by solving the maximization problem in equation (1), yielding:

$$r_C^* = h + (1 - 2\beta)u_0 \quad (4)$$

$$r_F^* = h + \frac{\phi}{2} \quad (5)$$

Because their decisions cannot be appealed, both formal and customary judges choose their unconstrained optimum. Given full information of the judges’ preferences, the plaintiff would not consider credible any more favorable signal from either judge.

In the customary system, the chief’s bias affects the remedy he hands out. In the formal system, the plaintiff is fully compensated for the harm done, but only partly compensated for the verdict’s ‘leakiness’. Since judges make decisions independently, ‘leakage’ does not impact the chief’s decision ( $\frac{\partial r_C^*}{\partial \phi} = 0$ ), and bias does not impact the magistrate’s decision ( $\frac{\partial r_F^*}{\partial \beta} = 0$ ). A more

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<sup>4</sup>This could be seen simply as the costs of travel or contesting a case in court, the deadweight loss due to punitive rather than redressive justice, or a range of other social and financial costs associated with taking a case to the formal system.

biased chief imposes a smaller penalty on the defendant ( $\frac{\delta r_C^*}{\delta \beta} = -2u_0$ ), and the formal remedy increases with the ‘leakiness’ of the formal system ( $\frac{\delta r_F^*}{\delta \phi} = 1$ ). In both systems, greater harm necessitates a higher remedy ( $\frac{\delta r_C^*}{\delta h} = 1$  and  $\frac{\delta r_F^*}{\delta h} = 2$ ).

**Stage 2: Plaintiff chooses forum.** In the second stage, a forward-looking plaintiff with knowledge of the judges’ remedies chooses  $j \in (N, C, F)$  by comparing her utility in each potential forum. This is equivalent to comparing the remedy she would receive from the chief,  $r_c^*$ , and the remedy from the magistrate accounting for ‘leakage’,  $\phi$ . Remedies in turn depend on  $\beta$  and  $\phi$  (equations 4 and 5). Comparing the utilities implied by these options and simplifying, the thresholds at which  $P$  switches between systems are given by

$$\phi = 4u_0\beta - 2u_0 \tag{6}$$

$$\phi = 2h \tag{7}$$

$$\beta = \frac{1}{2} + \frac{h}{2u_0} \tag{8}$$

Equation 6 determines the choice between  $F$  and  $C$ , equation 7 between  $F$  and  $N$ , and equation 8 between  $N$  and  $C$ . Figure 3 plots each of these conditions in  $(\beta, \phi)$  space. Each region displays  $P$ ’s ordering of utilities for the combination of conditions that define the region. Given the structure of the game,  $P$  will choose her first-best choice of forum in every instance. The shaded regions correspond to conditions under which  $P$ ’s choice is the customary system, the formal system, or none. Greater bias ( $\beta$ ) reduces the likelihood of reporting to the chief, while higher ‘leakiness’ ( $\phi$ ) reduces the likelihood of reporting to the magistrate.

Figure 3 also shows how  $P$ ’s choice set changes with changes in  $h$  and  $u_0$ . As  $h \rightarrow u_0$ , the ‘non-reporting’ region shrinks—all else equal, higher levels of harm raise  $P$ ’s willingness to report the crime, but does not change the relative merits of the two systems. In contrast, as  $u_0 \rightarrow 0$ , the chief becomes more attractive relative to both the magistrate and non-reporting, suggesting that on average, individuals with lower initial endowments end up in the customary system.

The above discussion generates a number of testable predictions.

**Prediction 1.** *Plaintiffs are more likely to report the dispute ( $j = C, F$ ) when harm  $h$  is high.* Thus we would expect, e.g., violent crimes or land disputes to be reported more often than ‘minor’ disputes.

**Prediction 2.** *Ceteris paribus, disadvantaged plaintiffs—i.e., those with lower utility endowments ( $u_0$ )—are more likely to report to the customary system.*

This implies that in the empirical analysis we expect women to be more likely to use the customary system, all other things being equal. The model suggests that the most important factor to hold constant for this to be true is the identity of the other party to the dispute. Prediction (2) is driven by resource endowments of the plaintiff alone, which we proxy with his/her demographic

and socio-economic characteristics. Prediction (3) is driven by levels of bias in the customary system, which are determined by the *gap* between the wealth or privilege of the plaintiff and defendant.

**Prediction 3.** *As pro-defendant bias in the customary system ( $\beta$ ) increases, the probability of reporting declines, and the probability of carrying the case to the formal system increases.*

Thus we would expect, for example, a female plaintiff to face greater bias in the customary system when pursuing a case against a male defendant, and consequently be more likely to take a male defendant to the formal system than a female defendant, or else not report the dispute at all. Similarly, we expect poor or otherwise disempowered plaintiffs to be more likely to take wealthier and more powerful peers to the formal sector. The source of this prediction can be seen by comparing the solutions to the judges' maximization problem in Equations 4 and 5.

**Stage 1: Defendant chooses harm.** In the first stage,  $D$  will choose a level of harm that gives him the greatest utility conditional on his knowledge of  $P$ 's future forum choice. We can rank  $D$ 's utilities from each forum in a similar manner to  $P$ 's. Figure 4 overlays a partial ranking of  $D$ 's utilities onto Figure 3. Depending on the exogenously determined values of  $\beta$  and  $\phi$ ,  $D$  will be located at some combination of  $(\phi, \beta)$  in one of three relevant regions  $X$ ,  $YY'$  or  $ZZ'$ . Before we examine  $D$ 's choice of  $h$ , it is worth noting that the only region where  $D$  could end up in the formal system is  $ZZ'$ , and in this region his utility is strictly less than if he were in  $N$  or  $C$ . In contrast, since  $P$  always chooses the forum that maximizes her utility, at the margin we expect  $P$  to be indifferent between forums. Thus we can make another prediction:

**Prediction 4.** *The customary system provides greater aggregate welfare than the formal system, in that the sum of the utilities of  $P$  and  $D$  are higher. Furthermore, for  $\phi$  above some threshold (i.e., a costly, inefficient, or punitive formal sector),  $D$  is strictly worse off if  $P$  chooses the formal sector.*

Note that we make no unambiguous prediction about the utility of the plaintiff in the formal versus the customary system. Plaintiffs rationally choose their forum conditional on exogenously determined  $\beta$  and  $\phi$  as such, we would expect utility-maximizing agents to be indifferent at the margin.

But prediction (4) suggests clearly that the subjective satisfaction of defendants would be lower in the formal system. Furthermore, the combination of (a) being taken to the formal system, and (b) demographic characteristics that suggest the defendant would have received a favorable outcome in the customary system should produce a strongly negative outcome in defendants' eyes.

We return now to  $D$ 's choice of harm. In the world of pro-plaintiff bias,  $X$ , where  $\beta < \frac{1}{2}$ ,  $D$ 's choice of  $h$  will not influence  $P$ 's forum choice— $P$  will always choose the chief and  $D$  will always receive  $u_D(r_C^*) = 2\beta u_0$ . Thus if  $\beta < \frac{1}{2}$ ,  $D$ 's choice of harm is irrelevant, and  $P$  always chooses  $j = C$ .

If bias is pro-defendant ( $\beta > \frac{1}{2}$ ),  $D$ 's choice of  $h$  will allow him to determine the region he occupies, by moving the  $\phi = 2h$  and  $\beta = \frac{1}{2} + \frac{h}{2u_0}$  lines along the  $\phi = 4u_0\beta - 2u_0$  line—an increase in  $h$  will reduce the “no reporting” region  $Y'Z'$ .

In this world, if  $D$  finds himself in region  $YY'$ , his choice of  $h$  will determine whether—for a given combination of  $(\phi, \beta)$ — $P$  will choose the chief or not report at all. By setting a low  $h$ ,  $D$  can increase the size of the “no reporting” region sufficiently to ensure that  $P$  does not report, and vice versa. However, no matter what he does he cannot get his first-best choice because  $P$ 's interests are dramatically opposed to his. In sub-region  $Y$ , where  $j = C$ , the chief's bias towards  $D$  is not high enough to make up for the loss of the remedy transferred to  $P$ , so  $u_D(r_N^*) > u_D(r_C^*)$ . Conversely in  $Y'$ , where  $j = N$ , the chief's bias is high enough to more than make up for the remedy, so  $u_D(r_N^*) > u_D(r_C^*)$ . Thus while  $D$  can influence  $P$ 's forum choice, no matter what level of  $h$  he sets he will always get suboptimal utility.

Finally, assume that  $D$  is in region  $ZZ'$ . His choice of  $h$  will determine whether—for a given combination of  $(\phi, \beta)$ — $P$  will choose the magistrate or not report at all. In both subregions  $Z$  and  $Z'$ ,  $u_D(r_N^*) > u_D(r_F^*)$ , i.e. that  $D$  always prefers non-reporting. This implies that  $D$  will choose a low enough  $h$  to expand the “no reporting” region so that he ends up in region  $Z'$ , where  $j = N$ . Simply put, the chief's high pro-defendant bias means  $P$  will never go to the customary system, and the higher the harm  $D$  commits, the more likely  $P$  is to report him to the magistrate—which makes  $D$  strictly worse off. So  $D$  chooses low harm and  $P$  chooses  $j = N$ .

One takeaway from this discussion is that  $D$  never sets  $h$  such that  $P$  will choose the formal system— $D$  avoids the formal system at all costs. This is consistent with our story that the formal system provides lower aggregate welfare than the customary, since taking  $D$  would entail a large loss of utility. In addition, though our model is extremely simple, it reflects quite well the empirical reality in Liberia where only four percent of disputes ever make it to the formal system—and most of those are “high harm” disputes such as murder, rape, and land (Table 1). The only circumstance where  $D$  prefers  $F$  to  $C$  is when bias is pro-plaintiff and  $\phi$  is low—but pro-plaintiff bias means  $P$  always picks the chief.

While the formal system will only be chosen in rare circumstances, our model highlights its role as an effective deterrent to harm. In the absence of the formal system,  $D$  has no incentive to set low harm—in region  $X$ , he is trapped in the customary system, and in region  $YY'$  though he can influence forum choice he cannot optimize his utility. But when the formal system casts its shadow in region  $ZZ'$ ,  $D$  actively reduces harm in order to prevent  $P$  from taking him to the magistrate. Thus our relatively simple model also captures one of the basic insights from Aldashev et al. (2012)—that the formal system, though rarely used, plays a crucial role in determining social welfare outcomes.

### 3.3 Introducing legal aid

We consider now the predictions of the model for the randomized impact evaluation. Specifically, we introduce into the model an informal legal-aid program which, on the one hand, is based on statutory legal principles (i.e., exhibiting low bias,  $\beta$ ) and, on the other hand, is *pro bono* and focuses on non-punitive resolution of disputes (i.e., low leakage,  $\phi$ ). This description is in line with our *pro bono* paralegal program, which is described more fully in Section 5.1.

Clearly, such a program would strictly dominate the  $F$  for both  $P$  and  $D$ , since neither has to bear the costs associated with the formal system. Similarly,  $P$  would now prefer the customary system if and only if she is in region  $X$ , where bias is pro-plaintiff.  $D$  would have the exact opposite preferences. It is worth noting that in this simple setup, the result is identical whether we consider legal aid to be a new forum  $L$ , with  $\beta = \frac{1}{2}$  and  $\phi = 0$  that strictly dominates  $F$ , or simply a resource transfer to  $P$  equal to  $\phi$  that effectively sets formal system ‘leakiness’ to zero.

This generates the following three predictions for the randomized evaluation.

**Prediction 5.** *Take-up: A disproportionate share of disputes taken to the program would, absent legal aid, not have been taken to any forum.*

The model is not unambiguous on this point, but prediction (5) emerges from a combination of the theoretical model and what we know about actual forum-shopping behavior in the observational data – i.e., a parameterized version of the model. Of cases taken the customary system, legal aid will only be attractive when  $\beta$  is low. For cases taken to the formal system, it depends on whether we conceptualize legal aid as a substitute for the formal system (i.e., as a competing forum  $L$ ) or as an input into it (i.e. as a resource transfer  $\phi$ ). In the first case, *pro bono* legal aid is always a better option, so the number of cases going to the formal system would go down. In the second, legal aid lowers formal system costs, thereby increasing reporting to the formal system. Thus predictions on formal system reporting are ambiguous. In contrast, there is a large number of disputes not reported, and *pro bono* legal aid lowers the two hurdles to reporting in the model: bias and cost.

Turning from take-up patterns to the effect of the program conditional on take-up, the model generates two predictions about treatment effects on the treated.

**Prediction 6.** *Treatment effects: Legal aid will increase plaintiffs’ payoffs.*

**Prediction 7.** *Heterogeneous treatment effects: Plaintiffs facing disadvantageous bias in the customary system will benefit more from legal aid.*

Prediction (6) is fairly obvious and in no way unique to our theoretical setup. The primary function of empirical testing is (a) to establish the magnitude of the potential welfare gains at stake here, and (b) to explore, beyond the narrow predictions of the model, the scope of impacts, i.e, on case outcomes, subjective satisfaction measures, material well-being, etc.

In contrast, prediction (7) provides a testable implication of our modeling framework. The

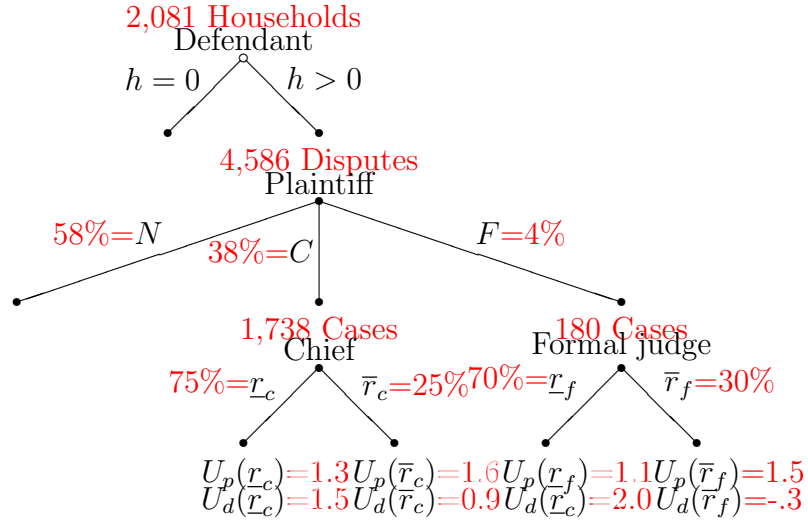


Figure 2: Game Tree & Empirical Proxies

depiction of the trade-offs faced by disadvantaged social groups in making forum-shopping decisions help to highlight who stands to gain the most from *pro bono* legal aid.

## 4 Evidence of forum shopping from observational data

To test the empirical empirical predictions of the model, we use data drawn from two rounds of an original household survey conducted by the authors in August 2008 and February 2009.<sup>5</sup> The full sample includes 2,081 households spread across 176 communities in five Liberian counties: Bong, Grand Gedeh, Lofa, Maryland and Nimba, shown in Figure 5. Together these counties account for nearly two-fifths (38 percent) of the population of Liberia, and more than half (56 percent) of the population outside Monrovia. First-stage sampling of communities within each county was based on random probability-proportional-to-size (PPS) sampling from the full list of communities in the 2008 Census of Liberia. In the second stage, a simple random sample of households was drawn within each selected community using in-field randomization.<sup>6</sup> As the primary purpose of the survey was to look at inter-household disputes, survey respondents were typically the household head, their spouse, or if neither was present, a representative adult member able to answer questions on behalf of the household.

Disputes are the basic unit of analysis in much of what follows, yet the boundary of what qualifies as a ‘dispute’ was left deliberately vague, and respondents were free to report disputes as they defined them. Thus it is important to analyze the incidence of and response to disputes within well-defined sub-categories of crimes and civil cases. In total, the 2,081 households in our final

<sup>5</sup>These survey rounds also constitutes the baseline for our community-level randomization.

<sup>6</sup>In the initial design of the survey we had anticipated that legal disputes would be rare events, requiring the need to screen respondents and over-sample those with disputes relevant to the study. However, a pilot survey conducted in July 2008 showed widespread incidence of crime and conflict across all communities.



estimation sample – restricted to those with full socioeconomic data on both parties to any dispute – reported 4,586 separate disputes, with 98 percent of households reporting at least one dispute. Disputes were solicited through a 60-90 minute interview focusing on respondents’ experience of a wide range of crimes and conflicts, including assault, sexual violence, murder and theft, as well as disputes involving land, debt, property, and family. Respondents were asked whether any member of their household had been affected by each dispute type, and if so, whether the other party was another household member, another member of the community, an outsider to the community, or unknown. Intra-household disputes were treated similarly to disputes between households. Details were collected for each dispute reported within the past year, including the forums visited, the time and costs incurred, and details of the judgment including reported subjective satisfaction.

Limited socioeconomic and demographic information is available for both parties (plaintiff and defendant) to each dispute, including sex, occupation, relationships to powerful figures, and ethnicity. However, we were constrained to soliciting this information from only one party to a given dispute— privacy and ethical considerations, e.g. the possibility of worsening or reigniting a previous dispute, as well as concerns about encouraging biased or censored response prevented us from tracking down the adversary to collect full dyadic data. Accordingly, subjective views about fairness or satisfaction with case outcomes are only reported in the first person by party being interviewed. In the analysis we include dummies wherever appropriate for whether the respondent was the plaintiff or defendant in the dispute.

## 4.1 Mapping theory to data

In this section we begin with some descriptive statistics, then attempt to map the data to the key variables in our model.

The core hypothesis of the theoretical model concerns forum choice. The raw data includes disputes taken to dozens of different forums on a fairly continuous spectrum, from ‘family head’ or ‘elders’ at the customary extreme, to police and magistrates at the formal extreme. For most of the analysis, forums are grouped into just three options corresponding to the theoretical model: ‘no forum’ if the respondent reports that the case was not taken to any third party; ‘formal’, which is limited to justices of the peace, magistrates, police and other military/government officials; and ‘customary’, which encompasses all other forums, including town, clan and paramount chiefs, as well as elders, family leaders and secret societies.<sup>7</sup>

Using these broad categories, 38 percent of disputes were taken to the customary system, while just 4 percent were taken to the formal system. In addition, 58 percent of disputes were not reported to any forum, and were either resolved by the disputing parties themselves or left unresolved. Table 1 disaggregates these patterns by dispute category. In line with Prediction 1

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<sup>7</sup>While we made every effort to communicate to respondents that ‘reporting’ taking the dispute to *any* third party for mediation or adjudication, it is possible that respondents did not fully understand reporting to the lowest rungs of the customary system, artificially increasing the number of disputes that were taken to ‘no forum’.

from the theoretical model, there is a clear tendency for violent crimes to be taken to the formal system (25.8 percent of murders, 21.2 percent of rapes and cases of sexual abuse) while the civil cases that dominate the sample are very rarely taken to the formal system (1.5 percent of the debt disputes and 1.4 percent of the family or marital disputes, which together comprise almost two-thirds of the sample).

Table 2 examines the relationship between forum shopping and plaintiff characteristics. We examine each of the four demographic measures at our disposal, namely whether the respondent is male, wealthy (based on a dummy for whether the household head has any non-farm employment), powerful (based on a dummy for whether the disputant is or is not related to a local leader), or drawn from the largest ethnic group in the community. In line with Prediction 2 from the model, the socially disadvantaged *on average* are significantly more likely to take their case to the customary system—women more so than men (42 percent versus 37 percent), farmers more so than non-farmers (38 percent versus 35 percent), and the ‘powerless’ more so than the powerful (40 percent versus 29 percent). It is worth noting that this table is silent on Prediction 3, regarding bias, since we consider bias as being disadvantaged *relative to the other party* in the dispute.

Table 3 presents favorable response rates for self-reported subjective evaluations of five justice outcomes: ‘fairness’, ‘satisfaction’, ‘winning’, ‘willingness to return to the forum’, and ‘respect received’. ‘Satisfaction’ and ‘respect’ are measured on a five-level Likert scale (‘very satisfied’, ‘somewhat satisfied’, etc.); ‘winning’ is measured on a three-level scale measuring in whose favor the verdict was given (‘my favor’, ‘neutral’, or ‘other party’s favor’); and ‘fairness’ and ‘willingness to return’ are binary variables (‘yes’ or ‘no’) measuring whether the respondent felt the decision was fair and whether they would be willing to bring another dispute to the forum. The table summarizes the relevant favorable response for each of these measures (respondents answering ‘yes’, ‘my favor’, and ‘somewhat satisfied’ or ‘very satisfied’, as appropriate), as a percentage of all disputes resolved in customary forums and formal forums, respectively. Thus 92 percent of respondents who had a dispute resolved in a customary forum thought that the outcome was fair, compared to 85 percent of respondents at formal forums. It is worth noting that in all measures, people appear to be happier with the customary system, in line with Prediction 4 regarding the customary system’s relative efficiency.

Figure 2 reproduces the theoretical game tree from Figure 1, overlaying descriptive statistics from the dispute database. Starting at the bottom of the figure, our model equates justice with the utility ( $u_P$  and  $u_D$ ) that it generates. In the empirical analysis, utility is proxied by self-reported evaluations of justice outcomes: notably the five measures of fairness, satisfaction, ‘winning’, willingness to return, and respect received summarized in Table 3. For brevity, we generate an aggregate index of all these subjective measures of justice, based on the first principal component taken from a factor analysis.

Remedies,  $r_C$  and  $r_F$ , in rural Liberia are difficult to quantify. Monetary compensation is rare, especially in the customary system. Instead, remedies are often in-kind or focus on loss of stature or

reputation through mandated apologies. We generate an aggregate measure of remedies, indicating whether any physical punishment was meted out, any material compensation was incurred, and whether either party issued an apology. The average values of this PCA index for plaintiffs and defendants, respectively, in cases where any remedy or punishment including apology was ( $\bar{r}_j$ ) or was not ( $\underline{r}_j$ ) incurred are listed at the bottom of Figure 2.<sup>8</sup>

Our analysis relies heavily on an empirical measure of customary judges' bias ( $\beta$ ). While we do not observe biases directly, we posit that the chief's bias in a given case will be determined by the characteristics of the plaintiff and defendant, reflecting the hegemony of certain social and economic groups. In particular, we hypothesize that bias will favor disputants who are male, employed, powerful, and from the dominant ethnic group. Characteristics that work in one's favor are coded as positive values in defining  $\beta$ . Both the plaintiff's and defendant's characteristics are clearly relevant.  $\beta$  equals the difference between defendant and plaintiff characteristics, such that  $\beta > 0$  is pro-defendant bias. For example:

$$\beta(\text{Sex}) \equiv \text{male dummy for defendant} - \text{male dummy for plaintiff}.$$

As coded, this implies that we expect customary judges to be more likely to side with the defendant when, say, a woman sues a man ( $\beta = 1 - 0 = \text{pro-defendant bias}$ ).

Moving up the game tree, the core hypothesis of our model concerns forum choice, and we present the relative take-up rates for different forums as described in Table 1. Finally, at the very top of the game tree, the level of harm,  $h$  relates to the incidence and severity of losses incurred by the plaintiff. Harm is not observed directly. (Monetary losses are measured when the respondent is the plaintiff, but are applicable for only a subset of disputes.) Instead, we control somewhat crudely for variation in the severity of harm using dispute-type dummies, covering 19 different categories of dispute. Thus we analyze the relationship between, for instance, disputant characteristics and forum choice by comparing land cases to land cases, thefts to thefts, and so on, but do not control for variation in severity of harm within these dispute categories.<sup>9</sup>

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<sup>8</sup>As noted earlier in Section 4, we interviewed only one party to each dispute. While the objective characteristics underlying the bias measures referred to earlier (sex, ethnicity, etc.) are solicited for both the plaintiff and defendant from a single respondent, this is clearly not appropriate for subjective evaluations of justice. Thus justice outcome data is available for either the plaintiff or defendant for a given case, not both. However, we can speak about both plaintiffs and defendants in the aggregate, as we interview plaintiffs in some cases and defendants in others.

<sup>9</sup>A special case occurs when the level of harm is zero, and no dispute is observed. As noted in Figure 2, the estimation sample covers 2,081 households. Because these households comprise a representative sample their respective communities, it is possible to examine the endogenous decision to inflict harm by defendants, by relating the probability of victimization to household characteristics. Due to limits of time and space, this analysis is not included here.

## 4.2 Testing the model

The fundamental premise of our modeling framework is that plaintiffs exercise agency in choosing a forum to hear their case, and that these choices are made strategically to maximize plaintiffs’ own welfare, possibly at the expense of defendants. An extreme alternative hypothesis would be that agents are bound by laws or norms to one system or another: legal dualism as legal apartheid. At the other extreme (more in keeping with our rational choice approach but taking its logic further than we feel is warranted), one might speculate that rational forum shopping and strategic behavior by judges could lead to an equilibrium where judgments are indistinguishable between forums, something analogous to the race to the middle in a Hotelling model.

This section econometrically tests the predictions of our model, implicitly weighing it against these alternative approaches. As detailed below, we find that individuals likely to suffer negative bias in the customary system are more inclined to exit to the formal system—consistent with rational forum shopping. We also show that plaintiffs bearing these (disadvantaged) characteristics receive greater differential utility from the formal versus the customary system. Furthermore, defendants with traits favored by the customary system do on occasion end up in the formal system and suffer utility losses when they do, all suggesting that judgments in the two systems have not converged and judgements ‘stick’, in the sense that infinite appeals are not feasible.

We first test two main predictions listed in Section 3 above: prediction 2, that disadvantaged plaintiffs—i.e., plaintiffs with lower  $u_0$ —are less likely to be able to bear the costs of reporting given their low utility endowments, and therefore on average more likely to choose the customary system (and conversely, privileged plaintiffs are less likely to do so) and prediction 3, that plaintiffs facing more customary bias—i.e. those facing high  $\beta$ —are less likely to report to the customary system.

We test these two hypotheses together using a multinomial logit specification, regressing an indicator for the choice of forum on empirical proxies for  $\beta$ .

$$I_i(j = N, C, F) = \gamma_0 + \Gamma_1\beta_i + \Gamma_2u_{0i} + \delta_d + v_i \tag{9}$$

where  $\beta_i$  is a vector of measures of pro-defendant bias, calculated as described earlier for each of four categories (sex, employment type, power and ethnicity);  $u_{0i}$  is a vector of measures of plaintiff utility endowment, as indicated by dummy variables for male, non-farm employment, powerful, and ethnic majority; and  $\delta_d$  are dispute dummies for four categories of disputes (“Family”, “Economic”, “Violent”, and “Other”, which we use as crude controls for the level of harm inflicted.<sup>10</sup>

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<sup>10</sup>These categories are constructed from 19 categories of disputes collected in the survey: “Accused of assault” “Accused of murder” “Accused of other crime” “Accused of property destruction” “Accused of rape” “Accused of rape/sexual abuse” “Accused of theft” “Accused of witchcraft” “Bribery/corruption” “Child custody dispute” “Child/wife neglect” “Debt dispute” “Divorce/separation” “Domestic violence” “Family or marital dispute” “Labor dispute” “Land dispute” “Property dispute (not land)” “Victim of assault” “Victim of murder” “Victim of other crime” “Victim of property destruction” “Victim of rape/sexual abuse” “Victim of theft” and “Victim

Our model predicts that when  $j = C$ ,  $\hat{\Gamma}_1 < 0, \hat{\Gamma}_2 < 0$ —the customary system is the less preferred choice for (1) privileged plaintiffs with high  $u_0$  (who can ‘afford’ the costs of accessing the formal system) and (2) plaintiffs who are disadvantaged relative to the defendant (high  $\beta$ ). The results in Table 4 show that on the whole the model is quite successful in explaining the decision to choose the formal over the customary system. It is somewhat less successful in predicting the decision to report to the customary system, or not to report.

Column 1 shows that three of the four measures of  $\beta$  are significantly and negatively associated with taking a case to the customary system relative to the formal, as predicted. Similarly, in three of four cases, the four measures of  $u_0$  also bear a significant, negative coefficient as predicted. In both cases, variables constructed from the ethnicity variable are insignificant. In short, the results are consistent with the notion that plaintiffs who face severe bias in the customary system and have the means to go elsewhere do so.

Column 2 shows the results for the decision to report to the customary system relative to not reporting at all. For both the  $\beta$  proxies and the proxies for  $u_0$ , coefficients display conflicting signs. Coefficients for non-farmers and powerful people are significant and negative, as predicted. However, the coefficient for sex is significant and positive, while the coefficient for ethnic majority is insignificant. The model’s treatment of the decision to report was relatively sparse compared to the attention given to the distinction between the formal and customary systems, and further attention to the possibility of bargaining and reconciliation outside a third-party forum appears to be merited.

While the model has no strict prediction for the choice between the formal system and not reporting at all, Column 3 can perhaps provide some insight into the relative costs  $\phi$  in accessing the formal system. For two of our four measures, plaintiffs with high  $u_0$  or facing high  $\beta$  strongly prefer reporting to the formal system relative to not reporting at all, suggesting that all else considered, the relative cost of taking a case to the formal system is not prohibitive.

The key theoretical prediction regarding disputants’ satisfaction (or perceptions of justice) from Section 3 is that defendants always prefer the customary system, except when bias is pro-plaintiff and the formal system is efficient at redistributing resources (Prediction 4). This suggests a series of interaction effects among the empirical determinants of utility, combining dummies for plaintiff/defendant status, relative bias, and a dummy for whether the case was taken to the formal system.

$$u_i = \gamma_1 P + \gamma_2 (P \times \beta) + \gamma_3 (P \times F) + \gamma_4 (P \times F \times \beta) + \gamma_5 D + \gamma_6 (D \times \beta) + \gamma_7 (D \times F) + \gamma_8 (D \times F \times \beta) + \epsilon_i \quad (10)$$

where  $u_i$  is a proxy for utility,  $P$  is a dummy denoting that the respondent is the plaintiff, and

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of witchcraft”. We aggregate for the sake of space and simplification, but our results do not change if we include the 19 disaggregated categories.

$F$  is a dummy for cases taken to the formal system. The empirical results in Table 5 are broadly consistent with the theoretical predictions. Column 1 shows that plaintiffs are generally indifferent between forums, but defendants are significantly less happy in the formal system. This is entirely in keeping with a customary system that produces greater aggregate welfare (prediction 4), as the sum satisfaction scores for the plaintiff and defendant is negative in the formal system ( $0.43 + 0.51 - 1.13 = -0.19$ ) and positive in the customary system ( $0.43 + 0.51 = 0.94$ ).

Columns 2–5 provide further interactions with each of our measures of bias and provide some tentative supporting evidence for our predictions regarding the interaction of forum choice and bias. For example, plaintiffs facing gender bias are significantly happier in the formal system (column 2,  $\hat{\gamma}_4 > 0$ , significant at 1%), while plaintiffs facing ethnic bias are significantly unhappier in the customary system (column 4,  $\hat{\gamma}_2 < 0$ , significant at 5%). Defendants in the formal system are consistently significantly unhappy ( $\hat{\gamma}_7 < 0$ , significant at 1% across all specifications)—but significantly unhappier in the formal system when they would have had gender or ethnic bias going in their favor (columns 2 and 4). This pattern is consistent with punitive formal system remedies that harm defendants to a greater extent than they benefit plaintiffs, in a system where the custom is biased towards some types of people and not others.

### 4.3 Discussion

On the whole, this pattern of results suggests not only that forum choices are made rationally to benefit the interests of the plaintiff, but that the judgements received in the chosen forum have utility consequences which are not bargained away or overridden through appeal. It provides evidence of individual agency (and, in particular, forward-looking rational choice) in forum shopping, running counter to starker depictions of legal dualism such as in Mamdani (1996), and fits well with our anthropological understanding of justice choices in Liberia (Isser et al., 2009) and elsewhere.

Our claim that plaintiffs exercise strategic choice in forum shopping confronts a *prima facie* tension between (a) well-documented bias in Liberian customary law, depriving women and marginalized groups of basic rights, and (b) the simple empirical fact documented here that even these disadvantaged plaintiffs take most (but not all) of their cases to customary forums. Why would marginalized groups choose to bring cases to customary courts that systematically repress them?

An obvious answer, in theory, is provided by high costs of entry to the formal system, i.e., barriers to “access to justice” in development speak. In rural Liberia, such barriers are undeniable. For plaintiffs in remote villages, travel costs alone to reach a police station or formal court are significant relative to the material stakes in many disputes. Court officials routinely solicit bribes and rural peasants may be ignorant of formal legal procedures.

Our results suggest that barriers to entry may not be the whole story, and that there are positive

features of customary justice that attract even disadvantaged plaintiffs. Notably, while plaintiffs who win favorable verdicts in the customary system exhibit higher satisfaction than those who do not, no such pattern exists in the formal system. Looking across systems, plaintiffs are generally less satisfied with the justice provided in formal than customary forums, questioning any notion of a clear hierarchy in the attractiveness of these systems. Finally, defendants are overwhelmingly less pleased with outcomes in the formal system – even after controlling for demographic characteristics and the nature of the dispute.

These patterns conform to the predictions of our simple model of strategic forum choice in which plaintiffs trade off the *rights* afforded them in the formal system in favor of the more efficient legal *remedies* delivered by customary courts. Our empirical evidence on the impotence of the formal system in generating utility for plaintiffs, combined with its success in creating disutility for defendants, corroborates one of our basic modeling assumptions: formal courts are relatively punitive, while customary law is more ‘restorative’, in the sense of efficiently redistributing utility from defendant to plaintiff with fewer Pareto losses.

To conclude this section, we briefly indulge ourselves by taking these empirical findings as given, and consider the normative policy implications of the underlying model.

As a thought experiment, consider a social planner with progressive preferences (very low  $\beta$ ) and the power to influence both the customary and formal system, e.g., Liberia’s central government under the leadership of the well-intending government of Ellen Johnson Sirleaf. The planner is always tempted to further reform the already-progressive norms of the formal system—by passing new laws—and to attempt to replace or reduce the dominance of custom, say by top-down decentralization programs. These approaches are popular with top-down reformers, especially in post-conflict settings where there is often (we would argue) a mistaken assumption that local institutions have somehow ceased to be relevant, or are weak enough to be written off. Yet these solutions lack clear coherence in our model, and seemingly fail to recognize the revealed preferences of the rural poor in seeking out customary justice focused on reconciliation and less punitive remedies. Aldashev et al. (2012) model this approach of top-down reform more explicitly, and highlight the potential for unintended negative consequences from increasing the distance between customary and formal laws.

Alternatively, the planner can attempt to reform customary norms (reduce  $\beta$ ) or increase the appeal of formal justice by making the system less punitive and more focused on delivering tangible benefits for plaintiffs (reduce  $\phi$ ). Both will be effective in theory. In practice, these alternatives are manifested, respectively, in ongoing collaborations by domestic civil society organizations and international NGOs to train customary leaders in their judicial responsibilities, and to provide quasi-formal alternative dispute resolution mechanisms that are less costly and punitive than police and magistrates’ courts. The rest of this paper examines one such intervention, which seeks to help the socially disadvantaged gain access to low-cost, remedial justice that incorporates the progressive features of the formal law, by means of *pro bono* mediation and advocacy services

provided by community paralegals.

## 5 Experimental evidence on *pro bono* legal aid

This section presents the results of a randomized controlled trial of a mobile paralegal intervention. The program’s design, as noted earlier, is consistent with the broad implications of our analysis of forum shopping for the design of legal empowerment initiatives—paralegals reduce both the direct costs of accessing the formal law as well as the costs associated with punitive formal system remedies, thereby increasing competition between formal and customary law. However, we are unable to directly test the model’s predictions in the experimental analysis, due to constraints imposed by the nature of program implementation. As such, the discussion in previous sections should be seen as a motivating framework for the intervention.

### 5.1 The community paralegal program

The Carter Center’s access to justice initiative in Liberia, active since 2006, is a part of the larger push towards strengthening the rule of law. Implemented in partnership with local civil society organizations, the Ministry of Internal Affairs and the Ministry of Justice, the initiative aims to support formal legal reform, educate Liberians of their rights under the law, and provide them everyday access to justice and legal settlement of disputes.

The flagship component of the Carter Center initiative is a community paralegal program, meant to provide an immediate alternative to other local justice mechanisms, both formal and customary. Community-based paralegals are recruited from the counties in which they work, and typically possess secondary school or college education. They are trained periodically in mediation, advocacy, formal law, and the roles of the different legal agencies. They are mandated to provide free-of-cost legal advice and services to local residents. In particular, they assist individuals and communities with a wide range of disputes, by providing information about the law and their individual rights, advocating on their behalf to customary and formal authorities, and directly mediating disputes if so requested.

With some exceptions, paralegals generally wait for potential clients to approach them with live disputes or grievances. These may range from child and spousal support cases, to disputes over land, debt, labor, or property, to violent crimes such as assault and gender-based violence. Paralegals assess the client’s initial story to see if it constitutes a ‘case’, i.e. where action of some sort is viable (as opposed to, for example, clients coming to talk about losses during the war, or crimes committed by unknown parties who cannot be identified or tracked down). If the dispute or grievance constitutes a ‘case’, paralegals decide whether or not to accept it depending on their existing caseload and the merits of the case. Paralegals encourage their clients to state what action they would like to take—for example, take the case to court, arrange a mediation to attempt to



reconcile, advocate on behalf of the client to relevant authorities, etc. (Notable exceptions are murder, rape, and other forms of violence where paralegals refuse to mediate and strongly advocate taking the case to a formal authority.) Paralegals lay out these and other options, and provide some information about the laws and processes involved and the likely outcomes.

If the client chooses to take the case to a formal authority, the paralegal becomes an informal legal advisor and advocate, guiding the client through the procedures and looking over the shoulder of authorities to ensure that due process is being followed. This is usually enough for the large majority of cases that do not formally make it into court. For cases that go to court, under some circumstances the paralegal could refer the client to in-house lawyers maintained by the Carter Center who may choose to represent the client. Lawyers also provide a limited range of other legal services that require formal legal assistance, such as filing bail applications in court, but even in those instances the paralegal is responsible for following up on the procedures.

Mediation, easily the most popularly selected recourse, is conducted along standard and familiar procedures of conflict resolution. Paralegals receive mediation training from the Carter Center's lawyers as well as other organizations such as the American Bar Association's local office. Mediation typically begins with the paralegal issuing an invitation (or multiple invitations, as required) to the other parties involved in a dispute. Invitations carry some weight, both because they are issued as written documents—a rarity in local dispute resolution—and because NGOs hold a great deal of sway in rural Liberia and are widely perceived as external, formal actors.

Mediation is conducted at a mutually agreed upon venue, and may be held over multiple sessions if so needed. If parties agree upon an outcome, the paralegal writes out a formal mediation agreement and leaves a copy with both parties. Though paralegals have no means of enforcing the agreement, they maintain a close watch on the case for at least three months after case resolution and check in periodically with their clients. If the agreement is reneged upon, paralegals may offer to reopen a case and pursue an alternative means of recourse if the client so desires.

Paralegals also play broader roles as individual and community advocates. They may approach traditional authorities, employers, government agents, or other informal actors as needed to advocate on behalf of their clients, which might be individuals or communities. They also play a broader social role that often goes beyond that of a legal representative—for instance, they may take on extreme cases of injustice *suo moto*, or in exceptional circumstances switch their allegiance to the other party—for example, if approached by a husband who has been beating his wife. To date, the paralegal program has taken up over 4,000 disputes, ranging from land and property to gender-based violence and child support.

Till 2009, paralegals were only based in the major towns in each districts. The high cost of travel, both in terms of time, transport, and the social cost incurred by individuals in taking a dispute to an outside third party, meant that new cases came predominantly from urban or peri-urban areas. From February 2009, the program added on a mobile outreach component as a means of extending its scope to more remote communities beyond the reach of the town-based

paralegals. ‘Mobile paralegals’ were deployed on motorbikes to 160 villages across five of Liberia’s fifteen counties: Bong, Grand Gedeh, Lofa, Maryland, and Nimba. Program communities included mining towns and plantations, border towns with high refugee populations, and a large number of remote towns inaccessible by road. Each paralegal was assigned to ten communities in her or his county, and required to make two visits per month to each community, during which they would conduct information sessions, take new cases, follow up on ongoing cases, or check in on resolved cases.

Paralegals follow a strict protocol when arriving in the village. They begin by greeting the local leaders, who over time have become familiar with the aims and objectives of the program. They then follow up on ongoing cases, e.g. meeting with either party to a dispute, providing information to a client, etc. Depending on their workload, they also conduct information sessions that typically take the form of a community meeting. Each session covers a broad topic, typically related to women’s rights (domestic violence, rape, spousal and child support, inheritance, etc.), or rights to land, labor rights, etc. On occasion they make forays into laws governing witchcraft and ‘sassywood’ (trial by ordeal), the structure of the legal system and local administration, political participation, etc.

This expansion means that, in principle, the program can bring (the content of) the formal law literally to the doorstep of those it serves. Furthermore, the ‘mobile’ model allows a relatively small number of paralegals to cover a large number of communities on a flexible schedule, making it a relatively cost-effective, labor-intensive approach to extending the reach of the formal legal system—and one with potential for scaling up.<sup>11</sup> Finally, this expansion provided a unique opportunity for a randomized evaluation of the program, expanding as it was into communities that had little prior experience of this sort of intervention and that were typically far from the reach of the formal legal system.

## 5.2 Evaluation design

The evaluation design follows a baseline and follow-up survey structure, combining difference-in-differences analysis with individual-level randomization of the Carter Center’s mobile paralegal program. The evaluation was launched in July 2011 and extended through December 2011. The main objective was to explore effects on paralegal clients.<sup>12</sup> Client-level randomization was conducted in villages that were already part of the community paralegal program. As clients typically approach the paralegal with questions or requests for assistance, the sample was entirely self-identified from within the village population. Given the nature of the cases and intervention, the program NGO and the authors considered it unethical to deny paralegal services to any ‘poten-

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<sup>11</sup>Indeed, neighboring Sierra Leone is at the time in the midst of a government-sponsored national expansion of a very similar program

<sup>12</sup>A second tier of the evaluation, launched in February 2009, involved community-level randomization aiming to assess longer-term community-level impacts, but the broader study is beyond the scope of this paper.

tial’ client beyond a three-month period. Thus clients were randomly assigned to treatment and control groups, with those assigned to the control group (“control group applicants”) guaranteed the paralegal’s attention three months after first contact.

In addition, to ensure that the sample of clients was large enough for analysis and selected transparently and representatively from the community program, a few innovations had to be made in the way the paralegals dealt with clients. First, each paralegal was asked to work in only six of their ten communities in order to deal with the anticipated increase in cases. In each community, paralegals conducted a civic education session on salient aspects of the laws dealing with land law, gender-based violence, female inheritance, spousal and child neglect, etc. After this session, the paralegal met with potential clients and verified that the client actually had a case that needed resolving. Each client was then interviewed by an enumerator using a handheld survey device programmed to randomly allocate clients to treatment and control groups based on a pre-determined algorithm. Once clients were allocated, the paralegal explained to the control group applicants that her/his time was limited, and encouraged them clients to take whatever actions they deemed necessary to resolve their cases—apart from being a basic ethical consideration, this was key to avoiding anticipation or ‘queuing’ effects, which could have artificially lowered outcomes in the control group and upwardly biased our impact estimates. The data collected at this stage provided a baseline measure for the individual randomization.

Due to privacy considerations—which in this case had direct implications for the relationship between paralegals and clients, as there was a fear that were clients to discover that enumerators were interviewing the other party, they would opt out of treatment—as well as logistical constraints, we were not able to collect dyadic data as in previous sections. This is one main limitation of the data presented in this section, as we cannot measure the sum impact of the paralegal treatment on both parties to a dispute, nor can we discuss in depth the composition of the plaintiff-defendant pairs that the paralegals treated.

For the subsequent three-month period, till November 2011, paralegals conducted follow-up activities on treatment cases only. For ethical reasons, paralegals were also provided a ‘veto’ option to be used in serious or urgent cases, for example cases that involved an immediate threat of violence or serious economic or social harm. Such cases were excluded immediately from the baseline sample. While this affects the representativeness of the client sample, it is not immediately clear whether paralegals would have had greater or less impact on the vetoed cases, so the direction of bias is hard to estimate. In November 2011, follow-up surveys were administered to the baseline sample of clients. Of 420 clients surveyed in the baseline, we were able to locate and re-interview 398 clients, for an attrition rate of just over five percent.

Based on this experimental design, the most general empirical strategy that we use to estimate the impact of the intervention on mean outcomes is

$$y_i = \alpha_0 + \alpha_1 Z_i + \varepsilon_i \tag{11}$$

where  $y_i$  is the outcome for individual  $i$ ,  $Z_i$  is the treatment dummy, and  $\varepsilon_i$  is the random error term, clustered at the village level.

For indicators for which we have both baseline and endline data, we exploit the panel structure of the data by looking at the impact of the treatment on a change in outcomes, using three common specifications: ANCOVA (Equation 12), difference-in-differences (Equation 13) and fixed effects (Equation 14).

$$y_{i1} = \alpha_0 + \alpha_1 Z_i + \alpha_2 y_{i0} + v_{i1} \quad (12)$$

$$y_{it} = \alpha_0 + \alpha_1 Z_i + \alpha_2 P_t + \alpha_3 (Z_i \times P_t) + \varphi_{it} \quad (13)$$

$$y_{it} = \alpha_0 + \alpha_1 Z_i + \alpha_2 P_t + \zeta_i + \xi_{it} \quad (14)$$

where  $y_{it}$  is the outcome at time  $t \in (0, 1)$ , and  $P_t$  is the post-treatment dummy.

### 5.3 Data

Table 6 provides a snapshot of dispute incidence and forum choice—notably, choice between the formal system, the customary system, and paralegals. Columns 1 and 2 show the number of disputes experienced in the past three months by type of dispute (including disputes reported both in the baseline and the endline) as well as the percent of disputes of each type. Columns 3–6 display forum shopping decisions for the most recent dispute respondents experienced during the three-month intervention period (including the original dispute they brought to the paralegal), and whether they took the dispute to the customary system, the formal system, or the paralegal, respectively. Disputes taken to more than one forum were counted as having gone to both forums. As noted above, this is a snapshot of potential paralegal clients, and therefore not representative of Liberians as a whole – comparing to the numbers displayed in Table 1, for example, there are a disproportionate number of “support” cases, a large proportion of which went to a paralegal.

The theoretical framework in Section 3 predicted simply that legal aid would yield positive welfare benefits for clients, and that these effects would be particularly strong for plaintiffs facing pro-defendant bias in the customary system. The survey data contains a wide range of variables that capture diverse elements of these welfare improvements. We group them into five categories:

**Category 1.** *Case outcomes*

Because the data spans a wide range of cases and case types, from commercial debt disputes to marital infidelity, we must rely on fairly broad survey measures of a positive case outcome. We rely on clients’ own subjective evaluations of the case outcome. Note, however, that we focus on their evaluation of the case outcome, rather than a more customer-service oriented assessment of the pro bono service they received from the paralegal.

We use five measures of case outcome, based on the following survey questions.

- “Did you think the outcome was fair or unfair?”
- “How satisfied are you with the outcome of this case?”
- “After this case, do you think you are... [better or worse off]?”
- “After this case, is your relationship with the other party... [better or worse]?”
- “After this case, is your relationship with other members of the community... [better or worse]?”

Responses for the first two questions are measured on a four-tiered Likert scale, and the last three questions on a five-tiered Likert scale. While we analyze these five outcomes separately, they reflect the same underlying hypothesis.

**Category 2.** *Legal knowledge and experience of the legal system*

Our second set of outcome measures stems from the hypothesis that informal legal aid—delivered by semi-skilled paralegals rather than lawyers, working primarily outside the formal court system—will increase confidence in Liberia’s formal legal system, by (a) improving knowledge of formal law and (b) lowering the informal costs of seeking justice (e.g. by reducing bribery and harassment).

To measure impacts on legal knowledge, we ask eight questions about the formal law developed in consultation with the Carter Center. Questions cover a range of issues, including inheritance rights, spousal abandonment, *sassywood*, domestic violence, statutory rape and corruption, such as “According to the formal law: Do married women have the right to inherit part of the property from their late father?”, “According to the formal law: It is illegal for an adult to have sex with someone below a certain age. What is that age?”, etc. We code each question into an indicator variable for a correct response, and generate an index using the first principal component from a factor analysis.

Finally, we also look at other objective measures of clients’ experiences with the legal system, including the proportion who reported being harassed or forced to pay a bribe during the past three months. We anticipate that the particular form of legal aid being evaluated here will reduce reliance on formal legal institutions, while simultaneously reducing the incidence of these abuses such as harassment and bribe payment.

**Category 3.** *Pro-social attitudes and subjective happiness*

We hypothesize that better, fairer resolution of legal disputes will improve clients’ subjective wellbeing and attitudes towards others. We measure impacts on three, admittedly disparate, measures of attitudes: subjective happiness, trust, and attitudes towards gender-based violence. The first two are measured, respectively, by responses to the following survey questions:

“When you think about your whole life, do you think you are...?”

*Responses:* “Very happy”; “Happy small”; “Not so happy”; “Not happy at all”.

“All in all, you can say that most people can be trusted, or that you need to be very careful when we doing things with people?”

*Responses:* “Most people can be trusted”; “Need to be very careful.”

The third is measured by the principal component from a factor analysis of the five standard questions from the Demographic Health Survey questionnaire:

“Sometimes a man is annoyed or angered by things that his woman does. Do you think it is alright for a man to beat his woman if...”

- “...she goes out without telling him?”
- “...she neglects the children?”
- “...she argues with him?”
- “...she refuses to have sex with him?”
- “...she burns the food?”

#### **Category 4.** *Economic behavior, specifically related to investment and credit*

Disputes over debt, land, property, labor are common in Liberia (Table 1). We hypothesize that informal legal aid will assist individuals in engaging in the credit market and taking steps to protect their property rights. Specifically, we investigate impacts on ownership of documents proving title, new demarcation of landholdings, and frequency of borrowing and lending, measured by affirmative responses to the following questions:

- “What kind of document do you have to assure that the land is for you?”
- “The land you making farm on, they na survey it for your to know your boundary?”
- “In the last three months, any of your family people in this house na credit money to someone outside?”
- “In the last three months, anyone outside this household na credit money to your?”

#### **Category 5.** *Household income and wellbeing*

The underlying hypothesis here supposes that cases are relatively large in monetary terms, i.e., that the legal disputes brought to paralegals have significant economic consequences, and that paralegals can significantly alter their outcome. Note that because our sample is drawn from would-be clients who brought a case to the paralegal, we cannot speak to the question of whether legal disputes are sufficiently frequent to meaningfully affect the wellbeing of the population at large. Our focus here is on a population with self-assessed grievances and an interest in legal aid.

“Loving problems”, usually referring to marital infidelity and often a loss of financial support, and “child neglect” constitute a large share of the cases in our database. We also examine the impact of the program on (a) child support payments received, and (b) child-specific food security. Child support payments are measured conditional on whether the respondent’s household has at least one single mother with an absentee partner, and the response to the question “Does the father living outside regularly send food or money to care for the children living in this household?”

We focus on two types of food security, one related to households on average and one focused on children. Paralegals receive a large number of cases that relate directly to child welfare (child support, child custody, and support for wives or girlfriends), and we hypothesize that such cases would likely directly impact child welfare. Our measures are based on the Household Food Insecurity Access Scale(HFIAS) developed by the United States Agency for International Development USAID (2007) and the child nutrition module in the ERS’s US Household Food Security Survey Module USDA (2012). Together, these consist of a battery of eighteen questions that focus on uncertain or anxiety over food access, perceptions that food is of insufficient quantity or quality, reported reductions in food intake, and reported consequences of reduced food intake. We combine these into two separate indices using principal components: an aggregate household measure of food insecurity focused on adults, using the HFIAS questions, and a child-specific measure using the ERS questions.

We also explore impacts on any increase in farmland under the household’s control, with the question “In the last three months, the land your can make farm on, your na add some to it or your take some from it?”

Finally, we measure the incidence of self-reported gender-based violence in the past three months, based on responses to standard questions from the Demographic and Household Survey. We ask respondents about any of nine different types of violence of varying intensity, and create an aggregate measure using the principal component from a factor analysis.

Table 7 reports summary statistics for the full vector of impact outcome measures tested in this section, as well as two additional key features of the endline data: the attrition rate, and overall status of cases brought to the paralegals in the baseline. The five measures related to “case results”, as well as the case status measure, were collected in the endline round only and are thus subjected to a cross-sectional analysis along the lines of Equation 11. The remaining measures are subjected to a full difference-in-differences analysis along the lines of Equation 13. Attrition is low, at 5 percent of the baseline sample.

Table 8 reports balance statistics for baseline levels of the main outcomes and household characteristics used in all subsequent analysis. Columns 1 and 2 display the average levels for treatment and control groups, respectively. Columns 3 and 4 show coefficients from a regression of the baseline observations for each variable on the treatment dummy. Standard errors are shown in parentheses. No baseline variables differ significantly between treatment and control groups. The second-last row of Table 8 reports attrition rates in both groups—again, these do not differ

significantly, and attrition is quite low at 5.4% (22 respondents). Nonetheless, given the relatively small number of respondents in the study, we will conduct various robustness tests to account for attrition bias.

## 5.4 Results

We begin by analyze take-up of legal aid, before turning to impacts on clients. The model in Section 3 (Prediction 5) implies that there should be high demand for legal aid among cases that would otherwise go to the formal sector or, barring that, not be reported to any forum whatsoever.

The individual randomization in our experiment provides a way to test this prediction. The control group consists of individuals who endogenously self-selected into legal aid, but were turned away. These “control group applicants” then faced the same forum-shopping choices as our representative sample of disputes analyzed above (customary, formal, or none). This control group was interviewed again three months later, at which point the vast majority had pursued their case in other forums. Thus the randomized evaluation provides a counterfactual not only for the outcomes of treated individuals, but also for their forum-shopping behavior.

We exploit this set up in Table 9 by re-estimating the multinomial logit model presented in Table 4, but pooling our earlier (representative) sample of individuals with the self-selected control group applicants. Our hypothesis is that control group applicants should, *ceteris paribus*, be more likely to go to the formal sector or, otherwise, not to report their cases at all.<sup>13</sup>

Indeed this is what we find: conditional on individual and dispute characteristics, demand for legal aid is highest among cases that otherwise would choose formal over customary forums, as well as cases that would otherwise not be reported whatsoever. This can be seen by the large, positive, and significant coefficients on the dummy variable for “control group applicants” in columns (1) and (2). This implies that legal aid not only provides an attractive alternative to going directly to the formal sector, but also increases the number of reported disputes by providing an outlet for grievances that otherwise would have gone nowhere.

Turning now to the estimation of treatment effects, Tables 10 and 11 display our main results. In line with Prediction 6, we expect treated individuals to experience better outcomes as a result of the treatment. Outcomes are grouped by hypothesis, and each row reports a separate regression specified either along the lines of Equations 11, 12, 13 and 14. Given the large number of outcome variables we consider, a key risk is over-rejection of the null hypothesis due to the problem of multiple inference (Anderson, 2008). We thus include a mean effects index in each hypothesis, calculated along the lines of (Kling et al., 2007), that generates a composite measure of the impacts for each group of outcomes under the hypothesis that offers a crude measure of whether the null hypothesis as a whole stands rejected. Yet even with a mean effects approach, we are still testing

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<sup>13</sup>Note that the earlier multinomial logit in Table 4 uses characteristics of both plaintiffs and defendants. As noted in the text, we lack data on defendant characteristics for the experimental sample, so Table 9 uses only plaintiff and dispute characteristics as independent variables.



multiple hypotheses and so we implement the family-wise error rate correction procedure proposed by Bonferonni and Sidak (Abdi, 2007), both within each hypothesis and across the mean effects indices. These are discussed further in Section 5.7.

One possible concern with the design of the experiment would have been a kind of anticipation effect, where applicants for legal aid that were assigned to the control group deliberately withheld making progress on their cases while waiting for the paralegal to intervene. Such “control group applicants” could then have looked worse off than otherwise, which would have biased treatment effects upwards. The first row of Table 10 provides some reassurance: there was no significant difference in case progression, in terms of average level of response to the question “What is the status of this case now?” with the options “Case pending, no agreement reached yet”, “Unable to reach agreement or resolution”, “Reached agreement, yet to be implemented” and “Reached agreement, successfully implemented”. There is also no evidence of any difference in the average respondent’s relationship with the community.

The remainder of Table 10 shows that paralegal clients were overall much happier with the outcome of the case: relative to the control group, our measure of fairness went up by 34.8 percent, satisfaction by 37 percent, whether the client considered themselves better off by 26.7 percent, and whether the relationship with the other party was now better by 23.3 percent. The mean effects index is strongly significant at the 5% level.

Turning to those outcomes for which we have panel data, we provide the results all four specifications listed above in Table 11. We find, firstly, convincing evidence that the quality of interaction with the overall justice system has changed—treated respondents reported a 10 percent decrease in having to pay a bribe to a police officer or public official, suggesting that paralegal involvement lowers the corruption costs of accessing justice. There was however no accompanying impact on harassment by public officials. Treatment also strongly impacted legal knowledge, which is measured as the first principal component of eight questions regarding respondents’ knowledge of the formal law. The PCA of treated respondents’ knowledge of the law improved significantly by 0.31 standard deviations over the course of the three months of interaction with the paralegal.

Moving further down the table, we find no impacts on any of our three measures of attitudes—generalized trust, subjective happiness, and attitudes towards gender-based violence. Neither do we find any impacts on behavior related to actions taken to protect property rights (land titling and demarcation) or engage in credit market activity (lending and borrowing). It is somewhat striking that there is absolutely no hint of an impact on any of these measures, suggesting by implication that any downstream impacts on household wellbeing do not come from changes in attitudes, credit market behavior, or greater security of property.

The intervention does, however, show significant downstream impacts on household wellbeing—in particular, on three measures: household food security, child food security, and proportion of households with single mothers receiving child support payments from absentee fathers. Clients were 22.8 percent more likely to receive child support payments, and reported large increases

household and child food security of 0.24 and 0.38 standard deviations, respectively, as measured by our aggregate indices. The intervention did not appear to have any impact on the remaining two measures of household wellbeing: the amount of land respondents farmed on, and the incidence of gender-based violence.

Figure 6 summarizes the key outcomes. The vertical axis displays all the main outcome indicators, and the horizontal axis measures the size of the impact and the precision of the estimate. All outcomes are normalized by subtracting the mean and dividing by the standard deviation, to provide comparable impact measures—thus the horizontal axis simply measures the standard effect size, i.e. the number of standard deviations of impact. Circles provide the point estimate, while the length of the line displays a 90% confidence interval around the point estimate. Thus if a line crosses the vertical origin, the estimate is not statistically different from zero. Statistically significant outcomes are presented in red and insignificant outcomes in blue.

## 5.5 Case interactions

To further investigate the mechanism underlying the effects we observe, we interact our vector of outcome variables with the disputes brought to the paralegal by each respondent during the three months of the intervention period. This provides some indication of whether a given downstream impact was associated with taking a relevant case to the paralegal. Thus for each outcome and case type, we run the following specification:

$$y_{it} = \alpha_0 + \alpha_1 Z_i + \alpha_2 P_t + \alpha_3 \delta_i + \alpha_4 (Z_i \times P_t) + \alpha_5 (Z_i \times \delta_i) + \alpha_6 (P_t \times \delta_i) + \alpha_7 (Z_i \times P_t \times \delta_i) + \varsigma_{it} \quad (15)$$

where  $y_{it}$  is the outcome for individual  $i$  in period  $t$ ,  $Z_i \in [0, 1]$  is a dummy indicating treatment for individual  $i$ ,  $P_t \in [0, 1]$  is the post-treatment dummy, and  $\delta_i$  is a measure of whether individual  $i$  experienced at least one dispute of a given category during the intervention period.

For the sake of parsimony, we examine three categories of cases: “family case” (wife or child neglect, ‘loving problems’, and child custody disputes), “violence case” (rape, domestic violence, and generalized assault), and “economic case” (disputes related to land, labor, property, and debt). Table 12 presents the results. The leftmost column lists dependent variables grouped by hypothesis. Each element in columns 1-4 is the coefficient on  $\delta_i \times Z_i \times P_t$  in a separate regression on each given case category, following the specification in Equation 15 above.

We find that case outcomes are generally linked to whether the individual took a relevant type of case to the paralegal. For example, although the coefficient on acquiring land title is insignificant on average, it is positive and strongly significant for individuals who brought an economic case to the paralegal—and this effect is driven entirely by those with land cases. Similarly, household and child food security increase differentially for individuals who brought either an economic case or a family case (involving spousal or child support or custody) to the paralegal. Gender-based

violence goes down differentially for individuals who brought a violence case (involving assault, rape, or domestic violence), but also for those who brought neglect or support cases. Child support payments are strongly associated both with taking a family case or an economic case to the paralegal. These patterns are consistent with the mechanism that taking the paralegal’s direct assistance in resolving the dispute improved the client’s outcomes relevant to that case type.

## 5.6 Heterogeneous effects

The first half of this paper made a case for the paralegal intervention as a solution to the constrained forum choices of the socially disadvantaged—unable to afford the formal system but discriminated against under the custom, they are the paralegals’ natural clients. We investigate heterogeneous treatment effects suggested by the theoretical model (Prediction 7) for six characteristics: women, subsistence farmers, ethnic minorities, individuals with no primary education, migrants, and refugees. Given the large number of categories and the much larger number of dependent variables, we choose to restrict ourselves to the mean effects index for each hypothesis so as to try and restrict the risk of Type 1 errors. Thus for the first hypothesis, we run the cross-sectional specification:

$$y_i = \alpha_0 + \alpha_1 Z_i + \alpha_2 \beta_i + \alpha_3 (Z_i \times \beta_i) + \nu_i \quad (16)$$

and for the remaining four hypotheses we run the difference-in-differences specification:

$$y_{it} = \alpha_0 + \alpha_1 Z_i + \alpha_2 P_t + \alpha_3 \beta_i + \alpha_4 (Z_i \times P_t) + \alpha_5 (Z_i \times \beta_i) + \alpha_6 (P_t \times \delta_i) + \alpha_7 (Z_i \times P_t \times \beta_i) + \sigma_{it} \quad (17)$$

Table 13 reports the results, which provide mixed but nonetheless suggestive evidence that the treatment effect is driven by differential impacts on women, subsistence farmers, and ethnic minorities. First, the impacts on case results, experiences with the justice system, and household wellbeing is more precisely estimated for each of these subgroups (columns 2, 5 and 8), and in general the coefficients on the interaction terms are large and positive, and in some cases significant. So for example, female clients experience significantly positive treatment effects on case results and in their interaction with the justice system, while male clients do not (the second and third column). Furthermore, the effect on female clients is significantly greater than males (column 3). While these results are in all likelihood held back by the relatively small sample size, they suggest that even within the population that has selected into paralegal treatment, the impacts are distributed in favor of those whose rights are most limited under customary law.

## 5.7 Robustness

Given our large vector of outcome variables, we need to address the risk of over-rejecting the null hypothesis due to the problem of multiple inference, which arises when testing multiple hypotheses simultaneously (Anderson, 2008). We therefore implement a multiple comparisons correction using the procedure proposed by Bonferonni and Sidak to Abdi (2007) to control the family-wise error rate (FWER), defined as the probability of making any false discovery. These tests are generally considered overly conservative.

We conduct the multiple comparisons correction across the mean effects indices for those hypothesis that were significant, as well as on the variables within each hypothesis. Figure 7 presents the results for each correction. The horizontal axis in each panel plots the parameter estimate, while the vertical axis plots the  $p$ -value. The horizontal red lines indicate the cut-off for 90% significance ( $p = 0.10$ ) as well as the ‘critical’ or corrected  $p$ -value that reflects the Bonferonni-Sidak corrections. Outcome variables above both the red lines indicate  $p$ -values that survive the correction procedure. Figure 7 shows, somewhat remarkably, that all our significant mean effects indices and the majority of our individual outcome measures survive the corrections tests.

Finally, we address the issue of attrition. In principle this type of intervention could easily generate differential attrition, if for example individuals with poor justice experiences become less inclined to speak to outsiders. On the face of it, however, we have no reason to be concerned—Table 7 showed that the attrition rate was only around five percent, and Table 8 showed that it was balanced across treatment and control groups. However, given our relatively small experimental sample, even a five percent rate could be significant, and it is conceivable that different types of people attrited out from treatment and control groups.

We therefore conduct a difference-in-differences analysis between attritors and non-attritors, across treatment and control groups. Table 14 presents the difference in outcomes and household characteristics between those who attrited and those who remained. Column 1 displays the baseline difference in means between attritors and non-attritors in the treatment group, for each outcome variable collected in the baseline. Column 2 displays the corresponding values for the control group while Column 3 reports the  $Z \times \Lambda$  interaction coefficient from the following regression:

$$y_i = \alpha_0 + \alpha_1 Z_i + \alpha_2 \Lambda_i + \alpha_3 (Z_i \times \Lambda) + \theta_i \quad (18)$$

Column 4 shows robust standard errors clustered at the village level. The results show that individuals with demarcated land and those more likely to borrow were more likely to exit the sample. Both results are significant at the 10 percent level. None of the other variables differ significantly between treatment and control, and in all the results appear to be reasonably resilient to attrition effects.

## 6 Conclusions

We began with the question of whether progressive, statutory legal reform could be made to meaningfully affect the lives of the poor and socially disadvantaged, given that they tend to remain outside the ambit of formal law and rely on customary institutions for their justice needs. In the first part of this paper, we attempted to explicate the underlying reasons by developing a simple model of forum choice that asks the poor to choose between a repressive custom and a punitive, costly formal system. We built the model relying on extensive contemporary anthropological data, and tested it using new household survey data on over 4,500 legal disputes in rural Liberia. Consistent with the model, we found empirical evidence that plaintiffs facing a disadvantageous pairing under the custom were more likely to opt for the formal system, but that customary remedies were more efficient in redistributing resources between plaintiffs and defendants. Thus our analytical and empirical results suggested a clear avenue for legal empowerment—to provide the poor access to low-cost, remedial justice that incorporates the progressive features of the formal law.

We then presented the results of a randomized controlled trial of a legal empowerment intervention in Liberia designed around these same basic principles, providing *pro bono* mediation and advocacy services through community paralegals trained in the formal law. We found strong and robust impacts on justice outcomes, as well as significant downstream welfare benefits—including increases in household and child food security of 0.24 and 0.38 standard deviations, respectively. We find no impacts on attitudes or behavior, but strong impacts associated with taking a case to the paralegals, suggesting that at least in the short term paralegals provide a directly redistributive role. Our experimental results are highly robust to different specifications, mean effects analyses, multiple comparisons corrections, and attrition.

Overall, we interpret these results as preliminary evidence that legal empowerment interventions aimed at improving access to justice and reviving dead letter laws can produce large socioeconomic benefits. Moreover, our results suggest that these gains can be achieved not by bringing the rural poor into the formal domain of magistrates' courts, government offices, and police stations, but by bringing the formal law into the organizational forms of the custom, through low-cost third-party mediation and advocacy.

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Table 1: Where do disputes go?

	Cases	%	% of all cases taken to:		
			None	Customary	Formal
<i>Family dispute</i>	728	15.9	61.1	37.5	1.4
<i>Economic dispute</i>	2676	58.4	60.1	36.3	3.7
Land	339	7.4	37.8	56	6.2
Debt	1374	30	69.9	28.6	1.5
Labor	125	2.7	61.6	38.4	0.0
Property (incl. theft)	838	18.3	52.9	40.5	6.7
<i>Violent dispute</i>	712	15.5	52.1	40.3	7.6
Assault	561	12.2	53.8	42.8	3.4
Rape/GBV	85	1.9	47.1	31.7	21.2
Murder	66	1.4	43.9	30.3	25.8
<i>Other disputes</i>	470	10.2	52.1	43.8	4.0
Total	4,586		58.2	37.9	3.9

*Note:* Columns 1 and 2 display the number and relative proportion of disputes of different types faced by the 2,081 households in our household survey sample. Columns 3–5 show the percentage of disputes of each type that went to “No forum”, “Customary”, and “Formal”, respectively.

Table 2: Who uses the customary system?

Plaintiff		#	% of all cases taken to		
			No forum	Customary	Formal
Gender	Female	939	55.4	41.5	3.1
	Male	3,647	59.0	36.9	4.1
Occupation	Farmer	4,128	58.2	38.2	3.6
	Non-farmer	458	58.3	35.2	6.6
Ethnicity	Minority	501	55.7	37.9	6.4
	Majority	4,085	58.5	37.8	3.6
Kinship	No	3,721	56.1	40.0	3.9
	Yes	865	67.4	28.7	3.9
Total		4,586	58.2	37.9	3.9

*Note:* Column 1 displays the total number of disputes faced by plaintiffs with particular characteristics across the 2,081 households in our household survey sample. Columns 2–4 show the percentage of disputes that plaintiffs of each type took to “No forum”, “Customary”, and “Formal”, respectively.

Table 3: Subjective satisfaction measures

	Customary	Formal
Outcome was fair	92.3	85.0
Outcome was in respondent's favor	70.3	59.0
Satisfied with outcome	89.3	78.2
Satisfied with respect shown	89.2	75.7
Would return to this forum	90.5	76.4
First principal component	0.315	-0.243

*Note:* Columns 1 and 2 present respondents' average levels of subjective satisfaction for disputes taken to "Customary", and "Formal", respectively, across the 2,081 households in our household survey sample

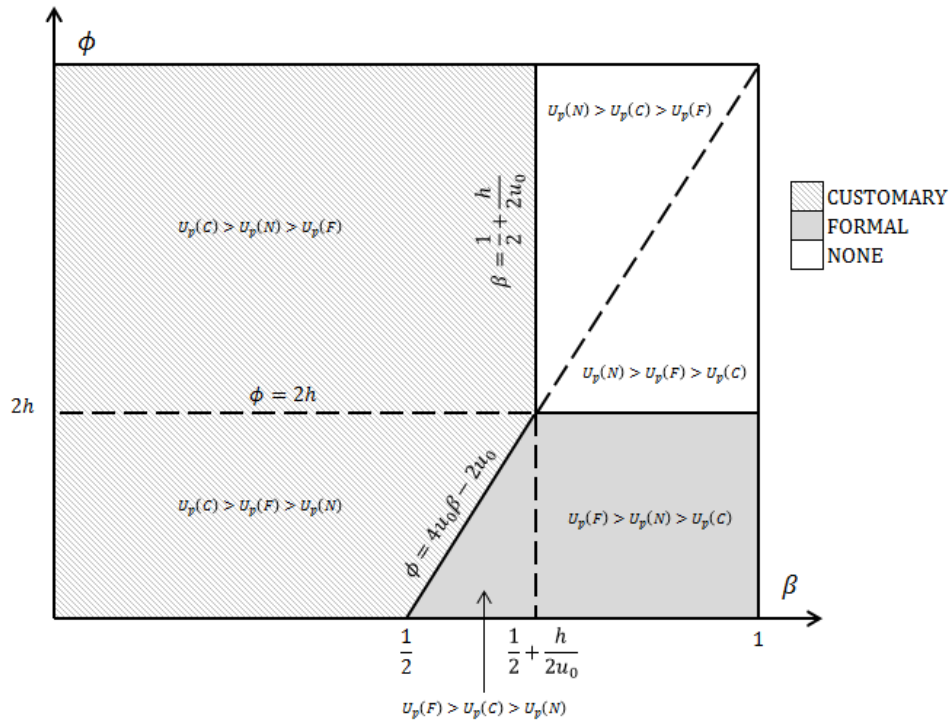


Figure 3: Plaintiff chooses forum (stage 2)

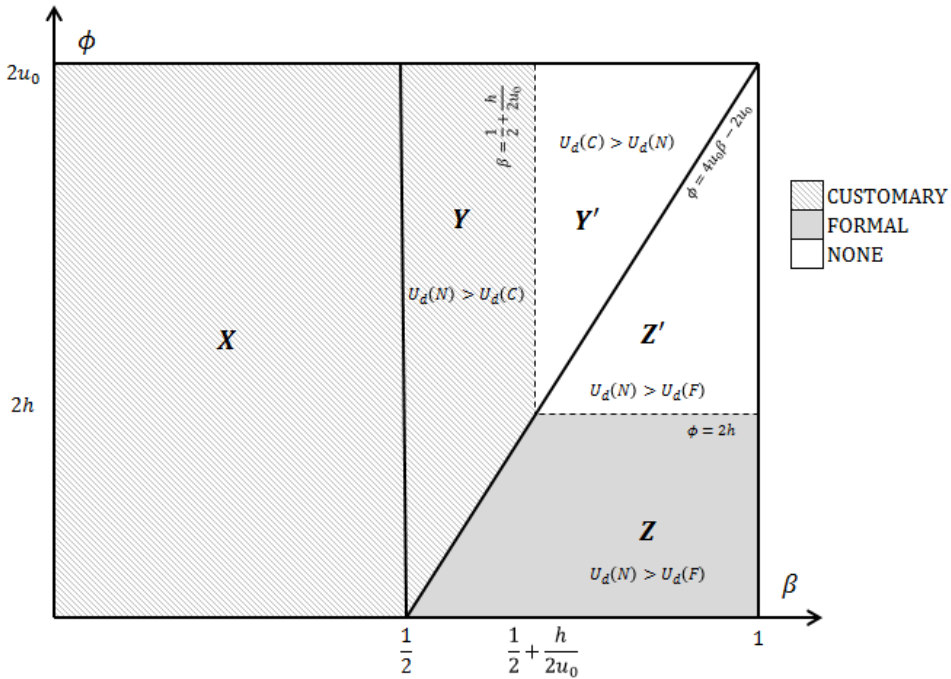


Figure 4: Defendant chooses harm (stage 1)

Figure 5: Map of surveyed counties

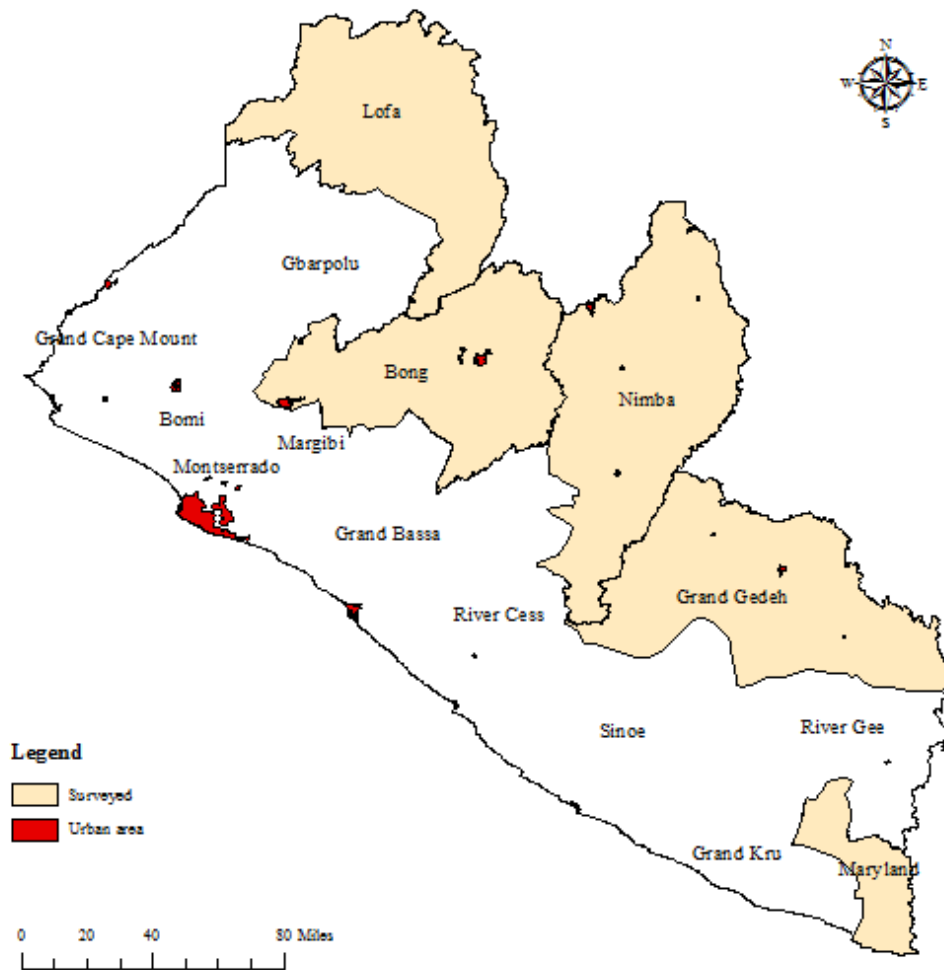


Table 4: Plaintiffs facing high  $\beta$  (Prediction 2) or with high  $u_0$  (Prediction 3) exit the customary system

	Formal over Customary	None over Customary	Formal over None
<i>Defendant - Plaintiff (<math>\beta</math>)</i>			
	(+)	(+)	(?)
Gender bias	1.111*** (0.262)	-0.276*** (0.074)	1.387*** (0.261)
Income bias	0.550** (0.201)	0.268** (0.103)	0.282** (0.199)
Elite bias	0.400 (0.197)	0.040 (0.119)	0.360 (0.203)
Ethnic bias	0.092 (0.205)	-0.015 (0.085)	0.107 (0.204)
<i>Plaintiff (<math>u_0</math>)</i>			
	(+)	(+)	(?)
Male	1.446*** (0.318)	-0.195*** (0.107)	1.641*** (0.318)
Non-farm employment	1.050 (0.271)	0.343 (0.142)	0.708 (0.269)
Related to chief	0.732** (0.249)	0.365** (0.135)	0.367** (0.252)
Ethnic majority	-0.191 (0.239)	0.009 (0.114)	-0.201 (0.240)
<i>Dispute type</i>			
Economic dispute	1.703 (0.339)	-0.012 (0.111)	1.715 (0.340)
Violent dispute	1.106 (0.323)	0.066 (0.087)	1.040 (0.323)
Other dispute	0.856* (0.486)	-0.288* (0.176)	1.144* (0.493)

*Note:* Coefficients displayed for each pair of choices from a single multinomial logit regression on the categorical variable of forum choice (“None”, “Customary”, “Formal”).  $\beta$  represents the gap between the defendant and plaintiff values ( $x_D - x_P$ ) for the characteristic listed in the column heading. The omitted dispute category is “Family dispute”. Specification includes a dummy for whether the respondent was the plaintiff or defendant. \*\*\* is significant at the 1% level, \*\* is significant at the 5% level and \* is significant at the 10% level.

Table 5: The customary system provides greater aggregate welfare (Prediction 4)

	Benchmark	Male	Non-farm employment	Related to chief	Ethnic majority
Plaintiff	.43 (.12)***	.45 (.12)***	.43 (.12)***	.44 (.12)***	.40 (.12)***
Plaintiff $\times \beta$		.11 (.09)	.08 (.17)	.10 (.13)	-.25 (.12)**
Plaintiff $\times$ Formal	-.16 (.21)	-.25 (.21)	-.15 (.21)	-.28 (.25)	-.12 (.21)
Plaintiff $\times$ Formal $\times \beta$		1.68 (.56)***	-.29 (.51)	-.40 (.41)	.54 (.65)
Defendant	.51 (.16)***	.53 (.16)***	.51 (.16)***	.60 (.17)***	.52 (.16)***
Defendant $\times \beta$		-.03 (.18)	-.11 (.28)	-.34 (.23)	-.10 (.29)
Defendant $\times$ Formal	-1.13 (.28)***	-1.17 (.28)***	-1.14 (.28)***	-1.20 (.32)***	-.91 (.30)***
Defendant $\times$ Formal $\times \beta$		-1.15 (.57)**	-.05 (.52)	.22 (.54)	-1.36 (.75)*
Observations	940	940	940	940	940
Adj. $R^2$	0.070	0.082	0.067	0.075	0.070

*Note:* Coefficients correspond to an OLS regression where the dependent variable is ‘utility’, i.e., the first principal component of the subjective justice metrics, as described in the text.  $\beta$  represents the gap between the defendant and plaintiff values ( $x_D - x_P$ ) for the characteristic listed in the column heading. Specification includes dispute-type dummies. \*\*\* is significant at the 1% level, \*\* is significant at the 5% level and \* is significant at the 10% level.



Table 6: Forum shopping in experimental sample

	All disputes		Most recent dispute			
	Any (%)	Paralegal (%)	Unreported (%)	Formal (%)	Customary (%)	Paralegal (%)
<i>Family case</i>	42.8	32.2	12.3	2.0	23.2	13.9
Child neglect	29.4	23.7	6.7	1.4	12.6	12.1
Child custody	10.8	8.2	2.3	0.5	4.8	3.4
‘Loving problem’	20.5	11.9	5.4	0.3	12.3	3.5
<i>Violence case</i>	23.6	6.0	11.8	0.9	9.0	0.9
Assault	6.3	1.8	2.3	0.4	3.1	0.5
Rape	1.8	0.5	1.0	0.5	0.3	0.0
Domestic violence	19.8	5.0	9.4	0.1	7.3	0.4
Land	14.3	8.9	2.9	0.6	6.4	5.5
<i>Economic case</i>	41.2	22.6	17.0	2.6	20.1	9.3
Labor	7.0	3.4	3.5	0.3	1.4	2.1
Property	10.9	6.4	4.1	0.1	6.5	1.1
Debt	19.8	6.9	8.2	1.6	9.7	1.6

*Note:* Columns 1 and 2 display the number and relative proportion of disputes of different types faced by the 420 households in our experimental sample. Columns 4–6 show the percentage of the most recent disputes of each type that went unreported, or were reported to the customary system, the formal system, and the paralegal, respectively. Disputes taken to more than one forum are counted as having gone to both forums.

Table 7: Summary statistics for experimental sample

	Observations	Mean	Std. Dev.	Min.	Max.
<i>Case results</i>					
Fair judgment	348	1.85	1.20	0.00	3.00
Satisfied	357	1.79	1.19	0.00	3.00
Better off	356	2.99	1.12	0.00	4.00
Other party relations	355	2.94	1.14	0.00	4.00
Community relations	357	3.16	1.04	0.00	4.00
<i>Justice system</i>					
Legal knowledge	768	0.00	1.00	-3.20	1.04
Not harassed	795	0.98	0.14	0.00	1.00
Did not bribe	789	0.93	0.26	0.00	1.00
<i>Attitudes</i>					
Oppose GBV	778	0.00	1.00	-5.35	0.44
Happiness	794	1.55	0.98	0.00	3.00
Trust	794	0.10	0.31	0.00	1.00
<i>Behavior</i>					
Land papers	645	0.26	0.44	0.00	1.00
Land demarcated	616	0.26	0.44	0.00	1.00
Lending	796	0.25	0.43	0.00	1.00
Borrowing	796	0.35	0.48	0.00	1.00
<i>Household wellbeing</i>					
HH food security	731	0.00	1.00	-1.35	2.36
Child food security	672	0.00	1.00	-1.37	2.16
Land gained	644	0.04	0.48	-1.00	1.00
Child support	233	0.23	0.42	0.00	1.00
Less GBV	753	0.00	1.00	-7.54	0.30
<i>Attrition rate</i>					
Respondent attrited	420	0.05	0.22	0.00	1.00

*Note:* Columns 1–5 present summary statistics for the core outcome measures and attrition for the 420 households in our individual survey sample.

Table 8: Balance in experimental sample

	Treatment	Control	Difference	Std. Err.
<i>Justice system</i>				
Legal knowledge	0.08	-0.04	0.115	(0.104)
Not harassed	0.99	0.98	0.012	(0.013)
Did not bribe	0.93	0.92	0.006	(0.027)
<i>Attitudes</i>				
Oppose GBV	-0.09	-0.05	-0.039	(0.110)
Happiness	1.23	1.32	-0.093	(0.096)
Trust	0.11	0.13	-0.024	(0.033)
<i>Behavior</i>				
Land papers	0.21	0.27	-0.062	(0.049)
Land demarcated	0.32	0.33	-0.006	(0.056)
Lending	0.31	0.29	0.029	(0.046)
Borrowing	0.39	0.37	0.018	(0.049)
<i>Household wellbeing</i>				
HH food security	-0.14	-0.13	-0.010	(0.101)
Child food security	0.01	-0.09	0.097	(0.103)
Land gained	0.01	0.06	-0.056	(0.060)
Child support	0.17	0.13	0.050	(0.064)
Less GBV	-0.17	-0.12	-0.050	(0.132)
<i>Attrition rate</i>				
Respondent attrited	0.05	0.05	-0.001	(0.022)

*Note:* Columns 1 and 2 present the treatment and control means for all outcome variables with baseline data, as well as mean attrition rates for each group. Columns 3 and 4 report the coefficient and standard error, respectively, from a t-test of each variable across the paralegal treatment group.

Table 9: Latent demand for formal law (Prediction 5)

	Formal over Customary	None over Customary	Formal over None
<i>Plaintiff (u0)</i>			
Male	0.004 (0.142)	0.040 (0.069)	-0.037 (0.139)
Non-farm employment	0.483 (0.171)	0.059 (0.095)	0.424 (0.165)
Ethnic majority	-0.160 (0.179)	-0.029 (0.089)	-0.131 (0.176)
<i>Take-up</i>	(+)	(+)	(?)
Control group applicants	3.573*** (0.226)	0.599*** (0.180)	2.974*** (0.183)
<i>Dispute type</i>			
Economic dispute	0.795 (0.219)	0.115 (0.094)	0.680 (0.215)
Violent dispute	0.745*** (0.203)	0.513*** (0.083)	0.232*** (0.199)
Other dispute	0.449 (0.256)	0.165 (0.151)	0.284 (0.240)

*Note:* Coefficients displayed for each pair of choices from a multinomial logit regression on the categorical variable of forum choice (“None”, “Customary”, “Formal”). “Control group applicants” indicates that the respondent opted into the paralegal intervention, but was assigned to the control group. The omitted dispute category is “Family dispute”. Specification includes a dummy for whether the respondent was the plaintiff or defendant. \*\*\* is significant at the 1% level, \*\* is significant at the 5% level and \* is significant at the 10% level.

Figure 6: Treatment effect estimates (Prediction 6)

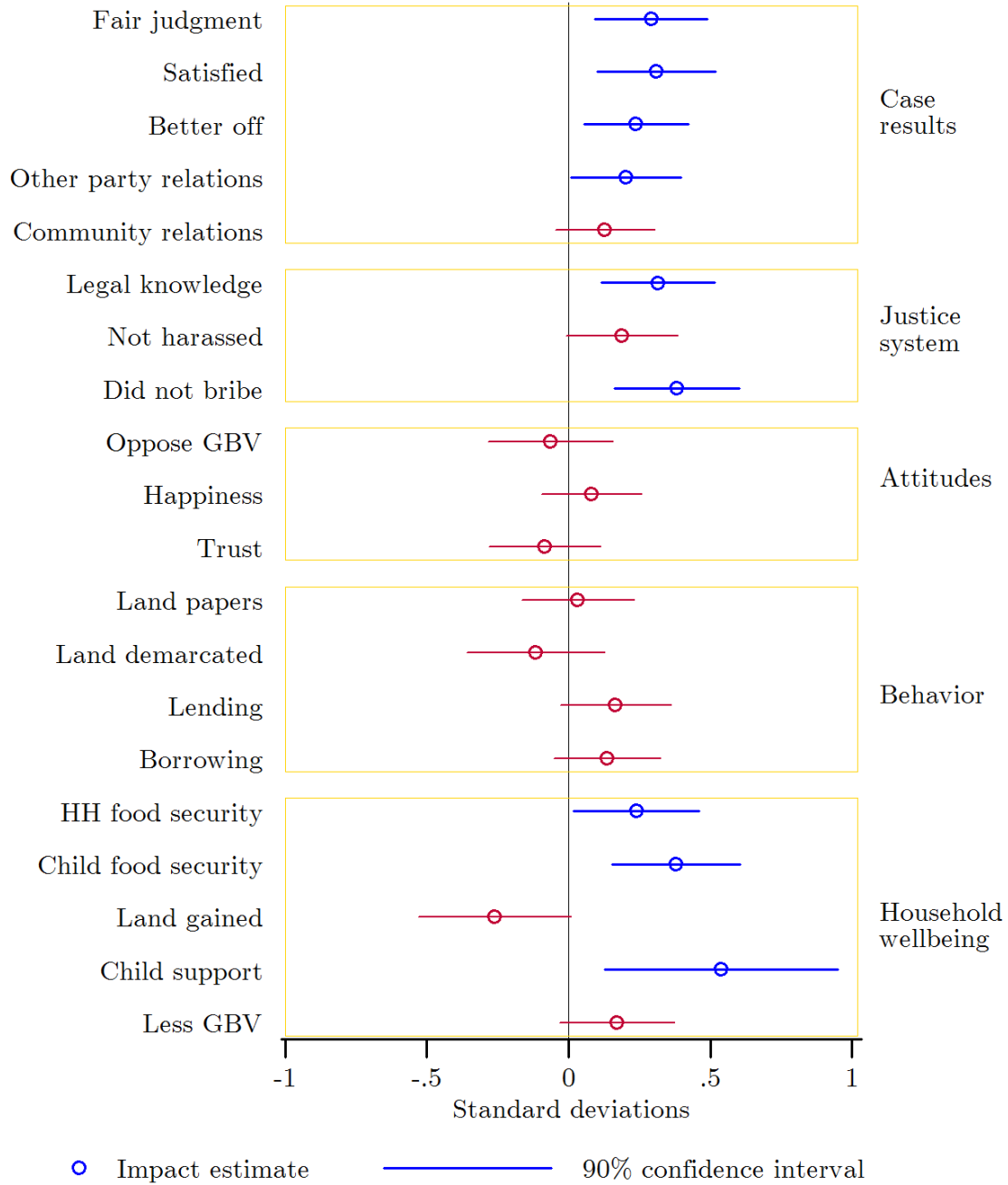


Table 10: Case results (Prediction 6)

	Coeff.	Std. Err.
<i>Case results</i>		
Fair judgment	0.348**	(0.142)
Satisfied	0.370**	(0.149)
Better off	0.267**	(0.123)
Other party relations	0.233*	(0.133)
Community relations	0.134	(0.110)
<i>Mean effect index</i>	0.219**	(0.092)

*Note:* Each row reports the coeff. and std. error for  $Z$  in a separate regression based on Equation 11, where  $Z \in [0, 1]$  indicates treatment. Std. errors are clustered at the village level. \*\*\*, \*\* and \* denote significance at 1%, 5% level and 10%, respectively.

Table 11: Treatment effect estimates (Prediction 6)

	Cross-section		ANCOVA		Diff-in-diff.		Fixed effects	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
<i>Justice system</i>								
Legal knowledge	0.190**	(0.090)	0.231**	(0.094)	0.316***	(0.119)	0.323***	(0.117)
Not harassed	0.015	(0.013)	0.017	(0.013)	0.027	(0.017)	0.028	(0.018)
Did not bribe	0.094***	(0.028)	0.089***	(0.028)	0.100***	(0.035)	0.095***	(0.035)
<i>Mean effect index</i>	0.184***	(0.046)	0.208***	(0.046)	0.275***	(0.073)	0.281***	(0.073)
<i>Attitudes</i>								
Oppose GBV	-0.058	(0.094)	-0.069	(0.099)	-0.068	(0.133)	-0.081	(0.136)
Happiness	0.163**	(0.074)	0.147**	(0.072)	0.085	(0.104)	0.095	(0.104)
Trust	-0.004	(0.025)	-0.011	(0.025)	-0.026	(0.036)	-0.026	(0.036)
<i>Mean effect index</i>	0.028	(0.059)	0.011	(0.057)	-0.026	(0.068)	-0.027	(0.068)
<i>Behavior</i>								
Land papers	0.079	(0.052)	0.034	(0.051)	0.002	(0.053)	-0.028	(0.058)
Land demarcated	-0.056	(0.052)	-0.073	(0.054)	-0.058	(0.063)	-0.077	(0.063)
Lending	0.046	(0.036)	0.060*	(0.036)	0.074	(0.051)	0.081	(0.052)
Borrowing	0.041	(0.047)	0.059	(0.047)	0.068	(0.054)	0.075	(0.055)
<i>Mean effect index</i>	0.066	(0.057)	0.067	(0.056)	0.056	(0.063)	0.060	(0.064)
<i>Household wellbeing</i>								
HH food security	0.260**	(0.119)	0.292**	(0.114)	0.260**	(0.130)	0.299**	(0.127)
Child food security	0.296**	(0.127)	0.273**	(0.127)	0.365***	(0.133)	0.337**	(0.141)
Land gained	-0.072	(0.050)	-0.051	(0.063)	-0.123	(0.078)	-0.102	(0.086)
Child support	0.179*	(0.094)	0.220*	(0.109)	0.243**	(0.103)	0.352**	(0.141)
Less GBV	0.226***	(0.072)	0.211***	(0.061)	0.171	(0.125)	0.157	(0.146)
<i>Mean effect index</i>	0.218***	(0.047)	0.218***	(0.046)	0.229***	(0.052)	0.226***	(0.053)

*Note:* Each row reports four regression specifications on the listed outcome variable. The leftmost column lists dependent variables grouped by hypothesis. The remaining columns display the coefficient and standard error on  $Z$  and  $Z \times P$  as appropriate, where  $Z \in [0, 1]$  indicates treatment and  $P \in [0, 1]$  indicates the post-intervention period. The second and third columns present the cross-sectional specification (Equation 11), the fourth and fifth present the ANCOVA specification (Equation 12), the sixth and seventh report difference-in-differences (Equation 13), and the last two report the fixed effects specification (Equation 14). Standard errors are clustered at the village level. \*\*\* is significant at the 1% level, \*\* is significant at the 5% level and \* is significant at the 10% level.

Table 12: Case interactions

	Family case		Economic case		Violence case	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
<i>Justice system</i>						
Legal knowledge	-0.011	(0.282)	-0.026	(0.254)	-0.200	(0.295)
Not harassed	0.043	(0.034)	-0.036	(0.036)	0.051	(0.057)
Did not bribe	0.256***	(0.058)	-0.098	(0.064)	0.030	(0.092)
<i>Mean effect index</i>	0.373**	(0.148)	-0.185	(0.152)	0.004	(0.179)
<i>Attitudes</i>						
Oppose GBV	-0.081	(0.178)	-0.228	(0.183)	0.422	(0.335)
Happiness	0.382*	(0.213)	-0.012	(0.194)	0.206	(0.261)
Trust	0.028	(0.072)	0.056	(0.061)	0.056	(0.130)
<i>Mean effect index</i>	0.122	(0.131)	-0.016	(0.126)	0.268	(0.210)
<i>Behavior</i>						
Land papers	0.195	(0.117)	0.074	(0.132)	0.136	(0.181)
Land demarcated	0.154	(0.125)	-0.338***	(0.104)	0.191	(0.180)
Lending	0.008	(0.099)	0.005	(0.076)	0.308**	(0.152)
Borrowing	0.236**	(0.103)	-0.059	(0.117)	0.331*	(0.174)
<i>Mean effect index</i>	0.275**	(0.113)	-0.151	(0.122)	0.508***	(0.161)
<i>Household wellbeing</i>						
HH food security	0.484*	(0.276)	0.041	(0.268)	0.231	(0.378)
Child food security	0.706**	(0.270)	-0.158	(0.270)	-0.054	(0.402)
Land gained	-0.097	(0.134)	-0.152	(0.123)	-0.198	(0.240)
Child support	0.578**	(0.228)	0.093	(0.186)	0.518**	(0.250)
Less GBV	0.525**	(0.228)	-0.487***	(0.175)	2.861***	(0.919)
<i>Mean effect index</i>	0.333***	(0.116)	-0.151	(0.106)	0.470**	(0.210)

*Note:* The leftmost column lists dependent variables grouped by hypothesis. Rows report interactions between the dependent variable and three categories of case type: “Family case” (wife or child neglect, ‘loving problems’, and child custody), “Economic case” (land, labor, property, and debt), and “Violence case” (rape, domestic violence, and assault). Each element in columns 1-4 is the coefficient on  $\delta_i \times Z_i \times P_i$  in a separate regression on each case category  $\delta$ , following the specification in Equation 15. Standard errors are clustered at the village level. \*\*\* is significant at the 1% level, \*\* is significant at the 5% level and \* is significant at the 10% level.



Table 13: Heterogeneous treatment effects (Prediction 7)

	Sex			Occupation			Ethnicity		
	Male	Female	Diff.	Non-farmer	Farmer	Diff.	Majority	Minority	Diff.
<i>Case results</i>	-0.025 (0.154)	0.298*** (0.109)	0.324* (0.184)	0.080 (0.286)	0.234** (0.094)	0.155 (0.295)	-0.056 (0.123)	0.394*** (0.120)	0.450*** (0.164)
<i>Justice system</i>	0.059 (0.068)	0.344*** (0.097)	0.285** (0.132)	0.406*** (0.148)	0.272*** (0.081)	-0.134 (0.173)	0.079 (0.063)	0.415*** (0.120)	0.336** (0.144)
<i>Attitudes</i>	0.016 (0.112)	-0.047 (0.087)	-0.063 (0.151)	-0.191 (0.164)	-0.005 (0.078)	0.186 (0.195)	-0.044 (0.082)	0.009 (0.105)	0.053 (0.134)
<i>Behavior</i>	-0.059 (0.110)	0.097 (0.075)	0.157 (0.129)	0.212 (0.174)	0.044 (0.070)	-0.169 (0.194)	-0.030 (0.085)	0.101 (0.094)	0.131 (0.127)
<i>Household wellbeing</i>	0.257** (0.108)	0.221*** (0.057)	-0.036 (0.115)	-0.121 (0.170)	0.259*** (0.057)	0.380** (0.183)	0.302*** (0.086)	0.192*** (0.071)	-0.110 (0.113)

*Note:* The leftmost column lists the dependent variable, which is the mean effects index for each hypothesis. Rows report interactions between the dependent variable and the plaintiff's sex, occupation, and ethnicity. Columns 2 and 3 present the coefficients for males and females, respectively, while column 4 presents the coefficient on  $\beta_i \times Z_i \times P_i$ , where  $\beta$  is sex, following the specifications in Equations 16 and 17. Columns 5-10 repeat this exercise for occupation and whether or not the respondent is a member of the dominant ethnic group. Standard errors are clustered at the village level. \*\*\* is significant at the 1% level, \*\* is significant at the 5% level and \* is significant at the 10% level.

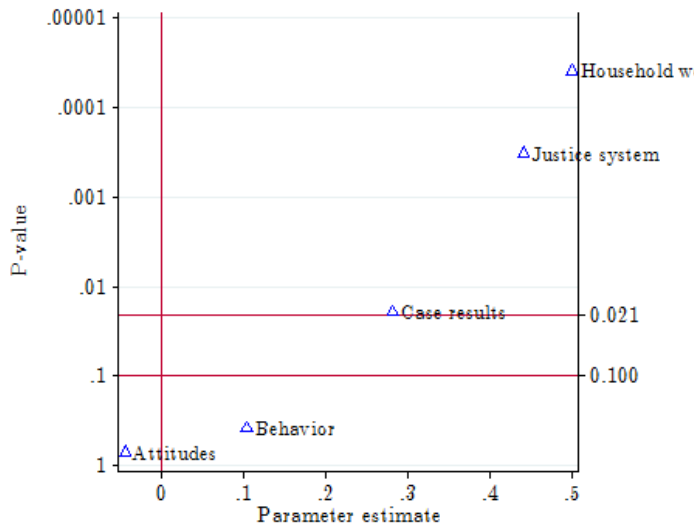
Table 14: Attrition

	Attritors minus non-attritors			
	Treatment	Control	Difference	Std. Err.
<i>Justice system</i>				
Legal knowledge	0.140	-0.103	0.243	(0.439)
Not harassed	0.024	0.011	0.013	(0.014)
Did not bribe	0.083	0.076	0.007	(0.027)
<i>Attitudes</i>				
Oppose GBV	0.510	-0.165	0.675	(0.434)
Happiness	0.142	-0.087	0.229	(0.391)
Trust	-0.046	-0.115	0.069	(0.095)
<i>Behavior</i>				
Land papers	-0.052	-0.011	-0.042	(0.238)
Land demarcated	-0.045	-0.336	0.291*	(0.167)
Lending	-0.205	-0.179	-0.026	(0.181)
Borrowing	-0.197	-0.402	0.205*	(0.105)
<i>Household wellbeing</i>				
HH food security	-0.149	0.045	-0.194	(0.357)
Child food security	-0.281	-0.058	-0.223	(0.728)
Land gained	0.051	-0.008	0.058	(0.324)
Child support	-0.131	-0.180	0.049	(0.078)
Less GBV	0.329	0.495	-0.166	(0.145)

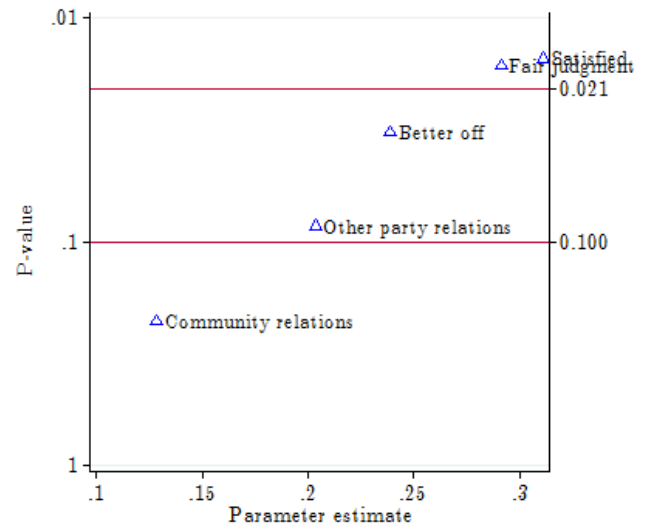
*Note:* Columns 1 and 2 report differences between the mean of each variable for attritors and non-attritors in the treatment and control groups, respectively. Column 3 reports the coefficient on the  $Z \times A$  interaction, where  $Z \in [0, 1]$  is the treatment dummy and  $A \in [0, 1]$  is a dummy for whether the respondent attrited. Column 4 displays robust standard errors clustered at the village level.

Figure 7: Bonferroni-Sidak Family-Wise Error Rate (FWER) Correction

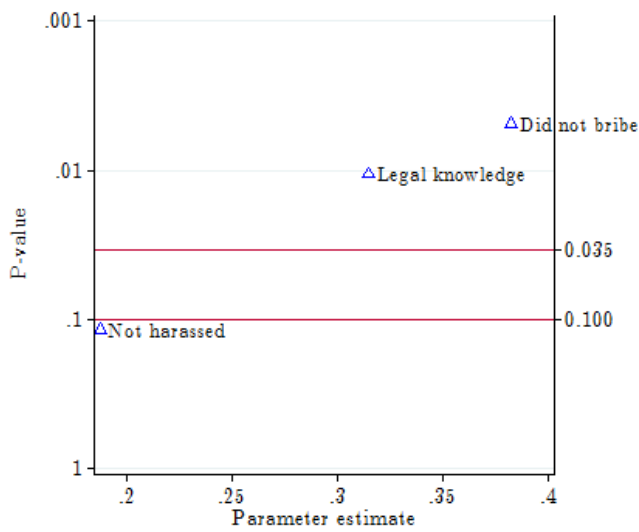
(a) Mean effects index



(b) Case results



(c) Justice system



(d) Household welfare

