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Formalizing dispute resolution: Effects of village courts in Bangladesh

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Formalizing Dispute Resolution: Effects of Village Courts in Bangladesh*

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Abstract

Disagreements over business deals, land boundaries, or loan non-repayment are very common sources of disputes, and courts are congested in developing countries. We evaluate the effects of the government introducing formal “village courts” (VCs) in rural Bangladesh using a randomized controlled trial with a pre-analysis plan. VCs were designed to improve dispute resolution and relieve the pressure on congested district courts. We find that VCs are more of a substitute for the ubiquitous informal dispute resolution mechanism (DRM) called *shalish*. VCs become functional and active in treated areas, but *shalish* remains the primary preferred DRM in both treatment and control areas. The elected leaders in charge of implementing VCs are also involved in settling *shalish* cases, and the potential of VCs is limited by the constraints on their time. There is some substitution from *shalish* to VC, but the district court congestion and downstream village economic activities, social dynamics, and political attitudes remain unaffected. The decentralized, diffuse *shalish* system is a better fit given the aggregate demand for dispute resolution, and it will not be possible for VCs to supplant this informal institution without additional investments in human resources to enhance VC capacity.

Keywords: Dispute resolution, Judicial systems, Institutional change

JEL Codes: K4, O17, P48

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1 Introduction

Almost every economic or social transaction – between suppliers and buyers, or firms and customers, or competing politicians, or neighboring households and farms – is subject to the risk that involved parties disagree at some point about the terms of the transaction. This could lead to (re-)negotiation, mild disputes and disagreements, or in rare cases, full-blown conflict. Much has been written about the causes and consequences of civil conflicts and civil wars ([Blattman and Miguel, 2010](#)) and institutions that can mitigate conflict risk ([Fearon et al., 2009](#); [Bunte and Vinson, 2016](#)). But “mild disputes” - such as disagreements over the terms of a business deal, contested land boundaries, or loan non-repayment - is the more salient risk for the vast majority of the global population.¹ 2 in 10 households in rural Bangladesh report involvement in a dispute within the previous two years, 61% of which remained unresolved. Courts remain severely congested with huge backlogs and delays. In the absence of institutions that efficiently mediate, unresolved disagreements can impede market transactions, investment, and growth.

We evaluate the effects of the government activating a new formal Dispute Resolution Mechanism (DRM) called “Village Courts” (VC) in Bangladesh, using a cluster randomized controlled trial. VCs are legally sanctioned by an Act of Parliament, but had remained largely dormant, inactive, and under-utilized. The “Activating Village Courts Bangladesh” (AVCB) program provided materials, personnel, training, public awareness, and monitoring to launch VCs in randomly chosen unions (the lowest administrative unit) covering over 6 million people.

The VCs were set up to improve access to and quality of justice in two ways. First, to alleviate the pressure on district courts, the heretofore lowest tier of the

¹In a survey covering 101 countries, approximately half of the respondents had experienced a legal problem in the past two years ([World Justice Project, 2019](#)).

conventional formal legal system. Similar to the situation in many other low- and middle-income countries, district courts in Bangladesh are severely congested and suffer from huge backlogs and delays in case resolution. More than 2 million cases (1,339 per 100,000 population) were pending in district courts across Bangladesh in 2016, and 70% of those cases remained pending in 2017 ([Justice Audit Bangladesh, 2018](#)). In our survey data, the average time it took for households to receive a judgment from a district court was 6 years. District courts are also very expensive, and therefore inaccessible to the vast majority of Bangladesh’s rural population. The average cost of using the district court was US \$1,586, which is more than half of the annual household expenditure in our sample population. Not surprisingly, only 6.66% of disputes identified in our survey data were resolved in a district court.

The second goal of the VCs is to provide a more effective and just alternative to the informal grassroots justice system, known as *shalish* in Bangladesh. *Shalish* refers to the convening of one or more powerful male “village elders” to adjudicate disputes. *Shalish* does not possess any formal state-sanctioned enforcement powers, and their decisions are typically enforced through informal community pressure. A *shalish* is faster, more accessible, and much cheaper than district courts, which explains their popularity. Two-thirds of all disputes we identified in our control villages were resolved in a *shalish*. However, *shalish* is widely perceived to be biased in favor of the rich and powerful, because social connections or financial relationships with the adjudicating elders can be helpful to have the dispute resolved in a person’s favor. The introduction of VCs could – in theory – address this bias.

The VCs are designed to incorporate the best aspects of both the formal courts and *shalish*. Like *shalish*, the VCs resolve disputes rapidly and cheaply without the involvement of lawyers or other costly professional services. However, unlike *shalish*, the VCs’ decisions are documented and backed up by the state’s enforcement powers.

We find that the AVCB program is implemented well, in that VCs become functional and active in treated communities. The proportion of all disputes resolved in VCs moves from 3% in control to 12% in treatment areas. But *shalish* remains the dominant DRM even in treated communities, accounting for 63% of all resolved disputes even post intervention. In summary, the new institution does not supplant the dominant informal institution. While VCs displaced some of the *shalish* cases, it was not by enough for this to have any quantitatively meaningful effect on overall access to justice, downstream economic activity (including activities that in theory depend on efficient dispute resolution and contract enforcement), on village social dynamics, or on the opinions of local elected officials in charge of VCs.

While the VCs were ostensibly designed to reduce the burden on district courts, we observe no change in the number or proportion of disputes resolved in district courts. This is apparent in our survey data as well as in district court administrative data. We observe that the cases now resolved by VCs look more like the types of cases that were otherwise going to *shalish*, rather than the ones resolved in district courts. The treatment group does report a significant decrease in their *plans to use* the district court for a hypothetical future dispute, but there's no evident change in actual usage in the 43 months post-intervention.

The last part of the paper focuses on understanding why the new formal institution remains less popular than the extant informal DRM, despite VCs providing an alternative to the potentially biased *shalish*, as well as adding the formal enforcement powers of the state. One crucial issue immediately evident in the data is that the locally elected leader who is assigned responsibility for setting up and administering the VC – called the *Union Parishad* (UP) chair – already dedicates a large share of his time conducting *shalish*. If bias stems from the adjudicating individual, VCs are unlikely to address that problem.

UP chairs already spend an average of 23 hours per week on conflict resolution. While our treatment affects the proportion of hours they dedicate to VC versus *shalish*, the total time spent on dispute resolution remains roughly constant. Given the UP chairs' other administrative responsibilities, this is likely the maximum time that we can expect them to allocate in a week. If, in the absence of VCs, the main adjudicator *would have* allocated that time to informal DRMs anyway, then it's not surprising that this intervention has little effect on downstream economic activities. To adequately meet the aggregate demand for dispute resolution in the community, the *shalish* system that diffuses and decentralizes responsibilities across multiple village leaders appears to be a more effective solution than the VC which centralizes tasks around a single, busy elected official.

While we track the effects of the AVCB program up to three and a half years after its onset, this might not have been sufficient time to fully realize program benefits. Among the households surveyed in both the midline and endline survey, we find a substantially higher VC usage rate at the time of the endline survey, suggesting that the VC usage rates might not yet have reached their full potential.

The limited usage of VCs we observe holds a few lessons for how we might in the future attempt to increase access to justice where formal courts are deemed weak or deficient. First, formalizing dispute resolution requires larger investments in human resource capacity to support the new formal system. Activating a new institution is likely insufficient if it is not accompanied by significant changes to personnel and budgets. Second, if the goal is to relieve pressure on congested courts, then the new institution must be legally empowered to adjudicate the types of cases that otherwise overburden the upper-level courts. Third, people may have a preference for the informal system they currently utilize, and it is important to explore why that preference exists and have realistic expectations about how long it takes for such a preference

to change. This may guide policymakers towards prioritizing alternative approaches, such as focusing on improving the efficacy or perceived equity and fairness of existing informal DRMs instead of trying to replace them with new formal institutions. [Blattman et al. \(2014\)](#) and [Hartman et al. \(2021\)](#) find that such a strategy was successful in Liberia.

Our research contributes to three stands of literature. First, we contribute to the literature on court systems and economic development. An influential paper ([Djankov et al., 2003](#)) constructs measures of procedural formalism in dispute resolution across 109 countries and finds no evidence that formalism is better for securing justice. This can explain why the informal DRM remains most popular in our setting even after the introduction of a formalized alternative. Other papers (e.g., [Kalkschmied, 2023](#)) point to the importance of institutions to support contracts and property rights, but our results suggest that the details of how those institutions are implemented matter. A more recent literature use reforms to judicial systems to show that better-functioning courts support credit markets, increase investment, revenue, and productivity, and foster economic growth ([Chemin, 2009a,b, 2012](#); [Kondylis and Stein, 2021](#); [Rao, 2022](#); [Chemin, 2020](#)). This literature also shows that courts can be improved through procedural reforms and monitoring, providing more personnel and financial support, or providing individual-level legal support ([Sandefur and Siddiqi, 2013](#); [Aberra and Chemin, 2021](#)). We add to this literature by experimentally evaluating an entirely new judicial institution introduced at the lowest tier of government. Research on debt recovery tribunals in India ([Visaria, 2009](#)) and special civil tribunals in Brazil ([Lichand and Soares, 2014](#)) is also related.

Second, we contribute to the literature on decentralization. This literature has mostly studied the decentralization of fiscal and administrative authority, public service delivery, and inter-jurisdictional externalities (e.g., [Bardhan and Mookherjee,](#)

2000, 2005; Galiani et al., 2008; Malesky et al., 2014; Lipscomb and Mobarak, 2016).

We study the devolution of formal judicial powers from the district courts to the lowest tier of local government. Here we find that the local government has limited capacity to alleviate the pressure on district courts, but that the even-more-decentralized *shalish* remains the preferred DRM.

Third, this paper is related to the limited quantitative literature on informal justice systems. Consistent with our results, Kpaka (2022) show that informal land tribunals do not decrease the burden on the formal justice system in Sierra Leone. In contrast, a United Nations program in Liberia to improve the functioning of informal justice decreased violence (Blattman et al., 2014; Hartman et al., 2021). We show the primacy of informal DRM in our context and provide evidence on the difficulties of formalizing the local-level justice system.

We provide the context and a description of our data sources in Section 2 and the empirical results in Section 3. Section 4 explores various explanations for why the intervention produced limited impacts and Section 5 discusses implications for policy.

2 Context, Experiment, and Data

Inadequate access to justice is a severe problem in rural Bangladesh. Our baseline survey revealed that 23% of households had had a dispute in the past two years and 14% of households had at least one unresolved dispute. Appendix Figure A.1 provides an overview of Bangladesh’s dispute resolution system. Bangladesh has a common law system with a Supreme Court as the highest level court. District and Metropolitan courts are at the next level, with one in each district and metropolitan area. These courts have original jurisdiction over civil and criminal cases from the districts and are the lowest tier in the conventional formal justice system.

The *Union Parishad* (UP) operates each Village Court (VC). UPs are elected bodies that handle the administrative responsibilities of a union, the lowest administrative tier of government in rural Bangladesh. There are approximately 4,500 Unions across the country. Each UP in a council of 12 members, of which three seats are reserved for women. A “UP Chair” leads the council and a UP Secretary is employed to handle administrative tasks.

2.1 Dispute Resolution in Rural Bangladesh

Resolving disputes in district courts is both costly and slow. Even after the 6 years it take to adjudicate cases in the district court, enforcing decisions take another 100 days on average. The average cost (BDT 132,684 = USD 1,586 or 59% of the average annual household expenditure) is prohibitive for most of the rural population.²

Instead, the most common DRM in rural Bangladesh is an informal institution called *shalish*. In our survey data, 66% of resolved disputes were resolved using *shalish*. The practice of *shalish* varies considerably across locations, but it is typically conducted by influential local leaders. Appendix Figure A.2 shows that the UP elected officials are commonly involved in conducting *shalish*.

Shalish is fast and does not require any paperwork or lawyers. On average, disputes brought to *shalish* took 50 days to be solved, and the *shalish*’s decision took 23 days to be enforced. In our survey data, the average cost of solving a dispute in *shalish* was BDT 5,652 (USD 68).

Shalish has two major downsides. First, decisions can only be enforced by community pressure. This can lead to lack of enforcement in some cases and draconian

²Throughout the paper, we use a USD/BDT exchange rate of 83.66, the average exchange rate during the experiment. The cost estimates include fees paid to lawyers, consultants, and other legal services, as well as informal payments and the costs of traveling to the court. It does not include opportunity costs.

enforcement in other cases, and that variability can undermine community trust and harmony. In the absence of written verdicts disputes can easily re-emerge. Second, there is a perception that *shalish* is biased to favor the politically powerful and susceptible to corruption.³

2.2 Village Courts

Village Courts (VC) are designed to be a rapid and low-cost mechanism for dispute resolution that generates formally documented decisions, and are backed by the enforcement powers of the state. VCs were first created with the 1976 Village Court Ordinance, which was replaced by the 2006 Village Courts Act. In practice, VCs were not active in most unions.

VCs can adjudicate both civil and criminal cases, but only up to a value of BDT 75,000 (USD 896). The VCs can only impose financial punishments and not prison sentences and they cannot adjudicate more serious criminal cases such as rape or murder. 59% of all disputes we recorded at baseline were within the VC jurisdiction.

Once a petitioner has filed a case with the VC, the UP chair tries to find a compromise through mediation. If a compromise cannot be reached, a VC is formed including the UP chair (who acts as the Chair of the VC) and four jury members nominated by the plaintiff and the defendant. The plaintiff and the defendant each nominate two jury members, of which two have to be from the twelve-person UP (union council). No lawyers are allowed on the VC.

VCs can use the local Village Police to enforce its decisions. Village Police are often used to bring defendants to the VC or to serve notices to witnesses to appear in court. If a VC cannot enforce a decision locally, it can bring the case to the District

³In our interviews, a resident complains that “People sometimes do not get justice from *shalish*, because of monetary transactions to influence the verdict of a *shalish*.”

Court, which can direct the police department to confiscate assets from people owing money as a result of the VC decision.

An explicitly stated goal for the VCs was to reduce the burden on the formal justice system. District courts have the option to send cases they deemed eligible and suitable to be solved in VCs. However, in practice, the AVCB monitoring data show that only 4.9% of the VC cases were sent down from District Courts.

2.3 Activating Village Courts in Bangladesh (AVCB)

The Government of Bangladesh and UNDP launched the *Activating Village Courts in Bangladesh* (AVCB) program in 2009. The first phase was implemented from 2009 to 2015 and covered 351 of Bangladesh's 4,550 unions. From 2016-2020, a second phase expanded the program to an additional 1,080 unions and this paper evaluates the effects of that expansion. www.villagecourts.org provides a comprehensive overview.

The AVCB program provides five types of support to UPs. First, it supplies the required forms and furniture to make the VCs functional and hires a Village Court Assistant for each UP. In that second phase, this was implemented April-November 2017. Second, the program trained UP officials in VC processes. The training took place between May 2017 and June 2018. Third, the program conducted community meetings, rallies, and multimedia drama shows in each program union to raise awareness among the general population. These activities began in July 2017 and were repeated periodically until December 2020. Fourth, to encourage monitoring by the district administration, UNDP facilitated workshops for government officials, district court judges, and journalists. These workshops were conducted between October 2017 and November 2018. Fifth, AVCB required program UPs to provide monthly reports to the district administration recording the number of cases processed by the VC.⁴

⁴Most of these activities closely follow the policy recommendations made by qualitative research

2.4 Study Area and Randomization

The Government and UNDP jointly selected the 1,080 unions eligible to participate in AVCB phase two. These were chosen from unions not participating in the first phase of AVCB. Districts and unions were prioritized using other factors including remoteness, economic vulnerability, and having female UP chairs. 267 unions within Dhaka and Chittagong divisions were deemed eligible, and we focused our evaluation on these two divisions to reduce the cost of data collection. These two divisions contain 47% of Bangladesh’s population. Appendix Figure [A.3](#) shows that Dhaka and Chittagong do not differ substantially from the rest of Bangladesh in terms of the number of VC cases recorded per union.

We randomly selected 178 of these 267 unions to receive the program, while 89 were randomized into the control group. The randomization took place before the baseline survey and was stratified by geographic location.

2.5 Data

Appendix Figure [A.4](#) provides an overview of the intervention and data collection activities. The paper uses data from four main sources: household surveys conducted before and after the intervention, surveys of UP officials, UP administrative data, and district court administrative data. We conducted our baseline survey in 107 unions in April-May 2017. These unions were randomly selected in their treatment and geographic location stratum. To identify households for whom the intervention would be more relevant, we first conducted a short targeting survey with 90 households in a randomly selected ward of the Union. Among these respondents, we then randomly sampled 30 households, oversampling households that had experienced a dispute in observing the dysfunctional pre-AVCB VCs ([Islam, 2019](#)).

the past year. We over-sampled households with any dispute in the past year by a factor of 4, and households with an unresolved dispute within the VC’s jurisdiction by a factor of 8. Our thinking was that by over-sampling such households and retaining sampling weights, we would be able to report results on both the subsample of “likely users” of the village court, as well as a representative set of households. We also surveyed five UP officials in each union and digitized the UP’s VC administrative records.

We conducted the first post-intervention survey in April-May 2019, 2 years after the baseline survey. We added surveys in 67 new unions in this follow-up for a total of 174 unions, again stratified by treatment status. In these unions, we surveyed 30 randomly selected households. A more limited second follow-up survey was conducted in 89 unions in January 2021, and we digitized UP administrative data in 54 of these unions. The second follow-up was conducted during the pandemic, so more accessible unions were selected, which lowered the cost of surveys.

To study spillover effects on district courts, we collected administrative data on the number of cases filed in all 7 district courts linked to all 267 treatment and control UPs in our sample. We collected these data January-July 2019 to cover cases filed with courts from September 2018 to January 2019. Cases filed in January 2017 were also collected and used as a pre-intervention covariate.

2.6 Randomization Balance and Attrition

Appendix Table [A.1](#) shows that the sample is balanced between treatment and control at baseline. Only one out of 28 variables tested is statistically different between treatment and control groups at baseline with 95% confidence. Appendix Table [A.2](#) shows that the overall attrition rate was 6% and virtually identical in treatment and

control UPs.

2.7 Pre-Analysis Plan and Sequence of Analysis

The VCs could potentially affect a large number of outcomes. We use two strategies to organize our analysis and reduce the risk of false positives from multiple-hypothesis testing. First, we published a detailed Pre-Analysis Plan (PAP) on the AEA RCT Registry. Deviations from the PAP are described in Appendix A.3. Second, we conducted a pre-specified sequential analysis following a conceptual framework for how the VCs were expected to affect each domain of outcomes.

Appendix Figure A.5 shows the sequence in which we performed our analysis. We start by testing the hypothesis that the AVCB program improved the functionality of the VCs. Only after establishing that this is the case, we proceed to test the extent to which the AVCB program affected the DRM used to resolve the pre-existing disputes identified in the baseline survey. We find that there was no increase in the share of pre-existing disputes resolved in VCs. Therefore, we do not go on to test the effect of the AVCB program on *how* these disputes were resolved.

We then test the following hypotheses. First, that the AVCB program increases the number of disputes resolved in VCs, focusing on the subset of disputes that emerged after the baseline survey. Second, that the program decreases the number of cases brought to district courts. Third, that the program improves subjective satisfaction with the justice system, decreases perceptions of crime, and decreases perceptions of unresolved disputes. Fourth, that the program increases economic activities dependent on efficient dispute resolution.

2.8 Empirical Strategy

Most of our analysis will use regression equations of the following form:

$$y_i = \alpha + \beta Treat_i + \gamma X_i + \delta_1 NoBaseline_i + \delta_2 Survey_i + \varepsilon_i \quad (1)$$

Where y_i is an outcome variable, $Treat_i$ is an indicator variable for the union being in the treatment group and X_i is a vector of covariates measured at baseline.⁵ If the observation has no baseline data, the control variables are set to zero, and the $NoBaseline_i$ indicator variable is set to one. $Survey_i$ is a survey indicator variable that is one if the observation is from the 2021 survey. The standard errors are clustered at the union level.

3 Empirical Results

3.1 The AVCB Program’s Effect on VCs Functionality

The first goal of the AVCB program was to create functional and active VCs. Figure 1 shows the effects of the AVCB treatment on multiple measures of VC functionality gathered using household surveys, surveys of UP officials, and UP administrative records. Each estimate is a coefficient from a regression using our main specification from Equation 1. Appendix Table A.3 shows the associated regression results.

The first three estimates in Figure 1 show effects measured in the household survey. Treatment households are 24 percentage points more likely to report that there is an active VC in their union (a 119% increase over the control group mean). The share of four hypothetical disputes that households state they *would* resolve in a VC increases

⁵See Appendix A.2 for a complete list of control variables.

by 8 percentage points (102%).⁶

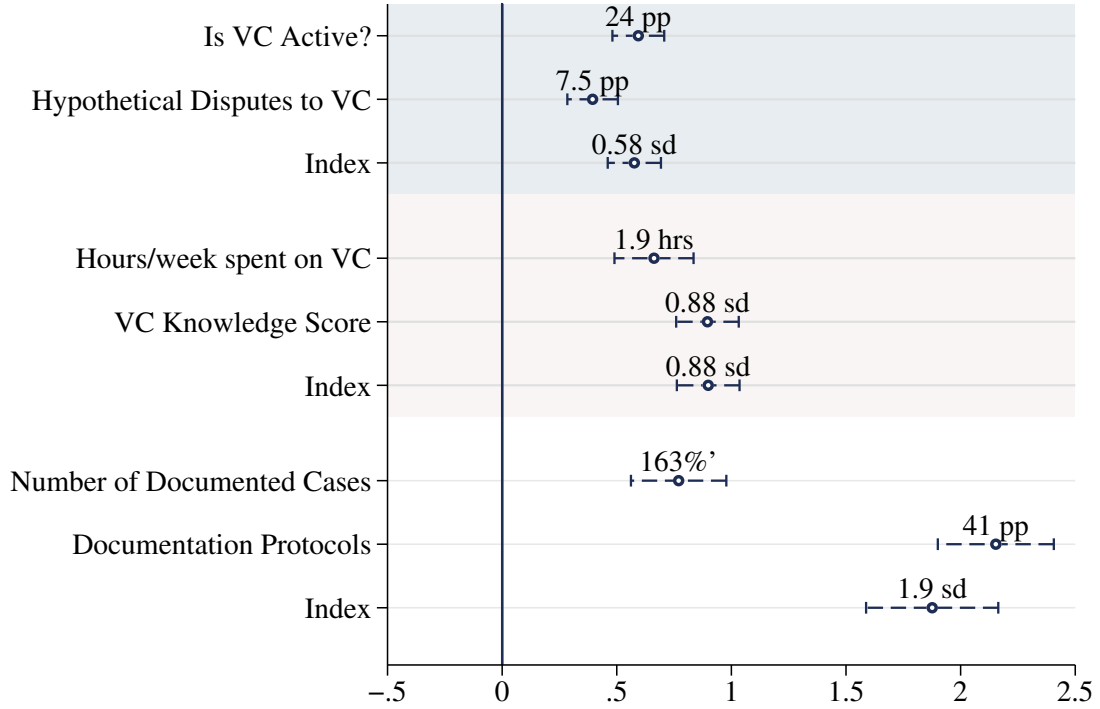
The next three estimates in Figure 1 show effects on UP officials. The UP chair, two randomly selected UP members, one randomly selected UP member from the seats reserved for women, and the UP secretary were included in this survey. UP officials spend 1.9 more hours (155%) per week resolving cases in VCs in treatment areas. We administered a knowledge quiz about VC regulations in this survey. Treatment improves UP officials' performance in this quiz by 0.88 standard deviations.

The final three estimates in Figure 1 show effects measured in the UPs' digitized administrative data. In AVCB program unions, the number of documented VC cases increases by 163 Inverse Hyperbolic Sine (IHS) points, or 410%.⁷ Among these cases, there was a 41 percentage point (182%) increase in the average share of required documents that had been filed. In summary, Figure 1 presents consistent evidence that the AVCB program was successful in creating functional VCs, across all indicators from multiple surveys.

⁶See Appendix Section A.1.2 for more information on the hypothetical disputes.

⁷We use the IHS transformation instead of a log transformation as some UPs had zero documented cases.

Figure 1: Effect of AVCB program on village courts' functionality



Notes: The figure above shows the effect of the AVCB program on a range of outcomes related to VCs' functionality. The first three variables are from the household survey data, the next three are from the surveys with UP officials, and the final three are from the digitized administrative UP data. Each point is a coefficient from a regression where the outcome variable is transformed into an index with a mean of zero and a standard deviation of one in the control group. The number shown next to each point is the effect on the outcome variable in its natural units. IHS points are denoted %'. 95% confidence intervals are constructed using standard errors clustered at the union level. The results are also shown in Appendix Table A.3.

3.2 Effect on Village Court Usage

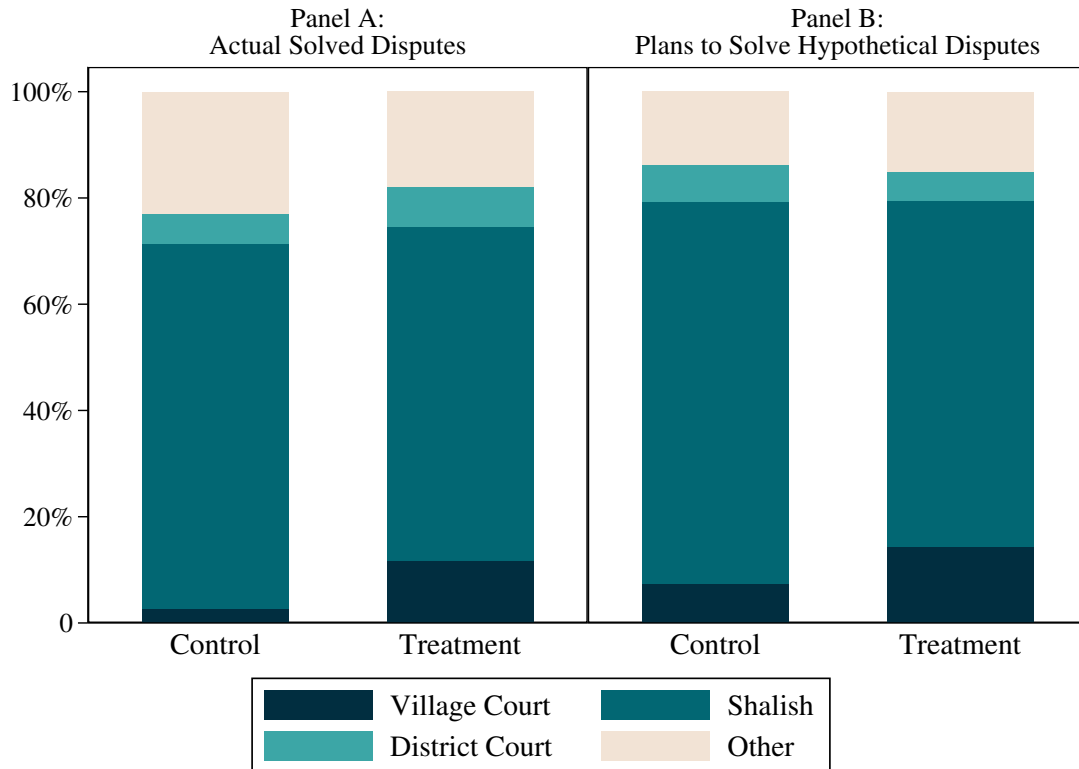
Once we document that VCs were functional in treatment areas, we next investigate whether this led to changes in where disputes are getting resolved. Column 1 of Appendix Table A.4 shows that there was no effect on the share of *pre-existing* disputes (identified in our baseline survey) getting resolved in VCs. It is likely that this is because the disputes in this group that would have been suitable to resolve in

VCs, had already been resolved by the time the VCs became fully functional in the treatment areas. As there was no effect on the share of these disputes being resolved in VCs (hypothesis 2a in the sequence of analysis), we do not analyze the effect of the AVCB program on the outcomes for these disputes (hypothesis 2b in the sequence of analysis).

The AVCB program did increase the share and number of *new* disputes (that emerged after the baseline survey) that get resolved in VCs. Panel A of Figure 2 summarizes the shares of resolved new disputes by the DRM used. VCs resolve 12% of all disputes in treatment unions, a statistically significant 9 percentage point increase relative to the control group. Although we observe a decrease in disputes being resolved through *shalish* (Appendix Table A.5), the key take-away from Figure 2 is that a majority of disputes (63%-69%) continue to be resolved through *shalish* in both control and treatment unions. Panel B of Figure 2 shows similar results for the DRMs households *say they would* use to resolve hypothetical disputes that could fall within the VCs' jurisdiction.

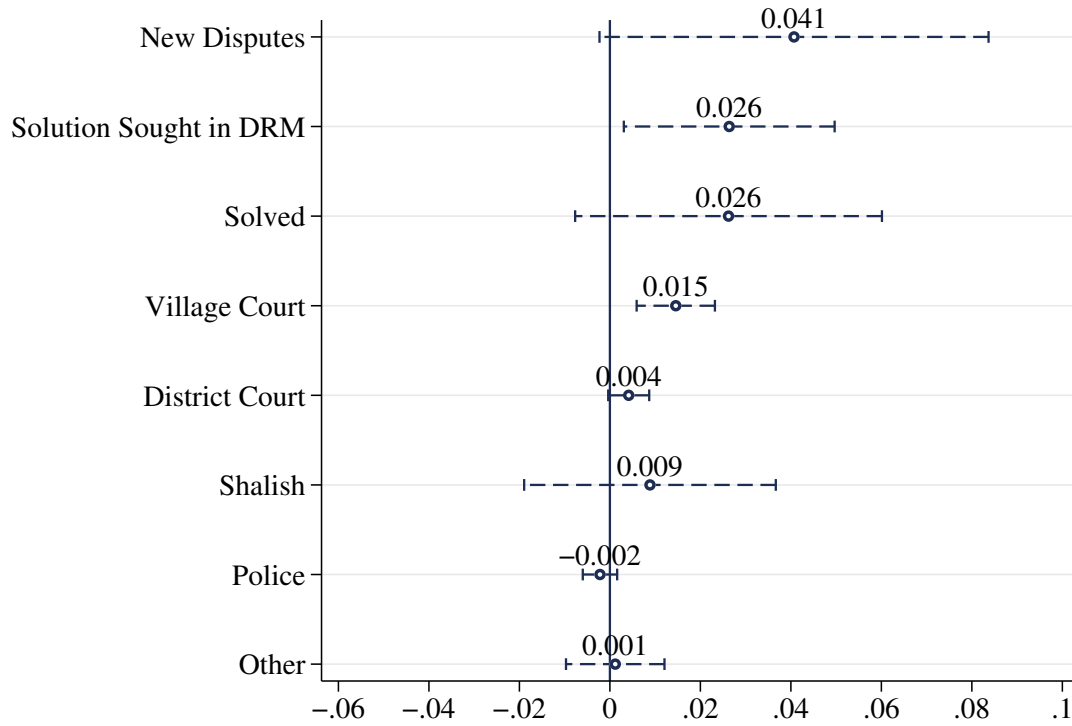
Figure 3 shows that the total number of disputes increased with the treatment, although the effect is only marginally statistically significant. The number of disputes brought to any DRM and the number of resolved disputes also increased proportionally, such that the share of disputes where a resolution had not been sought and the share of disputes that remained unresolved did not change. The AVCB increased the number of disputes resolved in VCs by 0.015 cases per household (438%).

Figure 2: Share of Solved Disputes by DRM



Notes: This figure shows what share of resolved disputes that are solved by each DRM (Panel A) and what DRM households state they would use to solve four hypothetical disputes (Panel B). The data used in Panel A is at the dispute level and include solved disputes only. The data used in Panel B is at the household level. See Appendix Section A.1.2 for more information on the hypothetical disputes. The regressions estimating the effects on these outcomes are shown in Appendix Tables A.5 and A.6.

Figure 3: Effects on Disputes per Household and Disputes Solved by DRM



Notes: This figure shows the effect of the AVCB program on the number of disputes per household. The first estimate is the effect on the total number of new disputes per household starting after the baseline survey. The second estimate is the number of these disputes that have been brought to a DRM. The third estimate is the number of these disputes that have been resolved. The remaining five estimates show the changes in where these disputes have been resolved. 95% confidence intervals are constructed using standard errors clustered at the union level. The results are also shown in Appendix Table [A.7](#).

3.3 Effects on Usage of Other DRMs

An explicit goal of activating village courts was to reduce the burden on district courts.⁸ We can evaluate the effect of the program on this outcome using both household survey data and the administrative records from the district courts that we digitized. Figure 3, and associated Appendix Tables A.5 and A.7 show that AVCB did not decrease either the total number or share of disputes resolved in district courts, as measured through our surveys.

Appendix Table A.8 shows a similar pattern using district court administrative data: no fewer cases reached the district courts from treatment unions relative to control unions. Restricting court records to cases that fall within the VC jurisdiction produces the same result. The only indication that the AVCB program *may* reduce the number of cases in district courts *in the future* is the -1.23 percentage point (-18%) decrease in the share of hypothetical disputes households state that they *would* resolve in district courts (see Panel B of Figure 2 and Appendix Table A.6).⁹

So what would have happened to the cases resolved in VCs, had the VCs not been functional? Panel A of Figure 2 and Appendix Table A.5 show that both the share of disputes resolved in *shalish* and the disputes resolved by going to the police station decreased. The decline in the share of disputes resolved through *shalish* is largest in absolute terms (-6.6 percentage points), but not statistically significant. Panel B of Figure 2 and Appendix Table A.6 also show that the share of hypothetical disputes

⁸The Copenhagen Consensus report by Hossain and Zaman (2016) assumed that 40% of VCs cases would have otherwise been solved in district courts. This assumption led to the conclusion that the AVCB program would have an 18 to 1 benefit-cost ratio, which was one of the factors encouraging the Government of Bangladesh and the UNDP to expand the program.

⁹Since this question is about disputes that are within the jurisdiction of the VCs, and are therefore typically not resolved in District Courts, it is plausible that the effect is larger than if the question had been asked about disputes that are typically resolved in District Courts. The effect should therefore be interpreted as an upper bound on the total effect that the AVCB program may have on the share of future disputes resolved in District Courts.

resolved in *shalish* is reduced by 7 percentage points (-9%), accounting for the vast majority of the increase in the share of hypothetical disputes that would be resolved in VCs.

Appendix Table A.9 provides a clue as to why the *shalish* margin is most elastic: disputes brought to VCs are more similar to those brought to *shalish* than disputes brought to district courts. The stated monetary value at stake in the dispute is similar between VC and *shalish* cases, while it is substantially larger for district court cases. Land disputes are often taken to district courts, while cases of threats and harassment are more common in VCs and *shalish*.

Together these results highlight that the AVCB program is not primarily moving disputes from higher levels of the formal court system to the VCs. Instead, the effect of the program is to move some cases from *shalish*, and to a lesser extent the police stations, to be resolved in the VCs. Thus, we can think of the AVCB as formalizing the existing informal dispute resolution system by bringing the disputes and some of the arbitrators from the *shalish* system to the VC system.

3.4 Downstream Outcomes: Perceptions of Disputes, Social Dynamics, and Socio-Economic Outcomes

We do not find evidence for any substantial effects of the AVCB program on households' perceptions of village social dynamics, economic activity, and satisfaction with the UP leadership. This is not surprising given that the AVCB program only caused a small shift towards VC resolution. *Shalish* remains the dominant DRM in rural Bangladesh, even in treatment areas.

Appendix Figure A.7 shows the effects of the AVCB program on households' subjective evaluations of the quality of the justice system that they have access to,

the extent to which unresolved disputes and crimes are problems in the village, and the level of trust and communal harmony. Aggregating categories of outcomes into a single index shows that there is no systematic, robust effect on any of these domains, even if there are some positive effects on individual variables (e.g. perceptions of harmony among neighbors and satisfaction with the justice system). Appendix Figure A.8 shows that there were no detectable effects on economic activities, despite our focus on economic activities that in principle should be more closely related to third-party dispute resolution and contract enforcement. Appendix Table A.10 shows null effects on households’ opinions about the UP chair.

4 Interpretation

4.1 Why Did Village Courts Not Become More Popular?

The AVCB program set up VCs as directed, and those VCs became operational and functional. Despite being backed by the enforcement powers of the state, the VCs failed to supplant the popular, traditional, informal DRM known as *shalish*.

So why didn’t more of the population in treated unions shift towards resolving their disputes in VCs? In Appendix B.2, we explore a range of possible reasons: that VCs offer low-quality dispute resolution, that people *perceive* VCs to be of low quality, that UP officials in charge of operating VCs are time-constrained, or that those officials exhibit bias.

We find no evidence of bias in favor of households “close to” the UP chairs limiting VC usage (section B.2.3), or that the VCs offer low-quality dispute resolution (section B.2.1). Compared to *shalish* and district courts, VCs are associated with better dispute resolution outcomes across a wide range of measures including cost, processing

time, the relationship between the disputing parties, and satisfaction with the verdict and process (Appendix Table A.15). This advantage persists even after we hold fixed observable characteristics of the household and dispute.

However, when we analyze *perceptions* of the quality of dispute resolution in various DRMs in Appendix Figure A.10 and Table A.16, we find that *shalish* is perceived to be both cheaper and faster than VC. Interestingly, this contradicts the results for actual outcomes. A perceived lack of benefits of VC, as opposed to the actual benefits they generate, appears to be a contributing factor in the relatively low demand for VCs leading to low usage.¹⁰

Second, the analysis in section B.2.4 suggests that a lack of UP capacity, and in particular the constrained schedule of the UP chairs, is an important supply-side limitation preventing VCs from supplanting *shalish* as the dispute resolution mechanism of choice. VCs and *shalish* are in direct competition for the UP chairs' time and attention. Figure 4 shows the UP chairs and other UP officials' time allocation across various DRMs. UP chairs generally spend a lot of time on dispute resolution: about 23 hours per week on average in control villages. The vast majority of that time is allocated to *shalish*. What is both surprising and informative is that even in treatment unions, UP chairs continue to spend the majority of their dispute resolution time (14 hours on average) conducting *shalish*, and only 7 hours on VCs. The schedule of the person assigned primary responsibility to operate the VC is therefore a binding constraint: given the UP chairs' wide range of responsibilities, it is not reasonable to expect this elected official to spend even more time on dispute resolution than the 23 hours per week they already dedicate.

Shalish is therefore not only a substitute for VCs, but a direct – almost mutually-

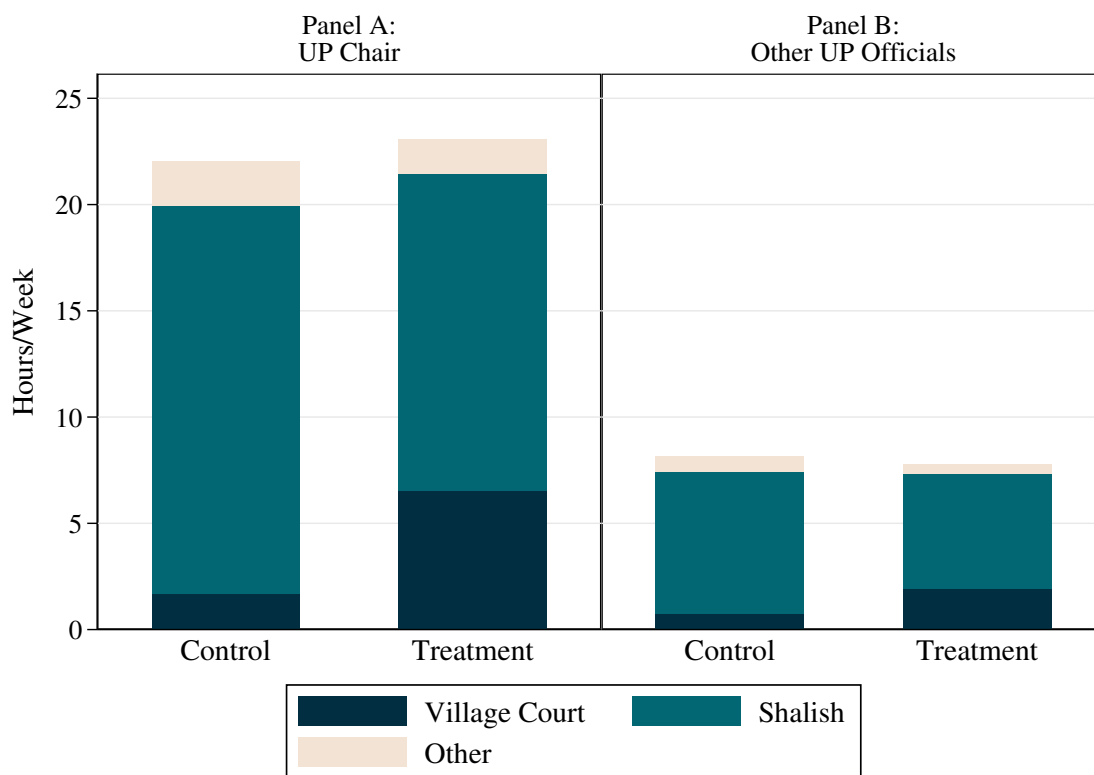
¹⁰VCs are perceived to make decisions that are fairer than those made by *shalish*. District Courts are perceived to provide slower, more costly, and less fair decisions compared to the other two DRMs.

exclusive – competitor to VCs, given the stringent competition for the UP chairs’ scarce time. *Shalish* continues to thrive and remain dominant in both control and treatment villages due to one key difference in how this informal institution is set up. Unlike VCs, *shalish* is not *solely* reliant on the UP chair. As shown in Appendix Figure A.2, a wider group of village leaders, including other elected UP officials or even influential businessmen, conduct *shalish*. Consistent with the observation that UP chairs spend less time conducting *shalish* in the treated unions, Appendix Figure A.2 shows that UP chairs conducted a smaller share of *shalish* in treatment unions.

Given the aggregate demand for dispute resolution in the community and the time it would take to handle all cases, it is simply not feasible to fully replace that decentralized, diffuse, informal system of justice with an institution that so heavily relies on a single elected official. We present a simple numerical example in Appendix B.2.4 to show that the UP chair simply would not have the time to handle all dispute resolution responsibilities currently shared by a group of village leaders. And if *shalish* remains dominant, then UP chairs evidently cannot dissociate themselves from that informal institution either, as shown in their time allocation data in Figure 4.

Some further evidence consistent with the UP chairs’ time being the binding constraint comes from the heterogeneity analysis reported in Appendix B.2.4 and Table A.11. If the chairs’ capacity is limited, we would expect activation efforts to be less successful in unions with larger populations where there are fewer UP officials per union resident. Indeed, VCs were less operational and less effective in larger unions. As union population size increases, the same amount of UP officials’ time is dedicated to VCs resulting in less time per capita. In unions with a larger population, the AVCB program has a smaller effect on the share of households aware of the VC being active and leads to a smaller percentage increase in the number of cases handled by VCs in the administrative data.

Figure 4: Time Spent on Dispute Resolution by UP Officials



Notes: This figure shows the average number of hours spent per week by the surveyed UP officials for each DRM. The UP officials interviewed in each union are the UP chair, two randomly selected UP members, one randomly selected UP member from the seats reserved for women, and the UP secretary. Panel A shows the results for UP chairs, while Panel B shows the results for all other UP officials.

4.2 Long-term vs. Short-term Results

A final possibility is that institutional change is slow, and we have not yet experienced the full potential of VCs in the data we collected **43 months** after the onset of the AVCB program. We find mixed evidence for this theory in our data. On the one hand, Appendix Figure [A.3](#) shows that there is no clear upward trend in the number of cases per union between 2019 and 2021. Furthermore, none of the two key constraints that we highlighted in Section [4.1](#) improved substantially between the midline survey

conducted in mid-2019 and the endline survey in January 2021. For the treatment union UP chairs surveyed in both surveys, the time spent on VC stayed constant at around 7 hours per week. Furthermore, the index measuring perceptions of the quality of dispute resolution in Appendix Table A.16, was approximately a quarter of a standard deviation lower for VC than for *shalish* in both the midline and endline surveys.

On the other hand, Table 1 shows that most of the effects of the AVCB program are substantially larger in the endline survey in January 2021 compared to the midline survey conducted in mid-2019. This suggests that the VCs had not reached their full potential by the midline survey. More data is needed to understand whether the progress will be sustained.

Table 1: Midline vs. Endline Effects on Share of Solved Disputes by DRM

	Households			Dispute		UP Administrative Data	
Panel A: Midline	(1) VC Active	(2) Hyp Disputes VC	(3) Hyp Disputes Shalish	(4) Solved VC	(5) Solved Shalish	(6) Documented Cases (IHS)	(7) % Protocols Followed
Treatment	0.087** (0.034)	0.028** (0.011)	-0.064** (0.027)	0.031 (0.034)	0.118 (0.085)	1.482*** (0.399)	0.405*** (0.053)
Observations	1,767	1,767	1,767	124	124	54	54
Clusters	89	89	89	59	59		
Control mean	0.175	0.043	0.728	0.020	0.640	2.874	0.197
Panel B: Endline	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Treatment	0.459*** (0.061)	0.188*** (0.036)	-0.128*** (0.039)	0.145*** (0.042)	-0.062 (0.083)	2.534*** (0.465)	0.494*** (0.050)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,766	1,766	1,766	501	501	54	54
Clusters	89	89	89	65	65		
Control mean	0.377	0.183	0.648	0.041	0.728	1.940	0.179

Notes: This table compares the midline vs endline results. The data only include households surveyed in both the midline and endline surveys. Standard errors are clustered at the UP level in the first four columns and robust standard errors are used in columns 5 and 6. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

5 Conclusion

The AVCB program was successful in activating new VCs. It led to an increase in the number of disputes resolved in the VCs and a decrease in the use of informal *shalish* (but not district courts), by moving both disputes and UP officials' time allocation away from *shalish* and into VCs. However, the move was only partial and *shalish* remains the main DRM even in treated areas. Given the limited scale of this change, we did not expect large changes to downstream outcomes and did not observe any such effects. The VCs did not decrease the pressure on the district courts, although this was an important stated goal of this project.

Our data point to three reasons for the limited use of VCs. First, households do not perceive VCs as having substantial benefits even though most measures of the quality of dispute resolution is better for disputes resolved in VC compared to those resolved by *shalish*. Second, the UP chair is capacity constrained, and cannot dedicate more time to VCs without reducing the time he allocates to *shalish*. This is evidently difficult given the continued popularity of *shalish*. This implies that for a decentralized local-level *formalized* DRM to become more functional, the government needs to allocate more human resource capacity. This might require more investment in support staff, or further decentralization of judicial power by enabling other UP members (beyond the chair) to run the VCs. Third, changing informal institutions takes a long-time and the full effect of the VCs may only become evident after more than the 3.5-year timespan of our data.

Our findings shed light on the more general problem of decentralizing responsibilities to local government. Even if it is administratively simple to devolve responsibilities, if local government capacity is limited, implementation quality is bound to fall short of the stated ideals.

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Appendix

A Additional Details on Experiment and Data

A.1 Additional Details on Household Surveys

For each household, only one household member was interviewed. Enumerators attempted to interview the household head, and if the household head was not available the surveyor came back to the household at a time when the household head would be available. If the household head was still not available, the most knowledgeable household member, above the age of 18, was interviewed. Households were paid BDT 100 (approximately USD 1.20) as compensation for their time.

Among the UP officials, we surveyed the UP Chair, the UP secretary, two randomly selected UP member, one randomly selected female UP member (from the seats reserved for women), and the VC assistant (if existing).

A.1.1 Definition and Measurement of Disputes

In the baseline household survey, we asked: “Please tell us whether you or anyone in your household has personally been the victim of any crime, accused of a crime or been involved in a dispute that is ongoing or that has been resolved in the past 2 years?”¹¹ The answer to this question formed the pre-existing disputes that were then asked about in the subsequent surveys.

In addition to asking about the disputes described at baseline, in the midline and endline surveys we also asked about any “new disputes” that had arisen between the baseline survey and the subsequent surveys. In the midline survey, we asked about

¹¹Enumerators were instructed to only include disputes severe enough that the household had used, or thought that it might need to use, a third party to resolve it.

any ongoing disputes or disputes that had been resolved within the past two years and in the endline survey we asked about any dispute that was ongoing or that had been resolved in the past year. The disputes reported in the endline survey may therefore be the same disputes as were described in the midline survey, as long as these were not resolved more than a year before the endline survey. This can explain the higher number of new disputes found in the endline survey as compared to the midline survey, which can be seen in Table 1.

In Appendix B.3 we cross-validate the different estimates of the number of disputes resolved by the UP chair in VC and in *shalish* against each other.

A.1.2 Hypothetical Disputes

To measure the effect of the AVCB program on where households plan to resolve future disputes we asked them about four hypothetical disputes. These disputes are common in rural Bangladesh and all of them fall within the jurisdiction of the VC. The four disputes are: 1) a BDT 10,000 loan not repaid, 2) a physical assault on a family member, so bad they need medical treatment, 3) an illegal occupation of land, and 4) an intentional damage to crop. For each household, we then construct a measure for what share of the four disputes the household state that it would solve in *shalish*, VC, and district court, as well as an “other” category for households stating that a different type of solution would be sought.

A.1.3 Subjective Perceptions

The survey elicited subjective perceptions of trust, harmony in the community, crime, disputes, and satisfaction with the justice system by asking the following questions:

- Trust: “How much do you trust each of the following types of people: relatives,

neighbours, other people you know”

- Harmony: “How much harmony or conflict exists between you and your 5 closest neighbours?”
- Crime: “Please rate how big of a problem crime is in your village?”
- Unresolved disputes: “Please rate how big of a problem unresolved disputes are in your village?”
- Satisfaction with the justice system: “Overall, how satisfied are you with the justice system that you have access to? (i.e. the justice system that you would turn to if something happened to you.)”

A.2 Details on the Baseline Control Variables

We control for baseline control variables in all of our main regressions. We follow the PAP in our choice of control variables except for the deviations mentioned in Appendix A.3. When possible, we control for the outcome variable at baseline in all of our regressions. In our analysis of household data we also control for household size, an indicator for any agricultural land ownership, the total area of land owned, years of education of the household head, distance to district court headquarters, and an indicator for if the household was involved in a dispute 2 years prior to the baseline. In our analysis of data from UP officials we control for fixed effects for the type of UP official, age, years of education, hours spent on dispute resolution at baseline, and the score on a knowledge quiz about VCs at baseline. For analysis carried out at the UP-level, we control for the UP population, the fraction of randomly selected households having had a dispute within 2 years prior to the baseline, distance to district headquarters, and region fixed effects.

A.3 Differences from the Pre-analysis Plan

Most of the main analysis is pre-specified in the PAP, including the regressions in Figures 1, 3, A.7, and A.8 and their corresponding appendix tables. Furthermore, the PAP includes the analysis in Appendix Figure A.9 and Appendix Tables A.2, A.8, and A.10. Following the PAP, for household- and dispute-level outcomes, we study heterogeneity in the treatment effects for the distance between the union and the district headquarters. For household-level outcomes, we also test for heterogeneity in the treatment effects by if the household had a dispute at baseline. We did not find any evidence of heterogeneous effects across these two dimensions.

A deviation from the PAP is that a round of endline data was collected. This data collection allows us to measure changes in the effects over time and it increases the overall precision of our results. Appendix Tables A.12 and A.13 show that the main results are similar when using only midline data.

The main empirical specification in Equation 1 follows the PAP except for the introduction of the $Survey_i$ variable, indicating if the data is from the endline survey. The $Survey_i$ variable was included as a result of the endline data collection and removing it does not qualitatively change the main results. We also pre-specified the use of the IHS transformation when variables contain observations with the value zero. We control for all variables in the vector X_i specified in the PAP, except for the distance to the UP complex, which we did not collect data on. Appendix Table A.14 specifies other minor deviations from the PAP.

B Additional Analysis

B.1 Survey Attrition

Appendix Table [A.2](#) shows that the attrition rate was 6% and similar in the treatment and control unions. The main reason for attrition was that the whole household had migrated, a less common reason for attrition was that despite several attempts the enumerators could not find any household member present at the address. In addition to these reasons, we had a small number of cases in which the household did not want to participate in the follow-up survey. Most of these cases were from two unions, one where a murder had taken place and another where a large-scale land dispute was ongoing, some households in these UPs were therefore uncomfortable speaking to our enumerators about disputes and conflicts.

B.2 Reasons for Low VC Usage

The AVCB program was successful in activating the VCs and as a result, more disputes are resolved in village courts, with a corresponding decrease in *shalish* cases. However, the vast majority of disputes continue to be resolved through *shalish*. In this section, we will explore four possibilities for why resolving disputes in VC did not become more widespread in the treated unions. We find evidence for one demand-side problem, that households do not perceive VCs to have any substantial benefits compared to *shalish*, and one supply-side problem, that UP chairs do not have sufficient time to resolve the majority of disputes via VC.

B.2.1 Small Benefits of VCs Compared to Other DRM

The first potential reason for the relatively low usage of VCs is that the benefits compared to other DRMs are small. Appendix Table A.15 shows descriptive differences between the characteristics of cases brought to VC, district courts, and *shalish*. These estimates do not have causal interpretations, because the type of cases brought to VC, district courts, and *shalish* are different. However, we believe that the correlations are still informative. Appendix Table A.15 Panel A shows that there are large differences in the dispute resolution provided by district courts compared to the two other DRMs. When a dispute is resolved in a district court the dispute resolution is more costly, it takes more time to reach a resolution, and the disputing parties have a worse relationship after the resolution is reached, compared to disputes solved either through *shalish* or in village courts. Post-resolution outcomes are also different. The users of district courts are less satisfied with both the process and the verdict. Using these measures we construct a quality of dispute resolution index, and disputes resolved in district courts have a 0.54 standard deviations lower quality of justice index as compared to *shalish*. Appendix Table A.15 Panel B shows that the differences are similar after controlling for household characteristics, union-fixed effects, and dispute-type fixed effects.

The differences between *shalish* and VC are less stark, but disputes that are resolved in VCs are less costly and take less time to get resolved. The disputing parties also have better relationships after having resolved the dispute and have higher levels of satisfaction with both the process and verdict. Overall, disputes resolved in VCs have a 0.14 standard deviations higher quality of justice index as compared to *shalish*. Appendix Table A.15 Panel B shows that the differences decrease after controlling for household characteristics, union-fixed effects, and dispute-type fixed effects, but

the quality of justice index is still 0.10 standard deviations higher for VC compared to *shalish*.

These results suggest that VCs do provide some benefits to the users as compared to the other DRMs available. Thus, it is unlikely that a complete lack of benefits is the reason for the limited usage of VCs.

B.2.2 Small *Perceived* Benefits of VCs Compared to Other DRM

Even though there may be some actual benefits to using the VC to resolve disputes, as suggested by Appendix Table A.15, it is not necessary that the population perceive the VCs as having any benefits compared to the other DRMs. To investigate this hypothesis we analyze households in the treatment unions' responses to survey questions asking them to rate the three main DRM along four dimensions: the fairness of the decisions, how well the decisions are enforced, how expensive it is to use the DRM, and how long it takes to get a decision. Appendix Figure A.10 shows the distributions of responses to the questions for *Shalish*, VC, and District Courts. Appendix Table A.16 analyzes these perceptions using regressions with data at the household by DRMs level, where *shalish* is used as the comparison group. Consistent with the experiences of those who have actually used the DRMs, District Courts are perceived as substantially less fair, more costly, and slower, than both VC and *Shalish*. The only dimension where there is no substantial difference between District Courts and the other two DRMs is in how well it enforces decisions. However, the vast majority of respondents think that all three DRMs can enforce their decisions either "completely successfully" or "fairly good".

The differences in the perceptions between VC and *shalish* are much smaller and which is viewed more favorably depends on which dimension of the quality of dispute resolution is asked about. For the fairness of the decision, VCs are perceived as

slightly fairer than *shalish*. For the speed of decision-making and the cost of using the DRMs, solving disputes by *shalish* is perceived as faster and less expensive, while there are no substantial differences in perceptions of the efficiency of enforcement.

When aggregating the perceptions into an index for the perceptions of the quality of justice, *shalish* has an index score that is 0.22 standard deviations higher than the score for VCs and 0.79 standard deviations higher than that for District Courts. This suggests that low perceived benefits compared to *shalish* is one of the reasons why not more individuals use VCs when resolving their disputes.

B.2.3 Bias Towards Households Close to the UP Chair

A potential reason for the low usage of VCs is that the VCs could be biased against households that do not have a close enough relationship with the UP chair, and most households don't. Appendix Figure [A.9](#) investigates if there are heterogeneous effects for those who are close to the UP chair. We create an index of UP chair closeness by combining two questions that ask households whether they are close to the UP chair and whether they think the UP chair would help them if they needed help. Interacting the index with the treatment variable we find that the effect of the treatment in terms of answering that a VC was active in one's union is 4.9% percentage points higher among households one standard deviation closer to the UP chair. However, we do not find any evidence for differential effects either in terms of hypothetical and actual VC usage, or in terms of the effect on satisfaction with the justice system, the perceived severity of unresolved disputes, the perceived severity of crime, and the feelings of trust and harmony among neighbors. Thus, we do not find evidence for a bias in the VCs making them more useful for the households closer to the UP chair.

B.2.4 UP Officials' Capacity

The final potential reason why more cases are not resolved in VCs is that UP officials simply do not have the capacity to handle more cases. UPs are responsible for a wide range of activities such as implementing welfare programs and development schemes, maintaining law and order, managing public property, updating administrative records, and raising government revenue. UPs are under-staffed (Khan, 2016). Ehsan (2021) and Islam (2019) specifically highlight the lack of administrative capacity limiting VCs' effectiveness. The AVCB program tried to address this problem by hiring VC assistants, but it is possible that their assistance was insufficient.

If the UP official's capacity was a limiting factor in the activation of the VCs, we would expect activation efforts to be less successful in unions with larger populations where there are fewer UP officials per union resident. Appendix Table A.11 shows that VCs were indeed less functional in larger unions. As union population size increases, the number of hours spent by UP officials on resolving cases in VC did not increase. This means that the effect of the AVCB program on the number of UP officials' VC work hours per capita is smaller in unions with larger populations. In unions with a larger population, the AVCB program had a smaller effect on the share of the population who knew about the VC and the AVCB program led to a smaller percentage increase in the number of cases recorded in the UP administrative data.

In particular, the VC is heavily reliant on the UP chair's time, so the UP chair time allocation data is informative. Figure 4 shows that the UP chair spends on average 23 hours per week (median is 18) on dispute resolution in treatment villages, of which 6.5 are spent on VC and 14 are spent on conducting *shalish*.¹² There is not

¹²Hours spent are simply stated by the UP officials and should therefore be interpreted carefully. However, Appendix Section B.3 validates the number of disputes solved stated by the UP officials against the household survey and administrative data and finds that the number of hours spent is plausible given the number of disputes resolved.

much room for the total number of hours allocated to dispute resolution to increase, so the only way to give more attention to VCs is to take away hours from *shalish* involvement. The informal institution of *shalish* is therefore both a substitute and a limiting factor for VC operations.

It is possible that low demand for dispute resolution in VC from citizens is the reason why UP chairs spend only about one-third of the time they commit to dispute resolution on the VCs, while they spend approximately two-thirds of this time on *shalish*. If this was the case, then the UP chairs' time spent on VC could increase with higher demand for dispute resolution via VC, and thus the UP chairs' time may not be a binding constraint on VC usage. However, the simple numerical example below shows that it is not plausible for UP chairs to increase their time spent on VCs to the point where VCs become the dominant DRM.

Assume that UP chairs in the treatment unions freed up time to double the number of hours spent on VCs by halving the number of hours they spent on conducting *shalish*. Further, assume that this doubling of labor input would also double the number of disputes solved in VC, bringing VC share of total disputes solved from 12% to 24%. Then assume that all of the disputes now resolved in VCs would have otherwise been resolved by conducting *shalish*. This would bring the share of total disputes resolved in *shalish* down from 63% to 51% of disputes. Thus, even after a halving of time spent conducting *shalish* and a doubling of the time spent on VC, *shalish* would still resolve more than twice as many disputes as the number of disputes resolved by VCs. It is not realistic to imagine that VCs could completely eliminate UP chairs' *shalish* responsibilities since there are still many cases that cannot be resolved in VCs due to VCs' limited jurisdiction and there are strong social norms that the UP chair should be available to perform *shalish* when that is demanded by the citizens of the union.

The key difference between VCs and *shalish* in terms of the capacity of the leaders conducting the two DRMs is that only the UP chair is allowed to manage the VC while a wider range of village leaders are able to conduct *shalish*. Figure A.2 shows that UP chairs are only involved in about a quarter of the dispute resolution via *shalish*, instead the 12 elected members of the UP and other leaders such as influential landowners and businessmen are involved in larger shares of the dispute resolution done by *shalish*. Thus, transferring all of the dispute resolution conducted via *shalish* to VCs would transfer the labor done by a group of village leaders onto just one person, which is not feasible.

B.3 Validating Disputes Solved Between Datasets

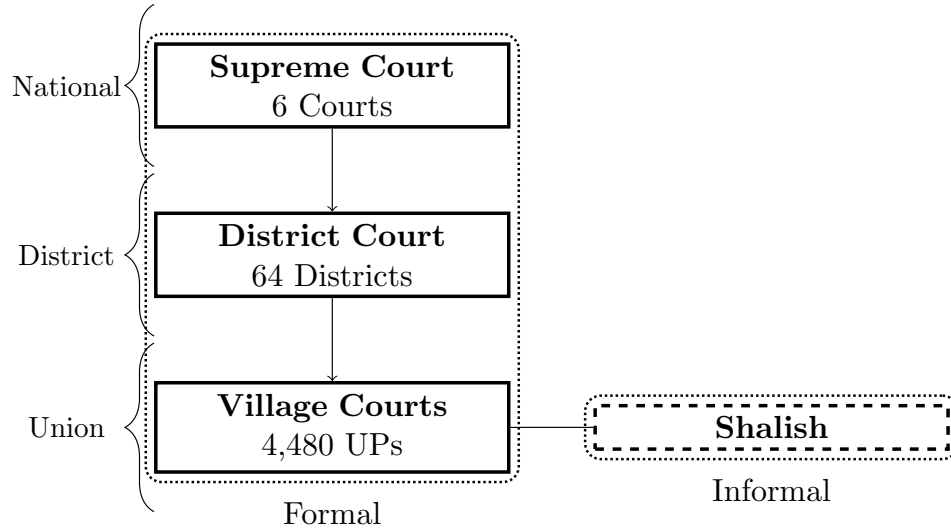
We have information on the number of cases solved in VCs from three sources: the household surveys, the surveys with UP chairs, and the AVCB program’s monitoring data. Using the household data from treatment unions, and reweighing it taking into account that we oversampled households with disputes, we estimate that the average number of cases resolved in each VC per week is 1.46. Using the statements made by the UP chairs about the number of cases they resolved in VC in the past 3 months (shown in Appendix Figure A.6), the average number of cases per week is 0.92. Finally, using the AVCB program’s monitoring data (shown in Appendix Figure A.3) the average number of cases resolved per week is 0.90.

Comparing these figures to the time that UP chairs in treatment unions state that they spend on resolving disputes in VC each week (shown in Figure 4), implies that it takes a UP chair approximately 4.77 to 4.64 hours to solve one dispute in VC. This is plausible as each dispute requires several interactions between the UP chair and the defendant and the plaintiff.

Similarly, we can use the household survey data to estimate the number of disputes where a shalish was done and the UP chair was involved. We estimate this to be 1.82 disputes per week, which is similar to the 1.5 disputes implied by the UP chairs' stated number of disputes resolved in the past 3 months. The time spent per week stated by the UP chairs implies that solving a dispute using shalish takes approximately 9.06 hours. Again, we find this plausible.

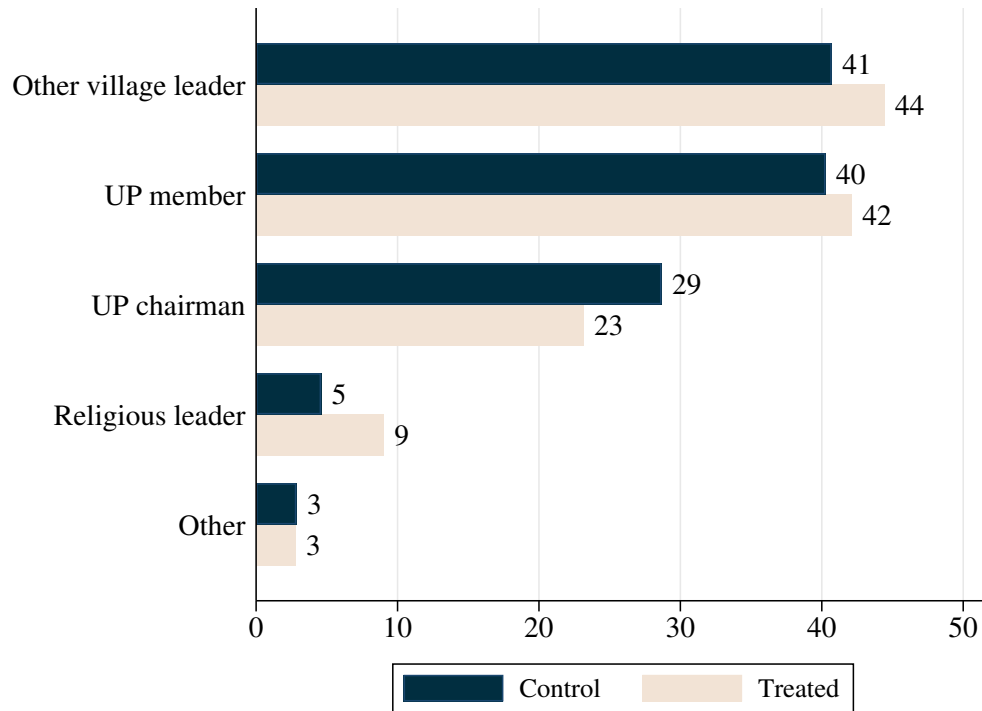
C Additional Figures and Tables

Figure A.1: Overview of the Justice System



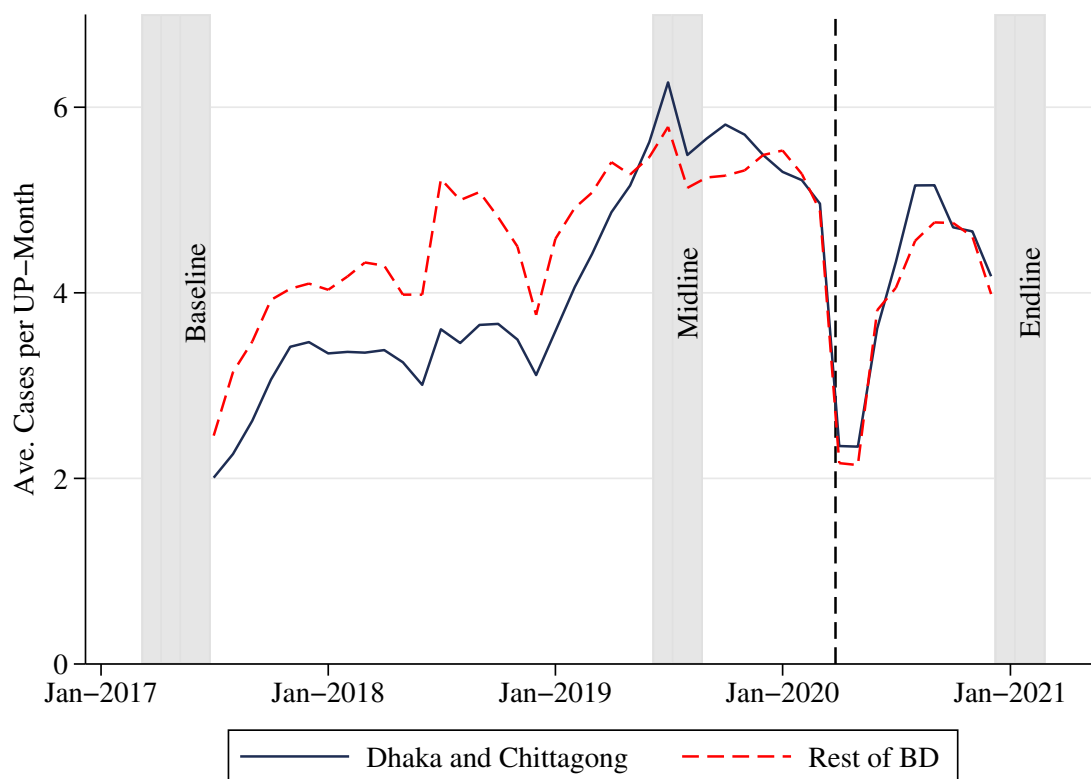
Notes: This figure provides an overview of the justice system in Bangladesh. Discussed in Section 2. Source: [Justice Audit Bangladesh \(2018\)](#)

Figure A.2: Share of *Shalish* Performed by Position of Leader (%)



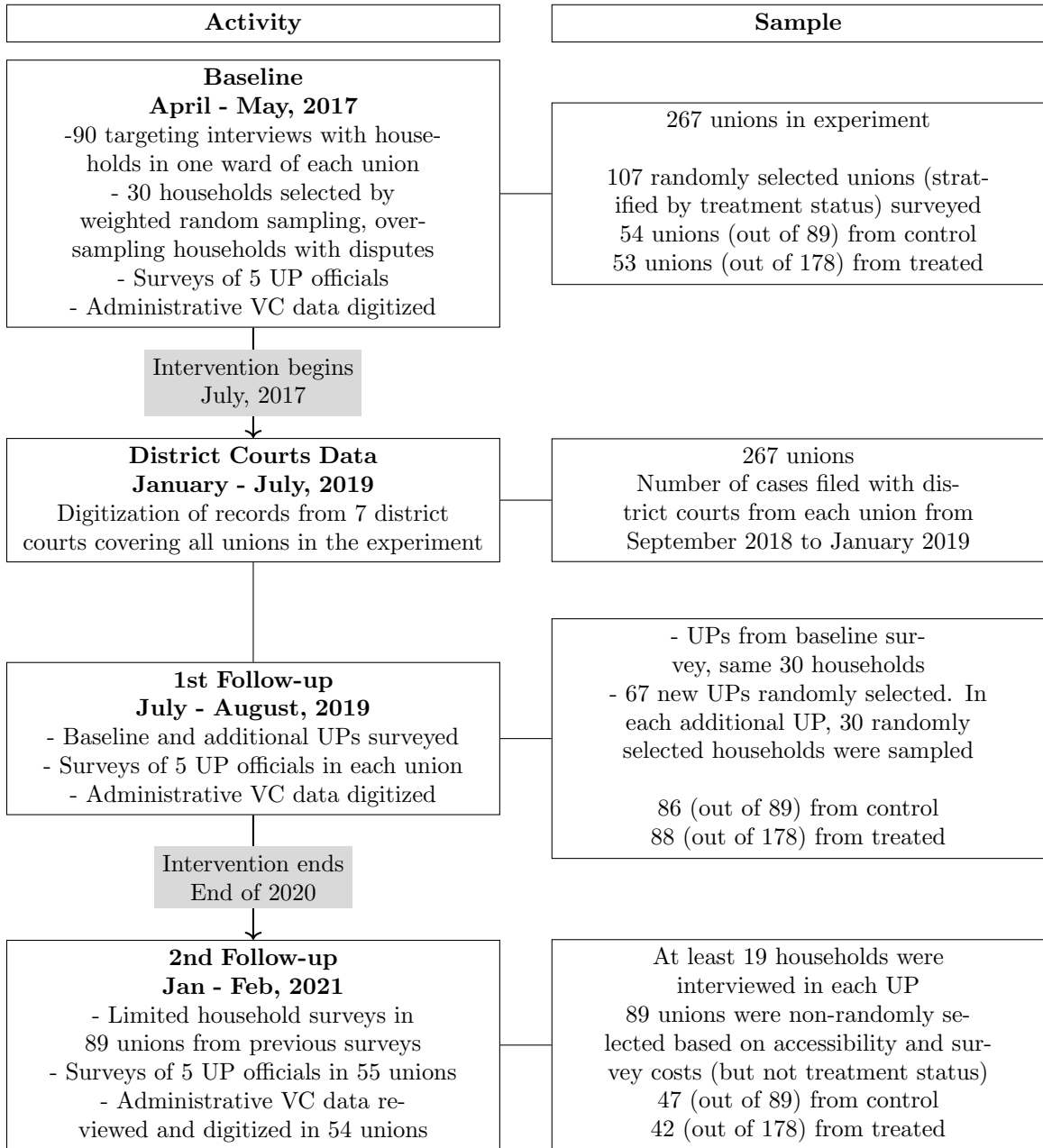
Notes: This figure shows which leaders conducted the *shalish*, separately for control and treatment unions, among the 889 cases resolved in *shalish* in our household survey data. For each case resolved in *shalish* the respondent could list the leaders that conducted the *shalish*, as several leaders can conduct a *shalish* jointly the percentages add up to more than 100%. Examples of "Other village leaders" are businessmen and landowners. Examples of "Others" are authorities from outside the village such as police officers.

Figure A.3: Cases per Union Over Time, AVCB Monitoring Data



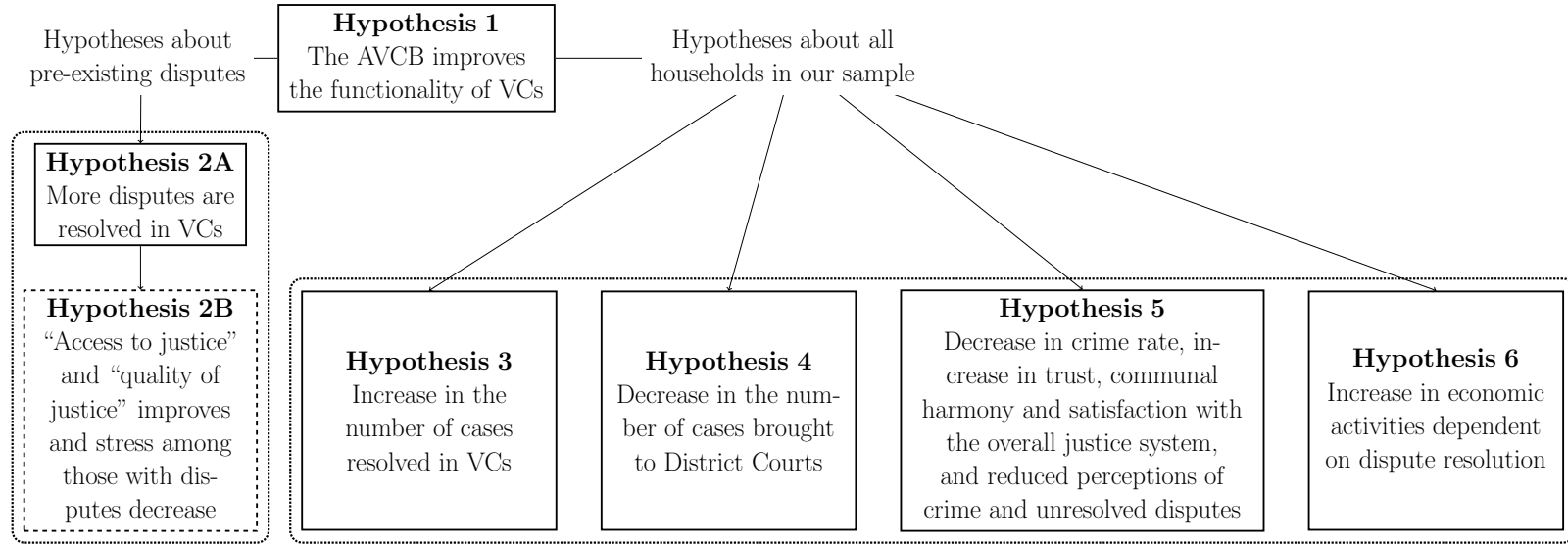
Notes: This figure shows the number of cases that were brought to VCs in unions receiving the AVCB program, as reported by the UPs to the AVCB monitoring system. The blue solid line shows the average for Dhaka and Chittagong, where the experiment took place, while the red dashed line shows the average for the six other divisions in Bangladesh. The gray areas show when our surveys took place in the experiment area. Discussed in Section 4.2.

Figure A.4: Timeline of Data Collection



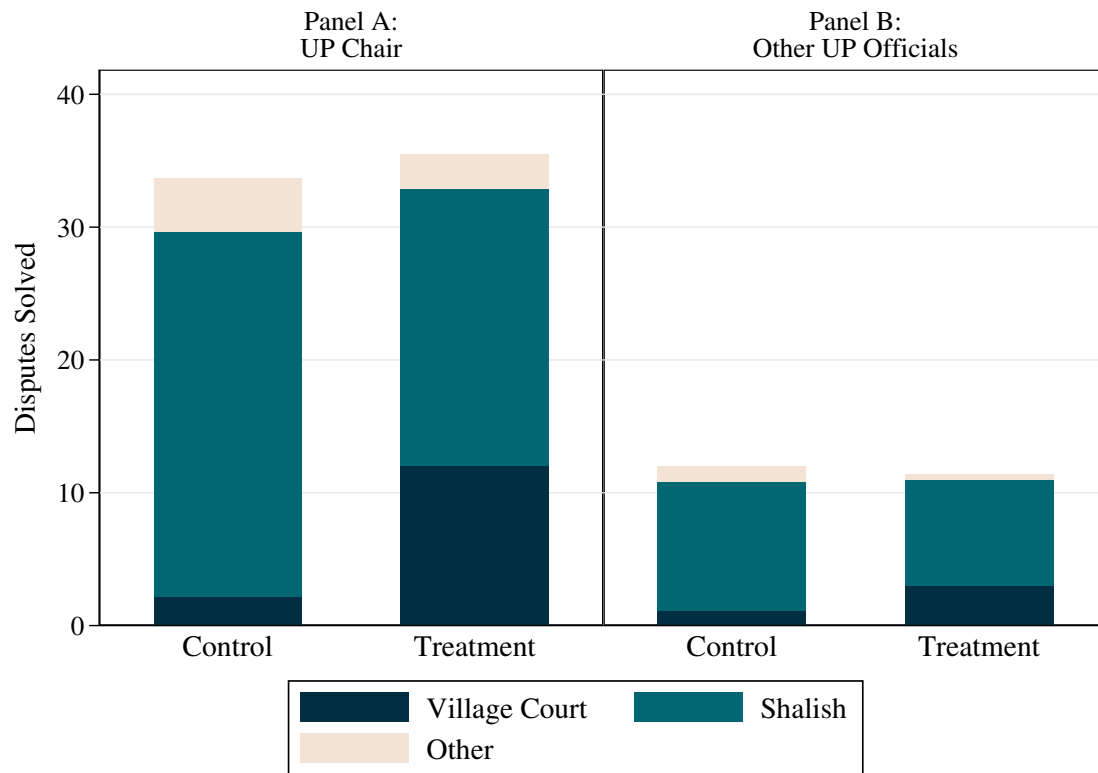
Notes: This figure shows a timeline of the data collection activities and the experimental intervention.

Figure A.5: Sequence of Analysis



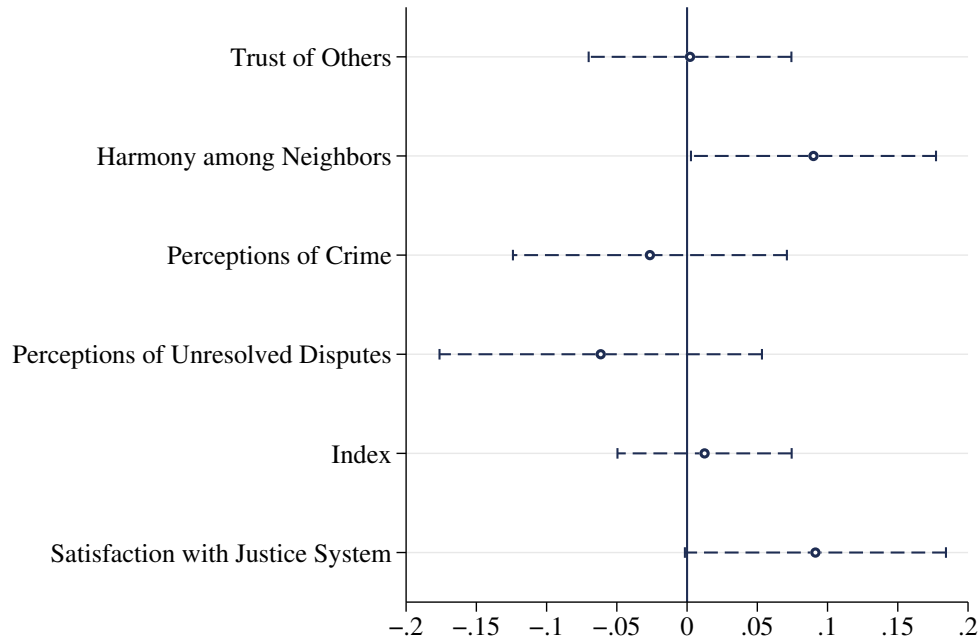
Notes: This figure shows the sequence of analysis used in this paper. Hypotheses were tested sequentially, if we did not find evidence for a step in the causal chain we did not continue to explore other hypotheses further down the causal chain. As we did not find evidence in favor of Hypothesis 2a, we did not test Hypothesis 2b.

Figure A.6: Number of Disputes Resolved by Other Officials



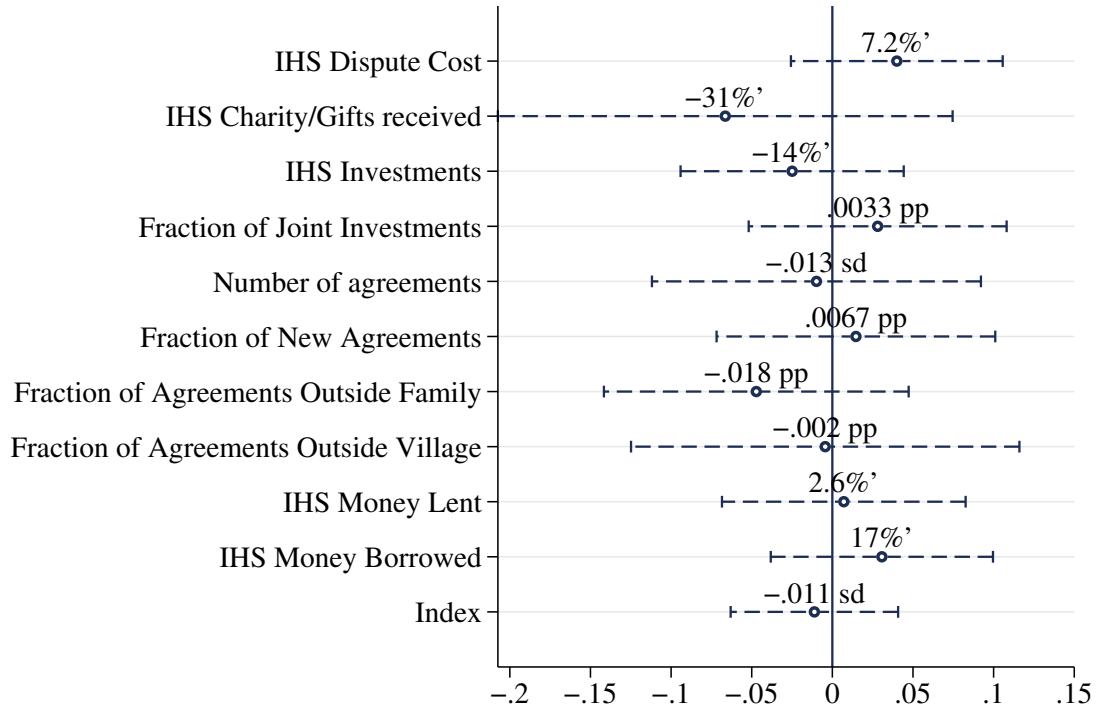
Notes: This figure shows the average number of cases solved in the past 3 months before the survey by the surveyed UP officials for each DRM. The UP officials interviewed in each union are the UP chair, two randomly selected UP members, one randomly selected UP member from the seats reserved for women, and the UP secretary. Panel A shows the results for UP chairs, while Panel B shows the results for all other UP officials.

Figure A.7: Effects on Satisfaction and Perceptions



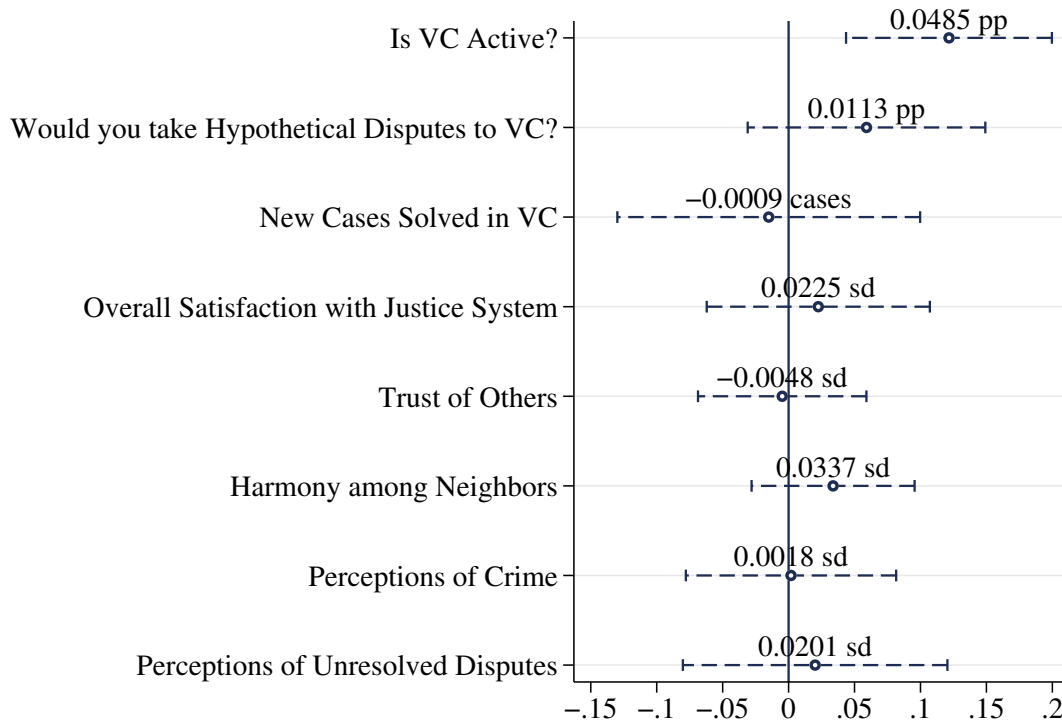
Notes: This figure shows the effect of the AVCB program on subjective measures of trust, harmony, crime, unresolved disputes, and satisfaction with the justice system. Outcome variables are constructed from 5-point scale questions and then transformed into an index with a mean of zero and a standard deviation of one in the control group. Higher values indicate better outcomes, e.g. that crimes and disputes are less serious problems. See Appendix [A.1.3](#) for the exact phrasing of the questions. Data on satisfaction with the justice system was only collected in 2019 and is therefore not part of the aggregate index. 95% confidence intervals are constructed using standard errors clustered at the union level. These results are shown in Appendix Table [A.17](#).

Figure A.8: Effects on Economic Activity



Notes: This figure shows the effect of the AVCB program on economic outcomes at the household level. Each point is a coefficient from a regression where the outcome variable is standardized to have a mean of zero and a standard deviation of one in the control group. The number shown next to each point is the effect on the outcome variable in its natural units. IHS points are denoted %'. IHS Dispute Costs and IHS Charity are not included in the index these variables do not represent an economic activity dependent on dispute resolution or contract enforcement. See Appendix Table A.18 for the regression table.

Figure A.9: Treatment Effects by UP Chair Closeness



Notes: This figure shows the heterogeneity in the effect of the AVCB program by the household's closeness to the UP chair. The coefficients are from regressions where the treatment variable is interacted with an index for how close the household reported to be to the UP chair at baseline. The coefficients are the difference in the effect of the AVCB program associated with a one standard deviation increase in the closeness-to-UP-chair index. All outcome variables are coded so that a higher value represents a more VC activity or a better outcome. 95% confidence intervals are constructed using standard errors clustered at the union level.

Figure A.10: Perceptions of DRM

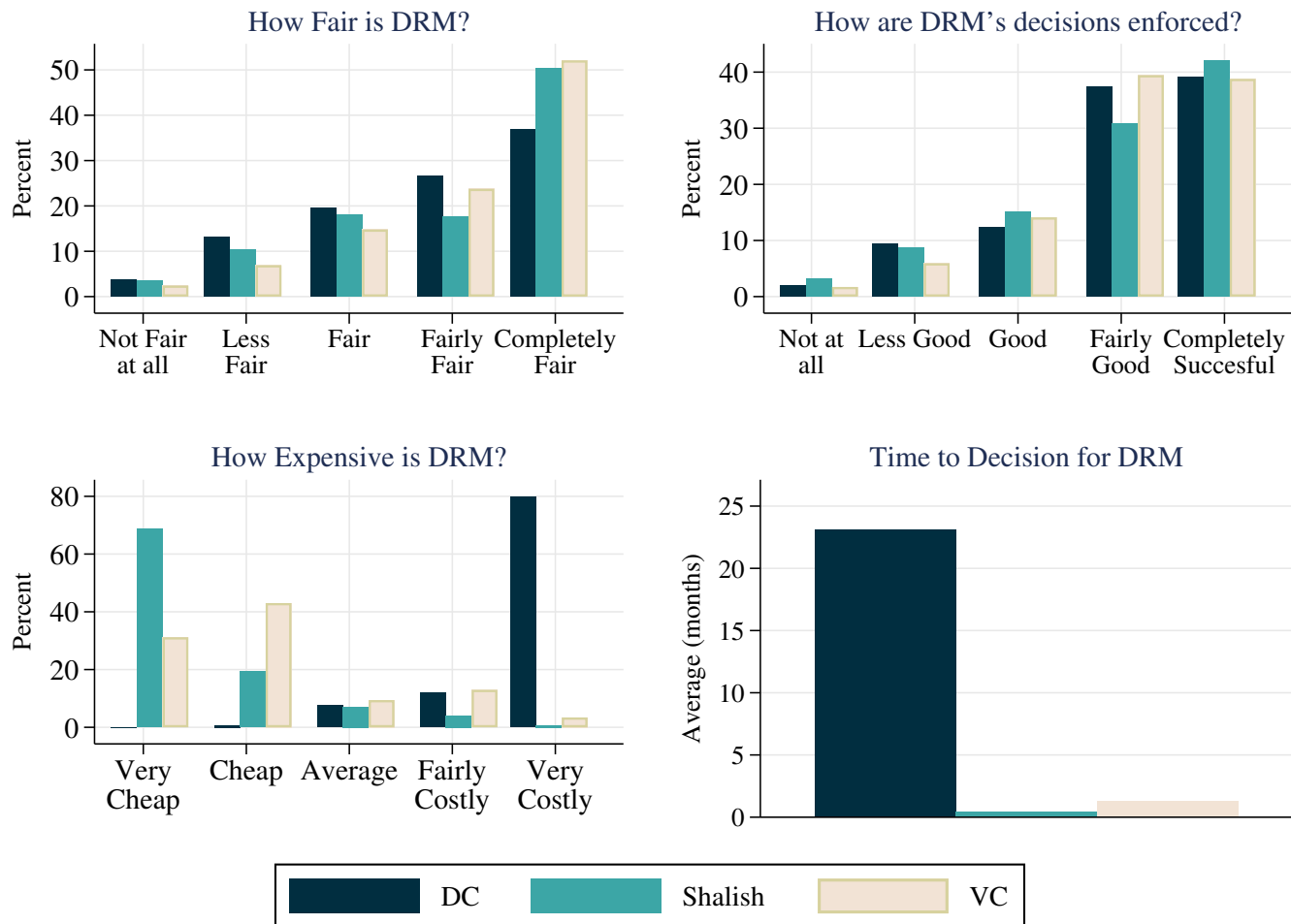


Table A.1: Balance of Randomization

	Treated		Control		Difference
	Obs. (Cluster)	Mean (SD)	Obs. (Cluster)	Mean (SD)	Diff. (SE)
Panel A. DC Admin Data					
Documented Cases	53 (53)	3.44 (1.78)	52 (52)	3.79 (1.59)	-0.353 (0.33)
VC documentation protocols followed (%)	53 (53)	0.31 (0.23)	52 (52)	0.34 (0.22)	-0.025 (0.04)
Panel B. District Court Data					
Number of cases brought to DC	178 (178)	0.96 (0.21)	89 (89)	0.90 (0.30)	0.056 (0.04)
Cases brought to DC in VC jurisdiction	178 (178)	0.21 (0.41)	89 (89)	0.17 (0.38)	0.039 (0.05)
Panel C. UP Data					
Union population	53 (53)	5,878.28 (3,312.21)	54 (54)	6,305.83 (2,923.54)	-427.55 (604.37)
Fraction of HH having dispute	53 (53)	0.16 (0.08)	54 (54)	0.16 (0.10)	0.00 (0.02)
Fraction of forms used	53 (53)	0.07 (0.14)	54 (54)	0.08 (0.09)	-0.01 (0.02)
Average test score chair	53 (53)	0.12 (0.05)	54 (54)	0.13 (0.05)	-0.01 (0.01)
Average test score not chair	53 (53)	0.29 (0.11)	54 (54)	0.29 (0.09)	-0.00 (0.02)
Panel D. Household Data					
Average household age	1,588 (53)	28.37 (9.22)	1,618 (54)	28.77 (9.39)	-0.40 (0.53)
Number of household members	1,588 (53)	5.46 (2.34)	1,618 (54)	5.50 (2.22)	-0.04 (0.13)
Per capita income (log)	1,542 (53)	10.26 (1.05)	1,570 (54)	10.22 (1.00)	0.04 (0.06)
Is there a functional VC in UP?	1,588 (53)	0.07 (0.25)	1,618 (54)	0.08 (0.28)	-0.01 (0.02)
Out of 4 hypothetical disputes, number resolved in VC	1,588 (53)	0.05 (0.35)	1,618 (54)	0.05 (0.32)	0.00 (0.02)
Total disputes (past 2 years)	1,588 (53)	0.49 (0.71)	1,618 (54)	0.51 (0.74)	-0.02 (0.05)
Disp. solved in Shalish (past 2 years)	1,588	0.11	1,618	0.11	-0.00

Table A.1 – Balance of Randomization (continued)

	Treated		Control		Difference
	Obs. (Cluster)	Mean (SD)	Obs. (Cluster)	Mean (SD)	Diff. (SE)
	(53)	(0.34)	(54)	(0.35)	(0.02)
Disp. solved in DC (past 2 years)	1,588	0.04	1,618	0.03	0.01
	(53)	(0.20)	(54)	(0.18)	(0.01)
Disp. solved in VC (past 2 years)	1,588	0.00	1,618	0.00	-0.00
	(53)	(0.05)	(54)	(0.06)	(0.00)
Disp. solved in other ways (past 2 years)	1,588	0.04	1,618	0.02	0.02**
	(53)	(0.20)	(54)	(0.14)	(0.01)
Number of unresolved disputes	1,588	0.30	1,618	0.35	-0.05
	(53)	(0.59)	(54)	(0.63)	(0.04)
Total cost of dispute resolution (past 2 years)	1,588	2,306.75	1,618	3,073.53	-766.78
	(53)	(9,988.18)	(54)	(13,367.24)	(504.25)
Has been the victim of a crime (past 2 years)	1,588	0.22	1,618	0.25	-0.03
	(53)	(0.41)	(54)	(0.44)	(0.02)
Total amount of investment (last year)	1,588	38,685.67	1,618	39,519.68	-834.01
	(53)	(128098.12)	(54)	(124115.19)	(5,077.91)
Amount invested jointly with someone else	1,588	143.58	1,618	262.05	-118.48*
	(53)	(1,473.41)	(54)	(1,991.77)	(61.87)
Total outstanding amount lent	1,588	4,180.73	1,618	3,958.16	222.57
	(53)	(19,526.87)	(54)	(19,479.25)	(760.31)
Total current debt	1,588	46,659.38	1,618	46,898.90	-239.51
	(53)	(95,218.76)	(54)	(98,841.37)	(4,593.23)
Satisfaction with justice system (1 to 5)	1,562	2.24	1,599	2.28	-0.03
	(53)	(0.78)	(54)	(0.77)	(0.05)
Satisfaction with VC chair (1 to 5)	1,588	3.70	1,618	3.63	0.07
	(53)	(1.11)	(54)	(1.12)	(0.09)

Notes: This table reports the balance of randomization between the treatment and control unions in the baseline data. We test the difference using t-tests of the differences in the means across the groups. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table A.2: Effects on Attrition from the Survey

	(1)	(2)
	Attrition	Attrition
Treatment	-0.0077 (0.0096)	-0.0087 (0.0094)
Controls	No	Yes
Observations	5,064	5,064
Clusters	107	107
Control mean	0.062	0.062

Notes: This table shows the effect of the AVCB program on attrition from the household survey from the baseline survey to the midline and endline surveys. The dependent variable indicates the attrition: whether the household from the baseline survey was not surveyed in the midline survey. The household either did not give consent in the midline survey or the household was not found. Standard errors clustered at the union level in parenthesis. ***p<0.01; **p<0.05; *p<0.1.

Table A.3: Effects on VC Functionality

	Households			UP Officials			UP Administrative Data		
	(1) VC Active	(2) Hypothetical Disputes (0-1)	(3) Index (HH)	(4) Hours Spent VC	(5) VC Knowledge Score	(6) Index (UP)	(7) Documented Cases	(8) Prop Protocols Followed	(9) Index (Admin)
Treatment	0.237*** (0.023)	0.075*** (0.011)	0.578*** (0.059)	1.854*** (0.246)	0.875*** (0.068)	0.878*** (0.068)	1.630*** (0.225)	0.413*** (0.025)	1.876*** (0.147)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,830	6,830	6,830	849	849	849	228	228	228
Clusters	174	174	174	174	174	174	174	174	174
Control mean	0.199	0.074	-0.000	1.198	-0.011	-0.008	2.845	0.227	-0.000

Notes: This table reports the impact of the AVCB program on VC functionality. Columns (1)-(3) use household-level outcomes, columns (4)-(6) use outcomes at the UP official level, columns (7)-(9) use outcomes from the UP administrative data. Results are also shown in Figure 1.

Table A.4: Effect on DRM Used to Solve Pre-Existing Disputes

	(1) VC	(2) Shalish	(3) DC	(4) Police	(5) Other
Treatment	-0.004 (0.016)	-0.092* (0.048)	0.094 (0.058)	0.001 (0.018)	-0.019 (0.036)
Controls	Yes	Yes	Yes	Yes	Yes
Observations	582	582	582	582	582
Clusters	101	101	101	101	101
Control mean	0.032	0.547	0.260	0.045	0.116

Notes: This table shows the effect of the AVCB program on where disputes that existed at baseline were resolved, conditional on them being reported as resolved either in the midline or endline survey.

Table A.5: Effects on Share of Solved Disputes by each DRM

	(1) VC	(2) Shalish	(3) DC	(4) Police	(5) Other
Treatment	0.092*** (0.024)	-0.066 (0.045)	0.018 (0.017)	-0.029** (0.014)	-0.016 (0.040)
Controls	Yes	Yes	Yes	Yes	Yes
Observations	976	976	976	976	976
Clusters	168	168	168	168	168
Control mean	0.026	0.688	0.057	0.063	0.166

Notes: This table shows the effect of the AVCB program on the share of solved disputes by the institution in which they were solved. Each observation is a solved dispute. Standard errors clustered at the union level in parenthesis. ***p<0.01; **p<0.05; *p<0.1.

Table A.6: Effect on Where Hypothetical Disputes Would be Resolved

	(1)	(2)	(3)	(4)
	VC	Shalish	DC	Other
Treatment	0.075*** (0.011)	-0.068*** (0.020)	-0.012** (0.006)	0.005 (0.014)
Controls	Yes	Yes	Yes	Yes
Observations	6,830	6,830	6,830	6,830
Clusters	174	174	174	174
Control mean	0.074	0.719	0.068	0.138

Notes: This table shows the effect of the AVCB program on where households state that hypothetical disputes would be resolved if they occur. See Appendix Section A.1.2 for more information on the four hypothetical disputes. Standard errors clustered at the union level in parenthesis. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table A.7: Effects on the Number of Disputes Solved by each DRM

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	New Disputes	Sought DRM	Solved	VC	Shalish	DC	Police	Other
Treatment	0.041* (0.022)	0.026** (0.012)	0.026 (0.017)	0.015*** (0.004)	0.009 (0.014)	0.004* (0.002)	-0.002 (0.002)	0.001 (0.006)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,125	7,125	7,125	7,125	7,125	7,125	7,125	7,125
Clusters	174	174	174	174	174	174	174	174
Control mean	0.231	0.132	0.127	0.003	0.087	0.007	0.008	0.021

Notes: This table shows the effect of the AVCB program on the number of disputes per household by the institution in which they were solved. Column (1) shows the total number of disputes that emerged after the baseline survey. Column (2) shows the number of these disputes that were resolved. Columns (3)-(7) shows the number of disputes resolved separately for each DRM. Standard errors clustered at the union level in parenthesis. The results are also shown in Figure 3. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table A.8: Number of Cases Received by District Courts

	(1)	(2)
	IHS Cases	IHS VC Jurisdiction
Treatment	0.032 (0.089)	-0.008 (0.118)
Controls	Yes	Yes
Observations	267	267
Control mean	33.1	4.8

Notes: This table shows the effect of the AVCB program on the number of cases received by district courts from the unions in the treatment and control groups. Data is digitized administrative data from the 7 district courts covering the experimental area, aggregated at the union level. Heteroscedasticity robust standard errors in parenthesis. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table A.9: Descriptive Statistics of Disputes by DRM

	Average			Difference in Means	
	(1) VC	(2) Shalish	(3) DC	(4) VC-Shalish	(5) VC-DC
Loss from dispute (thousands)	146.24 (451.59)	111.83 (335.80)	413.16 (701.54)	34.41 (43.00)	-266.92*** (48.84)
Number of DRM before main	0.67 (0.65)	0.23 (0.50)	0.67 (0.70)	0.43* (0.19)	-0.00 (0.19)
Disp. Type: Family Affairs	5.08 (22.06)	4.99 (21.78)	4.48 (20.69)	0.10 (2.12)	0.61 (2.15)
Disp. Type: Financial	9.32 (29.20)	8.26 (27.54)	10.37 (30.50)	1.06 (2.80)	-1.04 (2.88)
Disp. Type: Financial issue	2.54 (15.81)	2.03 (14.10)	0.47 (6.85)	0.52 (1.51)	2.07 (1.47)
Disp. Type: Land	41.53 (49.49)	34.68 (47.62)	57.24 (49.50)	6.84 (4.75)	-15.72** (4.86)
Disp. Type: Other	0.85 (9.21)	1.01 (10.02)	4.00 (19.62)	-0.17 (0.89)	-3.16** (1.08)
Disp. Type: Threat/Harrasment	25.42 (43.73)	34.29 (47.49)	4.24 (20.16)	-8.87* (4.24)	21.18*** (4.08)
Disp. Type: Violence	15.25 (36.11)	14.73 (35.46)	19.20 (39.41)	0.52 (3.47)	-3.94 (3.59)
Observations	118	1283	849	1401	967

Notes: This table includes data from old and new disputes from the mid-line and endline survey. Columns (1) to (3) report respectively the empirical mean of the variables for disputes that sought resolution in Village Courts, *shalish*, and District Courts; columns (4) and (5) report a t-test of difference in means across cases brought to village courts with respect to cases brought to Shalish and District courts, respectively. The institution for ongoing disputes comes from the last institution where a solution was sought. Loss from dispute represents the monetary BDT (in thousands) that was loss due to the committed crime/dispute, this variable was winsorized at the 99% level. Dispute type indicate the percentage of disputes of such nature.

Table A.10: The Effect on Perceptions of the UP Chair

	(1)	(2)
	Chair perception	Closeness to Chair
Treatment	0.000 (0.048)	-0.031 (0.045)
Controls	Yes	Yes
Observations	6,556	6,830
Clusters	174	174
Control mean	-0.000	-0.000

Notes: This table shows the effect of the AVCB program on households' opinions about the UP Chair. The two outcome variables are 5-point scales transformed into indices with mean zero and standard deviation one in the control group. Column (1) shows the effect on the responses to the question "Do you think the UP chair has done a good job of looking after the needs of your village?". Column (2) shows the effect on an index based on the questions "How well would you say you know the UP chair?", "If you had a problem and you brought it up with the UP chair, to what degree do you think he/she would try to help you?", and "Do you think the UP chair has done a good job looking after your personal needs?". Standard errors clustered at the union level in parenthesis. ***p<0.01; **p<0.05; *p<0.1.

Table A.11: Heterogeneity Analysis: Differential Effects by UP Population

	Households		Dispute	UP Officials		UP Administrative Data	
	(1) VC Active	(2) Hypothetical Disputes (0-1)	(3) Share Solved VC	(4) Hours Spent VC	(5) VC Knowledge Score	(6) Documented Cases	(7) Prop. Protocols Followed
Treatment	0.381*** (0.041)	0.093*** (0.024)	0.063 (0.040)	2.242*** (0.428)	0.978*** (0.150)	3.485*** (0.493)	0.487*** (0.060)
Households (Thousands)	0.019*** (0.006)	0.005 (0.003)	-0.001 (0.002)	0.091* (0.054)	0.049** (0.019)	0.327*** (0.081)	0.018** (0.009)
Households*Treatment	-0.026*** (0.007)	-0.004 (0.004)	0.005 (0.007)	-0.072 (0.077)	-0.018 (0.022)	-0.341*** (0.081)	-0.013 (0.010)
Observations	6,831	6,831	976	849	849	228	228
Clusters	174	174	168	174	174	174	174
Control mean	0.199	0.074	0.026	1.198	-0.011	2.845	0.227
Effect difference 75th-25th perc.	-0.059	-0.008	0.013	-0.142	-0.036	-0.683	-0.027

Notes: The table above reports the heterogeneity analysis of the AVCB program on a range of outcomes related to village courts' functionality and usage. The "Households" variable refers to the number of households in the union as per the 2011 Bangladesh census. In columns (1)-(2) each observation is a response in the household survey data. In Column (3) the observations are solved disputes, as described in the household survey. In columns (4)-(5) the outcome variables are from the surveys with UP officials. In columns (6)-(7) the outcome variables are from the digitized administrative UP data. "Effect difference 75th-25th perc." reports the difference in the predicted treatment effect between unions at the 75th percentile and 25th percentile in terms of population size. Standard errors clustered at the UP level. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table A.12: Midline Results: VC Functionality

	Households			Dispute		UP Administrative Data	
	(1) VC Active	(2) Hyp Disputes VC	(3) Hyp Disputes Shalish	(4) Solved VC	(5) Solved Shalish	(6) Documented Cases (IHS)	(7) % Protocols Followed
Treatment	0.158*** (0.023)	0.035*** (0.007)	-0.047** (0.020)	0.050*** (0.016)	-0.037 (0.047)	1.482*** (0.399)	0.405*** (0.053)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,064	5,064	5,064	475	475	54	54
Clusters	174	174	174	151	151		
Control mean	0.133	0.033	0.746	0.009	0.642	2.874	0.197

Notes: This table shows the effect on VC functionality using only the midline data from 2019. Standard errors are clustered at the UP level in the first four columns and robust standard errors are used in columns 5 and 6. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table A.13: Midline Results: Effects on the Number of Disputes Solved by each DRM

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	New Disputes	Sought DRM	Solved	VC	Shalish	DC	Police	Other
Treatment	0.036** (0.017)	0.034** (0.016)	0.021** (0.010)	0.005*** (0.002)	0.010 (0.008)	0.002 (0.003)	-0.002 (0.003)	0.006* (0.004)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,252	5,252	5,252	5,252	5,252	5,252	5,252	5,252
Clusters	174	174	174	174	174	174	174	174
Control mean	0.198	0.183	0.081	0.001	0.052	0.010	0.010	0.008

Notes: This table shows the effect of the AVCB program on the number of disputes per household by the institution in which they were solved, using only the midline survey data. Column (1) shows the total number of disputes that emerged after the baseline survey. Column (2) shows the number of these disputes that were resolved. Columns (3)-(7) shows the number of disputes resolved separately for each DRM. Standard errors clustered at the union level in parenthesis. ***p<0.01; **p<0.05; *p<0.1.

Table A.14: Deviations from the Pre-Analysis Plan

Analysis	Difference from PAP	Justification
VC Functionality	IHS of the number of documented cases in union administrative data added as an outcome	This an important outcome
	Share of hypothetical disputes, instead of the number of hypothetical disputes, as outcome	Makes interpretation of coefficient easier
	Number of hours spent instead of log of the number of hours	Makes interpretation of coefficient easier
Choice of DRM	Estimated using OLS instead of multinomial logit	Makes analysis consistent across the paper and makes interpretation of coefficients easier
	We did not include the analysis on the number of unresolved disputes	This is already implied by the difference in effects on disputes and resolved disputes in Figure 3
Downstream Outcomes	"Satisfaction with justice system" outcome variable moved from "Overall effects on dispute resolution" to "Downstream Outcomes"	Given the structure of the paper, outcome fits better in downstream outcomes section
	We did not include the analysis on the number of disputes in "Downstream Outcomes"	Outcome is already included in Figure 3
	PAP has two outcome variables for trust, we removed the logistic regression of binary trust variable	The analysis of one trust variable is sufficient
	We only collected data on gifts given in the midline survey, therefore these are the only gifts we are analyzing	To reduce the length of the survey some questions were cut from the survey
	We measure the effect on the IHS transformation of the amount lent and borrowed, in the PAP the amounts were untransformed	The IHS transformation makes the estimates comparable to other estimated effects in Section 3.4
Heterogeneous effects	We did not collect data on which political party the households support and could therefore not conduct the heterogeneity analysis for households supporting the same political party as the UP chair	Which political party a household is supporting can be sensitive, we did not want to make respondents uncomfortable
Statistical inference	We have not added p-values adjusted for multiple hypotheses testing within each domain of analysis	In each domain of analysis almost all indicators show similar results with either all or none of the effects statistically significant, hence there is little need for multiple hypothesis testing corrections

Table A.15: Descriptive Differences in Dispute Resolution Outcomes by DRM

Panel A: Without Controls	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Montary Cost	Opportunity Cost	Process Time (Days)	Enforce Time (Days)	Relationship (SD)	Satisfaction Process (SD)	Satisfaction Verdict (SD)	Index
Solved in VC	-4,761.41*** (1,432.61)	283.13 (225.57)	-166.59*** (38.12)	-30.61 (44.14)	0.26*** (0.09)	0.19* (0.11)	0.14 (0.11)	0.14*** (0.04)
Solved in DC	127,032.07*** (16,533.30)	2,523.67*** (449.35)	851.11*** (124.33)	278.46*** (74.48)	-0.46*** (0.10)	-0.24** (0.10)	-0.19** (0.10)	-0.54*** (0.08)
Observations	1,148	1,148	1,148	613	1,168	1,155	1,147	1,146
Clusters	169	169	169	160	169	169	169	169
Panel B: With Controls	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Solved in VC	1,561.79 (3,854.07)	425.13 (284.57)	-68.91 (48.39)	144.85 (97.23)	0.17 (0.11)	0.23 (0.15)	0.19 (0.16)	0.10* (0.05)
Solved in DC	118934.24*** (17,863.43)	2,246.55*** (471.97)	639.61*** (149.16)	229.83*** (65.80)	-0.35*** (0.12)	-0.10 (0.13)	-0.15 (0.12)	-0.42*** (0.08)
Household Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Union FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dispute Type FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shalish Mean	5,651.91	681.98	199.33	91.72	0.09	0.02	0.06	0.12
Observations	1,148	1,148	1,148	613	1,168	1,155	1,147	1,146
Clusters	169	169	169	160	169	169	169	169

Notes: This table shows the differences in different aspects of the dispute resolution process between VC, district courts, and *shalish*. Column (8) is an index of all other variables except enforcement time (column 4), because the enforcement time data was not collected in the endline survey. Standard errors clustered at the union level in parenthesis. ***p<0.01; **p<0.05; *p<0.1.

Table A.16: Perceptions of DRM

	(1)	(2)	(3)	(4)	(5)
	Fairness	Decision Time †	Efficiency Enforcement	Expensive †	Index
Panel A: HH providing answers for all DRMs					
VC	0.095 (0.063)	-0.304*** (0.051)	-0.062 (0.078)	-0.622*** (0.087)	-0.268*** (0.029)
DC	-0.202*** (0.069)	-1.127*** (0.054)	-0.132* (0.074)	-1.159*** (0.044)	-0.787*** (0.037)
Observations	3,142	2,917	2,599	2,681	3,020
Clusters	88	88	88	88	88
Mean Shalish	0.006	0.035	0.037	0.028	0.026
Survey FE	Yes (1)	Yes (2)	Yes (3)	Yes (4)	Yes (5)
Panel B: All responses					
VC	0.159*** (0.043)	-0.376*** (0.033)	0.003 (0.055)	-0.663*** (0.046)	-0.246*** (0.024)
DC	-0.239*** (0.054)	-1.019*** (0.037)	-0.075 (0.050)	-1.170*** (0.036)	-0.788*** (0.034)
Observations	7,219	6,304	4,873	7,520	5,633
Clusters	88	88	88	88	88
Mean Shalish	0.004	0.025	0.007	0.036	0.033
Survey x HH FE	Yes	Yes	Yes	Yes	Yes

Notes: This table shows the differences in perceptions of the dispute resolution process between VC, district courts, and *shalish*. Standard errors clustered at the union level in parenthesis. ***p<0.01; **p<0.05; *p<0.1.

Table A.17: Effects on Satisfaction and Perceptions

	(1)	(2)	(3)	(4)	(5)	(6)
	Trust	Harmony	Crime	Unresolved Disputes	Index	Satisfaction
Treatment	0.002 (0.037)	0.090** (0.045)	-0.026 (0.050)	-0.061 (0.059)	0.012 (0.032)	0.091* (0.047)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,812	6,830	6,720	6,830	6,704	4,957
Clusters	174	174	174	174	174	174
Control mean	0.00	0.00	0.00	0.00	0.00	0.00

Notes: shows the effect of the AVCB program on subjective measures of trust, harmony, crime, unresolved disputes, and satisfaction with the justice system. In columns (1)-(4) and (6) the outcome variables are constructed from 5-point scale questions and then transformed into an index with a mean of zero and a standard deviation of one in the control group. Higher values indicate better outcomes, e.g. that crimes and disputes are less serious problems. See Appendix A.1.3 for the exact phrasing of the questions. In Column (5) the outcome variable is an index constructed from the outcome variables in columns (1)-(4). Data on satisfaction with the justice system used in column (6) was only collected in 2019 and is therefore not part of the aggregate index. 95% confidence intervals are constructed using standard errors clustered at the union level. These results are shown in Figure A.7. Standard errors clustered at the union level in parenthesis. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table A.18: Effects on Economic Activity

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	IHS Dispute Cost	IHS Gifts Received (2019)	IHS investments	Joint investment	Number of agreements	New Agreements	Agreements Outside Family	Agreements Outside Village	IHS Lending	IHS Borrowing	Index
Treatment	0.072 (0.060)	-0.307 (0.333)	-0.138 (0.196)	0.003 (0.005)	-0.013 (0.068)	0.007 (0.020)	-0.018 (0.018)	-0.002 (0.027)	0.026 (0.143)	0.172 (0.197)	-0.011 (0.026)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,125	5,064	6,830	2,715	4,490	4,472	3,462	3,534	6,830	6,830	6,830
Clusters	174	174	174	174	174	174	174	174	174	174	174
Control mean	0.407	5.889	4.530	0.014	1.919	0.545	0.750	0.569	1.647	7.701	0.244

Notes: This table reports the impact of the AVCB program on economic outcomes shown in Figure A.8. Continuous variables are winsorized at the 99th percentile. The IHS transformation is used for continuous variables including zeroes. The outcomes variables are the following: Column (1) IHS of gift received, using data from 2019 only; Column (2) IHS of total investments; Column (3) value of the investments made jointly with another investor as a share of the total investment; Column (4) Number of economic agreements; Column (5) IHS of the total value of economic agreements; Column (6) economic value of agreements made outside of family as a share of the total value of economic agreements; Column (7) economic value of agreements made outside the village as a share of the total value of economic agreements; Column (8) IHS value of amount lent; Column (9) IHS of the amount borrowed; Column (10) Index comprising of outcome variables in columns (2)-(10). Standard errors clustered at the UP level. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.