Preventing Rebel Resurgence after Civil War: A Field Experiment in Security and Justice Provision in Rural Colombia

ROBERT A. BLAIR  Brown University, United States
MANUEL MOSCOSO-ROJAS  Brown University, United States
ANDRÉS VARGAS CASTILLO  Comparativa, Colombia
MICHAEL WEINTRAUB  Universidad de los Andes, Colombia

How can states prevent armed groups from exploiting local governance gaps to (re)establish territorial control during transitions to national peace? We report results from an experimental evaluation of Colombia’s ComunPaz program, a scalable, inexpensive intervention that sought to replace rebel governance by harnessing complementarities between state and communal authorities and by improving security and justice provision in areas once dominated by FARC, the country’s largest rebel group. We find that ComunPaz enhanced the quality of local dispute resolution, increased citizens’ trust in (some) state institutions, and strengthened coordination between state and communal authorities. It also appears to have reduced citizens’ trust in, and reliance on, armed groups. The program did not, however, increase reliance on either state or communal authorities to resolve disputes, nor did it increase citizens’ trust in communal institutions. We discuss the implications of our findings for peace-building and state-building in countries transitioning from civil war.

State-building in conflict and postconflict settings is a slow, arduous process. States transitioning out of civil war typically struggle to (re)establish authority in areas previously governed by armed groups. They usually have limited physical infrastructure and operate under severe financial and human capital constraints. These constraints are compounded by citizens’ distrust, which is often the result of years of state repression or neglect. If states remain weak, then governance gaps that emerge as rebel groups demobilize may exacerbate crime and conflict at the local level. Governance gaps may also create opportunities for new or existing armed groups to consolidate territorial control. How can states recovering from civil war avoid an escalation of local disputes during transitions to national peace? How can they prevent armed groups from exploiting local governance gaps to seize territories abandoned by their newly demobilized rivals?

State-building in areas previously governed by armed groups depends crucially on the provision of mechanisms to adjudicate crimes and resolve disputes. In states transitioning from civil war, the quality of these mechanisms “embodies the quality of local governance more generally,” and providing institutions to resolve disputes is “essential” for preventing armed actors from becoming “new de facto rulers in areas formerly ruled by rebels or paramilitaries” (Arjona 2016, 69, 311). Because these states are weak, however, we argue that their most viable strategy for resolving disputes fairly and efficiently is to partner with communal institutions (Baldwin 2015)—locally embedded mechanisms for sustaining order independently of the state, typically through the use of social sanctions. (We provide a more detailed definition of communal institutions below.) Communal institutions often have local legitimacy and access to inside information that states lack; states (even weak ones) often have material resources and coercive capacity that communal institutions lack. We argue that by exploiting these complementarities, states can reduce the risk of local conflict escalation and prevent the reemergence of rebel rule.

We test this argument in Colombia, where the demobilization of the Fuerzas Armadas Revolucionarias de Colombia (FARC), the country’s largest rebel group, has provided an opportunity for the state to project authority into rural regions for the first time in more than 50 years. FARC and other armed groups created or co-opted a variety of mechanisms for maintaining order in the territories they controlled, including, crucially, mechanisms of dispute resolution (Arjona 2016; Vargas Castillo 2019). Now that FARC has demobilized, the state must fill the resulting governance gaps before FARC dissidents and splinter groups, competing rebel groups (especially the Ejército de Liberación Nacional, or ELN), neoparamilitaries, or other criminal organizations intervene to take FARC’s place.

We experimentally evaluate an inexpensive, scalable intervention designed to fill these governance gaps by exploiting complementarities between the state and communal institutions. The ComunPaz program sought to help state authorities understand the comparative advantages and legal roles and responsibilities of their communal counterparts, and vice versa; create...
opportunities for these authorities to build trust with each other, and with citizens; and develop strategies to increase communication and coordination between communal institutions and the state. The program focused on police officers, Police Inspectors, and Junta de Acción Comunal (JACs) — communal institutions that are critical to local governance in rural Colombia (Kaplan 2017; Vargas Castillo 2019). FARC and other armed groups tried and in many cases succeeded in co-opting JACs to facilitate governance of the communities under their control; most previously co-opted JACs continue to function even in communities abandoned by FARC, but without the coercive capacity that FARC once provided. We argue that states can project power more successfully by mimicking this strategy, leveraging relationships with communal institutions to penetrate territories that lie within their de jure borders but beyond their de facto control. ComunPaz sought to pursue precisely this approach to state-building.

Our sample consists of 149 communities across four rural regions of Colombia where FARC was historically dominant; roughly 81% of residents in our sample report that armed groups controlled their communities at some point in the past. In total, 72 communities were randomly assigned to participate in ComunPaz, which was administered in four modules over the course of three months in each treatment community. We evaluate the impact of the program using surveys of residents, JAC leaders, police officers, and Police Inspectors. Unusually for an evaluation of this sort, our survey sample thus includes both the “supply” and “demand” sides of security and justice provision. The residents survey also includes endorsement and list experiments designed to measure support for, and reliance on, armed groups—a potentially sensitive topic. We combine the surveys with costly behavioral measures designed to operationalize residents’ willingness to petition for closer coordination between state and communal authorities and JAC leaders’ willingness to act on these petitions. We corroborate and contextualize our quantitative results using detailed qualitative field reports from ComunPaz facilitators.

Consistent with our theoretical framework and pre-analysis plan (PAP),1 we find that ComunPaz reduced the prevalence of unresolved and violent disputes at the community level as reported by survey respondents. We also find more suggestive evidence that the program diminished both perceptions of and reliance on armed groups among residents. Importantly, we find that reliance on armed groups was already rare in these communities, and perceptions of them already unfavorable. While FARC had largely demobilized by the time of our study, multiple additional armed groups were already competing to supplant FARC’s rule. ComunPaz appears to have driven perceptions of and reliance on these other armed groups nearly to zero, potential floor effects notwithstanding. The program also improved perceptions of some state authorities, especially those that have frequent and direct contact with their communal counterparts.

Also consistent with our theoretical framework, we find that the program increased coordination between the state and communal institutions and improved the cohesiveness and functionality of communal institutions themselves. This is especially striking given that our endline was administered approximately seven months after the end of the intervention. Interestingly, and contrary to our expectations, the program appears to have weakened demand for additional coordination between state and communal authorities as captured by our costly behavioral measures. We interpret this as evidence that the program helped satisfy existing demand for coordination, as reflected in the large number of petitions filed in all communities regardless of treatment status. If ComunPaz helped satisfy existing demand for state–communal coordination, then it is perhaps unsurprising that we find lower demand in treatment communities after the program concluded.

More surprisingly, we find no evidence that ComunPaz improved perceptions of communal institutions or increased understanding of their roles and responsibilities under Colombian law. Nor do we find evidence that the program strengthened state or communal authorities’ awareness of the most serious disputes in their communities or that it fostered consensus around how disputes should be resolved. We also find no evidence that the program increased reliance on either state or communal authorities to resolve disputes. This is puzzling given the reduced prevalence of unresolved and violent disputes in treatment communities. In the discussion we combine our quantitative and qualitative data to explore several potential explanations for this surprising combination of results.

Taken together, our results suggest that states can prevent a resurgence of local violence, improve their relations with civilians, and impede the restoration of armed group control by exploiting complementarities with communal institutions—a strategy that armed groups themselves often use to reinforce their local governance capabilities in the territories they control. Patterns of contestation and control during civil war often reshape local institutional configurations in profound and lasting ways, which may in turn affect the prospects for peace. To date, however, few (if any) studies have tested whether or how governments can engage these altered institutional arrangements to promote stability and state consolidation. Our results demonstrate that states can exploit complementarities with communal institutions to extend their authority into areas where they were previously absent. More speculatively, given the ties between JACs and FARC in many Colombian communities, our results suggest that states recovering from conflict may be able to leverage the legacies of rebel governance in the past to prevent renewed rebel control in the future.

Our study contributes to multiple bodies of research. First, we contribute to the literature on rebel governance by exploring mechanisms for preventing armed groups from filling local governance gaps during transitions to national peace (Arjona 2016; Arjona, Kasfir,

---

1 Our PAP was preregistered with the Evidence and Governance and Politics network prior to endline data collection, and is available at https://osf.io/yw7ts/.
and Mampilly 2015; Cunningham and Loyle 2021; Huang 2017; Mampilly 2011; Revkin and Ahram 2020; Stewart 2018; Steele and Weintraub 2021). Second, we contribute to research on the relationship between state and communal institutions by exploring ways to leverage their underserved complementarities (Baldwin 2015; Blair 2019; Bodea and LeBas 2016; Van der Windt et al. 2019). Third, we contribute to studies of security and justice provision in postconflict countries—most of which focus on strengthening the state while excluding communal institutions, or vice versa (Blair, Karim, and Morse 2019; Blattman, Hartman, and Blair 2014; Hartman, Blair, and Blattman 2021)—by testing mechanisms to empower the state and its communal counterparts simultaneously. Finally, we contribute to the broader literature on peace-building and state-building by showing how states can benefit from cooperation with communal institutions that are often marginalized during state-building processes (Call and Wyeth 2008; Isser 2011; Paris and Sisk 2009).

THEORETICAL FRAMEWORK

Complementarities between States and Communal Institutions

One of the most basic functions of any government is to establish institutions for adjudicating crimes and resolving disputes. These institutions preserve order (Levi 1989), protect property rights (Blattman, Hartman, and Blair 2014), reduce transaction costs associated with economic exchange (North 1990), and more generally allow individuals to “live together peacefully and engage in mutually beneficial cooperation” (Arjona 2016, 70). Dispute-resolution institutions are especially important in countries suffering or recovering from civil war. Where these institutions are effective and legitimate, they increase citizens’ loyalty to the state, strengthen their incentives to resist rebel encroachment, and improve their capacity to mobilize against rebel rule (Kaplan 2017). As Arjona (2016, 11, 72) explains, resistance to rebel incursions is a function of the “quality of the local institutions in place prior to the arrival of the group, in particular, dispute institutions,” because these institutions deprive armed actors of “one of the most effective means to consolidate their power: creating new dispute institutions and becoming the de facto administrators of justice for local populations.”

But weak and war-torn states often fail to provide effective, legitimate institutions for resolving disputes, and armed groups have succeeded in becoming local “administrators of justice” in a wide variety of settings including Afghanistan, Sri Lanka, Ethiopia, Nepal, Cuba, Peru, and Sudan, among others. When these groups disarm, they leave behind governance gaps that states must fill in order to facilitate the implementation of peace agreements, prevent local conflicts from escalating into regional or national crises (Autesserre 2010; Blair, Blattman, and Hartman 2017), and impede other armed actors from seizing newly abandoned territories (García-Villegas and Espinosa 2015). But filling these gaps is not easy. The same factors that facilitate insurgency also tend to impede the projection of state power after insurgents demobilize. For example, state infrastructure may be dilapidated and state bureaucracies may be dysfunctional, especially in rural areas. Communities that are accustomed to autonomy may also resist the (re)imposition of state rule.

We argue that states can overcome these challenges by leveraging underserved complementarities with communal institutions and authorities. Communal institutions provide public goods and resolve disputes at the local level while retaining some degree of independence from the state. They tend to be deeply embedded in the communities they govern and typically rely on social sanctions rather than physical coercion to enforce their decisions (Bowles and Gintis 2002). Crucially, communal authorities are not mere extensions of the state. They are distinct from local police officers, judges, or magistrates, who may also provide public goods and resolve disputes, but who are employed by the state and answerable to higher level officials within the state apparatus. Communal institutions are also distinct from the multitude of civil society groups and organizations that may exist at the local level but that do not attempt to govern the communities in which they are based (for example, youth groups or sports leagues).

Some communal authorities operate independently of the state but are nonetheless recognized under state law, with constitutionally delineated roles and jurisdictions—for example, lineage chiefs in Mozambique (Lubkemann, Kyed, and Garvey 2011) or sheikhs practicing tribal customary law in Iraq (Asfura-Heim 2011). Others—secret societies in Liberia, for example (Blair, Karim, and Morse 2019)—are not recognized by the state. Some derive power from their association with specific historical customs, rituals, or lineages, as is the case with elders and liurai in East Timor (Brown and Gusmao 2009); others were elevated by state or colonial rulers but subsequently became powerful in their own right, as is the case with Paramount Chiefs in Sierra Leone (Acemoglu, Reed, and Robinson 2014). (We consider the generalizability of our results to different types of communal institutions in the conclusion.) Theoretically, the relationship between state and communal authorities is not inherently antagonistic, though confusion and contestation over jurisdictional boundaries is very common in practice (Isser 2011).

Communal institutions exist in most (if not all) societies. They tend to be locally legitimate and informed about the most important sources of disputes among citizens. During periods of civil war, when the state is weak and threats to security are imminent, communal institutions may help preserve a semblance of local stability in the midst of national upheaval (Isser 2011). During transitions to peace, they can facilitate access to rural communities and relieve the burden on the state by adjudicating nonviolent crimes and petty domestic conflicts, which might otherwise overwhelm the justice system. If states could leverage these comparative advantages, they could extend their authority without incurring the prohibitive costs of developing
the infrastructure and bureaucracy necessary to serve remote, sparsely populated areas (Baldwin 2015).

Of course, communal institutions often suffer from pathologies of their own. During civil war they may be co-opted by armed groups to facilitate rebel governance. In Mozambique, for example, the Resistência Nacional Moçambicana (RENAMO) relied on traditional chiefs known as régulos to resolve disputes, organize the provision of food and other supplies to RENAMO fighters, and ensure civilians' adherence to RENAMO's decrees. Similarly, the Sudan People's Liberation Movement (SPLM) exploited customary leaders to maintain order and enforce compliance with SPLM dictates (Arjona 2016).

Although communal institutions may not need third parties to function, their reliance on social sanctions rather than physical coercion makes them more susceptible to shirking, free-riding, and forum shopping (Blattman, Hartman, and Blair 2014). After armed groups demobilize, the communal institutions they co-opt may continue to function, but without the benefit of the coercive capacity that armed groups once provided, which may render their decisions unenforceable. Communal authorities may also be corrupt, biased, or ineffective or may resolve disputes in ways that contravene state laws and due process protections (Blair 2019; 2020).

We argue that peace processes create windows of opportunity for states to resolve these pathologies and foster symbiotic relationships with communal authorities. During these transitional moments, states have strong incentives to project their authority into previously rebellious territories, especially as the barriers to state penetration erected by formerly dominant rebel groups begin to fall. Transitions from civil war are also conducive to institutional innovations that may be more difficult to achieve once peace is consolidated and path dependence sets in (Call 2007). Communal institutions can in many cases provide the local legitimacy and inside information that states lack, helping to identify conflicts before they escalate and bringing disputants to the bargaining table. States can provide the coercive capacity that communal institutions often lack, ensuring that their decisions are enforceable and consistent with legal rules and procedures. By exploiting these complementarities, we argue that states can project power and increase their legitimacy, improve the quality of dispute resolution at the local level, and prevent new or existing armed groups from gaining a foothold in communities recently abandoned by demobilized rebels.

Three Obstacles to Leveraging the Complementarities

Exploiting the complementarities between states and communal institutions requires overcoming at least three obstacles that often arise in conflict and postconflict settings: a lack of (1) information, (2) trust, and (3) coordination. First, state authorities may be unaware of the legal roles and responsibilities of their communal counterparts, and vice versa. Citizens, too, may be unaware of the legally circumscribed division of labor between states and communal institutions. In many developing countries, communal authorities routinely (if inadvertently) exceed the legal limits of their powers, thus undermining the state's jurisdictional claims (Blair 2019; 2020). For their part, state authorities often do not know the most important sources of disputes at the local level, thus limiting their ability to respond to citizens' complaints.

Second, in countries recovering from civil war, citizens and communal authorities may distrust state institutions and may (rightly) fear that wartime patterns of state predation or neglect will persist. Conversely, in areas previously controlled by armed groups, state authorities may (accurately) perceive their communal counterparts as accessories to rebel rule. Third and related, state and communal systems of dispute resolution may develop in isolation, with few mechanisms to coordinate their activities. Coordination problems may arise even when state and communal authorities understand and trust one another, and even when their interests are aligned. Coordination problems may also afflict citizens: even citizens who agree on the legal division of labor between the state and its communal counterparts may disagree about how, exactly, they should seek redress for a given grievance. Moreover, the inclusiveness and consensus inherent to much local-level decision making may leave communal institutions especially vulnerable to shirking, free-riding, and dissonance within their ranks.

These three obstacles reinforce a suboptimal equilibrium in which states and communal institutions operate independently of, or in conflict with, one another. These dynamics are common in weak and war-torn states. In Mozambique, “widely divergent interpretations” of statutes delineating the division of labor between state and communal authorities foment jurisdictional competition and undermine dispute resolution (Lubkemann, Kyed, and Garvey 2011, 41). In Guatemala, distrust of the state underlies citizens' continued reliance on local civil patrols to provide security and justice, often through vigilantism (Bateson 2013). In Iraq, “vague provisions” in the law allow for coordination between state and communal authorities, but mechanisms for facilitating coordination are weak or nonexistent (Asfura-Heim 2011, 270). The intervention we evaluate seeks to help state and communal authorities resolve precisely these problems in Colombia.

SETTING AND INTERVENTION

Colombia is the site of the world's longest civil war. In 2016, after more than half a century of conflict, the government signed a peace agreement with FARC, the country's largest rebel group. But as with previous rebel and paramilitary demobilizations in the mid 1980s and early 2000s, the transition to peace has been tumultuous, with multiple armed groups vying to fill governance gaps left in FARC's wake. The Colombian government is currently pursuing multiple strategies to consolidate state authority, prevent local conflict
escalation, and impede the establishment of new forms of rebel governance in communities previously controlled by FARC.

The intervention we evaluate focuses on three actors in particular: police officers, Police Inspectors, and Juntas de Acción Comunal (Community Action Councils, or JACs). Police officers are responsible for investigating serious crimes; Police Inspectors are mandated to adjudicate petty crimes and coordinate with the police when serious crimes occur. Police Inspectors are trained in conflict resolution by the central government—typically through a Coexistence Commission (Comisión de Convivencia y Conciliación), the unit within JACs that is responsible for conflict resolution. In most cases they are inclusive, with one representative per household in each community (Vargas Castillo 2019, 83). They tend to enjoy high local legitimacy, are accessible and affordable, and have a presence in almost all rural areas, constituting the “most common form of rural organization” in the country (Kaplan 2017, 14). But they receive little if any training; have limited material resources; and are often unfamiliar with the duties, powers, and constraints imposed on them by Colombian law. They also lack the coercive capacity to enforce potentially unpopular decisions.

During the civil war, JACs developed varied and complex relationships with armed groups (Cubides 2006). In some communities they helped civilians protect themselves from armed group violence (Kaplan 2017); in others they were dismantled by encroaching insurgents (Arjona 2016). Armed groups sought to co-opt JACs during the conflict (Jaramillo, Mora, and Cubides 1986), and in some cases JACs developed symbiotic relationships with armed groups (Vargas Castillo 2019). This was especially true in communities controlled by FARC—the focus of our study. FARC generally operated as a “co-facilitator of organizational processes” at the community level, using its coercive capacity to support existing communal institutions (Jaramillo, Mora, and Cubides 1986, 175). FARC often demanded that all households enroll in JACs, enforced attendance at JAC meetings, and ensured participation in collective labor days convened by JAC leaders. FARC benefited from the presence of locally legitimate institutions capable of resolving disputes and preserving order independently of the state, while JACs benefited from FARC’s coercive capacity, which made their decisions easier to enforce.

Relations between police officers, Police Inspectors, and JACs are beset by the three obstacles of information, trust, and coordination discussed above. As part of our endline survey, we asked JAC leaders seven simple factual questions about the extent and limits of their authority under Colombian law. The modal JAC leader in the control group answered fewer than half of these questions correctly. Fewer than one-third of control group residents expressed trust in Police Inspectors at endline; perceptions were more positive among JAC leaders but were still unfavorable. Police Inspectors and JACs have few mechanisms for coordinating their efforts. Only 12.5% of control group JAC leaders even knew how to contact a Police Inspector at endline, and just 17% reported that Police Inspectors “actively support” the JAC’s work. These information, trust, and coordination deficits limit the state’s ability to exploit complementarities with JACs in order to project power into areas susceptible to future armed group control.

The ComunPaz Program

We evaluate an inexpensive, scalable intervention designed to induce closer coordination between police officers, Police Inspectors, and JACs, while avoiding the pitfalls of forcibly imposing state laws and institutions on communities long accustomed to autonomy or rebel rule. The program and our evaluation of it occurred at a pivotal transitional moment: after FARC demobilized and as rival armed groups were beginning to establish a physical presence, but before they were able to erect more sophisticated mechanisms of governance and territorial control. The program was specifically designed to facilitate state penetration and impede the reemergence of rebel rule in communities abandoned by FARC—though, as we discuss in the conclusion, the goals and structure of the intervention are potentially generalizable to settings without histories of rebel governance.

The ComunPaz program comprises four modules involving a combination of lectures, discussions, group work, and Q&A. Each module lasts one day for a total of four days per treatment community, implemented over the course of three months per community, with gaps between sessions to allow residents to adopt new institutional arrangements and put new skills into practice.
Module 1 targets police officers and Police Inspectors; Module 2 targets JACs. These modules help participants understand the legal division of labor between state and communal authorities, identify the comparative advantages of state and communal approaches to dispute resolution, and locate the most important sources of conflict in the communities under their jurisdictions.

Module 3 targets police officers, Police Inspectors, and JACs, and attempts to build trust while helping participants develop concrete, actionable proposals for collaborating to resolve disputes like those identified in Modules 1 and 2. Module 4 targets police officers, Police Inspectors, JACs, and citizens and, again, attempts to build trust while disseminating information about the proposals developed in Module 3. The program culminates with the promulgation of a ruta de atención (“response route”) for resolving disputes, as in Figure 1. Response routes are tailored to each community and then displayed prominently in a central location in each village.

ComunPaz specifically targets the three obstacles to state–communal cooperation discussed above. The program seeks to provide information about the roles and responsibilities of state and communal authorities, build trust between citizens and both state and communal authorities by creating opportunities for them to interact in a structured and secure environment, and improve coordination between state and communal authorities through the design and dissemination of “response routes.” The structure of the program was informed by a survey that we administered in 2015 to 100 communities across four regions of Colombia—Ariari-Guayabero, Oriente Antioqueño, Centro del Valle del Cauca, and Sur de Bolívar—and by focus groups that we conducted with 40 Police Inspectors in the department of Meta in July 2015. The program was implemented between October 2018 and May 2019 by the Colombian government’s National Planning Department (DNP), and the Conflict Analysis Resource Center (CERAC), a Bogotá think tank. We discuss the structure of the intervention in further detail in Appendix A.1 and the ethics of the program and our evaluation of it in Appendix A.2.

ComunPaz represents a return to the Colombian government’s strategy when it first authorized the formation of JACs in the 1950s. As originally conceived, JACs embodied an “alternative form of state-building:” although the Colombian government could not “quickly and easily increase its capacity,” it could “quickly encourage capacity from the bottom up and establish links of communication and coordination” with JACs (Kaplan 2017, 80). In reality, these links remained tenuous in most rural Colombian communities and often ruptured altogether when armed groups seized control. Some armed groups were more aggressive (and more successful) than the government in co-opting JACs during the conflict. In a sense, ComunPaz was designed to mimic these armed groups’ strategies; in so doing, however, it sought to establish precisely the mechanisms of communication and coordination that the government initially believed would facilitate state-building in rural communities, especially those that were most severely affected by civil strife. In this way, the program sought to address the government’s concern that armed groups might leverage the legacies of rebel rule to undermine state-building efforts.

RESEARCH DESIGN

Site Selection

Our sample consists of 149 communities distributed across 24 municipalities in four purposefully selected regions of Colombia: Ariari-Guayabero, Oriente Antioqueño, Nordeste Antioqueño, and Centro del Valle del Cauca. Our primary site selection criterion was historical FARC presence. Within each region we purposively selected five to six municipalities where we were most confident FARC had established uncontested territorial control at some point during the civil war; other armed groups (including ELN and paramilitaries) were historically present as well and controlled territory within our sample at various points during the conflict. We relied on primary and secondary sources to identify these municipalities, including NGO reports, academic studies, and government analyses, following the procedure described in Appendix A.1.1.

We excluded municipalities where extremely poor road conditions made it prohibitively expensive to implement the intervention. We also excluded municipalities where ongoing violence or active armed group control would pose a threat to facilitators’ or participants’ safety. Within selected municipalities we sampled all centros poblados (“populated centers”) with fewer than 5,000 residents. We discarded populated centers with more than 5,000 residents in order to reduce heterogeneity in cluster size and because the intervention was intentionally designed to target relatively small communities. For compactness we refer to these populated centers as “communities” throughout.

Our endline survey suggests that we were successful in identifying former armed group strongholds: as we discuss in further detail in Appendix A.1.1, 81% of respondents in our sample reported that armed groups had established control over their communities at some point during the conflict by maintaining a continuous physical presence, regulating the entrances and exits to the community, resolving disputes, and/or serving as the “primary authority” in the community. The four regions vary along other dimensions, including state

2 This latter region was somewhat artificially created for our purposes, consisting of municipalities in Centro del Valle within the area of operation of FARC’s 46th Front.

3 For the safety of our respondents we did not ask them to disclose the name(s) of the armed group(s) that controlled their communities. Given that these regions are former FARC strongholds, it is likely that many respondents were referring to FARC.
presence, political history, and historical settlement patterns, as we discuss in Appendix A.1.1.

FARC had largely withdrawn or been eliminated from these regions by the time of our study. In some regions, such as Oriente Antioqueño, the government destroyed FARC militarily; in others, such as Ariari-Guayabero, FARC drew down following the signing of the 2016 peace agreement. But other armed groups were present at the time of our study, and although none had established control over the communities in our sample, they had already begun to compete to seize the territories FARC had abandoned. According to our qualitative data (described in further detail below), nearly one-third (23) of the 72 treatment communities experienced active armed group presence at some point during our study, including from...
ELN, large armed groups linked to drug cartels with (ostensibly) political agendas (e.g., the Autodefensas Gaitanistas and Los Rastrojos), and smaller groups that are more clearly criminal (e.g., Los Pachellis).

Randomization

Treatment was randomly assigned at the community level. We stratified by region and blocked by population to mitigate the bias that can arise when average cluster size varies between the treatment and control groups (Imai, King, and Nall 2009). We then randomly assigned four communities to treatment in each block in Oriente Antioqueño and Nordeste Antioqueño and two communities in each block in Ariari-Guayabero and Centro del Valle del Cauca, for a total of 72 treatment communities. We also randomized the order in which municipalities would be treated. We map the distribution of treatment and control communities in Figure 2. A detailed description of our blocking procedure is in Appendix A.3.1, and balance tests are in Appendix A.3.3.

Limitations

Our study is not without limitations. One is our inability to test for treatment effect heterogeneity along several potentially important dimensions. For example, although previous studies suggest that many JACs were co-opted by FARC and became stronger under FARC rule (Vargas Castillo 2019), this was not the case everywhere (Arjona 2016). It is possible that the effects of ComunPaz might vary with the strength of JACs prior to implementation or with the nature of the relationship between JAC leaders and local FARC commanders. It is also possible that the effects might vary with the intensity of citizens’ distrust of the state. Unfortunately, we do not have baseline data on these moderators, so we cannot test for heterogeneous treatment effects (HTEs) along these dimensions. However, we can test for heterogeneity along other potentially salient moderating variables, such as prior exposure to violence and historical strength of rebel and paramilitary rule. We motivate these analyses and report results in Appendix A.5.7.

A second limitation is the “bundled” nature of the treatment. ComunPaz comprises four modules, and we cannot disentangle the effects of each module in isolation from the others. It is possible that a shorter, simpler program might have similar effects—though, given the initial wariness with which some residents greeted increased police presence in their communities, we are skeptical. A third limitation is the absence of administrative data on crime and violence at such a low level of aggregation in Colombia. We instead rely on surveys to measure the prevalence and severity of disputes, but surveys may be prone to nonrandom recall and social desirability bias. We took a number of precautions to mitigate these problems, including the use of survey experiments and costly behavioral measures. Moreover, although ComunPaz had the expected beneficial effect on some outcomes that are susceptible to social desirability bias (reliance on armed groups, for example), it had no or even adverse effects on others (perceptions of JACs, for example). This suggests that social desirability alone is unlikely to explain our results.

EMPIRICAL STRATEGY

Hypotheses

Our theory posits that states can reduce the risk of local conflict escalation and prevent a resurgence of rebel governance by exploiting complementarities with communal institutions, thereby filling local governance gaps and encouraging citizens to seek redress for grievances through the mechanisms that state and communal authorities provide rather than through armed actors. Following our theoretical framework, in our PAP we hypothesized that ComunPaz would reduce the prevalence of (H1) unresolved and (H2) violent disputes and decrease (H3) reliance on armed groups while increasing reliance on (H4) JACs and (H5) police officers and Police Inspectors.4

But our theory also identifies three obstacles to exploiting these complementarities: information, trust, and coordination. Information problems arise when citizens do not understand the legally circumscribed division of labor between state and communal institutions or when state and communal authorities do not understand the most important conflicts affecting citizens’ lives. Problems of trust arise when state authorities distrust their communal counterparts or when citizens and communal authorities trust armed groups more than they trust the state. Coordination problems arise when citizens disagree about how particular conflicts should be resolved; when state and communal authorities prove incapable of harmonizing their activities; or when communal institutions are paralyzed by shirking, dissension, and free-riding among their own members.

ComunPaz was designed to overcome precisely these obstacles. Again following our theoretical framework, we hypothesized that the program would mitigate problems of information by increasing (M1) understanding of the extent and limits of JACs’ authority under Colombian law and (M2) understanding of the most important sources of disputes at the community level. The program would mitigate problems of trust by improving perceptions of (M3) JACs and (M4) police officers and Police Inspectors while diminishing perceptions of (M5) armed groups. Finally, the program would mitigate coordination problems by increasing (M6) consensus around how disputes should be resolved, (M7) the quality of coordination between JACs, police officers, and Police Inspectors, and (M8) the cohesiveness and functionality of

4 We present these hypotheses in a different order here than in our PAP and replace the distinction between “primary” and “secondary” hypotheses with a distinction between outcomes and mechanisms. In our PAP we also hypothesized that the program would increase respect for state authority in cases that fall under state jurisdiction. We relegate this hypothesis to Appendix A.5.1, as it proved difficult to test using our survey.
JACs themselves. We expected the program to help resolve disputes and reduce reliance on armed groups through one or a combination of these mechanisms. Figure 3 summarizes how ComunPaz activities connect to the three obstacles described above and to the outcomes we measured in our endline survey.

By supplanting armed groups and providing effective, legitimate alternatives to rebel rule, we expected
that, over time, the state could begin (re)establishing territorial control over areas once lost to insurgents (Arjona 2016). Reduced reliance on armed groups, increased reliance on the state, and improved perceptions of state authorities are also important indicators of state consolidation in and of themselves (Blair 2019). Following our PAP, we also test for HTEs along four dimensions: (1) victimization during the civil war, (2) strength of historical rebel governance, (3) strength of historical paramilitary governance, (4) and connectedness to local and municipal political power. Because these hypotheses were exploratory, we did not specify the direction of effects. For compactness, we present HTEs on the outcomes most central to the program: the prevalence of unresolved and violent disputes and reliance on JACs, police officers and Police Inspectors, and armed groups. These results are in Appendix A.5.7, and are almost uniformly null.

Quantitative Data
We test our hypotheses using multiple sources of data. First, we conducted an endline survey roughly seven months after the end of the intervention. We surveyed 18 randomly selected residents and eight purposively selected leaders in each community in our sample. The residents survey included an endorsement experiment designed to measure support for the police, JACs, and armed groups and a list experiment designed to measure reliance on armed groups to resolve disputes. We also surveyed one police commander and one Police Inspector in each municipality. Because police commanders and Police Inspectors have jurisdiction over multiple communities, for most questions we provided a list of communities in their jurisdiction and asked about each one individually. The survey was conducted between November and December of 2019 by Proyectos, a Colombian survey firm. Descriptive statistics and further details on our sampling frame are in Appendix A.4.

Second, we administered two costly behavioral measures. The first was designed to operationalize demand for coordination between police officers, Police Inspectors, and JACs. At the end of the residents survey, respondents were given a petition requesting additional involvement of municipal authorities in local dispute resolution. Residents were instructed to deliver the signed petition to the JAC president within seven days of the survey. We then called each JAC president to ask how many petitions they received. The second behavioral measure sought to operationalize actual coordination between police officers, Police Inspectors, and JACs. At the end of the leaders survey, respondents were encouraged to create a WhatsApp group to facilitate coordination with municipal authorities, and they were also given the name and phone number of the police commander and Police Inspector in their jurisdiction. We then called each JAC president a week later to ask whether they had created a WhatsApp group.

Qualitative Data
We corroborate and contextualize our quantitative results with detailed qualitative field reports compiled by ComunPaz facilitators. Facilitators documented any discussions held, questions asked, and outputs

FIGURE 3. Theoretical Framework, Program Activities, and Outcomes

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Program activities to overcome obstacle</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Modules 1 and 2: state and communal authorities participate in interactive exercises to understand one another's roles and responsibilities and identify common local disputes</td>
<td>Understanding of JACs' authority</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Understanding of most important disputes</td>
</tr>
<tr>
<td>Trust</td>
<td>Module 3: state and communal authorities interact with one another in a secure, structured environment with clear rules of engagement</td>
<td>Perceptions of armed groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perceptions of JACs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perceptions of police and PiS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reliance on armed groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reliance on JACs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reliance on police and PiS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Approval of policies endorsed by JACs, police, or armed groups</td>
</tr>
<tr>
<td>Coordination</td>
<td>Modules 1 and 2: state and communal authorities identify common obstacles to coordination</td>
<td>Any unresolved disputes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Any violent disputes</td>
</tr>
<tr>
<td></td>
<td>Module 3: state and communal authorities jointly develop response routes for dispute resolution and strategies for overcoming obstacles to coordination</td>
<td>Consensus around dispute resolution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coordination between JACs, police, and PiS</td>
</tr>
<tr>
<td></td>
<td>Module 4: communities adopt response routes and disseminate information about them</td>
<td>Any petitions requesting greater coordination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of petitions requesting greater coordination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WhatsApp group to facilitate greater coordination</td>
</tr>
</tbody>
</table>

https://doi.org/10.1017/S0003055422000284 Published online by Cambridge University Press
produced during each activity and recorded their own appraisals of group dynamics and individual attitudes and behaviors. Because these reports are only available for treatment communities, we cannot use them to test our hypotheses. Nonetheless, they provide valuable context and rich (if suggestive) evidence regarding mechanisms. Importantly, although qualitative data were collected on the specific dates of the workshops, participants regularly discussed more general processes of conflict and conflict resolution in their communities, yielding insights into mechanisms that emerged throughout implementation.

Estimation

Most of our outcomes comprise clusters of dependent variables. Following our PAP, we estimate the average effect size (AES) across all dependent variables in each cluster to reduce the number of hypotheses we test and control the false discovery rate (Clingingsmith, Khwaja, and Kremer 2009). AES coefficients are interpreted in terms of standard deviations from the control group mean. For some outcomes we have just one dependent variable and use ordinary least squares (OLS) instead. We include individual-level controls for age, gender, household size, educational attainment, employment status, and two proxies for socioeconomic status (quality of walls and floors). These controls were measured in the endline survey; although they are posttreatment, they either cannot (e.g., age) or are very unlikely (e.g., educational attainment) to be affected by treatment assignment. We also include community-level controls for population, distance to the nearest arterial road, and distance to the departmental capital, measured using administrative data from the Instituto Agustín Codazzi and the planning office of each municipality. We estimate the intention-to-treat effect (ITT) on all outcomes.

Dependent variables from the residents and leaders surveys are operationalized at the individual level. Dependent variables from the police and Police Inspectors surveys are operationalized at the community level. Our two behavioral measures are operationalized at the community level as well. For individual-level outcomes, we cluster our standard errors at the community level. For community-level outcomes, we omit individual-level controls and do not cluster our standard errors. Because the probability of treatment assignment varied across blocks, we weight each community by the inverse of the probability of assignment to its realized treatment status. The probability of assignment to treatment ranged from one-third to two-thirds, implying that no community received a weight more than twice that of any other. All specifications include block fixed effects. We report results with multiple comparisons corrections in Appendix A.5.2.

Potential Threats to Inference

Spillover

Our analysis is potentially susceptible to three types of spillover. First, dispute resolution strategies and information conveyed to participants during the program may spill over from treatment to control communities through word of mouth. For most if not all of our outcomes, this would bias our ITT estimates toward the null. In any event, spillover of this kind strikes us as unlikely, given that the average treatment community is located more than 8 kilometers from the nearest control community—a long way in rural Colombia, where roads are rough and often impassable, and where few residents own cars.

Second, because the jurisdictions of police officers and Police Inspectors encompass both treatment and control communities, it is possible that the benefits of improved performance among these state authorities may spill over from the treatment group to the control group. Again, this would bias our ITT estimates toward the null. Spillover of this kind strikes us as unlikely as well: based on focus groups conducted with Police Inspectors before the start of the program, municipal authorities rarely travel to the communities in their jurisdictions, and they are most likely to do so with the encouragement of a third party.

Finally, it is possible that participation in ComunPaz may cause police officers and Police Inspectors to redirect effort away from control communities and toward treatment communities. In this case, our ITT estimates would be a function not just of improved coordination between state and communal authorities in treatment communities but also of diminished coordination in control communities. We view this risk as relatively minor: state institutions have limited physical presence in remote rural areas, and the amount of effort that could plausibly be redirected is small. Floor effects likely would mitigate the risk of negative spillover of this kind.

Noncompliance

Participation in the ComunPaz program was voluntary and was therefore susceptible to one-sided noncompliance. We took several precautions to minimize this problem, including sending individually addressed letters about the program from the Colombian government’s National Planning Department (DNP), visiting each municipal capital to coordinate timing and logistics with municipal authorities, and visiting each treatment community to coordinate timing and logistics with JACs as well. (We were especially concerned with maximizing participation among JACs, who have agency of their own, and who were empowered to decline to participate.) We also sent a letter from the DNP to the Planning Director of the Colombian...
National Police, who then sent individually addressed letters authorizing the participation of the police commanders in our sample.

Even with these precautions, some noncompliance did occur, as we discuss in detail in Appendix A.3.2. Fortunately, there are only three treatment communities that we can classify as “full” noncompliers, in that they were not treated at all. Other communities are more appropriately classified as “partial” noncompliers, as they received some (but not all) modules of the intervention. We administered the endline survey in all communities and include both full and partial noncompliers in the treatment group for purposes of our ITT analyses. This should bias our ITT estimates toward the null. As a robustness check, we computed (approximate) upper and lower bounds on the complier average causal effect (CACE) by first classifying partial noncompliers as compliers and reestimating the CACE, then reclassifying them as noncompliers and reestimating the CACE. Neither approach yields CACE estimates that are substantively different from the ITT. For compactness, we report the ITT alone.

RESULTS

Fewer Unresolved or Violent Disputes

Table 1 reports the ITT of the ComunPaz program on unresolved (columns 1 and 2) and violent (columns 3 and 4) disputes. Residents were asked if they or another household member had been involved in a dispute over any of nine issues in the past six months, including theft, public consumption of drugs or alcohol, noise complaints, improper garbage disposal, contested land boundaries, or negligent management of pets or livestock. Residents were then asked whether these disputes resulted in physical or verbal aggression and whether they were resolved. Leaders were also asked if they or a family member had been the victim of an assault. We code dummies for any unresolved or violent disputes at the household (columns 1 and 3) and community (columns 2 and 4) level.6

We find that the program reduced the prevalence of both unresolved and violent disputes at the community (columns 2 and 4) but not the household level (columns 1 and 3). This discrepancy between the household- and community-level results is perhaps unsurprising, given that disputes are much more common when operationalized at the community level. Treatment group leaders were 9.3 percentage points less likely to report an unresolved dispute in their community, a reduction of 16.1% relative to the control group mean (0.579). Residents were 2.7 percentage points less likely to report an unresolved dispute involving a household member—a statistically insignificant reduction of 8% relative to the control group mean (0.338). Treatment group leaders were also 5.1 percentage points less likely to report a violent dispute in their community. Although this effect is not quite statistically significant at the 95% level ($p = 0.053$), it represents a substantively large 25.1% reduction relative to the control group mean (0.203). Residents in the treatment group were no less likely to report a violent dispute, though this may be an artifact of floor effects, as only 6.4% of control group residents reported a violent dispute in the past six months.

Reduced Reliance on Armed Groups but No Change in Reliance on State or Communal Authorities

Table 2 reports the ITT on residents’ and leaders’ reliance on armed groups (columns 1 and 2), JACs

---

6 In our PAP we prespecified that we would analyze the residents and leaders samples both separately and pooled. For compactness and to reduce the number of hypotheses we test, we omit the pooled results here. Given the differences between sampling frames and, in some cases, outcome measurement strategies, we view the separate results as more informative.
(columns 3 and 4), and police officers and Police Inspectors (columns 5 and 6) to resolve disputes. We measure reliance on armed groups in four ways. First, respondents were read four hypothetical scenarios of conflict and crime, ranging in severity from a dispute over improper garbage disposal to an assault with a firearm. They were then asked to which authority (if any) they would report the incident first and which authority should be responsible for providing a “definitive” resolution. We code a dummy for respondents who selected an armed group for any of these questions. Second, for each of the actual disputes in Table 1, respondents were asked if they or a household member had approached an armed group for help. Residents were also asked if they or a household member had been victim of any of seven crimes in the past six months—including burglary, robbery, assault, and extortion—and, if so, whether they had reported the crime to an armed group. We code a dummy for residents who reported any crime or dispute to an armed group.7

Third, respondents were read another four hypothetical scenarios of crime and conflict and asked if they believed other community members would seek assistance from an armed group. We code a dummy for respondents who believed they would. Finally, respondents were asked if they believed other community members were in the habit of reporting actual disputes to armed groups. We code a dummy for respondents who agreed or strongly agreed that they were. By eliciting beliefs about other community members, we hoped to mitigate social desirability bias that might arise when answering questions about oneself and one’s family. We measure reliance on JACs, police officers, and Police Inspectors using the first three of these four measures.

We find that ComunPaz reduced reliance on armed groups among residents (column 1) but not leaders (column 2). Although our measure of reliance on armed groups is potentially susceptible to social desirability bias, the negative AES in the residents survey is driven in particular by a 27.3% reduction in the belief that other community members would seek the help of armed groups in hypothetical scenarios and a 48.8% reduction in the belief that other community members reported actual disputes to armed groups. These measures are less susceptible to social desirability concerns. In Appendix A.5.3 we test whether the program also reduced residents’ reliance on armed groups in a list experiment. We find no evidence that it did, though this analysis is underpowered. We also find no evidence of social desirability bias in residents’ reports of reliance on armed groups when comparing the survey with the list experiment, lending additional credence to the results in Table 2.

Importantly, reliance on armed groups was rare in the control group, ranging from less than 1% (the proportion of control group residents who had solicited help from an armed group to resolve an actual dispute) to 6.2% (the proportion who believed other community members would solicit armed group assistance in hypothetical disputes). Reliance on armed groups was no more common in the list experiment. This is informative in itself, suggesting that rebel governance in these communities was already weak at endline. It is also unsurprising, as ComunPaz targeted communities where FARC had demobilized but where rival armed groups had not yet established territorial control. Given that reliance on armed groups was so rare in our sample, we interpret the ITT in column 1 of Table 2 somewhat cautiously. Nonetheless, our results suggest that ComunPaz reduced already low levels of reliance on armed groups nearly to zero, potential floor effects notwithstanding. Conversely and more surprisingly, we find no evidence that the program increased reliance on JACs, police officers, or Police Inspectors (columns 3–6). We return to this result in the discussion.

<table>
<thead>
<tr>
<th>TABLE 2: Reliance on Armed Groups and State and Communal Authorities to Resolve Disputes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliance on armed groups</td>
</tr>
<tr>
<td>(1) Residents</td>
</tr>
<tr>
<td>Assigned to treatment</td>
</tr>
<tr>
<td>[0.027]</td>
</tr>
<tr>
<td>Observations</td>
</tr>
<tr>
<td>Individual controls</td>
</tr>
<tr>
<td>Community controls</td>
</tr>
<tr>
<td>Block FE</td>
</tr>
<tr>
<td>Weights</td>
</tr>
<tr>
<td>Estimator</td>
</tr>
</tbody>
</table>

Note: All specifications include individual- and community-level controls, block fixed effects, and inverse probability weights. Standard errors, clustered by community, are in brackets. *p < 0.10, **p < 0.05, ***p < 0.01.

7 To avoid conditioning on a posttreatment variable, we code this dummy as 0 for residents who were involved in a crime or dispute but did not report it to an armed group and also for residents who were not involved in a crime or dispute. Our results are substantively similar if we exclude this dummy from the AES estimator.
No Change in Information about Communities or Colombian Law

Table 3 reports the ITT on residents’ (column 1) and leaders’ (column 2) understanding of the extent and limits of JACs’ authority under Colombian law, as well as the ITT on leaders’ (column 3), police commanders’ (column 4), and Police Inspectors’ (column 5) understanding of the most serious disputes in the communities under their jurisdiction. To measure understanding of JACs’ authority, residents and leaders were asked seven factual questions about the types of cases JACs are and are not authorized to adjudicate, ranging in severity from noise complaints to domestic violence. We code dummies for correct answers to each of these questions.

To measure understanding of the most serious disputes, residents were first asked which of 12 potential sources of disputes they viewed as most important in their community. We take the modal response across the 18 randomly selected residents of each community. Leaders, police commanders, and Police Inspectors were asked the same question about each community under their jurisdiction. We code dummies indicating whether leaders’, police commanders’, and Police Inspectors’ responses match the modal response among residents. This is a hard test, as leaders, police commanders, and Police Inspectors may be aware of residents’ assessments of the most serious disputes in their communities but may disagree with those assessments. In this case we will underestimate the ITT on understanding of the most serious disputes.

With that caveat, we find no evidence that the program increased understanding of JACs’ authority under Colombian law or that it increased understanding of the most serious disputes. Importantly, there is much agreement among residents and leaders about the most important sources of disputes in their communities, though the extent of this agreement is no greater in the treatment group than in the control group. In other words, we find no evidence to suggest that either state or communal authorities gained a better understanding of the communities under their jurisdiction due to ComunPaz.

Less Favorable Perceptions of Armed Groups, More Favorable Perceptions of State Authorities

Table 4 reports the ITT on perceptions of armed groups (columns 1 and 2), JACs (columns 3–5), and police officers and Police Inspectors (columns 6 and 7). To measure perceptions of armed groups, respondents were asked whether other members of the community view armed groups as fair and effective in resolving disputes. We code a dummy for respondents who agreed or strongly agreed that they do. Respondents were also asked whether they themselves believe armed groups resolve disputes fairly and effectively, are trustworthy, and understand the problems afflicting the community. We code dummies for respondents who reported holding these beliefs somewhat, quite a bit, or a lot. Respondents were asked these latter three questions about JACs, police officers, and Police Inspectors as well.

We measure perceptions of JACs among police commanders and Police Inspectors by asking whether they trust the JAC of each community under their jurisdiction. We code dummies for those that said they do. Although this latter analysis was not prespecified, it follows immediately from our theoretical framework. In some cases police commanders and Police Inspectors reported having no contact with one or more of the JACs under their jurisdiction.
jurisdiction. To avoid conditioning on a posttreatment variable, we code these cases as 0s on our measure of perceptions. In this sense, we implicitly assume that police commanders and Police Inspectors cannot trust JACs with whom they have never interacted.9

We find that ComunPaz diminished residents’ perceptions of armed groups. The negative and statistically significant AES among residents is driven by a 1.5-percentage-point (45.8%) reduction in trust in armed groups, a 1.7-percentage-point (42.0%) reduction in the perception that armed groups resolve disputes fairly and effectively, and a 2.6-percentage-point (37.2%) reduction in the belief that other community members perceived armed groups as fair and effective. The program diminished leaders’ perceptions of armed groups as well, though this effect falls just short of (weak) statistical significance at conventional levels (p = 0.106). However, it is similar in magnitude to the effect among residents.

Again, we interpret these results somewhat cautiously, as favorable perceptions of armed groups were rare in our sample. Only 3.3% of residents and 3.8% of leaders in the control group reported trusting armed groups, only 3.9% of residents and 4.2% of leaders said they believe armed groups understand the problems afflicting their communities, only 3.7% of residents and 3.6% of leaders said they believe armed groups resolve disputes fairly and effectively, and only 6.9% of residents and 4.1% of leaders said they believe other community members would agree with this assessment. While taking care not to overinterpret treatment effects on outcomes this rare, our results in Table 4 suggest that rebel groups were already unwelcome in our sample and that ComunPaz made them even more so, potential floor effects notwithstanding.

We also find that the program (weakly) improved perceptions of police officers and Police Inspectors in the residents survey—a result driven by an improvement in perceptions of Police Inspectors in particular. Treatment group residents were 5.7 percentage points (15.7%) more likely to express trust in Police Inspectors and 6.4 percentage points (17.9%) more likely to believe Police Inspectors resolve disputes fairly and effectively. Perceptions of police officers were more favorable among treatment group residents as well, but not statistically significantly so. The AES on perceptions of police officers and Police Inspectors is positive among leaders, but it is smaller than the AES among residents and is imprecisely estimated.

We find no evidence that the program improved perceptions of JACs among either residents or police commanders. However, the program did improve perceptions of JACs among Police Inspectors, who were 18.7 percentage points more likely to believe JACs resolve disputes fairly and effectively. Perceptions of police officers and Police Inspectors among leaders are also more likely to cooperate with JACs to resolve disputes. This may also help explain why we observe a more pronounced change in perceptions of Police Inspectors among residents and (especially) leaders.

Table 5 reports the ITT on perceptions of armed groups, JACs, and the police using an endorsement experiment. Residents were asked to consider three potential policies for their communities: a ban on public alcohol consumption, a mandate that motorbike riders wear helmets, and restrictions on the passage of pack animals through the village. The policies were endorsed by one of three authorities: armed groups, the police,10

9 Restricting this analysis to JACs that had interacted with police commanders and Police Inspectors would induce bias, as these interactions are partly a function of treatment.

10 For reasons of statistical power we did not distinguish between endorsement by the police and endorsement by Police Inspectors.
or JACs. Endorsement was randomly assigned at the respondent level such that the same authority endorsed all three policies. A control group received the same three policies without an endorsement. Respondents were then asked how much they would support each policy. We aggregate responses into a standardized additive index and estimate the effect of ComunPaz by interacting assignment to the program with assignment to each of the three endorsements. We report marginal effects from the endorsement experiment graphically in Appendix S.2.2.

Consistent with our results in Table 4, we find that ComunPaz increased support for policies endorsed by the police. It also (weakly) increased support for policies endorsed by JACs. We find no evidence that the program decreased support for policies endorsed by armed groups, though this may be an artifact of floor effects. A plurality of control group respondents expressed the highest possible level of support for all three policies when they were endorsed by either the JAC or the police. In contrast, a plurality expressed the lowest possible level of support when policies were endorsed by an armed group. This is consistent with Table 4 and helps explain the substantively large and highly statistically significant negative effect of the armed group endorsement in the control group. This also helps explain the null when we interact assignment to ComunPaz with the armed group endorsement.

### TABLE 5. Perceptions of Armed Groups and Governmental and Communal Institutions among Residents Using Endorsement Experiment

<table>
<thead>
<tr>
<th>Index of approval</th>
<th>Assigned to treatment</th>
<th>JAC endorsement</th>
<th>Police endorsement</th>
<th>Armed group endorsement</th>
<th>Assigned to treatment x JAC endorsement</th>
<th>Assigned to treatment x police endorsement</th>
<th>Assigned to treatment x armed group endorsement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0.134 [0.084]</td>
<td>-0.087 [0.061]</td>
<td>-0.092 [0.061]</td>
<td>-0.961*** [0.133]</td>
<td>0.154* [0.087]</td>
<td>0.204** [0.080]</td>
<td>0.051 [0.183]</td>
</tr>
</tbody>
</table>

Observations 2,673

Individual controls Yes

Community controls Yes

Block FE Yes

Weights Yes

Estimator OLS

**Note:** Specification includes individual- and community-level controls, block fixed effects, and inverse probability weights.

Standard errors, clustered by community, are in brackets.

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

---

### More Coordination between and within Governmental and Communal Institutions

Table 6 reports the ITT on consensus around dispute resolution (columns 1 and 2); coordination between JACs, police officers, and Police Inspectors (columns 3–5); and the cohesiveness and functionality of JACs (column 6). To measure consensus around dispute resolution, we use the same four hypothetical scenarios of conflict and crime that we used to measure reliance on armed groups. For each hypothetical scenario, respondents were asked which authority they would report to first and which they believed should provide a “definitive” resolution. We take the modal response to each of these questions within each community, then code a dummy indicating whether each individual response matches the communal mode.

We measure coordination separately for leaders, police commanders, and Police Inspectors. Leaders were asked whether they had the number for a police commander or Police Inspector stored on their phone; whether they believed coordination between JACs, police officers, and Police Inspectors improves dispute resolution; whether they believed police officers and Police Inspectors “actively” support the JAC; and whether the JAC contacted a police officer or Police Inspector for help with dispute resolution in the past six months. We code dummies for affirmative answers to each of these questions.

Police commanders and Police Inspectors were similarly asked if they had the number for a JAC member from each community stored on their phones, whether each JAC had contacted them for help with dispute resolution in the past six months, and whether they had visited each community in the past six months. (The endline was conducted more than seven months after the end of the intervention.) We code dummies for affirmative answers to each of these questions. Finally, to measure the cohesiveness and functionality of JACs, leaders were asked whether there exists an “atmosphere of trust” among JAC members, whether JAC meetings devolve into fights and disagreements, and whether the JAC meets at least monthly. We code Likert-type scales ranging from 1 to 5 for the first two questions. We code a dummy for affirmative answers to the third.

We find no evidence that the program increased consensus around dispute resolution. We find suggestive evidence that the program increased coordination between state and communal authorities according to leaders, though this result is only weakly statistically significant and is sensitive to specification.11 Although

11 In our PAP we prespecified that leaders would also be asked whether they know the name of a police officer or Police Inspector. Because ComunPaz participants exchanged names during the workshops, we believe this is more appropriately interpreted as a manipulation check. Interestingly, treatment group leaders were no more likely to know the name of a police officer or Police Inspector than control group leaders, perhaps because the survey was administered more than six months after the end of the program. When we include knowledge of names as proxies for coordination, the AES is positive but no longer statistically significant at conventional levels.
the program did not increase coordination according to police officers, it did increase coordination according to Police Inspectors. This is consistent with Table 4 and again suggests that the program was more effective in improving relations and encouraging coordination with Police Inspectors, perhaps because they have more contact with communities than police officers do. We find that the program improved coordination within JACs as well, in particular by creating an atmosphere of trust among JAC members.

Finally, Table 7 reports the ITT on our costly behavioral measures of demand for (columns 1 and 2) and actual coordination (column 3) between state and communal authorities. These measures suffer from missing data. When we attempted to contact JAC leaders a week after the survey was complete, many were unreachable. As a result, we are missing data on petitions and WhatsApp groups for 32 of the 149 communities in our sample. Fortunately, missingness is not statistically significantly correlated with treatment or any of our community-level controls, mitigating bias concerns. Interestingly, we find that, if anything, residents of treatment communities were less likely to sign petitions requesting greater coordination between state and communal authorities. Treatment group JACs were 17.8 percentage points less likely than control group JACs to receive any petitions, and they received 1.14 fewer petitions overall. These represent substantially large reductions of 24.7% and 26.7%, respectively, relative to the control group means (0.72 and 4.27).

One possible explanation for this finding is that demand for coordination between state and communal authorities was already high in our sample and that ComunPaz helped meet this demand in the treatment group. Consistent with this interpretation, 63.2% of all communities received at least one petition, with a mean of 3.64 petitions per community. If the intervention helped satisfy demand by improving coordination between state and communal authorities—as Table 6 suggests—then it is unsurprising that demand was lower in the treatment group after the intervention was complete. Fewer communities (20.6%) established WhatsApp groups, and we find no evidence that treatment communities established them at a higher (or lower) rate than control communities.

12 The number of petitions signed ranges from a low of 0 (36.8% of communities) to a high of 18 (1.7% of communities).

We are missing data on petitions and WhatsApp groups for 19.4% of treatment communities and 23.4% of control communities. These proportions are not statistically different from each other.

### Table 6. Coordination between and among Governmental and Communal Institutions

<table>
<thead>
<tr>
<th>Consensus around dispute resolution</th>
<th>Coordination between JACs, police, and Pls</th>
<th>Coordination within JACs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents</td>
<td>Leaders</td>
<td>Leaders</td>
</tr>
<tr>
<td>Assigned to treatment</td>
<td>-0.031</td>
<td>0.092</td>
</tr>
<tr>
<td></td>
<td>[0.036]</td>
<td>[0.056]</td>
</tr>
<tr>
<td>Observations</td>
<td>2,673</td>
<td>1,182</td>
</tr>
<tr>
<td>Individual controls</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Community controls</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Block FE</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Weights</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Estimator</td>
<td>AES</td>
<td>AES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coordination between JACs, police, and Pls</th>
<th>Coordination within JACs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaders</td>
<td>Pls</td>
</tr>
<tr>
<td>Assigned to treatment</td>
<td>0.153**</td>
</tr>
<tr>
<td>Observations</td>
<td></td>
</tr>
<tr>
<td>Individual controls</td>
<td></td>
</tr>
<tr>
<td>Community controls</td>
<td></td>
</tr>
<tr>
<td>Block FE</td>
<td></td>
</tr>
<tr>
<td>Weights</td>
<td></td>
</tr>
<tr>
<td>Estimator</td>
<td></td>
</tr>
</tbody>
</table>

Note: Specifications in columns 1–3 and 6 include individual- and community-level controls, block fixed effects, and inverse probability weights. Columns 4 and 5 exclude individual-level controls. Standard errors are in brackets and are clustered by community in columns 1–3 and 6. *p < 0.10, **p < 0.05, ***p < 0.01.

### Table 7. Demand for Coordination between State and Communal Authorities Using Behavioral Measures

<table>
<thead>
<tr>
<th>Any petitions</th>
<th># of petitions</th>
<th>WhatsApp group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigned to treatment</td>
<td>-0.178**</td>
<td>-1.139</td>
</tr>
<tr>
<td>Observations</td>
<td>117</td>
<td>117</td>
</tr>
<tr>
<td>Individual controls</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Community controls</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Block FE</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Weights</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Estimator</td>
<td>OLS</td>
<td>OLS</td>
</tr>
</tbody>
</table>

Note: All specifications include community-level controls, block fixed effects, and inverse probability weights. *p < 0.10, **p < 0.05, ***p < 0.01.
DISCUSSION

We find that ComunPaz reduced the prevalence of unresolved and violent disputes at the community level and diminished residents’ already limited reliance on armed groups. These results are consistent with our theoretical framework and our PAP. Contrary to our expectations, however, we find no evidence that the program induced reliance on either state or communal authorities. This is especially surprising given our finding that the program reduced the prevalence of unresolved and violent disputes. If more disputes are being resolved in treatment communities but neither state authorities nor communal institutions nor armed groups are resolving them, then who is?

Although we cannot answer this question definitively, we can combine our quantitative and qualitative data to explore three potential explanations. (These analyses were not prespecified, and should be interpreted as exploratory. The three potential explanations are neither exhaustive nor mutually exclusive.) First, ComunPaz may have increased participants’ ability to resolve conflicts through direct dialogue, without recourse to a third party. Our qualitative data indicate that participants identified direct dialogue as an important first step in dispute resolution in nearly one-third (20) of treatment communities. Our quantitative data similarly suggest that roughly one-third of respondents viewed direct dialogue as the most appropriate response in hypothetical scenarios of crime and conflict. Our qualitative data also suggest, however, that much larger proportions of respondents preferred reliance on either state or communal authorities. Moreover, as we show in Appendix A.5.4, direct dialogue does not appear to be more common in treatment communities than in control communities and, if anything, may be less so. Taken together, these results suggest that an increase in direct dialogue is unlikely to explain the reduction in unresolved and violent disputes.

Second, ComunPaz may have created response routes so complex that they did not lend themselves to reliance on any particular authority. From our qualitative data, the modal response route involved three different authorities and seven different mechanisms of dispute resolution. (Crucially, for all their complexity, ComunPaz response routes never included rebel groups.) This complexity is likely attributable to the structure of authority already in place in treatment communities, which facilitators did not seek to alter, rather than to changes induced by the program. One potential observable implication of this explanation is that treatment group respondents should be more likely to rely on multiple authorities to resolve any given dispute (i.e., “forum shopping”). From our quantitative data, however, a minority of residents (8%) reported relying on more than one authority; the proportion of leaders who reported relying on multiple authorities was larger (28%) but still relatively small. Moreover, as we show in Appendix A.5.5, reliance on multiple authorities does not appear to be more common in the treatment group, suggesting that response route complexity is unlikely to explain the null effects on reliance on police officers, Police Inspectors, and JACs.

Third, ComunPaz may have enabled better coexistence and habitation (“convivencia”) among residents, thus mitigating the risk that conflict would occur in the first place. As our qualitative data illustrate, facilitators explicitly encouraged participants to identify the most important sources of disputes in their communities and to avoid behaviors that might provoke conflict with neighbors. In at least three treatment communities, facilitators helped participants resolve disputes during the intervention itself. A potential observable implication of this explanation is that treatment group respondents should be more likely to report the absence of significant sources of disputes in their communities. Appendix A.5.6 confirms that treatment group residents and leaders were, respectively, 2.9 and 2.6 percentage points more likely to report an absence of disputes. Although these ITT estimates are not quite statistically significant at conventional levels (p = 0.165 and p = 0.133, respectively), they constitute substantively large increases of roughly 50% and 90% relative to their respective control group means (0.058 and 0.029). This may help explain why the reduction in unresolved and violent disputes was not accompanied by increased reliance on either state or communal authorities.

CONCLUSION

Fair, efficient dispute resolution is critical to lowering the risk of conflict escalation and impeding the reemergence of rebel governance in countries recovering from civil war. We argue that dispute resolution can be made more effective by leveraging complementarities between state and communal authorities. During civil war, armed groups often co-opt communal institutions to help govern the territories they control—allied to Arjona (2016) describes as “aliocracy.” We argue that states can use a similar strategy to prevent rebel resurgence once civil war ends. We test our theory through an experimental evaluation of the ComunPaz program in Colombia.

We find that the program reduced the prevalence of unresolved and violent disputes at the community level, increased citizens’ trust in (some) state authorities, and strengthened coordination between state and communal institutions. We also find more suggestive evidence that the program reduced citizens’ trust in, and reliance on, armed groups (albeit without increasing reliance on either state or communal authorities). These results are striking given that the intervention was short (approximately 10 hours per community) and inexpensive (approximately $1,000 USD per community). They are also striking given that in many Colombian communities, JACs were incorporated into rebel governance arrangements at the local level (Vargas Castillo 2019). Although speculative, this suggests that governments may in some cases be able to leverage the legacies of rebel governance in the past to prevent renewed rebel governance in the future.
While we cannot say whether these effects will persist over time, the endline was administered roughly seven months after the program was complete, suggesting the possibility of lasting change. And although we cannot know for certain how our results will generalize to other settings, we do not believe the scope of our findings is specific to the particular dynamics of violence and rebel governance in our sample. These dynamics are not unique to these particular regions of Colombia or to Colombia as a whole (Arjona 2016). Nor do we believe the scope is limited to strong states (the Colombian state is stronger than many conflict and postconflict states, but remains weak in rural areas) or to countries in which peace is already consolidated (despite the 2016 peace agreement, the security situation in Colombia remains volatile). Moreover, although JACs are recognized under Colombian law, we see no reason to expect formal legal recognition to be a necessary condition for the success of the program.

However, two important scope conditions are implicit in our theory. First, our theory (and the program itself) hinges on the existence of potential complementarities between state and communal institutions. States benefit from the local legitimacy and inside information that communal institutions can provide; communal institutions benefit from the resources and coercive capacity that states can provide. If communal institutions are so ineffective and illegitimate that they have no comparative advantages relative to the state—or, conversely, if the state is so weak and resource constrained that it has no comparative advantages relative to communal institutions —then interventions like ComunPaz are unlikely to succeed. Second, our theory depends on windows of opportunity for the state to expand into territories from which it was previously absent. Programs like ComunPaz are unlikely to succeed in places wracked by violence at the time of implementation or that are already controlled by rebel groups. In these settings, the window of opportunity for consolidating state authority likely has already closed.

But these scope conditions are not overly restrictive. Indeed, we speculate that the benefits of interventions like ComunPaz may even extend to contexts without histories of civil war or rebel rule. We focus on areas that were previously governed by rebel groups, as these are likely to be of especially urgent concern to state-builders seeking to consolidate power and prevent rebel resurgence. But communal institutions also exist in areas where rebel groups never sought or achieved territorial control in the past; indeed, they exist in many countries that never experienced civil war at all, especially those with relatively weak and resource-constrained states (Baldwin 2015). Programs like ComunPaz could, in theory, improve perceptions of the state and reduce the prevalence of unresolved and violent disputes in these settings as well. We leave this question for future research to explore.

SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit http://doi.org/10.1017/S0003055422000284.

DATA AVAILABILITY STATEMENT

Research documentation and data that support the findings of this study are openly available at the American Political Science Review Dataverse: https://doi.org/10.7910/DVN/OXSQOMU. Limitations on data availability are discussed in the text and/or appendix.

ACKNOWLEDGMENTS

For their generous financial and logistical support we thank the UN Development Programme (especially Jairo Matallana), the KfW Development Bank, the Folke Bernadotte Academy, the Organization for International Migration, and the Social Science Research Institute at Brown University. We are grateful to Colombia’s Department of National Planning (especially Diana Urbano) for administrative support. For their helpful feedback, we thank Cyril Bennouna, Graeme Blair, Alex Coppock, Travis Curtice, Alex Hartman, Aila Matanock, Sarah Moore, Mara Revkin, Cyrus Samii, Daniel Schulte, Stephanie Schwartz, Rich Snyder, and Nicolas Taccone, as well as participants at the 2019 Evidence in Governance and Politics workshop in Washington, DC (EGAP 25), the 2019 and 2020 American Political Science Association Annual Meetings, the 2020 Folke Bernadotte Academy Workshop on Security Sector Reform, the Harvard University Experiments Workshop, the Northwestern University Comparative Politics Workshop, the University of Chicago Comparative Politics Workshop, and the Duke University Security, Peace, & Conflict Workshop.

FUNDING STATEMENT

This research was funded by the UN Development Programme, the KfW Development Bank, the Folke Bernadotte Academy, the Organization for International Migration, and the Social Science Research Institute at Brown University.

CONFLICT OF INTEREST

The authors declare no ethical issues or conflicts of interest in this research.

ETHICAL STANDARDS

The authors declare the human subjects research in this article was reviewed and approved by the IRBs at Yale University (Protocol #1508016338) and Brown University (Protocol #1807002149) and certificate numbers are provided in the appendix.