Armed Group Governance and Civilian Perceptions in Conflict Regions

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Abstract

This paper examines how governance by illegal armed groups shapes civilian attitudes and perceptions toward the state in conflict-affected areas of Colombia. Using panel data from the MAPS survey and an event-study difference-in-differences approach, I estimate the effects of armed group rule on formal institutional trust, perceived security, and economic well-being. The results show that, on average, illegal groups' rule increases trust in civil institutions but leads to declines in perceived economic conditions. Disaggregated analysis reveals contrasting patterns across armed actors: while FARC dissidents and the ELN reduce trust but improve economic perceptions, criminal gangs reinforce trust in formal institutions while coinciding with worsening economic views. These findings highlight that the effects of armed group governance are not uniform, but depend on the group involved, the nature of governance practices, and the broader state context.

Resumen

Este trabajo examina cómo la gobernanza ejercida por grupos armados ilegales influye en las actitudes y percepciones civiles hacia el Estado en zonas afectadas por el conflicto en Colombia. Utilizando datos de panel de la encuesta MAPS y un enfoque de estudio de eventos con diferencias en diferencias, estimo los efectos de la gobernanza de estos grupos sobre la confianza en las instituciones formales, la percepción de seguridad y el bienestar económico. Los resultados muestran que, en promedio, la gobernanza de los grupos ilegales incrementa la confianza en las instituciones civiles, pero conlleva una disminución en la percepción de las condiciones económicas. El análisis desagregado revela patrones contrastantes entre actores armados: mientras los disidentes de las FARC y el ELN reducen la confianza, pero mejoran las percepciones económicas, las bandas criminales refuerzan la confianza en las instituciones formales, aunque coinciden con una visión económica más negativa. Estos ha-

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llazgos subrayan que los efectos de la gobernanza de grupos armados no son uniformes, sino que dependen del grupo involucrado, del tipo de prácticas de gobernanza y del contexto estatal más amplio.

I. Introduction

Irregular armed conflicts are among the most destructive forces that contemporary societies confront, driving displacement, economic decline, institutional fragility, and long-term harm to physical, mental, and environmental well-being (United Nations, N.d.; UNHCR, 2024; Collier, 1999; Bendavid, 2021; UNEP, 2009; Fazel, 2005; Petersen, 2002). Yet despite—or perhaps because of—their destabilizing effects, many illegal armed groups engage in what scholars have called "competitive state-building," seeking to establish legitimacy in the eyes of local populations and challenge the state's authority (Kalyvas, 2006). While much of the early research on armed group governance focused on ideologically driven rebel movements—such as insurgencies aiming to overthrow or reshape the political system—a growing body of work has begun to recognize that both these groups and criminal organizations—often lacking overt political goals—develop governance strategies that shape the everyday lives of civilians (Blattman, 2024; Lessing, 2017). They do so by establishing administrative structures and providing public goods and services typically associated with the state—such as education, infrastructure, and justice—in order to enforce order and gain a comparative advantage over rivals (Arjona, 2016; Blattman, 2024; Mampilly, 2021) Thereby, insurgent groups not only secure territorial control but also foster collaboration with civilians, who may offer support in the form of information, shelter, or protection in the face of external inquiries (Arjona, 2016). This contradiction—simultaneously violent enforcers and governance providers—raises questions about how civilians experience and interpret the governance of armed groups.

This paper explores the relationship between armed group governance and civilian attitudes and perceptions toward the state, particularly how this relationship may differ across rebel and criminal actors. While there is substantial evidence on the negative consequences of war-related violence on affected populations (Vargas, 2009; Carey, 2020; Ibán˜ez, 2023; Pérez-Cardona, 2022), much less is known about the political effects that arise from the governance practices that illegal armed actors adopt when taking over control. Armed groups often engage in regulating social and economic practices, service provision, and enforcement mechanisms that resemble state functions, potentially shaping how civilians perceive authority and institutional legitimacy (Arjona, 2016; Mampilly, 2021; Blattman, 2024). Our understanding of how these governance structures influence civilians' attitudes toward the state remains limited, despite the widespread prevalence of rebel and criminal governance—Lessing (2017) estimates that tens or even hundreds of millions of Latin Americans live under such rule—. This study seeks to address that gap.

The effects of armed group governance on civilians' attitudes toward the state depend on how it is exercised and how it is perceived by civilians. I conceptualize armed group governance along two key dimensions: the extent to which armed groups impose invasive rules that regulate civilian life, and the level of violence they use to enforce those rules. Different combinations of these dimensions likely produce different governance configurations, each with distinct effects. Invasive and coercive forms of armed group governance may alienate civilians from the state, especially when the former seeks to displace or replace its core functions. Yet, in some cases, the experience of arbitrary or violent rule may prompt civilians to turn toward the state in search of protection and stability. However, civilians not only structure their attitudes based on the behavior of the armed actors, but also their expectations of the state and its ability to deliver services, provide justice, and maintain order.

I study this question in Colombia, where illegal armed groups have historically governed large portions of the national territory and continue to exert control over many regions today. Colombia's armed conflict—featuring large leftist armies, robust right-wing paramilitaries, and powerful drug trafficking organizations—has shaped local governance and citizen-state relations for over six decades. Even after

the 2016 demobilization of the FARC-EP, the country's largest guerrilla group, other armed actors—including the ELN, FARC dissidents, and the *Autodefensas Gaitanistas de Colombia* (AGC)—have continued to establish territorial control and interact with civilian populations through diverse governing strategies.

The pace of armed groups' expansion has been remarkable. Despite the aforementioned peace treaty and intermittent negotiations for ceasefires and agreements with illegal actors, many regions continue to experience persistent or renewed armed group governance. At the height of its influence in 2002, the FARC-EP operated in more than 500 municipalities (González, 2015). As of 2024, the AGC is reportedly active in 30 of Colombia's 32 departments, and exerts influence in over 300 municipalities (La FM, N.d.; International Crisis Group, 2024). While the FARC may no longer be active in its original form, its legacy persists: in many of the communities it once governed, its absence has left a governance vacuum that other armed groups have since contested (Blair, 2022). Understanding how diverse forms of armed group governance shape civilians' perceptions of the state is essential to evaluating broader processes of legitimacy, trust-building, and state reconstruction in post-conflict Colombia.

To examine the effects of armed group governance on civilians' attitudes and perceptions toward the state, I exploit the Mapping Attitudes, Perceptions, and Support (MAPS) panel survey, conducted in 170 municipalities across Colombia's PDET zones-regions heavily affected by violence and poverty during the country's conflict. This survey captures detailed information on armed group presence, trust in institutions, justice, security, political participation, and public service provision, and is representative at the level of each of the 16 PDET subregions. I restrict the analysis to individuals recontacted across all three waves, allowing for individual-level panel estimation.

To measure governance, I rely on responses from the MAPS survey regarding self-reported armed group control in respondents' communities. To capture its effects, I examine outcomes across three key dimensions of civilian attitudes and perceptions: trust in institutions, perceived security, and economic well-being. Trust is measured using indexes constructed from questions on trust in national and local authorities, state security forces, and civil institutions. Each index is standardized for comparability across time and groups, with missing responses imputed using municipality-wave averages [1]. Perceptions of security are measured using questions about perceptions of local safety, changes in security conditions, and concerns related to crime and armed conflict. Economic perceptions are assessed through questions on both communityand individuallevel financial conditions. In addition to estimating average treatment effects, I disaggregate the treatment variable by armed group, distinguishing the governing practices of FARC dissidents, the ELN, and criminal gangs. This allows me to identify the differentiated effect of illegal governance by armed actor, each with distinct strategic objectives and modes of interaction with civilian populations. It is important to note that the analysis captures cross-group differences in governance experiences, rather than variation in the specific practices or intensity of governance within a given group.

I implement a difference-in-differences design following Callaway (2021) to estimate the causal effects of governance exposure, leveraging the staggered timing of treatment—individuals are considered treated from the first period they report experiencing armed group governance. To estimate dynamic treatment effects while accounting for selection and covariate imbalance, I use the doubly robust estimator proposed by Sant'Anna (2020), while controlling for baseline characteristics and respondent fixed effects. The analysis distinguishes two treatment cohorts (2021 and 2023), and compares them to individuals who were never

1 Non-response and "Don't know" answers are rare across all trust questions, with a maximum of 7.55%. A regression analysis indicates that missingness is only weakly associated with observable characteristics, suggesting minimal risk of systematic bias. This matter is further discussed in the Data section.

treated during the study period. This design allows me to trace how trust in the state, and perceptions of economic and physical security evolve in response to governance by armed actors over time.

The results confirm that governance by illegal armed groups significantly shapes civilian attitudes and perceptions. On average, armed group governance is associated with increased trust in civil institutions-village action boards and social leaders-with positive effects of up to 0.23 standard deviations among individuals treated in 2021. Trust in other formal institutions is also improved. However, this trust does not extend to the state's armed forces, where no significant change is observed. Perceptions of economic well-being tend to decline after having experienced armed governance, with respondents reporting a decrease of around 0.11 standard deviations in personal economic security shortly after armed group governance is established. Perceptions of security show mixed patterns, but identification concerns constrain the conclusions that can be drawn.

When disaggregating by armed actor, contrasting patterns emerge: FARC dissidents and the ELN are associated with declines in trust in state institutions and improvements in perceived economic conditions, while criminal gangs appear to reinforce trust in formal institutions but are linked to worsening economic perceptions. Together, the results indicate that civilian responses to armed group governance are neither uniform nor straightforward: they vary depending on the identity of the armed actor and the nature of the governance provided, and the strength and legitimacy of the state institutions. A broad set of robustness checks confirm these results.

This study contributes to the literature in three key ways. First, it advances our understanding of power and governance in irregular conflict settings by examining how both rebel and criminal armed groups establish authority and how civilians respond to these arrangements. To the best of my knowledge, this is among the first studies to systematically compare these two forms of nonstate governance using panel data. While much of the existing work emphasizes the destructive impacts of armed conflict, this paper highlights the political and institutional roles that illegal armed groups can play and how these roles shape civilian attitudes toward the state. Second, it offers new insights into the relationship between non-state governance and state legitimacy. By leveraging panel data and focusing on key indicators of trust, security, and economic wellbeing, the analysis suggests that armed group governance may compete with, complement, or displace formal institutions in the eyes of the community. Finally, the findings carry important policy implications: by identifying how different forms of governance affect civilian trust and perceptions, I provide a foundation for designing policies that have the potential to strengthen institutional legitimacy, rebuild state-citizen relations, and address the governance vacuums that armed groups often exploit.

II. Conceptual Framework

Armed group governance refers to the set of rules and institutions that insurgent groups establish to regulate civilian life, which often mimic state structures. This includes, but is not limited to, the provision of security, market regulation, dispute adjudication, and justice enforcement (Mampilly, 2011). Establishing governance benefits armed groups in two key ways: it enhances their ability to control territory and it fosters relationships with civilians, potential allies when it comes to collecting information on rival groups or state forces (Arjona, 2016). Yet governance not only impacts armed groups but also transforms how civilians perceive state authority. This leads to the question of how does armed group governance influence civilians' attitudes and beliefs, especially regarding their views toward the state.

When an armed group arrives to a community, it faces a fundamental choice: it can either establish strategies structures and rules that structure residents'

behaviors, or it can choose not to do so. This decision depends, in part, on the value the armed group assigns to the territory and on their time horizon (Arjona, 2016). Governance is more likely to occur in territories that hold strategic military importance—such as high-value passages—or economic significance, like resource-rich areas. Additionally, if the armed group intends to remain in the community for an extended period of time, it is more likely to implement rules governing civilian behavior to establish lasting order. However, governance is not necessarily exerted only by one illegal actor. Even in contested areas, competing armed groups may simultaneously establish governance structures (DeBruin, 2024). While this framework applies broadly to all non-state actors, it is important to distinguish between rebel groups-which tend to pursue ideological or political goals-and criminal organizations-whose motivations are often economic-when analyzing governance practices by armed groups.

To account for this, I adopt a reasonable classification that distinguishes armed actors based on their dominant goals and behaviors: rebel groups (such as FARC dissidents and the ELN), typically associated with political or ideological projects, and criminal groups, whose strategies are more economically motivated. This distinction draws from descriptive categorizations developed by investigative and policy organizations, including Loaiza (2025), International Crisis Group (2017, 2025), and ACAPS (2023), which document how armed actors vary in their governance approaches across Colombia. These sources underscore how FARC dissidents have fragmented into factions with heterogeneous objectives, how criminal groups seek territorial control for revenue generation, and how ELN strategies can vary between ideological influence and pragmatic governance. However, even within the same category, armed groups do not govern uniformly—their strategies differ also within the same organization depending on the region, leadership, and local context. One group's governance strategies can shift across territories—from efforts to build ideological legitimacy or mediate community disputes, to extractive practices centered on coercion and extortion. These differences highlight the need to approach non-state governance not as a fixed typology, but as a flexible and situational phenomenon.

To analyze variation in how different armed actors govern, I conceptualize non-state governance as having two dimensions. The first is the extent to which armed groups impose *invasive rules* on civilian life. Highly invasive governance entails broad intervention in the community's daily life that goes beyond economic and security matters, such as regulating personal relationships, controlling access to goods and services, imposing curfews, or dictating social and cultural practices. An example of this type of governance is the Taliban in Afghanistan, which imposes rigid codes of behavior, particularly regarding education, gender norms, and personal appearance (Giustozzi, 2009). In contrast, minimally invasive governance occurs when armed groups limit their interventions to specific domains, such as taxation, dispute resolution, or economic regulation, without dictating broader social behaviors. In parts of Mexico, for instance, cartels like the Sinaloa Cartel engage in minimally invasive governance, primarily focusing on ensuring their economic activities run smoothly while allowing local populations relative autonomy in their daily lives (Lessing, 2021).

The second dimension is the *extent of violence* used to enforce rules. Some armed groups force compliance through brutal and highly public forms of violence, such as extrajudicial executions, forced disappearances, and corporal punishment. El Salvador's MS-13 and *Barrio 18* gangs, for example, have been known to impose territorial control through extreme violence, including public killings as a means of reinforcing fear and obedience (Wolf, 2017). Such extreme measures of violence serve both to punish past transgressions and to deter future disobedience. On the other hand, some groups rely more on co-optation, persuasion, or selective enforcement, which are less violent forms of governance. For example, in parts of Syria, Hay'at Tahrir al-Sham (HTS) has sought to legitimize its rule

through local governance structures, public service provision, and a court system that, while coercive, places a stronger emphasis on institutional control rather than indiscriminate violence (Revkin, 2021).

These two dimensions—the extent of rule invasiveness and the level of violence used for enforcement—give rise to distinct scenarios, each influencing how civilians perceive the state in different ways. Armed groups that provide order while avoiding excessive repression may foster civilian acceptance or even some degree of legitimacy. When such governance is also non-invasive, civilian attitudes toward the state may remain stable—though if it improves local outcomes, trust in the state can even be enhanced (Staniland, 2012).

Groups that impose limited rules but use coercion, or those that establish invasive norms but enforce them nonviolently, may foster reluctant acceptance or even preference if state institutions are absent, abusive, or ineffective (Marten, 2013; Kalyvas, 2006). On the other hand, those that rule through unpredictable violence and harshly invasive measures may alienate populations and increase demands for state protection (e.g. DeBruin, 2024). In some cases, however, civilians may prefer even coercive armed governance over a weak or absent state—especially where state institutions are perceived as corrupt, abusive, or incapable of providing basic security (Kalyvas, 2006; Mampilly, 2011; Sánchez de la Sierra, 2020).

The state is not a passive actor in these dynamics: its institutional strength and response strategies shape how armed groups govern and how civilians react. Where state institutions are weak or absent, armed groups can more easily impose their own rules. But when the state is strong and trusted, armed groups face greater resistance to establishing invasive governance or co-opting local institutions (Arjona, 2016). In some cases, armed governance may even complement state authority. In Medellín, for example, gangs provide services alongside a functioning state (Blattman, 2024). In other contexts, the state has incorporated local militias or former rebels into formal institutions, blurring boundaries in ways that can enhance perceived stability and trust in governance (Staniland, 2012). Civilians can also influence the type of governance armed groups establish, especially through strong community organization and leadership. In Afro-Colombian territories, communities with unified leadership and well-organized local institutions were able to resist the expansion of coca crops introduced by illegal armed actors (Lobo, 2022). The quintessental example of this in the *Juntas de Acción Comunal* (JACs)—legally recognized grassroots organizations. The JACs play a crucial role in local governance, acting as intermediaries between communities, the state, and, in some cases, armed groups. Their presence can enhance what Arjona (2016) terms civic autonomy, enabling communities to resist external imposition and negotiate the terms of local order. Kaplan (2017) also shows how such institutions have helped communities organize nonviolent resistance and maintain cohesion amid conflict. The strength and cohesion of JACs can therefore shape both the type of governance that armed actors are able to establish and how civilians perceive state legitimacy.

Therefore, armed group governance doesn't affect civilian attitudes toward the state in a single, straightforward way. Instead, its impact depends on how these groups govern—the extent of rule invasiveness, the level of violence used for enforcement, and the state's pre-existing institutional strength and its response strategies. In some cases, armed groups may weaken state legitimacy by taking over state functions and through coercive rule, while in others, they may coexist with or even complement state governance. Whether armed governance reinforces, competes with, or undermines the state ultimately depends on how these actors interact and how civilians weigh the benefits and risks of both state and non-state governance. In this study, I test whether these differences in governing strategies—particularly between rebel and criminal groups—translate into distinct effects on civilians' perceptions of the state. Understanding these dynamics is crucial for assessing the broader political

consequences of armed governance and its implications for statebuilding, legitimacy, and security provision.

III. Background

A. Armed Conflict in Colombia

Colombia has been immersed in civil war for more than six decades. This conflict is rooted in long-standing political exclusion and rural inequality that has existed in the country historically. La Violencia, a brutal civil conflict between Liberal and Conservative party supporters sparked by the 1948 assassination of Jorge Eliécer Gaitán, resulted in more than 200,000 deaths and entrenched deep rural divisions that laid the groundwork for future insurgencies (Sánchez, 1983; Karl, 2003). From this conflict, and the consequent narrowing of political debate, emerged leftwing armed guerrilla groups, most notably the *Fuerzas Armadas Revolucionarias de Colombia* (FARC-EP) and the *Ejército de Liberación Nacional* (ELN), whose primary objectives were to seize power and promote communist ideology. Although these guerrilla groups were initially political in nature, they engaged in many forms of violence to articulate their demands and pressure the government (Pécaut, 2008). Rural elites and politicians, many of whom were large landowners, were particularly targeted by this violence. As a response, during the 1980s, they supported the creation of illegal self-defense groups aimed at countering the guerrillas. Over time, these groups evolved into paramilitary organizations, such as the *Autodefensas Unidas de Colombia* (AUC) (Romero, 2003). These groups were notorious for their involvement in massacres, forced displacements, and their deep ties to drug trafficking (Fundación Ideas para la Paz, 2010).

In 2016, under President Juan Manuel Santos, Colombia signed a historic peace treaty with the FARC-EP. This agreement resulted in the group's demobilization, the surrender of their arms, the reintegration of ex-combatants into society, the establishment of transitional justice mechanisms for war criminals, and the formation of a political party named "Comunes" composed of former FARC members (Gobierno de Colombia y FARC-EP, 2016). One of the critical components of the treaty was the prioritization of 16 regions heavily affected by violence, known as the PDET zones (*Programas de Desarrollo con Enfoque Territorial*). These regions were designed to "implement sectoral plans and programs as a priority within the framework of the 'Reforma Rural Integral' (RRI) and the relevant measures established by the Final Agreement" (Función Pública, 2017). The PDET zones encompass 170 municipalities and more than 11,000 rural settlements, which have historically suffered from violence and poverty (Agencia de Renovación del Territorio, 2022).

Following the Peace Agreement, territories dominated by the FARC-EP experienced significant shifts in power dynamics. Although the FARC-EP as a group did demobilize following the treaty, not all members adhered to the peace process. Many dissidents, disagreeing with the treaty's terms or unwilling to demobilize, regrouped into what are now known as FARC dissident factions, and have since engaged in illegal activities, including drug trafficking and territorial control (InSight Crime, 2024*b*; National Counterterrorism Center, 2024). The vacuum left by the group's demobilization provided an opportunity for other illegal armed groups, regardless of their nature, such as the FARC dissidents, ELN, and criminal organizations, to expand and consolidate control over these areas. These groups have exploited the voids of state presence to further their objectives, including drug trafficking, illegal mining, and extortion (InSight Crime, 2024*a*; Colombia Peace, 2024). By 2024, it is estimated that such groups have re-established control over previously abandoned areas and conquered new ones, complicating efforts to achieve lasting peace and stability in these regions (International Crisis Group, 2024; La FM, N.d.).

PDET zones are particularly relevant for studying the relationship between the state and citizens in conflict-affected areas due to their distinct characteristics. First, as previously mentioned, these regions have historically experienced high levels of violence, making them among the most severely affected by the Colombian armed conflict since its onset. As a result, they provide a valuable context for analyzing dynamics that may be applicable to other civil war settings.

Second, these zones were a primary focus of the programs and reforms outlined in the 2016 Peace Agreement, which aimed at territorial reparations, victim support, and alternative development, among other objectives. The Colombian government has since engaged with these communities and, to some extent, implemented its commitments. However, the degree and effectiveness of implementation have varied across PDET zones, and in many cases, state intervention has been insufficient. Overall, the process has been marked by significant delays, uneven progress, and serious non-compliance in some areas. Only 17.9% of the required annual resources have been executed; the reincorporation of ex-combatants faces persistent challenges, particularly regarding the sustainability of their productive projects; and security has deteriorated nationwide, with PDET zones especially affected and ex-combatants and social leaders increasingly targeted (Fundación Ideas para la Paz, 2024; Procuraduría General de la Nación, 2024).

While it is clear that PDET zones are not entirely stateless, they have historically experienced significant gaps in state presence, both before and after the Peace Agreement. These voids have been, in many cases, filled by armed groups that assume control over the governance and security dynamics in the region. Despite these shared characteristics, PDET zones are highly heterogeneous, with varying experiences of conflict and state intervention. Their differences must be carefully considered when analyzing the broader implications of this study. Although they do offer rich insights into state-citizen relations in conflict-affected contexts, their unique characteristics require caution in generalizing the findings of this study to other settings.

Consequently, the direction of the potential bias introduced by focusing exclusively on PDET zones is not straightforward. On the one hand, residents of these regions may be more familiar with the governance practices of armed actors, which could make them more resilient and less responsive to changes in them—suggesting that the estimated effects may be smaller than those in areas with less exposure to conflict. On the other hand, weaker ties to the state and higher levels of vulnerability may make civilians in these areas more sensitive to such changes, potentially amplifying the observed effects. Whether this leads to loweror upper-bound estimates is difficult to determine, especially given the internal heterogeneity of PDET zones. Disaggregated analyses across different zones would be necessary to better understand how local histories, institutional presence, and levels of community organization shape civilian responses to armed group governance in comparison to the rest of the country.

IV. Data

To understand the effect of armed group governance on civilians' attitudes, I use the Mapping Attitudes, Perceptions, and Support (MAPS) panel survey, conducted in communities historically affected by the conflict. The MAPS survey was implemented in PDET regions in 2019, 2021, and 2023. The objective of the survey is to "measure and trace attitudes, perceptions, and support of the citizens most affected by the armed conflict in Colombia" (Weintraub et al., 2023). It collects data on armed group governance, trust in government institutions, political participation, justice and conflict resolution, security, and public goods. It was a collaborative project between the Peace Research Institute Oslo (PRIO), Universidad de los Andes, and UNDP Colombia.

The MAPS survey is one of the largest conducted to study peace agreements, and the only one in Colombia representative at the level of each of the 16 PDET zones. Its panel structure and large sample size in war-affected communities enable rigorous longitudinal analysis in regions transitioning to peace. The survey used a probabilistic, stratified, and multistage sampling design, with random selection of sampling units at each stage. These units included municipalities, blocks, and dwellings, selected across two population strata: the 16 PDET regions, and the municipal capitals and rural hamlets of the selected municipalities (Weintraub et al., 2023). A pilot survey was conducted in 2017 in two municipalities—Tumaco (Nariño) and Mesetas (Meta). Based on its findings, a revised questionnaire was implemented in 2019 in two PDET zones, Arauca and Tolima. The first full wave, using the final questionnaire, was then conducted across the remaining PDET zones, reaching 12,052 respondents. Importantly, none of the questions relevant to this article changed between the revised questionnaire and the formal first wave, ensuring consistency in measurement and comparability. The second wave, conducted in 2021, included 11,777 respondents, and the final wave in 2023 surveyed 11,820 respondents. In total, the three waves comprise 35,649 responses.

For the purposes of this article, I use only the recontacted responses across all three waves, comprising 5,159 respondents per wave, for a total of 15,477 observations. When comparing the sociodemographic characteristics of recontacted respondents against those who were not between Wave 1 and Wave 2—either due to impossibility of follow-up or refusal to participate—the only statistically significant difference is in age: "those effectively contacted were more likely to be in the 36–55 age group than those refusing to participate in the second wave" (Weintraub et al., 2023). An attrition test on armed group presence in Wave 2 found no statistically significant differences between recontacted and new respondents. As for Wave 3, although the data is not yet public, its implementation and the distribution of sociodemographic characteristics were very similar to previous waves, providing no indication of systematic differences that would bias the results. All respondents are adults residing in municipal capitals, or rural hamlets consisting of at least 20 homes within 170 PDET municipalities, and all were randomly selected. The survey consists of six modules: demographic data, trust and political participation, the peace agreement with the FARC-EP and its implementation, wartime experiences, transitional justice, and perceptions of social services and community needs. For this study, I use responses from the first, second, and sixth modules. More details about the survey and its design can be found in Weintraub et al. (2023).

The treatment group for this study is defined as individuals who answered "Yes" and "Don't know" to the question: "In the last 6 months, in this community, was one or more of these groups in control: FARC dissidents, ELN, criminal groups?" Although the reference period was adjusted to 12 months in Waves 2 and 3 due to administrative motives, the responses remain comparable across waves, as the focus of these questions is on individuals' retrospective assessments. The control group consists of those who answered "No" or did not respond. To construct the best possible control group, I exclude individuals who answered "Yes" in 2019 from the estimations. Additionally, I exclude "switchers", which are individuals who answered "Yes," or "Don't know" in a given wave to any question but later changed their response to "No," or did not respond in subsequent waves-that is, individuals who were treated in a given wave and in a subsequent one were not treated.

The final dataset consists of 7,230 observations, including 1,586 individuals in the treatment group and 824 individuals who are never treated. Among the treated, 885 individuals begin treatment in 2021 and 701 in 2023, totaling 2,471 treated observations and 4,759 untreated observations across the panel. Since individuals may begin treatment in either Wave 2 or Wave 3, the treatment group is divided into two cohorts, and the analysis is conducted at the cohort level.

As an extension to the main specification—which aggregates armed group governance—I also explore heterogeneous treatment effects by disaggregating the treatment variable by specific armed group. In this alternative specification, I maintain the same definition of treatment (i.e., respondents who answered "Yes," or "Don't know" in a given wave), but apply it separately to each of the three questions referring to different armed groups-FARC dissidents, ELN, criminal gangs. This results in three distinct treatment groups, one for each armed group, while all other aspects of sample delimitation remain unchanged.

For the question on governance by FARC dissidents, the treatment group consists of 1,275 individuals—482 treated in Wave 2 and 793 in Wave 3. The total sample includes 9,408 observations, with 1,861 respondents in the control group. For the ELN governance question, the treatment group includes 1,042 individuals, while 2,325 belong to the control group, yielding a total sample of 10,101 observations. Among the treated, 400 were treated in Wave 2 and 642 in Wave 3. Finally, for the criminal gangs governance question, the total sample consists of 8,919 observations, with 1,521 treated individuals and 1,452 in the control group. The treated group includes 622 respondents in the 2021 cohort and 899 in the 2023 cohort.

Since these are self-reported surveys, there is a risk that respondents will not answer truthfully, particularly with sensitive questions related to armed groups. The primary threat to validity arises when respondents report "No" or "Don't know" despite an armed group controlling their community, possibly due to fear of retaliation. This misreporting affects the construction of treatment and control groups at the individual level, as some respondents who actually experience governance might be incorrectly classified as untreated. Consequently, the estimated effects are likely understated, since those individuals' perceptions still reflect the reality of governance even when they deny its presence. By contrast, if respondents erroneously report "Yes" despite no armed group actually exercising control, this should not pose a significant issue. If they genuinely believe an armed group governs their community, their subsequent responses will reflect this perception, which is ultimately what matters for measuring the impact of governance on attitudes and perceptions.

To address this concern, respondents who answered "Don't know" are included in the treatment group. In most cases, identifying whether an armed group maintains territorial control is relatively straightforward, given their tendency to impose governance structures, enforce rules, and establish a visible presence. Including "Don't know" responses minimizes the margin of error and ensures that the estimates provide a lower bound of the true impact of illegal group governance. As a robustness check, I later redefine the control group to include individuals who answered "Don't know" to confirm that this classification does not significantly affect the results.

Moreover, it is important to understand the extent to which reported governance in the MAPS survey coincides with actual governance by these groups. While the latter is difficult to measure objectively, the closest available proxies are administrative indicators of armed group presence and activity. I begin by using event-level data from the *Sistema de Información de Eventos de Violencia del Conflicto Armado Colombiano* (SIEVCAC), focusing on two types of violent acts that commonly signal the presence of armed groups: armed confrontations and selective assassinations. These events are recorded at the municipality level for the years 2019 and 2021. For the MAPS data, I apply the previously established treatment definition and compute the mean reported presence by group, municipality, and wave, obtaining the percentage of respondents in a given municipality and year who report the presence of a particular armed group. The correlation between MAPS and SIEVCAC data is moderate, no greater than 40% in either year (Sistema de Información de Eventos de Violencia del Conflicto Armado Colombiano, 2025*a*,*b*).

To further explore this relationship, I use data collected by the *Fundación Paz y Reconciliación* (PARES) on armed group presence at the municipality level across the country. I also perform a simple correlation analysis between armed group presence reported by PARES and MAPS survey responses, aggregated at the municipality level. The PARES dataset includes information on ELN presence for 2019 and 2021, as well as data on FARC dissidents, the *Clan del Golfo*, and the *Caparros* for 2021 (Fundación Paz y Reconciliación, N.d.). The correlation between reported governance and actual presence for the ELN is 65.38% in 2019 and 67% in 2021. In contrast, for FARC dissidents in 2021, the correlation is 41.57%, while for criminal groups (*Clan del Golfo* and *Caparros* combined), the rate of overlap is 63.23%.

Although a stronger correlation would be preferable, these differences are not surprising. Individual survey responses may diverge from municipality-level data due to the fragmented and uneven nature of armed group control. Moreover, the MAPS question specifically asks about governance, rather than mere presence, which may vary even across areas within the same municipality. Armed groups may be present in a given municipality but exert effective control over only certain communities. These differences highlight the fact that the concept of "presence" varies across institutions. As such, some degree of divergence between reported governance and other indicators is to be expected, but perception-based survey data is valuable because it offers essential insight into how civilians experience and interpret non-state rule.

In Chart 1, I present a balance check between the control group and the two treatment cohorts. In general, I find that most characteristics are balanced between groups, with no statistically significant differences for many key variables. Characteristics that do not change over time, such as gender or race, are controlled for through individual fixed effects, even if they show statistically significant differences. The main characteristic that poses a potential concern for estimation is the distribution of age groups across treatment and control groups, so it will be included as a control variable.

To assess the impact of armed group governance on civilians' trust in various institutions, I constructed a series of trust indexes based on the responses to the following question from the MAPS survey: "Please tell me how much you trust in: the president, the senate and the lower house of Congress, the mayor, judges, the national police, the armed forces, village action boards, the governor, the *personero*, and social leaders." Each index aggregates trust in a specific set of institutions, defined as follows:

- General trust: A composite of all the trust-related questions in the survey.
- Trust in national level institutions: Includes trust in the president, in the Senate and the lower house of Congress, and in the governor.
- Trust in local level institutions: Includes trust in the mayor, in the judges, and in the *personero*.
- Trust in state armed forces: Includes trust in the national police and armed forces.
- Trust in civil institutions: Includes trust in village action boards, and in social leaders.

For each index, I calculate the simple mean of responses to all included questions. Responses are originally coded on a four-point Likert scale, ranging from 1 ("nothing") to 4 ("very much"). To facilitate comparability across different measures, I standardize each index by subtracting the sample mean and dividing by the sample standard deviation, ensuring that the resulting measures have a mean of zero and a standard deviation of one. This approach facilitates the comparison across groups and over time, ensuring that variation in trust is not driven by individual differences in perception of the scale, rather than actual differences in trust.

Chart 1:
Balance Check

Variable	Control	Wave 2	Wave 3	Diff Wave 2	Diff Wave 3
Female	0.591	0.628	0.615	-0.037* (0.115)	-0.024 (0.344)
Single	0.176	0.216	0.190	-0.040* (0.038)	-0.014 (0.488)
Married	0.201	0.190	0.228	0.012 (0.545)	-0.027 (0.204)
Union	0.413	0.403	0.389	0.009 (0.698)	0.023 (0.358)
Divorced	0.092	0.090	0.091	0.002 (0.895)	0.001 (0.950)
Widow	0.061	0.069	0.064	-0.008 (0.490)	-0.004 (0.777)
Age 18-25	0.090	0.075	0.090	0.015 (0.252)	-0.000 (0.996)
Age 26-35	0.160	0.191	0.158	-0.031* (0.095)	0.002 (0.922)
Age 36-45	0.165	0.224	0.210	-0.059** (0.002)	-0.045* (0.025)
Age 46-55	0.208	0.190	0.217	0.018 (0.360)	-0.009 (0.658)
Age 56-65	0.209	0.172	0.184	0.037 (0.051)	0.025 (0.227)
Age 66+	0.169	0.149	0.141	0.020 (0.269)	0.027 (0.141)
Unemployed	0.025	0.042	0.026	-0.016 (0.063)	-0.000 (0.981)
Student	0.024	0.028	0.036	-0.004 (0.608)	-0.011 (0.190)
Homemaker	0.481	0.471	0.488	0.009 (0.698)	-0.007 (0.777)
Retired	0.046	0.034	0.039	0.012 (0.197)	0.008 (0.464)
Employed	0.416	0.418	0.407	-0.002 (0.939)	0.010 (0.702)
Primary Educ.	0.373	0.318	0.357	0.055* (0.017)	0.016 (0.520)
Secondary Educ.	0.351	0.348	0.357	0.003 (0.907)	-0.006 (0.810)
Higher Educ.	0.138	0.189	0.173	-0.050** (0.005)	-0.034 (0.065)
Black	0.309	0.374	0.359	-0.065** (0.005)	-0.050* (0.039)
White	0.458	0.357	0.469	0.100*** (0.000)	-0.012 (0.645)
Native	0.627	0.646	0.616	-0.019 (0.417)	0.011 (0.654)
Victim	0.409	0.415	0.389	-0.006 (0.811)	0.020 (0.438)

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Means are reported for the control group, treated in Wave 2, and treated in Wave 3. Differences represent the treated groups compared to the control group, with p-values shown in parentheses.

Respondents who answered "Don't know" or did not respond pose a challenge for calculating these indexes. However, non-responsiveness is generally low across all questions, with a maximum of 7.55% for the *personero* question and 5.15% for the Senate and lower house of Congress question. To assess whether non-responsiveness introduces bias, I regress an indicator of non-response (including "Don't know" responses) on several covariates and find that gender, age, victimization, and religion are statistically associated with non-responsiveness. Nonetheless, the estimated effects are very small in all cases. Given that non-responsiveness is not entirely random, but is only weakly correlated with observable characteristics, I impute missing values using mean levels of trust in each institution at the municipality-wave level. This method ensures that missing values are replaced with information from respondents in the same municipality and survey wave, preserving local variation. By imputing within these strata, I reduce potential bias from systematic non-responsiveness while maintaining the internal consistency of the data.

Another potential impact of armed governance on civilians' attitudes toward the state is their perception of security. As previously discussed, security provision is the most basic and visible form of governance that armed groups can establish. The MAPS survey includes three questions related to security, each capturing different dimensions of it. The first question is: "In your opinion, what is the most serious problem affecting your municipality?" While this question does not refer explicitly to security, three of the possible answers are directly related to it: petty crime, drug trafficking, and armed conflict. I construct a binary variable equal to 1 if the respondent selects any of these options, and 0 otherwise.

The second relevant question on security perception asks: "How do you rate the safety of (*respondent's municipality*)?" Responses are recorded on a five-point Likert scale ranging from 1 ("very bad") to 5 ("very good"). The third question of interest is: "Would you say that over the last 6 months the security of (*respondent's municipality*) has worsened, stayed the same, or improved?" The possible answers are: worsened, stayed the same, or improved. In Waves 2 and 3, the reference period for this question was changed to 12 months for administrative reasons. However, comparison across waves remains valid, as the question is designed to elicit a retrospective evaluation. This distinction is particularly relevant given that the treatment variable is also based on reported governance of armed groups in the same period of time, allowing for a roughly contemporaneous comparison between governance and perceived changes in security. Although the second and third questions may appear similar, they capture distinct concepts: the second reflects current perceptions of safety, while the third focuses on how safety has evolved over time.

As with the trust questions, non-responsiveness and "Don't know" answers, although relevant, are rare: of the total sample, they represent just 0.08% for the second question and 1% for the third. To avoid losing observations while maintaining consistency, I apply a similar imputation strategy to the one used for the trust variables. However, instead of using the municipality-wave mean, I use the municipality-wave median. This choice reflects the fact that these variables are discrete, and their categorical distribution should be preserved.

Finally, the last dimension of interest that the MAPS questions allow us to explore is economic security, understood as the perception of how well individuals or their communities are doing in terms of income and financial stability. The survey includes two relevant questions, one at the community level and one at the individual level: "How do you rate (*respondent's municipality*)'s financial situation over the last 6 months? (regarding income)" and "How do you rate your financial situation over the last 6 months? (regarding income)." The same change in the period of reference was applied here, and the same reasoning about their validity still stands. These questions are relevant for studying the impact of armed group governance because they reflect how civilians perceive the econom-

ic performance of their communities under different governance structures, and how satisfied they are with their own financial well-being.

Both questions use the same three response options: worsened, stayed the same, or improved. As with the security questions, non-responsiveness and "Don't know" answers are imputed using the municipality-wave median, which is appropriate given the categorical nature of the variables. In this case, missing values represent 1.1% of the sample for the community-level question and 0.3% for the individual-level question.

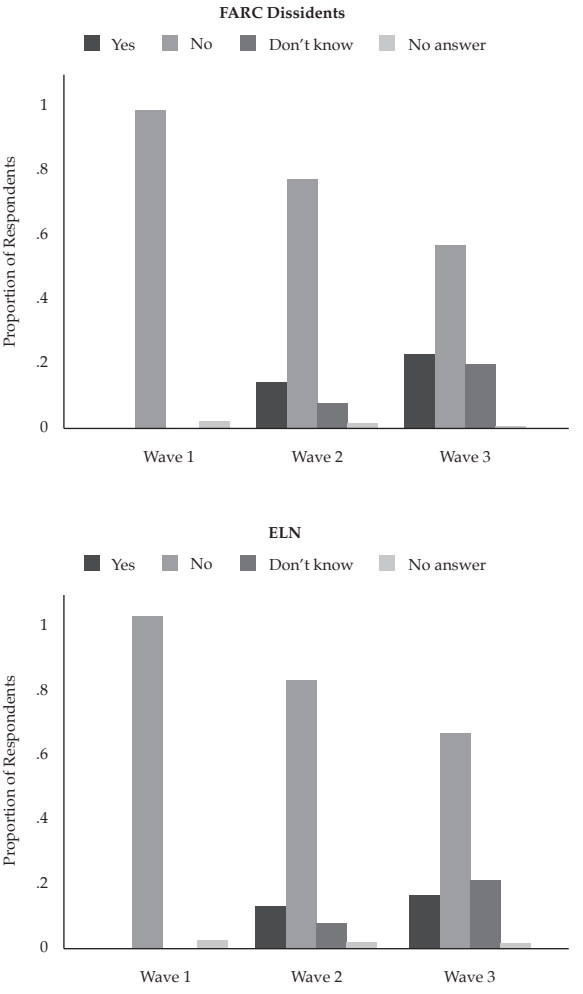
V. Research Design

A. Summary Statistics

Figure 1 presents the distribution of responses to the questions on governance individually, as well as the aggregate across all groups. The figure excludes respondents who answered "Yes" or "Don't Know" to any of them in 2019, and "switchers"—individuals from communities where an armed group that once governed later withdrew.

The distribution of responses is broadly similar across groups and waves. The vast majority of respondents answer "No," although this share declines over time for all groups. In contrast, the proportion of respondents answering "Yes" increases, particularly for criminal gangs. By Wave 3, "Yes" responses for criminal gangs surpass 40%, while in the aggregated graph they approach 50%. Those who did not respond constitute a very small fraction of the sample, but the "Don't know" category, despite remaining relatively stable across groups, represents a meaningful share of respondents. Overall, criminal gangs exhibit the highest levels of reported governance across waves, likely driving the sharp increase in "Yes" responses observed in the aggregated graph[2].

Figure 1:
Reported Armed Group Control by Armed Group & Wave



2 See Apendix A.1.1 for more details on the graphs.

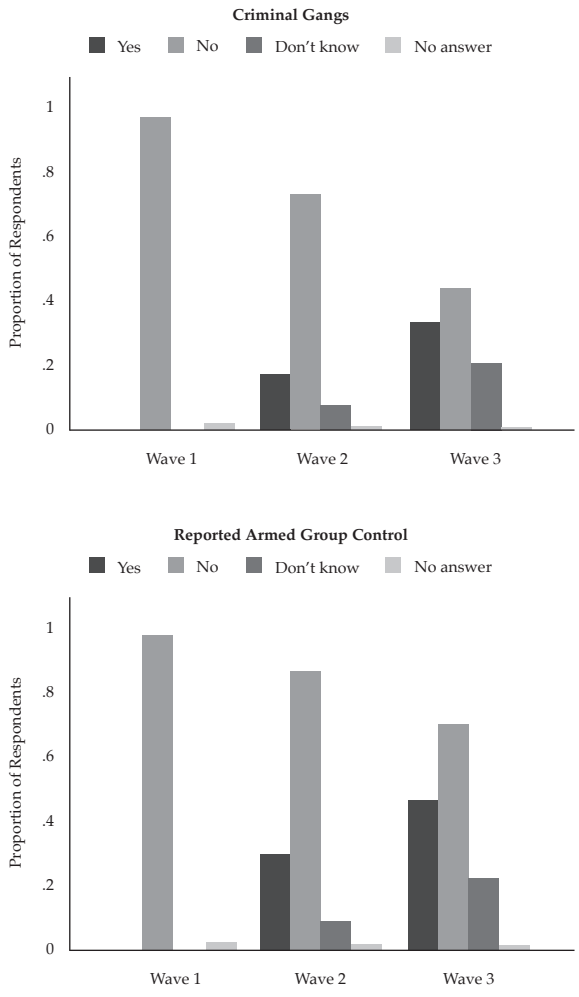
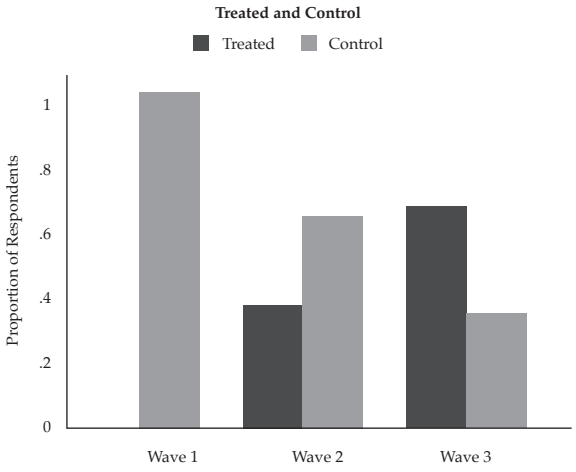


Figure 2 shows the final distribution of treated and control respondents across survey waves. Consistent with Figure 1, the proportion of control respondents declines over time, while the share of treated individuals increases notably between 2021 and 2023. By Wave 3, treated respondents represent approximately 65% of the sample, whereas the proportion of control respondents falls to less than 40% of the sample.

Figure 2:
Distribution of Treated and Controls by Wave



Appendix A.1.2 contains the graphical evolution of trust indexes by wave and treatment group. Regarding general trust, treated individuals consistently exhibit higher trust than the control group, with the gap being most pronounced in Wave 3. Importantly, general trust increases over time for both groups. A similar upward trend is observed for trust in both national and local government. However, trust in civil institutions and in the state's armed forces display different dynamics. For civil institutions, the control group experiences a sharp decline in trust in Wave 2, but recovers in Wave 3. Conversely, trust in the state's armed forces diverges more sharply: control group respondents consistently report higher trust than the treated group, and overall trust declines over time. Interestingly, while both groups start with positive levels of trust, by Wave 3 they become negative-particularly for the treated group.

These patterns offer insight into how institutional trust evolves under armed group governance. Treated individuals tend to show increasing trust in national and local government, suggesting that armed group governance may coexist with or even strengthen perceptions of state legitimacy. In contrast, declining trust in the state's armed forces—particularly among

the treated—points to a potential substitution effect, where armed groups undermine official security actors to consolidate control. Trust in civil institutions presents a more complex dynamic, with treated respondents showing consistent increases-potentially reflecting a perception that these institutions are local and are aligned with the community's interests-, while the control group exhibits an atypical dip in Wave 2 followed by a recovery-perhaps due to a local shock.

The graphical distribution of responses to the security perception questions by wave and treatment group is presented in Appendix A.1.3. The figures indicate that in Waves 2 and 3, treated individuals may be more likely than those in the control group to identify security as the most serious problem in their municipality, although concern increases for both groups in Wave 3. Consistently, the control group gives higher ratings to both the current security situation and its recent evolution. This pattern may be consistent with governance practices by armed groups that rely on coercive or violent methods to enforce their authority.

Finally, Appendix A.1.4 presents the distribution of responses related to perceptions of economic security. Control group respondents consistently report higher ratings of both personal and community-level economic security across all waves,suggesting that armed group governance may have a negative effect on economic conditions. Notably, the gap between treated and control groups narrows by Wave 3. However, there is a noticeable improvement in perceived economic conditions by Wave 3 for both groups, suggesting an overall positive trend in economic security.

B. Estimation

To estimate the impact of armed group governance on civilians' attitudes and perceptions toward the state, I implement an event study specification following Callaway (2021), which takes the following form[3]:

$$Y_{it} = \delta_t + \lambda_i + \sum_{g \neq C} \sum_{j \neq -1} \beta_{g,j} \cdot \mathbb{1}[G_i = g] \cdot \mathbb{1}[t - G_i = j] + \gamma X_i' + \epsilon_{it} \quad (1)$$

where Y_{it} is the outcome of interest for individual i at time t; δ_t are time fixed effects, and λ_i are individual fixed effects. $G_i = \min\{t : D_{it} = 1\}$ is the period in which individual i is first treated. The double summation term allows for the estimation of a separate treatment effect $\beta_{g,j}$ for each cohort g and event time j (relative to treatment), excluding the control group C and the baseline period $j = -1$. The vector X_i contains baseline covariates, and ε_{it} is the error term.

I implement the doubly robust difference-in-differences estimator developed by Sant'Anna (2020). This estimator combines stabilized inverse probability weighting with ordinary least squares, offering robustness to misspecification in either the treatment model or the outcome model. Since the data is structured as a panel and treatment is irreversible, I exploit the staggered timing of treatment reported by MAPS respondents in all survey waves, with possible treatment cohorts being 2021 and 2023. Importantly, all treatment cohorts have at least one period in which they were not yet treated, allowing for valid comparisons across groups. Robust and asymptotic standard errors are estimated clustered at the individual level.

Identification relies on two key assumptions. First, the no anticipation assumption implies that individuals do not change their behavior in anticipation of treatment. In this context, this assumption is plausible: the arrival of an armed group, and particularly the establishment of governance structures by such groups, is typically sudden, unannounced, and outside the control of affected individuals. It is therefore unlikely that respondents would adjust their perceptions or attitudes in anticipation of this type of event.

Second, the conditional parallel trends assumption requires that, in the absence of treatment, treated and

3 I attempted to implement a two-way fixed effects (TWFE) model, but was ultimately unable to obtain valid estimates, likely due to limitations in the underlying data structure. This remained the case despite exploring a range of specifications and estimation strategies.

control units would have followed similar trends in the outcome, conditional on baseline covariates. Chart 1 shows the distribution of these covariates, ensuring that observable characteristics are comparable across treatment cohorts and the never-treated group. Accordingly, I include age group as a control variable to account for potential confounding. Although some of these variables may vary over time, the estimator uses only their baseline values to avoid posttreatment bias and ensure that covariates are unaffected by the treatment itself.

C. Limitations

One of the main limitations of this study lies in the use of self-reported variables, which may not accurately reflect the governance of armed groups in the territories where respondents are located. As discussed in the research design section, this could be due to respondents' fear of reprisals, which may lead them to answer untruthfully. It is also difficult to ensure the full accuracy of responses, particularly for questions involving the governance or influence of armed groups. Measures to address this concern are discussed in the Data section.

Furthermore, armed groups do not randomly select the communities where they establish control. Instead, they carefully choose locations based on diverse factors, such as the presence of other armed groups, the availability of resources, and the strategic value of the territory. This nonrandom selection introduces potential bias that complicate the interpretation of causal effects, as the communities chosen by armed groups are likely to differ systematically from those they avoid.

To assess whether such selection can be explained by observable characteristics, I used two penalized regression methods—lasso and elastic net—to explore the predictive power of municipallevel covariates in anticipating individual armed group governance. I considered a comprehensive set of municipality-level covariates from the CEDE municipal panel: rural population, urban population, total population, rural index, area in square kilometers, distance to the department capital, distance to the national capital, total product, total expenditure, government financing, municipal debt, municipal performance score, total transfers from the central government via the General Participation System (SGP), and total transfers from the central government via the General Royalties System (SGR) (Centro de Estudios sobre Desarrollo Económico, 2023*b*,*a*). For each outcome (governance by FARC dissidents, by ELN, by criminal gangs, and aggregated governance), crossvalidation was used to select the optimal penalty parameters.

Notably, neither the lasso nor the elastic net method selected any municipal covariates as predictive for any of the governance outcomes. Additionally, both methods yielded nearly identical goodness-of-fit measures. These findings indicate that the observable municipal characteristics considered have limited power to predict where armed groups establish governance, implying a weak association between these covariates and territorial control. This helps alleviate concerns about selection bias, as it suggests that the establishment of armed group governance may not be fully determined by observable characteristics across municipalities—though unobservable factors could still play a role.

Another limitation is that the MAPS survey is representative at the PDET zone level, not at the municipality or rural hamlet level, which may complicate data aggregation. Moreover, the MAPS survey is specifically designed to measure attitudes in PDET zones, which, by definition, have been historically affected by violence. Thus, while the results provide valuable insights into these regions, caution is required when generalizing them to areas with different conflict dynamics or levels of violence.

VI. Results

A. Main Results

1. Trust

Figures 3–7 represent the estimated dynamic treatment effect over time for all treated cohorts for each trust index. First and foremost, none of the trust indexes show statistically significant effect in the pre-treatment period. This supports the validity of the identification strategy, particularly the conditional parallel trends assumption. The pre-treatment coefficients are close to zero with wide confidence intervals, indicating no significant differences in trends between treated and untreated units before the establishment of armed group governance.

Regarding post-treatment dynamics, most trust indexes display an initial positive effect in period 0, the first period in which an individual reports armed group governance, which tends to disappear by the following post-treatment period. This pattern is consistent across general, national government, and local government trust indexes (Figures 3, 4, and 5). In these cases, the estimated effects are small—generally around 0.1 standard deviations—and are not statistically significant in the later period, possibly due to a reduction in sample size or because the initial effect fades over time.

An exception to this pattern is trust in civil institutions (Figure 6). In this case, the dynamic effects are not only consistently positive across both post-treatment periods, but also statistically significant. These results are supported further by the regression results in Appendix A.2, where the estimated cohort-period average treatment effect on the treated (ATTGT) for treated individuals in Wave 2 in 2021 and 2023 are statistically significant at conventional levels. These effects are the largest observed among all outcomes, reaching approximately 0.15 standard deviations.

Figure 3:
Dynamic Treatment Effect for General Trust

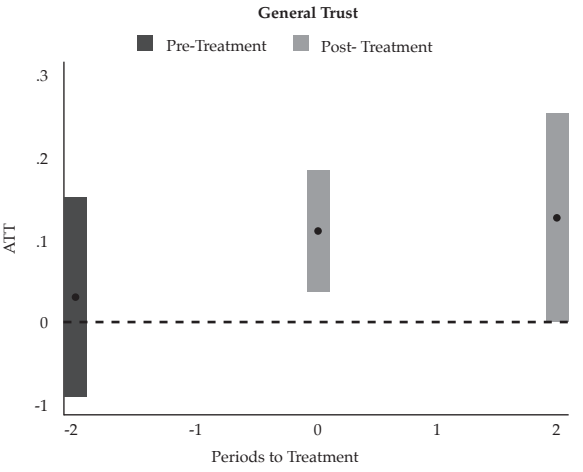


Figure 4:
Dynamic Treatment Effect for National Government Trust

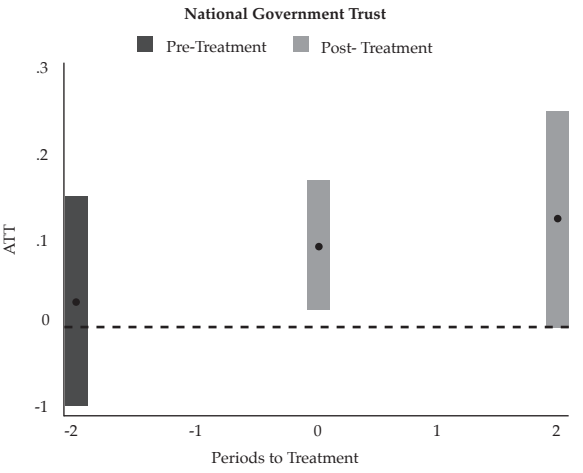
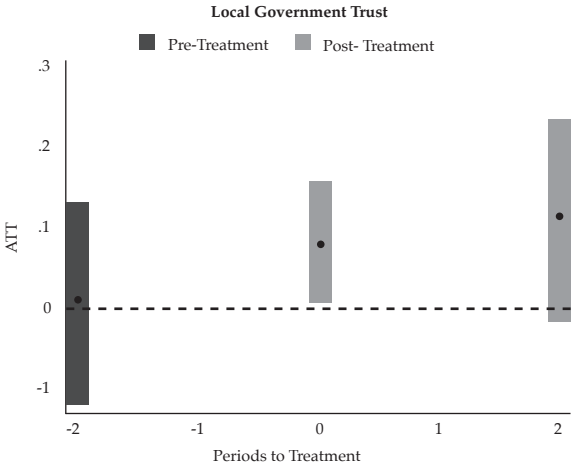


Figure 5:
Dynamic Treatment Effect for Local Government Trust



A key driver of this finding may be the role of *Juntas de Acción Comunal* (JACs), which serve as community-led institutions that connect community organization with local governance, and promote democratic engagement and local development (Función Pública, 2002). While often associated with state-led development efforts, JACs are composed of civilians and rooted in community leadership, making them distinct from formal state institutions. In many rural areas, they are perceived as legitimate and responsive actors, continuing to function even when formal state presence is weak or contested. The sustained rise in trust in civil institutions may reflect the perceived continuity, relevance, and local accountability of JACs, which often act as a reliable, trustworthy authority and as a stabilizing intermediary in contested and even violent governance contexts.

In contrast, trust in the state's armed forces (Figure 7) shows no significant effects in either preor post-treatment periods, making it difficult to draw clear conclusions about the impact of armed group governance on this trust index. These null results may be due to the complex role of the armed forces—as both the state's enforcement arm and the symbolic counterpart to non-state actors—, specially in rural and violence affected areas, leading to mixed perceptions or no effect altogether.

Figure 6:
Dynamic Treatment Effect for Civil Institutions Trust

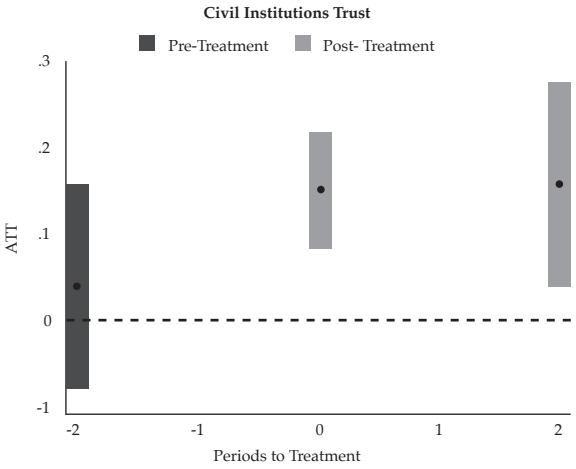
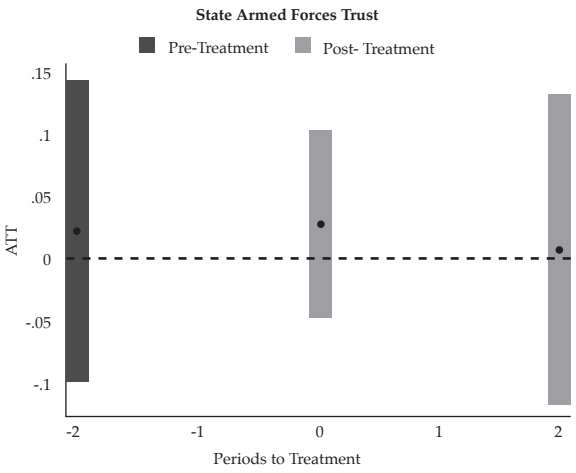


Figure 7:
Dynamic Treatment Effect for Armed Forces Trust



Appendix A.2.1 contains all estimated ATTGTs from estimating Equation 1 across all trust indexes. It shows that all coefficients for both treatment cohorts

are positive, although they vary in magnitude, and only a few are statistically significant. For individuals treated in Wave 2, there is a statistically significant effect on the general trust index in 2021, and on trust in civil institutions in both 2021 and 2023. None of the coefficients for the Wave 3 cohort are statistically significant. According to Chart 2, for those treated in Wave 2, general trust increased by 0.127 standard deviations in 2021, and trust in civil institutions increased by 0.231, and by 0,156 standard deviations in 2021 and 2023, respectively.

To aid interpretation of the estimated effects, I benchmark them by translating the standardized results back into the original 1–4 trust scale. Among untreated individuals in Wave 1, the standard deviation of the original trust indexes ranges from 0.61 to 0.88 points. Using these values, the estimated average effects for the first post-treatment period correspond to increases in the original scale of about 0.07 points for general trust, 0.06 points for national trust, 0.06 points for local trust, and 0.13 points for trust in civil institutions. These shifts may appear modest in absolute terms, but they are meaningful when situated within the scale of trust. In particular, the effect on civil trust is large enough to shift some individuals from a response of 'some trust' to 'a lot of trust,' depending on their baseline level of trust. The distribution of trust indexes shown in Appendix A.1.2 help visualize how these standardized changes translate into differences between treated and control groups over time.

These dynamic results are consistent with the patterns discussed earlier. Although the increase in trust following the establishment of armed group governance may initially seem counterintuitive, it becomes more understandable when considering the ways in which these groups may interact with, rather than oppose, the state. The positive effects on several trust indexes suggest that civilians do not necessarily view armed governance as a substitute for the state, but potentially as a complement to it. In particular, the sustained increase in trust in civil institutions among treated individuals may reflect a perception that these institutions are more local, responsive, and aligned with community needs—features that can persist, or even be enhanced, under informal governance from armed groups. Taken together, these results suggest that armed group governance has a differentiated effect on civilian trust—while it may reinforce confidence in localized, civil institutions, it appears to have little influence on perceptions of the state's armed forces.

2. *Security Perception*

Appendix A.2.2 contains the event study graphs with the dynamic treatment effect over time estimated with the security-related questions as the outcomes of interest. All three figures consistently display a clear pre-treatment effect, undermining the credibility of the identifying assumptions. Given this, it cannot be confidently concluded that armed group governance has a causal effect on security perception. However, the sign of the estimated coefficients in both the even study regressions and graphs indicate that, while treated individuals appear more likely to name security as their community's primary problem, they also seem to report perceiving the current security situation—and its evolution in the recent past—as more positive than their untreated counterparts.

The regression results for the estimated ATTGTs for the questions on security perceptions are also included in Appendix A.2.2. Although because of the violation of the identifying assumptions nothing can be certainly asserted, it could be inferred from the estimated coefficients that individuals that report armed groups governance are more likely to identify a security concern as the most serious issue in their community, but simultaneously report more favorable perceptions of the current security situation and its recent evolution. This interpretation appears particularly strong for the 2021 cohort, for which all coefficients are statistically significant. However, the coefficients for the 2023 cohort in the Wave 1 to Wave 2 period are all also statistically significant, despite this cohort having not yet been

treated, reassuring the incredibility of both identifying assumptions.

This perception may be consistent with a governance structure in which armed groups enforce order through coercive means, generating fear and concern among civilians, leading them to identify security as the central issue. Yet, if these methods are effective at deterring criminal behavior and reducing uncertainty, they may also produce an improved perception of local security conditions. This reading also aligns with previous findings on unaffected trust in the state's armed forces: if there are perceived improvements in overall security despite the fact that armed groups are using violence to enforce rules, public confidence in formal armed forces has no reason to change.

3. Economic Security

Figures 8 and 9 illustrate the dynamic treatment effect over time for all treated cohorts using the economic security questions as outcomes in Equation 1. The absence of significant pre-treatment effects confirms the credibility of the identification strategy, suggesting that the parallel trends and no anticipation assumptions are likely satisfied.

The results suggest that armed group governance is associated with a deterioration in perceived economic security, both at the community and individual levels. The post-treatment estimates clearly show this: a negative shift in both economic security indicators in the first post-treatment period, but no statistically significant effect in the second post-treatment period. Both reported estimates, although small, are of similar magnitude: around -0.07 standard deviations for the community model, and around -0.08 standard deviations for the personal model.

Figure 8:
Dynamic Treatment Effect for Community Economic Security

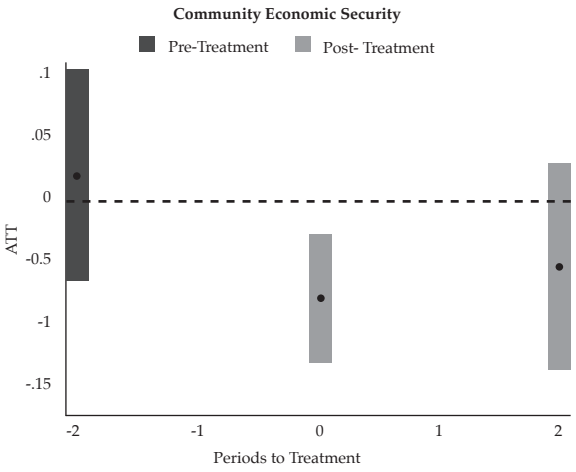
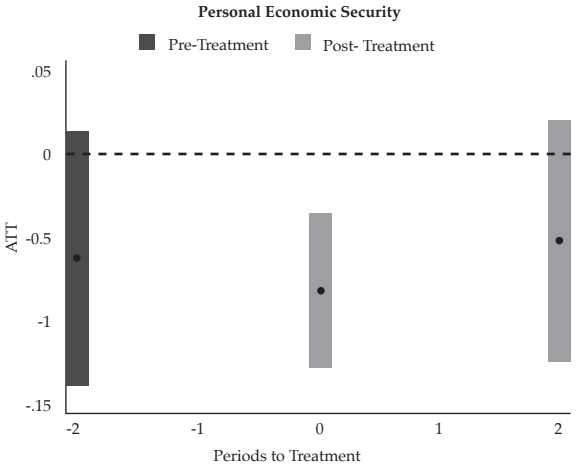


Figure 9:
Dynamic Treatment Effect for Personal Economic Security



The estimated ATTGTs in Appendix A.2.2 support these findings: all post-treatment coefficients are negative, however only two of them are statistically significant at conventional levels. Specifically, individuals treated in 2021 report a decline of 0.112 standard deviations in personal economic security in the first

post-treatment period, while those treated in 2023 report a decline of 0.114 standard deviations in perceived community economic security in the same period.

To contextualize the magnitude of the effects on perceived economic security, I benchmark the results using the standard deviations of each variable. The estimated effect of armed group governance on community-level perceptions is -0.07 standard deviations, which translates to a 0.04 point decrease on the original 1–3 scale. For individual-level perceptions, the estimated -0.08 effect corresponds to a decrease of approximately 0.042 points. The distribution of responses shown in Appendix A.1.4 helps visualize how these standardized changes translate into observable differences in perceived economic security. Given the nature of this scale, these shifts suggest a modest decline in how civilians perceive their financial situation under armed group governance. Even small movements in these measures may be meaningful in contexts of high baseline vulnerability, which is likely the case in areas historically affected by violence.

One plausible mechanism that may help to explain these results is the imposition of informal taxation by these groups—such as extortion payments—which represents a basic form of economic governance but also imposes a financial burden on households and businesses. Additionally, the presence of armed actors may disrupt formal economic activity by deterring external investment, and restricting mobility. Even if armed group governance succeeds in improving physical security or fostering trust, these economic dynamics can undermine perceptions of personal and community well-being.

B. Additional Results

1. Effects of Governance by Armed Group

To test whether illegal governance by different armed groups results in systematically different effects on civilian perceptions, I estimate Equation 1 using the same set of outcomes, but disaggregating the treatment by armed group, as explained in the Data section. Because the MAPS survey do not measure the intensity or mode of governance practices directly, these estimates reflect the average association between being governed by a given actor type and changes in civilian attitudes, rather than the effects of changes in governance style within that actor. This approach makes it possible to differentiate the effects depending on the governing actor-whether it is a rebel or criminal groupin line with my theoretical framework. The corresponding event study graphs and regression results are presented in Appendix A.3 for each group: FARC dissidents, ELN, and criminal gangs.

The results suggest that FARC dissidents and the ELN produce similar reactions in civilians. Both these rebel actors' treatment groups consistently show null or negative effects on trust indexes, including trust in civil institutions—which in the main specification appeared to be the strongest. These negative effects emerge only in the second post-treatment period and typically range between 0.1 and 0.2 standard deviations, equivalent to a 0.1 to 0.16 point decline in the original trust scale. The decline in trust appears to be concentrated among institutions associated with the national government. Regarding perceptions of security, most outcomes show clear pre-treatment trends, violating the identifying assumptions for those models. An exception is the question on current security conditions for ELN governance, which displays a negative and statistically significant effect particularly pronounced in the second post-treatment period. However, the results for FARC dissidents and ELN diverge in the economic security outcomes: while governance by FARC dissidents shows no significant effects, ELN governance is associated with positive and growing effects over time, with both economic security questions exhibiting stronger positive impacts in the second post-treatment period.

Conversely, the results for criminal gangs are more similar to those in the main specification, consistent with the fact that these groups have the largest treatment group, contributing the most to the aggre-

gated treatment effects. Regarding the trust indexes, the estimates reveal a consistently positive and growing effect—except for trust in the state armed forces, where neither post-treatment coefficients is statistically significant. The effects are particularly pronounced for general trust and trust in civil institutions: the first post-treatment period shows an increase of approximately 0.1 standard deviations, which doubles to around 0.2 standard deviations in the second post-treatment period—roughly 0.05 to 0.09 points in the original scale for the first treatment period, and 0.1 to 0.17 in the second. In contrast, there are no discernible effects on perceptions of security. Lastly, the results for economic security consistently indicate negative effects across both post-treatment periods, ranging between 0.05 and 0.1 standard deviations, in line with the main findings, which translates to a 0.03 to 0.05 point decline in the original scale.

These results suggest two opposing outcomes to different forms of governance used by different types or armed groups-rebel an criminal. FARC dissidents and the ELN—particularly the latter—appear to adopt practices that alienate citizens from the state, as reflected in the negative effects observed in the trust indexes. At the same time, ELN governance seems to foster economic activity, as indicated by the positive effects on both community and personal economic security. This pattern suggests that rebel groups, through invasive and coercive governance strategies, may crowd out state legitimacy, positioning themselves as de facto authorities in the eyes of civilians. It is likely consistent with a highly invasive and potentially coercive form of governance. If the state fails to assert control or respond effectively, it is plausible that citizens' trust in it would erode, while the armed group may be perceived as more capable of maintaining order and supporting economic life. The positive economic effects associated with ELN governance could be due to the introduction of the armed group's own economic institutions, thereby fostering local economic conditions.

In contrast, criminal gangs appear to follow a more complementary approach to state institutions. These results may reflect a minimally invasive, low-violence governance strategy, where the group supports certain governance outcomes—such as dispute resolution or basic service provision—while largely avoiding interference in social and political life. This approach could help explain the observed increase in institutional trust, especially if the group is perceived as maintaining stability or filling local governance gaps without replacing the state. The increase in trust in civil institutions may also reflect the governance practices of criminal gangs, which tend to exert influence without dismantling existing local institutions, such as JACs. Because these groups do not seek to replicate or replace state authority, JACs may retain their roles as legitimate community representatives. In such contexts, these institutions may play a more active and relevant role, serving as intermediaries not only between citizens and the state, but also between citizens and armed actors. However, the negative effects on economic outcomes may reflect mismatched expectations. When governance outcomes improve—through increased order or service provision—civilians may come to expect parallel improvements in their economic situation. If those improvements do not materialize, even a stable economy may be perceived as worsening. Additionally, informal taxation, which constitutes the most basic form of governance, may place some economic burden on communities.

These differences in outcomes likely reflect not only the governance strategies employed by each group, but also their underlying nature and objectives. Rebel groups such as the ELN and FARC dissidents often impose strict behavioral rules, regulate social life, enforce curfews, and administer justice, actions that reflect highly invasive and coercive forms of governance. This aligns with their ideological origins: guerrilla movements were founded with the goal of seizing power and promoting leftist political agendas, as discussed in the background section. It is therefore logical that their governance would aim to replace or directly contest the state's authority. In contrast, criminal groups and paramilitary actors emerged primarily to counter guerrilla influence and protect territorial

or economic interests. These groups are typically less ideologically motivated and more concerned with extracting economic benefits while avoiding direct confrontation with state institutions. Their strategies tend to be less invasive and less violent, often involving informal taxation, selective enforcement, or economic appropriation, forms of governance that maintain local control without seeking to displace the state. These differences in origin, objectives, and governance practices help explain the divergent effects observed across actor types in this study.

These contrasting results highlight the need to disaggregate analyses of armed group governance by individual group. While rebel groups—such as FARC dissidents and the ELN—appear to erode trust in formal institutions through more invasive and coercive governance strategies, criminal groups seem to reinforce it, particularly when they adopt less intrusive forms of rule that do not openly compete with the state. This contrast is not merely descriptive: it points to fundamentally different ways in which civilians experience and interpret authority. When armed governance mimics or replaces the state, trust in state institutions tends to decline. When it coexists with the state without displacing it, trust may be preserved—or even strengthened. Understanding that governance practices among armed groups vary significantly is essential for understanding its broader political effects and for designing responses that strengthen state legitimacy in contested regions. These findings underscore the need for differentiated policy responses based on the specific governance strategies of each group, rather than treating all non-state actors as a uniform threat.

C. Robustness Checks

To assess the robustness of my results, I redefine the control group to include respondents who answered "Don't know" to any question regarding the presence of armed group governance. In this specification, the treatment group remains limited to those who answered "Yes." This adjustment is intended to account for potential misreporting or uncertainty among respondents, particularly in cases where fear or limited information may influence their answers. Additionally, I modify the definition of "switchers" to apply at the level of each specific armed group question, rather than at the aggregated treatment level. Under this definition, a "switcher" is an individual who initially responded "Yes" to the governance question concerning a particular group—whether it is FARC dissidents, ELN, or criminal gangs—and later changed their response to "No," "Don't Know," or "No Answer" in a subsequent wave to that same question. Apart from these modifications, the estimation strategy and sample restrictions are identical to those used in the main specification.

This modified specification of the treatment and the redefinition of "switchers" affect both the overall sample size and the composition of the treatment and control groups. The resulting number of observations is now 8,238, with 2,746 respondents in each of the three survey waves. Of these, 1,245 individuals are classified as treated and 1,501 belong to the control group. The 2021 treatment cohort includes 477 respondents, while the 2023 cohort consists of 768 individuals. Results for the robustness specifications can be found in Appendix A.4.

The estimated effects on trust indexes under the robustness specification exhibit patterns broadly in line with the main results. However, in contrast to the original estimates, the second posttreatment effect is now consistently statistically significant at conventional levels. These coefficients are positive and larger in magnitude, although they have wide confidence intervals. The presence of pre-treatment trends for general and national government trust invalidate the identifying assumptions for these two models. Post-treatment coefficients for local government and civil institutions follow the same trend as the main results, but have bigger magnitudes. In contrast, post-treatment coefficients for trust in local government and civil institutions align with the patterns observed in the main specification, though with larger effect sizes. The most pronounced change is observed in trust in the armed

forces: both post-treatment effects are statistically significant and substantially larger than those in the main model—approximately 1.5 standard deviations.

Regarding civilians' perceptions of security under armed group governance, the robustness specification reveals the presence of pre-treatment trends across all three questions of interest. As a result, the parallel trends assumption is violated, preventing any causal interpretation of the estimated effects for these outcomes. This confirms the results obtained in the main specification.

Finally, the robustness results for the economic security outcomes follow a pattern similar to that observed in the main specification, but with bigger coefficient estimates. For perceptions of the community's economic security, the first post-treatment effect is approximately 0.5 standard deviations larger. The second post-treatment effect is also statistically significant, although slightly smaller in magnitude than the first one. In the case of personal economic security, the first posttreatment effect is again larger than in the main specification; however, the second post-treatment effect remains statistically insignificant, consistent with the original results.

VII. Discussion and Conclusions

This study examines how armed group governance shapes civilian attitudes and perceptions toward the state in conflict-affected areas of Colombia. Using panel data from the MAPS survey and an event-study difference-in-differences approach, the analysis provides new evidence on how civilians respond to the presence of armed actors who assume governance roles. Unlike much of the existing literature that emphasizes violence or wartime victimization, this study centers on the political and institutional effects of *rule*, offering a deeper understanding of how governance by non-state actors influences trust in formal institutions, perceptions of security, and economic well-being.

The results demonstrate that armed group governance yields distinct effects across different dimensions. On average, it increases trust in formal institutions—especially local ones—by up to 0.23 standard deviations, but has no impact on trust in the state's armed forces. The particularly strong and sustained increase in trust in civil institutions may, in part, reflect the continued presence of community-led organizations, which often act as trusted intermediaries between the community and both the state and non-state actors in settings of contested governance. It is also associated with declines in perceived economic well-being, around 0.11 standard deviations. Security perceptions exhibit mixed patterns, but pre-treatment trends limit the credibility of any causal interpretation in this domain. Robustness checks confirm these patterns, with some effects becoming stronger and more statistically significant under alternative specifications.

Disaggregating by actor reveals distinct strategies: FARC dissidents and the ELN reduce trust in institutions but improve economic perceptions, suggesting more invasive forms of governance. In contrast, criminal gangs appear to build trust—especially in local institutions—while contributing to worsening economic perceptions, consistent with a more complementary, less intrusive mode of governance. These patterns reflect not only differences in their governance practices but also each group's underlying nature and objectives: rebel groups, rooted in ideological ambitions to contest state authority, tend to replicate its functions, while criminal actors—typically more economically motivated—are more interested in extracting resources while coexisting with the state. In this setting, institutions like JACs may retain their role and legitimacy in the community, serving as visible and functional bridges between civilians and both state and non-state authorities.

Taken together, these findings demonstrate that civilians do not respond to armed group governance in a uniform way. Some may view it as a threat or substitute for the state, while others interpret it as a comple-

ment to weak or absent governance. These reactions depend on how governance is enacted, the group involved, and the perceived behavior of state institutions. As such, this research contributes to a more nuanced understanding of authority in irregular conflict settings—highlighting that governance and legitimacy can be deeply contested and hybrid in nature.

Future research could explore the intensity and duration of governance, armed group withdrawal, or additional outcomes such as conflict resolution, public goods, and justice. Understanding how state responses interact with non-state governance will also be key to informing effective peacebuilding and state-strengthening efforts. Additionally, examining heterogeneous effects across individual characteristics—such as gender, victimization status, or socioeconomic background—could shed light on how different populations perceive and respond to armed governance, both in aggregate and by group.

A. Public Policy Implications

Beyond their academic contribution, these findings also speak to real policy challenges in areas where state authority coexists or competes with governance by armed groups. Specifically, the results suggest that interventions must consider both the type of actor in control and the nature of the governance they exercise. These insights are particularly relevant for state-building initiatives in conflict-affected areas, and they call for greater coordination across state institutions. In the Colombian context, they are especially applicable to the agencies responsible for implementing the Peace Accord and governing PDET zones.

In the case of guerrilla groups (e.g., FARC dissidents and the ELN), which are associated with reduced trust in formal institutions but improved perceptions of economic well-being, policy efforts should prioritize rebuilding the relationship between the state and local communities. Because these groups tend to impose more invasive forms of governance, they may be perceived by civilians as substitutes for the state. An effective response thus requires a consistent institutional presence, the effective delivery of public goods and services, and accessible channels of state support. Moreover, security policies must enhance the state's ability to enforce the rule of law, visibly assert its authority, and provide reliable protection—especially in ways that counterbalance the coercive and invasive practices of these armed groups.

Conversely, criminal groups exhibit the opposite pattern: they are associated with increased trust in state institutions—particularly local ones—but with negative perceptions of economic conditions. This dynamic likely reflects a less intrusive governance model that nonetheless exerts substantial control over local economies through extortion, illicit taxation, or extractive industries. In these contexts, policy should focus on strengthening the local economy by promoting formal employment, productive alternatives, and access to legal markets. It is equally critical to dismantle the financial base of criminal governance by targeting illicit revenue streams and protecting local institutions from co-optation or capture. Furthermore, given that these groups appear to reinforce trust in local institutions such as JACs, policymakers should aim to strengthen the relationship between these institutions and the state. Such local organizations often serve as vital bridges between governing authorities—state or non-state—and the citizens.

These results underscore the need for differentiated policy responses to non-state governance. Effective state interventions must account not only for the presence of armed actors, but also for the specific forms of governance they establish and the ways in which civilians experience and respond to them. A one-size-fits-all approach is unlikely to succeed in building state legitimacy or achieving sustainable public order in contested territories. Interventions that overlook these differences risk reinforcing existing distrust or misjudging the influence of certain actors. More broadly, the results highlight the importance of strengthening the social contract between the state and its citizens, including community-led institutions—both as a goal

in itself and as a strategy to undermine the appeal and influence of armed groups.

VIII. References

AACAPS. (2023). Colombia risk analysis update. https://www.acaps.org/fileadmin/Data_Product/Additional_resources/20230112_acaps_mire_colombia_risk_report_spanish_0.pdf

Agencia de Renovación del Territorio. (2022). Todo sobre el PDET. https://serviceweb.renovacionterritorio.gov.co/artdev/media/temp/2022-11-291146361315189334.pdf

Arjona, A. (2016). Rebelocracy: Social order in the Colombian civil war. Cambridge University Press.

Bendavid, E., Boerman T., Akseer, N., Langer, A., Malembeka, E. B., Okiro, E. A.,Wise, P. H., Heft-Neal, S., Black, R. E., & Bhutta, Z. A. (2021). The effects of armed conflict on the health of women and children. The Lancet, 397(10272), 1979–1990.

Blair, R. A., Moscoso-Rojas, M., Vargas, A., & Weintraub, M. (2022). Preventing rebel resurgence after civil war: A field experiment in security and justice provision in rural Colombia. American Political Science Review, 116(4), 1258–1277.

Blattman, C., Duncan, G., Lessing, B., & Tobón, S. (2024). Gang rule: Understanding and countering criminal governance. The Review of Economic Studies, 92(3), 1497–1531. https://doi.org/10.1093/restud/rdae079

Callaway, B., & Sant'Anna, P. H. C. (2021). Difference-in-Differences with multiple time periods. Journal of Econometrics, 225(2), 200–230.

Carey, S. C., & González, B. (2020). The legacy of war: The effect of militias on postwar repression. Conflict Management and Peace Science, 38(3).

Centro de Estudios sobre Desarrollo Económico. (2023a). Panel Municipal CEDE - Buen Gobierno. https://datoscede.uniandes.edu.co/catalogo-de-datos/

Centro de Estudios sobre Desarrollo Económico. (2023b). Panel Municipal CEDE – Características Generales. https://datoscede.uniandes.edu.co/catalogo-de-datos/

Collier, P. (1999). On the Economic Consequences of Civil War. Oxford Economic Papers, 51(1), 168–183.

Colombia Peace. (2024). FARC Dissident Groups. https://colombiapeace.org/farcdissident-groups/

DeBruin, E., Levy, G., Schubiger, L., & Weintraub, M. (2024). Out-Competing Rivals: Armed Group Governance and Civilian Attitudes in Colombia. American Political Science Review, 1(14). doi:10.1017/S0003055424000789.

Fazel, M., Wheeler, J., & Danesh, J. (2005). Mental health of displaced and refugee children resettled in high-income countries: risk and protective factors. The Lancet, 365(9467), 130–140.

Función Pública. (2002). Ley 743 de 2002. https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=5301

Función Pública. (2017). Decreto Ley 893 de 2017. https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=81856

Fundación Ideas para la Paz. (2010). Para dónde va el paramilitarismo en Colombia? https://ideaspaz.org/publicaciones/investigaciones-analisis/2010-01/no-58-para-donde-va-el-paramilitarismo-en-colombia

Fundación Ideas para la Paz. (2024). Ocho años de la firma del Acuerdo de Paz: avances y rezagos de la implementación. https://ideaspaz.org/publicaciones/investigacionesanalisis/2024-11/ocho-anos-de-la-firma-del-acuerdo-de-paz-avances-y-rezagos-de-laimplementacion

Fundación Paz y Reconciliación. (n.d.) Dataset on the presence of illegal armed groups in Colombian municipalities (2019–2021) [Unpublished dataset].

Giustozzi, A. (2009). Decoding the New Taliban: Insights from the Afghan Field. Columbia University Press.

Gobierno de Colombia y FARC-EP. (2016). Acuerdo final para la terminación del conflicto y la construcción de una paz estable y duradera. https://www.jep.gov.co/Documents/Acuerdo

González, C. A. (2015). Diálogos de paz Gobierno-FARC-EP y las oportunidades para la paz en Colombia. Estudios Políticos (46),243–261. https://www.redalyc.org/articulo.oa?id=16433765013

Ibáñez, A. M., Arjona, A., Arteaga, J., Cárdenas, J. C., & Justino P. (2023). The long-term economic legacies of rebel rule in civil war: Micro evidence from Colombia. Journal of Conflict Resolution, 68(9):1825–1855.

InSight Crime. (2024a). ELN Show of Force Confirms Its Unmatched Criminal Presence in Colombia. https://insightcrime.org/news/eln-show-of-force-confirms-its-unmatchedcriminal-presence-in-colombia/

InSight Crime. (2024b). FARC Assets at Center of Dissident Disputes in Colombia. https://insightcrime.org/news/farc-assets-center-of-dissident-disputes-colombia/

International Crisis Group. (2017). Colombia's Armed Groups Battle for the Spoils of Peace. https://www.crisisgroup.org/latin-america-caribbean/andes/colombia/63-colombiasarmed-groups-battle-spoils-peace

International Crisis Group. (2024). La incógnita de la "paz total": qué hacer con los gaitanistas. Informe sobre América Latina, (105).

International Crisis Group. (2025). Colombia: From "Total Peace" to Local Peace. https://www.crisisgroup.org/latin-america-caribbean/andes/colombia/colombia-totalpeace-local-peace

Kalyvas, S.N. (2006). The Logic of Violence in Civil War. Cambridge University Press.

Kaplan, O. (2017). Resisting War: How Communities Protect Themselves. Cambridge University Press.

Karl, T. (2003). The Vicious Cycle of Inequality in Latin America. In S. Eckstein & T. Wickham-Crowley (Eds.), What Justice? Whose Justice?: Fighting for Fairness in Latin America (pp. 133-157). University of California Press. https://doi.org/10.1525/9780520936980-007

La FM. (n.d.). La FM tuvo acceso a un informe interno de la Presidencia de la República que revela la complicada situación de (...) [Tweet].

Lessing, B. (2017). Making Peace in Drug Wars: Crackdowns and Cartels in Latin America. Cambridge University Press.

Lessing, B. (2021). Conceptualizing Criminal Governance. Perspectives on Politics, 19, 854–873.

Loaiza, L., & Shuldiner, H. (2025, February 27). Major Criminal Powers Dispute Key Corridors in Colombia. Insight Crime. https://insightcrime.org/news/major-criminal-powers-dispute-key-corridors-incolombia/

Lobo, I.D., & Vélez, M.A. (2022). From strong leadership to active community engagement: Effective resistance to illegal coca crops in Afro-Colombian collective territories. International Journal of Drug Policy, 102.

Mampilly, Z. (2011). Rebel Rulers: Insurgent Governance and Civilian Life during War. Cornell University Press.

Mampilly, Z., & Stewart, M.A. (2021). A Typology of Rebel Political Institutional Arrangements. Journal of Conflict Resolution, 65(1), 15–45.

Marten, K. (2013). Warlords and Governance. In A.P. Jakobi & K.D. Wolf (Eds), The Transnational Governance of Violence and Crime: Governance and Limited Statehood. Palgrave Macmillan. https://doi.org/10.1057/9781137334428_2

National Counterterrorism Center. (2024). Revolutionary Armed Forces of Colombia - People's Army (FARC-EP) Dissidents. https://www.dni.gov/nctc/terroristgroups/farc.html

Petersen, R.D. (2002). Understanding Ethnic Violence: Fear, Hatred, and Resentment in Twentieth Century Eastern Europe. Cambridge University Press.

Procuraduría General de la Nación. (2024). Sexto Informe al Congreso sobre la Implementación del Acuerdo de Paz. https://www.procuraduria.gov.co/Documents/2024/Diciembre%202024/Micrositio%20Acuerdos%20de%20paz/ResumenEjecutivoSextoInformeSeguimientoAFPvfradicar.pdf

Pécaut, D. (2008). Las FARC: una guerrilla sin fin o sin fines. Grupo Editorial Norma.

Pérez-Cardona, S. (2022). Let the rebels rule? Evidence on the economic effects of rebel governance in Colombia. Universidad de los Andes, Facultad de Economía, CEDE. https://hdl.handle.net/1992/54401

Revkin, M. (2021). Insurgent Legality: State-Building and Failure of the Islamic State in Iraq and Syria. Proceedings of the ASIL Annual Meeting, 115, 297–302.

Romero, M. (2003). Paramilitares y autodefensas, 1982-2003. Editorial Planeta.

Sant'Anna, P.H.C., & Zhao, J. (2020). Doubly robust difference-in-differences estimators. Journal of Econometrics, 219, 101–122.

Sistema de Información de Eventos de Violencia del Conflicto Armado Colombiano. (2025a). Casos Acciones Bélicas. https://www.datos.gov.co/Inclusi-n-Social-y-Reconciliaci-n/Sistema-de-Informaci-n-de-Eventos-de-Violencia-del/39qq-a72j/about_data

Sistema de Información de Eventos de Violencia del Conflicto Armado Colombiano. (2025b). Casos Asesinatos Selectivos. https://www.datos.gov.co/Inclusi-n-Social-y-Reconciliaci-n/Sistema-de-Informaci-n-de-Eventos-de-Violencia-del/sysu-pezb/about_data

Staniland, P. (2012). States, Insurgents, and Wartime Political Orders. Perspectives on Politics, 10(2), 243–64.

Sánchez de la Sierra, R. (2020). On the Origins of the State: Stationary Bandits and Taxation in Eastern Congo. Journal of Political Economy, 128(1).

Sánchez, G., Meertens D. (1983). Bandoleros, gamonales y campesinos: El caso de La Violencia en Colombia. El Áncora Editores.

UNEP. (2009). From Conflict to Peacebuilding: The Role of Natural Resources and the Environment. https://www.unep.org/resources/report/conflictpeacebuilding-role-natural-resources-and-environment

UNHCR. (2024). Tendencias Globales: Desplazamiento Forzado en el Mundo. https://www.acnur.org/tendencias-globales

United Nations. (2023, January 26). With highest number of violent conflicts since Second World War, United Nations must rethink efforts to achieve, sustain peace, speakers tell Security Council. https://press.un.org/en/2023/sc15184.doc.htm

Vargas, G. (2009). Urban irregular warfare and violence against civilians: Evidence from a Colombian city. Terrorism and Political Violence, 21(1), 110–132.

Weintraub, M., Steele, A., Pantoja-Barrios, S., Nyg˚ard, H. M., Dahl M. & Binningsbo, H. M. (2023). Mapping Attitudes, Perceptions, and Support (MAPS) dataset on the Colombian peace process. Journal of Peace Research, 61(6), 1085–1098.

Wolf, S. (2017). Mano Dura: The Politics of Gang Control in El Salvador. University of Texas Press.

IX. Appendix

A.1. Summary Statistics

i. Distribution of Responses to Governance Questions by Wave

Figure 10:
Reported FARC Dissidents Control by Wave

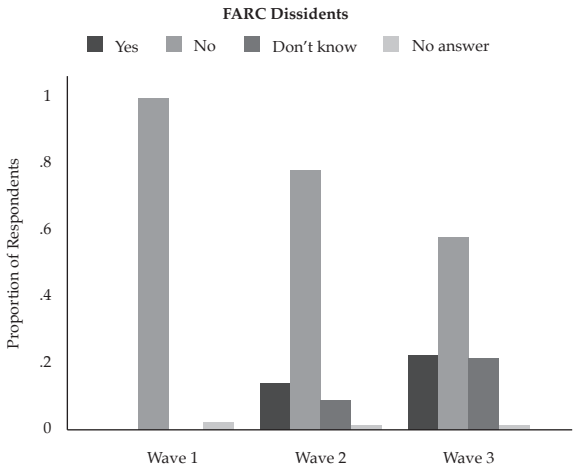


Figure 11:
Reported ELN Control by Wave

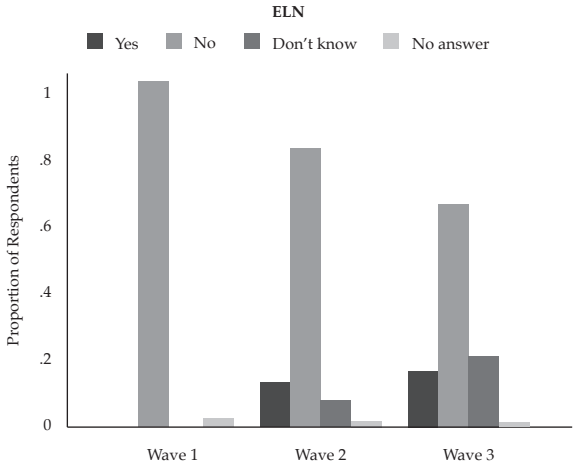
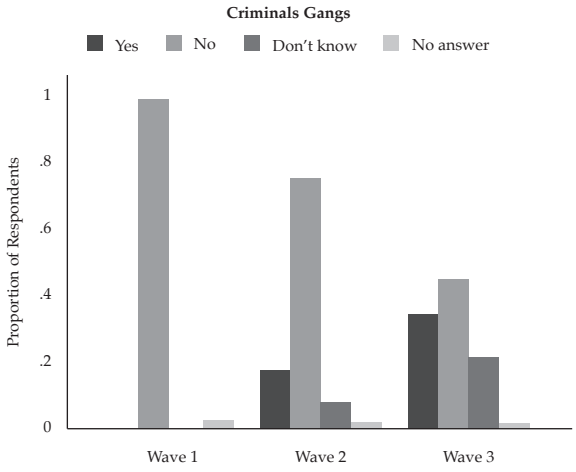


Figure 12:
Reported Criminal Gangs Control by Wave



ii. Distribution of Trust indexes by Wave and Treatment Group

Figure 13:
General Trust Index by Wave

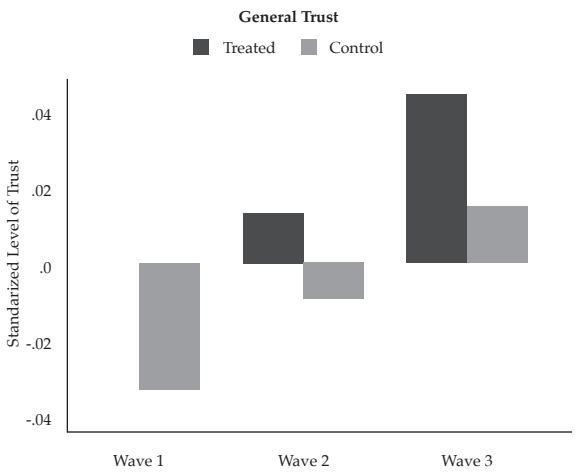


Figure 14:
National Government Trust Index by Wave

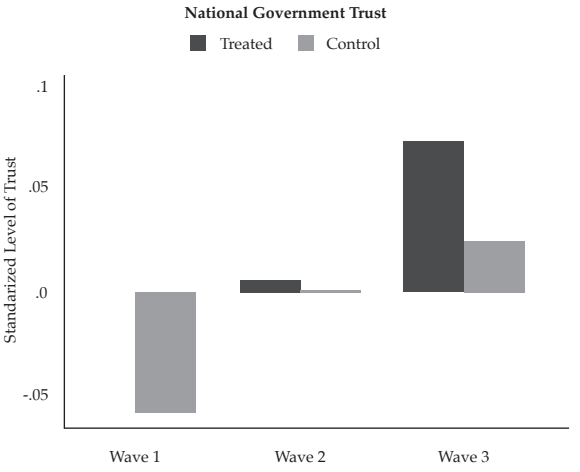


Figure 15:
Local Government Trust Index by Wave

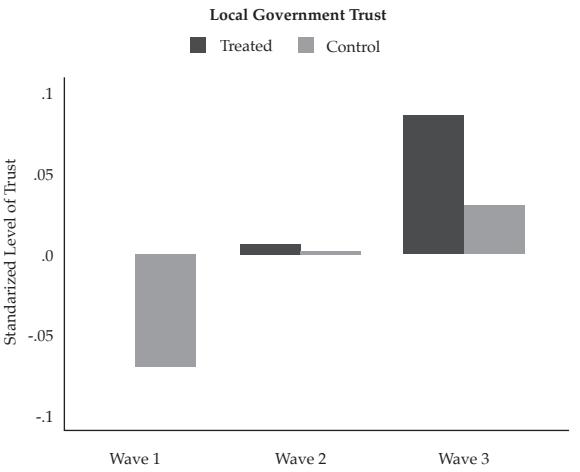


Figure 16:
State Armed Forces Trust Index by Wave

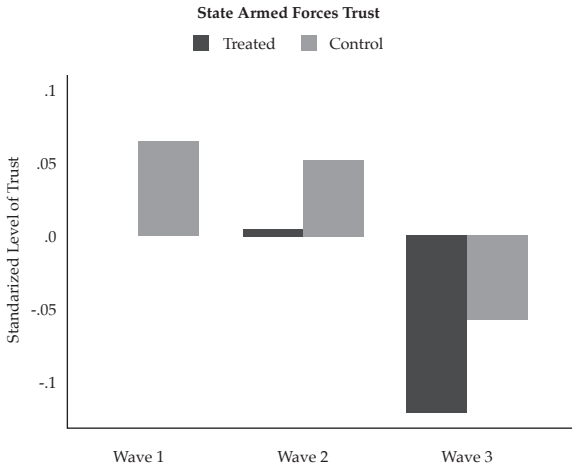
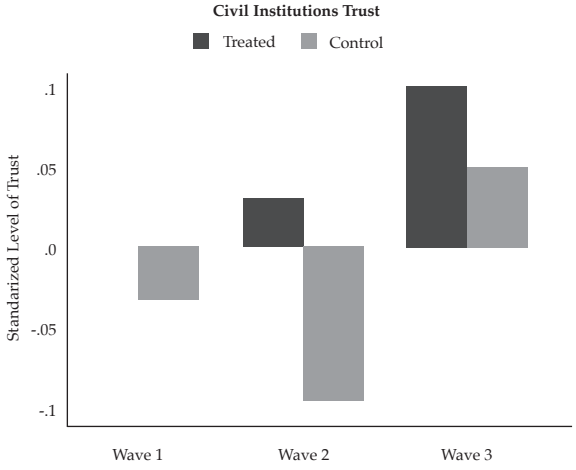


Figure 17:
Civil Institutions Trust Index by Wave



iii. Distribution of Security Questions by Wave and Treatment Group

Figure 18:
Perception of Security as Main Problem by Wave and Treatment Group

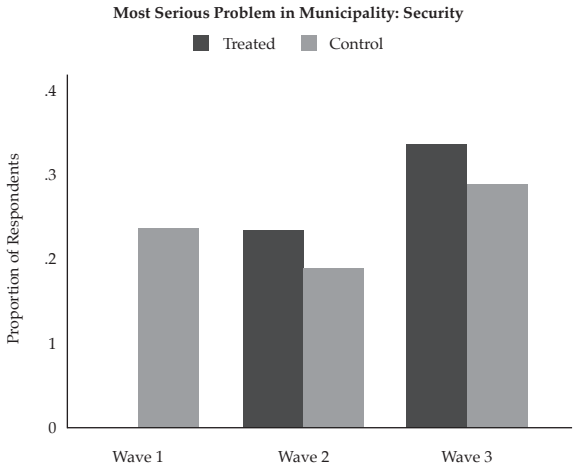


Figure 19:
Perception of Current Security Situation by Wave and Treatment Group

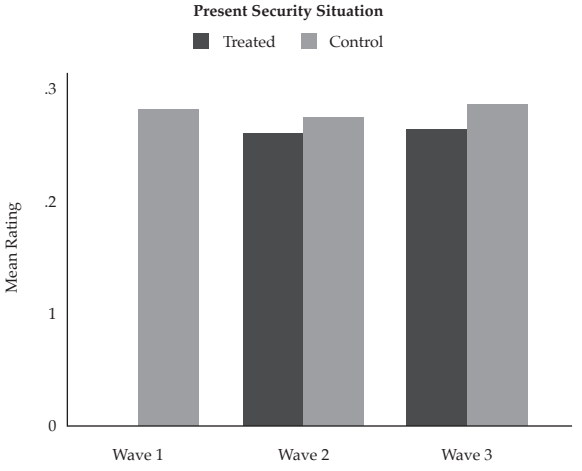
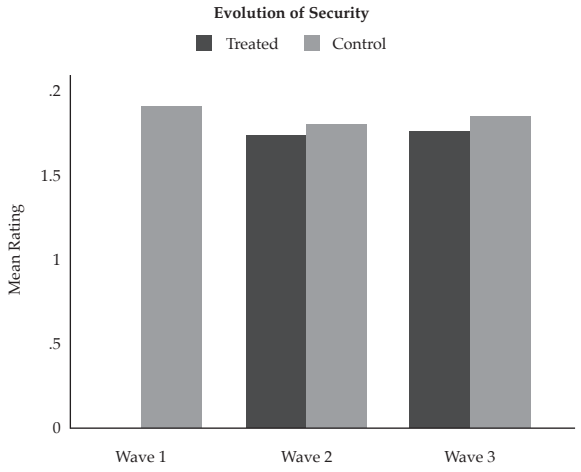


Figure 20:
Perception of Security Evolution by Wave and Treatment Group



iv. Distribution of Economic Security Questions by Wave and Treatment **Group**

Figure 21:
Perception of Community Economic Security by Wave and Treatment Group

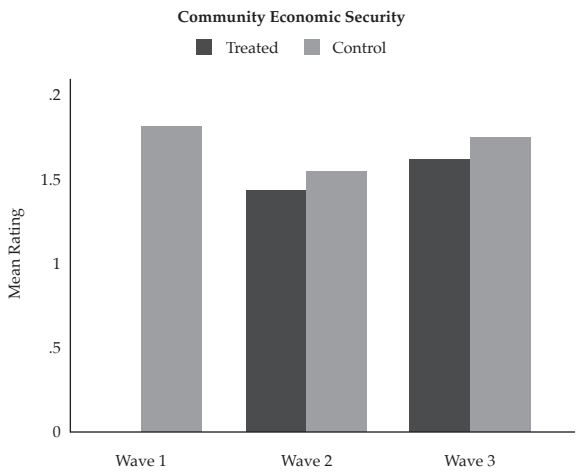
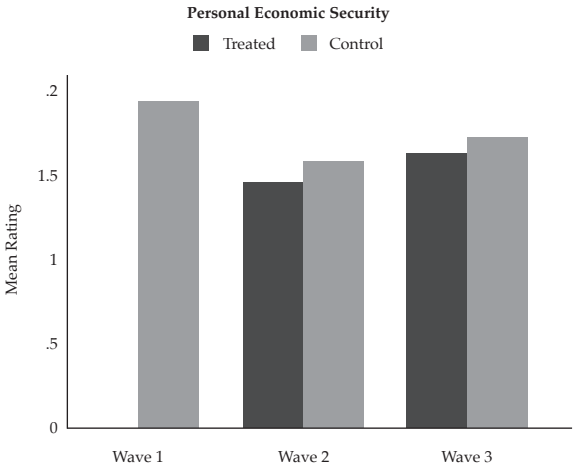


Figure 22:
Perception of Personal Economic Security by Wave and Treatment Group



A.2. Event Study Results

A.2.1. Trust

Chart 2 presents the regression results from estimating Equation 1 across all trust indexes. This chart reports the estimated group-time average treatment effects on the treated (ATTGT), for each cohort and time period. Each estimate compares outcomes in the treated period to the last untreated period available for that specific cohort.

Chart 2:
Event Study Regression Results with Weights

	(1)	(2)	(3)	(4)	(5)
	General	**National Government**	**Local Government**	**Civil Institutions**	**State Armed Forces**
2021 Cohort					
Wave 1 to Wave 2	0.127*	0.0962	0.0708	0.231***	0.0238
	(2.14)	(1.57)	(1.13)	(3.83)	(0.39)
Wave 1 to Wave 3	0.124	0.122	0.110	0.156*	0.00737
	(1.93)	(1.83)	(1.69)	(2.39)	(0.12)
2023 Cohort					
Wave 1 to Wave 2	0.0283	0.0227	0.00599	0.0439	0.0238
	(0.45)	(0.35)	(0.09)	(0.68)	(0.38)
Wave 2 to Wave 3	0.0881	0.0804	0.0984	0.0624	0.0338
	(1.41)	(1.20)	(1.54)	(0.99)	(0.57)
Weights					
2021-2021	0.279***	0.279***	0.279***	0.279***	0.279***
	(37.40)	(37.40)	(37.40)	(37.40)	(37.40)
2021-2023	0.279***	0.279***	0.279***	0.279***	0.279***
	(37.40)	(37.40)	(37.40)	(37.40)	(37.40)
2023-2021	0.221***	0.221***	0.221***	0.221***	0.221***
	(31.44)	(31.44)	(31.44)	(31.44)	(31.44)
2023-2023	0.221***	0.221***	0.221***	0.221***	0.221***
	(31.44)	(31.44)	(31.44)	(31.44)	(31.44)
Observations	**7230**	**7230**	**7230**	**7230**	**7230**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

A.2.2. Security Perception

Figures 23 to 25 are the event study graphs that display the dynamic treatment effect over time for all treated cohorts for the security perception questions.

Figure 23:
Dynamic Treatment Effect for Most Serious Problem Security

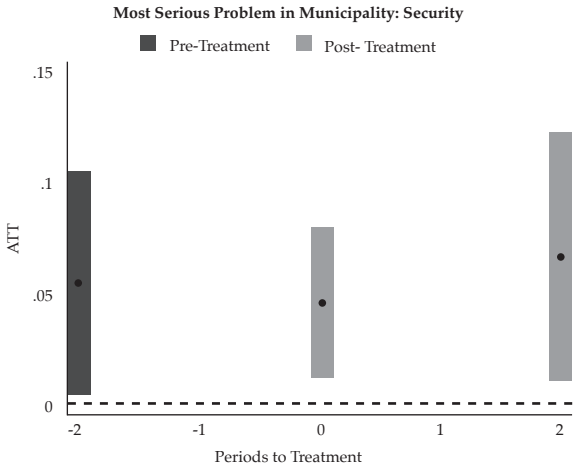


Chart 3 presents the estimated group-time average treatment effects on the treated (ATTGT) for each cohort and period, using Equation 1 with the security-related questions as the outcomes of interest.

Chart 3:
Event Study Regression Results for Security Perception

	(1)	(2)	(3)
	Most Serious Problem	**Security Situation**	**Evolution of Security**
2021 Cohort			
Wave 1 to Wave 2	0.0626*	-0.201***	-0.0748*
	(2.40)	(-3.82)	(-2.04)
Wave 1 to Wave 3	0.0657*	-0.211***	-0.0282
	(2.27)	(-3.77)	(-0.69)
2023 Cohort			
Wave 1 to Wave 2	0.0540*	-0.196***	-0.104**
	(2.07)	(-3.42)	(-2.72)
Wave 2 to Wave 3	0.0237	-0.0701	-0.0106
	(0.82)	(-1.26)	(-0.26)
Weights			
2021-2021	0.279***	0.279***	0.279***
	(37.40)	(37.40)	(37.40)
2021-2023	0.279***	0.279***	0.279***
	(37.40)	(37.40)	(37.40)
2023-2021	0.221***	0.221***	0.221***
	(31.44)	(31.44)	(31.44)
2023-2023	0.221***	0.221***	0.221***
	(31.44)	(31.44)	(31.44)
Observations	**7230**	**7230**	**7230**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Figure 24:
Dynamic Treatment Effect for Present Security Situation

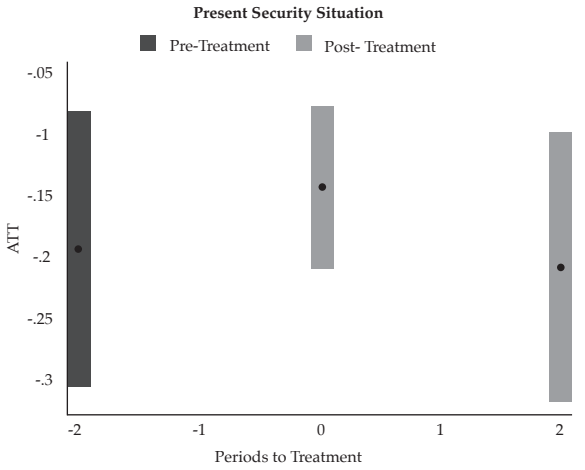
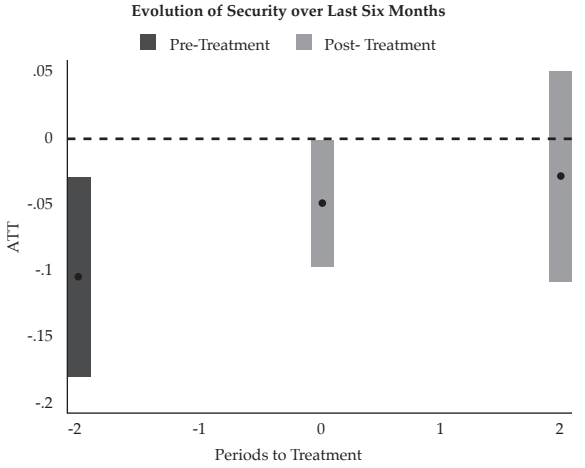


Figure 25:
Dynamic Treatment Effect for Evolution of Security over Last 6 Months



Economic Security

Chart 4 presents the estimated ATTGTs from using the economic security questions as outcomes in Equation 1.

Chart 4:
Event Study Regression Results for Economic Security

	(1)	(2)
	Community	**Personal**
2021 Cohort		
Wave 1 to Wave 2	-0.0381	-0.112**
	(-0.96)	(-2.93)
Wave 1 to Wave 3	-0.0481	-0.0517
	(-1.21)	(-1.38)
2023 Cohort		
Wave 1 to Wave 2	0.0202	-0.0637
	(0.49)	(-1.64)
Wave 2 to Wave 3	-0.114**	-0.0443
	(-2.64)	(-1.07)
Weights		
2021-2021	0.279***	0.279***
	(37.40)	(37.40)
2021-2023	0.279***	0.279***
	(37.40)	(37.40)
2023-2021	0.221***	0.221***
	(31.44)	(31.44)
2023-2023	0.221***	0.221***
	(31.44)	(31.44)
Observations	**7230**	**7230**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

A.3. Additional Results

Effects of Governance by FARC Dissidents

Figures 26 to 30 are the event study graphs that display the dynamic treatment effect over time for all treated cohorts with the the trust indexes as outcomes with FARC dissidents governance.

Figure 26:
Dynamic Treatment Effect for General Trust with FARC Dissidents Governance

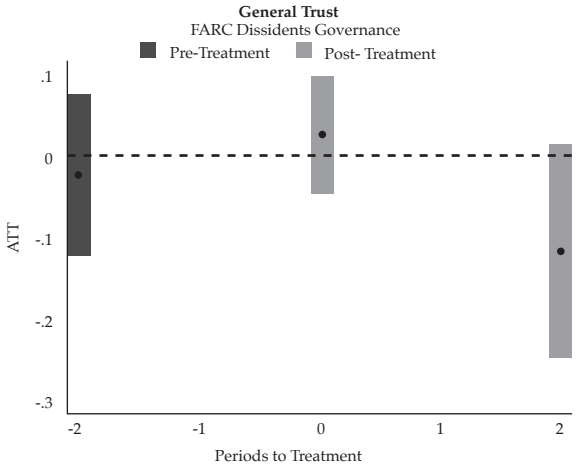


Chart 5 presents the regression results from estimating Equation 1 across all trust indexes with FARC dissidents governance. This chart reports the estimated group-time average treatment effects on the treated (ATTGT), for each cohort and time period.

Figures 31 to 33 are the event study graphs that display the dynamic treatment effect over time for all treated cohorts for the security perception questions with FARC dissidents governance.

Chart 6 presents the estimated group-time average treatment effects on the treated (ATTGT) for each cohort and period, using Equation 1 with the security-related questions as the outcomes of interest with FARC dissidents governance.

Figures 34 and 35 illustrate the dynamic treatment effect over time for all treated cohorts using the economic security questions as outcomes in Equation 1 for FARC dissidents governance.

Chart 7 presents the estimated ATTGTs from using the economic security questions as outcomes in Equation 1 with FARC dissidents governance.

Effects of Governance by ELN Dissidents

Figures 36 to 40 are the event study graphs that display the dynamic treatment effect over time for all treated cohorts with the the trust indexes as outcomes with ELN governance.

Chart 5:
Event Study Regression Results for Trust indexes with FARC Dissidents Governance

	(1)	(2)	(3)	(4)	(5)
	General	National Government	Local Government	Civil Institutions	State Armed Forces
2021 Cohort					
Wave 1 to Wave 2	-0.0460	-0.107	-0.0489	0.0774	-0.0539
	(-0.78)	(-1.75)	(-0.76)	(1.27)	(-0.90)
Wave 1 to Wave 3	-0.117	-0.187**	-0.123	-0.00106	-0.0421
	(-1.75)	(-2.69)	(-1.81)	(-0.02)	(-0.67)
2023 Cohort					
Wave 1 to Wave 2	-0.0240	-0.0504	-0.0406	-0.00390	0.0284
	(-0.48)	(-0.96)	(-0.79)	(-0.07)	(0.54)
Wave 2 to Wave 3	0.0688	0.0487	0.0864	0.0529	0.0268
	(1.32)	(0.88)	(1.62)	(1.02)	(0.53)
Weights					
2021-2021	0.189***	0.189***	0.189***	0.189***	0.189***
	(23.86)	(23.86)	(23.86)	(23.86)	(23.86)
2021-2023	0.189***	0.189***	0.189***	0.189***	0.189***
	(23.86)	(23.86)	(23.86)	(23.86)	(23.86)
2023-2021	0.311***	0.311***	0.311***	0.311***	0.311***
	(32.58)	(32.58)	(32.58)	(32.58)	(32.58)
2023-2023	0.311***	0.311***	0.311***	0.311***	0.311***
	(32.58)	(32.58)	(32.58)	(32.58)	(32.58)
Observations	**9408**	**9408**	**9408**	**9408**	**9408**

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Chart 6:
Event Study Regression Results for Security Perception with FARC Dissidents Governance

	(1)	(2)	(3)
	Most Serious Problem	**Security Situation**	**Evolution of Security**
2021 Cohort			
Wave 1 to Wave 2	0.0946**	-0.0326	-0.0541
	(3.27)	(-0.59)	(-1.46)
Wave 1 to Wave 3	0.145***	-0.171**	-0.113*
	(4.75)	(-2.79)	(-2.53)
2023 Cohort			
Wave 1 to Wave 2	0.0740***	-0.117*	-0.102**
	(3.30)	(-2.39)	(-3.21)
Wave 2 to Wave 3	-0.0184	-0.0104	0.00189
	(-0.76)	(-0.22)	(0.05)
Weights			
2021-2021	0.189***	0.189***	0.189***
	(23.86)	(23.86)	(23.86)
2021-2023	0.189***	0.189***	0.189***
	(23.86)	(23.86)	(23.86)
2023-2021	0.311***	0.311***	0.311***
	(32.58)	(32.58)	(32.58)
2023-2023	0.311***	0.311***	0.311***
	(32.58)	(32.58)	(32.58)
Observations	**9408**	**9408**	**9408**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Chart 7:
Event Study Regression Results for Economic Security with FARC Dissidents Governance

	(1)	(2)
	Community	**Personal**
2021 Cohort		
Wave 1 to Wave 2	0.0770	-0.0328
	(1.90)	(-0.82)
Wave 1 to Wave 3	-0.0244	-0.0346
	(-0.59)	(-0.86)
2023 Cohort		
Wave 1 to Wave 2	0.0185	-0.0180
	(0.56)	(-0.57)
Wave 2 to Wave 3	-0.0757*	0.00964
	(-2.18)	(0.28)
Weights		
2021-2021	0.189***	0.189***
	(23.86)	(23.86)
2021-2023	0.189***	0.189***
	(23.86)	(23.86)
2023-2021	0.311***	0.311***
	(32.58)	(32.58)
2023-2023	0.311***	0.311***
	(32.58)	(32.58)
Observations	**9408**	**9408**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Figure 27:
Dynamic Treatment Effect for Trust in National Government with FARC Dissidents Governance

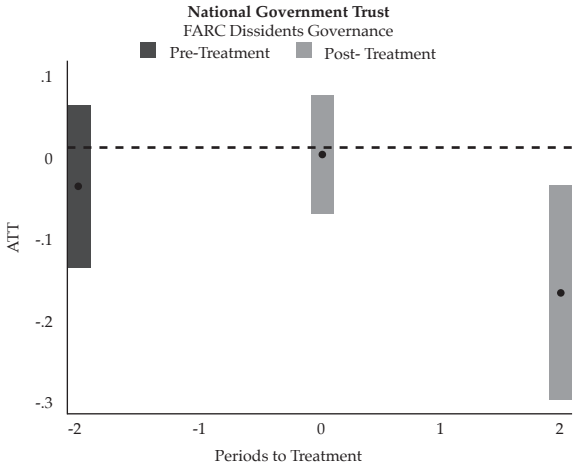


Chart 8 presents the regression results from estimating Equation 1 across all trust indexes with ELN governance. This chart reports the estimated group-time average treatment effects on the treated (ATTGT), for each cohort and time period.

Figures 41 to 43 are the event study graphs that display the dynamic treatment effect over time for all treated cohorts for the security perception questions with ELN governance.

Chart 9 presents the estimated group-time average treatment effects on the treated (ATTGT) for each cohort and period, using Equation 1 with the security-related questions as the outcomes of interest with ELN governance.

Figures 44 and 45 illustrate the dynamic treatment effect over time for all treated cohorts using the economic security questions as outcomes in Equation 1 for ELN governance.

Chart 10 presents the estimated ATTGTs from using the economic security questions as outcomes in Equation 1 with ELN governance.

Effects of Governance by Criminal Gangs Dissidents

Figures 46 to 50 are the event study graphs that display the dynamic treatment effect over time for all treated cohorts with the the trust indexes as outcomes with Criminal Gangs governance.

Chart 11 presents the regression results from estimating Equation 1 across all trust indexes with Criminal Gangs governance. This chart reports the estimated group-time average treatment effects on the treated (ATTGT), for each cohort and time period.

Figures 51 to 53 are the event study graphs that display the dynamic treatment effect over time

Chart 8:
Event Study Regression Results for Trust indexes with ELN Governance

	(1)	(2)	(3)	(4)	(5)
	General	**National Government**	**Local Government**	**Civil Institutions**	**State Armed Forces**
2021 Cohort					
Wave 1 to Wave 2	-0.128*	-0.107	-0.0755	-0.0170	-0.219***
	(-2.03)	(-1.68)	(-1.10)	(-0.26)	(-3.33)
Wave 1 to Wave 3	-0.171*	-0.179*	-0.127	-0.0779	-0.167*
	(-2.38)	(-2.49)	(-1.70)	(-1.06)	(-2.51)
2023 Cohort					
Wave 1 to Wave 2	-0.0512	-0.0719	-0.0242	0.0361	-0.0898
	(-1.00)	(-1.33)	(-0.46)	(0.67)	(-1.66)
Wave 2 to Wave 3	-0.00669	-0.0136	-0.0144	-0.0163	0.0243
	(-0.12)	(-0.24)	(-0.27)	(-0.29)	(0.46)
Weights					
2021-2021	0.192***	0.192***	0.192***	0.192***	0.192***
	(21.31)	(21.31)	(21.31)	(21.31)	(21.31)
2021-2023	0.192***	0.192***	0.192***	0.192***	0.192***
	(21.31)	(21.31)	(21.31)	(21.31)	(21.31)
2023-2021	0.308***	0.308***	0.308***	0.308***	0.308***
	(28.16)	(28.16)	(28.16)	(28.16)	(28.16)
2023-2023	0.308***	0.308***	0.308***	0.308***	0.308***
	(28.16)	(28.16)	(28.16)	(28.16)	(28.16)
Observations	**9408**	**9408**	**9408**	**9408**	**9408**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Chart 9:
Event Study Regression Results for Security Perception with ELN Governance

	(1)	(2)	(3)
	Most Serious Problem	**Security Situation**	**Evolution of Security**
2021 Cohort			
Wave 1 to Wave 2	0.112***	-0.105	-0.0646
	(3.64)	(-1.87)	(-1.59)
Wave 1 to Wave 3	0.164***	-0.355***	-0.107*
	(4.92)	(-5.78)	(-2.30)
2023 Cohort			
Wave 1 to Wave 2	0.0569*	-0.0742	-0.119***
	(2.45)	(-1.47)	(-3.55)
Wave 2 to Wave 3	0.0208	-0.0545	0.119***
	(0.82)	(-1.15)	(3.35)
Weights			
2021-2021	0.192***	0.192***	0.192***
	(21.31)	(21.31)	(21.31)
2021-2023	0.192***	0.192***	0.192***
	(21.31)	(21.31)	(21.31)
2023-2021	0.308***	0.308***	0.308***
	(28.16)	(28.16)	(28.16)
2023-2023	0.308***	0.308***	0.308***
	(28.16)	(28.16)	(28.16)
Observations	**9408**	**9408**	**9408**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Chart 10:
Event Study Regression Results for Economic Security with ELN Governance

	(1)	(2)
	Community	**Personal**
2021 Cohort		
Wave 1 to Wave 2	0.0942*	0.0183
	(2.24)	(0.43)
Wave 1 to Wave 3	0.110**	0.112**
	(2.68)	(2.67)
2023 Cohort		
Wave 1 to Wave 2	0.0330	-0.0346
	(0.94)	(-1.05)
Wave 2 to Wave 3	0.0192	0.0792*
	(0.53)	(2.24)
Weights		
2021-2021	0.192***	0.192***
	(21.31)	(21.31)
2021-2023	0.192***	0.192***
	(21.31)	(21.31)
2023-2021	0.308***	0.308***
	(28.16)	(28.16)
2023-2023	0.308***	0.308***
	(28.16)	(28.16)
Observations	**9408**	**9408**

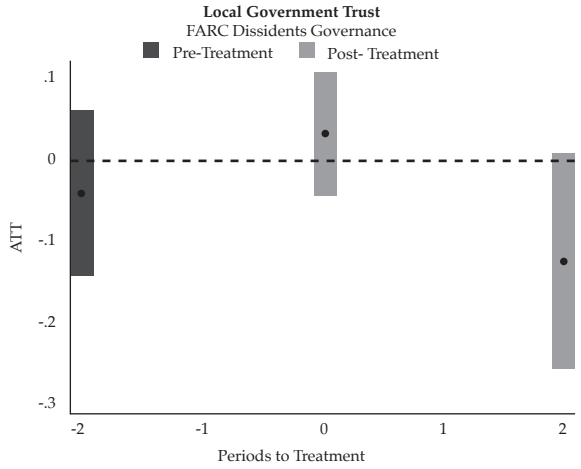
t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Chart 11:
Event Study Regression Results for Trust indexes with Criminal Gangs Governance

	(1)	(2)	(3)	(4)	(5)
	General	National Government	Local Government	Civil Institutions	State Armed Forces
2021 Cohort					
Wave 1 to Wave 2	0.182**	0.115	0.105	0.238***	0.138*
	(3.22)	(1.93)	(1.77)	(4.23)	(2.36)
Wave 1 to Wave 3	0.184**	0.177**	0.148*	0.199**	0.0607
	(2.92)	(2.68)	(2.34)	(3.20)	(1.00)
2023 Cohort					
Wave 1 to Wave 2	0.0762	0.0674	0.0435	0.0784	0.0592
	(1.51)	(1.28)	(0.83)	(1.50)	(1.14)
Wave 2 to Wave 3	0.0410	0.0519	0.0551	0.0302	-0.0131
	(0.80)	(0.95)	(1.06)	(0.57)	(-0.27)
Weights					
2021-2021	0.204***	0.204***	0.204***	0.204***	0.204***
	(28.05)	(28.05)	(28.05)	(28.05)	(28.05)
2021-2023	0.204***	0.204***	0.204***	0.204***	0.204***
	(28.05)	(28.05)	(28.05)	(28.05)	(28.05)
2023-2021	0.296***	0.296***	0.296***	0.296***	0.296***
	(35.90)	(35.90)	(35.90)	(35.90)	(35.90)
2023-2023	0.296***	0.296***	0.296***	0.296***	0.296***
	(35.90)	(35.90)	(35.90)	(35.90)	(35.90)
Observations	**9408**	**9408**	**9408**	**9408**	**9408**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Figure 28:
Dynamic Treatment Effect for Trust in Local Government with FARC Dissidents Governance



for all treated cohorts for the security perception questions with Criminal Gangs governance.

Chart 12 presents the estimated group-time average treatment effects on the treated (ATTGT) for each cohort and period, using Equation 1 with the security-related questions as the outcomes of interest with Criminal Gangs governance.

Figures 54 and 55 illustrate the dynamic treatment effect over time for all treated cohorts using the economic security questions as outcomes in Equation 1 for Criminal Gangs governance.

Chart 13 presents the estimated ATTGTs from using the economic security questions as outcomes in Equation 1 with Criminal Gangs governance.

Chart 12:
Event Study Regression Results for Security Perception with Criminal Gangs Governance

	(1)	(2)	(3)
	Most Serious Problem	**Security Situation**	**Evolution of Security**
2021 Cohort			
Wave 1 to Wave 2	0.00973	-0.123*	-0.0524
	(0.37)	(-2.31)	(-1.41)
Wave 1 to Wave 3	-0.0410	-0.125*	0.0236
	(-1.42)	(-2.33)	(0.59)
2023 Cohort			
Wave 1 to Wave 2	0.0338	-0.0961*	-0.0318
	(1.53)	(-2.03)	(-1.02)
Wave 2 to Wave 3	0.0155	-0.0412	-0.0338
	(0.64)	(-0.90)	(-1.00)
Weights			
2021-2021	0.204***	0.204***	0.204***
	(28.05)	(28.05)	(28.05)
2021-2023	0.204***	0.204***	0.204***
	(28.05)	(28.05)	(28.05)
2023-2021	0.296***	0.296***	0.296***
	(35.90)	(35.90)	(35.90)
2023-2023	0.296***	0.296***	0.296***
	(35.90)	(35.90)	(35.90)
Observations	**9408**	**9408**	**9408**

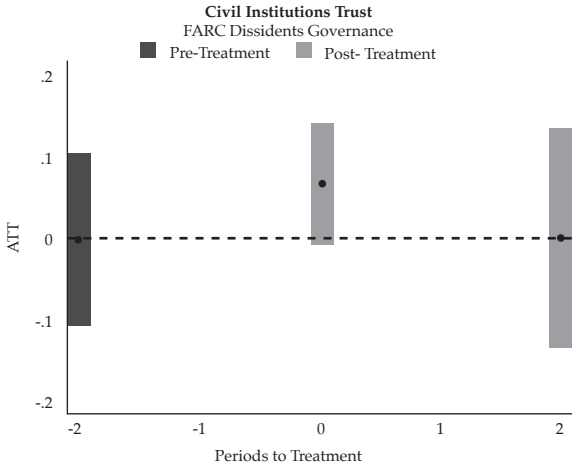
t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Chart 13:
Event Study Regression Results for Economic Security with Criminal Gangs Governance

	(1)	(2)
	Community	**Personal**
2021 Cohort		
Wave 1 to Wave 2	-0.173***	-0.169***
	(-4.64)	(-4.69)
Wave 1 to Wave 3	-0.0811*	-0.0766*
	(-2.04)	(-2.11)
2023 Cohort		
Wave 1 to Wave 2	0.00835	-0.00841
	(0.25)	(-0.26)
Wave 2 to Wave 3	-0.0483	-0.0217
	(-1.39)	(-0.63)
Weights		
2021-2021	0.204***	0.204***
	(28.05)	(28.05)
2021-2023	0.204***	0.204***
	(28.05)	(28.05)
2023-2021	0.296***	0.296***
	(35.90)	(35.90)
2023-2023	0.296***	0.296***
	(35.90)	(35.90)
Observations	**9408**	**9408**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Figure 29:
Dynamic Treatment Effect for Trust in Civil Institutions with FARC Dissidents Governance



A.4. Robustness Checks

A.4.1. Trust

Figures 56 to 60 are the event study graphs that display the dynamic treatment effect over time for all treated cohorts for the trust indexes in the robustness specification.

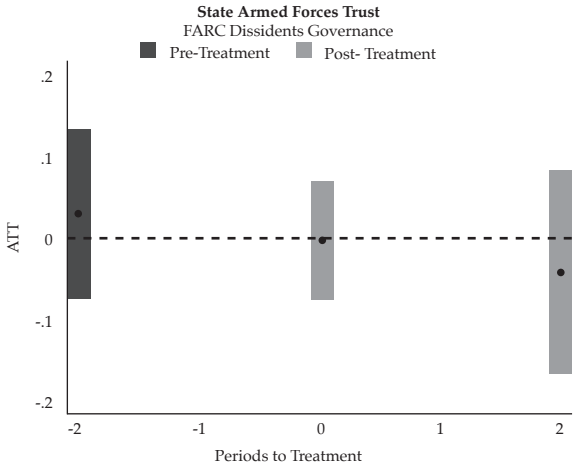
Chart 14 presents the regression results from estimating Equation 1 across all trust indexes for the robustness specification. This chart reports the estimated group-time average treatment effects on the treated (ATTGT), for each cohort and time period.

Chart 14:
Event Study Regression Results for Trust indexes

	(1)	(2)	(3)	(4)	(5)
	General	**National Government**	**Local Government**	**Civil Institutions**	**State Armed Forces**
2021 Cohort					
Wave 1 to Wave 2	0.161*	0.135*	0.0742	0.207**	0.107
	(2.57)	(2.08)	(1.13)	(3.24)	(1.61)
Wave 1 to Wave 3	0.255***	0.227**	0.213**	0.218**	0.147*
	(3.78)	(3.17)	(3.06)	(3.06)	(2.23)
2023 Cohort					
Wave 1 to Wave 2	0.105*	0.134*	0.0753	0.0362	0.0704
	(1.97)	(2.40)	(1.36)	(0.65)	(1.33)
Wave 2 to Wave 3	0.148**	0.0503	0.129*	0.190***	0.121*
	(2.71)	(0.85)	(2.26)	(3.48)	(2.36)
Weights					
2021-2021	0.192***	0.192***	0.192***	0.192***	0.192***
	(24.03)	(24.03)	(24.03)	(24.03)	(24.03)
2021-2023	0.192***	0.192***	0.192***	0.192***	0.192***
	(24.03)	(24.03)	(24.03)	(24.03)	(24.03)
2023-2021	0.308***	0.308***	0.308***	0.308***	0.308***
	(32.65)	(32.65)	(32.65)	(32.65)	(32.65)
2023-2023	0.308***	0.308***	0.308***	0.308***	0.308***
	(32.65)	(32.65)	(32.65)	(32.65)	(32.65)
Observations	**8238**	**8238**	**8238**	**8238**	**8238**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Figure 30:
Dynamic Treatment Effect for Trust in State Armed Forces with FARC Dissidents Governance



A.4.2. Security Perception

Figures 61 to 63 are the event study graphs that display the dynamic treatment effect over time for all treated cohorts for the security perception questions in the robustness specification.

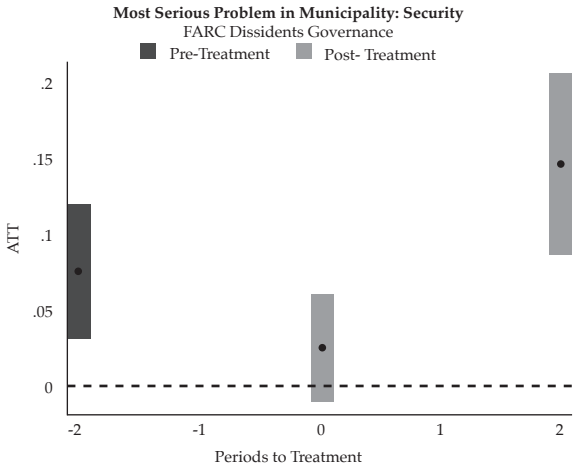
Chart 15 presents the estimated group-time average treatment effects on the treated (ATTGT) for each cohort and period, using Equation 1 with the security-related questions as the outcomes of interest in the robustness specification.

Chart 15:
Event Study Regression Results for Security Perception

	(1)	(2)	(3)
	Most Serious Problem	**Security Situation**	**Evolution of Security**
2021 Cohort			
Wave 1 to Wave 2	0.0487	-0.196***	-0.0620
	(1.68)	(-3.30)	(-1.60)
Wave 1 to Wave 3	0.136***	-0.285***	-0.0916*
	(4.26)	(-4.48)	(-2.12)
2023 Cohort			
Wave 1 to Wave 2	0.0703**	-0.123*	-0.0230
	(3.01)	(-2.47)	(-0.69)
Wave 2 to Wave 3	-0.00852	-0.0813	-0.112**
	(-0.33)	(-1.67)	(-3.17)
Weights			
2021-2021	0.192***	0.192***	0.192***
	(24.03)	(24.03)	(24.03)
2021-2023	0.192***	0.192***	0.192***
	(24.03)	(24.03)	(24.03)
2023-2021	0.308***	0.308***	0.308***
	(32.65)	(32.65)	(32.65)
2023-2023	0.308***	0.308***	0.308***
	(32.65)	(32.65)	(32.65)
Observations	**8238**	**8238**	**8238**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Figure 31:
Dynamic Treatment Effect for Most Serious Problem: Security with FARC Dissidents Governance



A.4.3. Economic Security

Figures 64 and 65 illustrate the dynamic treatment effect over time for all treated cohorts using the economic security questions as outcomes in Equation 1 for the robustness check.

Chart 16 presents the estimated ATTGTs from using the economic security questions as outcomes in Equation 1 for the robustness check.

Chart 16:
Event Study Regression Results for Economic Security

	(1)	(2)
	Community	**Personal**
2021 Cohort		
Wave 1 to Wave 2	-0.0896*	-0.0892*
	(-2.16)	(-2.24)
Wave 1 to Wave 3	-0.110*	-0.0434
	(-2.55)	(-1.10)
2023 Cohort		
Wave 1 to Wave 2	0.0482	-0.0130
	(1.37)	(-0.39)
Wave 2 to Wave 3	-0.154***	-0.124***
	(-4.12)	(-3.46)
Weights		
2021-2021	0.192***	0.192***
	(24.03)	(24.03)
2021-2023	0.192***	0.192***
	(24.03)	(24.03)
2023-2021	0.308***	0.308***
	(32.65)	(32.65)
2023-2023	0.308***	0.308***
	(32.65)	(32.65)
Observations	**8238**	**8238**

t statistics in parentheses
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Figure 32:
Dynamic Treatment Effect for Present Security Situation with FARC Dissidents Governance

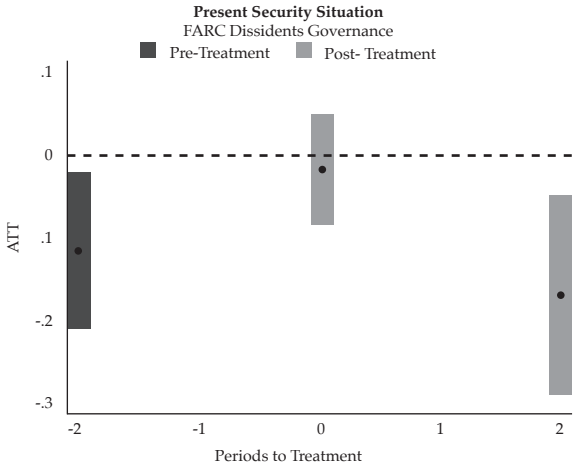


Figure 33:
Dynamic Treatment Effect for Evolution of Security over Last 6 Months with FARC Dissidents Governance

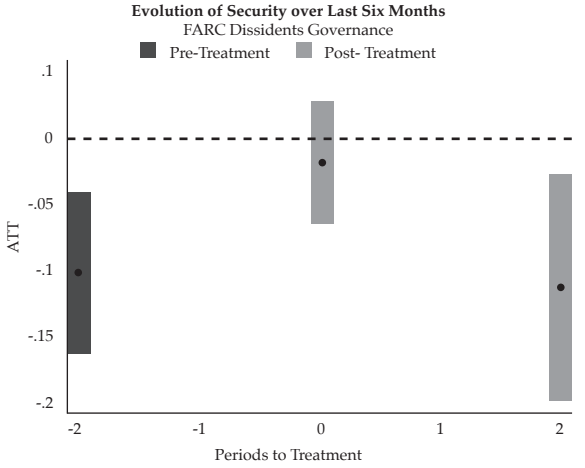


Figure 34:
Dynamic Treatment Effect for Community Economic Security with FARC Dissidents Governance

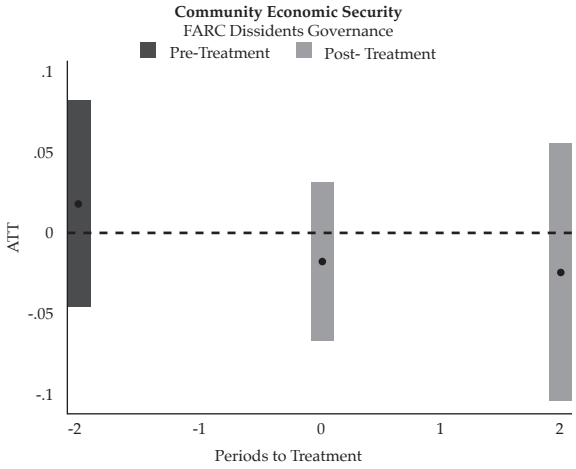


Figure 35:
Dynamic Treatment Effect for Personal Economic Security with FARC Dissidents Governance

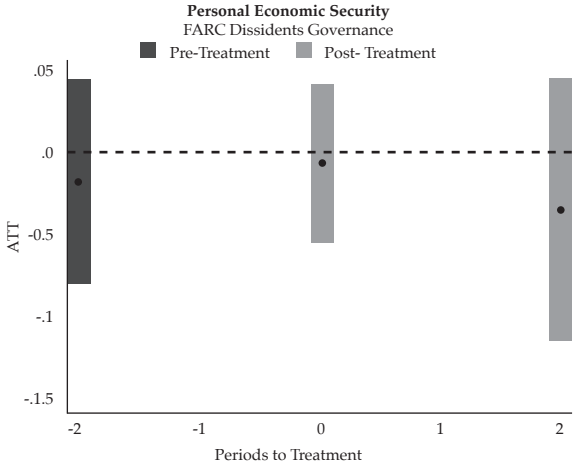


Figure 36:
Dynamic Treatment Effect for General Trust with ELN Governance

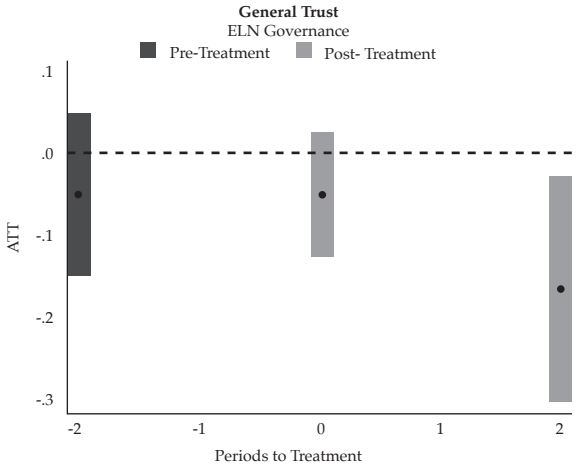


Figure 37:
Dynamic Treatment Effect for Trust in National Government with ELN Governance

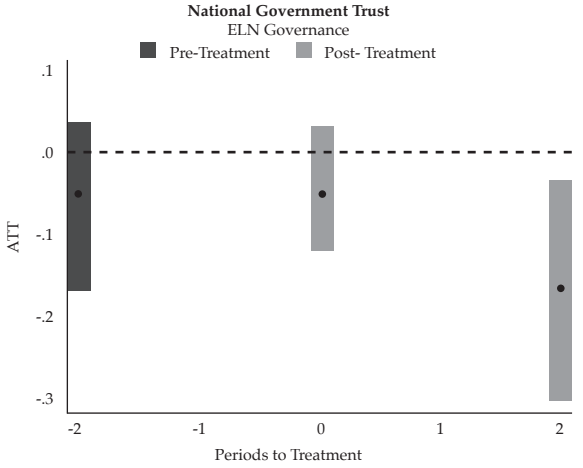


Figure 38:
Dynamic Treatment Effect for Trust in Local Government with ELN Governance

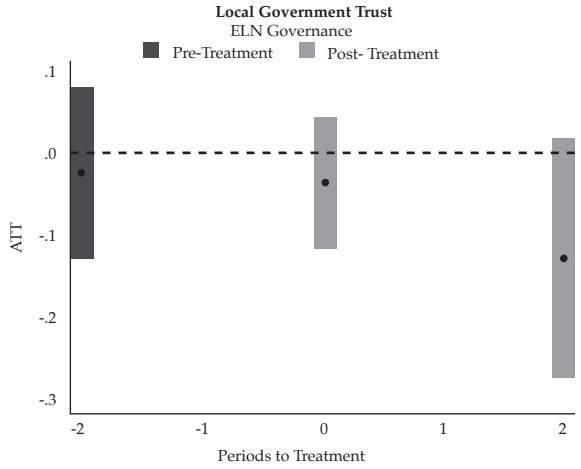


Figure 39:
Dynamic Treatment Effect for Trust in Civil Institutions with ELN Governance

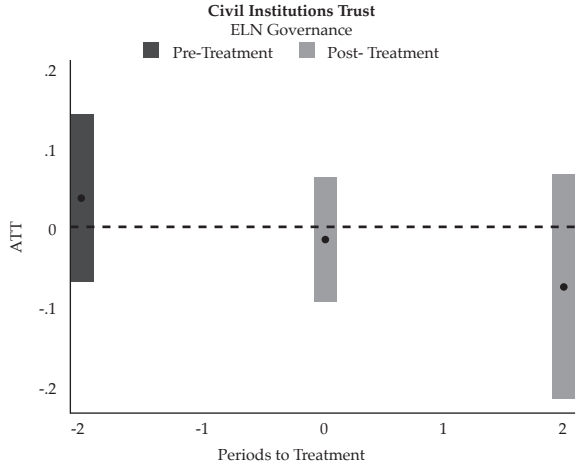


Figure 40:
Dynamic Treatment Effect for Trust in State Armed Forces with ELN Governance

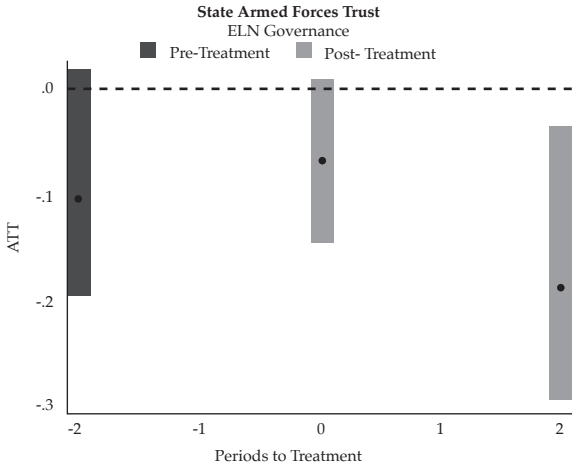


Figure 41:
Dynamic Treatment Effect for Most Serious Problem: Security with ELN Governance

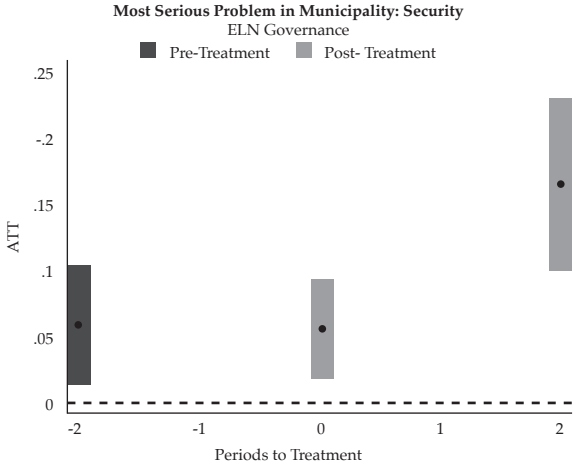


Figure 42:
Dynamic Treatment Effect for Present Security Situation with ELN Governance

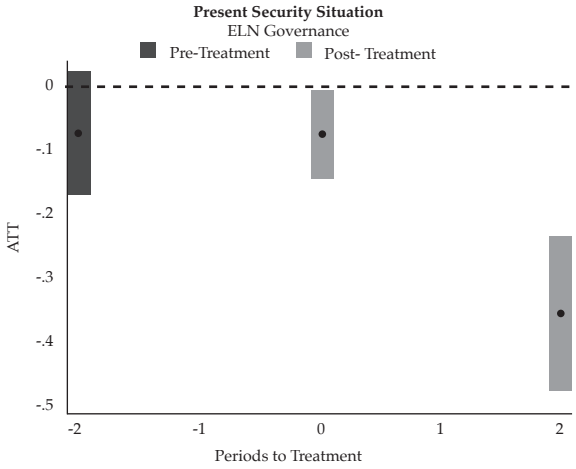


Figure 43:
Dynamic Treatment Effect for Evolution of Security over Last 6 Months with ELN Governance

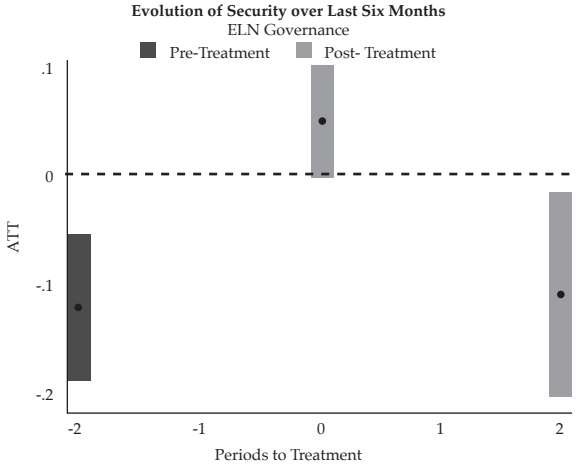


Figure 44:
Dynamic Treatment Effect for Community Economic Security with ELN Governance

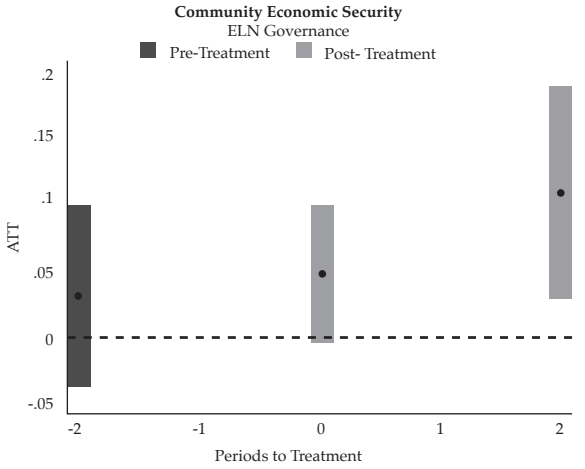


Figure 45:
Dynamic Treatment Effect for Personal Economic Security with ELN Governance

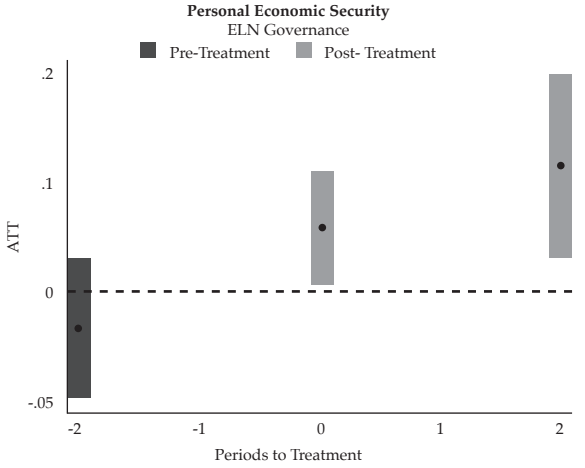


Figure 46:
Dynamic Treatment Effect for General Trust with Criminal Gangs Governance

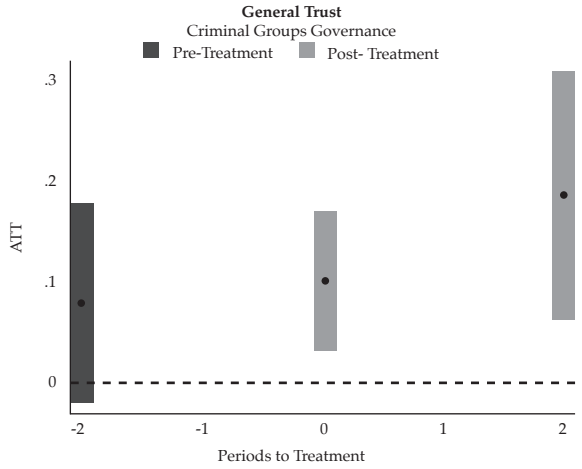


Figure 47:
Dynamic Treatment Effect for Trust in National Government with Criminal Gangs Governance

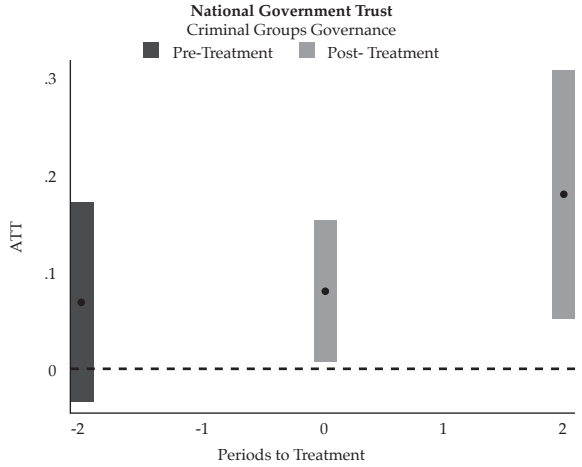


Figure 48:
Dynamic Treatment Effect for Trust in Local Government with Criminal Gangs Governance

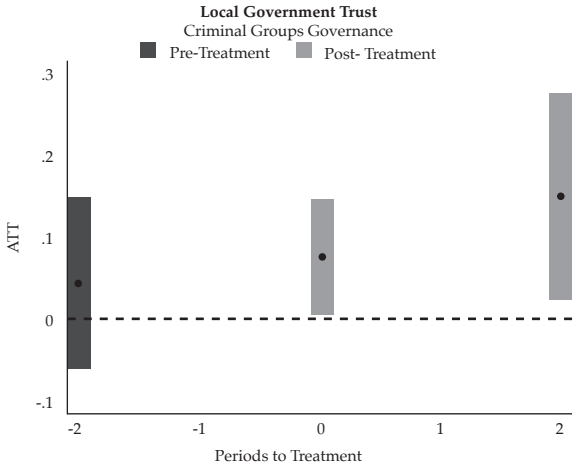


Figure 49:
Dynamic Treatment Effect for Trust in Civil Institutions with Criminal Gangs Governance

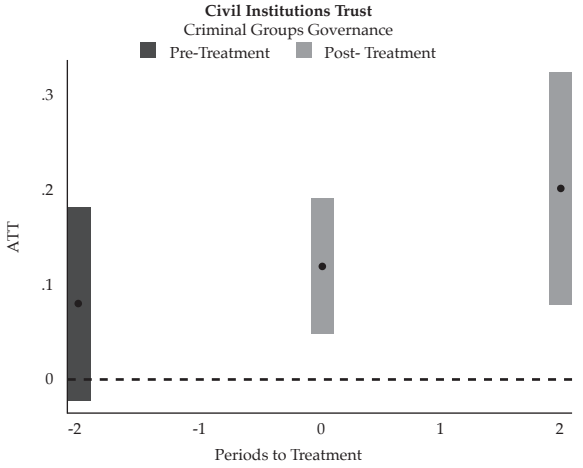


Figure 50:
Dynamic Treatment Effect for Trust in State Armed Forces with Criminal Gangs Governance

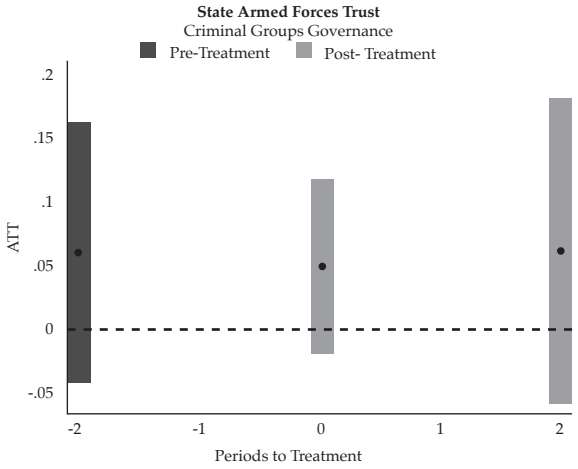


Figure 51:
Dynamic Treatment Effect for Most Serious Problem: Security with Criminal Gangs Governance

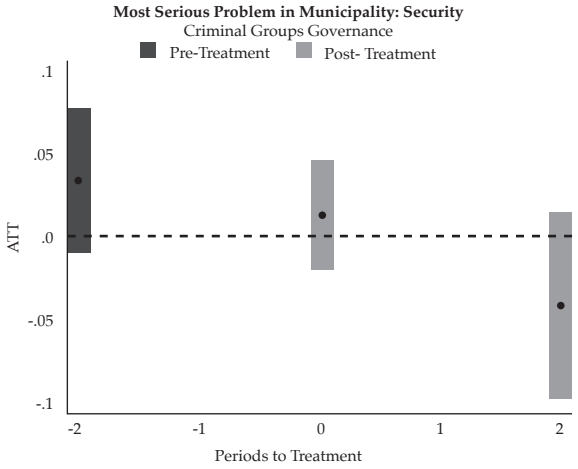


Figure 52:
Dynamic Treatment Effect for Present Security Situation with Criminal Gangs Governance

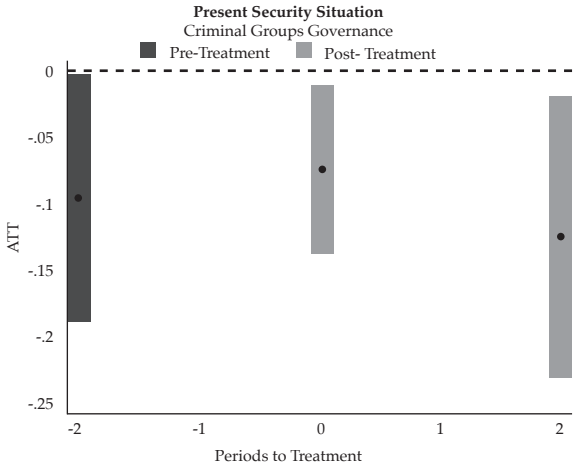


Figure 53:
Dynamic Treatment Effect for Evolution of Security over Last 6 Months with Criminal Gangs Governance

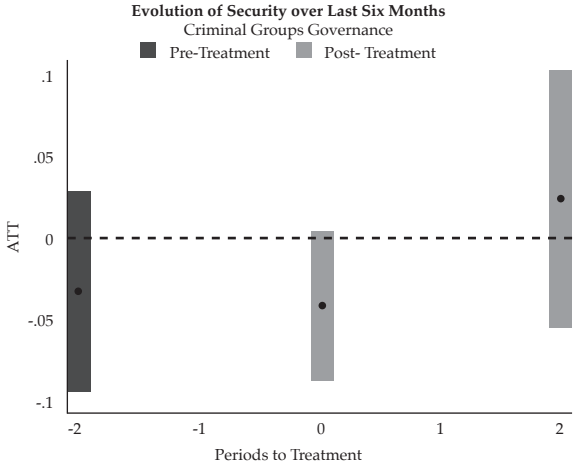


Figure 54:
Dynamic Treatment Effect for Community Economic Security with Criminal Gangs Governance

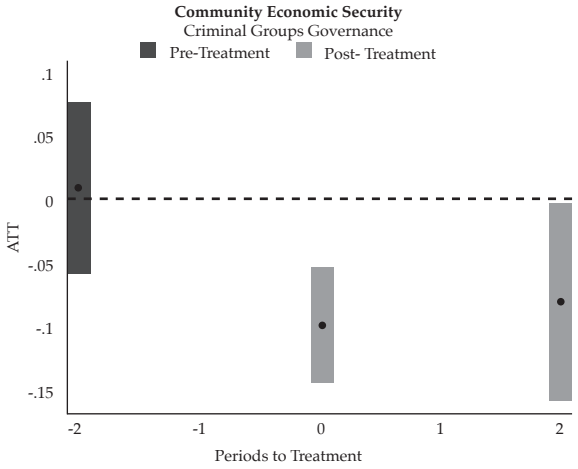


Figure 55:
Dynamic Treatment Effect for Personal Economic Security with Criminal Gangs Governance

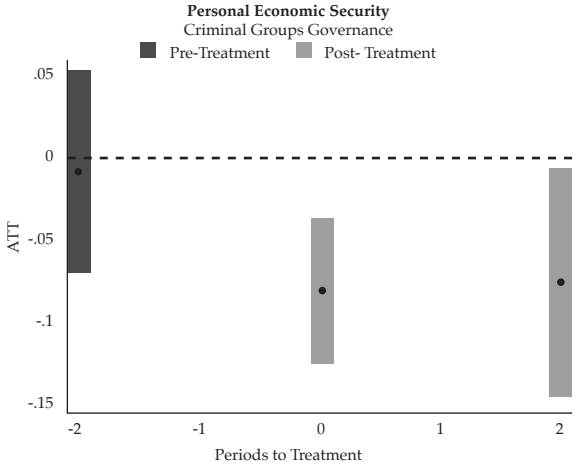


Figure 56:
Dynamic Treatment Effect for General Trust

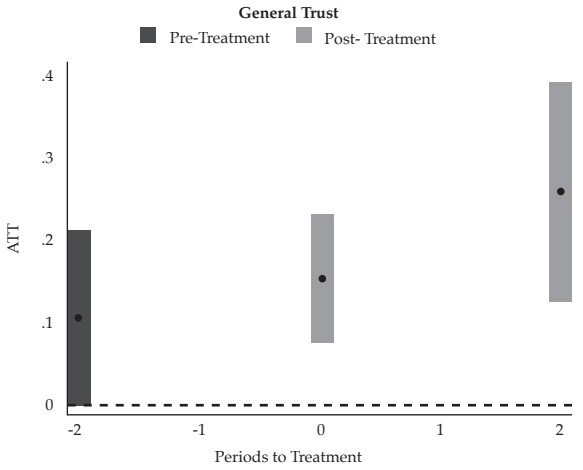


Figure 57:
Dynamic Treatment Effect for Trust in National Government

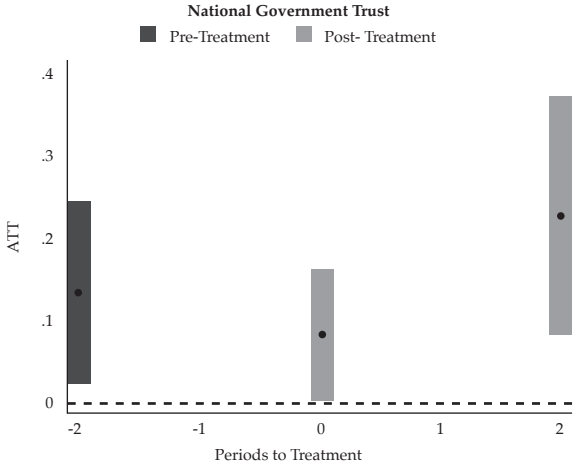


Figure 58:
Dynamic Treatment Effect for Trust in Local Government

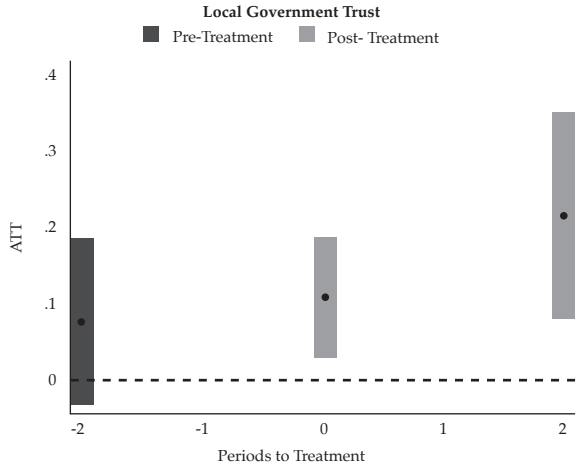


Figure 59:
Dynamic Treatment Effect for Trust in Civil Institutions

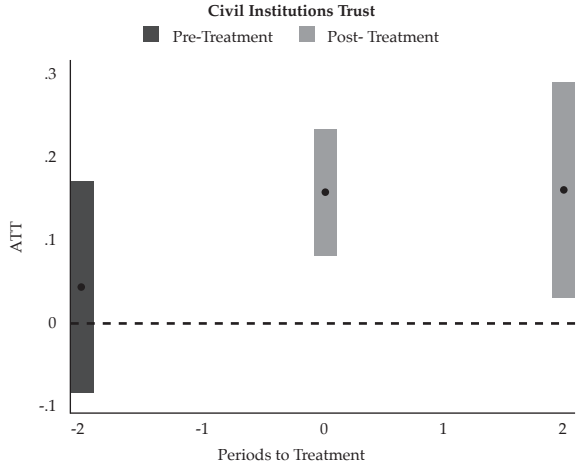


Figure 60:
Dynamic Treatment Effect for Trust in State Armed Forces

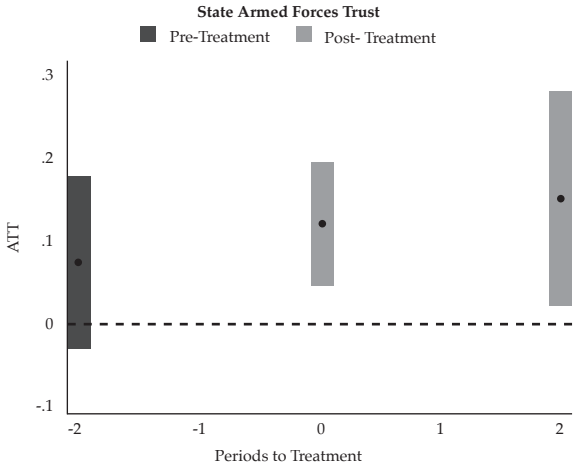


Figure 61:
Dynamic Treatment Effect for Most Serious Problem Security

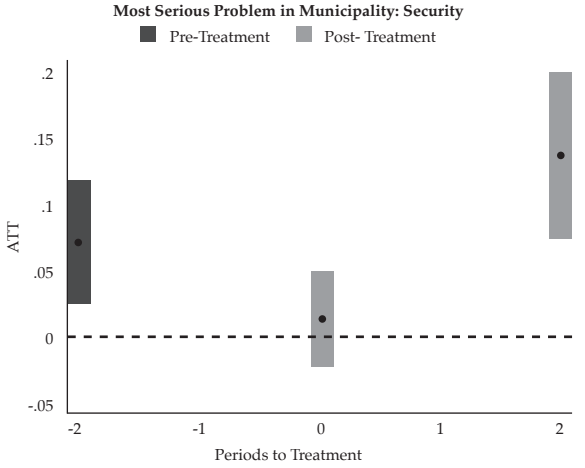


Figure 62:
Dynamic Treatment Effect for Present Security Situation

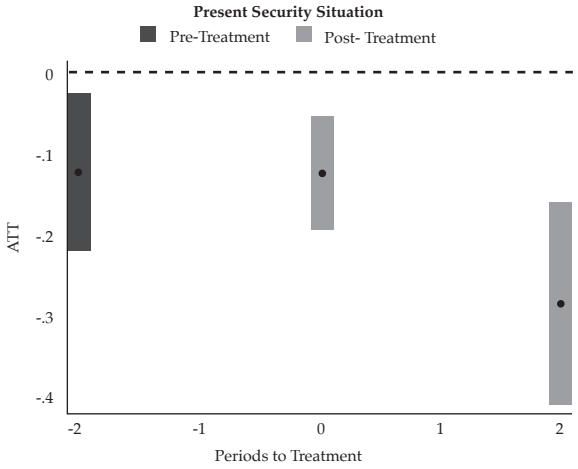


Figure 63:
Dynamic Treatment Effect for Evolution of Security over Last 6 Months

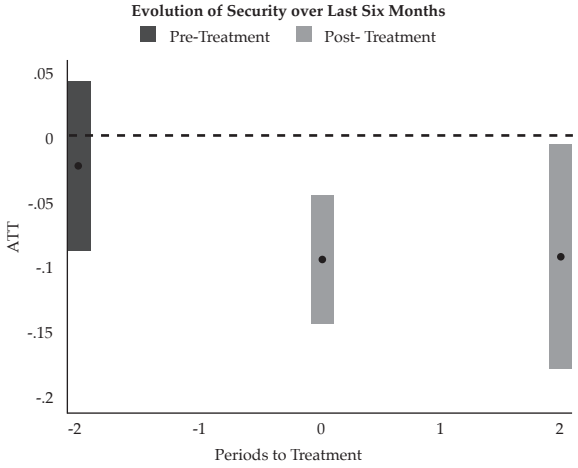


Figure 64:
Dynamic Treatment Effect for Community Economic Security

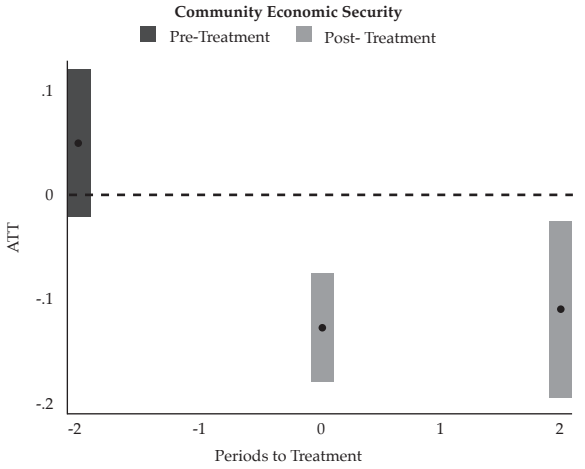


Figure 65:
Dynamic Treatment Effect for Personal Economic Security

