KILLING SOCIAL LEADERS FOR TERRITORIAL CONTROL: THE UNINTENDED CONSEQUENCES OF PEACE

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ABSTRACT. We study the unintended consequences of the recent peace process in Colombia, that ended over five decades of internal armed conflict with the FARC insurgency. Using a triple differences empirical strategy, we show that the permanent ceasefire that started in December 2014 in the context of the peace negotiations was followed by an increase in the killing of social leaders in previously FARC-dominated territories, perpetrated by other armed groups seeking control of these areas. Consistent with our interpretation that local social leaders are killed to thwart collective action and mobilization at the municipal level, we show that the targeting of social leaders is not explained by the behavior of the overall homicide rate and that it is exacerbated in municipalities with weaker state capacity and an inefficient local judiciary. Our results suggest that partial pacification processes can exacerbate violence by other existing armed groups, aimed at controlling pacified territories.

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1. Introduction

Peace agreements are usually imperfect and short from comprehensive. Peace building strategies need to address the specificities of particular conflicts, and are shaped by both internal and external political constraints (Doyle and Sambanis, 2000). This constitutes a magnificent challenge. The concept of 'peace' goes well beyond the absence of war and should "incorporate the conditions under which states have little need or incentive to use violence against their citizens, and conversely citizens have little motivation or incentive to challenge the state by force of arms" (Regan, 2014). The limited nature of peacemaking is likely to be exacerbated when, in internal conflicts with multiple actors, peace deals are made with only a fraction of the active armed groups. The fragility and short duration of peace in countries such as the Democratic Republic of Congo constitutes an eloquent example of this observation.[1]

Colombia is not the exception. After over five decades of civil war the government signed at the end of 2016 a peace deal with the country's largest and oldest guerrilla, the *Revolutionary Armed Forces of Colombia* (FARC from the Spanish acronym). While the conflict with FARC ended as a result of the agreement, other groups such as the *National Liberation Army* (ELN from the Spanish acronym) and criminal bands formed by former paramilitary groups were excluded from the negotiations. Moreover, since government forces largely failed to occupy and build institutional capacity in FARC's former strongholds, a vacuum of power was created in these territories. In this paper we argue that incomplete peace building efforts can have unintended negative consequences, and look at the recent experience of Colombia as a a case study.

Specifically, we study the systematic killing of local social leaders that has taken place in Colombia in the last few years. From January 2009 to December 2017 over 550 social leaders were killed in Colombia.[2] Using a triple differences strategy, we find that the permanent ceasefire introduced at the end of 2014 by FARC in the context of the peace negotiations encouraged the targeting of local community leaders by illegal armed groups not involved in the peace process, who sought to occupy valuable territories, previously controlled by FARC.[3]

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[1]See *DR Congo: Peace Process Fragile, Civilians at Risk*, Human Rights Watch, 07/27/2008. Available from: https://www.hrw.org/news/2008/07/27/dr-congo-peace-process-fragile-civilians-risk-updated-version-august-28-2008 (last accessed June 22, 2018).

[2]Section 3 describes this variable as well as all other variables used in this study.

[3]The ceasefire was declared on December 20th 2014 and resulted from the peace negotiations that FARC held with the Government of Colombia since October 2012. The final peace agreement, signed at the end of 2016, is probably the most important political achievement of a country that faced over five decades of internal armed conflict. However, the simultaneous unprecedented surge in the

A vast academic literature in economics and political science agrees that state capacity is an important determinant of economic development.[4] Thus, a relevant question is how to build capable states. A key element of state formation, emphasized at least since the work of Weber (1946), is the consolidation of the monopoly of violence within a given territory (see also Huntington, 1968; Tilly, 1990). This function, however, is not limited to a central institutionalized authority. States that have recently struggled with establishing institutional presence and control throughout their territories include those which function quite effectively in their central territory but less so in the periphery. Specifically, in the context of internal conflict, non-state actors with long-term horizons can also establish social order within specific peripheral territories, regulating most public and private affairs and enforcing specific commands, thus *de facto* establishing a local "state" (Arjona, 2016).

In this context, situations that end up in the withdrawal of the ruling actor –such as peace agreements followed by disarmament– generate a vacuum of power that other armed groups often rush in to fill. In turn, consolidating territorial dominance often entails the use of violence as a strategy to ensure the compliance of the local populations. While indiscriminate violence is ineffective in achieving this objective as it generally backfires, targeting local leaders through selective violence can be used to thwart collective action in a weakly institutionalized environment, and thus it is generally a more effective strategy (Kalyvas, 2006).

Consistent with this, we show that the killing of social leaders increased disproportionally after the start of FARC's permanent ceasefire in places previously dominated by this insurgency and located in the proximity of areas with presence of other armed groups. Moreover, the killing social leaders is not driven by a differential trend of the overall homicide rate, and thus it is not explained by either a strategy of indiscriminate killings of civilians or a differential change of reporting rates in previously FARC-controlled areas after the ceasefire. In addition, we show that the killing of leaders is exacerbated in areas with a weaker state capacity and an inefficient local judiciary. Our results are driven by the window of opportunity for territorial control given by the permanent ceasefire, but are not exacerbated (or attenuated) during the implementation stage of the peace agreement, that started at the beginning of 2017.

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assassination of social leaders (see Figure 1), which we study in this paper, casted shadow over the euphoria generated by the end of the conflict with FARC.

[4]See for instance Amsden (1992), Evans (1995), Migdal (1998), Herbst (2000), Gennaioli and Rainer (2007), Acemoglu (2005), Besley and Persson (2011, 2009), Acemoglu and Robinson (2012) and Acemoglu et al. (2015).

The strategic targeting civilians is a recurrent strategy of warring factions in civil war.[5] In Colombia, for instance, over 6,000 civilians were killed by paramilitary groups in just under 1,000 massacres during the period 1988-2005 (Vargas, 2016). Before a ceasefire was declared in October 2002, the *Sudan People's Liberation Army* targeted civilians all across southern Sudan to punish alleged supporters of Karthoum-backed militias (Johnson, 1995). During Museveni's rule in Uganda, the *National Revolutionary Army* targeted alleged supporters of the *Lord's Resistance Army* in northern Uganda, to recover territories lost to this insurgency (Berkeley, 2001).

Several scholars have studied this phenomenon. The consequential role of civilians stems from their capacity of sharing information, providing resources and services, as well as new recruits (Kalyvas, 2006). These are key assets in irregular wars, characterized by large asymmetries in the bellicose capacity of contesting groups, usually in favor of government forces (Kalyvas and Balcells, 2010). In the context of territorial disputes, the consequential role of civilians in civil war encourages the use of selective violence by armed groups as means to achieve allegiance and informal collaboration, prevent defections, mobilize supporters, and increase military strength.[6] Winning over the cooperation of the local population is thus a tactical objective or armed groups.[7]

This paper contributes to the existing literature in several ways. First, given our historical context, we emphasize how peace agreements may backfire if they generate territorial vacuums of power, that are not quickly filled by the legitimate state. In particular, our results suggest that partial pacification processes can exacerbate violence by other existing armed groups, aimed at controlling pacified territories. Overall, the killing of social leaders in Colombia has largely undermined the legitimacy of the peace agreement. Second, our data allows us to identify the scope of selective targeting by pinpointing the identity of the victims in terms of their specific role in society. Indeed, we focus on the killing of local community leaders, who represent specific vulnerable groups, including ethnic groups, unions, LGTB groups and peasant organizations. On the methodological end, our empirical strategy allows us to separate the effect of the ceasefire on the level and the trend of the killing of leaders, as well as the persistence of the effect overtime.

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[5]According to Eck and Hultman (2007), most civilian killings are deliberately planned by both state and non-state actors, and by and large are not the result of collateral damage.

[6]See Mason and Krane (1989); Goodwin (2001); Wood (2003); Downes (2007); Kalyvas and Kocher (2007); Lyall (2009); Kocher et al. (2011); Condra and Shapiro (2012); Lyall and Imai (2013); Toft and Zhukov (2015).

[7]This has been recognized at least since the work of Galula (1964), Clutterbuck (1966) and Thompson (1966). See Berman and Matanoc (2015) for a recent thorough review.

The rest of the paper is organized as follows. Section 2 provides some context on the Colombian conflict and the recent peace process, section 3 describes the data sources, section 4 discusses the identification strategy, section 5 reports the main results, robustness and potential mechanisms and section 6 concludes.

2. The Colombian conflict and the recent peace process

The Colombian civil war started with the launch of left-wing guerrillas FARC and ELN in the mid 1960s. Both groups claim to represent the rural poor and have fought for over 50 years with the stated aim of overthrowing the government. In order to finance the protracted war, both groups have been profiting from several forms of illegal activities localized within the Colombian territory (Richani, 1997). This implies that sub-national territorial dominance is an important intermediate objective of the armed groups.

The conflict was a Cold War proxy until the end of the 1980s, but escalated during the 1990s fueled by the involvement of the guerrillas in illegal drug trafficking and the consolidation of right wing paramilitary groups. The formation of paramilitary groups dates back to the late 1960s. Established as part of the war against "internal enemies," The US *National Security Doctrine* legitimized the military as the force ultimately responsible for security and development in Latin America. In Colombia, this encouraged the enactment of Decree 3398 of 1965 and Law 48 of 1968, which allowed civilians to be trained and armed by the military to fight the newly created communist insurgencies.[8]

In the mid 1990s, the paramilitaries effectively became a third force in the conflict, when splintered paramilitary armies colluded under the umbrella organization of the *United Self-Defense Groups of Colombia* (AUC by its Spanish acronym). Through the end of the 1990s and the first half of the 2000s, the counterinsurgency strategy of paramilitaries was based on perpetrating massacres targeted at civilians, thought to constitute the local 'infrastructure of guerrillas' (Restrepo et al., 2004; Aranguren, 2001).

In 2003, the AUC declared a partial ceasefire and a started conversations with the government of Alvaro Uribe that ultimately led to its demobilization between 2005 and 2007. However, this process did not effectively disarm all paramilitary units of the country, as some factions did not lay down all their weapons. In many aspects, the

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[8]An additional small number of paramilitary groups emerged as self-defense forces, organized by rural elites to oppose guerrilla extortion.

reintegration of former paramilitaries was largely ceremonial, and many combatants reconvened to form criminal bands and neo-paramilitary groups, that exist to date (Human Rights Watch, 2010).

The 5-decade long, three-sided Colombian conflict resulted in the largest number internally displaced persons (IDPs) globally (United Nations High Commissioner for Refugees, 2017). To date, over 8.5 million people are formally registered with the state as victims of the conflict.[9] Local social leaders have contributed their share to these figures.

The persecution of social leaders dates back at least to the emergence of the paramilitary groups in the 1960s, when leaders were seen as an instrument of the "subversion" to foster political and economic instability (Gallón et al., 2013). During Uribe's administration (2002-2010) violence against union members was at the center of the public debate. One the one hand, union leaders argued in favor of stopping the negotiations of the free trade agreement with the US because of the incapacity of the government to curbing violence against trade unionists, which they claimed was a result of the victims normal union activities. This argument was even picked up by US democratic presidential candidate Barack Obama in the final presidential debate with John McCain, to oppose the free trade agreement with Colombia.[10] The government, on the other hand, argued that most of the violence was a byproduct of the armed conflict (Mejía and Uribe, 2011). Given the high number of social leaders assassinated during the armed conflict, the Victims' Unit established a specific program for the collective reparation of social groups systematically affected through killings, threats, and forced disappearances such us unionists, journalists, and human rights defenders.

In October 2012 the Colombian government and FARC started peace negotiations in Havana, with the oversight of the Norwegian government. While the four-year long process was characterized by constant ebb and flow, one of the most significant milestones was the establishment of a permanent ceasefire by FARC on December 20, 2014. In this paper, we show that FARC's inability to respond violently during the ceasefire (which was largely met until followed by the bilateral definitive ceasefire and then by the final disarmament in 2016) constituted a window of opportunity for other

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[9]Source: Victims' Registry, from the Unit for the Victims Assistance and Reparation (herein the Victims' Unit), March 2018 figure (https://www.unidadvictimas.gov.co/en).

[10]"Candidates Obama and McCain disagree on Colombian FTA agreement in final presidential debate", *Semana* magazine, 10/16/2008, available from https://www.semana.com/international/headlines/articulo/candidates-obama-and-mccain-disagree-on-colombian-fta-agreement-in-final-presidential-debate/96274-3 (last accessed June 2018).

armed groups (specifically the ELN and former paramilitary criminal bands) to try to establish their dominance in previously FARC-controlled territories. Moreover, we also show that this territorial dispute resulted in a disproportional assassination of local social leaders. Overall, the killing of social leaders, we argue, constitutes an unintended negative consequence of a partial pacification process that was not accompanied by an effort to consolidate the state control in former FARC strongholds.

The final peace agreement was endorsed by Congress on November 30 2016 after a previous version of it got rejected by a 0.5% vote margin in a referendum that took place on October 2th that year.

3. Data

3.1. **Killing of social leaders.** The killings of social leaders comes from a Colombian Human Right NGO called *Somos Defensores*. This NGO was created in 1999 with the aim of protect social leaders in Colombia by denouncing the abuses targeted at them in the context of the armed conflict. A *social leader* is defined by the NGO as person who fights for the Human Rights of local vulnerable communities.

Since 2006, *Somos Defensores* created an information system that records all the homicides of social leaders, with the objective of producing permanent statistics about this type of violence in order to lobby national authorities and denounce what they call a systematic (and intentional) practice.[11] The registry is filled with the input of a large network of Human Rights organizations (over 500) with presence throughout the Colombian territory (especially in conflict-affected areas) and supplemented with field-work carried out by *Somos Defensores* to verify that assassinations of alleged leaders are indeed so. Efforts are made to avoid double counting.

Somos Defensores uses these data to publish bi-annual reports with details of each one event. For each murder case the report includes: the date and place of the event, the victim's name, the organization represented by the leader, and the presumed perpetrator. Most of the murdered leaders were part of local community councils (33%), were leaders of indigenous communities (22%), or peasant leaders (12%), see table 1. For the purpose of our statistical analysis, we aggregate this information at the municipality-bi-annual level for our analysis.

Our analysis covers the period 2011:1 to 2017:2, since the start Juan Manuel Santos' presidential term. Before the ceasefire (until 2014:2), 250 killing cases are recorded (31 per semester). After the ceasefire there are 240 cases recorded (40 per semester).

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[11]See Programa Somos Defensores - PNGPDDH (2008).

This increase can be seen in Panel A of Figure 3, that shows the the evolution of the number of leaders killed during our sample period. In turn, Figure 2 presents the spatial distribution of assassinations by municipality during the entire period of analysis. Overall, killings are concentrated in the periphery of the country, in places relatively far from the big cities and characterized by a rather weak presence of the state. This is consistent with our interpretation that leaders are targeted in areas that are being violently disputed by armed groups after the *de facto* withdrawal of FARC.

3.2. **Armed groups presence and exposure.** Turning to our measures of armed groups presence, we use the violence dataset originally compiled by Restrepo et al. (2004), and updated through 2014 by Universidad del Rosario. This dataset codes violent events recorded in the *Noche y Niebla* reports from the NGO *Centro de Investigación y Educación Popular* (CINEP) of the Company of Jesus in Colombia, which provides a detailed description of the violent event, date, the municipality in which it occurred, the identity of the perpetrator, and the count of victims involved in the incident.[12] Specifically, we create a dummy for *FARC presence* if there was at least one violent case by FARC in the period 2011:1–2014:2, after president Juan Manuel Santos took office and before the beginning of the ceasefire.

Measuring the influence exercised by an armed group over a specific location is extremely challenging. Indicators of presence and non-violent coercion over a large set of municipalities cannot be systematically recorded in an objective way. Violence, on the other hand, while more easily observed, is only imperfectly correlated with territorial dominance. However, non-violent dominance is unlikely to occur without any violence inflicted in the past, either as a way to legitimize influence with the citizenry or to oust any contesting (legal or illegal) group. It is thus reasonable to assume that the ability to inflict localized violence over a relatively long period could be expected to translate into influence in different ways. We thus follow a growing empirical literature on the Colombian conflict (see e.g. Ch et al., forthcoming; Acemoglu et al., 2013; Fergusson et al., 2018a,b), and use past violence over a period of years as an (imperfect) indicator of influence.[13]

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[12]*Noche y Niebla* sources include (Restrepo et al. 2004, p. 404) "1. Press articles from more than 20 daily newspapers of both national and regional coverage. 2. Reports gathered directly by members of human rights NGOs and other organizations on the ground such as local public ombudsmen and, particularly, the clergy." Notably, since the Catholic Church is present in even the most remote areas of Colombia, we have extensive coverage of violent events across the entire country.

[13]Arjona and Otálora (2011) compare existing databases of civil war violence in Colombia to survey evidence on armed groups' presence (for the small subsample of municipalities for which the latter is available) and conclude that while violence is likely to *underestimate* –by roughly the same magnitude– both guerrilla and paramilitary control, there is a non-negligible correlation between both measures.

To measure the intention of other armed groups to dispute the control of a specific area, we create a measure of *exposure to other armed groups* (neo-paramilitary criminal bands and the ELN guerrilla). This is obtained from the interaction of a presence dummy equivalent to that of FARC (and during the same period, 2011:1–2014:2), and a vector of (distance-penalized) neighboring municipalities. Specifically, we define the matrix **F** with entries f_{ij} as:

$$(3.1) \qquad f_{ij} = \frac{1}{1 + d_{ij}(1 + e_{ij})}$$

where d_{ij} is the euclidean distance between municipalities i and j, and e_{ij} is the difference in altitude between municipality i and j (used to compute the an "effective distance", corrected by terrain ruggedness). Let $N(i)$ be the set of neighbors that share a common border with municipality i and constitutes the ith row of the matrix **N**, which summarizes all the neighbors of every municipality and has entries:

$$(3.2) \qquad n_{ij} = \begin{cases} 0 & \text{if } j \notin N(i) \\ f_{ij} & \text{if } j \in N(i) \end{cases}$$

Using these definitions we end up with a sample composed by 129 municipalities with FARC presence, 172 municipalities with presence of other armed groups, and 49 with presence of both FARC and other groups. In addition, using the distance-penalized neighboring criterion, there are 564 municipalities *exposed* to the influence of other armed groups, 92 of which have FARC presence.

3.3. **Other data.** We complement these data with a large set of municipality-level characteristics from an annual panel constructed by *Centro de Estudios sobre Desarrollo Económico* (CEDE) at Universidad de los Andes. This dataset includes socioeconomic and geographical information for all the municipalities in Colombia. We gathered information on population, presence of coca plantations, altitude, size of the municipality, distance to the closest mayor city, tax revenue, an index for sound fiscal policy, literacy rate, and an index of rurality.

Table 2 presents summary statistics for our sample of 1,069 municipalities that include all municipalities with a population of less than 200,000, by doing this we drop mayor cities and capitals that are mainly urban and less affected by the conflict.[14] On a given semester 2.1% of the municipalities experience the assassination of a social leader, and the homicide rate (per 1,000 inhabitants) of this group is on average 0.11

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[14]All our results are robust to including all Colombian municipalities.

in a given semester.[15] In our sample 9% of the municipalities are exposed to FARC, 52% to other armed groups, and 8% to both of them.

We also present differences in observables between type of armed group presence at the municipality level before the ceasefire in table 3. We focus our attention on differences between municipalities with only FARC presence and those with FARC and other armed groups' exposure. We find that in general both types of municipalities are similar in terms of geographic and socioeconomic characteristics before the ceasefire. On the margin there is some evidence that municipalities with FARC presence only had more assassinations of social leaders before the ceasefire.

Finally we split the evolution of leaders' killings by type of armed group presence since 2011. We divide the municipalities in two groups: presence of both FARC and other groups and presence of FARC only (see figure 3 panel B). In general, while we observe that there were more leaders killed in places with FARC presence before the ceasefire, we do not see any differential time pattern between these two types of municipalities before the ceasefire. However, there is a large increase in the number of killings in municipalities with presence of both FARC and other armed groups after the ceasefire. This already suggests that those areas exposed to the influence of other armed groups experienced an increase in assassinations after the ceasefire. The next section describes how we explore this idea more formally.

4. Empirical strategy

4.1. **Main specification.** Our identification strategy exploits the timing of the permanent ceasefire announced by FARC on December 20, 2014, during the peace negotiations with the Colombian government, and the spatial distribution of illegal armed groups in Colombia prior to the ceasefire. Since we are interested in how the killing of social leaders changed after the ceasefire in places with FARC presence that, in addition, are exposed to the influence of other armed groups, the main empirical strategy is based on a *difference-in-difference-in-differences* or triple differences model. More formally, using the subindex m to denote municipalities and t to denote time, we estimate:

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[15]We do not have the universe of social leaders at the municipal level, so we use as denominator the municipal total population.

$$(4.1) \quad y_{mt} = \alpha_m + \delta_t + \beta_1 \times \mathrm{FARC}_m \times \mathbf{N}_m \mathbf{OAG} \times \mathrm{Cease}_t + \beta_2 \times \mathrm{FARC}_m \times \mathrm{Cease}_t$$
$$+ \beta_3 \times \mathbf{N}_m \mathbf{OAG} \times \mathrm{Cease}_t + \sum_{c \in \mathbf{X_m}} (c \times \alpha_t) + \epsilon_{mt}$$

where y_{mt} is one of our measures of leaders killed,[16] FARC_m is a dummy that takes the value one for municipalities with FARC presence as measured before the ceasefire, and $\mathbf{N}_m \mathbf{OAG}$ captures the exposure of municipality m to the influence of other armed groups, measured either by their presence or their (distance-penalized) vicinity.[17] $Cease_t$ is a dummy that takes the value one after the start of the permanent ceasefire, in the first semester of 2015. α_m and δ_t are municipal and time fixed effects that capture any time-invariant municipal-level heterogeneity and any aggregate time shock, respectively. X_m are municipality characteristics measured before the ceasefire that we interact with the time fixed effects to flexibly control by differential trends parametrized by each one of the municipal attributes. Finally, the error term ϵ_{mt} is allowed to be spatially and timely correlated, using the structure suggested by Conley (1999) and Conley (2016).

Our coefficient of interest is β_1 which captures the differential change in killing of social leaders after the ceasefire in municipalities with FARC presence and exposed to the influence of other armed groups, relative to municipalities with only FARC presence (but not exposed) or exposed (but without FARC presence), taking into account any differential effects driven by fixed municipality characteristics over time and any aggregate time shock. The main identification assumption is that, in the absence of the ceasefire, the killing of social leaders in municipalities with FARC presence exposed to other armed groups would have evolved in a similar way than the killing of leaders in other municipalities.

This "parallel trends" assumption can be tested by estimating following dynamic version of (4.1):

$$(4.2) \quad y_{mt} = \alpha_m + \delta_t + \sum_{j \in T} \mathrm{FARC}_m \times \mathbf{N}_m \mathbf{OAG} \times \delta_j^1 + \sum_{j \in T} \mathrm{FARC}_m \times \delta_j^2$$
$$+ \sum_{j \in T} \mathbf{N}_m \mathbf{OAG} \times \delta_j^3 + \sum_{c \in \mathbf{X_m}} (c \times \delta_t) + \epsilon_{mt}$$

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[16]These include the total number of killings, a dummy variable for any leader being killed in a municipality, or the rate of killings per 100,000 municipal inhabitants.

[17]Specifically, **OAG** is a vector with dummy variables that take the value one for municipalities with ELN or neo-paramilitary presence before the ceasefire and $\mathbf{N}_m$ is the mth row of matrix $\mathbf{N}$.

where T includes all semester of our sample period but the second semester of 2014, which is the period right before the ceasefire. The parameters δ_j^1 can be interpreted as the differential killings in municipalities with FARC presence that are exposed to the influence of other armed groups, relative to the semester right before the ceasefire.

4.2. **Other specifications.** The signature of the final peace agreement at the end of 2016 was followed by a mobilization of FARC fronts away from their areas of operation and into specific zones where, under the monitoring of a UN peace mission, FARC disarmed and started their reincorporation process. Thus, one could argue that, while the permanent ceasefire opened a window of opportunity for other armed groups to dispute the control of FARC-dominated territories, the mobilization of FARC personnel during the agreement implementation stage further facilitated the occupation of former FARC areas by other armed groups. If this is the case, then there should be a differential effect on the killing of social leaders starting in 2017:1, relative to that observed during the post ceasefire, pre-implementation period (2015:1 to 2016:2).

However, as mentioned in the introduction, the quest for territorial control by armed groups entails the selective killing of civilians to induce fear and encourage allegiance and support, and this strategy is independent of whether a ceasefire-compliant FARC is present or not. This, on the other hand, argues against any differential effect in the killing of social leaders after the implementation of the agreement relative to the ceasefire period. We take a skeptical view and estimate a this potential differential effect through the following model:

$$
\begin{aligned}
(4.3) \quad y_{mt} = {} & \alpha_m + \delta_t + \beta_1 \times \text{FARC}_m \times \mathbf{N}_m\mathbf{OAG} \times \text{Implementation}_t \\
& + \beta_2 \times \text{FARC}_m \times \text{Implementation}_t + \beta_3 \times \text{OAG}_m \times \text{Implementation}_t \\
& + \beta_4 \times \text{FARC}_m \times \mathbf{N}_m\mathbf{OAG} \times \text{Cease}_t + \beta_5 \times \text{FARC}_m \times \text{Cease}_t \\
& + \beta_6 \times \mathbf{N}_m\mathbf{OAG} \times \text{Cease}_t + \sum_{c \in \mathbf{X_m}} (c \times \delta_t) + \epsilon_{mt}
\end{aligned}
$$

where Implementation$_t$ is a dummy that takes the value of one for the after beginning the implementation face of the peace agreement, in first semester of 2017. Relative to β_4, β_1 captures the differential change in the killing of social leaders during the implementation stage in comparison with the ceasefire period.

Finally, we evaluate potential mechanisms behind our main results by augmenting the main specification in equation (4.1) to test for heterogeneous effects in places that are more attractive or harder to control by other armed groups. We do so by adding

a fourth interaction term. Let the municipality characteristic Z_m (measured before the ceasefire) be a measure of the relative attractiveness or else the relative cost of disputing a FARC stronghold. We estimate:

(4.4)

$$
\begin{aligned}
y_{mt} = {} & \alpha_m + \delta_t + \beta_1 \times \mathrm{FARC}_m \times \mathbf{N}_m\mathbf{OAG} \times Z_m \times \mathrm{Cease}_t + \beta_2 \times \mathbf{N}_m\mathbf{OAG} \times Z_m \times \mathrm{Cease}_t \\
& + \beta_3 \times \mathrm{FARC}_m \times Z_m \times \mathrm{Cease}_t + \beta_4 \times \mathrm{FARC}_m \times \mathbf{N}_m\mathbf{OAG} \times \mathrm{Cease}_t + \beta_5 \times \mathrm{FARC}_m \times \mathrm{Cease}_t \\
& + \beta_6 \times \mathbf{N}_m\mathbf{OAG} \times \mathrm{Cease}_t + \beta_7 \times Z_m \times \mathrm{Cease}_t + \sum_{c \in \mathbf{X_m}} (c \times \alpha_t) + \epsilon_{mt}
\end{aligned}
$$

Our coefficient of interest, β_1, captures the differential killing of social leaders in places with FARC presence and exposed to other armed groups in municipalities with characteristic Z_m. More specifically, we parametrize Z_m according to the presence of demands for land restitution, as well as according to measures of state capacity and local institutional strength.

Using the above specifications we estimate the impact of the December 2014 permanent ceasefire on the killing of social leaders in areas previously dominated by FARC and exposed to other armed groups (equation 4.1), the dynamic persistence of this effect (equation 4.2), the potential differential effect given by the start of the implementation of the peace agreement at the beginning of 2017 (equation 4.3), and heterogeneous effects given by the relative attractiveness of disputed municipalities as well as their institutional capacity (equation 4.4). The next section reports the estimated results.

5. Results

5.1. **Main results.** We start by describing, on Table 4, the empirical estimates of the main specification given by regression model 4.1. Recall that our main coefficient of interest is the (triple) interaction between a (pre-ceasefire) FARC presence indicator, the municipal "exposure" to the influence of other armed groups –given by the (distance penalized) vicinity of either neo-paramilitary criminal bands or ELN strongholds- and a dummy that captures the period after the announcement of the permanent ceasefire.

We measure the killing of social leaders in different ways. Columns 1 and 2 of Table 4 compute the rate of killings by 100,000 inhabitants (of the municipality where the death is recorded). Columns 3 and 4 use the non-normalized count of social leaders killed. Columns 5 and 6 focus on the extensive margin, coding a dummy variable that takes value one if at least one single leader is killed in a municipality-year. While

all specifications include both municipality and and time fixed effects, even columns include all the predetermined municipal controls (described in section 3) interacted with the time fixed effects to flexibly control by differential trends parametrized by each one of the municipal attributes.

In all cases, the coefficient of interest is positive and significant. This suggests that social leaders are differentially targeted after the ceasefire in areas both formerly controlled by FARC and exposed to other armed groups. According to the magnitude of the estimate reported in Column 1, in places controlled by FARC prior to the ceasefire, a one standard deviation increase in the average municipal exposure to other armed groups (equal to 0.325, see second Panel from the top of Table 2, Column 2) increases the rate of leaders killed by 0.11 per 100,000 inhabitants ($=0.348 \times 0.325$) after the start of the permanent ceasefire. This effect is statistically significant at 5%, and it represents an increase in 10% of a standard deviation of the social leaders' homicide rate.[18]

The estimate reported in Column 3 of Table 4, which focuses on the count of leaders killed, implies that in FARC-controlled areas a one standard deviation increase in the average municipal exposure to other armed groups increases the number of leaders killed by 0.03 ($=0.09 \times 0.325$) after the ceasefire. This is equivalent to 15% of a standard deviation, and is significant at the 5% level.[19]

Finally, on the extensive margin, Column 5 implies that in places where FARC was present prior to the ceasefire a one standard deviation increase in the average municipal exposure of other armed groups increases the probability of a leader being killed in 1.7 percentage points. This is equivalent to 12% of a standard deviation of the dummy that captures the killing of one or more leaders and it is significant at the 10% level.[20]

Table 4 also reveals that in municipalities exposed to the violent influence of other armed groups, but not previously controlled by FARC, there is a statistically significant drop in the killing of social leaders after the start of the permanent ceasefire. Moreover, in places dominated by FARC but not exposed to other armed groups, there is no significant differential change in the targeting of leaders. These results are consistent with

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[18]Adding the differential trends parametrized by the predetermined controls, the equivalent estimated coefficient reported in Column 2 of Table 4 is slightly bigger in magnitude and implies an increase in the rate of leaders killed on 0.12 per 100,000 inhabitants ($=0.377 \times 0.325$). It is also significant at the 5% level.

[19]Allowing for differential trends parametrized by predetermined controls does not change the magnitude of the estimated coefficient substantially (a 16% of a standard deviation increase in then number of leaders killed), but it does increase statistical precision (see Column 4).

[20]When the controls are added the estimated coefficient and the significance level remain the same (Column 6).

our interpretation that it is the attempt at controlling territories previously dominated by FARC what drives the targeting of social leaders when the ceasefire provides the opportunity.

5.2. **Parallel trends.** To test the identification assumption that, in the absence of the ceasefire, the killing of social leaders in municipalities with FARC presence exposed to other armed groups would have evolved in a similar way than the killing of leaders in other municipalities, and at the same time get a sense of how persistent is the differential targeting of leaders during the post ceasefire period, we present the results from estimating equation 4.2. This is a non-parametric version of the main empirical specification (equation 4.1).

The results are shown in Figure 4, where we plot the point estimates associated with the triple interaction of interest, together with the 95% confidence interval. The estimates plotted in Panel A included no controls and those of Panel B include the pre-determined controls interacted with the time fixed effects. In neither case are there statistically significant coefficients in the years prior to the ceasefire, and the point estimates move around 0. This supports our choice of our *difference-in-differences* empirical strategy. However, the point estimates increase in magnitude after the start of the permanent ceasefire (with a slight decline in the last two semesters), and most of them are statistically significant.

5.3. **Robustness.** Our measure of exposure to the violent influence of other armed groups interacts the a dummy of presence of either neo-paramilitary criminal bands or the ELN guerrilla with a vector of (distance-penalized) neighboring municipalities (see section 3). Thus, in our baseline measure a municipality m is more or less exposed to these groups depending on whether (and how many of) its neighboring municipalities are under their dominance and on how far is the centroid of these municipalities from that of m.

Our results are not driven by using this specific measure of exposure. On the one hand, a simpler alternative measure defines exposure as the share of m's neighbors with presence of other armed groups. On the other hand, a more general measure does not restrict the distance-penalized indicator to m's neighbors, and instead uses all municipalities in Colombia.

Tables A.1 and A.2 in the Appendix are equivalent to Table 4 but use these two alternative measures of exposure, respectively. In all cases the coefficient of interest

is positive and significant.[21] Overall, this is reassuring of our territorial dispute inter-
pretation, as the surge in the killing of leaders in former FARC-dominated territories
after the permanent ceasefire are driven by the exposition to other armed groups.

Our results are not driven by lumping together neo-paramilitary criminal bands and
ELN in the "other armed groups" category. These illegal armed actors have several
differences, including their political objectives and their military strategy, which ar-
guably involve different relationships with civilians.[22] Importantly, however, because
of the irregular nature of Colombia's internal conflict, controlling valuable municipali-
ties is instrumental to both groups (Berman and Matanoc, 2015).

Table 5 shows the results from estimating equation 4.1, using the rate of leaders killed
as dependent variable, but including in the measure of other armed groups only the
neo-paramilitary criminal bands (Columns 1 and 2) or only the ELN guerrilla (Columns
3 and 4). Interestingly, FARC-dominated municipalities experience a differential surge
in the rate of leaders killed after the start of the permanent ceasefire when they are
exposed to the violent influence of each group, as measured separately. Moreover, in
spite of the difference in the size of the reported estimated coefficients in Table 5, the
magnitude of the effect is essentially equivalent.

Focusing on the even columns, which flexibly control for municipal-specific pre-
determined characteristics, we find that in places controlled by FARC prior to the
ceasefire, a one standard deviation increase in the average municipal exposure to
neo-paramilitary criminal bands (to the ELN) increases the rate of leaders killed by
$0.353 \times 0.292 = 0.10$ ($0.515 \times 0.178 = 0.09$) per 100,000 inhabitants after the start
of the permanent ceasefire. This effect, which in both cases is significant at the 5%
level, represents an increase in 10% (9%) of a standard deviation of the social leaders'
homicide rate.

At the end of our sample period the peace agreement was signed and its imple-
mentation started with the movement of FARC combatants to special hosting areas
for disarmament and reincorporation. We estimate equation 4.3 to test whether the
implementation of the peace agreement further encouraged the killing of social leaders
by armed groups taking advantage of FARC's internal migration. This is picked up

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[21]The only exception is when the dependent variable is the dummy of any leader killed, differential
trends parametrized according to pre-determined controls are not included, and the alternative mea-
sure of exposure is the share of neighbors with presence of other armed groups (Column 5 of Table
A.1).

[22]Some of these differences are briefly discussed in section 2.

by the triple interaction between our FARC presence measure, the exposition to other armed groups, and a time dummy that indicates the implementation period (the two last semesters of our sample period).

Table 6 shows the estimated coefficients from specification. The coefficient of interest is not statistically significant which suggests no differential effect on the rate of leader killed in this sub-period.[23] We interpret this as suggesting that the ceasefire, which was by and large respected by FARC (to credibly signal their willingness of reaching a peace agreement) was a high enough incentive for other armed groups to dispute the control of this group's territorial strongholds.

5.4. **Potential mechanisms.** Over 8.5 million people are formally registered with the Colombian state as victims of the armed conflict, and almost 7 million have been determined to qualify for reparations or assistance services.[24] Most of the victims (7.4 million between 1985 and 2017) are internally displaced people, some of whom were dispossessed from their land by illegal armed groups, especially by paramilitary groups representing the interests of large landowners and drug lords (Fergusson et al., 2018a)

In 2011 the government enacted Law 1448 (known as the 'Victims Law'). This is a comprehensive law that establishes the victims' rights, including humanitarian aid, psychological assistance and a large set of material reparations. The latter includes the restitution of the dispossessed land in cases in which illegal dispossession can be proved by a judge. To attend a potentially very large number of demands for lands restitution the Victims' Law created a special administrative *Land Restitution Unit.* Between 2012 and 2017 over 204 thousand hectares of land had been restituted (Unidad Administrativa Especial de Gestión de Restitucioón de Tierras, 2018).

We posit that the incentive of illegal armed groups to dispute the FARC territories when the ceasefire is declared is larger for municipalities that have a larger share of demands for land restitution. Non-state actors, especially neo-paramilitary criminal bands, are either directly affected or, as mentioned above, represent groups of the society that are affected by the land restitution policy. Moreover, anecdotal accounts suggest that a non-negligible share of the social leader killed in Colombia are those who have mobilized dispossessed victims to claim their land. We thus expect to observe a differentially higher number of leaders killed in areas with where there is a relatively large number of land restitutions demands.

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[23]The Table also shows that the level effect for this sub-period is positive and statistically significant when the pre-determined controls are added.

[24]Source: Victims' Registry from the *Unit for the Victims Assistance and Reparation*, June 2018 figure (available at: https://www.unidadvictimas.gov.co/en, last accessed June 2018).

Columns 1 and 2 of Table 7 report the estimated coefficients of the four-way interaction that adds a dummy variable that equals one for municipalities with land restitution claims above the median to the triple interaction that we have used to identify our main effect.[25] We find that municipalities with higher demands for land restitution experienced a larger boost in the killing of social leaders when controlled by FARC and exposed to other armed groups, after the start of the ceasefire. Again, this result suggests that other armed groups target local leaders whose activity constitutes a risk to the group's particular interests in valuable land.

We have argued that the very nature of the peace process with FARC, that excluded other armed groups from the negotiations, threatens the success and sustainability of the achieved 'peace' if not accompanied by state-led efforts of territorial control and institutional consolidation. If the state is absent once FARC *de facto* withdraws from its strongholds, it is easier for other armed groups to gain control over these areas. We explore this idea formally by testing the extent of which different measures of pre-determined state capacity at the municipal level attenuate the targeting of social leaders by other armed groups in previously FARC controlled areas after the start of the ceasefire.

In Table 7 we use two such measures. Following Acemoglu et al. (2015), for our first measure we use the average number of public offices of in each municipality (Columns 3 and 4). The second is the share of municipal judiciary employees under disciplinary investigations by the National Office of the Attorney (Columns 5 and 6). It has been shown that local corruption might be related to linkages between local authorities and paramilitary groups (see López 2007, Ávila and López 2010).

Our results are consistent with the interpretation discussed above. First, the four-way interaction of FARC presence, exposure of other armed groups, a time dummy that equals one after the start of the ceasefire and state presence is negative (and significant when the pre-determined controls are interacted with the time fixed effects). A decrease in one standard deviation of state presence (= 8.7) increases the rate of leader killed in 0.41 per 100 thousand inhabitants (=8.7 × 0.325 × 0.145).

Second, the four way interaction with the described "judicial corruption" measure is positive and significant, suggesting that when the local judiciary can be captured, illegal armed groups find it easier to get away with the killing of local community

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[25]Specifically, we measure the intensity of the demand for land restitution using the number of requests for land restitution at the municipal level. Our dataset includes all the requests since the creation of the *Land Restitution Unit* until June 2015.

leaders. We find that an increase in one standard deviation in the level of judicial corruption (0.08) increases the rate of leader killed in in 0.08 (=0.08 × 0.325 × 3.12).

Finally, our story requires that the killing of social leaders is driven by the selective targeting of leaders so as to thwart collective action at the local level, and not by indiscriminate municipal violence. To rule out that our results are explained by an aggregate increase in insecurity in FARC-dominated territories exposed to other armed groups after the ceasefire, that mechanically translates into more leaders killed, Table 8 estimates equation 4.1 using as dependent variable the overall municipal homicide rate. The coefficient of interest, associated with the triple interaction, is not statistically significant. This is reassuring that social leaders are being selectively targeted by other armed groups.

6. CONCLUSIONS

Territorial contestation by armed groups in the context of civil war often involves the selective killing of civilians. This strategy, which has been documented by a vast literature in political science and economics, is used to encourage allegiance, as well as to achieve informal collaboration, prevent defections, mobilize supporters, and increase military strength. In this paper, we show that the recent surge in the systematic killing of local social leaders in Colombia can be –at least partially- explained by the vacuum of power that FARC's permanent ceasefire left in this group's controlled areas, which encouraged other illegal armed groups seeking to occupy these areas to target local community leaders.

Our estimation strategy exploits the temporal variation given by the ceasefire as well as the cross-sectional variation given by the presence of FARC and the exposure to the influence of other armed groups. We do so in a triple differences model that controls for two-way fixed effects and for differential trends parametrized by a large set of pre-determined municipal controls.

Our results are not explained by the overall municipal homicide rate which suggests that they are not caused by either a differential change in reporting after the ceasefire or by a strategy of indiscriminate violence against civilians, which is in line with the literature. In addition, we show that the killing of leaders is exacerbated in areas with a weaker state capacity and an inefficient local judiciary. We also show that our results are driven by the window of opportunity for territorial control given by the permanent ceasefire, but are not exacerbated (or attenuated) during the implementation stage of the peace agreement, that started at the beginning of 2017.

Overall, the killing of social leaders, we argue, constitutes an unintended negative consequence of a partial pacification process that was not accompanied by an effort to consolidate the state control in former FARC strongholds.

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FIGURE 1. **Timelie of peace process**
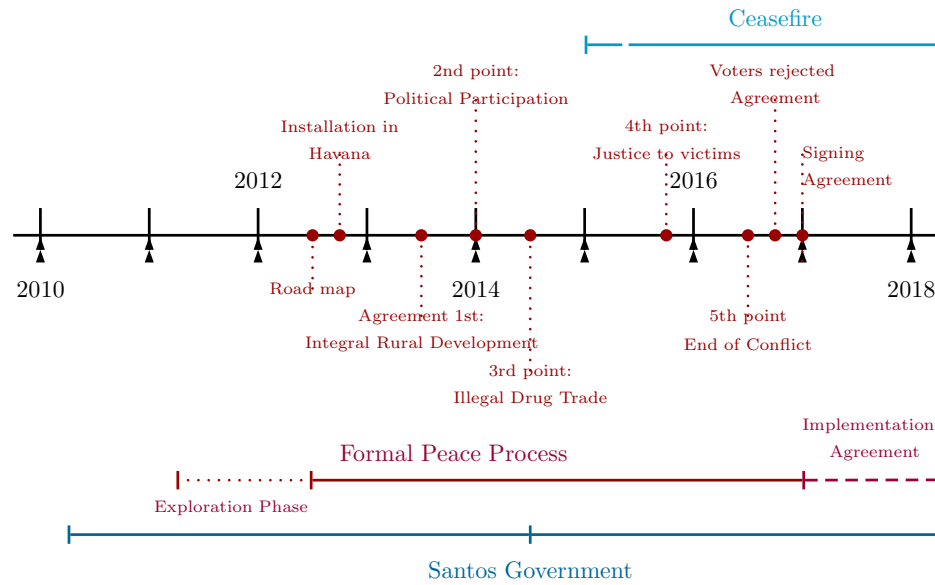
Notes: This figure presents the evolution of the peace process in Colombia since 2010.

FIGURE 2. **Spatial distribution of social leaders killings**
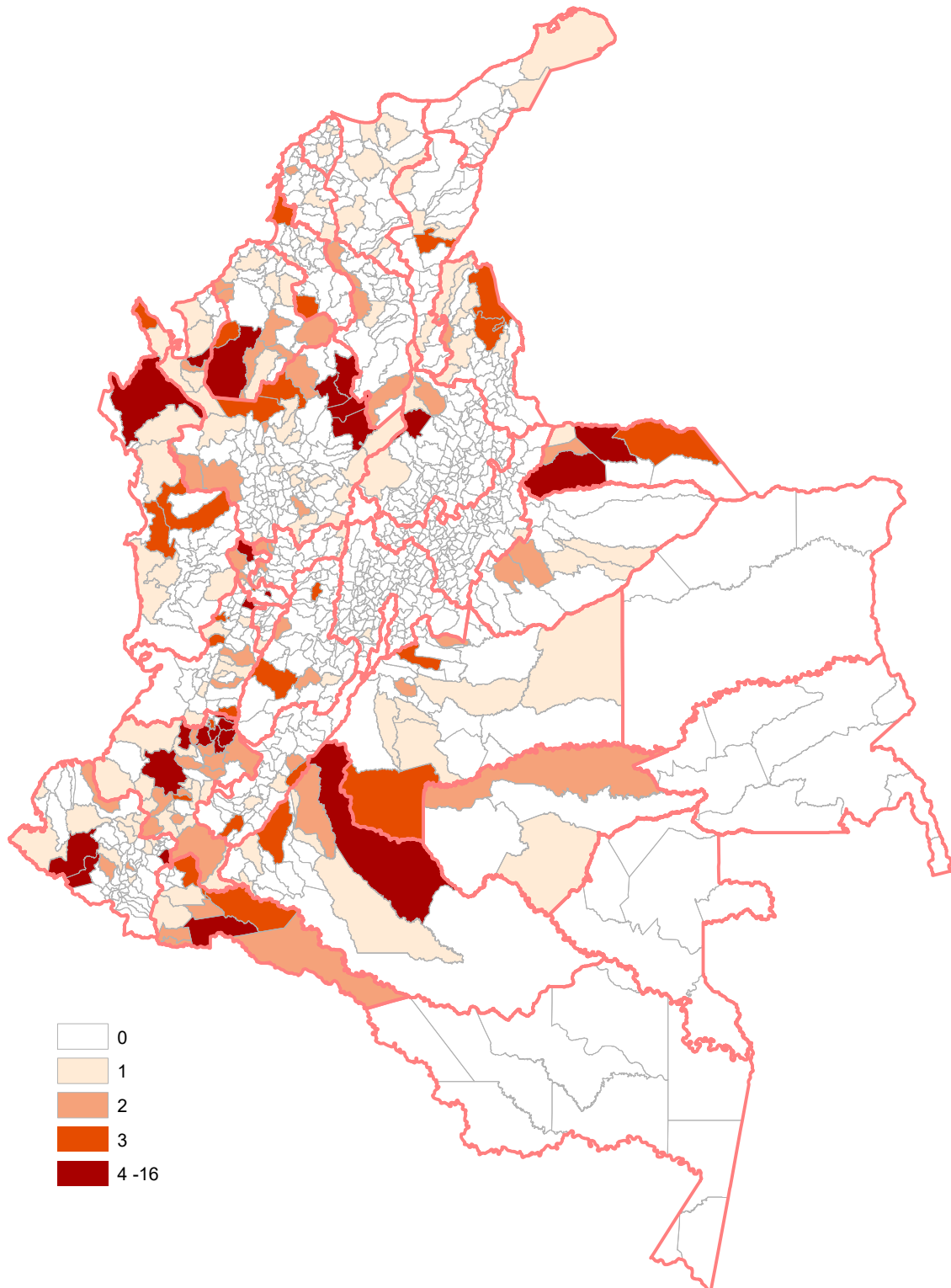
Notes: This map presents the spatial distribution of killings of social leaders for the sample 2011 to 2017.

FIGURE 3. **Evolution of social leaders killings**
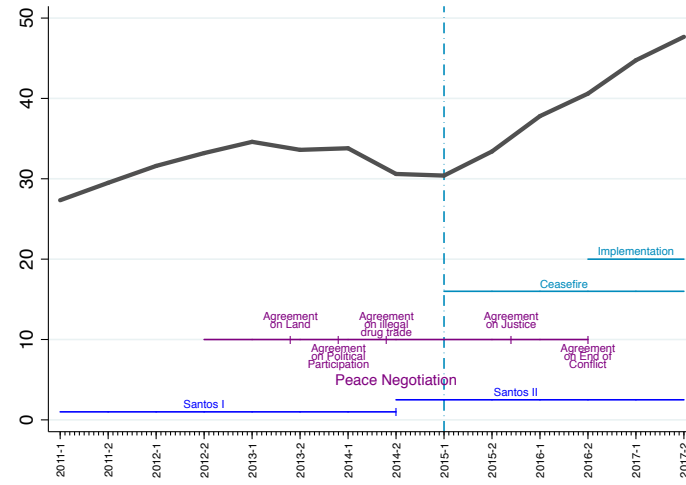
A. Aggregate
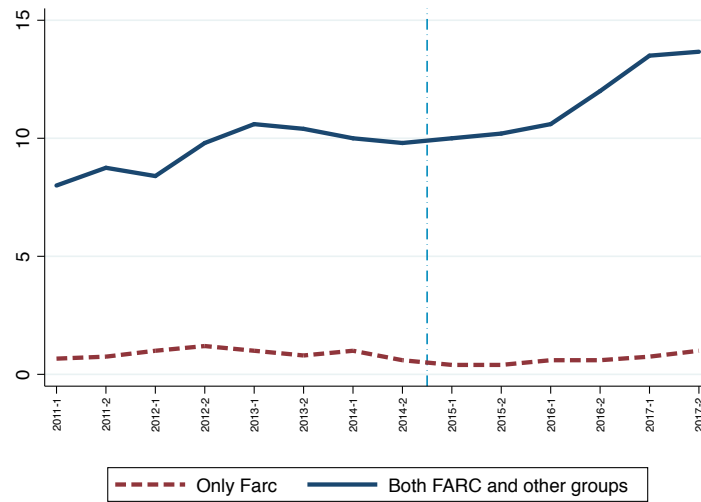
B. Split by type of municipality

Notes: This figure presents the evolution of killings of social leaders from 2010 to 2017. Panel A presents the distribution of total cases per semester and adds the description of the peace process. In panel B we split the sample by type of municipality into those with FARC and other groups exposure, and only FARC. We define those municipalities with exposure as those that have any positive exposure. In both panels we show one-year moving averages to smooth the data.

FIGURE 4. **Dynamic estimation and parallel trends**
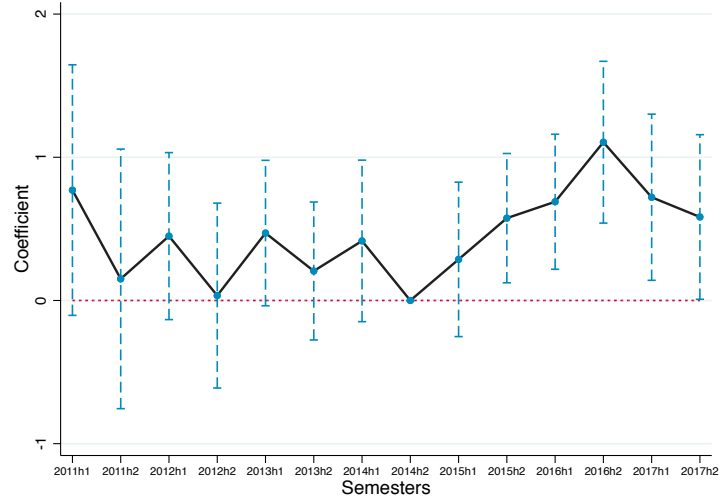
A. Without controls
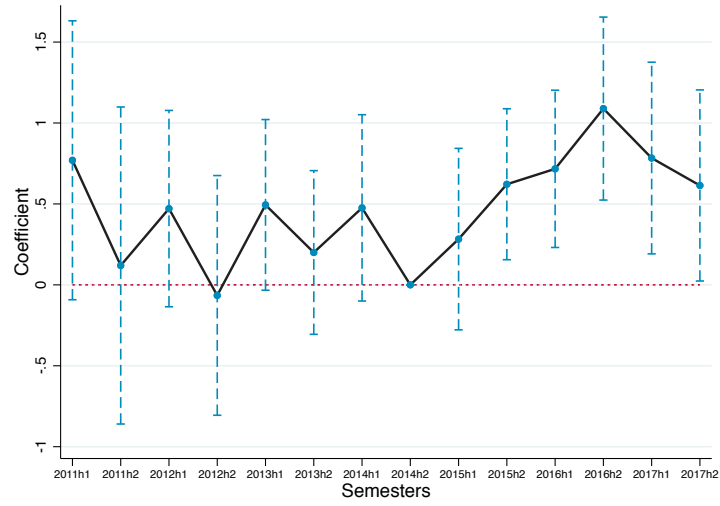
B. With controls

Notes: This figure presents the coefficients from our dynamic specification presented in equation (4.2). We present the point estimates of the regression and the confidence of interval at the 95%.

TABLE 1. Leaders killed by activity

Activity	N (1)	% (2)
Local council	165	33.3
Indigenous	109	22.0
Peasant	59	11.9
Conflict victims	47	9.5
Union member	32	6.5
Afro	23	4.7
Human rights	19	3.8
LGBT	18	3.6
Student-teacher	20	4.0
Women	3	0.6

Notes: This table shows the distribution of homicides by type of social leader.

TABLE 2. Descriptive Statistics: Time-invariant variables

	Mean	Std. Dev.	Min	Max
Social leaders killings				
Dummy of any killing	0.021	0.144	0.0	1.0
Number of killings	0.026	0.189	0.0	5.0
Rate of killings	0.113	1.051	0.0	38.4
Illegal groups presence				
FARC	0.093	0.290	0.0	1.0
N_mOAG	0.128	0.325	0.0	1.3
N_mParamilitary	0.103	0.292	0.0	1.3
N_mELN	0.035	0.178	0.0	1.2
FARC $\times$ N_mOAG	0.034	0.183	0.0	1.2
Geographic				
Altitude (Km)	1.149	0.903	0.0	3.1
Distance to main city kms	80.772	55.551	0.0	376.1
Rural share	0.579	0.229	0.0	1.0
Municipal area in km^2	865.268	2996.145	15.0	65674.0
Basic socioeconomic				
Log (population)	9.489	0.948	6.9	12.2
Poverty index	69.924	15.631	14.3	100.0
Literacy rate	83.661	8.447	30.0	97.8
Language test scores	47.977	2.200	38.4	57.1
Math test scores	47.863	2.694	39.4	61.7
Fiscal				
Log (Tax income)	6.726	1.408	0.0	12.1
Good fiscal policy index	66.239	9.359	0.0	94.2

Notes: Control variables measure before 2010. Altitude above sea level of the urban center of each municipality. Distance is linear distance to the state's capital. Rural share is the percentage of population outside urban center. Municipal area official in km^2. Total municipal population (in logs). Proportion of people in poverty according to multidimensional index. Percentage literate population. Math and language scores is the municipal average scores per area for high-school graduates in the official standardized test. Tax income is municipal total amount collected taxes. Good fiscal policy index of efficiency, legal requirements and management of the fiscal resources.

TABLE 3. Descriptive Statistics by illegal groups presence

Variable Variable	Presence FARC (1)	Presence Other Groups (2)	Only FARC vs. Both Groups (3)
Social leaders killings			
Dummy of any killing	0.058	0.052	0.038
	[0.000]	[0.000]	[0.024]
Number of killings	0.073	0.061	0.049
	[0.000]	[0.000]	[0.026]
Rate of killings	0.290	0.243	0.209
	[0.000]	[0.000]	[0.099]
Geographic			
Altitude (Km)	-0.276	-0.542	-0.134
	[0.001]	[0.000]	[0.436]
Distance to main city kms	13.673	31.071	25.678
	[0.023]	[0.000]	[0.057]
Rural share	0.062	-0.099	-0.004
	[0.006]	[0.000]	[0.944]
Municipal area in km^2	1900.961	833.764	1140.908
	[0.000]	[0.001]	[0.149]
Basic socioeconomic			
Log (population)	0.552	0.760	0.322
	[0.000]	[0.000]	[0.099]
Poverty index	9.026	5.026	7.552
	[0.000]	[0.001]	[0.016]
Literacy rate	-5.038	-3.873	-7.021
	[0.000]	[0.000]	[0.000]
Language test scores	-0.765	-0.888	-0.973
	[0.001]	[0.000]	[0.014]
Math test scores	-1.241	-0.774	-0.971
	[0.000]	[0.003]	[0.061]
Fiscal			
Log (Tax income)	0.363	0.557	0.250
	[0.002]	[0.001]	[0.346]
Good fiscal policy index	0.184	0.263	-0.831
	[0.813]	[0.826]	[0.560]

Notes: Control variables measure before 2010 and social leader killings before 2014:2. Columns (1) and (2) shows difference by presence versus no presence of the illegal group. p-value in squared parenthesis.

TABLE 4. Killing of social leaders, FARC presence and exposure to other armed groups

	Killing rate		Number of killings		Any killing	
	(1)	(2)	(3)	(4)	(5)	(6)
Cease $\times$ FARC $\times \mathbf{N}_m\mathbf{OAG}$	0.348**	0.377**	0.090**	0.095***	0.052*	0.055*
	(0.149)	(0.154)	(0.037)	(0.036)	(0.030)	(0.030)
Cease $\times$ FARC	−0.113	−0.144	−0.012	−0.020	0.001	−0.006
	(0.098)	(0.102)	(0.014)	(0.015)	(0.012)	(0.013)
Cease $\times \mathbf{N}_m\mathbf{OAG}$	−0.178***	−0.225***	−0.032***	−0.042***	−0.018**	−0.027***
	(0.060)	(0.067)	(0.011)	(0.012)	(0.009)	(0.009)
Observations	14966	14966	14966	14966	14966	14966
Municipalities	1069	1069	1069	1069	1069	1069
Municipality FE	✓	✓	✓	✓	✓	✓
Period FE	✓	✓	✓	✓	✓	✓
Controls		✓		✓		✓
Avg Dep Var	0.101	0.101	0.028	0.028	0.021	0.021
SD Dep Var	1.083	1.083	0.219	0.219	0.144	0.144

Notes: This table presents the results from the main specification in equation (4.1). Columns (1) and (2) use the number of homicides of social leaders over total population, columns (3) and (4) use as dependent variable the total number of homicides of social leaders, while columns (5) and (6) use a dummy that takes the value one if there was at least one social leader assassinated. *Cease* is a dummy that takes the value one for the period after 2015:1. *FARC* is a dummy for those municipalities with FARC presence. *OAG* is a dummy for those municipalities with ELN or paramilitary groups. Predetermined municipal controls includes logarithm of the population in 2010, municipality area, average elevation, distance to the closest major city, share of population under poverty, literacy rate, index of rurality, log of tax income, index of good fiscal policy and share of coca cultivated in 2009. Errors in parentheses control for spatial and first-order time correlation (see Conley, 1999, Conley, 2016). We allow spatial correlation to extend to up to 279 km from each municipality's centroid to ensure that each municipality has at least one neighbor. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

TABLE 5. Killing of social leaders by exposure to different armed groups

	Noe-Paramilitary		ELN	
	(1)	(2)	(3)	(4)
Cease × FARC ×$\mathbf{N}_m\mathbf{OAG}$	0.330**	0.353**	0.483**	0.515**
	(0.165)	(0.168)	(0.230)	(0.240)
Cease × FARC	−0.099	−0.144	−0.061	−0.088
	(0.092)	(0.096)	(0.080)	(0.083)
Cease ×$\mathbf{N}_m\mathbf{OAG}$	−0.180***	−0.225***	−0.293	−0.300
	(0.068)	(0.077)	(0.189)	(0.192)
Observations	14966	14966	14966	14966
Municipalities	1069	1069	1069	1069
Municipality FE	✓	✓	✓	✓
Period FE	✓	✓	✓	✓
Controls		✓		✓
Avg Dep Var	0.101	0.101	0.101	0.101
SD Dep Var	1.083	1.083	1.083	1.083

Notes: This table presents the results from the main specification in equation (4.1). The dependent variable is the number of homicides of social leaders over total population. *Cease* is a dummy that takes the value one for the period after 2015:1. *FARC* is a dummy for those municipalities with FARC presence. In columns (1) and (2) *OAG* is a dummy for those municipalities with paramilitary groups, while in columns (3) and (4) is a dummy for those municipalities with ELN presence. Predetermined municipal controls includes logarithm of the population in 2010, municipality area, average elevation, distance to the closest major city, share of population under poverty, literacy rate, index of rurality, log of tax income, index of good fiscal policy and share of coca cultivated in 2009. Errors in parentheses control for spatial and first-order time correlation (see Conley, 1999, Conley, 2016). We allow spatial correlation to extend to up to 279 km from each municipality's centroid to ensure that each municipality has at least one neighbor. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

TABLE 6. Killing of social leaders during the cease fire and the implementation of the peace agreement

	Killing rate	
	(1)	(2)
Implementation × FARC ×$\mathbf{N}_m\mathbf{OAG}$	−0.0121	0.0212
	(0.2159)	(0.2171)
Cease × FARC ×$\mathbf{N}_m\mathbf{OAG}$	0.352**	0.369**
	(0.161)	(0.165)
Implementation × FARC	0.1269	0.0782
	(0.1548)	(0.1620)
Cease × FARC	−0.155	−0.170
	(0.099)	(0.105)
Implementation ×$\mathbf{N}_m\mathbf{OAG}$	0.0101	−0.0198
	(0.0577)	(0.0649)
Cease ×$\mathbf{N}_m\mathbf{OAG}$	−0.182***	−0.218***
	(0.063)	(0.070)
Implementation + Cease × FARC ×$\mathbf{N}_m\mathbf{OAG}$	0.340	0.391*
	(0.216)	(0.221)
Observations	14966	14966
Municipalities	1069	1069
Municipality FE	✓	✓
Period FE	✓	✓
Controls		✓
Avg Dep Var	0.101	0.101
SD Dep Var	1.083	1.083

Notes: This table presents the results from the main specification in equation (4.3). The dependent variable is the number of homicides of social leaders over total population. *Cease* is a dummy that takes the value one for the period after 2015:1, *Implementation* is a dummy that takes the value one for the period after 2017:1. *FARC* is a dummy for those municipalities with FARC presence. *OAG* is a dummy for those municipalities with ELN or paramilitary groups. Predetermined municipal controls includes logarithm of the population in 2010, municipality area, average elevation, distance to the closest major city, share of population under poverty, literacy rate, index of rurality, log of tax income, index of good fiscal policy and share of coca cultivated in 2009. Errors in parentheses control for spatial and first-order time correlation (see Conley, 1999, Conley, 2016). We allow spatial correlation to extend to up to 279 km from each municipality's centroid to ensure that each municipality has at least one neighbor. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

TABLE 7. Killing of social leaders, land restitution, and state capacity

	Land restitution		State presence		Judicial corruption	
	(1)	(2)	(3)	(4)	(5)	(6)
Cease × FARC ×$\mathbf{N}_m\mathbf{OAG}$ × Z	0.566*	0.579*	−0.112	−0.145*	3.287*	3.123*
	(0.324)	(0.328)	(0.075)	(0.085)	(1.839)	(1.841)
Cease × FARC × Z	−0.023	0.005	0.051	0.066	0.146	0.198
	(0.226)	(0.233)	(0.064)	(0.067)	(1.126)	(1.108)
Cease ×$\mathbf{N}_m\mathbf{OAG}$ × Z	−0.163	−0.175	0.018	0.047	−1.315**	−1.335**
	(0.124)	(0.127)	(0.022)	(0.035)	(0.648)	(0.662)
Cease × FARC ×$\mathbf{N}_m\mathbf{OAG}$	0.006	0.026	0.590***	0.679***	0.035	0.078
	(0.264)	(0.269)	(0.218)	(0.245)	(0.226)	(0.228)
Cease × FARC	−0.116	−0.161	−0.189	−0.232	−0.116	−0.153
	(0.164)	(0.170)	(0.161)	(0.167)	(0.120)	(0.122)
Cease ×$\mathbf{N}_m\mathbf{OAG}$	−0.103	−0.136	−0.208**	−0.296**	−0.084	−0.126*
	(0.103)	(0.109)	(0.092)	(0.116)	(0.065)	(0.072)
Cease × Z	0.084**	0.068**	−0.001	−0.063*	0.213	0.169
	(0.033)	(0.034)	(0.012)	(0.037)	(0.172)	(0.180)
Observations	14966	14966	13244	13244	14966	14966
Municipalities	1069	1069	946	946	1069	1069
Municipality FE	✓	✓	✓	✓	✓	✓
Period FE	✓	✓	✓	✓	✓	✓
Controls		✓		✓		✓
Avg Dep Var	0.101	0.101	0.101	0.101	0.101	0.101
SD Dep Var	1.083	1.083	1.083	1.083	1.083	1.083

Notes: This table presents the results from the main specification in equation (4.4). The dependent variable is the number of homicides of social leaders over total population. *Cease* is a dummy that takes the value one for the period after 2015:1, *Implementation* is a dummy that takes the value one for the period after 2017:1. *FARC* is a dummy for those municipalities with FARC presence. *OAG* is a dummy for those municipalities with ELN or paramilitary groups. *Land restitution* is a dummy for those municipalities with the number of request for land restitution over the size of the municipality being above the median. *State presence* is the average number of public offices in the municipality as in (Acemoglu et al., 2015). *Judicial corruption*is the share of justice employees under disciplinary investigations. Predetermined municipal controls includes logarithm of the population in 2010, municipality area, average elevation, distance to the closest major city, share of population under poverty, literacy rate, index of rurality, log of tax income, index of good fiscal policy and share of coca cultivated in 2009. Errors in parentheses control for spatial and first-order time correlation (see Conley, 1999, Conley, 2016). We allow spatial correlation to extend to up to 279 km from each municipality's centroid to ensure that each municipality has at least one neighbor. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

TABLE 8. Overall homicides rate, FARC presence and exposure to other armed groups

	Homicide rate	
	(1)	(2)
Cease × FARC ×$\mathbf{N}_m\mathbf{OAG}$	1.511	1.499
	(3.222)	(3.131)
Cease × FARC	−0.686	−0.011
	(2.097)	(2.126)
Cease ×$\mathbf{N}_m\mathbf{OAG}$	−2.339**	−2.457**
	(1.066)	(1.111)
Observations	14966	14966
Municipalities	1069	1069
Municipality FE	✓	✓
Period FE	✓	✓
Controls		✓
Avg Dep Var	12.595	12.595
SD Dep Var	28.347	28.347

Notes: This table presents the results from the main specification in equation (4.1). The dependent variable is the total number of urban homicides excluding social leaders over total population. *Cease* is a dummy that takes the value one for the period after 2015:1. *FARC* is a dummy for those municipalities with FARC presence. *OAG* is a dummy for those municipalities with ELN or paramilitary groups. Predetermined municipal controls includes logarithm of the population in 2010, municipality area, average elevation, distance to the closest major city, share of population under poverty, literacy rate, index of rurality, log of tax income, index of good fiscal policy and share of coca cultivated in 2009. Errors in parentheses control for spatial and first-order time correlation (see Conley, 1999, Conley, 2016). We allow spatial correlation to extend to up to 279 km from each municipality's centroid to ensure that each municipality has at least one neighbor. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

TABLE A.1. Killing of social leaders, FARC presence and exposure to other armed groups
Neighbor municipalities

	Homicides rate		Homicides		Any homicides	
	(1)	(2)	(3)	(4)	(5)	(6)
Cease × FARC × Neigh OAG	0.252**	0.289**	0.054**	0.060**	0.033	0.036*
	(0.114)	(0.120)	(0.027)	(0.026)	(0.022)	(0.021)
Cease × FARC	−0.130	−0.172	−0.013	−0.021	−0.001	−0.007
	(0.105)	(0.110)	(0.015)	(0.016)	(0.013)	(0.014)
Cease × Neigh OAG	−0.131***	−0.171***	−0.019**	−0.028***	−0.010*	−0.018***
	(0.046)	(0.053)	(0.008)	(0.008)	(0.006)	(0.007)
Observations	14966	14966	14966	14966	14966	14966
Municipalities	1069	1069	1069	1069	1069	1069
Municipality FE	✓	✓	✓	✓	✓	✓
Period FE	✓	✓	✓	✓	✓	✓
Controls		✓		✓		✓
Avg Dep Var	0.101	0.101	0.028	0.028	0.021	0.021
SD Dep Var	1.083	1.083	0.219	0.219	0.144	0.144

Notes: This table presents the results from the main specification in equation (4.1). Columns (1) and (2) use the number of homicides of social leaders over total population, columns (3) and (4) use as dependent variable the total number of homicides of social leaders, while columns (5) and (6) use a dummy that takes the value one if there was at least one social leader assassinated. *Cease* is a dummy that takes the value one for the period after 2015:1. *FARC* is a dummy for those municipalities with FARC presence. *OAG* is a dummy for those municipalities with ELN or paramilitary groups. Predetermined municipal controls includes logarithm of the population in 2010, municipality area, average elevation, distance to the closest major city, share of population under poverty, literacy rate, index of rurality, log of tax income, index of good fiscal policy and share of coca cultivated in 2009. Errors in parentheses control for spatial and first-order time correlation (see Conley, 1999, Conley, 2016). We allow spatial correlation to extend to up to 279 km from each municipality's centroid to ensure that each municipality has at least one neighbor. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

TABLE A.2. Killing of social leaders, FARC presence and exposure to other armed groups
All municipalities penalized by distance

	Homicides rate		Homicides		Any homicides	
	(1)	(2)	(3)	(4)	(5)	(6)
Cease × FARC ×$\mathbf{F}_m\mathbf{OAG}$	0.300**	0.330**	0.073**	0.078**	0.044*	0.047*
	(0.138)	(0.143)	(0.031)	(0.031)	(0.025)	(0.025)
Cease × FARC	−0.188	−0.227*	−0.028	−0.037**	−0.009	−0.017
	(0.121)	(0.126)	(0.017)	(0.018)	(0.015)	(0.015)
Cease ×$\mathbf{F}_m\mathbf{OAG}$	−0.147***	−0.209***	−0.025**	−0.038***	−0.014*	−0.025***
	(0.051)	(0.061)	(0.010)	(0.011)	(0.007)	(0.008)
Observations	14966	14966	14966	14966	14966	14966
Municipalities	1069	1069	1069	1069	1069	1069
Municipality FE	✓	✓	✓	✓	✓	✓
Period FE	✓	✓	✓	✓	✓	✓
Controls		✓		✓		✓
Avg Dep Var	0.101	0.101	0.028	0.028	0.021	0.021
SD Dep Var	1.083	1.083	0.219	0.219	0.144	0.144

Notes: This table presents the results from the main specification in equation (4.1). Columns (1) and (2) use the number of homicides of social leaders over total population, columns (3) and (4) use as dependent variable the total number of homicides of social leaders, while columns (5) and (6) use a dummy that takes the value one if there was at least one social leader assassinated. *Cease* is a dummy that takes the value one for the period after 2015:1. *FARC* is a dummy for those municipalities with FARC presence. *OAG* is a dummy for those municipalities with ELN or paramilitary groups. Predetermined municipal controls includes logarithm of the population in 2010, municipality area, average elevation, distance to the closest major city, share of population under poverty, literacy rate, index of rurality, log of tax income, index of good fiscal policy and share of coca cultivated in 2009. Errors in parentheses control for spatial and first-order time correlation (see Conley, 1999, Conley, 2016). We allow spatial correlation to extend to up to 279 km from each municipality's centroid to ensure that each municipality has at least one neighbor. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.