Rebel Governance and Development: The Persistent Effects of Guerrillas in El Salvador *

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Abstract

How does rebel governance affect long-term development? Rebel forces have controlled territory and imposed their own institutions in many countries over the past decades affecting millions of people. We investigate the economic, social, and political consequences of temporary territorial control by guerrillas during the Salvadoran Civil War. During that time, guerrillas displaced state authorities and created their own informal institutions that encouraged autonomy and self-sufficiency from the state and external actors. Using a spatial regression discontinuity design, we show that areas once under guerrilla control have experienced worse economic outcomes over the last 20 years than adjacent areas controlled by the formal state. Our results suggest that reliance on non-state governance reinforced norms of distrust of external actors, producing overdependence on subsistence farming and disengagement from postwar governments. Results do not revert despite increased postwar public investment in formerly guerrilla areas. We argue that when non-state actors develop alternative governance institutions, these can prompt adverse development effects through lasting norms of distrust of out-groups.

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"Mayors, judges, security posts, everything disappears, (...), practically the whole state disappears, and the state was us."

(FMLN Military Commander, March 2022)

I INTRODUCTION

Rebel forces have controlled sizable territories and populations for decades, affecting millions worldwide (Cunningham, Gleditsch and Salehyan, 2013). However, the consequences of their presence on development and whether these effects endure after they lose control remain largely unknown. In principle, non-state armed actors may affect long-term development through rebel governance – the administration of civilian affairs in seized territories (Arjona, Kasfir and Mampilly, 2015; Arjona, 2016; Stewart, 2018; Breslawski, 2021; Grasse, Sexton and Wright, 2021; Sánchez De La Sierra, 2020)[1]. One particularly relevant feature of this strategy is the creation of autonomous governing institutions that promote self-reliance in communities and instill distrust of the state and out-groups (Pearce, 1986; Binford, 1997; Kubota, 2017; Martin, Piccolino and Speight, 2021). We have seen these rebels' institutions in several contexts, from the New People's Army in the Philippines, which established local committees in areas under their control; the Maoist insurgency in Nepal, which organized civilians under a parallel government in the vast territories under their control; the National Resistance Movement in Uganda, which established civilian-elected committees; to guerrillas in Central America that established local village councils and autonomous community-based organizations.

This paper provides evidence that rebel governance can hinder long-term development by generating a culture of mistrust towards outsiders that persists even when rebels relinquish control. We provide three main results. First, using exogenous variation in the formation of boundaries of rebel-controlled areas in El Salvador, we show that after the end of rebel governance and the return of the formal state, individuals living inside formerly guerrilla-controlled territories have lower human capital, wealth, and earnings compared to individuals living in nearby areas that have always been under state-controlled. Second, we find no evidence of convergence over time: we show that the divergence in economic outcomes between the areas persists over 20 years despite

[1]Non-state armed actors frequently establish stable and durable territorial control during conflict. Throughout history, most rebel groups have established their institutions to regulate civilian life. For example, in Colombia, the FARC (*Fuerzas Armadas Revolucionarias de Colombia*) controlled many remote areas before signing a peace agreement in 2016, much as Peru's Shining Path (*Sendero Luminoso*) controlled the Andes Valley in the 1980s. Other well-documented examples of armed actors who have engaged in local governance include groups in the Democratic Republic of the Congo, South Sudan, Liberia, India, Indonesia, Sri Lanka, Greece, Bolivia, Guatemala, Cuba, and Venezuela. See Arjona, Kasfir and Mampilly (2015) for an analysis of these case studies.

the absence of rebel control and increased state investment. Third, we provide evidence of the mechanisms behind these enduring negative effects. Since participatory institutions introduced by rebels were developed in parallel as an alternative to the state, they also promoted norms of self-sufficiency and distrust toward outsiders. In particular, individuals in these areas are more autonomous, engage less with the state, and distrust external actors, leading to lower access to some public goods and overdependence on agriculture.

To show these results, we focus on the long-term development impacts of territorial control by the Farabundo Martí National Liberation Front (*Frente Farabundo Marti para Liberación Nacional*, FMLN) in El Salvador between 1985-1992. The FMLN was an armed organization formed in October 1980 that united the five largest leftist guerrilla organizations in El Salvador.[2] After 1985, the FMLN (herein FMLN, rebels, or guerrillas) consolidated its territorial, economic, social, and political control in multiple areas, effectively replacing the Salvadoran state. In areas controlled by the FMLN, guerrillas eliminated local state authorities and promoted autonomous institutions to respond to health, education, and economic demands. These organizations flourished as an alternative to state institutions, promoting social capital but also distancing local communities de facto from local politicians and outsiders (Wood, 2008; Binford, 1997). In contrast, during the same period, nearby areas remained under state control.[3] After the end of the Civil War in 1992, the state regained control of all areas.

To isolate the causal channels, we exploit the location of boundaries of rebels' territorial control documented in the United Nations map used during peace talks between the Salvadoran government and the FMLN. Figure 1 illustrates these areas and boundaries. The scope of the control zones and the location of the borders were not controversial: the two parties in the negotiations agreed that this was the territorial division during the civil war.[4] Indeed, we validated the map with commanders from both sides during our fieldwork. Given this setting, we use a spatial regression discontinuity design that compares areas that were under full guerrilla control and areas

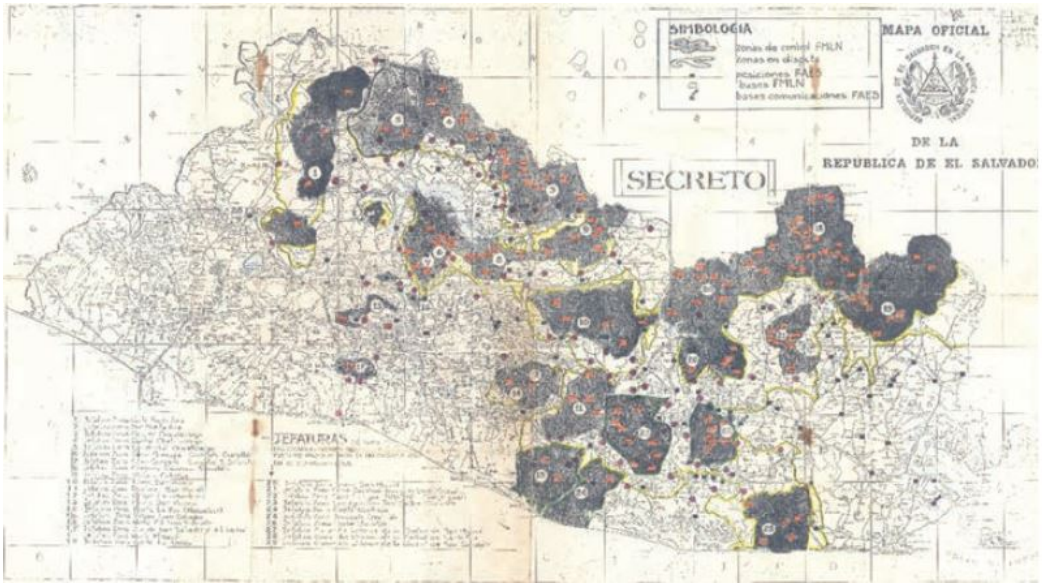
[2]These included *Fuerzas Populares de Liberación Farabundo Martí*, *Ejercito Revolucionario del Pueblo*, *Resistencia Nacional*, *Partido Comunista Salvadoreño*, and *Partido Revolucionario de los Trabajadores Centroamericanos*.

[3]The only counterinsurgency community-based strategy promoted by the Salvadoran government was the CONARA (Commission for the Restoration of Areas) in 1983. This initiative was implemented in two departments (San Vicente and Usulután) but did not target guerrilla territory. It was similar to the Strategic Hamlet Program in South Vietnam and aimed to halt the influence of communism. However, the plan failed to produce the expected results and was quickly discontinued.

[4]A precise definition of the boundaries of the control areas was necessary, as some of the points of the peace agreement included the recognition by the states of the property rates of individuals living inside areas controlled by the rebels.

that were either controlled by the Salvadoran Armed Forces or disputed by both parties. Our empirical strategy estimates the effect of being under the control of the guerrilla for approximately seven years on outcomes up to 20 years after the state regained control of the areas.

Figure 1. Guerrilla-Controlled Areas



Source: Castañeda (2016).
Notes: This map shows the location of guerrilla-controlled areas. It was submitted to the United Nations for the Chapultepec Peace Accords and approved jointly by the Salvadoran Government and the FMLN as part of the cease-fire negotiation process from 1990 to 1992.

We use geospatial data on night light luminosity from 1992 to 2013 and census tract data on education and wealth for 2007. To disentangle mechanisms, we combine information from multiple sources such as public opinion surveys (2004–2016), elections (2014 and 2015), the 2007 agriculture census, and household surveys (2011–2018) concerning measures of political participation, income, land markets, education, and trust. In addition, we designed and conducted our own survey in 2022 for a representative sample of about 4,000 households located in the eastern region (across formerly controlled areas) to obtain contemporaneous measures of trust and social capital. In particular, since we have several rounds of years for some outcomes (light density, education, occupation, and public investment), we can also study convergence over the years after the war ended. Finally, we complement these information sources with focus groups of ex-combatants and citizens living in the Salvadoran departments of Morazán and Chalatenango.

Supporting the validity of our research design, we find that all geospatial and economic variables observed before guerrilla territorial control vary smoothly around the boundaries of rebel-

controlled areas. In particular, geocoded data from multiple sources—including covariates that proxy state capacity, violence, demographics, trust, agricultural suitability, and land concentration—confirms there were no differences in these dimensions before guerrillas seized control. The only significant difference between the areas around the boundary is a small discontinuity of approximately 17 m in altitude. This is consistent with qualitative evidence and findings from our interviews with former combatants that show the FMLN's territorial boundaries were primarily defined by war strategies and thus independent of preexisting economic conditions (Castañeda, 2016).[5] In particular, rebel territories included strategic locations that offered a topographic advantage against the enemy.

Results reveal that FMLN control in the mid-1980s had large and persistent negative effects on development outcomes in the long run. Almost 20 years after the end of guerrilla governance and the return of the formal state, areas inside formerly FMLN-controlled territories have less night light luminosity, lower human capital, and worse wealth outcomes than areas outside them. By 2013, areas once controlled by guerrillas experienced nearly 18.6 percent lower night light luminosity than places never under rebel control (approximately 5.2 percent lower GDP than areas the guerrillas did not control).[6] Using 2007 census data, we also show that individuals who live today in areas previously controlled by guerrillas have 0.28 fewer years of education and a 0.121 sd lower wealth index than individuals living in nearby areas. Moreover, we find that effects persist over time: we observe negative effects on light density each year between 1992 and 2013 and fewer years of schooling during 2011–2018, and 2022. We also find negative effects on education for cohorts that started their education after territorial control ended.

What explains these enduring adverse effects on development? The entire region has experienced the same formal institutions since the war ended, and guerrillas no longer govern any areas. We hypothesize, however, that the informal norms developed through the participatory institutions promoted by the FMLN between 1985 and 1992—such as the view that citizens should guarantee their needs independent of elites and the state (Pearce, 1986)—induced persistent changes in the relationships between communities in FMLN areas and outsiders. Rebels usually create alternative institutions that promote local cooperation and instill loyalty to the local community (Keister

[5] In our analysis, we show that this difference in altitude is not correlated with any economic outcomes at baseline, which confirms that these locations were chosen solely for strategic advantage. We do this by comparing the economic outcomes of areas without guerrilla territorial control but with 17 m of difference in altitude and find no economic differences between them. We also show that controlling for altitude leaves our results unchanged.

[6] De Groot et al. (2022) estimate that absent conflicts around the world between 1960 and 2007, global GDP would have risen by 15.7 percent. Hence, an effect of five percent is sizable.

and Slantchev, 2014). Yet, these norms can erode trust in outgroups (Kubota, 2017), and crowd out the role of the post-conflict state if they are developed to avoid dependence on political and economic elites (Martin, Piccolino and Speight, 2021, 2022), potentially impeding the development of trust in and engagement with outsiders in the long run.[7]

In line with these arguments, our quantitative results show that individuals living in areas once controlled by the FMLN trust the state less and are less likely to engage with politicians and outsiders. Moreover, using our geocoded survey from 2022, we find that individuals in former guerrilla areas are more likely to donate to a community member and less likely to sell their land to someone outside their community. We also find evidence of higher social capital within the community, which could potentially reinforce this disengagement with the state and outsiders.[8] We find that people interact with community members more often and participate in civil society organizations at a higher rate in former guerrilla areas relative to the control group.

Consistent with distrust and low engagement with politicians in these areas, we find that residents of former guerrilla areas today report lower access to/utilization of public services and are less likely to pay taxes. However, these effects are not driven by a lack of public investment in the postwar period. We find, since 1995, more public investment in the same services where households report less access and utilization. Moreover, we observe many newly constructed schools in formerly guerrilla areas since 1998. We also find no differences in state buildings, hospitals, and police stations across areas, providing further evidence that government discrimination against these areas in the postwar period is not driving the results.[9]

Next, we show that distrust of the state and outsiders promoted by rebel governance also affects economic behavior. We find that individuals in former guerrilla areas report less willingness to sell

[7] Kubota (2017) finds that Sri Lankan guerrillas co-opted state institutions, which reduced trust in the postwar government. Martin, Piccolino and Speight (2021) find that civilians in Côte d'Ivoire relied on former rebel actors for protection, which crowded out government police forces in the post-conflict period.

[8] When individuals interact primarily with members of their group and enforcement occurs through strong informal institutions, individuals will develop values of loyalty and cooperation with the in-group and neglect out-groups (Greif, 1997; Tabellini, 2008). Moreover, disunion among groups that ended up under the control of different actors during a civil war is common, and it is attributed to trust gaps in which people trust in-group members more than they trust out-groups (Whitt, 2010).

[9] Trust has a central role in effective functioning of state institutions (Banfield, 1967; Almond and Verba, 2015; Coleman, 1990). Less trust may affect the supply of public goods if politicians have less information about local populations. For instance, citizens may fail to communicate their needs effectively if they do not believe politicians will respond; this disengagement prevents the government from providing public goods effectively (Jablonski and Seim, 2022; Buntaine, Nielson and Skaggs, 2021). At the same time, less trust in state institutions can also decrease demand for public services since citizens do not view the government as legitimate or capable (Mishler and Rose, 2001; Alsan and Wanamaker, 2018; Lowes and Montero, 2021; Martinez-Bravo and Stegmann, 2022).

their land to outsiders even though they perceive demand for it. This result aligns with our focus group results, which suggest that regardless of whether agricultural landowners or private actors want to invest in former guerrilla areas today, residents are less willing to let them because they distrust individuals outside their community. Additionally, we find a larger share of individuals working in subsistence agriculture in former guerrilla areas than in nearby areas.

Finally, to further shed light on the social norms mechanism, we also show evidence that the negative effects of rebel presence are stronger in places where self-governance was more robust. First, we exploit the location of base ecclesial communities in 1974, relatively autonomous Catholic religious groups that organized peasants into self-reliant communities. These base communities directly exposed peasants to concepts of local cooperation, autonomy from elites, and bottom-up organization. Second, we take advantage of the fact that rebel governance was less intense in some areas based on the faction of rebels in charge.[10] In particular, we look at differential effects by areas with more or less self-governance. We find that in places with a base ecclesial community in 1974, the effects are larger, which is consistent with our mechanism. Importantly, we also find that the presence of base ecclesial communities is balanced across treatment and control, suggesting that rebels did not target places with higher levels of pre-existing social capital or collectivist norms. Moreover, we find that effects mitigate in areas where self-governance initiatives were presumably less powerful due to the fact that the adoption of institutional changes happened later on by other factions.[11]

We rule out alternative mechanisms. First, an increase in violence during and after the conflict does not explain our results. They hold when we exclude areas close to the rebel border and when we use different bandwidths, suggesting that violence at the border is not the main driver.[12] Furthermore, there was no increase in deaths, battles, or victims from 1980 to 1992 in guerrilla-controlled areas relative to nearby areas outside rebel control. Second, these results do not seem

[10] Among the factions of the FMLN two groups were particularly powerful, and the main institutional innovators– the ERP and FPL, who introduced two self-governance institutions, the poderes de doble cara and the poderes populares locales, respectively (Binford, 1997; Pearce, 1986). Although self-governance expanded to all the fronts, some areas experienced self-governance from earlier on, where the presence of the ERP and FPL was more significant, particularly in the Western Front, Morazán, and in Chalatenango (Álvarez, 2010).

[11] Importantly, based on our interviews with commanders, the factions were not assigned based on pre-existing levels of state capacity. Indeed, we corroborate this statement by looking at heterogenous effects based on state presence at baseline and we do not find differential effects.

[12] We rule out other dynamics associated with a border, such as a higher incidence of land mines along the boundary, because El Salvador ran a very successful program that cleared all mines by 1994. Moreover, using larger bandwidths and donut holes of different sizes allows us to reject that our findings are driven by measurement error from digitalizing a historical map.

to stem from selective migration from guerrilla-controlled areas relative to nearby areas. In particular, we find that education effects are not driven by individuals who had finished their education by the time guerrillas gained territorial control, ruling out that effects are driven by selective migration or changes in population composition due to guerrilla control.[13] Moreover, we do not find evidence that greater out-migration of economic elites in guerrilla areas drives the results. In particular, we find that the negative effects on development are also observed in regions where elites were less likely to be present such as areas with no suitability for commercial crops. Third, effects do not seem to be driven by greater disruption of pre-war landholdings leading to post-war uncertainty about property rights. We find no differences in land ownership or expropriation risk across areas, ruling out that differences in property rights could drive the results. Fourth, the effects do not seem to be driven by ideology-based policy changes in the post-conflict period. Our results suggest that independent of the political party affiliation of the government in charge, there are still negative effects on development outcomes in former guerrilla areas in the postwar period. Indeed, we find that, if anything, public investments increased in these locations immediately after the end of territorial control. Moreover, we find no differences in the quality of public goods.[14] [15]

Overall, this paper demonstrates that historic territorial control by non-state actors and their establishment of local governance can partly explain divergent long-term development paths within countries. Particularly in Latin America, local governance by non-state actors has featured prominently in several communities.[16] Our findings add a novel instance to the extensive literature

[13]Indeed, the effects are robust to estimating a difference-in-differences strategy that exploits variation across cohorts and places of birth.

[14]The negative development effects could also be explained by the fact that the FMLN had an extreme left-wing ideology, which could have persisted among the individuals living in the area leading to underdevelopment caused by a prevailing communist ideology. However, we do not see any differences in political preferences in the post-conflict period. These patterns are consistent with the fact that during its territorial control, the FMLN not only taught these communities to be autonomous and independent from the prevailing state and elites but also from the FMLN itself.

[15]Finally, it is unlikely that the effects emerge from forced child recruitment by guerrilla groups. Qualitative evidence suggests the Salvadoran Army extensively recruited children by force, but the guerrillas did not. It is estimated that of 60,000 Salvadoran Army combatants, about 48,000 (or 80 percent) were under 18 years of age, while only 2,000 of the 9,000 FMLN members (or 20 percent) were under 18 (Courtney, 2010). Moreover, a survey of child soldiers by UNICEF at the end of the war showed that while 91.7 percent of FMLN recruits had joined voluntarily, close to 53 percent of underage Salvadoran Army soldiers were forcibly recruited (Courtney, 2010).

[16]In Latin America, local governance by non-state actors has figured significantly in several communities, at least since colonization: from indigenous communities like the Mayan State in the Yucatán Península that had their own army and institutions to rebel groups. Moreover, recent work studies the effect of territorial control of organized criminal groups on economic outcomes in the region (Melnikov, Schmidt-Padilla and Sviatschi, 2020; Blattman et al., 2021). We complement this work by examining the effects of an insurgency, which has different objectives and a fundamentally different relationship with civilians. For example, the effects of guerrillas on development should not necessarily convey through coercion, as with many criminal organizations. However, the results on long-term development may be similar to those in areas controlled by criminal organizations since the presence of these groups could undermine

that studies the role of historical institutions in shaping long-term development (e.g., Acemoglu, Johnson and Robinson, 2001; Acemoglu and Robinson, 2012; Dell, 2010; Dell, Lane and Querubin, 2018; Acemoglu et al., 2019; Nunn, 2020a; Dell and Olken, 2020; Lowes and Montero, 2021). Our evidence closely relates to Dell, Lane and Querubin (2018), who show how village governance in Vietnam increased social capital and development by crowding in cooperation with the government. We complement this work by substantiating how local governance by rebels can hinder long-term development when it is developed in parallel and as an alternative to the state. The fact that rebel governance is, in general, promoted as a substitute for the state is particularly important to understand the negative economic consequences since it reduces cooperation with outsiders due to enduring norms of distrust.

This paper also examines the mechanisms behind the negative effect of rebel governance on development. The evidence of the persistence of norms of distrust towards outsiders in areas formerly controlled by rebels is consistent with literature highlighting how historical events can shape long-term development through cultural traits (Nunn and Wantchekon, 2011; Alesina and Giuliano, 2015; Nunn, 2020b). In line with theoretical models highlighting how localized norms of reciprocity can lead to neglect and mistrust of outsiders (Tabellini, 2008), we find that individuals living in guerrilla areas are less likely to trust and engage with outgroups while also showing higher levels of solidarity towards fellow community members– with significant persistence. Indeed, we show that this can be particularly prevalent during rebel governance since rebels aim to gain independence from the state and economic groups. Moreover, in line with existing work that examines differences in development between individualist and collectivist cultures (Gorodnichenko and Roland, 2011, 2017), we provide new evidence that areas with localized norms of trust and lack of engagement with formal institutions have worse economic outcomes.[17]

This paper also provides new insights into the developmental consequences of conflict and its effect on social norms.[18] We complement previous work by showing that the economic legacies of war and their effects on social norms are not only by-products of violence or the destruction

trust. Lastly, we complement this literature by looking at the long-term effects of the territorial control of actors that are no longer present.

[17]We are able to rule out that differences in economic development are driving the results in trust differentials. When we look at development differences like those found in treated areas but that have never been under the control of guerrillas, we do not find any differences in trust in institutions, suggesting that the direction of our main effect is mediated by trust, not merely a byproduct of the negative development effects. Moreover, using exogenous variation in distrust using the presence of ecclesial communities in 1970 we find larger negative effects on development.

[18]See the works of Collier (2008); Blattman and Miguel (2010); Bauer et al. (2016); León (2012); Fergusson, Ibáñez and Riaño (2020); Riaño and Valencia Caicedo (2020); Gilligan, Pasquale and Samii (2014); Liu (2022).

of factors of production but also a consequence of institutions left by rebels. This distinction is necessary to understand the lasting effects of conflict.[19] If the destruction of physical capital or the temporary reduction of human capital due to violence could explain all the effects, negative development impacts could be mitigated in the short-to-medium term (Miguel and Roland, 2011). However, if effects on development emerge from structural changes in the economy and social norms, they will be more persistent and difficult to change.

In addition, we contribute to a growing literature on rebel governance by considering the effects on development in areas that have experienced control by insurgents. Scholars have recently shown that non-state actors can govern the political, economic, and social lives of residents in an orderly fashion and establish institutions that regulate civilian behaviors (Arjona, 2016; Breslawski, 2021; Loyle et al., 2021; Stewart, 2018; Sánchez De La Sierra, 2020; Grasse, Sexton and Wright, 2021). Most previous work focuses on factors that produce rebel governance. However, little is known about how these changes affect development outcomes or whether any effects remain after rebels relinquish control. Our findings contrast with a nascent literature that looks at how rebel governance correlates with development, comparing areas with varying intensities of rebel intervention (Ibáñez et al., 2023). We complement this literature in several ways. First, we provide causal evidence of rebel governance overcoming the endogeneity concerns related to the location and timing of the presence of rebels. Second, we analyze the effects of rebel governance on development outcomes relative to areas with a state presence where there is more uncertainty about the direction of the effects. Finally, we also look at the long-term effects when rebels are no longer present. Our results align with recent work that finds that rebel governance can lead to persistent identity fragmentation in the aftermath of conflict (Kubota, 2017), and a decrease in engagement with the state (Martin, Piccolino and Speight, 2022).

II HISTORICAL BACKGROUND

II.A The origin of Salvadoran guerrillas: The FMLN

The leading causes of the Civil War and the motivation for the FMLN originated in the country's long history of authoritarian rule, political exclusion, and economic inequality. As early as the 1930s, most agricultural lands were owned by a small group of coffee plantation owners who met their demand for workers through a mostly unfree labor force that lived in harsh conditions.

[19] While there is agreement on the negative economic impacts of conflict in the short run, there is no consensus on long-term effects (Riaño and Valencia Caicedo, 2020).

Economic modernization after the Second World War led to the expansion of commercial crops but did little to diversify the elites who controlled crop cultivation and exports as well as the incipient financial and manufacturing sectors (Colindres, 1976; Sevilla, 1985). Years of military rule helped forge an alliance between these elites and politicians that was based on the maintenance of class structures and the exclusion of peasants and workers from the political system (Wood, 2003). As a result, rural labor unions remained illegal, labor practices continued to be coercive, and the land was unequally distributed.

Although such political exclusion has characterized most of El Salvador's history, the military regime allowed some level of political competition in the 1960s. However, this process halted in 1972 after the mayor of San Salvador, José Napoleón Duarte—a popular opposition candidate—was allowed to run for president. Duarte won but the military quickly overruled the results. This decision sparked protests and mass mobilization in urban and rural areas that met with brutal repression. Peasants responded with outrage to the assassinations of rural leaders, students, teachers, and peers during these years (Wood, 2003). Security forces machine-gunned several marches and state resources flowed to paramilitary organizations and "death squads" as well. By 1980, more than one thousand people each month were killed for political reasons.

By the mid-1970s, several guerrilla groups were operating in the San Salvador area. By the late 1970s, five major guerrilla organizations were recruiting supporters among students and workers in cities and peasants in rural areas. Confronted with the growth of the guerrilla movement, divisions within the oligarchic alliance began to deepen; in October 1979, a group of reformist military officers overthrew the president and installed a new junta. Yet, instead of changing strategy, these new leaders tightened their repression of guerrilla groups (Wood, 2003).

As El Salvador spiraled towards civil war, the five biggest guerrilla groups founded the FMLN in November 1980. In January 1981, they launched their first major operation, usually known as the "final offensive." Although this failed to unseat the government, it consolidated the FMLN as the major fighting force against the Salvadoran state and provoked a change in strategy as the guerrillas retreated to rural areas to regroup and prepare for a longer fight.

The change in FMLN strategy was based on the establishment of *zonas liberadas* (liberated zones) in the countryside. At the peak of the war in 1984, the FMLN had an estimated 8,000 to 15,000 combatants (Doyle, Johnstone and Orr, 1997) and ran operations in 30 percent of the country (70 municipalities out of 262). Most analysts argue that by 1985, the war had reached a stalemate,

and the FMLN's hold on these areas was stable and undisputed. By 1989, the FMLN was strong enough to plan and launch a massive offensive in several urban areas. This led to the 1990 formal negotiations mediated by the United Nations that ultimately ended the war on January 16, 1992.

II.B Boundaries of FMLN territorial control

The treatment of interest is full territorial control of *zonas liberadas* by insurgents between 1985 and 1992. The boundaries that define assignment to treatment are shown in Figure 1.[20] Areas inside these boundaries were under guerrilla control, while areas outside were either controlled by the Salvadoran Armed Forces or disputed by both parties. Evidence suggests that military and geographic considerations, such as protection offered by mountains and hills (as opposed to economic differences at the boundaries of interest) explain the formation of these areas of control (Álvarez, 2011). Indeed, as shown below, the rebels did not select areas based on preexisting economic conditions. As one FMLN commander (1984, p. 2) wrote in his memoir: *"The domain of most of the strategic elevations and the northern mountain range gives the FMLN a total topographical advantage over the army."* Likewise, when we asked Mario Chocho, founder of the Perkin Museum and former military instructor for the guerrillas, why the ERP settled in Morazan, he answered: *"The strategic vision of Rafael Artesana, secretary-general at the time. His vision was to look for areas that would allow the conditions for war: call it the ruggedness or altitude of the terrain."*

Initially, the Salvadoran state entirely controlled the regions under analysis. In 1981, the guerrillas conducted a countrywide offensive against 12 main military bases to promote an insurrection (MINED, 2009). Although this failed, it prompted a change in military strategy and thus the group's geographic dispersion with the goal of establishing a presence on all fronts through the aforementioned *liberated zones*. The first of these was organized as early as 1982 (Castañeda, 2016). *Liberated zones* are a key guerrilla warfare tactic and comprise areas where insurgents can generate support by providing basic public goods and establishing their own institutions. The concept dates back at least to Mao Zedong's military strategy in which *base areas* proved a winning tactic against a conventional army. They consisted of local strongholds in (preferably) mountainous areas where insurgents could elicit popular support by creating systems of governance (Mao, 1966). As this idea evolved, the strategic location of these zones in mountainous areas remained important and has been copied by non-state armed actors ranging from communist guerrillas in

[20] As mentioned in the introduction, this map was used in the peace accord meetings between the Salvadoran government and the FMLN from April 1990 to January 1992. It is typically viewed as recognition by the state of the magnitude of the insurgent territorial presence (Chávez, 2011).

Guatemala in the 1980s (Moran, 1985) to armed organizations in Burma in 2021.

Importantly, historical evidence and FMLN documents suggest that after 1984, the boundaries of FMLN-controlled areas were extremely stable for at least two reasons. First, by 1984, the FMLN controlled approximately 80 percent of all militarily strategic territory. Second, more than 80 percent of the Salvadoran Army's offensive capacity was in permanent use by that same year. Therefore, they could not reconquer areas under FMLN occupation but instead had to strengthen the defense of areas the state still controlled. Hence by 1985, the conflict had effectively entered a virtual stalemate (Castañeda, 2016). The stability of the borders reported in historical accounts is consistent with testimonies from former FMLN military commanders that we obtained through our qualitative work, which report the stalemate stabilized these boundaries. As a result, we focus on stable guerrilla-controlled areas between 1985 and 1992. Figure 1 shows the three zones of the country where the FMLN had full control by 1985: the northern, central, and coastal areas.[21]

II.C Rebel governance in FMLN-controlled areas

Upon their arrival, rebel groups eliminated the state's local and judicial administrations in the areas they controlled (Álvarez, 2010). This created a pressing need for new institutions and offered citizens the opportunity to choose their own representatives and shape their own lives for the first time. The rebels conceived areas under their control as spaces where civilians could satisfy their needs and work collectively to solve problems independently from the military command of the FMLN, the state, and prewar elites (Pearce, 1986; FMLN, 1984). We confirmed this in several interviews with former FMLN military commanders.[22] To promote self-sufficiency, the FMLN assisted in forming autonomous local councils, first the *Poderes Populares Locales* (PPL) and later the "dual powers" (*Poderes de Doble Cara*), to substitute for formal state authorities (FMLN, 1984; Pearce, 1986; Binford, 1997). These new governing structures administered and organized the local population; their main purpose was to procure public goods and resolve issues affecting the community. Although they existed in various forms, all fostered democratic activity by residents. Citizens participated in their own government and largely viewed these local powers as legitimate (Pearce, 1986). Some groups had popular assemblies, and sometimes they held elections for positions.[23] These organizations addressed issues ranging from water provision to establishing

[21] The absence of an FMLN presence in the western region is usually attributed to the legacies of the massacres of indigenous peasants by state and paramilitary forces in the 1930s (Gould and Lauria-Santiago, 2008).

[22] Further details on this qualitative work are presented in the next section.

[23] Each PPL group, for example, was democratically elected, and the president governed 400–500 people. They also had a vice president and secretaries of social affairs, production, defense, political education, and legal affairs (Pearce,

community legal codes.

Due to these initiatives, the guerrilla-controlled areas witnessed the emergence of diverse and plentiful civil society institutions to organize peasants and handle pressing development issues (Álvarez, 2013; Velado, 1993). The FMLN supported these community-based groups and viewed them as a way to organize the population independently of the state and the guerrillas (FMLN, 1984). The autonomy of these institutions meant residents did not fear being labeled as insurgents by the government, and they were also protected by the FMLN (Binford, 1997). Despite overwhelming peasant support for the FMLN, neutrality was possible and common inside FMLN areas because the guerrillas were highly restrained in their use of violence and promoted autonomy as a policy (Wood, 2008).

The idea that citizens should be autonomous and self-sufficient was also present in the reconfiguration of the economy. Since many food products were unavailable during the war, the FMLN promoted subsistence farming and supported the occupation of large and abandoned landholdings (Wood, 2008).[24] Moreover, it permitted peasants to occupy land regardless of whether or not they participated in the insurgency (Wood, 2003, 2008). These new models of production led to the "peasantization" of agriculture (Wood, 2010; Binford, 1997).

The promotion of autonomous self-governance institutions to address basic needs independent of the state and outsiders led to a change in social norms in these areas (Wood, 2008; Pearce, 1986; Binford, 1997). The prevailing view in these communities during the rebel period was that self-governance would allow citizens to defend their way of life from external threats once the war had ended (Pearce, 1986). In particular, the fact that these communities could govern themselves for the first time independently of the state and elites led to a new culture based on a network of civic organizations, social capital, and distrust towards the prevailing state and economic actors (Wood, 2008; Pearce, 1986; Binford, 1997).

III DATA

This section describes the primary sources of data used in the study. Appendix A presents a detailed account of the database construction and Appendix B presents summary statistics of all variables employed in the analysis.

1986).

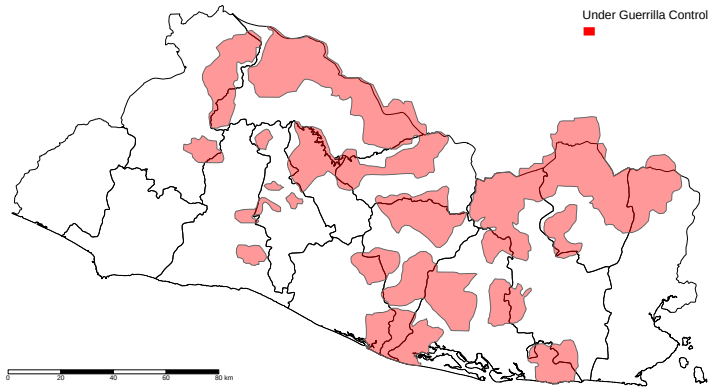
[24] In the late 1970s, as social unrest grew, large landowners began to flee from many areas of the country, including guerrilla and non-guerrilla areas.

III.A Guerrilla-controlled territories

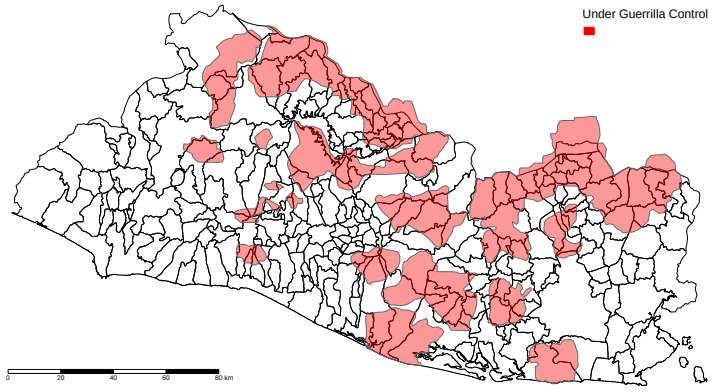
To analyze the role of guerrilla territorial control in long-term development, we geocoded the map that depicts FMLN-controlled areas (Figure 1). It shows areas the FMLN controlled during the conflict, areas controlled by the state, and disputed ones. As Figure 2 illustrates, no boundaries of the guerrilla-controlled areas coincide with the administrative departments and municipal boundaries of El Salvador today. Therefore, our estimated treatment effects are unlikely to be contaminated by a compound treatment comprised of guerrilla control and changes in administrative boundaries. In section IV.B, we provide further evidence that the identification strategy isolates the effects of guerrilla control from other potential confounders by looking at baseline characteristics.

Figure 2. Guerrilla-Controlled Territories and Administrative Boundaries

(a) Departmental Boundaries



(b) Municipal Boundaries



Notes: The figure presents the areas under guerrilla control in red and shows these areas do not coincide with the administrative departments (Panel A) and municipal boundaries (Panel B) of El Salvador today.

III.B Geospatial variables

We use geospatial data to test the validity of the local continuity assumption around the boundaries of guerrilla-controlled areas. Elevation was obtained from NASA's Shuttle Radar Topography Mission (SRTM). Information on surface water bodies comes from the MERIT Hydro dataset.

Figure C.1 in Appendix C maps guerrilla-controlled territories, altitude, and main rivers in El Salvador. It illustrates that the rebels located in high altitudes as part of their war strategy (FMLN, 1984) and that rivers often marked the boundaries of their territories.

III.C Development outcomes

The long-term development impacts of guerrilla territorial control are measured using 2013 night light luminosity (as a proxy for local economic activity) and 2007 population and household census data.

Night light luminosity. Data on night light luminosity comes from the Defense Meteorological Satellite Program Operational Linescan System. This data was obtained from the US National Oceanic and Atmospheric Administration (NOAA) web page. It has a resolution of 30 arc-seconds $\times$ 30 arc-seconds (i.e., approximately 1 km $\times$ 1 km) and spans 1992 to 2013.[25] The main results use data for 2013 as it is the last year available from the Operational Linescan System (OLS) flown by the US Air Force Defense Meteorological Satellite Program (DMSP). To study the durability of effects, we also used individual years between 1992 and 2013.

2007 Population and Household Census. Anonymized microdata from the Population and Household Census of 2007 was provided by the General Directorate of Statistics and Censuses (*Dirección General de Estadísticas y Censos*, DIGESTYC) in El Salvador. The 2007 census data includes socioeconomic characteristics of all households and individuals in El Salvador, such as educational attainment; asset ownership; use of public services (water, electricity, sewerage, and others); labor market outcomes; migration; and other characteristics.

2007 Census Cartography. We obtained maps of the tracts (small areas with specific geographic boundaries) for the 2007 census from DIGESTYC. In 2007, the average tract in our estimation sample included 110 households and 458 individuals. The advantage of using census tract units is that it improves the accurate identification of guerrilla territorial control. We use the geographic coordinates of the tract as a proxy for our measure of territorial control.

[25] Unfortunately, luminosity data is not available for years prior to 1992.

In sum, we explore the effects of FMLN control via night light luminosity, human capital (measured as years of education and literacy rates), and a wealth index (constructed as suggested by the Demographic and Health Surveys program).[26] The wealth index is the first factor from the principal component analysis of a household's cumulative living standard, which includes household characteristics such as asset ownership (e.g., bicycles and television); materials used for housing construction; types of water access; and sanitation facilities. The estimates use the average index of all households in each census tract.

2022 Complementary Survey. To test and validate the mechanisms that explain the main results, we conducted a household-level, self-reported survey with a representative sample of about 4,000 households in July–August 2022 in eastern El Salvador (namely, the departments of La Union, Morazan, San Miguel, and Usulutan). This allowed us to inspect differences in preferences for land tenure, trust in in- and out-groups, and measures of prosocial behaviors between the treated and control units. In Appendix D, we describe the sampling procedure, recruitment activities, survey instruments, and data collected.

Other data. We also use information on attitudes towards the government, engagement with the state, conflict, election results, quality of school teachers, crop yields, and alternative data sources related to individuals' years of education. These come from the Latin American Public Opinion Project (LAPOP), El Salvador's registry of victims and incarcerations, the 2013 teacher census from the Ministry of Education, the Agricultural National Census of 2017, election results from the Tribunal Supremo Electoral of El Salvador, and El Salvador's Households and Multipurpose surveys (EHPM). See Appendix A for further details.

Qualitative data. We conducted focus groups and in-depth interviews with guerrilla leaders and people who were prominent in the operational-military arena, religious and community leaders, and residents of areas controlled by the guerrillas during the Civil War. In Appendix E, we describe the sampling and recruitment activities, survey instruments, approach, and main results.

[26] The challenge of night light luminosity data is the significant fraction of observations that take the value of zero and also the existence of extreme values in the right tail of the distribution (Michalopoulos and Papaioannou, 2013; Pinkovskiy and Sala-i Martin, 2016). To account for this concern, the outcome is transformed using the inverse hyperbolic sine transformation, which can be interpreted as a logarithmic dependent variable (Pence, 2006). Moreover, step-by-step instructions for constructing the wealth index are available at https://dhsprogram.com/topics/wealth-index/Wealth-Index-Construction.cfm.

IV EMPIRICAL STRATEGY

IV.A Spatial regression discontinuity design

We estimate the long-term development impacts of rebel territorial control between 1985 and 1992 using a spatial regression discontinuity design around the boundaries illustrated in Figure 1. The specification is:

$$y_s = \beta_1 T_s + \beta_2 f(\overline{d_s}) + \beta_3 T_s \times f(\overline{d_s}) + \sum_{i=1}^{400} \alpha_s^i + \varepsilon_s \tag{1}$$

where y_s represents the contemporaneous economic and social development outcomes of interest observed at the census tract unit s. T_s is a treatment indicator equal to one if the tract intersects a guerrilla-controlled zone. $\overline{d_s}$ is the minimum normalized perpendicular distance from each point in a tract's boundary to the guerrilla-controlled boundary.[27] $f(\overline{d_s})$ is a polynomial function of the distance to the boundary which, interacted with T_s, controls for smoothness in the geographic location at each side of the boundary. Finally, since we want to compare treatment and control census tracts that are geographically proximate, the indicator α_s^i splits the boundary into four km segments and equals one if census tract s is closest to segment i and zero otherwise. We include 400 fixed effects for the minimum distance from each point in a tract's boundary to each of the 400 segments of the guerrilla-controlled boundary.[28] Standard errors are adjusted for heteroskedasticity. As a robustness check, we also estimate Conley standard errors to account for spatial correlation in the data (Conley, 1999).

The baseline results use a local linear polynomial of the normalized distance and limit the sample to tracts within the distance suggested by the optimal bandwidth algorithm of Calonico, Cattaneo and Titiunik (2014) when using night light luminosity as an outcome (which represents approximately 2.26 km), and triangular weighting kernel. We also present the results under a variety of different bandwidths to check the robustness of the main findings given the classic trade-off between bias and power. All robustness checks are summarized in Appendix F.

[27] As a result of the distance normalization, tracts touching the guerrilla-controlled boundary get the value of zero in their distance variable and tracts outside the guerrilla-controlled area get a negative value, contrary to tracts inside.

[28] The choice of 400 breaks is to account for enough spatial variation without compromising the variation we are exploiting.

IV.B Validation of the local continuity assumption

To ensure census tracts outside the boundary are an appropriate counterfactual for guerrilla-held ones, we first test for preexisting differences in geographic and socioeconomic characteristics before the guerrillas consolidated their control.

For this purpose, we estimated equation (1) to test for discontinuities related to geographic characteristics (e.g., elevation, slope, and access to waterways) and some socioeconomic characteristics (e.g., road and railway density in 1980 and crop agro-climatic yields from 1961 to 1979). Table 1 shows that 27 of 28 baseline covariates are statistically similar across the boundary.

Baseline state capacity— Panel A in Table 1 shows that infrastructure and the presence of the state before rebel control were similar across guerrillas' boundaries. In particular, we find no differences in terms of the location of the army, state administration (which includes the mayor's office, municipal council, and notary), public schools, and churches in 1979 and 1980. Moreover, we find no differences in telecommunication density, roads and railway density, or the presence of a city or village in 1945. These results provide evidence that guerrillas did not establish their boundaries to fill in the void of the state but rather to replace it.

Baseline socioeconomic characteristics— Panel B shows no differences in 1980 in terms of population, education, and migration shares across the boundaries before rebels consolidated its control, providing evidence that guerrillas did not choose the location of the boundaries based on the socioeconomic characteristics of the population. In particular, these results show that guerrilla-controlled territories were not less developed than nearby areas before their control.

Baseline norms and land concentration— To measure distrust and inequality at baseline, we use as a proxy the probability of being part of the 1980 Land Reform and the presence of ecclesial base communities. In particular, the Land Reform redistributed large haciendas to peasants in 1980 in an attempt to palliate increasing levels of distrust of the state and mobilization by the peasantry (Wood, 2003). We also use the presence of ecclesial base communities in 1974 as a proxy for the support of the guerrilla movement. These religious communities were heavily influenced by liberation theology, which spoke against economic elites, and land concentration, and in favor of peasants. We also use the presence and distance to parishes as a proxy of baseline social capital.

Panel C shows that all four variables were similar across the boundaries before the FMLN consolidated their control, providing further evidence that boundaries were not defined based on initial

levels of trust from the communities towards the state or guerrillas.

Violence 1980-1985— Panel D shows no differences in the number of violent events or massacres across the boundary, yielding further evidence that guerrillas did not establish territorial control according to levels of distrust of the state that are generally associated with historical repression.

Geographic characteristics and crops' suitability— Panel E shows no differences in terms of slope, rivers, ruggedness, and crop suitability. The only exception is altitude. However, the difference in mean altitude is very small (17.13 m from a dependent mean of 502.7) and aligns with the observation that the guerrillas occupied higher territories as a military strategy. As a robustness exercise, we will include altitude as a control variable in the main specification (see Table F.1).[29] In Section V.B.4, we also conduct a placebo analysis where we study whether the small difference in altitude can explain development outcomes in areas with no guerrilla presence.

[29]The specification that controls for altitude is not used to report main estimates as it may result in biased coefficients. The estimate that can be identified when adjusting for imbalanced covariates in RD designs is a weighted average of the treatment effects where the weights depend on the conditional distribution of the imbalanced covariate on the treatment, which is not our estimate of interest. See Calonico et al. (2019) for a discussion.

Table 1. Smooth Condition Test

Variable (Year)	Coefficient	SE	Dependent Mean	Obs
Panel A: Baseline State Capacity (Before 1980)				
Had a Military Base (1980)	-0.001	0.002	0.001	3,652
Distance to Military Base (1980)	68.19	76.51	10,702	3,652
State Administration (1980)	-0.000	0.009	0.011	3,652
Distance to School (1980)	0.078	0.079	12.108	3,652
Distance to Telecommunications (1945)	0.064	0.050	0.904	3,652
Telecommunications Density (1945)	-0.053	0.060	0.429	3,652
Had a City or Village (1945)	0.014	0.022	0.096	3,652
Distance to City or Village (1945)	-0.053	0.046	0.999	3,652
Roads and Railway (1980)	0.020	0.028	0.375	3,652
Panel B: Baseline Socio-Demographic Characteristics (Before 1980)				
Total Population (1980)	3.010	4.085	162.043	3,636
Years of Education (1980)	-0.0349	0.144	4.412	3,635
In-migration Share (1980)	-0.011	0.008	0.140	3,605
Out-migration Share (1980)	0.000	0.001	0.006	3,410
Panel C: Baseline Norms and Land Concentration (Before 1980)				
Part of Land Reform (1980)	-0.014	0.016	0.063	3,652
Had a Ecclesial Base Community (1974)	0.001	0.004	0.002	3,652
Had a Parish (1979)	-0.004	0.006	0.013	3,652
Distance to Parish (1979)	0.053	0.070	3.421	3,652
Panel D: Violence (1980–1985)				
Number of War Events (1981)	0.007	0.089	0.041	3,652
Number of War Victims (1981)	-0.258	0.490	0.213	3,652
Number of Incarcerations (1980-1985)	0.008	0.007	0.021	3,652
Panel E: Geographic Characteristics and Crops' Suitability (Before 1980)				
Altitude (1980)	17.132***	5.679	502.728	3,652
Slope (1980)	0.352	0.222	7.158	3,652
Ruggedness (1980)	0.440	0.321	10.277	3,652
Hydrography (1980)	0.026	0.025	0.232	3,652
Bean High Suitability (1961-1990)	-0.015	0.011	0.931	3,652
Coffee High Suitability (1961-1990)	-0.015	0.012	0.146	3,652
Maize High Suitability (1961-1990)	0.002	0.005	0.992	3,652
Sugarcane High Suitability (1961-1990)	-0.015	0.013	0.180	3,652

Notes: The table presents the results of estimating equation (1) for a variety of geographic characteristics, road and infrastructure availability, demographic characteristics, indicators for crop suitability, and outcomes related to conflict before the guerrillas' settlement. The information was gathered from diverse sources (see Appendix A for more details). Crops were selected according to their relevance for domestic consumption and exports. The unit of observation is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates were weighted using a triangular kernel. The dependent mean corresponds to the mean outside the territories of guerrilla control but within the area of analysis. We report robust standard errors. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

V MAIN RESULTS

V.A Night light luminosity, human capital, and wealth

Table 2 presents formal estimates of equation (1) for the main outcomes of interest. All estimates suggest strong negative impacts of guerrilla territorial control on development outcomes. First, the results show that locations within former guerrilla territories had lower night light luminosity in 2013, relative to places outside these areas. The effects are sizable. Approximately 20 years after the end of the Civil War—and about 30 years after guerrillas first controlled these areas—lands that were once under FMLN rule experienced nearly 18.6 percent lower night light luminosity than places with no guerrilla control (see Column 1). These results are robust to different transformations of the dependent variable (see Appendix Table F.2). Considering that a one percentage point (pp) change in luminosity corresponds to a 0.28 pp change in GDP (Henderson, Storeygard and Weil, 2012), areas that had been under guerrilla control had approximately 5.2 percent lower GDP ($18.6 \times 0.28 = 5.2$) than areas that had not.

Second, we document that areas once controlled by the guerrillas have lower human capital and are less wealthy almost two decades after the end of the Civil War. Column 2 shows that those had 0.28 fewer years of education, on average, by 2007 than areas not under guerrilla control. Consistent with these negative effects on education, Column 3 shows that residents of areas close to the border but still under guerrilla control had a wealth index 0.121 sd lower than areas never controlled by the guerrillas by 2007.

In Table F.3 in the Appendix, we present the analysis by cohorts that were exposed to guerrillas versus cohorts that had already finished their education when guerrillas arrived in the areas where they lived. The effects are driven by individuals who were school-age during the war, whereas individuals across the boundary who finished their education before 1980 had similar years of education.[30]

[30] In Column 4 in Table F.2 in the Appendix, we also study literacy rates. These were constructed as the number of individuals 18 years or older who can read divided by the total number of individuals older than 18 years. We find individuals in former FMLN areas had 2.1 percent lower literacy rates than people living outside these areas. This corresponds to a 2.6 percent drop relative to the average literacy rate in 2007.

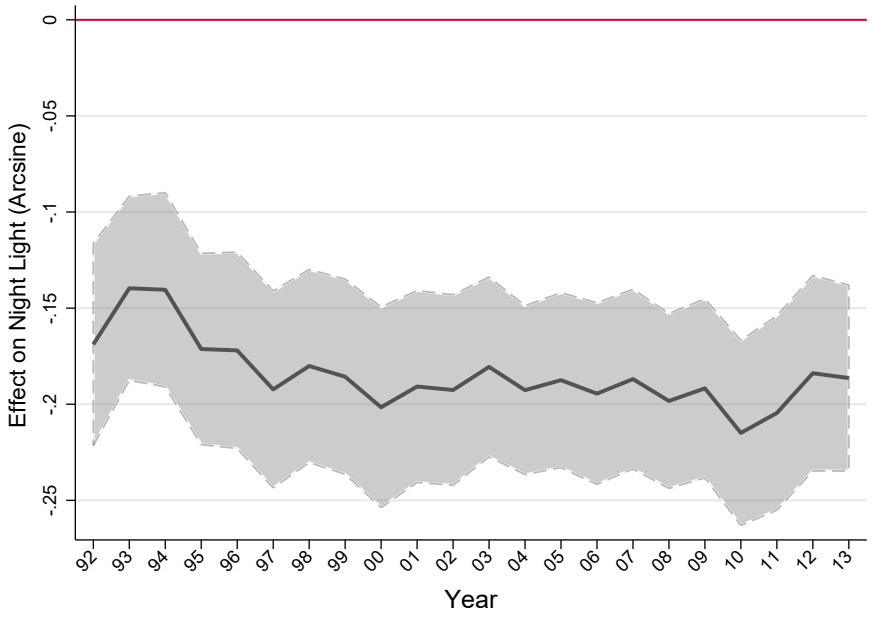
Table 2. Effects of Guerrilla Territorial Control on
Night Light Luminosity, Human Capital, and Wealth

	Night Light Luminosity	Years of Education	Wealth Index
	(2013)	(2007)	(2007)
	(1)	(2)	(3)
Guerrilla control	-0.186***	-0.279**	-0.121***
	(0.0247)	(0.109)	(0.0355)
Observations	3,652	3,637	3,630
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	3.536	6.573	-0.0160

Notes: The table presents the results of estimating equation 1 for the main outcomes. Column 1 shows the effect of whether a census tract was under guerrilla control on the arcsine of night light luminosity from NOAA. Column 2 shows as dependent variable years of education of the population older than 18 years. Column 3 uses the standardized score of household wealth as the dependent variable in the same estimation. The unit of observation in all columns is the census tract. Information from Columns 2 and 3 was obtained from the Population and Household Census of 2007. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with an indicator of whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates use triangular kernel weights. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Figure 3 presents effects on night light luminosity for all years of data from 1992 to 2013 to test whether effects endure over the years. The results suggest that not only did negative effects persist since 1992, but also the magnitudes barely changed over the years. Similarly, using the household surveys and our own survey, we look at years of education in 2011–2018 and 2022. In the Appendix, Table F.4 presents the results showing that the negative effects on education are still present in recent years. Indeed, Figure F.1 shows that the results for education are present each year. Moreover, using our survey in 2022, in Table F.5, we also analyze whether effects disappear for young cohorts that decided their schooling in years after territorial control. We find no differential effects, providing further evidence of the persistent effects of guerrilla control on human capital accumulation.

Figure 3. Effects of Guerrilla Control on the Arcsine of Night Light Luminosity Over Time



Notes: This figure shows the coefficients obtained from the estimation of equation 1 for each year between 1992 and 2013. The gray color illustrates 95 percent confidence intervals. The estimates shown include up to 400 fixed effects. Overall, the effect of guerrilla control on night light luminosity is negative and stable over time.

Overall, these results confirm that guerrilla control produced a lasting negative effect on long-term development outcomes. Section VI explores mechanisms to explain this persistence.

V.B Robustness checks

We used four approaches to test the robustness of our results: (i) the estimation of Conley standard errors, (ii) the use of different bandwidths, and donut hole analysis; (iii) the use of alternative RD specifications and Ordinary Least Squares (OLS) specifications, (iv) a placebo test that uses the difference in altitude to define artificial boundaries, (v) a restriction in population sorting across boundaries, and (vi) a difference-in-differences estimation that exploits variation across cohorts and place of birth.

V.B.1 Spatial correlation

To account for spatial correlation in our data, we estimate Conley standard errors following Conley (1999). As we show in Table F.6 in the Appendix, the statistical significance of the estimated effects remains the same.

V.B.2 Alternative bandwidths and donut hole analysis

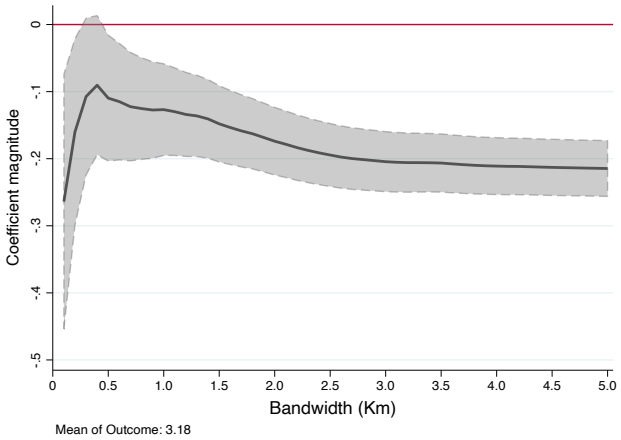
Two important concerns for the main results presented in Table 2 are, first, measurement error in the location of the border and, second, the possibility that the results are border-specific. The first concern arises from the fact that we are digitizing a historical map, and thus, we may not be pinning down the precise location at which the border intersects census tracts. The second concern is related to the idea that either the state or guerrillas may have deployed specific actions along the border, with these tracts driving our results. We address these concerns using different bandwidths, to include observations further away from the boundary, and estimate our regression discontinuity results using several different "donut holes," to remove observations right on and proximate to the boundary.

Figure 4 illustrates that the effects of FMLN territorial control on the main outcomes are robust to different choices of bandwidths between 0.1 and 5 km. Moreover, Tables F.7- F.9 shows the results are robust to larger bandwidths. In particular, Table F.7 shows the results using a 5 km bandwidth and 0 to 600 mts donut holes; Table F.8 shows the results using a 9 km bandwidth and 0 to 2 km donut holes; and Table F.9 shows the results using a 17.95 km bandwidth – the largest possible boundary considering the proximity of treated areas and the size of El Salvador[31] – and 0 to 4 km donut holes. All the results hold, which provides evidence that effects are not driven by observations right at the boundary. Moreover, they also show that our estimated effects are robust to strictly using observations further away from our border, which can't have been miss-assigned to treatments or control due to imprecisions during the map digitization. Lastly, Figure 5 shows a graphical representation of the results and shows that the effects persist further away from the boundary. Moreover, Figure F.2 shows that our results hold for an even larger bandwidth of 5 kilometers. Again, the effects persist even when moving further away from the boundary.

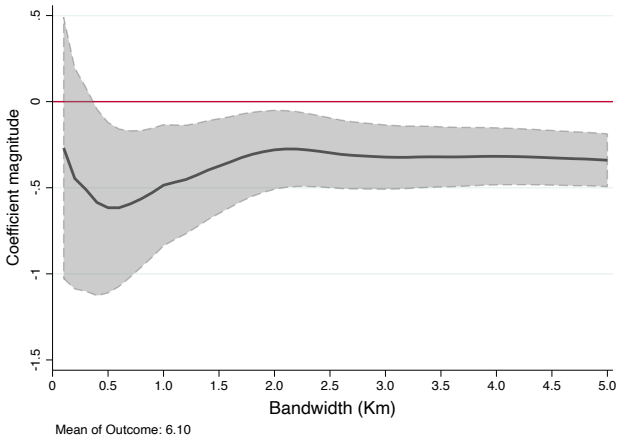
[31] Unfortunately, we can't use boundaries as large as those used in other work that looks at the effects of historical institutions on development [v.gr., Dell, Lane and Querubin (2018); Lowes and Montero (2021)]. El Salvador is a relatively small country– the smallest in Central America– and some treated areas are very close to each other, which prevents us from using larger bandwidths. To put it in perspective, its land area is only 84% of the area of the State of Maryland.

Figure 4. Effects of Guerrilla Control on Main Outcomes under Different Bandwidths

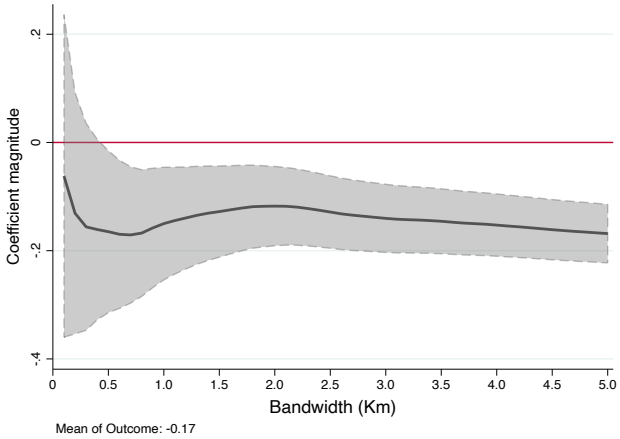
(a) Night Light Luminosity (2013)



(b) Years of Education (2007)



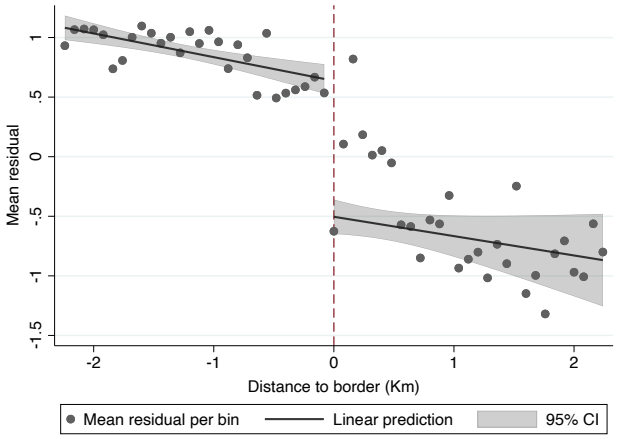
(c) Wealth Index (2007)



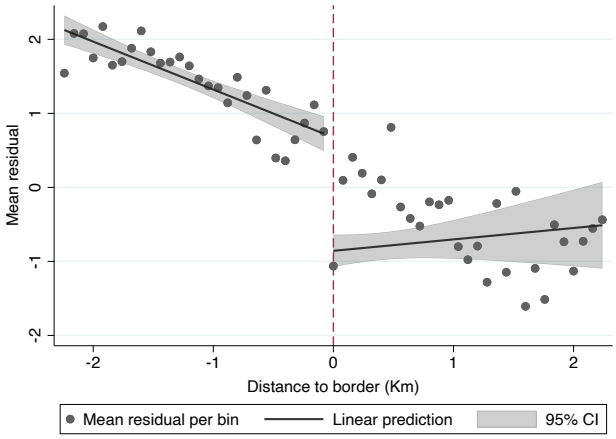
Notes: The results follow the specification of equation 1. The estimates shown include up to 400 break fixed effects. The figure illustrates the coefficients for 50 individual estimations, one for each of the different bandwidths around the discontinuity. The gray color illustrates 95% confidence intervals. Data for night light luminosity comes from NOAA; education and wealth data come from the Population and Household Census of 2007.

Figure 5. Effects of Guerrilla Control on Main Outcomes under The Optimal Bandwidth (2.266 km.)

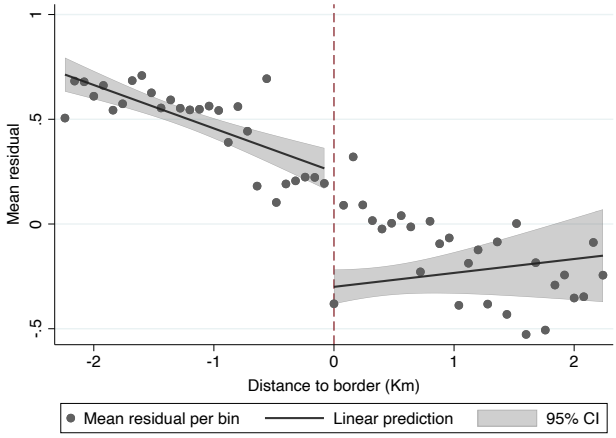
(a) Night Light Luminosity (2013)



(b) Years of Education (2007)



(c) Wealth Index (2007)



Notes: The results show the average de-meaned outcomes in each bin and fit local linear trends in the running variable at each side of the cutoff. The gray color illustrates 95% confidence intervals. Data for night light luminosity comes from NOAA; education and wealth data come from the Population and Household Census of 2007.

V.B.3 Alternative specifications

In Tables F.10 – F.12 in the Appendix, the main results are presented using alternative RD polynomials (constant, linear, and quadratic); and varying the kernel choice. In addition, to address that some census segments could be partially treated, in Table F.15 in the Appendix, we control in the main specification by the share of the census segment that is under guerrilla control. We find that the magnitudes did not change, providing evidence that effects are not driven by partially treated census segments. Moreover, in Table F.13, we re-estimate equation 1 and replace the distance vari-

able and its interaction with the treatment dummy for the latitude and longitude coordinates of each tract's centroid. Overall, the results are robust to all these alternative specifications.

V.B.4 The use of altitude to define borders

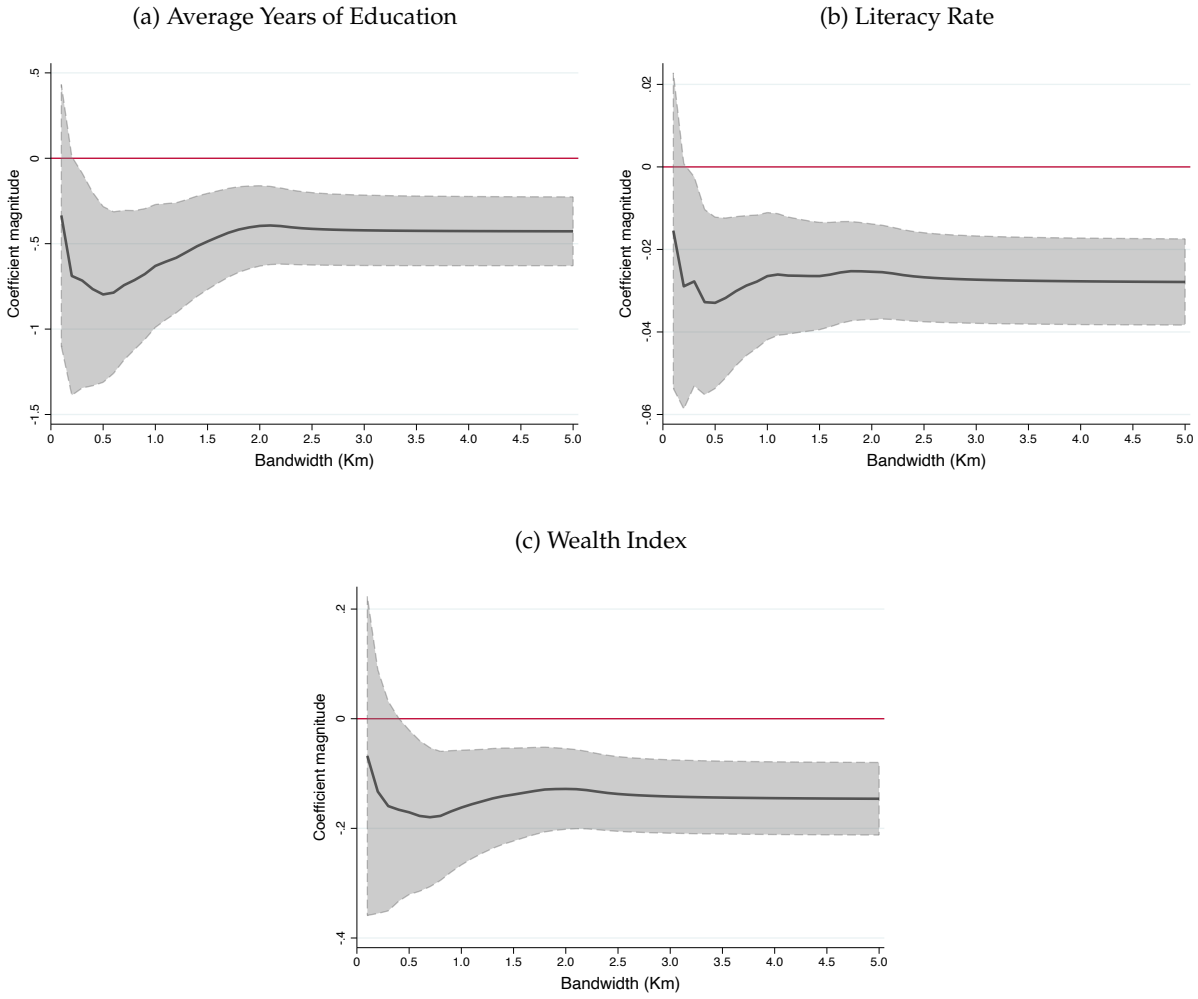
One relevant concern regarding our empirical strategy is that since FMLN territories were defined using altitude as the main geographic feature for the borders, the results may reflect some socioeconomic characteristics associated with higher-altitude areas rather than rebel control. As shown in Table 1, there are no statistical differences in variables that measure economic productivity and state capacity at baseline in areas later controlled by the FMLN.

Nevertheless, we conducted a placebo exercise by selecting pairs of neighboring census tracts in areas that were never under guerrilla control but which have the same difference in altitude as tracts inside FMLN areas. The intuition here is that if negative effects on development outcomes stemmed from significant altitude differences, there would be similar effects on outcomes in areas with the same altitude differences that were not under FMLN control. Results are in Table F.16 in the Appendix. The effects on development are mixed, with some positive and others negative, but they are of a smaller magnitude than the estimated effects for FMLN control. Moreover, we repeat the same exercise with tracts outside guerrilla areas that have larger altitude differences. Even in this extreme case (that comprises a small percentage of tracts in our sample), the effects are small. Finally, Table F.17 shows estimates of the main effects when we restrict the sample to census segments without a sudden change in altitude relative to their immediate neighbors. Results do not change. Overall, these findings provide evidence that the main effects are not the by-product of higher altitudes but rather the consequence of guerrilla control.

V.B.5 Population sorting

One potential concern is that individuals in FMLN areas may have moved to nearby areas (our control group) by the time the boundaries formed. Although rates of migration across the boundaries are very low (less than one percent), we still address this concern in a number of ways. First, we evaluate the effects for individuals who never moved ("stayers.") Table F.18 shows that results are of similar magnitude and significance as for the whole sample, suggesting that in-sample migration may not be a concern. Figure 6 presents more evidence that the effects do not arise from out-migration from FMLN territories. The figures illustrate the estimates of equation (1) on education and wealth outcomes observed at the individual level for the subsample of "stayers." As shown in Figure 6, the effects remain negative and statistically significant.

Figure 6. Effects of Guerrilla Control on Education and Wealth Outcomes of the Non-moving Population Only



Notes: The figure illustrates the results for each outcome variable obtained from the estimation of equation 1 using the "stayers" subsample. The gray color illustrates 95 percent confidence intervals. Overall, we find that the effects of guerrilla control on the three outcomes are consistent under a wide range of bandwidths (0.1 to 4 km).

Second, we explore whether recent and selective migration at the time of the boundary could explain differences in economic development across the boundary, but we find no evidence of it. In particular, we trimmed the sample in two ways. First, we omitted the 10.4 percent of the control-group sample with the highest education and wealth, as contemporaneous in-migration to nearby control areas was 10.4 percent. Second, we omitted the 3.3 percent of the guerrilla sample with the lowest education and wealth, as in-migration to guerrilla areas was 3.3 percent. The estimates based on the trimmed samples remain similar (see Table 3). Moreover, we take

advantage of the fact that the census contains information on the year individuals arrived in each location to account for in-sample migration in 1980 and 1985 in Columns 3–4 and 5–6. Overall, our main estimations do not change. In addition, rates of migration across the boundaries are very low (less than one percent).

Table 3. Effects of Guerrilla Territorial Control on Main Outcomes Controlling for Selective In-migration

Trimming using the	All-Time In-migration Rate		1980 In-migration Rate		1985 In-migration Rate	
	Years of Education	Wealth Index	Years of Education	Wealth Index	Years of Education	Wealth Index
	(1)	(2)	(3)	(4)	(5)	(6)
Guerrilla control	-0.260**	-0.101***	-0.277**	-0.121***	-0.274**	-0.121***
	(0.107)	(0.0353)	(0.109)	(0.0358)	(0.109)	(0.0358)
Observations	3,637	3,630	3,637	3,630	3,637	3,630
Bandwidth (Km)	2.266	2.266	2.266	2.266	2.266	2.266
Dependent mean	6.538	-0.0330	6.570	-0.0280	6.565	-0.0280

Notes: The results follow the specification of equation 1 for the Years of Education and Wealth Index outcomes. However, we trim the dependent variables by using different in-migration rates. In Columns 1 and 2, we use the all-time in-migration rate to trim the 10.4 percent most educated and wealthy people and the 3.3 percent least educated and wealthy from the treated and control groups' respective distributions. In Columns 3 and 4, we use the in-migration rate from 1975 to 1980 to trim the 0.4 percent most educated and wealthy people and the 0.6 percent least educated and wealthy from the control group's respective distributions. In Columns 5 and 6, we use the in-migration rate from 1979 to 1985 to trim the 0.7 percent most educated and wealthy people and the 0.8 percent least educated and wealthy from the control group's respective distributions. The unit of observation in all columns is the census tract. Information from all columns was obtained from the Population and Household Census of 2007. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The estimates use triangular kernel weights. Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

These results are consistent with the effects of education being concentrated in particular cohorts, with no impact among those individuals who completed their education before the territorial control (see Table F.3). The fact that we observe no effects on education among older individuals highlights that changes in the population composition could not be driving the effects on development. Indeed, the effects are robust to estimating a difference-in-differences strategy that exploits variation across cohorts and places of birth. This allows us to include fixed effects by cohort and place of birth (see Table F.19).

Overall, these results align with qualitative evidence that shows the guerrillas provided key defense functions for peasants in their areas during territorial control (Pearce, 1986), suggesting we should not expect out-sorting to areas controlled by the Salvadoran state. Moreover, qualitative

evidence from our focus groups in these communities suggests that even today residents of former guerrilla areas still do not migrate to nearby areas due to the strong sense of belonging to their local community and distrust of out-groups. We explain this mechanism in detail in section VI.B.

V.C External validity

We conducted further analyses to rule out that the results are specific to our RD sample. First, we show that at baseline, the RD sample is similar in characteristics to the rest of the country (see Table F.20). Second, we show how the main results change when moving outside the two km bandwidth. An important concern is that our results may be the product of border dynamic we can't observe– like more investment on the side controlled by the state. Besides showing robustness to using a bandwidth of up to 17.95 km wide in Section V.B.2, Figure F.3 shows that the outcome means up to almost 18 km outside the boundary clearly exhibit the same negative relationship. This rules out the idea that the results are specifically driven by clusters right along the border. Lastly, we estimate the effect of being controlled by the guerrilla using an OLS in the entire country and observe similar negative effects on economic outcomes, which suggests that the results externalize to other areas not in our rd sample and not driven by institutions or investments at the border. (see Table F.14).

VI EXPLORING POTENTIAL MECHANISMS: REBEL GOVERNANCE AND THE TRANSFORMATION OF SOCIAL NORMS

Why would the rebel's influence endure so many years after its territorial control ended? As discussed above, one explanation concerns the reshaping of local governance that led to disengagement with the state and outsiders. We argue that a lifestyle that promoted autonomy from outsiders and the state could have created a negative feedback loop that depressed living standards in the long run through lower access to public goods and over-reliance on agriculture. We hypothesize that many of these changes continued through the present day due to lasting distrust of the state and outsiders.

In this section, we show that while citizens in former guerrilla areas have more social capital, they are also less engaged with politicians and outsiders, and have lower trust in the state, leading to problems accessing public goods and services. In particular, we find that even though former guerrilla areas today have more state investment, access to and utilization of some public services are still lower than in the control group. We present similar findings for the agricultural sector. Even though the land in treated and control areas is equally suitable to produce cash and subsis-

tence crops, we find that a larger share of individuals works in subsistence agriculture in former guerrilla areas. This pattern could also be explained by distrust towards outsiders. In our fieldwork and survey, we learned that although commercially oriented producers and entrepreneurs would like to invest in these areas, residents are reluctant to let them due to high distrust of outgroups. In this section, we also rule out alternative mechanisms such as an increase in violence, land tenure, selective migration, lower public investment, and child recruitment.

VI.A Transformation of social norms: less trust in and engagement with the state and outgroups

Both FMLN documents and scholarly work suggest that the organization of the rural population was a key rebel strategy against the state (FMLN, 1983, 1984; Binford, 1997; Pearce, 1986). In guerrilla areas, the FMLN's social base set up participatory institutions to replace the municipal administration. As noted above, they eliminated state and judicial authorities and established community-based organizations to represent peasants and address key development issues (Binford, 1997; FMLN, 1984).

These institutional arrangements are created by many rebel organizations worldwide to promote forms of organizations that are long-lived and encourage local cooperation through norms of trust. Despite the resulting increase in social capital at the community level, these arrangements tend to foster distrust of outgroups, particularly the state and elites (Keister and Slantchev, 2014; Kubota, 2017). The fact that rebel governance presents an alternative to state institutions, it may reduce engagement with the state and the government even when the state regains control. Local norms of cooperation and solidarity can reinforce distrust of external authorities if the state is negatively viewed by individuals in the postwar era relative to local alternatives. Indeed, there is plenty of evidence of inter-group distrust across territories controlled by the state and rebels in the aftermath of conflict, provoked by disruptions in ordinary interactions, to legitimize the rebels' cause or due to security concerns (Kubota, 2017; Martin, Piccolino and Speight, 2022). Norms of distrust can have significant long-term effects, including precluding economic cooperation among groups. In this section, we study the validity of this mechanism by examining contemporary attitudes towards the state, public goods provision, and agricultural outcomes.

Table 4 presents the estimates of equation (1) using data from the Latin American Public Opinion Project (LAPOP) from 2004 to 2016 for outcomes related to trust and engagement.[32] We used

[32]LAPOP conducts surveys of public opinion throughout the Western Hemisphere, including North, Central, and

the data to construct four indicators of political attitudes and behaviors including political participation, engagement with politicians, nondemocratic engagement, and trust in institutions.[33] Although individuals living in former FMLN areas are not less likely to participate or engage non-democratically in politics (Columns 1 and 3), they exhibit less engagement with politicians and less trust in institutions (Columns 2 and 4). We also find evidence of more trust towards community members in these areas, providing further evidence on how former guerrilla governance may have reinforced social capital within the community and distrust in the state.[34]

Table 4. Effects of Guerrilla Territorial Control on Trust and Engagement with the State and Elites

	Inverse Covariance Index (ICW)				
	Political Participation	Engagement with Politicians	Non-Democratic Engagement	Trust in Institutions	Distrust of Members of the Community (Share)
	(1)	(2)	(3)	(4)	(5)
Guerrilla control	0.166	-0.663*	-0.180	-0.734**	-0.161**
	(0.218)	(0.349)	(0.370)	(0.335)	(0.0738)
Observations	270	275	199	273	295
Bandwidth (Km)	2.266	2.266	2.266	2.266	2.266
Dependent mean	0.000	0.000	0.000	0.000	0.118

Note: The table presents the results of estimating equation 1 for our outcomes related to engagement with politicians and trust. Outcomes were obtained from the 2004–2016 Latin American Public Opinion Project (LAPOP) surveys. Column 1 shows the political participation scope that includes questions regarding whether the citizen votes, attends protests, and joins government meetings. Column 2 measures the extent to which citizens contact state authorities and/or bureaucracies to solve issues and attend government/political meetings. Column 3 measures the extent to which citizens approve the use of alternative or violent means to engage in politics. Column 4 reports the extent to which citizens trust different Salvadoran institutions. The table reports the inverse-covariance weighted average index as dependent variables. Column 5 reports the share of individuals who report believing their community members are not trustworthy. Details on outcome definitions are in Appendix A. Individual data for all years are pooled at the census tract level; thus, this is the unit of observation in all columns. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

We also examine attitudes towards the community and out-groups using our 2022 complementary survey in the eastern zone of the country. We find individuals are more likely to interact

South America and the Caribbean. LAPOP's core project is the AmericasBarometer, a rigorous comparative survey of political and social attitudes and demographic and economic characteristics.

[33] These indexes were constructed using the inverse-covariance weighted average of answers to a set of questions that capture the variables of interest. See more details in Appendix A.

[34] As we show in Table F.21, results are robust when we use the simple sum of questions related to each outcome using data from LAPOP instead of the inverse covariance index as in Table 4.

with members of their own community, be a member of civil society organizations, attend local development council meetings, more likely to donate to members of their own community, and less likely to donate to out-groups (see Table 5 and Table 6). Moreover, in our 2022 survey, we find individuals living in formerly guerrilla-controlled areas are less willing to sell their land to outsiders than are their counterparts in the untreated group (See Table 7). These findings are consistent with qualitative evidence that suggests that rebel governance increased altruistic solidarity in controlled areas (Wood, 2003), as well as with testimonies obtained during our focus groups of key actors in the agricultural and private sectors in former guerrilla communities. The repeatedly notable pattern is that residents of former guerrilla areas are more likely to distrust external actors.

Table 5. Effects of Guerrilla Control on Trust Towards In- and Out-groups: Dictator Game

	Donation to Family Inside the Community (0 - 1 Scale) (1)	Donation to Family Outside the Community (0 - 1 Scale) (2)	Donation to Yourself (0 - 1 Scale) (3)
Guerrilla control	0.0528**	-0.0256*	-0.0276
	(0.0224)	(0.0152)	(0.0267)
Observations	4,749	4,749	4,749
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	0.313	0.138	0.547

Note: The table presents the results of equation 1 for a dictator game in which survey respondents are asked to split a $US 1 phone recharge between a family in their community, a vulnerable Salvadoran family outside their community, and themselves. The unit of observation is a household. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and the social desirability index. As for our main outcomes, we use a bandwidth of 2.266 km and the estimates use triangular kernel weights. Robust standard errors are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

A potential concern is that differences in the level of trust are driven by differences in wealth between former guerrilla territories and others. We rule out this concern by comparing the same outcomes as in Table 4 between neighboring pairs of census tracts that were not under guerrilla control but had the same difference in night light intensity and wealth as tracts around the FMLN boundary (Table 2). This is a placebo test in the spirit of Table F.16. As we show in Tables F.22 and F.23, neither developmental differences (measured by night light intensity) nor wealth differences replicate the results in Table 4. This argues for a causal effect on trust driven by guerrilla control, not by differences in wealth or development.

Overall, distrust of out-groups still exists in these areas even though rebel governance ended decades ago. This was probably reinforced by residents' reliance on and trust in their neighbors,

Table 6. Effects of Guerrilla Control on Community Engagement

	Interaction with Community (Likert Scale)	Member of Civil Society Organization	Member of ADESCO	Any ADESCO Meeting
	(1)	(2)	(3)	(4)
Guerrilla control	0.102*	0.0220*	0.0223	0.0709**
	(0.0560)	(0.0133)	(0.0153)	(0.0311)
Observations	4,748	4,747	4,741	3,666
Bandwidth (Km)	2.266	2.266	2.266	2.266
Dependent mean	0.000	0.0520	0.0860	0.391

Note: The table presents the results of equation 1 for a series of measures of community engagement. Namely, the outcome in Column 1 measures the frequency of interactions with the community on a Likert Scale (standardized) where higher values represent higher frequency. In Columns 2 and 3, the outcomes are dummies indicating whenever the respondent was a member of a non-religious community association such as a cooperative and whenever he was a member of the local ADESCO, the communal development local councils for its initials. in Spanish (Asociación de Desarrollo Comunal). In Column 4, the outcome is a dummy variable indicating that respondents report that their local ADESCO holds meetings with some frequency. To clarify, it takes the value of zero when respondents report that their local ADESCO never holds meetings. The unit of observation is a household. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and the social desirability index. As for our main outcomes, we use a bandwidth of 2.266 km and the estimates use triangular kernel weights. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 7. Effects of Guerrilla Control on Self-Reported Difficulty of Selling Land

	Difficulty of Selling Land (Likert Scale)	Would Sell Land (Dummy)
	(1)	(2)
Guerrilla control	-0.155***	-0.055**
	(0.054)	(0.023)
Observations	4,672	4,769
Bandwidth (Km)	2.266	2.266
Dependent mean	0.000	0.272

Note: The table presents the results of equation 1 for a measure of how difficult respondents feel it is to sell their land. The outcome is on a Likert Scale, with higher values indicating that respondents believe it is more difficult to sell land. The unit of observation is a household. In Column 2, the outcome is a dummy variable that indicates if a respondent would be willing to sell their land to a member outside their community. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and the social desirability index. As for our main outcomes, we use a bandwidth of 2.266 km and the estimates use triangular kernel weights. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

making outsiders unnecessary for subsistence. In the next subsections, we analyze how these differences in social norms affected the durability of changes implemented during guerrilla control,

such as the provision of public goods and the subsistence economy.

VI.A.1 Transformation of local governance: public goods provision

Less political engagement and less trust in institutions may complicate the provision of public goods by the state and affect demand for state-provided services. As shown earlier, these areas are populated by individuals who deeply distrust the state and show high levels of trust in their own community relative to the control group. These norms may lead them to refrain from demanding public goods from the state and attempt to provide them themselves instead.

We explore the validity of these arguments in Table F.24 in the Appendix by examining different contemporaneous outcomes that measure demand for and supply of state services. First, we measure state efforts to provide public goods in these areas by analyzing the effects of guerrilla control on public investment (measured as any government expenditures in projects related to infrastructure in sectors such as electricity, water and sewerage, and education) and on effective state supply of public services (which include the total number of schools, hospitals, and state buildings per 100k inhabitants, and road density). Second, to measure access to and utilization of public goods by citizens in former guerrilla areas, we estimate equation (1) using rates of access/usage of sewerage service, potable water, electricity, and garbage collection service from the Census as outcomes of interest. These rates were estimated as the number of households with access to each public service relative to the total number of households in each census tract.[35]

The estimates yield three key results. First, there is more public investment in (Column 1) and government expenditure on education and road infrastructure inside former guerrilla areas (Columns 3 and 4, respectively), but no differences in health infrastructure or state buildings (Columns 2 and 5, respectively). Notably, we observe persistently higher provision of schools in former guerrilla areas since 1999 (see Figure F.4). We also rule out the lack of state capacity or enforcement as a potential mechanism. Table F.25 shows no significant differences in the distance of each segment to the closest local police station (*comisaría*) or in incarcerations between treated and control areas.

Second, in terms of demand, citizens report less access to and utilization of public services in former guerrilla areas relative to other areas (Columns 6–9). Importantly, we see less access to the exact services in which we observe an increase in public investment. Third, we also show that access to and utilization of public services is not affected by the quality of these services. Column

[35] See Appendix A for details on the construction of these measures.

10 shows no differences in reported daily water frequency across the boundaries. In Table F.26, we also analyze whether the quality of education, measured by teachers' education level and the number of teachers, is lower in former guerrilla areas than in others. We do not find evidence of significant differences in either of these variables.

All in all, areas with past guerrilla presence have higher investments in infrastructure. At the same time, residents of these areas also report less access to and utilization of public services relative to people in control areas. Low levels of institutional trust and political engagement may partly explain these effects: if citizens do not trust the state, they will demand fewer public goods or lack adequate access; plus, they will be less willing to pay taxes even though the state is present in these areas today. Indeed, our survey confirms that residents of former guerrilla areas perceive the state as less capable since they report that the government does not collect taxes there, and they are less likely to report paying taxes (See Table 8). This shows that although the state made more investments in the post-conflict period, individuals in these areas still perceive it as more distant and seek to disengage.

Table 8. Effects of Guerrilla Control on State-Individual Interactions

	Government Collects Taxes (1)	People Pay Taxes (2)	Government Agency in Community (3)
Guerrilla control	-0.0966***	-0.0714**	-0.0211
	(0.0275)	(0.0339)	(0.0208)
Observations	4,672	3,159	4,664
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	0.662	0.460	0.173

Note: The table presents the results of equation 1 for a series of measures of state presence. Data come from our 2022 survey. Namely, the outcomes are dummies that indicate if survey respondents believe the government collects taxes, if the representative inhabitant of the community pays taxes, and if there is a government agency in the community they can go to for information or assistance. The unit of observation is a household. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and the social desirability index. As for our main outcomes, we use a bandwidth of 2.266 km and the estimates use triangular kernel weights. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

VI.A.2 Transformation of economic structures: occupations and agricultural productivity

Present distrust in former guerrilla areas could also prevent the entry of large landowners and outsiders in general, effectively forcing the continuation of the subsistence farming economy. We explore this hypothesis by studying the effects of guerrilla control on occupations and productiv-

ity.

In particular, we explore differences in the occupations of employed individuals currently living in former guerrilla areas relative to other areas. Using data from the 2007 census, we find that individuals in these areas work disproportionately in agriculture (specifically subsistence agriculture) and less in other occupations known to create more value added. These include, for example, industries and services (see Table 9 and Figure F.5). Moreover, the same pattern is observed using our 2022 survey (Table F.27), providing evidence that even 30 years after guerrillas relinquished control,individuals in these areas are still more likely to keep working in agriculture relative to individuals located juts 2 km away. [36]

Table 9. Workers by Economic Activity

	Share of Workers by Economic Activity			Share of Agricultural Workers
	Agriculture	Industry	Services	Growing Subsistence Crops
	(1)	(2)	(3)	(4)
Guerrilla control	0.0465***	-0.0261***	-0.0203**	0.0456***
	(0.00985)	(0.00559)	(0.00878)	(0.00944)
Observations	3,636	3,636	3,636	3,636
Bandwidth (Km)	2.266	2.266	2.266	2.266
Dependent mean	0.194	0.227	0.579	0.160

Note: The table presents the results of equation 1 for the share of workers in each economic activity. The information was calculated from the Population and Household Census of 2007 and using ISIC v4 to classify each occupation. The unit of observation is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The estimates use triangular kernel weights. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1, † p<0.15.

We also analyze the effects of self-governance on agriculture productivity. Since guerrillas promoted autonomous communities, this could affect productivity if distrust towards out-groups prevented interactions with the state and outsiders that could bring new knowledge and skills. Table F.28 presents the results of the spatial RD analysis for the total extension of land cropped (panel A), the share of the land harvested (panel B), and the actual crop yield in 2005 (panel C).

[36]These occupational differences between treated and control areas are maintained even as we increase the bandwidth around the discontinuity from two to 18 km, suggesting these differences are not affected by the location or creation of urban centers close to the discontinuity (see Figure F.6).

Consistent with qualitative evidence, we find that the production of export crops, such as sugarcane, dropped significantly. Moreover, the measures of productivity (harvest and yield) for almost all crop types are much lower in former guerrilla areas.

In sum, we show that rebel control transformed local economic production. Areas formerly under FMLN control today have more workers employed in low-value-added economic sectors (particularly subsistence agriculture) and lower productivity levels for all relevant subsistence and export crops. We argue that distrust of outsiders could explain the enduring nature of these factors by preventing investment and reinforcing the subsistence economy to date.

VI.A.3 Testing the self-governance and social norms mechanism behind the persistent underdevelopment

In this section, we investigate to what extent rebel governance and norms of self-reliance could be explaining the effects on development outcomes. We follow three approaches. First, we analyze whether there are heterogeneous effects across regions where base ecclesial communities were present in 1974 as a proxy for stronger self-governance. Most of these communities during the 70s followed a progressive catholic doctrine (liberation theology) that emphasized the power of the individual to solve social and economic injustices by creating social capital within communities. Second, we study whether effects differ by regions controlled by factions where self-governance was not as intensively promoted. Participatory institutions figured more prominently in places where the two main factions of the FMLN, the ERP and FPL, had a significant presence. Third, we analyze how the expansion of new base ecclesial communities in the post-war period could potentially mitigate the effects by reducing norms of distrust towards outgroups. Base ecclesial communities significantly changed in the post-war period, in El Salvador and elsewhere in Latin America, after the Catholic Church moved away from Liberation Theology. In particular, these bases no longer preached on the liberation of the oppressed, distrust of elites and bottom-up power. Rather, the new base communities promoted the integration of all peoples in the postwar period and the wake of the first-ever democratic period.

Table 10 presents the results. Panel A and B show that effects are exacerbated in regions that had stronger norms of self-reliance at baseline. In contrast, Panel C shows that, in places where the new ecclesial communities are based in the post-war period, the effects on development are mitigated. This suggests that new norms of integration are key to reversing the negative effects caused by the self-sufficiency adopted during rebel governance.

Table 10. Heterogeneity by Presence of Base Ecclesial Communities and Areas with Weak Self-Governance

	Night Light Luminosity	Years of Education	Wealth Index
	(2013)	(2007)	(2007)
	(1)	(2)	(3)
Panel A: Heterogeneous Effects on Regions with Base Ecclesial Communities in 1974			
Guerrilla control	-0.171***	-0.212*	-0.105***
	(0.0264)	(0.112)	(0.0363)
Guerrilla Control × Had BEC in 1974	-0.0859**	-0.423***	-0.0708
	(0.0388)	(0.158)	(0.0622)
Panel B: Heterogeneous Effects on Regions with Weaker Self-Governance Promotion.			
Guerrilla control	-0.225***	-0.455***	-0.158***
	(0.0251)	(0.121)	(0.0393)
Guerrilla control × Weak Rebel Governance	0.112**	0.517***	0.107**
	(0.0437)	(0.141)	(0.0530)
Panel C: Heterogeneous Effects on Regions with Base Ecclesial Communities in 2007			
Guerrilla control	-0.222***	-0.296***	-0.119***
	(0.0257)	(0.110)	(0.0351)
Guerrilla control × Had BEC in 2007	0.240***	0.370**	0.109
	(0.0474)	(0.175)	(0.0678)
Dependent mean	3.536	6.573	-0.0160
Observations	3,652	3,637	3,630
Bandwidth (Km)	2.266	2.266	2.266

Note: The table provides the results of equation 1 alongside three heterogeneity analyses. Panel a showcases the heterogeneous effects on areas that had Base Ecclesial Communities in 1974, while panel b examines regions with weaker self-governance promotion. Panel c presents the findings for areas that had Base Ecclesial Communities in 2007. The unit of observation in all columns is the census tract. Data for night light luminosity come from NOAA, while wealth and education data, from the Population and Household Census of 2007. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. We also include the un-interacted dummy variables for the corresponding interaction terms. We use the algorithm of Calonico, Cattaneo and Titiunik (2014) to set the bandwidth and weight using a triangular kernel. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

VI.B Ruling out migration and pre-war elites displacement

This section explores potential differences in migration patterns in former FMLN areas compared to those outside the boundary. The guerrillas promoted changes that might have induced different patterns of worker selection. For example, high-ability workers could have migrated from these areas due to fear of expropriation of their income (out-migration). But there could have been an adverse selection of workers if guerrilla-held areas attracted less-productive peasants or individuals with more egalitarian preferences (in-migration).

We explore these migration patterns empirically in Table 11, using data from the 2007 census. Columns 1–5 examine impacts on international migration. In particular, we estimate equation (1) for the share of international emigrants during the period of FMLN territorial control and afterward, the number of years since the international emigrant left the household, and the share of households receiving remittances. Unfortunately, the 2007 census does not include questions related to internal migration. However, international migration is significant in El Salvador.

The results suggest that residents of former guerrilla areas were not more likely to migrate abroad or to receive remittances than those in nearby locations, and that—if anything—migration abroad seems more recent. The coefficients are also negative, indicating that people were less likely to migrate internationally. These results provide evidence that former guerrilla areas did not experience more "brain drain." Moreover, to explore if the effects are driven by the migration of elites who were mostly investing in cash crops such as coffee and sugar, we test the robustness of the results when considering plots with low suitability for coffee and sugar. We find that effects hold even for this subsample, providing evidence that effects are not entirely driven by the absence of historically large landowners (See Table F.29). These results are consistent with the fact that many elites left the entire region before the territorial control, affecting our treated and control areas equally.[37]

We examine in-migration outcomes in Columns 6–9 using data from the 2007 census. To evaluate if there was more migration into rebel areas, we estimate equation (1) for the share of individuals who always lived in the same location, the share of individuals who lived in the same location as their mothers, in-migration during the Civil War, and years since arrival. Each variable is defined in Appendix A. There is no evidence of large differences in migration patterns for areas under guerrilla control. Importantly, the magnitude of the estimated coefficients is small and close to zero for all these outcomes.

To further examine if there was more migration from FMLN areas by highly educated people, we examine the same outcomes in Columns 6–9 of Table F.30 using the sample of individuals who had finished at least high school by the time the conflict started. The magnitude of all the coefficients in Table F.30 is close to zero and not significant, implying that migration of highly educated

[37] Furthermore, Table 1 shows that guerrillas did not target areas where elites were disproportionately present as we find that the agrarian reform implemented by the state before the territorial control was equally distributed among control and treated areas. Finally, there is no anecdotal evidence that elites moved from guerrilla-controlled territory to nearby areas controlled by the state.

individuals may not underpin the effects. Moreover, the sign of the coefficients in Columns 6–8 highlights that, if anything, more in-migration of highly selected individuals occurred.

Table 11. Effects of Guerrilla Control on Migration Outcomes

	International Migrants					Always Lived in	Same Location	People who Arrived	Years since
	During Control (Share)	At any Time (Share)	Years since Departure	Households that Received Remittances (Share)	Received Remittance from War Migrant (Share)	Same Location (Share)	as the Mother (Share)	During Control (Share)	Arrival
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Guerrilla control	-0.00219	-0.00221	-0.341	-0.00674	-0.00194	0.00788	0.00648	-0.00452	-0.218
	(0.00171)	(0.00498)	(0.27700)	(0.00427)	(0.00126)	(0.00956)	(0.00978)	(0.00321)	(0.41100)
Observations	3,637	3,637	3,396	3,637	3,637	3,637	3,637	3,637	3,524
Bandwidth (Km)	2.266	2.266	2.266	2.266	2.266	2.266	2.266	2.266	2.266
Dependent mean	0.0230	0.112	7.416	0.103	0.0140	0.766	0.730	0.0620	16.470

Note: The table presents the results of equation 1 for our outcomes related to migration. Columns 1–5 focus on outcomes for international migrants. Columns 6–9 focus on internal in-migration flows. All information was obtained from the Population and Household Census of 2007. The unit of observation in all columns is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates use triangular kernel weights. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Finally, we also looked at temporal migration for work by analyzing whether individuals work in a different census tract or municipality from where they live across the boundaries (Table F.31). We do not find that residents of former guerrilla areas are more likely to work outside their community, providing further evidence that out-migration may not drive the results. It is possible they prefer not to leave their village due to strong social ties, more "rootedness," and because they do not trust outsiders. This idea aligns with previous results that residents of former guerrilla areas are more likely to trust members of their community than they trust residents of nearby areas.[38] We test this possibility using data from the survey in 2022 in Table 12 and find that residents in former guerrilla areas are more likely to report the presence of social ties and distrust to outsiders as the main reason for living in the community rather than economic opportunities relative to individuals in nearby areas that were never under guerrilla control.

[38] Using the Agriculture Census, we also do not find differences in the probability of producers owning a plot outside the segment they live.

Table 12. Effects of Guerrilla Control on Self-Reported Reasons for Living in Their Current Residence

	Economic Opportunity (Dummy)	Social Ties (Dummy)	Inability to Leave (Dummy)	Owns Land (Dummy)	Other (Dummy)
	(3)	(4)	(5)	(6)	(7)
Guerrilla control	-0.009*	0.029*	-0.002	-0.010	-0.008**
	(0.005)	(0.016)	(0.004)	(0.015)	(0.004)
Observations	4,791	4,791	4,791	4,791	4,791
Bandwidth (Km)	2.266	2.266	2.266	2.266	2.266
Dependent mean	0.029	0.624	0.018	0.317	0.013

The table presents the results of equation 1 for a series of dummies that indicate the reason why the respondents have lived in their current place of residence since the peak of the civil conflict. As for our main outcomes, we use a bandwidth of 2.266 km and the estimates use triangular kernel weights. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

VI.C Ruling out conflict and persistent violence

This section explores whether the negative effects of guerrilla control stemmed mainly from higher conflict and the persistence of violence, which may have been more intense in areas close to the boundary where control was contested. As such, conflict or violence may be the source of the negative effects on the development outcomes.

We test this mechanism in several ways. First, we estimate equation (1), controlling for the segments of disputed areas where the Salvadoran government and the guerrillas usually fought. Second, we use a donut-hole approach to exclude all observations within 400 m from the boundary of guerrilla-held territories.[39]

Results for the main outcomes of interest from these exercises are in Table F.32. In general, the coefficients are negative, statistically significant, and similar in size. This suggests conflict is not the main factor behind the negative effects. We obtain similar results using outcomes of war crimes, including the number of deaths, disappearances, and other conflict-related crimes as reported by the Truth Commission. Results in Table F.33 again support the idea that areas under guerrilla control did not experience disproportionately higher crimes relative to other areas. The negative coefficient associated with the war crime estimates suggests that former guerrilla areas experienced fewer crimes, leading to lower-bound estimates of our main outcomes.

[39]We excluded all segments within a 400 m distance to shut off almost every segment close to the boundary and inside the guerrilla zone with an immediate neighbor outside it.

Finally, we appraise the role of guerrilla control in contemporaneous measures of crime to judge whether the historical presence of guerrillas prevented the development of criminal actors such as gangs. The social capital in former guerrilla areas may have done so (Sviatschi, 2022); tightly knit communities with strong social ties can better prevent crime because they raise detection probabilities and attach shame to criminal behaviors (Buonanno, Montolio and Vanin, 2009). If social capital lasts, we expect fewer crimes linked to non-state armed actors, which are pervasive in El Salvador. But if our results stemmed from violence during or after guerrilla control of these areas, we should expect more violence today. To test these hypotheses, we considered homicide rates during 2017 using police data, and victimization rates from 2004 to 2016 provided by LAPOP surveys.

Table F.34 in the Appendix presents the results. Consistent with the finding that violence during the conflict was not greater in guerrilla-controlled areas, the results largely suggest no differences in homicide rates between areas once under and outside FMLN control.[40] If anything, the estimates are negative, which suggests the documented differences in long-term development did not arise from increases in conflict or violence. Additionally, there is evidence that residents of areas once under guerrilla control are less likely to be victims of violent crime or extortion related to gang activity. This aligns with enduring norms of cooperation and higher levels of social capital as well as with qualitative evidence gathered from interviews with locals and former guerrilla commanders, who repeatedly expressed thoughts such as: *"The fact that the maras (gangs) are barely present in these areas reflects that the self-organization of the people worked."* (Joaquín Villalobos, FMLN Military Commander, interview conducted on March 23, 2022).

VI.D Other mechanisms

Other potential mechanisms such as disproportionate improvements in control areas, or changes in the supply and quality of education, or child recruitment could not underlie our results.

Peace agreement, ideology and post-conflict policies— One potential concern is the role of post-conflict policies driving the results. As we note in Appendix G, all reforms of the peace agreement (e.g., the reform of the judicial system) were implemented at the national level and may not prompt our effects. For example, although the agreement created a national police force, we find no differences in law enforcement or the number of state institutions across areas.

[40] Figures F.7 and F.8 confirm this result for different bandwidths.

Moreover, the results do not arise from differences in the postwar land redistribution. One possibility is that people in former guerrilla areas remained attached to the land since they did not have the right to sell it. This is unlikely since the peace agreement respected the land tenure that formed during guerrilla territorial control and granted residents the corresponding land titles. Indeed, using the Agriculture Census, we do not observe differences between treatment and control areas in land ownership or land property rights.[41] Moreover, our survey suggests that individuals living in formerly guerrilla-controlled areas find it less difficult to sell land than their counterparts in the untreated group (See Table 7). We also show that our results do not vary according to the distance of households from the road network or the main city (see Table F.35), providing further evidence that effects are not driven by physical isolation from large markets.

Finally, the post-conflict political environment does not seem to explain the results. First, the right-wing government elected after the agreement did not reduce public investment to punish guerrilla areas, as shown in Table F.24. Second, evidence from the 2014 and 2015 elections shows that these areas did not favor a specific party (see Table F.37).[42] These patterns could also be explained by the fact that during its territorial control, the FMLN not only taught these communities to be autonomous and independent from the prevailing state and elites, but also from the FMLN itself, further ensuring their self-governance. Moreover, consistent with the lack of trust in politicians and the state, Column 3 in Table F.37 shows that residents of former FMLN areas were more likely to cast blank votes in the 2014 presidential elections and the 2015 municipal elections. Third, we find that effects on development were still negative when the FMLN won elections in 2009 and 2014 (as shown previously in Figure 3), and when former guerrilla areas received more investment (not less) related to infrastructure reconstruction efforts such as roads and schools.

Threat of urban development around main cities in 1980s— One potential mechanism is that cities located in state-controlled areas were not very developed by 1980s but urbanized during guerrilla territorial control. In Table F.38, we test this hypothesis by analyzing if urban areas at baseline could be driving the results. We find that effects are robust when we exclude urban centers at baseline using different variables, providing evidence that urban development in the control group may not be explaining the negative main effects. These results are consistent with the het-

[41] The results are in Table F.36. We also find similar effects using our own survey in 2022. Results are available upon request.

[42] If anything, there was a small and negative effect on the vote share for the leftist party. However, these votes did not seem to benefit the right. For example, in the 2015 municipal elections, the share of blank votes increased at the expense of both the left and the right.

erogeneity results based on baseline development using the road network in 1980 where we see similar effects on economic outcomes independently of whether these areas were isolated or not.

Recruitment— Coercive recruitment has figured prominently in work that ties civil conflict to lower levels of education. Early military experience is a bad substitute for education and labor market experience, and child soldiers lose key formative years of schooling (Blattman and Miguel, 2010). Nonetheless, coercive recruitment is unlikely to be the force behind our results. First, child soldiers were not prominent in the FMLN. Estimates suggest that of the 9,000–12,000 FMLN members, only 2,000 (about 20 percent) were under age 18, while the percentage of underage combatants in the Salvadoran Army was 80 percent (48,000 of 60,000 combatants) (Courtney, 2010). Likewise, most historical studies conclude that FMLN recruitment was mostly voluntary. A UNICEF study shows that while 91.7 percent of FMLN recruits had joined voluntarily, close to 53 percent of underage Salvadoran Army soldiers were forcibly recruited (Courtney, 2010).

Post-conflict willingness to invest in guerrilla areas— In terms of private investment, we do not find qualitative evidence that large agricultural producers or firms are less willing to invest in these locations. Indeed, residents of former guerrilla areas do not report more difficulties in selling their land than residents in untreated areas (see Table 7). Moreover, we do not find evidence that fear of expropriation in former guerrilla areas explains the results. We observe that residents of these areas are as likely as those in the control group to believe it is acceptable to invade private property or engage in violent forms of political participation or anti-democratic behavior (see Table F.39).

Spillovers in non-guerrilla areas during territorial control and in the postwar period— We also rule out that effects stem from counterinsurgency in nearby control areas during the period of guerrilla control. Furthermore, the effects are not explained by nearby control areas benefiting from the lack of development or the agricultural focus in guerrilla areas. In this case, effects would be concentrated close to the boundary or just in the regression discontinuity sample. Several pieces of evidence show this is not the case. First, evidence from the donut-hole analysis shows this is not so: effects are robust to excluding observations close to the boundary. Second, if we increase the sample beyond the bandwidth to 17 km, we see homogeneous effects on development.[43] Finally,

[43]One potential concern (as with many rd designs) is that we observe cross-sectional differences today in development. Due to the lack of panel data, we cannot disentangle how much the effects originate in improvements in the control group and deterioration in former guerrilla areas over time versus just improvements in the control group and no changes in former guerrilla areas. Hence, we analyze heterogeneous effects based on the distance to the main road, distance to a city, and population density. If effects emerged only via improvements in control areas but no changes in the treated group, we would expect mitigation of the negative effects in better-connected regions. Table F.35 shows this is not so. These results imply that even areas that were more developed before guerrilla control are equally affected by

the fact that we observe negative effects on productivity in former guerrilla areas provides further evidence that development effects are not driven by control areas benefiting from guerrilla ones.

VII DISCUSSION

This paper explores the long-term development impacts of rebel governance. Our results show that guerrilla control in El Salvador had sizable negative and enduring consequences for development. We argue that our main results arise from the guerrilla-directed transformation of local governance structures and associated norms. In these areas, norms of self-sufficiency and distrust of outsiders led to lasting changes in economic structures and relations with the state.

Our results shed light on a new mechanism that explains why civil wars may have long-term impacts on development. Empirical evidence shows that civil war matters to development through channels that highlight the destruction of human and physical capital. In contrast, we examine the role of territorial control by rebel actors. This has important policy implications. Post-conflict reconstruction is among the top priorities for policymakers. Yet, if we ignore that civil war depresses development through persistent changes in norms to focus solely on infrastructure investment, areas of former rebel governance may embark on a negative development path that is likely to continue.

We expect the persistent distrust of outsiders motivated by alternative forms of governance to matter in several different contexts. Qualitative and quantitative evidence suggests civilians have lived under the control of non-state armed groups in countries with civil war. These cases span the globe and include highly developed governance systems like that of the Liberation Tigers of Tamil Eelam in Sri Lanka (Kubota, 2017), mixtures of direct and local power-sharing in Côte d'Ivoire (Martin, Piccolino and Speight, 2022), and centralized, hierarchical governmental structures under communist rebel control during the Greek Civil War (Kalyvas et al., 2015). In most of these territories, rebels create autonomous governing institutions that seek to emancipate civilians from the state and out-groups. In such cases, differences in institutional trust and reliance on self-sufficient economic production may depress economic growth in these territories.

their historical presence today.

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Contents (Appendix)

A Data Sources and Variable Definitions

A.A *Guerrilla territories*

- **Territories under control by 1991:** Following Castañeda (2016), this study uses the maps that document FMLN-held areas as submitted to the United Nations and approved by the political parties in El Salvador during the cease-fire process. Since the map originally had an image format, we used ArcMap to digitize it by hand and convert it to a shapefile format. Thus, this is the only part of the spatial analysis that is not coded.

A.B *Geospatial variables*

- **Night light luminosity:** Data on night light luminosity comes from the Defense Meteorological Satellite Program Operational Linescan System (DMSP-OLS). This data was obtained from the US National Oceanic and Atmospheric Administration (NOAA) at https://ngdc.noaa.gov/eog/download.html. This data has a resolution of 30 arc-seconds (1 km^2) and spans 1992 to 2013. The challenge with night light luminosity data is the significant fraction of observations that take the value of zero and the existence of extreme values in the right tail of the distribution (Michalopoulos and Papaioannou, 2013; Pinkovskiy and Sala-i Martin, 2016). To account for this potential concern, we adjust the outcome of interest using the logarithm and the inverse hyperbolic sine transformation.[44]

- **Elevation:** Elevation was obtained from the Google Earth Engine Data Catalog and is available at https://developers.google.com/earth-engine/datasets/catalog/USGS_SRTMGL1_003. This data provides elevation information in meters at the 3 arc-seconds spatial resolution (90 mts^2). The digital elevation model (DEM) was created based on the images of the Shuttle Radar Topography Mission (SRTM) of NASA. In this study, we calculated the average elevation for each census tract.

- **Slope:** this study uses the terrain() function in R to compute the slope from the elevation data accordingly with Ritter (1987).[45] The algorithm uses four neighboring pixels to compute each pixel's slope in degrees. Thus, higher values represent steeper terrain. Our study uses the average of the slope at the census tract level.

[44] The inverse hyperbolic sine transformation is defined as $log(y_i + (y_i^2 + 1)^{1/2})$ and can be interpreted as a logarithmic dependent variable (Pence, 2006).

[45] Documentation of the R tool can be found at https://www.rdocumentation.org/packages/raster/versions/3.4-10/topics/terrain

- **Ruggedness:** This study implements the terrain ruggedness index of Riley, DeGloria and Elliot (1999) using the tri() function in R.[46] The algorithm uses five neighboring pixels to calculate each pixel's index from the elevation data. Our study uses the average of the ruggedness index at the census tract level.

- **Rivers and lakes:** Information on surface water bodies comes from the Google Earth Engine Data Catalog and is available at https://developers.google.com/earth-engine/datasets/catalog/MERIT_Hydro_v1_0_1. The data comes from the MERIT Hydro dataset with a 3 arc-seconds spatial resolution (90 mts^2). Our variables take the value of one if a river or lake passes by a census tract.

- **Historical crop yield:** Agro-climatic yield rasters were obtained from the Global Agro-Ecological Zones version 3.0 (GAEZ v 3.0) project and are available at https://www.gaez.iiasa.ac.at. The data has a spatial resolution of 5 arc-minutes (9 km^2) and a yearly periodicity. We used the 30-year average (starting in 1961) of the most relevant crops in terms of consumption and exports for 1990 (i.e., coffee, cotton, rice, beans, and sugarcane).

- **Roads and railways in 1980:** the map outlining the road and railway network in 1980 for El Salvador was obtained from the United States Library of Congress and is available at https://www.loc.gov/resource/g4840.ct000627/. This map was made by the Central Intelligence Agency. Since the map originally had an image format, we used ArcMap to digitize it by hand and convert it to a shapefile format. Our variable takes the value of one if a census tract contains part of a road or railway.

- **Number of hospitals per 100k population:** El Salvador's Ministry of Health provided the location of all hospitals in El Salvador in 2015. The variable we use is the number of hospitals by 100k population in each census tract.

- **Number of schools by 100k population:** El Salvador's Ministry of Education provided us with the location of all schools in El Salvador in 2007. The variable we use is the total number of schools in each census tract.

A.C *Population and Household Census of 2007 (PHC)*

The PHC of 2007 is available at http://www.censos.gob.sv/censo/Default.aspx.

[46] Documentation of the R tool can be found at https://www.rdocumentation.org/packages/spatialEco/versions/1.3-7/topics/tri

- **Census cartography:** DIGESTYC provided maps of the 12,435 census tracts (*segmentos censales*) in the 2007 census. Each census tract represents a small area with a fixed geographic perimeter. On average, they have an area of 1.7 km^2, a perimeter of 5.5 km, 113 households, and 463 individuals. Our estimation sample consists of 3,678 census tracts, which have on average 110 households and 458 individuals.

- **Wealth score:** we built a wealth score that represents the living conditions of each household using characteristics and asset ownership such as the type of roof, access to water, television, etc. To construct the score, we used a principal component analysis following the steps recommended by the Demographic and Health Surveys program (DHS), which can be consulted at https://dhsprogram.com/topics/wealth-index/Wealth-Index-Construction.cfm. We calculate the average of this measure for each census tract.

- **Years of education:** The PHC asks each individual the total number of years of education in single years. However, our variable only takes into account individuals older than 18 years since most of this population already finished secondary school. We calculate the average of this variable for each census tract.

- **Literacy rate:** The PHC asks each individual if they can read and write. Thus, our literacy rate variable is the number of individuals older than 18 years who can read in each tract over the total population in the same age range in the same tract.

- **Public goods provision rates:** The PHC asks each household if they have water access, sewerage, electricity, and garbage services. Our rates are calculated as the total number of households that report having the service in each tract over the total households in the same tract.

- **International migrants:** This is the total number of people who are reported by their households to be outside El Salvador in 2007 for each census tract.

- **International migrants in the war period:** This is the total number of people who left El Salvador between 1979 and 1990 and who are reported by their households to be outside El Salvador in 2007 for each census tract.

- **In-migration during the war period:** This is the total number of individuals who reported in 2007 that they arrived in a given census tract between 1979 and 1990.

- **Moving population:** This is calculated as the number of people in a given census tract who reported in 2007 any relocation in their entire life.
- **Moving population share:** This is calculated as the moving population in each census tract over the total population in the same tract.
- **Economic activity:** Respondents report their main economic activity (i.e., their occupation), which we classify into agriculture, industry, and services using the ISIC v4.

A.D *Presidential election results*

All data related to elections came from the Tribunal Supremo Electoral of El Salvador and included results and coordinates for each polling station.

- **Left voting share:** This is calculated as the total votes for the FMLN party over the total valid votes for each polling station in El Salvador.
- **Right voting share:** This is calculated as the total votes for the ARENA party over the total valid votes for each polling station in El Salvador.
- **Blank voting share:** This is calculated as the total blank votes over the total valid votes for each polling station in El Salvador.
- **Turnout share:** This is calculated as the total valid votes over the total number of people registered to vote in each polling station in El Salvador.

A.E *2013 teacher census*

- **Total enrollment:** total number of students at each school.
- **Total teachers:** total number of teachers at each school.
- **Certified teachers:** number of teachers who have received a formal accreditation in pedagogy from the Ministry of Education.
- **Teachers with high school:** number of teachers who have a high school degree.
- **Certified teachers with high school:** number of teachers who have received a formal accreditation in pedagogy from the Ministry of Education and who have a high school degree.

A.F *Registry of war victims*

The following variables come from El Salvador's registry of war victims, or *Registro de Víctimas de Graves Violaciones a los Derechos Humanos Ocurridas en el Contexto del Conflicto Armado Interno*; in Spanish. This registry was assembled by El Salvador's Human Rights Institution in 2013.

- **Total number of war events:** This includes all war events such as massacres, abductions, and destruction of property either by El Salvador's army or guerrilla groups.
- **Has a war events:** Dummy variable that equals 1 whenever an event such as a massacre, an abduction, or a destruction of property either by El Salvador's army or guerrilla groups occurred during the war period.
- **Total number of war victims:** This is a registry of all victims that features information on the year they were murdered or reported as disappeared, their name, and their geocoded location.
- **Has a war victim:** Dummy variable that equals 1 whenever a casualty was registered in a census tract during the war.

A.G *Registry of incarcerations*

- **Number of incarcerations:** This includes all incarcerations in El Salvador between 1980 and 1985. Data comes from the universe of individuals who entered prison from 1980 to 1985 obtained from the *Dirección General de Centros Penales* in El Salvador.

A.H *Attitudes towards the government*

All data regarding attitudes toward the government comes from the Latin American Public Opinion Project (LAPOP) survey. We compute the mean for each of the following variables at the census tract level.

- **Political participation:** This is a summary index using the standardized inverse-covariance weighted average of indicators of whether the citizen votes, attends protests, and attends government meetings.
- **Engagement with politicians:** This is a summary index using the standardized inverse-covariance weighted average of indicators of whether the citizen contacts state authorities and/or bureaucracies to solve issues and attend government/ political meetings.

- **Non-democratic engagement:** This is a summary index using the standardized inverse-covariance weighted average of indicators of whether the citizen approves the use of alternative or violent means to engage in politics.
- **Trust in institutions:** This is a summary index using the standardized inverse-covariance weighted average of indicators of whether the citizen trusts different types of Salvadoran institutions, including the police, the powers of state, and local government.
- **Distrust of members of the community:** An indicator for when a citizen believes the members of their community are not trustworthy.

A.I *Public investment and public buildings*

- **Public investment:** This variable comes from the registries of the Fund for Social Investment in Local Development (FISDL is its Spanish acronym) and is a dummy that takes the value of one for census tracts that received any investment project between 1995 and 2015.
- **Public buildings per 100k population:** This variable comes from Google maps. The following buildings are considered government buildings: local government offices, city halls, schools, courthouses, embassies, fire stations, hospitals, museums, police stations, post offices, secondary schools, transit stations, and bus stations.
- **Distance to Police Stations:** This variable comes from web-scraping the coordinates of every police station in El Salvador and then computing the minimum distance between each census tract boundary and the closes police station.

A.J *Agricultural National Census of 2007*

For the analysis we use census-tract level means for each of these variables:

- **Owned area:** This is the size of the land the producer owns in hectares.
- **Total area:** This is the size of the total land the producer manages, which could also include rented land.
- **Cultivated area:** This is the area cultivated by the producer.
- **Share of owned area:** This is the share of the total area managed by the producer that the producer owns.
- **Crop production:** This is a measure of crop production in 1,000 tons.

- **Share of harvest:** Crop harvest as a share of the total area of a census tract.
- **Actual crop yield:** This is the total production over the total of cultivated land for each crop.

A.K *Household and Multipurpose Survey (EHPM)*

For the analysis, we employed each of these variables:

- **Years of education:** The EHPM asks each individual the total number of years of education in single years.
- **Income inequality:** The survey asks respondents for their income. We compute several measures of inequality at the census tract level based on respondents' real income.

A.L *Standardized Test of Student Achievement*

For the analysis, we employed the following variable:

- **Number of High Schools per 100k Population:** We retrieve this variable from the list of schools that took the Standardized Test of Student Achievement, or PAES (for its Spanish acronym), between 1999 and 2018. This test evaluates high school graduates' knowledge of mathematics, social studies, natural sciences, Spanish, and literature.

B Descriptive Statistics

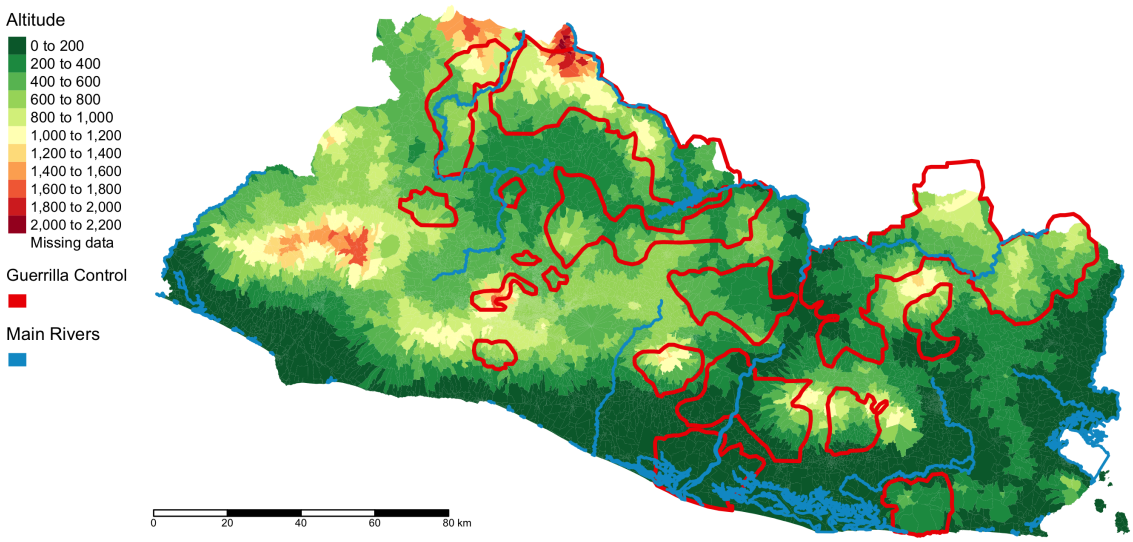
Table B.1. Summary Statistics of the Variables Used in the Estimation

	Mean	SD	Min	Max	Obs
Panel A: Ceasefire map of 1991					
Segment under guerrilla control	0.167	0.373	0.000	1.000	12,435
Distance to nearest controlled area	-8.647	12.243	-67.010	17.955	12,435
Panel B: Geographic characteristics					
Night Light Luminosity (2013)	3.181	1.471	0.000	4.825	12,432
Altitude (1980)	496.403	287.500	0.000	2,185.623	12,433
Slope (1980)	7.458	5.153	0.000	30.127	12,432
Ruggedness (1980)	10.916	8.274	0.000	184.795	12,432
Hydrography (1980)	0.282	0.450	0.000	1.000	12,435
Aggregate Yield Index (1961-1979)	0.000	1.000	-8.162	1.991	12,435
Bean Potential Yield (1961-1979)	4.064	0.227	1.451	4.764	12,301
Coffe Potential Yield (1961-1979)	1.672	0.251	1.128	3.121	12,301
Cotton Potential Yield (1961-1979)	0.709	0.086	0.000	1.000	12,301
Maize Potential Yield (1961-1979)	9.941	0.652	4.310	11.645	12,301
Wet Rice Potential Yield (1961-1979)	8.628	1.020	0.000	9.137	12,301
Sugarcane Potential Yield (1961-1979)	6.337	1.031	0.000	8.958	12,301
Roads and Railway (1980)	0.376	0.484	0.000	1.000	12,435
Panel C: Socioeconomic characteristics					
Wealth Index (2007)	-0.168	0.890	-2.336	1.723	12,393
Hospitals per 100k Population (2007)	15.637	62.482	0.000	787.402	12,406
Schools per 100k Population (2007)	112.544	219.692	0.000	11,111.111	12,406
Sewerage Service Rate (2007)	0.352	0.428	0.000	1.000	12,406
Garbage Rate (2007)	0.439	0.441	0.000	1.000	12,406
Water Access Rate (2007)	0.744	0.323	0.000	1.000	12,406
Electricity Rate (2007)	0.865	0.186	0.000	1.000	12,406
Daily Water Rate (2007)	0.713	0.359	0.000	1.000	12,276
Total Population (2007)	463.011	137.741	2.000	3,462.000	12,406
Birth Rate (2007)	0.175	0.351	0.000	18.000	12,394
Years of Education (2007)	6.098	2.759	0.000	15.272	12,406
Literacy Rate (2007)	0.787	0.139	0.000	1.000	12,406
International Migrants (2007)	22.310	21.781	1.000	182.000	11,725
Panel D: Economic activity					
Agriculture (2007)	0.245	0.263	0.000	1.000	12,403
Industry (2007)	0.218	0.116	0.000	0.786	12,403
Services(2007)	0.536	0.223	0.000	1.000	12,403
Share of Agricultural Workers Growing Subsistence Crops (2007)	0.198	0.239	0.000	1.000	12,403
Panel E: Attitudes towards the Government					
Political Paticipation ICW (2004–2016)	0.133	0.960	-2.370	2.377	270
Engagement with Politicians ICW (2004–2016)	0.022	0.959	-0.661	5.115	275
Non-Democratic Engagement ICW (2004–2016)	0.105	1.016	-1.104	3.933	199
Trust in Institutions ICW (2004–2016)	0.114	0.990	-3.608	2.272	273
Distrust of Members of the Community Share (2004–2016)	0.095	0.215	0.000	1.000	818
Panel F: Agricultural Productivity					
Bean Production (2005)	0.095	0.061	0.000	0.266	12,427
Maize Production (2005)	1.822	1.323	0.000	6.631	12,427
Coffee Production (2005)	0.416	0.303	0.000	2.817	12,427
Sugarcane Production (2005)	22.415	46.151	0.000	426.958	12,427
Share of Bean Harvest (2005)	0.023	0.047	0.000	0.969	12,426
Share of Maize Harvest (2005)	0.070	0.148	0.000	3.376	12,426
Share of Coffee Harvest (2005)	0.046	0.091	0.000	1.189	12,426
Share of Sugarcane Harvest (2005)	0.027	0.091	0.000	1.456	12,426
Bean Yield (2005)	0.387	0.099	0.000	0.481	12,427
Maize Yield (2005)	2.174	0.549	0.000	2.777	12,427
Coffee Yield (2005)	0.824	0.164	0.000	1.249	12,427
Sugarcane Yield (2005)	62.632	19.224	0.000	115.003	12,427

Notes: This table presents summary statistics of most raw variables used in the analysis. The information was gathered from diverse sources. See Appendix A for more details.

C Maps

Figure C.1. Mapping of Altitude, Main Rivers, and Guerrilla-Controlled Territories



Notes: The figure maps the guerrilla-controlled areas, main rivers, and the variation in altitude for El Salvador. The latter is at a resolution of 3 arc-seconds and based on the DEM model of NASA's SRTM.

D Complementary Survey Appendix

D.A Survey

To collect information on additional mechanisms of the results obtained from administrative datasets, we conducted a household-level, self-reported survey in July–August 2022. The survey allows us to evaluate differences between individuals living in areas that were controlled (or not) by guerrillas regarding preferences for land tenure, trust in in-groups and out-groups, perceptions of local institutions, and measures of prosocial behaviors. In this Appendix, we describe the sampling procedure and recruitment activities, survey instrument, and data collected.

D.B Sampling and recruitment

D.B.1 Power calculations

To determine the sample size, we estimated statistical power assuming an α of 0.05 and statistical power of 80%. Using household-level data on land tenure from the household survey and defining census tracts as our cluster of interest, we estimate an intracluster correlation of 0.24 and use it for our statistical power estimations. From the household survey, we also estimate an average census tract size of 8 households. Using these parameters, we are able to identify effects between 0.1–0.165 standard deviations with a sample size of 4,000 individuals from 600 census tracts equally distributed between areas controlled (or not) by guerrillas during the war.

D.B.2 Sampling

The sample for the survey was determined following two steps. First, we selected the 1,056 census tracts that were part of the sample used for the main estimation (equation 1). Second, we randomly selected 603 census tracts (305 in controlled areas and 298 in non-controlled areas). To account for differences in the number of households within each census tract, and since there is no updated sampling frame at the household level, we conducted the following procedure to determine the number of surveys in each census tract. First, we used information from the Population and Household Census of 2007 to estimate the number of households that had at least an adult between 30 and 70 years of age within each census tract.[47] Then, assuming there were no important changes in the distribution of the number of households within each census tract over time, we distribute the 4,809 surveys among each census tract based on the size of each tract in 2007.

[47] This age range is relevant because that would allow us to interview individuals at different ages during the war, including some who were not even born by then.

D.B.3 Recruitment

To conduct the survey, we implemented an adaptation of Melnikov, Schmidt-Padilla and Sviatschi (2020). First, in coordination with the survey firm, we identified the different entry points to each census tract and randomly selected one of these points. Enumerators started by interviewing the closest household to the randomly selected entry point. Then, following a clockwise direction, the next surveyed household was the closest to the first one, and so on until the required number of households were interviewed for each census tract. We made sure that only households within the relevant census tracts and boundaries of our RD design were included. We imposed two restrictions on the eligibility of each household. First, we only administered the survey to household heads between 30 and 70 years of age.[48] Second, we only interviewed household heads who had been living in the same place since the period of guerrilla territorial control (1985–1992). Moreover, we only surveyed household heads who consented to be interviewed by the enumerators and who lived within the boundaries of our RD design. Our final sample consisted of 4,809 individuals, 2,345 living in territories controlled by the guerrilla and 2,464 in non-controlled territories.

D.C Survey instrument

After verifying the eligibility of a household head and obtaining their informed consent for the survey, we began the survey. We collected information related to the location and sociodemographic profile of the participants, their employment status and economic activity, their land tenure and use, their trust in different institutions, measures of prosocial behavior, and their perceptions about economic inequality.

1. **Screening:** we asked potential respondents to express their informed consent to be part of the survey and to indicate whether they lived in the same place as today during the 1985–1992 period. We then geocoded the place of current residence for all household heads who were eligible to participate in the survey and who expressed their desire to do so.

2. **Sociodemographic characteristics:** we asked the respondents about their sex, age, highest level of education, number of household members, and the reasons why they live in, or moved to, the current place of residence.

3. **Pro-social behaviors (community engagement):** we asked survey participants how much they interacted with their community, if they engaged in civil society initiatives such as

[48] Note that we have 5 individuals who are older than 70.

cooperatives or Community Development Association (ADESCO for its Spanish acronym), and about the frequency of ADESCO meetings. We also asked them to play a dictator game in which they were asked to split US $1 between themselves, a vulnerable family in their community, and another vulnerable Salvadoran family outside their community.

4. **State-individual interactions:** We also included questions related to tax collection, willingness to pay taxes to the government, and if they were aware of any local government agency in their community.

5. **Economic activity and land-sale preference:** we registered respondents' main occupation. Moreover, we asked them if they could consider selling it to another member of the community, and how hard they think it would be to sell their land.

6. **Social desirability:** To account for social desirability bias in the self-report of some questions, such as trust and pro-social behaviors, we included the four items related to social desirability from the Crowne and Marlowe (1960) scale. It includes questions such as if they sometimes feel like they lack persistence, if they feel jealousy towards other people's good luck, and if they ever say things to hurt other people on purpose, among others.

D.D Data description

In this section, we describe the variables in our analysis and how we constructed them:

- Donation to family in the community, vulnerable family outside the community in El Salvador, and to yourself: we asked respondents to split a US $1 phone recharge between themselves, a vulnerable family in their community, and a vulnerable Salvadoran family outside their community. We use the monetary values reported by the respondents as the main outcome for each category. These outcomes take a value between 0 and 1.

- Interactions with other community members: We used the question about the frequency of interaction with other members in the community in some events, such as meetings, parties, religious festivities, and local markets, among others. The response option for this question was on a 1 to 5 point Likert scale, where a higher score indicates a more frequent interaction. To construct the outcome variables, we standardized the respondent's answer using the mean and standard deviation of the control group.

- Member of civil society organization: this consists of a dummy variable that equals 1 when-

ever a respondent reported being a member of an organization such as a workers' cooperative or another non-religious organization.

- Member of ADESCO: this is a dummy indicator that equals 1 whenever an individual reported being a member of an ADESCO or participating in a community improvement project.
- Any ADESCO meeting: respondents report the frequency of their local ADESCO meetings. We created a dummy variable to capture this information. Namely, we coded each of the following as 1: less than monthly, monthly, and more than monthly frequency. We coded the dummy variable as 0 when respondents reported their local ADESCO never held meetings.
- Government collects taxes: we created a dummy variable equal to 1 if the respondent reported being aware of the government collecting taxes in their community.
- People pay taxes: this is a dummy variable indicating if the respondent thought the average community member paid taxes.
- Government agency in the community: this is a dummy variable that equals 1 if a respondent reported there was a local government office in their community from which they could get information or help with a problem.
- Difficulty selling land: respondents rated the difficulty of selling their land on a 1 to 5 scale, where higher values imply more difficulty. To construct the outcome, we standardized the respondent's answer using the mean and standard deviation of the control group.
- Would sell land to member outside the community: this is a dummy variable that takes the value of 1 for respondents who reported willingness to sell their land to a member outside the community.
- Reason for not moving out (migrating) from their community: We asked participants why they had been living in their community since the peak of the civil conflict. We presented the following response options: economic opportunity, social ties (i.e., friends and family live here), inability to leave for lack of money, land ownership, and others. We created a dummy for each category of analysis.
- Occupational choice: we asked respondents to choose which of these options best described their main occupation: agriculture, sales, own household work, working as an employee, or other. We created a dummy for each category of analysis.

- Years of education: To estimate a proxy for the number of years of education, we used the education level question. That is, we assumed that respondents with no formal schooling had zero years of education, those who completed elementary school had six years, and those who completed middle school had nine. High school graduates had 13 while college graduates and holders of a postgraduate degree had 21 and 24 years of education, respectively. In this sense, this variable has a value between zero and 24 for each respondent.

- Social Desirability Index: we construct a social desirability index using the four statements included in the survey:"It is sometimes difficult for me to work without being told to," "I have stopped doing an activity because I have felt unable to succeed," "I have felt jealous of other people's good luck," and "I have done or said things to hurt other people on purpose." We asked participants if they agreed or not with each statement. If the respondent disagreed with any statement, we coded the response to that statement as a 1, and zero otherwise. Then we added all the responses; thus, the raw outcome can take a value between 1 and 4; the higher the score, the higher the social desirability bias. Then we created a standardized index for each respondent using the mean and standard deviation of the index for the control group.

In Table D.1, we summarize the data. We report the means and number of observations of the key variables for the subsample that was under guerrilla control and the control group comprised of households in areas that were never under guerrilla control.

Table D.1. Summary Statistics by Group

	In-Boundary Sample		Out of Boundary Sample	
	Mean	Obs	Mean	Obs
Demographics:				
Years of Education	7.069	2,334	8.085	2,447
Age	50.299	2,345	50.880	2,457
Social Desirability:				
Difficult to Work Without Being Told to	0.168	2,331	0.201	2,444
Lacks Persistence	0.237	2,343	0.267	2,456
Jealousy	0.099	2,344	0.132	2,456
Hurts Others on Purpose	0.244	2,336	0.326	2,446
Donation to: (0-1 Scale)				
Community Member	0.304	2,345	0.312	2,456
Vulnerable Family in El Salvador	0.105	2,345	0.139	2,456
Yourself	0.590	2,345	0.547	2,456
Community Engagement:				
Interaction with Community	0.110	2,317	0.000	2,431
Member of Civil Society Organization	0.071	2,343	0.052	2,456
Member of ADESCO	0.109	2,339	0.087	2,454
Any ADESCO meeting	0.496	1,832	0.393	1,868
State-Individual Interactions:				
Government Collects Taxes	0.560	2,303	0.663	2,419
People Pay Taxes	0.393	1,667	0.458	1,527
Government Agency in Community	0.138	2,309	0.173	2,404
Land Tenure Perceptions:				
Difficulty of Selling Land	-0.010	2,300	0.000	2,372
Would Sell Land to Community Member	0.170	2,327	0.272	2,442
Reason for Staying in the Current Place of Residence:				
Economic Opportunity	0.018	2,342	0.029	2,449
Social Ties	0.648	2,342	0.624	2,449
Inability to Leave	0.016	2,342	0.018	2,449
Owns Land	0.310	2,342	0.317	2,449
Other	0.008	2,342	0.013	2,449
Occupational Choice:				
Agriculture	0.591	2,342	0.377	2,453
Sales	0.161	2,342	0.227	2,453
Works in Own Household	0.105	2,342	0.177	2,453
Works as an Employee	0.131	2,342	0.193	2,453
Other	0.012	2,342	0.025	2,453

Notes: This table presents summary statistics of all variables from our 2022 survey used in the analysis. See Appendix D for more details on the survey and the power calculations, sampling, and recruitment procedures.

E Qualitative Study

This Appendix provides further information on the methods used in the qualitative component of the study and their main results.

E.A Sample definition and recruitment of participants

The qualitative study aims to complement the quantitative results by gathering information to understand the dynamics that occurred within territory controlled by Salvadoran guerrillas, the stability of the borders, and changes in the economic, social, and political structures, among other potential mechanisms that could underpin the main findings in this study.

The target groups were: (i) political-military leaders of the guerrillas, who designed and implemented military strategy and policies with a broad knowledge of the grassroots social movement; (ii) religious and community leaders with in-depth knowledge of the armed conflict; (iii) residents of areas controlled by the guerrillas during the Civil War; and (iv) former guerrilla members who were prominent in the operational-military arena.

Given the diversity of these groups, we collected information using in-depth interviews and focus groups. Groups (i) and (ii) were invited to join individual in-depth interviews and focus groups, while (iii) and (iv) were invited to participate in focus groups. A total of three focus groups and eight in-depth interviews occurred in June 2022. Focus groups took place in three municipalities: one in Chalatenango and two in Morazan. These municipalities were selected based on the intensity of guerrilla presence during the Civil War.[49]

E.B Instruments

Three instruments were developed: (i) for in-depth interviews (with religious or community leaders and political-military leaders), (ii) for focus groups of citizens who lived in former guerrilla areas, and (iii) for interviews with former guerrillas.

All three instruments included two components. First, there were questions related to the economic and social dynamics of guerrilla-controlled areas before and during the war: for example, questions about the main local economic activity before the arrival of the specific guerrilla group in charge of the area or about the form of government in place during the conflict. Second, there were questions concerning participants' perceptions of changes in social and economic factors af-

[49] Since Morazán was a crucial department for the FMLN during the Civil War, two focus groups were conducted there.

ter the war's end: for example, whether they perceived that the presence of guerrillas affected social and community ties in the area to the present day.

Instruments (i) and (ii) also included questions related to characterizing the geographic space controlled by the guerrillas. For example, the instruments asked whether and how the borders of the controlled territories changed during the conflict, when these borders became more stable, or the reasons why guerrillas chose these areas.

E.C Approach

For the qualitative study, interviewers used a narrative technique that employed a semi-structured approach of open-ended questions to permit more variation in responses. These interviews and focus groups create a natural in-depth discussion that yields specific details on the different components included in the instruments.

Interviews lasted 60 to 70 minutes, and focus group discussions lasted up to one hour. A local consultant with expertise in qualitative research and knowledge of the guerrilla movement conducted the interviews. She was responsible for recruiting participants who met the eligibility criteria, obtaining their informed consent, conducting the interviews, and producing their transcripts. Special care was taken to preserve participant anonymity and freedom to consent. Indeed, the strategy for maintaining trust and safety was to be extremely clear to all participants that the purpose of the survey was purely academic. Only audio of the conversations was recorded; no photos or videos were allowed.

E.D Main results

The main messages of the qualitative analysis are summarized below.

Establishment of self-governance institutions to promote social capital

Our interviews with FMLN commanders show that consolidating self-governance institutions in controlled areas was a key strategy. From 1982 onwards, the state—in terms of its traditional institutional framework—disappeared. For example, municipal authorities ceased to function; local judges stopped providing their services, etc. In the words of one FMLN military commander: *"Mayors, judges, security posts, everything disappears, (...), practically the state disappears, and the state was us [the FMLN]."* (Joaquín Villalobos, FMLN Military Commander, interview conducted on March 23, 2022). As a substitute for power, popular power emerged; that is, power determined by the people. When asked about FMLN-controlled areas, an influential religious leader who lived

in these areas said: *"the project of structural change in control areas was always present. (...). Starting in 1982–1983, these places become controlled territories, the institutions disappear, and the popular powers emerge (...)."* (Religious leader, interview conducted on March 25, 2022). In these new institutions, the key principle was the organization of local communities: *"the individual that lives in a controlled area has a clear consciousness that what prevails in these areas are values. (...) what was consolidated was an idea of social co-responsibility."* (Religious leader, interview conducted on March 25, 2022). This strategy was not a by-product of the elimination of state authorities but rather a deliberate plan to promote the autonomy of peasants from traditional government institutions. The change in military strategy—from a regular to an irregular war—that occurred around 1984 was linked to the conviction that civilians had the right to direct their own lives. Marisol Galindo, an FMLN commander, explained: the locals *"had a right to be on their own land, the right to harvest, to not be treated as armed population,(...), that is, we"* [the guerrillas] *"made a clear distinction between guerrilla members and civilian population. (...). We wanted to rescue organizational forms of what today we call the Civil Society (...)."* (Marisol Galindo, FMLN military commander, interview conducted January 28, 2022). When the state disappeared, peasants took charge of these informal institutions, like the 'poder de doble cara' (or double-faced power), which was the *"self-governance of civilians, to solve their own needs (...), and it had to be done in confrontation with the state."* (Joaquín Villalobos, FMLN Military Commander, interview conducted on March 23, 2022). This organization of citizens in the communities made it possible to guarantee social cohesion or the *"tejido social."*

Our interviews revealed powerful evidence of the enduring social capital these institutions generated. In several instances, individuals reflected upon the fact that, although these areas seem to be less developed, they are extremely secure. When the interviewer noted that the zones of former guerrilla presence don't have any gang presence, one of the former combatants said: *"Yes [they are the most secure], and where judges die of boredom."* She later added, *"I relate this to the level of organization that the community achieved. I am going to give you an example; in San José de las Flores there is a river and thermal waters, and there is a little hotel. If you go there and say you want to stay there for 10 days, they will ask you, who are you? Who sent you? Once a fugitive gangster (marero) came who believed he could stay. It is impossible. They investigate who sent you, your references."* (Lorena G., FMLN military commander, interviewed on January 28, 2022). The same point was made in other interviews, where an ex-combatant said *"the fact that the maras (gangs) are barely present in these areas reflects that the self-organization of the population worked."* (Joaquín Villalobos, FMLN Military Commander, interview conducted on March 23, 2022).

The organization of the communities was promoted by local leadership groups such as the Organization of the Comadres and the Sisters of the Assumption. One of the paradigmatic civil society organizations that developed and still exists today is the *Patronato para el Desarrollo de las Comunidades de Morazan y el Norte de San Miguel (PADECOMSM)*. This organization is based on a framework of participatory democracy and self-management with local, zonal, and regional councils that identify problems and devise solutions. The PADECOMSM emerged as a consequence of autonomous space that was granted to civilians in guerrilla-controlled areas.

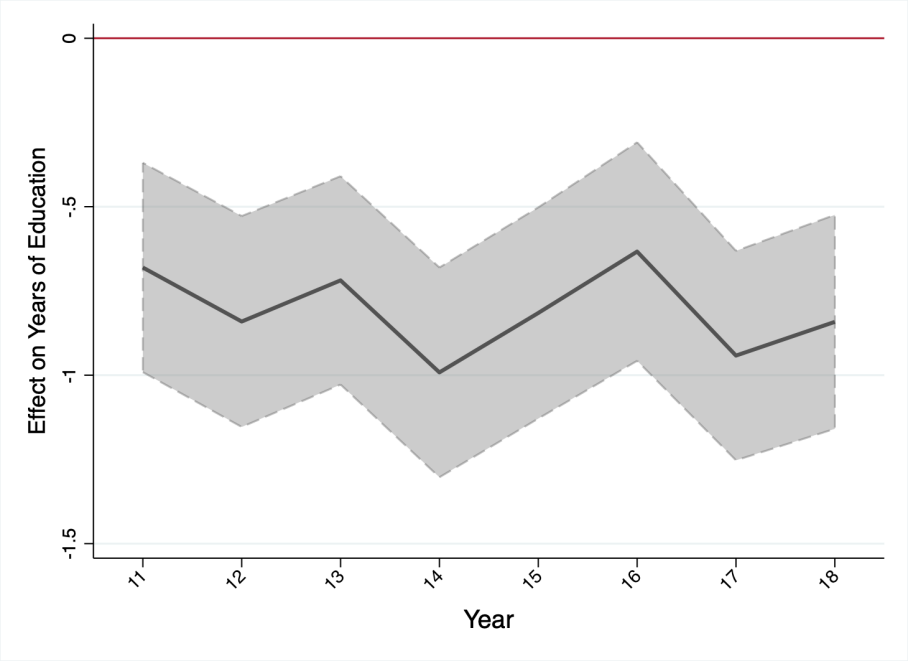
Migration decisions

Participants reported various reasons for not migrating from controlled areas. These interviews reflected a sense of rootedness in the communities and attachment to their limited economic resources. One guerrilla commander said: *"there were many families, that is why some schools for children emerge [in the controlled zones], because many of these families wanted to stay. (...) What the stories from those years reflect is that there was an important population that did not want to leave."* (Marisol Galindo, FMLN military commander, interview conducted January 28, 2022).

Stability of boundaries Ex-guerrilla leaders confirmed that the boundaries between controlled and non-controlled territories were stable after 1984–1985. A potential explanation is that around 1984, the guerrillas changed their military strategy. The regular war against the Salvadoran state had reached a stalemate, and the FMLN decided to switch to an irregular strategy, based on the control of liberated zones. Joaquín Villalobos, one of the most important FMLN military commanders, also mentioned that the state made a crucial mistake in underestimating their capacity and practically gave them territory: *"after they left us our territory, we moved to a superior level of organization and consolidation of power (...)."* (Joaquín Villalobos, FMLN Military Commander, interview conducted on March 23, 2022). All the military commanders we interviewed agreed that after 1984, the boundaries of the controlled areas were extremely stable. They also confirmed that the map we used to identify control areas was the map used and approved by all parties during the peace talks sponsored by the UN.

F Robustness Tests

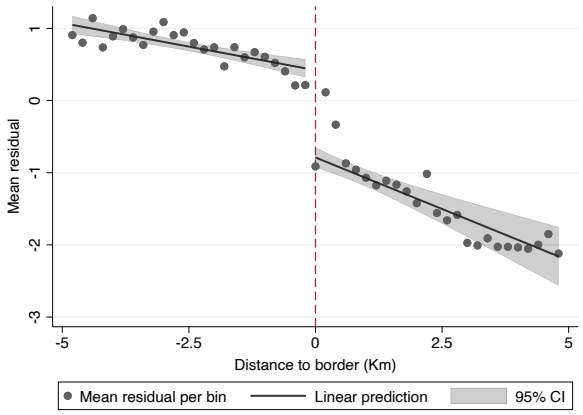
Figure F.1. Effects of Guerrilla Control on Years of Education Over Time



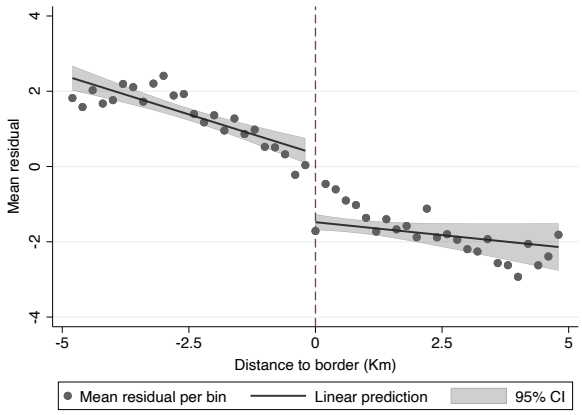
Notes: This figure shows the coefficients obtained from the estimation of equation 1 for each year between 2011 and 2018. Data come from El Salvador's Household Survey. The gray color illustrates 95% confidence intervals. The figure illustrates the coefficients of each yearly estimation from 2011 to 2018. Overall, the effect of guerrilla control on years of education is negative and stable over time.

Figure F.2. Effects of Guerrilla Control on Main Outcomes under a 5 Km. Bandwidth

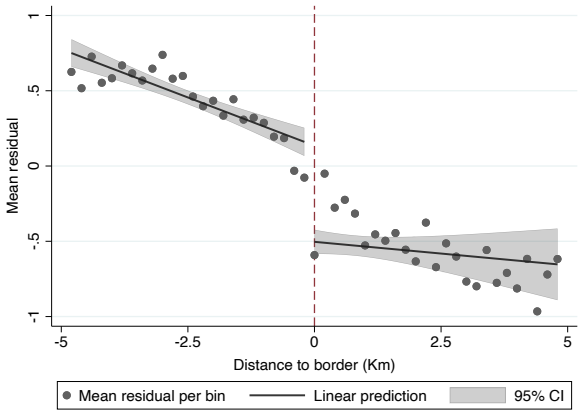
(a) Night Light Luminosity (2013)



(b) Years of Education (2007)



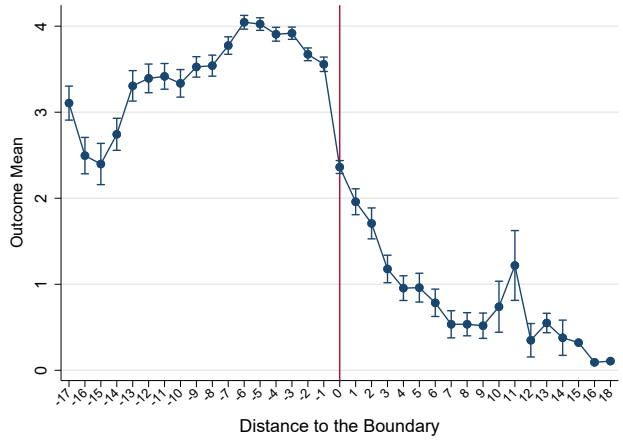
(c) Wealth Index (2007)



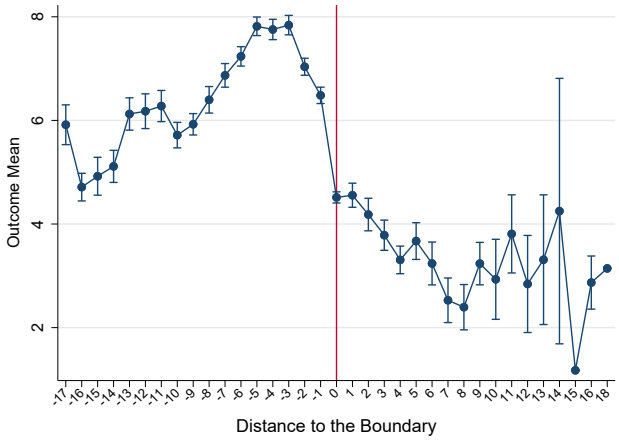
Notes: The results follow the specification of equation 1 using a 5km bandwidth. The estimates shown do not include fixed effects or controls for the running variable or the interaction between it and the treatment dummy. The gray color illustrates 95% confidence intervals. Data for night light luminosity comes from NOAA; education and wealth data come from the Population and Household Census of 2007.

Figure F.3. External Validity for Main Outcomes

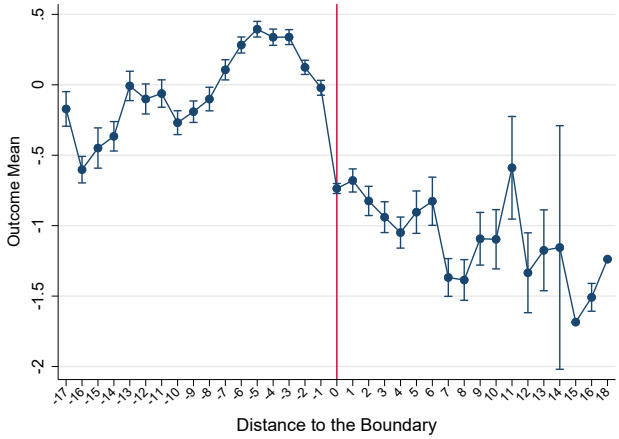
(a) Night Light Luminosity (2013)



(b) Years of Education (2007)

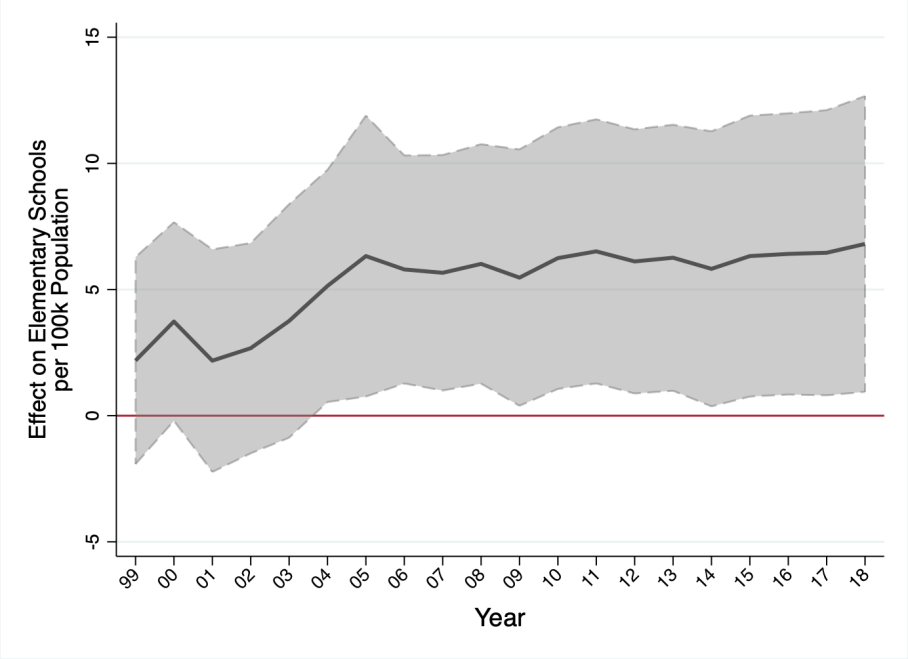


(c) Wealth Index (2007)



Notes: The figure shows the raw mean of each outcome by bin. Each bin corresponds to the distance to the boundary in kilometers, which ranges from 17 km outside the guerrilla-controlled boundary to 18 km within the boundary. Negative values signal being outside the boundary and positive values mean being inside the boundary. Data for night light luminosity comes from NOAA; education and wealth data come from the Population and Household Census of 2007.

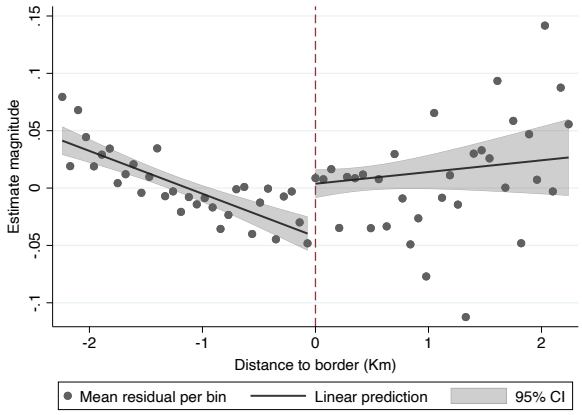
Figure F.4. Effects of Guerrilla Control on the Number of Schools per 100k Population Over Time



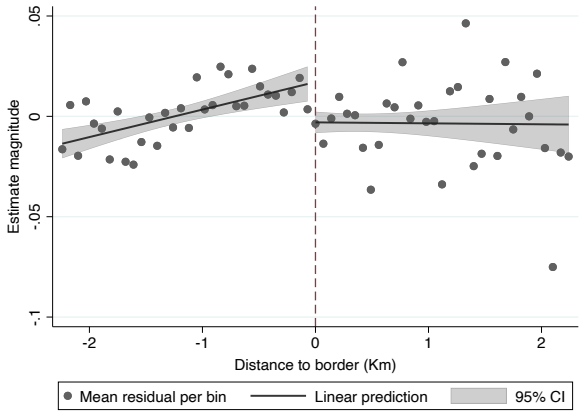
Notes: This figure shows the coefficients obtained from the estimation of equation 1 for each year between 1999 and 2018. Data come from the list of schools that took the national standardized test of student achievement between 1999 and 2018. The gray color illustrates 95% confidence intervals. The estimates shown include up to 400 break fixed effects. The figure illustrates the coefficients of each yearly estimation from 1999 to 2018. Overall, the effect of guerrilla control on the number of primary schools per capita is positive and stable over time.

Figure F.5. Plot of the Effect of Guerrilla Control on the Share of Workers by Economic Activity

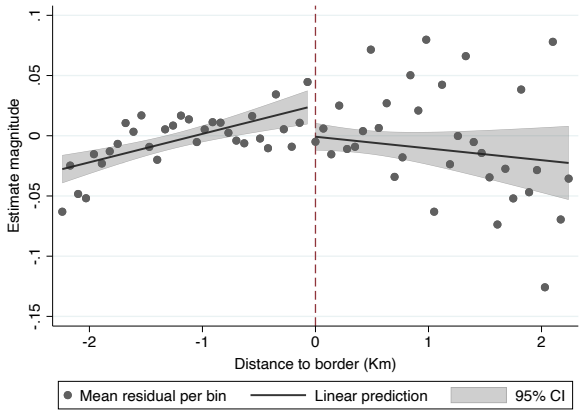
(a) Agriculture



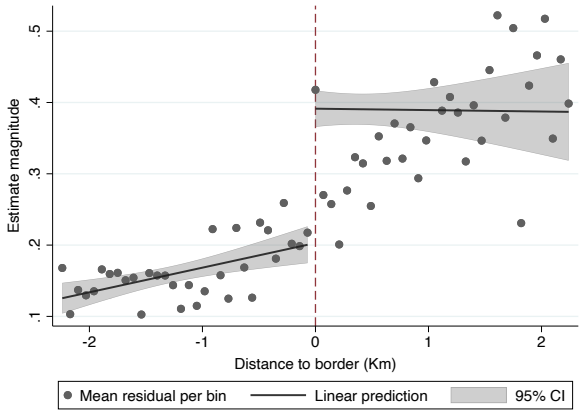
(b) Industry



(c) Services

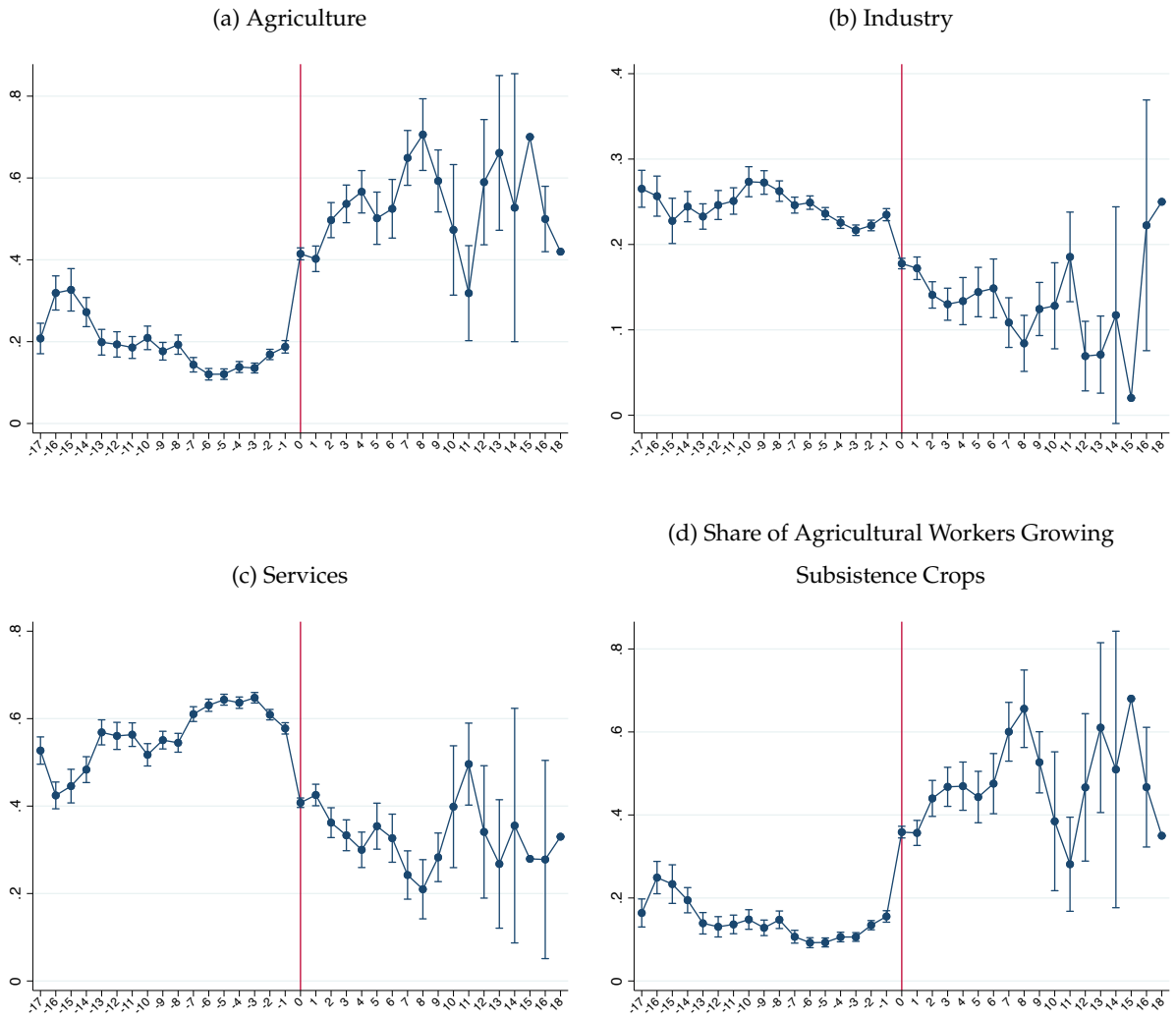


(d) Share of Agricultural Workers Growing Subsistence Crops



Notes: The results follow the specification of equation (1). The estimates shown include up to 400 break fixed effects. Data come from the Population and Household Census of 2007.

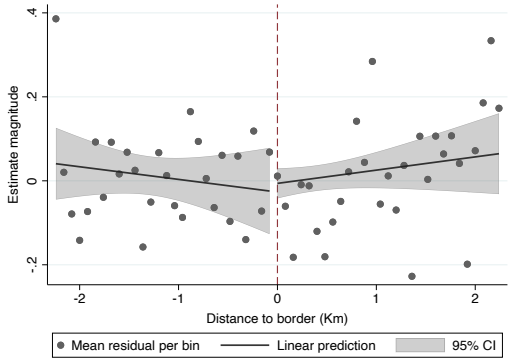
Figure F.6. Share of Workers by Economic Activity and Distance to the Boundary



Notes: The figure shows the raw mean of each outcome by bin. Each bin corresponds to the distance to the boundary in kilometers, which ranges from 17 km outside the guerrilla-controlled boundary to 18 km within the boundary. Negative values signal being outside the boundary and positive values mean being inside the boundary. Data come from the Population and Household Census of 2007.

Figure F.7. Plotting the Effects of Guerrilla Control on Homicide Rates

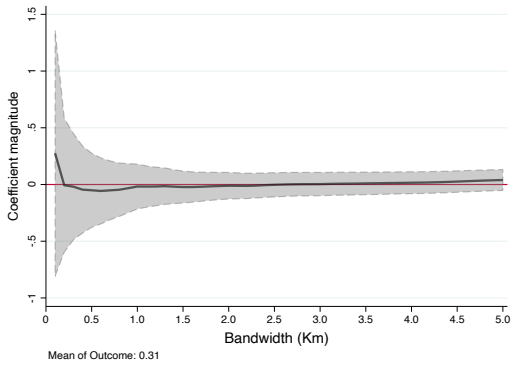
(a) Homicide Rate (2017)



Notes: This figure shows the results obtained from the estimation of equation (1). The estimates shown include up to 400 break fixed effects. There are no effects of guerrilla control on homicide rates in 2017. Data come from police reports.

Figure F.8. Effects of Guerrilla Control on Homicide Rates under Different Bandwidths

(a) Homicide Rate (2017)



Notes: This figure shows the results obtained from the estimation of equation (1). The figure illustrates the coefficients for 40 individual estimations, one for each of the different bandwidths around the discontinuity. The estimates shown include up to 400 break fixed effects. The gray color illustrates 95% confidence intervals. Data come from police reports.

Table F.1. Effects of Guerrilla Territorial Control on Night Light Luminosity, Human Capital, and Wealth Controlling for Altitude

	Night Light Luminosity	Years of Education	Wealth Index
	(2013)	(2007)	(2007)
	(1)	(2)	(3)
Guerrilla control	-0.182***	-0.264**	-0.113***
	(0.0244)	(0.110)	(0.0356)
Observations	3,652	3,637	3,630
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	3.536	6.573	-0.0160

Notes: The table presents the results of estimating equation 1 for the main outcomes. Column 1 shows the effect of whether a census tract was under guerrilla control on the arcsine of night light luminosity from NOAA. Column 2 shows as dependent variable years of education of the population older than 18 years. Column 3 uses the standardized score of household wealth as the dependent variable in the same estimation. The unit of observation in all columns is the census tract. Information from Columns 2 and 3 was obtained from the Population and Household Census of 2007. Controls not shown include altitude, a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with an indicator of whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates use triangular kernel weights. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.2. Effects of Guerrilla Territorial Control on Other Transformations of Night Light Luminosity and Literacy Rate

	Transformations of Night Light Luminosity (2013)			Literacy Rate
	Logarithm	Level (Raw)	Weighted by Pixel Area	(2007)
	(1)	(2)	(3)	(4)
Guerrilla control	-0.218***	-1.710***	-1.710***	-0.0212***
	(0.0294)	(0.339)	(0.339)	(0.00501)
Observations	3,652	3,652	3,652	3,637
Bandwidth (Km)	2.266	2.266	2.266	2.266
Dependent mean	2.810	30.725	30.725	0.810

Note: The table presents the results of equation 1 using different transformations of night light luminosity in Columns 1–3. Column 4 shows the results for the effect of guerrilla control on literacy rates. The unit of observation in all columns is the census tract. Data for night light luminosity comes from NOAA, while literacy rates come from the Population and Household Census of 2007. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. We use the algorithm of Calonico, Cattaneo and Titiunik (2014) to set the bandwidth and weight using a triangular kernel. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.3. Effects of Guerrilla Control on Years of Education by Age Cohort

	Years of Education (2007)	
	In School Age at War (1982-92)	Not In School Age at War (1982-92)
	(1)	(2)
Guerrilla control	-0.346***	-0.160
	(0.121)	(0.113)
Observations	3,635	3,635
Bandwidth (Km)	2.266	2.266
Dependent mean	7.859	4.412

Notes: The table presents the effects of guerrilla control on the years of education by age cohort. Column 1 estimates the effect for the sample of people who were school age during the war period. Column 2 does the same but uses the sample of people who were not school age during this period. Data come from the Population and Household Census of 2007. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. We use the algorithm of Calonico, Cattaneo and Titiunik (2014) to set the bandwidth and weight using a triangular kernel. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.4. Effects of Guerrilla Control on Years of Education

	Years of Education	
	Household Survey (2011-2018)	Our Survey (2022)
	(1)	(2)
Guerrilla control	-0.830***	-1.144***
	(0.0566)	(0.319)
Observations	216,035	4,781
Bandwidth (Km)	2.266	2.266
Dependent mean	10.20	8.085

Note: The table presents the results of equation 1 for education related outcomes. In Column 1, the outcome is the same, but the source is the Salvadoran Household Survey for the years between 2011 and 2018. In Column 2, the outcome is years of education and comes from our survey. The unit of observation is an individual. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory and its interaction with whether the tract was under guerrilla control or not. As for our main outcomes, we use a bandwidth of 2.266 km and the estimates use triangular kernel weights. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.5. Heterogeneous Effects of Guerrilla Control on Years of Education by Age Cohort

	Years of Education (1)	Years of Education (2)	Years of Education (3)
Guerrilla control	-1.121***	-1.169***	-1.060***
	(0.327)	(0.331)	(0.337)
Guerrilla control×Young	-0.183	-0.0252	-0.330
	(0.452)	(0.404)	(0.361)
Observations	4,730	4,730	4,730
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	8.109	8.109	8.109

Note: The table presents the results of equation 1 for a variable indicating the respondents' years of education. The unit of observation is a household head. The young variable indicates whenever an individual was below a certain age by the time the guerrillas relinquished territorial control. Each column uses a different threshold. In Column 1, young individuals are those who were at most 6 years old in 1992. In Columns 2 and 3, the threshold ages are 8 and 12, respectively. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, a dummy for being in the young cohort, and the social desirability index. As for our main outcomes, we use a bandwidth of 2.266 km and the estimates use triangular kernel weights. Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.6. Effects of Guerrilla Territorial Control on Main Outcomes Using Conley Standard Errors

Panel A: Conley Standard Errors (0.5 Km)			
	Night Light Luminosity	Years of Education	Wealth Index
	(2013)	(2007)	(2007)
	(1)	(2)	(3)
Guerrilla control	-0.186***	-0.279***	-0.121***
	(0.0242)	(0.103)	(0.0343)
Observations	3,652	3,637	3,630
Panel B: Conley Standard Errors (2 Km)			
Guerrilla control	-0.186***	-0.279**	-0.121**
	(0.0278)	(0.129)	(0.0482)
Observations	3,652	3,637	3,630
Panel C: Conley Standard Errors (4 Km)			
Guerrilla control	-0.186***	-0.279**	-0.121**
	(0.0344)	(0.142)	(0.0566)
Observations	3,652	3,637	3,630
Bandwidth (Km)	2.266	2.266	2.266

Note: The table presents the results of equation 1 using Conley standard errors. The unit of observation in all columns is the census tract. Data for night light luminosity come from NOAA, while wealth and education data, from the Population and Household Census of 2007. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. We use the algorithm of Calonico, Cattaneo and Titiunik (2014) to set the bandwidth and weight using a triangular kernel. Conley standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.7. Effects of Guerrilla Territorial Control on Main Outcomes Using a 5 Km bandwidth and Different donut Hole Sizes.

Panel A: Night Light Luminosity (2013)					
Guerrilla control	-0.215***	-0.240***	-0.262***	-0.288***	-0.326***
	(0.0212)	(0.0232)	(0.0256)	(0.0280)	(0.0295)
Observations	6,517	6,345	6,172	6,005	5,831
Dependent mean	3.738	3.738	3.735	3.731	3.726
Panel B: Years of Education (2007)					
Guerrilla control	-0.340***	-0.312***	-0.238***	-0.214**	-0.174**
	(0.0783)	(0.0798)	(0.0823)	(0.0842)	(0.0881)
Observations	6,491	6,321	6,148	5,981	5,807
Dependent mean	7.210	7.208	7.203	7.201	7.201
Panel C: Wealth Index (2007)					
Guerrilla control	-0.168***	-0.175***	-0.165***	-0.144***	-0.124***
	(0.0276)	(0.0291)	(0.0305)	(0.0316)	(0.0328)
Observations	6,481	6,311	6,140	5,973	5,799
Dependent mean	0.171	0.171	0.168	0.167	0.166
Bandwidth (Km)	5	5	5	5	5
donut Hole (Km)	0	0.150	0.300	0.450	0.600

The table presents results for the main outcomes but under different specifications that help discard the hypothesis that effects were driven by conflict. In particular, we show results using a larger bandwidth of 5km and a donut-hole methodology with a hole sizes that vary from 0 to 600 m. The unit of observation in all columns is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.8. Effects of Guerrilla Territorial Control on Main Outcomes Using a 9 Km bandwidth and Different donut Hole Sizes.

Panel A: Night Light Luminosity (2013)					
Guerrilla control	-0.273***	-0.344***	-0.380***	-0.417***	-0.504***
	(0.0220)	(0.0290)	(0.0379)	(0.0492)	(0.0628)
Observations	8,742	8,178	7,569	6,903	6,163
Dependent mean	3.782	3.776	3.769	3.771	3.770
Panel B: Years of Education (2007)					
Guerrilla control	-0.662***	-0.555***	-0.407***	-0.476***	-0.601***
	(0.0699)	(0.0797)	(0.0919)	(0.110)	(0.142)
Observations	8,715	8,153	7,549	6,886	6,147
Dependent mean	7.166	7.159	7.167	7.192	7.197
Panel C: Wealth Index (2007)					
Guerrilla control	-0.255***	-0.234***	-0.163***	-0.163***	-0.194***
	(0.0250)	(0.0295)	(0.0333)	(0.0407)	(0.0516)
Observations	8,703	8,143	7,539	6,876	6,137
Dependent mean	0.175	0.172	0.172	0.176	0.178
Bandwidth (Km)	9	9	9	9	9
Donut Hole (Km)	0	0.500	1	1.500	2.000

The table presents results for the main outcomes but under different specifications that help discard the hypothesis that effects were driven by conflict. In particular, we show results using a larger bandwidth of 9km and a donut-hole methodology with a hole sizes that vary from 0 to 2000 m. The unit of observation in all columns is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.9. Effects of Guerrilla Territorial Control on Main Outcomes Using a 17.95 Km bandwidth and Different donut Hole Sizes.

Panel A: Night Light Luminosity (2013)					
Guerrilla control	-0.391***	-0.494***	-0.646***	-0.818***	-0.920***
	(0.0244)	(0.0407)	(0.0646)	(0.0940)	(0.140)
Observations	10,496	9,323	7,917	6,585	5,430
Dependent mean	3.659	3.644	3.628	3.617	3.571
Panel B: Years of Education (2007)					
Guerrilla control	-0.952***	-0.698***	-0.890***	-1.278***	-1.126***
	(0.0651)	(0.0890)	(0.138)	(0.165)	(0.226)
Observations	10,468	9,302	7,900	6,567	5,420
Dependent mean	6.883	6.872	6.855	6.811	6.627
Panel C: Wealth Index (2007)					
Guerrilla control	-0.363***	-0.280***	-0.330***	-0.460***	-0.455***
	(0.0237)	(0.0325)	(0.0495)	(0.0653)	(0.110)
Observations	10,456	9,292	7,890	6,561	5,418
Dependent mean	0.0960	0.0900	0.0830	0.0740	0.0320
Bandwidth (Km)	17.95	17.95	17.95	17.95	17.95
donut Hole (Km)	0.000	1.000	2.000	3.000	4.000

The table presents results for the main outcomes but under different specifications that help discard the hypothesis that effects were driven by conflict. In particular, we show results using a larger bandwidth of 17.95 km and a donut-hole methodology with a hole sizes that vary from 0 to 4000 m. The unit of observation in all columns is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.10. Robustness Analysis for the Night Light Luminosity Outcome

	Night Light Luminosity (2013)											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A: Polynomial of order zero												
Guerrilla control	-0.153***	-0.160***	-0.153***	-0.147***	-0.346***	-0.153***	-0.153***	-0.160***	-0.153***	-0.147***	-0.346***	-0.153***
	(0.0278)	(0.0278)	(0.0277)	(0.0295)	(0.0220)	(0.0278)	(0.0278)	(0.0278)	(0.0277)	(0.0295)	(0.0220)	(0.0278)
Observations	1,494	1,344	1,443	1,406	4,946	1,442	1,494	1,344	1,443	1,406	4,946	1,442
Bandwidth type	mserd	mserd	mserd	msetwo	msetwo	msetwo	cerrd	cerrd	cerrd	certwo	certwo	certwo
Kernel	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov
Bandwidth (Km)	0.588	0.441	0.538	0.510	3.388	0.535	0.588	0.441	0.538	0.510	3.388	0.535
Dependent mean	3.247	3.201	3.205	3.183	3.666	3.200	3.247	3.201	3.205	3.183	3.666	3.200
Panel B: Polynomial of first order												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Guerrilla control	-0.186***	-0.215***	-0.198***	-0.201***	-0.232***	-0.211***	-0.142***	-0.153***	-0.147***	-0.159***	-0.188***	-0.165***
	(0.0247)	(0.0252)	(0.0248)	(0.0233)	(0.0238)	(0.0237)	(0.0298)	(0.0298)	(0.0295)	(0.0273)	(0.0272)	(0.0275)
Observations	3,652	3,373	3,619	4,221	4,019	4,092	2,542	2,342	2,514	2,953	2,808	2,851
Bandwidth type	mserd	mserd	mserd	msetwo	msetwo	msetwo	cerrd	cerrd	cerrd	certwo	certwo	certwo
Kernel	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov
Bandwidth (Km)	2.266	2.040	2.235	2.750	2.571	2.630	1.414	1.273	1.395	1.717	1.605	1.641
Dependent mean	3.536	3.517	3.537	3.594	3.568	3.578	3.453	3.440	3.452	3.506	3.497	3.498
Panel C: Polynomial of second order												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Guerrilla control	-0.205***	-0.252***	-0.220***	-0.231***	-0.239***	-0.235***	-0.140***	-0.147***	-0.146***	-0.225***	-0.234***	-0.235***
	(0.0274)	(0.0286)	(0.0277)	(0.0243)	(0.0269)	(0.0252)	(0.0336)	(0.0338)	(0.0334)	(0.0257)	(0.0282)	(0.0263)
Observations	4,851	4,834	4,842	8,244	7,595	8,096	3,232	3,212	3,220	5,962	5,282	5,824
Bandwidth type	mserd	mserd	mserd	msetwo	msetwo	msetwo	cerrd	cerrd	cerrd	certwo	certwo	certwo
Kernel	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov
Bandwidth (Km)	3.303	3.284	3.292	7.583	6.353	7.296	1.927	1.916	1.921	4.424	3.707	4.257
Dependent mean	3.665	3.663	3.664	3.802	3.800	3.807	3.496	3.497	3.498	3.712	3.681	3.706

Note: The table presents the robustness of the effects of guerrilla control on night light intensity using different polynomial orders. Data come from NOAA. Panel A shows results for a constant polynomial. Panels B and C present the results using a first- and second-order polynomial, respectively. Estimations across columns show different bandwidth and kernel types and different bandwidth size. Robust standard errors in parentheses. "mserd" and "msetwo" specify one and two common MSE-optimal bandwidth selectors for the RD treatment effect estimator, respectively. "cerrd" and "certwo" indicate one or two common CER-optimal bandwidth selectors for the RD treatment effect estimator, respectively. The kernel row indicates the type of kernel used: triangular, uniform, or epanechnikov. Differences in the number of observations are due to the selection of different bandwidths across specifications. *** p<0.01, ** p<0.05, * p<0.1.

Table F.11. Robustness Analysis for the Years of Education Outcome

	Years of Education (2007)											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A: Polynomial of order zero												
Guerrilla control	-0.648***	-0.658***	-0.650***	-0.654***	-0.637***	-0.592***	-0.648***	-0.658***	-0.650***	-0.654***	-0.637***	-0.592***
	(0.154)	(0.170)	(0.157)	(0.172)	(0.140)	(0.111)	(0.154)	(0.170)	(0.157)	(0.172)	(0.140)	(0.111)
Observations	1,348	1,154	1,289	1,249	1,289	1,669	1,348	1,154	1,289	1,249	1,289	1,669
Bandwidth type	mserd	mserd	mserd	msetwo	msetwo	msetwo	cerrd	cerrd	cerrd	certwo	certwo	certwo
Kernel	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov
Bandwidth (Km)	0.458	0.298	0.409	0.378	0.409	0.746	0.458	0.298	0.409	0.378	0.409	0.746
Dependent mean	5.761	5.849	5.834	5.843	5.834	5.867	5.761	5.849	5.834	5.843	5.834	5.867
Panel B: Polynomial of first order												
Guerrilla control	-0.280**	-0.197	-0.230**	-0.277**	-0.145	-0.236**	-0.441***	-0.331**	-0.409***	-0.433***	-0.361**	-0.422***
	(0.117)	(0.121)	(0.114)	(0.115)	(0.119)	(0.117)	(0.157)	(0.167)	(0.154)	(0.155)	(0.164)	(0.159)
Observations	3,308	2,755	3,238	3,369	2,808	3,140	2,297	1,950	2,247	2,336	1,987	2,188
Bandwidth type	mserd	mserd	mserd	msetwo	msetwo	msetwo	cerrd	cerrd	cerrd	certwo	certwo	certwo
Kernel	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov
Bandwidth (Km)	2.001	1.572	1.942	2.051	1.615	1.868	1.249	0.981	1.212	1.280	1.008	1.166
Dependent mean	6.510	6.358	6.477	6.514	6.399	6.463	6.168	6.015	6.143	6.192	6.030	6.135
Panel C: Polynomial of second order												
Guerrilla control	-0.283**	-0.260*	-0.229*	-0.281***	-0.305***	-0.290***	-0.484**	-0.374**	-0.466**	-0.328**	-0.263**	-0.285**
	(0.139)	(0.133)	(0.139)	(0.102)	(0.108)	(0.103)	(0.188)	(0.178)	(0.189)	(0.129)	(0.134)	(0.130)
Observations	4,441	4,357	4,296	7,167	6,274	6,902	2,951	2,892	2,852	4,934	4,265	4,731
Bandwidth type	mserd	mserd	mserd	msetwo	msetwo	msetwo	cerrd	cerrd	cerrd	certwo	certwo	certwo
Kernel	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov
Bandwidth (Km)	2.956	2.884	2.834	5.815	4.796	5.488	1.725	1.683	1.654	3.394	2.799	3.202
Dependent mean	6.828	6.791	6.776	7.270	7.178	7.269	6.425	6.402	6.398	6.984	6.767	6.949

Note: The table presents the robustness of the effects of guerrilla control on the number of years of education using different polynomial orders. Data come from the Population and Household Census of 2007. Panel A shows results for a constant polynomial. Panels B and C present the results using a first- and second-order polynomial, respectively. "mserd" and "msetwo" specify one and two common MSE-optimal bandwidth selectors for the RD treatment effect estimator, respectively. "cerrd" and "certwo" indicate one or two common CER-optimal bandwidth selectors for the RD treatment effect estimator, respectively. The kernel row indicates the type of kernel used: triangular, uniform, or epanechnikov. Estimations across columns show different bandwidth and kernel types and different bandwidth size. Robust standard errors in parentheses. Differences in the number of observations are due to the selection of different bandwidths across specifications. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.12. Robustness Analysis for the Wealth Index Outcome

	Wealth Index (2007)											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A: Polynomial of order zero												
Guerrilla control	-0.213***	-0.220***	-0.208***	-0.211***	-0.210***	-0.208***	-0.213***	-0.220***	-0.208***	-0.211***	-0.210***	-0.208***
	(0.0506)	(0.0552)	(0.0503)	(0.0517)	(0.0486)	(0.0507)	(0.0506)	(0.0552)	(0.0503)	(0.0517)	(0.0486)	(0.0507)
Observations	1,258	1,124	1,221	1,240	1,173	1,216	1,258	1,124	1,221	1,240	1,173	1,216
Bandwidth type	mserd	mserd	mserd	msetwo	msetwo	msetwo	cerrd	cerrd	cerrd	certwo	certwo	certwo
Kernel	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov
Bandwidth (Km)	0.391	0.274	0.358	0.374	0.315	0.354	0.391	0.274	0.358	0.374	0.315	0.354
Dependent mean	-0.327	-0.317	-0.331	-0.326	-0.361	-0.332	-0.327	-0.317	-0.331	-0.326	-0.361	-0.332
Panel B: Polynomial of first order												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Guerrilla control	-0.120***	-0.100***	-0.109***	-0.118***	-0.103***	-0.107***	-0.144***	-0.118**	-0.133***	-0.137***	-0.111**	-0.127***
	(0.0397)	(0.0367)	(0.0392)	(0.0374)	(0.0365)	(0.0374)	(0.0504)	(0.0461)	(0.0498)	(0.0471)	(0.0457)	(0.0471)
Observations	2,987	3,066	2,933	3,298	3,104	3,179	2,088	2,125	2,057	2,289	2,164	2,204
Bandwidth type	mserd	mserd	mserd	msetwo	msetwo	msetwo	cerrd	cerrd	cerrd	certwo	certwo	certwo
Kernel	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov
Bandwidth (Km)	1.756	1.809	1.718	2	1.846	1.901	1.096	1.129	1.072	1.248	1.152	1.186
Dependent mean	-0.0530	-0.0510	-0.0570	-0.0350	-0.0500	-0.0470	-0.168	-0.169	-0.176	-0.136	-0.153	-0.145
Panel C: Polynomial of second order												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Guerrilla control	-0.104**	-0.107**	-0.101**	-0.140***	-0.136***	-0.142***	-0.139**	-0.128**	-0.126**	-0.125***	-0.145***	-0.120***
	(0.0436)	(0.0428)	(0.0424)	(0.0337)	(0.0340)	(0.0339)	(0.0561)	(0.0542)	(0.0540)	(0.0404)	(0.0403)	(0.0406)
Observations	4,308	4,218	4,460	7,227	6,909	7,052	2,861	2,801	2,959	5,001	4,740	4,841
Bandwidth type	mserd	mserd	mserd	msetwo	msetwo	msetwo	cerrd	cerrd	cerrd	certwo	certwo	certwo
Kernel	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov	triangular	uniform	epanechnikov
Bandwidth (Km)	2.852	2.768	2.978	5.915	5.514	5.685	1.664	1.615	1.738	3.452	3.218	3.318
Dependent mean	0.0460	0.0360	0.0580	0.201	0.194	0.197	-0.0690	-0.0670	-0.0590	0.104	0.0920	0.0950

Note: The table presents the robustness of the effects of guerrilla control on the wealth index using different polynomial orders. Data come from the Population and Household Census of 2007. Panel A shows results for a constant polynomial. Panels B and C present the results using a first- and second-order polynomial, respectively. Estimations across columns show different bandwidth and kernel types and different bandwidth size. "mserd" and "msetwo" specify one and two common MSE-optimal bandwidth selectors for the RD treatment effect estimator, respectively. "cerrd" and "certwo" indicate one or two common CER-optimal bandwidth selectors for the RD treatment effect estimator, respectively. The kernel row indicates the type of kernel used: triangular, uniform, or epanechnikov. Robust standard errors in parentheses. Differences in the number of observations are due to the selection of different bandwidths across specifications. *** p<0.01, ** p<0.05, * p<0.1.

Table F.13. Effects of Guerrilla Territorial Control on Main Outcomes Latitude-Longitude Specification

	Night Light Luminosity	Years of Education	Wealth Index
	(2013)	(2007)	(2007)
	(1)	(2)	(3)
Guerrilla control	-0.255***	-0.755***	-0.322***
	(0.0191)	(0.0694)	(0.0259)
Observations	3,652	3,637	3,630
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	3.536	6.573	-0.016

Note: The table presents the results of equation 1 via Ordinary Least Squares using a latitude-longitude specification. Data for night light luminosity come from NOAA; wealth and education data come from the Population and Household Census of 2007. The unit of observation in all columns is the census tract. Controls not shown include the latitude and longitude coordinates of each census tract's centroid, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.14. Effects of Guerrilla Territorial Control on Main Outcomes Using Ordinary Least Squares

	Night Light Luminosity	Years of Education	Wealth Index
	(2013)	(2007)	(2007)
	(1)	(2)	(3)
Guerrilla control	-0.477***	-1.100***	-0.471***
	(0.0257)	(0.0607)	(0.0221)
Observations	12,411	12,384	12,370
Dependent mean	3.457	6.505	-0.0310

Note: The table presents the results of equation 1 via Ordinary Least Squares using the whole sample. Data for night light luminosity come from NOAA; wealth and education data come from the Population and Household Census of 2007. The unit of observation in all columns is the census tract. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.15. Effects of Guerrilla Territorial Control on Night Light Luminosity, Human Capital, and Wealth. Controls for the Share of the Tract that is Within the Guerrilla-Controlled Zones.

	Night Light Luminosity	Years of Education	Wealth Index
	(2013)	(2007)	(2007)
	(1)	(2)	(3)
Guerrilla control	-0.125***	-0.336***	-0.146***
	(0.0253)	(0.122)	(0.0393)
Observations	3,652	3,637	3,630
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	3.536	6.573	-0.016

Notes: The table presents the results of estimating equation 1 for the main outcomes. Column 1 shows the effect of whether a census tract was under guerrilla control on the arcsine of night light luminosity from NOAA. Column 2 shows as dependent variable years of education of the population older than 18 years. Column 3 uses the standardized score of household wealth as the dependent variable in the same estimation. The unit of observation in all columns is the census tract. Information from Columns 2 and 3 was obtained from the Population and Household Census of 2007. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with an indicator of whether the tract was under guerrilla control or not, the share of the census tract that is contained within the guerrilla-controlled territory, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates use triangular kernel weights. Robust standard errors are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.16. Placebo Test for All Pairs of Neighbors Whose Difference in Altitude is between the Following Thresholds

	Altitude difference between 15 and 20 masl			*Altitude difference between 20 and 100 masl*		
	Altitude	Night Light Luminosity (2013)		Altitude	Night Light Luminosity (2013)	
	Any neighbor pair	Any neighbor pair	Both neighbors outside guerrilla area	Any neighbor pair	Any neighbor pair	Both neighbors outside guerrilla area
	(1)	(2)	(3)	(4)	(5)	(6)
Difference	17.83***	0.0206***	0.0239***	47.71***	-0.0114***	-0.0172***
	(0.0322)	(0.00521)	(0.00525)	(0.201)	(0.00384)	(0.00430)
Neighbor pairs	2,914	2,914	2,515	11,811	11,811	8,742
		Years of Education (2007)			*Years of Education (2007)*	
		(11)	(12)		(13)	(14)
Difference	-	0.0818***	0.0964***	-	-0.0540***	-0.0513***
	-	(0.0307)	(0.0336)	-	(0.0144)	(0.0172)
Neighbor pairs	-	2,911	2,513	-	11,758	8,734
		Wealth Index (2007)			*Wealth Index (2007)*	
		(7)	(8)		(9)	(10)
Difference	-	0.0149	0.0202**	-	-0.0456***	-0.0468***
	-	(0.00921)	(0.00980)	-	(0.00501)	(0.00583)
Neighbor pairs	-	2,910	2,513	-	11,729	8,733

Note: The table presents the placebo test results. Data for night light luminosity comes from NOAA; wealth and education data come from the Population and Household Census of 2007. The unit of observation in Columns 1–3 is the pair of neighboring census tracts conditional on having a difference in altitude between 15 and 20 masl. The unit of observation in Columns 4 and 5 is the pair of neighboring census tracts conditional on having a difference in altitude between 20 and 100 masl. Columns 1, 2, 4, and 5 show the mean difference for all neighbor pairs in the sample. Columns 3 and 6 do the same for pairs in which both neighboring tracts are outside the guerrilla-controlled area. Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.17. Main Results Restricting the Sample to Tracts without Sudden Altitude Changes with Respect to Their Neighbors

	Night Light Luminosity	Years of Education	Wealth Index
	(2013)	(2007)	(2007)
	(1)	(2)	(3)
Guerrilla control	-0.146***	-0.309**	-0.120***
	(0.0240)	(0.137)	(0.0439)
Observations	2,572	2,562	2,561
Bandwidth (Km)	2.103	2.103	2.103
Dependent mean	3.743	6.924	0.118

Note: The table presents main results without considering segments that have a difference in altitude of more than 100 masl with respect to their neighbors. Column 1 shows the effect of whether a census tract was under guerrilla control on the arcsine of night light luminosity from NOAA. Column 2 shows as dependent variable years of education of the population older than 18 years. The unit of observation in all columns is the census tract. Column 3 does the same but uses as dependent variable a standardized score of household wealth. Information from Columns 2 and 3 was obtained from the Population and Household Census of 2007. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates use triangular kernel weights. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.18. Effects of Guerrilla Territorial Control on Main Outcomes for Individuals Who Have Always Lived in the Same Place

	Years of Education	Literacy Rate	Wealth Index
	(2007)	(2007)	(2007)
	(1)	(2)	(3)
Guerrilla control	-0.402***	-0.0261***	-0.132***
	(0.112)	(0.00563)	(0.0356)
Observations	3,633	3,633	3,621
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	6.785	0.817	-0.0280

Note: The table presents main results for the sample of people who have always lived in the same place. The unit of observation in all columns is the census tract. Data come from the Population and Household Census of 2007. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.19. Effect on Years of Education– RD-Differences-in-Differences Estimation

	Years of Education
	(2007)
	(1)
Guerrilla control	-0.0349
	(0.144)
Guerrilla control× School age at war	-0.457***
	(0.0421)
Observations	7,332
Bandwidth (Km)	2.266
Dependent mean	6.132

Notes: The table presents the results of estimating equation 1 for years of education including a second difference based on birth-cohort. We separate individuals who were of school age during the war, between 1982–1992, from those who were not. Then, we compute the average years of education for each group. Thus, each observation is a combination of a census tract and an age group. School-age in war is a dummy variable indicating that the information comes from the subsample of individuals who were of school age in wartime. Data comes from the 2007 census. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with an indicator of whether the tract was under guerrilla control or not, an indicator of school age during the war, census tract fixed effects, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates use triangular kernel weights. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.20. Comparison of Baseline Characteristics Between Census Tracts In and Outside the RD-Sample

	In RD-Sample		Out of RD-Sample	
Baseline Characteristics	Mean	Obs	Mean	Obs
Panel A: Baseline State Capacity (Before 1980)				
Had a Military Base (1980)	0.001	36,81	0.001	8,753
Distance to Military Base (1980)	12,807.32	3,681	11,296.12	8,753
State Administration (1980)	0.018	3,681	0.013	8,753
Distance to School (1980)	16.980	3,681	21.771	8,754
Had a Parish (1979)	0.011	3,681	0.011	8,754
Distance to Parish (1979)	4.309	3,681	4.055	8,754
Distance to Communications (1945)	1.199	3,681	1.257	8,754
Communications Density (1945)	0.328	3,681	0.334	8,754
Had a City or Village (1945)	0.128	3,681	0.073	8,754
Distance to City or Village (1945)	1.024	3,681	1.285	8,754
Panel B: Baseline Socioeconomic Characteristics (Before 1980)				
Roads and Railway (1980)	0.401	3,681	0.366	8,754
Total Population (1980)	158.233	3,667	161.574	8,735
Years of Education (1980)	3.493	3,666	4.227	8,737
In-migration Share (1980)	0.108	3,636	0.147	8,646
Out-migration Share (1980)	0.006	3,446	0.008	8,272
Panel C: Baseline Norms and Land Concentration (Before 1980)				
Part of Land Reform (1980)	0.081	3,681	0.112	8,754
Had a Ecclesial Base Community (1974)	0.002	3,681	0.003	8,759
Panel D: Violence (1980–1985)				
Number of War Events (1981)	0.037	3,681	0.018	8,754
Number of War Victims (1981)	0.155	3,681	0.056	8,754
Number of Incarcerations (1980–85)	0.013	3,681	0.103	8,754
Panel E: Geographic Characteristics and Crops' Suitability (Before 1980)				
Altitude (1980)	488.319	3,681	499.802	8,752
Slope (1980)	8.624	3,681	6.968	8,751
Ruggedness (1980)	12.381	3,681	10.300	8,751
Hydrography (1980)	0.320	3,681	0.266	8,754
Bean High Suitability (1961–90)	0.858	3,691	0.942	8,736
Coffee High Suitability (1961–90)	0.086	3,691	0.146	8,736
Maize High Suitability (1961–90)	0.980	3,691	0.983	8,736
Sugarcane High Suitability (1961–90)	0.108	3,691	0.194	8,736

Note: The table compares the mean and number of observations of outcomes in Table 1 between census tracts in the RD-sample and census tracts outside the sample. The information was gathered from diverse sources (See Appendix A for more details).

Table F.21. Effects of Guerrilla Territorial Control on Political Attitudes

	Total Sum of Questions per Item/Scope			
	Political Participation	Engagement with Politicians	Non-Democratic Engagement	Trust in Institutions
	(1)	(2)	(3)	(4)
Guerrilla control	1.449	-0.380**	0.804	-4.112***
	(1.098)	(0.184)	(1.922)	(1.403)
Observations	242	248	172	241
Bandwidth (Km)	2.266	2.266	2.266	2.266
Dependent mean	12.96	0.383	10.69	11.72

Note: The table presents the results of equation 1 for our outcomes related to political discontent and distrust. Column 1 shows the political participation scope, which includes questions that measure whether the citizen votes, attends protests, and attends government meetings. Column 2 reports the engagement with politicians' scope, which measures the extent to which citizens contact state authorities and/or bureaucracies to solve issues and attend government/political meetings. Column 3 shows the nondemocratic engagement scope, which measures the extent to which citizens approve the use of alternative or violent means to engage in politics. Column 4 reports the trust in institutions item, which measures the extent to which citizens trust different types of Salvadoran institutions, including the police, the powers of state, and local government. The table uses the simple sum of questions by each item as dependent variables. The unit of observation in all columns is the census tract. The information was obtained from the Latin American Public Opinion Project survey (LAPOP) between 2004 and 2016. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.22. Placebo Test for All Pairs of Neighbors Whose Difference in Wealth is between the Following Thresholds

	Wealth difference between 0 and 0.5 sd		*Wealth difference between 0.5 and 2 sd*	
	Political Participation		Political Participation	
	Any neighbor pair	Both neighbors outside	Any neighbor pair	Both neighbors outside
	(1)	(2)	(3)	(4)
Difference	0.0244	0.0294	0.0853	0.191
	(0.0650)	(0.0761)	(0.111)	(0.136)
Observations	266	199	74	56
	Engagement with Politicians		Engagement with Politicians	
	(5)	(6)	(7)	(8)
Difference	0.104*	0.104	0.0937	-0.000181
	(0.0589)	(0.0675)	(0.0942)	(0.0799)
Observations	277	206	75	56
	Non-Democratic Engagement		Non-Democratic Engagement	
	(9)	(10)	(11)	(12)
Difference	-0.0386	-0.0935	-0.142	-0.174
	(0.0976)	(0.124)	(0.154)	(0.203)
Observations	129	69	31	12
	Trust in Institutions		Trust in Institutions	
	(13)	(14)	(15)	(16)
Difference	0.0547	0.0767	-0.0125	-0.0668
	(0.0694)	(0.0763)	(0.0978)	(0.114)
Observations	299	236	78	62
	Distrust in Members of the Community (Share)		Distrust in Members of the Community (Share)	
	(17)	(18)	(19)	(20)
Difference	0.0169	0.0154	0.00583	0.000695
	(0.0124)	(0.0135)	(0.0210)	(0.0227)
Observations	873	774	242	215

Note: The table presents the placebo test results. The information was obtained from the Latin American Public Opinion Project survey (LAPOP) between 2004 and 2016. The unit of observation in Columns 1–2 is the pair of neighboring census tracts conditional on having a difference in wealth between 0 and 0.5 standard deviations. The unit of observation in Columns 4 and 5 is the pair of neighboring census tracts conditional on having a difference in wealth between 0.5 and 2 standard deviations. Columns 1 and 3 show the mean difference for all neighbor pairs in the sample. Columns 2 and 4 do the same for pairs in which both neighboring tracts are outside the guerrilla-controlled area. Robust standard errors are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.23. Placebo Test for All Pairs of Neighbors Whose Difference in Night Light Luminosity is Within Specific Thresholds

	Nightlight difference between 0 and 0.1 sd		*Nightlight difference between 0.1 and 1 sd*	
	Political Participation		Political Participation	
	Any neighbor pair	Both neighbors outside	Any neighbor pair	Both neighbors outside
	(1)	(2)	(3)	(4)
Difference	-0.0997	-0.0874	0.0685	0.269
	(0.0784)	(0.0845)	(0.123)	(0.243)
Neighbor pairs	191	167	88	33
	Engagement with Politicians		Engagement with Politicians	
	(5)	(6)	(7)	(8)
Difference	-0.0587	-0.0757	0.0268	-0.0486
	(0.0537)	(0.0546)	(0.142)	(0.288)
Neighbor pairs	195	170	96	37
	Non-Democratic Engagement		Non-Democratic Engagement	
	(9)	(10)	(11)	(12)
Difference	-0.0991	0.00835	-0.100	0.0142
	(0.116)	(0.104)	(0.132)	(0.279)
Neighbor pairs	67	47	80	26
	Trust in Institutions		Trust in Institutions	
	(13)	(14)	(15)	(16)
Difference	-0.0153	-0.00115	-0.205	-0.265
	(0.0725)	(0.0782)	(0.144)	(0.231)
Neighbor pairs	228	201	86	38
	Distrust in Members of the Community (Share)		Distrust in Members of the Community (Share)	
	(17)	(18)	(19)	(20)
Difference	-0.00121	0.00490	0.0199	0.00724
	(0.0150)	(0.0156)	(0.0178)	(0.0205)
Neighbor pairs	535	493	438	362

Note: The table presents the placebo test results. The information was obtained from the Latin American Public Opinion Project survey (LAPOP) between 2004 and 2016. The unit of observation in Columns 1–2 is the pair of neighboring census tracts conditional on having a difference in night lights between 0 and 0.1 standard deviations. The unit of observation in Columns 3 and 4 is the pair of neighboring census tracts conditional on having a difference in night lights between 0.1 and 1 standard deviation. Columns 1 and 3 show the mean difference for all neighbor pairs in the sample. Columns 2 and 4 do the same for pairs in which both neighboring tracts are outside the guerrilla-controlled area. Robust standard errors are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.24. Effects of Guerrilla Control on Supply of and Demand for Public Goods

Panel A: Supply of State Services and Public Goods					
	Public Investment (1995-2015)	Schools per 100k Population (2007)	Road Density (2014)	Hospitals per 100k Population (2015)	Public Buildings per 100k Population (2020)
	(1)	(2)	(3)	(4)	(5)
Guerrilla control	0.127**	27.76***	0.246*	-2.938	-6.131
	(0.0614)	(10.03)	(0.127)	(4.607)	(139.2)
Observations	1,068	3,637	3,652	3,637	3,265
Dependent mean	0.318	96.52	1.196	15.22	1934
Panel B: Demand for State Services					
	2007 - Share of Households that report using				
	Sewerage	Garbage	Water	Electricity	Daily Water Frequency
	(6)	(7)	(8)	(9)	(10)
Guerrilla control	-0.0255	-0.0523***	-0.0392**	-0.0290***	0.000710
	(0.0179)	(0.0184)	(0.0192)	(0.00858)	(0.0196)
Observations	3,637	3,637	3,637	3,637	3,582
Dependent mean	0.403	0.506	0.782	0.907	0.745
Bandwidth (Km)	3.082	2.266	2.266	2.266	2.266

Note: The table presents the results of estimating equation 1 for our outcomes related to public goods provision. Panel A presents results related to the supply-side provision of public goods and services. Panel B shows outcomes related to household access to public goods and services. The outcome in Column 1 is an indicator for whether the canton has received public investment for any social project (FISDL), mostly related to construction or infrastructure updates. Outcomes in Columns 2 and 3 are the number of schools per 100k inhabitants and the road density per census tract, measured as the length of all roads in the unit divided by their area. In Columns 4 and 5 the outcomes are the number of hospital and public buildings per 100k inhabitants, respectively. Columns 6–9 report the effect on the share of households with any of the marked services within each census tract. Column 10 shows whether the household receives water daily or not. The unit of observation in Column 1 is the canton, but for the rest of the columns, it is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects that represent the closest evenly spaced break in the guerrilla-controlled boundary. The estimates use triangular kernel weights. Robust standard errors are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.25. Effects of Guerrilla Territorial Control on Distance to Police Stations and Incarcerations

	Distance to Police Stations	Incarcerations (1992-1999)
	(1)	(2)
Guerrilla control	0.0198	0.0193
	(0.0614)	(0.0136)
Observations	3,652	3,652
Bandwidth (Km)	2.266	2.266
Dependent mean	1.850	0.0600

Notes: This table shows the effects of guerrilla control on the distance to the closest local police station (Column 1) and the number of incarcerations per segment between 1992 and 1999 (Column 2). Data from distance to police stations and data for incarcerations, comes from administrative records of the universe of incarcerated individuals in El Salvador. *** p<0.01, ** p<0.05, * p<0.1.

Table F.26. Quality of School Teachers

	Total Enrollment	Total Teachers	Certified Teachers	Certified Teachers with High School	Teachers with High School
	(1)	(2)	(3)	(4)	(5)
Guerrilla control	9.764	0.519	0.320	0.350	0.452
	(35.31)	(1.155)	(1.123)	(0.969)	(0.991)
Observations	1,522	1,522	1,522	1,522	1,522
Bandwidth (Km)	2.266	2.266	2.266	2.266	2.266
Dependent mean	386.7	13.42	12.78	11.51	11.88

Notes: This table shows the effects of guerrilla control on school size (Columns 1–2) and education quality measured using accreditation of teachers (Columns 3–5). Data were obtained from the 2013 teacher census provided by the Ministry of Education. "Total enrollment" and "Total teachers" refer to the total number of students and teachers at the school level, respectively. "Certified teachers" refers to teachers who have received formal accreditation in pedagogy from the Ministry of Education.*** p<0.01, ** p<0.05, * p<0.1.

Table F.27. Effects of Guerrilla Control on Occupational Choice

	Agriculture	Sales	Works in Own Household	Works as an Employee	Other
	(1)	(2)	(3)	(4)	(5)
Guerrilla control	0.141***	-0.0229	-0.0436**	-0.0477**	-0.0269***
	(0.0283)	(0.0214)	(0.0197)	(0.0212)	(0.00918)
Observations	4,743	4,743	4,743	4,743	4,743
Bandwidth (Km)	2.266	2.266	2.266	2.266	2.266
Dependent mean	0.375	0.228	0.178	0.193	0.0250

Note: The table presents the results of equation 1 for a series of dummy variables indicating that the respondents' main occupation. The unit of observation is a household. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and the social desirability index. As for our main outcomes, we use a bandwidth of 2.266 km and the estimates use triangular kernel weights. Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.28. Effects of Guerrilla Control on Agricultural Productivity

	Subsistence crops		Cash crops	
	Bean	Maize	Coffee	Sugarcane
	(1)	(2)	(3)	(4)
Panel A: Crop Production in 2005 (1,000 Tons)				
Guerrilla control	-0.00167	-0.0110	-0.00540	-1.829***
	(0.00161)	(0.0324)	(0.00789)	(0.529)
Observations	3,652	3,652	3,652	3,652
Dependent mean	0.100	1.910	0.460	15.46
Panel B: Share of harvest in 2005 (Has)				
Guerrilla control	-0.0112***	-0.0310***	-0.0202***	-0.00357
	(0.00356)	(0.0109)	(0.00753)	(0.00230)
Observations	3,651	3,651	3,651	3,651
Dependent mean	0.0400	0.110	0.0800	0.0300
Panel C: Actual Crops' Yield in 2005 (Tons/Ha)				
Guerrilla control	-0.00471***	-0.0161***	-0.00622**	-1.078***
	(0.00126)	(0.00586)	(0.00242)	(0.241)
Observations	3,566	3,550	3,649	3,649
Dependent mean	0.400	2.250	0.840	61.22
Bandwidth (Km)	2.266	2.266	2.266	2.266

Notes: The table presents the results of estimating equation (1) for outcomes related to agriculture. Panel A shows results using as dependent variable each crop's production in 1,000 tons. Panel B uses the share of harvested land of each crop from the total area of each census tract as outcomes. Panel C uses the actual yield of each crop, which is measured as the total production over the total of cultivated land for each crop. The unit of observation in all columns is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates use triangular kernel weights. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.29. Effects of Guerrilla Control on Main Outcomes in Areas with Low Crop Suitability of Cash Crops

	Night Light Luminosity	Years of Education	Wealth Index
	(2013)	(2007)	(2007)
	(1)	(2)	(3)
Panel A: Areas with low suitability for coffee			
Guerrilla control	-0.184***	-0.185*	-0.107***
	(0.0268)	(0.0967)	(0.0358)
Observations	3,335	3,320	3,313
Dependent mean	3.318	6.015	-0.164
Panel B: Areas with low suitability for sugar			
Guerrilla control	-0.186***	-0.181*	-0.108***
	(0.0273)	(0.0983)	(0.0364)
Observations	3,254	3,239	3,232
Dependent mean	3.290	6.001	-0.170

Notes: The table presents the results of estimating equation 1 for the main outcomes in areas with low crop suitability. All results use a bandwidth of 2.266 km. Column 1 shows the effect of whether a census tract is under guerrilla control on the arcsine of night light luminosity from NOAA. Column 2 shows as dependent variable years of education of the population older than 18 years. Column 3 uses the standardized score of household wealth as dependent variable in the same estimation. The unit of observation in all columns is the census tract. Information in Columns 2 and 3 was obtained from the Population and Household Census of 2007. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with an indicator of whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates use triangular kernel weights. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.30. Effects of Guerrilla Control on Migration Outcomes for the Highly Educated Population

	International Migrants					Always Lived in	Same Location	People who Arrived	Years since
	During Control	At any Time	Years since	Households that Received	Received Remittance from	Same Location	as the Mother	During Control	Arrival
	(Share)	(Share)	Departure	Remittances (Share)	War Migrant (Share)	(Share)	(Share)	(Share)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Guerrilla control	0.00151	0.00343	0.226	-0.00573	-0.00112	-0.00376	-0.00713	-0.00491	-0.469
	(0.00452)	(0.00927)	(0.540)	(0.00463)	(0.00416)	(0.0127)	(0.0132)	(0.00535)	(0.531)
Observations	3,325	3,325	1,907	3,636	3,325	3,602	3,602	3,602	3,441
Bandwidth (Km)	2.266	2.266	2.266	2.266	2.266	2.266	2.266	2.266	2.266
Dependent mean	0.0200	0.100	6.220	0.110	0.0100	0.730	0.700	0.0800	17.68

Note: The table presents the results of equation 1 for our outcomes related to migration. Columns 1–5 focus on outcomes for international migrants. All information was obtained from the subsample of individuals in the Population and Household Census of 2007 who had finished at least high school by the time the conflict started. The unit of observation in all columns is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates use triangular kernel weights. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.31. Share of Individuals who Work in the Same Place as their Residence

	Work in the Same Place as Residence (Share)
	(1)
Guerrilla control	0.00333
	(0.00320)
Observations	3,636
Bandwidth (Km)	2.266
Dependent mean	1.000

Note: The table presents the results of equation 1 for individuals who work in the same place as their residence. All information was obtained from the Population and Household Census of 2007. The unit of observation in all columns is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates use triangular kernel weights. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.32. Effects of Guerrilla Territorial Control on Main Outcomes, Controlling for Conflict

Panel A: Separating Disputed areas from Government-controlled areas			
	Night Light Luminosity	Years of Education	Wealth Index
	(2013)	(2007)	(2007)
	(1)	(2)	(3)
Guerrilla control	-0.127***	-0.438**	-0.170***
	(0.0314)	(0.188)	(0.0587)
Disputed area	0.0851*	-0.230	-0.0670
	(0.0473)	(0.207)	(0.0678)
Observations	3,652	3,637	3,630
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	3.536	6.573	-0.0160
Panel B: Doughnut Hole Analysis (400 m)			
Guerrilla control	-0.164***	-0.308**	-0.123**
	(0.0520)	(0.153)	(0.0541)
Observations	1,564	1,555	1,555
Dependent mean	3.245	5.845	-0.197

Note: The table presents results for the main outcomes but under different specifications that help discard the hypothesis that effects were driven by conflict. Panel A shows results when separating the control group between government-controlled areas and areas disputed by guerrillas. Notice that in panel A, the omitted category concerns segments under pure governmental dominance. Panel B shows results using a donut-hole methodology with a hole of 400 m. The unit of observation in all columns is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.33. Effects of Guerrilla Territorial Control on Crimes during the War Period

	Total War Events	Total War Victims	Has a War Event	Has War Victims
	(1)	(2)	(3)	(4)
Guerrilla control	0.00660	-0.258	0.00180	0.00322
	(0.0894)	(0.490)	(0.00264)	(0.00287)
Observations	3,652	3,652	3,652	3,652
Bandwidth (Km)	2.266	2.266	2.266	2.266
Dependent mean	0.0410	0.2130	0.00100	0.00200

Note: The table presents the results of estimating equation 1 for our outcomes related to crimes committed in the war period. Columns 1 and 3 report the total events related to war and their probabilities, respectively. A war event can be a massacre, combat, bombing, or any other event that produced victims. Columns 2 and 4 show the total number of victims and the probability of the census tract to have war victims. The unit of observation in all columns is the canton level. The information was obtained from the registry of victims. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.34. Effects of Guerrilla Control on Homicide and Victimization

	Homicides	Victim of Any Crime	Victim of Gang Extortion
	(2017)	(2004-2016)	(2004-2016)
	(1)	(2)	(3)
Guerrilla control	-0.0110	-0.210***	-0.193***
	(0.0562)	(0.0552)	(0.0637)
Observations	3,652	94	94
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	0.314	0.688	0.0420

Note: The table presents the results of equation 1 for our outcomes related to current crime. Column 1 shows the number of homicides reported to police for each census tract in 2017. Column 2 shows the share of people within a census tract who reported being a victim of any type of crime in the LAPOP survey. Column 3 shows the share of people within a census tract who reported being a victim of extortion in the LAPOP survey. The unit of observation in all columns is the census tract. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. We use the algorithm of Calonico, Cattaneo and Titiunik (2014) to set the bandwidth and weight using a triangular kernel. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.35. Heterogeneity by Baseline Distances to Road Network (1980) and Nearest City (1945)

Panel A: Heterogeneity by Distance to Road Network in 1980			
	Night Light Luminosity	Years of Education	Wealth Index
	(2013)	(2007)	(2007)
	(1)	(2)	(3)
Guerrilla control	-0.177***	-0.272**	-0.0953**
	(0.0272)	(0.125)	(0.0399)
Control × Distance to Road	0.00503	0.0410	-0.0267
	(0.0212)	(0.0737)	(0.0230)
Dependent mean	3.536	6.573	-0.0160
Panel B: Heterogeneity by Distance to Nearest City in 1945			
Guerrilla control	-0.225***	-0.295**	-0.109***
	(0.0307)	(0.116)	(0.0412)
Control × Distance to City	0.0375**	0.0187	-0.00881
	(0.0149)	(0.0642)	(0.0223)
Dependent mean	3.536	6.573	-0.0160
Observations	3,652	3,637	3,630
Bandwidth (Km)	2.266	2.266	2.266

Note: The table presents the results from the heterogeneity analysis at baseline for the main outcomes. Panel A shows how the main results vary by distance to a road network in 1980. Panel B presents heterogeneity of results by distance to the nearest city in 1945. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.36. Land Ownership

	Land Ownership Rate	Size of Owned Land (Ha)
	(1)	(2)
Guerrilla control	0.0300	0.273
	(0.0189)	(0.613)
Observations	2,385	2,385
Bandwidth (Km)	2.266	2.266
Dependent mean	0.550	4.270

Note: The table presents the results of equation 1 for outcomes related to land ownership. Information was obtained from the Agricultural National Census of 2007. The unit of observation is at the census tract level. The dependent variable in Column 1 is the share of agricultural producers with positive land holding. In Column 2, the outcome is the average plot size managed by producers measured in hectares. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The estimates use triangular kernel weights. Robust standard errors in parentheses.*** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.37. Effects of Guerrilla Territorial Control on the Elections of 2014 and 2015

Panel A: 2014 Presidential elections - Guerrillas' Party won				
	Left Voting Share	Right Voting Share	Blank Voting Share	Turnout Share
	(1)	(2)	(3)	(4)
Guerrilla control	-0.0350*	0.0341	0.00387***	0.0166
	(0.0199)	(0.0221)	(0.00131)	(0.0103)
Observations	416	416	416	416
Bandwidth (Km)	2.930	2.930	2.930	2.930
Dependent mean	0.483	0.395	0.007	0.565
Panel B: 2015 Municipal elections				
Guerrilla control	-0.0152	-0.00723	0.00207**	0.0300
	(0.0278)	(0.0259)	(0.000905)	(0.0219)
Observations	434	434	434	434
Bandwidth (Km)	3.239	3.239	3.239	3.239
Dependent mean	0.411	0.629	0.007	0.513

Note: The table presents the results of equation 1 for our outcomes related to electoral results. The unit of observation in all columns is the polling station. Panel A shows the results for the presidential elections of 2014 and Panel B does the same for the municipal elections of 2015. The information was obtained from the Salvadoran Electoral Court. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Clustered errors at the Canton level are reported in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F.38. Impacts of Guerrilla's Territorial Control Excluding Urban Areas at Baseline

Panel A: Had a City or Village in 1945			
Guerrilla control	-0.176***	-0.242*	-0.120***
	(0.0254)	(0.126)	(0.0402)
Observations	3,161	3,150	3,148
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	3.647	6.787	0.0670
Panel B: Population Density in 1980 Above the Median			
Guerrilla control	-0.167***	-0.301**	-0.104***
	(0.0392)	(0.119)	(0.0374)
Observations	2,110	2,110	2,104
Bandwidth (Km)	2.266	2.266	2.266
Dependent mean	2.492	4.613	-0.773

Note: The table presents the results of estimating equation 1 for our main outcomes. The unit of observation in all Columns is the census tract. In each panel we exclude areas that were likely to be urban at baseline. We vary the definition of urbanization in each panel. Namely, in panel a we assume that a census tract was urban when it had a city or village in 1945. In panel b, we exclude tracts whose population in 1980 was above the national median. Data for night light luminosity come from NOAA, while wealth and education data, from the Population and Household Census of 2007. Not shown controls include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract is under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table F.39. Effects of Guerrilla Territorial Control on Expropriation, Invasion, and Non-democratic Beliefs

	Invading Property	Occupying Buildings	Overturn the Government	Taking Law in Own Hands	Non-Democratic Engagement (sum)
	(1)	(2)	(3)	(4)	(5)
Guerrilla control	-0.110*	0.0616	-0.00269	-0.0734	0.804
	(0.0605)	(0.0815)	(0.0721)	(0.136)	(1.922)
Observations	248	175	248	245	172
Bandwidth (Km)	2.266	2.266	2.266	2.266	2.266
Dependent mean	0.0580	0.109	0.0740	0.245	10.69

Note: The table presents the results of estimating equation 1 for our outcomes related to beliefs regarding how acceptable it is to engage in certain actions against private property or the government. These are measured on a 1–10 scale; thus, we assume that individuals support these behaviors whenever their agreement level is above 5. Columns 1–4 show the share of individuals who think that invading property, occupying buildings, overthrowing the government, and taking the law into their own hands are acceptable. Column 5 shows the effects of guerrilla control on an index comprised of the sum of the raw scores. The information was obtained from the LAPOP Survey between 2004 and 2016. Controls not shown include a linear polynomial of the distance to the boundary of guerrilla territory, its interaction with whether the tract was under guerrilla control or not, and up to 400 fixed effects representing the closest evenly spaced break in the guerrilla-controlled boundary. The algorithm of Calonico, Cattaneo and Titiunik (2014) was used to set the bandwidth and the estimates weight using a triangular kernel. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

G Post-conflict environment

After the government and the FMLN jointly approved the Chapultepec Peace Accords on January 16, 1992, the Salvadoran Civil War ended. Scholars often refer to these peace agreements as the most successful in the post-Cold War period. Why? The cease-fire held; the FMLN became a political party; military, judicial, and electoral institutions were reformed; an Office of Human Rights Council was established; a Truth Commission was formed, and a limited agrarian reform was enacted (Moodie, 2011). Most of these policy changes were implemented at the national level.

The Catholic Church and the United Nations were the mediators of the peace talks that culminated in a final agreement regarding five main areas (United Nations, 1992). First, the armed forces were modified, and the FMLN was demobilized.[50] Second, the National Civil Police (PNC, for its initials in Spanish) replaced the National Guard.[51] Third, there were modifications to the judicial

[50] According to the agreement, the armed forces' sole objective would be to defend the sovereignty of the State while remaining apolitical and respecting human rights.

[51] The PNC replaced the old security forces with a civil and democratic doctrine, quotas were established for the new personnel in which demobilized elements of the FMLN, and former National Police would participate, and a National

system and the defense of human rights.[52] Fourth, the electoral system was modified to create the Supreme Electoral Tribunal, the highest administrative and jurisdictional authority on elections. At the political level, the measures sought to guarantee FMLN leaders and their members the full exercise of their civil and political rights within a framework of absolute legality. Finally, measures were imposed in both the economic and social fields. The main ones included land distribution to landless peasants and ex-combatants from the Salvadoran military and guerrilla groups. Moreover, the agreement established that land tenure inside territories not controlled by the state was to be honored, and land titles were to be granted to peasants working there during the civil war.[53]

During this period, the Salvadoran private sector boomed, and the economy moved away from a concentration of power among 14 elite families to open to international markets (Boyce, 1995). This was reflected in the transformation of the economy from a primarily agricultural model of coffee, sugar, and cotton exploitation towards more diversified growth in commerce, agricultural export businesses, industry, and financial services. For instance, while agricultural exports represented approximately 25 percent of Salvadoran GDP in the 1970s, agriculture's share fell to less than five percent (Rettberg, 2007) towards the end of the century. Salvadoran businesses blossomed and between 1990 and 1995, the economy grew at an average rate of 6.2 percent, much of it nurtured by growing domestic investment rates in commerce, financial services, and industry. One of the winners was the private sector, which received stability, a friendly investment climate at home, and economic rules that enabled it to compete in a new international macroeconomic environment (Rettberg, 2007).

Academy of Public Security was created to train the agents of the NCP with an emphasis on respect for Human Rights.

[52] Measures included the creation of the Judicial Training School to train judges and magistrates to adjust to the country's new reality, a reform of the National Council of the Judiciary (which appoints and evaluates judges) to give it greater independence, and a reform of the election process and terms of the magistrates of the Supreme Court of Justice.

[53] In Section VI.D, we analyze whether these changes could explain the negative effects on development and we find no evidence of it. This result is consistent with the fact that landless peasants and ex-combatants that were outside of guerrilla-controlled areas also had access to land after the civil conflict.