The Real Winner's Curse*

Leopoldo Fergusson[†] Pablo Querubin[‡] Nelson A. Ruiz-Guarin[§] Juan F. Vargas[¶]

December 15, 2016

Abstract

We study the unintended consequences of political inclusion in a context of weak institutions. Using a regression discontinuity approach, we show that the narrow election of previously excluded leftist parties to local executive office in Colombia results in an almost one-standard-deviation increase in violent attacks by right-wing paramilitaries, more than tripling the sample mean. We interpret this surge in violence as a *de facto* reaction of traditional political and economic elites, who seek to offset the increase in outsiders' *de jure* political power. Consistent with this interpretation, we find that other types of violence are unaffected, and that levels of violence are not influenced by the victory of right-wing parties in close elections. Moreover, we show that the surge in paramilitary violence is concentrated in the year of the next election, which gives left-wing parties a large incumbency *disadvantage* in Colombia. Our findings highlight the dangers of broadening political inclusion in the absence of efforts to strengthen other institutional dimensions. Open elections that are not complemented by checks and balances to prevent the disproportional accumulation of political power by some groups in society may have unintended negative consequences.

JEL Codes: O12, D02, and D74. **Keywords**: Democracy, elections, political inclusion, violence, regression discontinuity.

^{*}For their helpful comments, we thank Juan Carlos Angulo, Tim Besley, Catherine Boone, Laura Bronner, Adriana Camacho, Ernesto Dal-Bó, Emilio Depetris, Guadalupe Dorna, Juan Dubra, Marcela Eslava, Claudio Ferraz, Jean-Paul Faguet, Xavier Freixas, Sebastián Galiani, Francisco Gallego, Jenny Guardado, Frances Hagopian, Dominik Hangartner, Daniel Hidalgo, Marc Hofstetter, Oskar Nupia, Rafael Santos, José Tessada, Santiago Tobón, Hernán Vallejo, Diana Weinhold, and participants at the Brown "Violence: Processes, Responses, & Alternatives" Workshop, CEDE-Universidad de los Andes Weekly Seminar, Universidad del Rosario, Universidad Católica de Chile, Forum Ridge-Lacea Political Economy, Harvard-DRCLAS Tuesday Seminar Series, Harvard Political Economy Graduate Workshop, LSE's Political Science Work in Progress Seminar, LSE Political Economy and Public Policy Workshop, LSE's Research Seminar in International Development, MIT's Latin American Working Group, MPSA Annual Meetings 2016, NEWEPS 2016, the NYU Graduate Political Economy Seminar, and the 6th Annual Conference of the Al Capone network. Juan Carlos Angulo, Juliana Aragón, Carmen Delgado, Francisco Eslava, Diego Martín, and Juan Camilo Mejía provided superb research assistance. Ruiz-Guarin gratefully acknowledges UNU-WIDER for its support.

[†]Facultad de Economía, Universidad de los Andes. Calle 19A No. 1-37 Este Bloque W, Bogotá, Colombia. Tel: +57 1 339-4949 Ext 2439, Email: lfergusson@uniandes.edu.co

[‡]The Wilf Family Department of Politics, New York University. 19 W 4th Street, Room 208, New York, NY 10012. Tel: +1 212 992 6525, Email: pablo.querubin@nyu.edu

[§]International Development Department, London School of Economics and Political Science. 6-8th Floors, Connaught House, Houghton Street, London WC2A 2AE. Tel: +44 (020) 7955 6565, Email: n.a.ruiz-guarin@lse.ac.uk

[¶]CAF-Development Bank of Latin America and Facultad de Economía, Universidad del Rosario. Casa Pedro Fermín, Calle 12C No. 4-59, Bogotá, Colombia 110321. Tel: +57 1 297-0200, Email: jvargas@caf.com & juan.vargas@urosario.edu.co

1 Introduction

In many countries, despite the presence of nominally democratic institutions, some political groups remain largely excluded from formal political power. *De facto* barriers include fraud, clientelism, uneven access to economic resources, violence, and legal constraints on political participation. Yet in spite of these barriers, traditionally excluded groups may succeed in winning elections and entering the political system. What happens when these outsiders gain formal political power?

One possibility is that giving excluded groups a voice and a stake in the political process strengthens democracy and promotes political stability. However, another likely implication is that, faced with electoral defeat by outsiders, powerful political elites who have previously enjoyed a monopoly over access to power will feel that their interests are threatened. Where *de jure* institutions such as elections fail to favor the more powerful groups in society, these groups may strengthen their emphasis on *de facto* means of avoiding policy change and preventing other groups from gaining formal power (Acemoglu & Robinson, 2008). Moreover, in weakly institutionalized environments in which political power is concentrated in a few hands, this may help explain the relatively mild or null effects of democratic reforms on economic policies and other political and economic outcomes (Mulligan, Gil, & Sala-i Martin, 2004). As long as the underlying distribution of power remains unchanged, traditional political elites may prevent these reforms from having the intended effect.

This paper examines elite responses to previously excluded (left-leaning) groups gaining local representation in Colombia by winning mayoral elections. Traditional elites have responded with the most direct form of *de facto* power: violence. We assess whether the victory of left-leaning parties in mayoral elections (1) generates (or exacerbates existing) violence and (2) if so, if this prevents non-traditional groups from attaining political power in the future.

Colombia is an ideal setting in which to study this question. Following a legacy of powersharing agreements between the Liberal and Conservative parties (which are described in more detail in Section 2), Colombia introduced local elections in the late 1980s to open up the political system and broaden access to power to formerly excluded groups. These reforms included the introduction of single plurality rule elections to select municipal mayors; they were previously appointed by one of the two traditional parties. A new constitution enacted in 1991 further weakened the dominance of traditional parties. While the left remained a political minority, some of its candidates were elected to local offices like mayoral posts and municipal councils, which represented an important change in the local political arena. The new parties began advocating different policy preferences than those of traditional parties, including a stronger emphasis on redistribution, communal property rights, land reform, and vindication of peasant rights. Moreover, competitive elections took place in the midst of a decades-long violent conflict between left-wing guerrillas, the government, and right-wing paramilitary militias organized by local elites to fight the guerrillas.

To study the effect of left-wing victories on violence, we use a regression discontinuity design (RDD) based on close elections and compare municipalities in which the left narrowly won vs. narrowly lost the mayoral race. To document the validity of our RDD approach, we show balance across a wide range of political and socio-economic characteristics in municipalities in

which the left either won or lost by a small margin. We also show that left-wing candidates are no more or less likely to win very close races than candidates from other parties, which confirms that the outcome of the elections resembles a coin toss.

Our results show that a narrow left-wing victory leads to up to 6.8 additional yearly attacks per 100,000 inhabitants by right-wing paramilitary groups during the subsequent government term. This effect is large: it is equivalent to almost one standard deviation and over three times the sample mean. Importantly, we do not find a significant surge in violence when other (non-left-wing) parties win by a small margin. Furthermore, we show that left-wing parties suffer from an incumbency *disadvantage* that is almost six times larger than that experienced by other parties in Colombia (which has been documented by Klašnja and Titiunik (in press)).

Several additional findings support our interpretation that paramilitary attacks following left-wing victories form part of a deliberate strategy by local elites to offset (via *de facto* methods) the political power gained by the left through institutional means. For instance, consistent with the idea that traditional elites incite violence in order to prevent left-wing groups from increasing their representation in local government, we show that the increases in levels of violence are concentrated around the time of the subsequent local election. Moreover, we find that this effect becomes much weaker after 2006, when paramilitary groups signed a peace deal with the government and demobilized. While splinter criminal bands continued to engage in violent acts after 2006, violence has been less politically motivated since then.

Ruling out some alternative interpretations of our results, we find no comparable increase in paramilitary (or any type of) violence in the period *before* narrow victories by left-wing candidates. Similarly, we find no changes in violence perpetrated by groups other than rightwing paramilitaries after narrow victories by the left. Thus, our results do not seem to reflect pre-existing trends in violence or an increase in overall violence in constituencies where the left wins. Nor does increased violence appear to be a reaction to corruption or poorer performance by leftist mayors while in office. We do not find that left-leaning parties are involved in more corruption investigations or convictions than other parties, or that their administrations exhibit worse governance indicators.

Our results are consistent with anecdotal and case study evidence (which we present in detail in Section 8) that left-wing political activists have often been the target of paramilitary groups following left-wing victories. We show that these patterns of violence against the general population and party activists in areas where the left wins local elections are systematic and do not represent isolated incidents. Moreover, it demonstrates that this violence is perpetrated with the goal of preventing policy change and thwarting future electoral victories by the left.

The paper is related to several strands of literature. First, it is closely associated with the literature on "subnational authoritarianism" (e.g. Gibson, 2005, 2014; Giraudy, 2010; Sidel, 2014). The patterns of violence that we document are consistent with elites using "boundary control" strategies to maintain control over their local authoritarian enclaves following the national democratization reforms in Colombia in the late 1980s (Gibson, 2014).

As noted above, our purported mechanism of informal control also provides evidence in line with Acemoglu and Robinson's (2008) idea that, when operating in weak institutional settings, elites may react to a loss in *de jure* power by investing in *de facto* methods to avoid substantial changes in equilibrium institutions and policies. Bandiera and Levy (2011) provide suggestive evidence of the potential relevance of *de facto* power for the political equilibrium by showing that in Indonesia, policy is tilted towards the elites in areas where the poor population is more ethnically diverse and therefore has a harder time organizing against the elites' potential influence. Bruce and Rocha (2014) show that after democratization in Brazil in the 1980s, turnout patterns were consistent with illiterate voter manipulation by elites aligned with the former dictatorship. Yet, few papers have studied what is perhaps the most obvious (and potentially damaging) form of *de facto* power: outright political violence. Fergusson, Vargas, and Vela (2013) is an exception. They study the use of violence in the form of electoral coercion by paramilitaries following media scandals affecting their preferred candidates. Here, we instead study violent reactions to the election of formerly excluded groups that threaten the interests of traditional elites.

This reaction by elites is particularly important, as it constitutes a response to democratization reforms – i.e., the introduction of local elections to broaden access to formal political power. While we study the effect of formerly excluded groups gaining access to power rather than the introduction of elections per se, our results also relate to the literature on elections and violence. Elections are said to provide an "antidote to international war and civil strife" (Bill Clinton, 1994, in J. L. Snyder (2000)). Scholars have emphasized several mechanisms via which elections may lead to a reduction in violence: the preferences of the opposition receive attention as part of the political debate, which reduces their incentives to revolt (Regan & Henderson, 2002); they create a path to power that is less costly than violence (Davenport, 2007); elites can credibly commit to future redistribution when policy concessions are insufficient to persuade excluded groups not to revolt (Acemoglu & Robinson, 2006); and increasing the legitimacy of the incumbent government undermines revolts (Kurzman, Werum, & Burkhart, 2002). But by creating winners and losers, elections may increase incentives for violent behaviors that could otherwise be avoided, for example, by power-sharing agreements. As Chacón, Robinson, and Torvik (2011) put it, the key issue is the conditions under which losers will peacefully relinquish power. Eifert, Miguel, and Posner (2010) also show that political competition may exacerbate (ethnic) identities, which represent another source of conflict. Despite the conflicting theoretical effects, several authors suggest that elections and "democratic transitions" nurture violence (Huntington, 1991; Horowitz, 1993; Sahin & Linz, 1995; Casper & Taylor, 1996; J. Snyder, 2000); fewer find results in the opposite direction (e.g. Davenport, 1997; Fergusson & Vargas, 2013). Our paper shows that the effect of introducing elections on violence is conditional on the identity of the winner: when traditional incumbent elites lose elections, they resort to violence to prevent policy changes and regain political power in the future.

While our empirical evidence focuses on the case of Colombia, our argument and empirical findings have wider external relevance. Increases in violence after previously excluded groups are newly elected to office have been observed at the national level across the world: in Egypt, when the Muslim Brotherhood came to power and enacted very different policies – including redrafting the constitution – this triggered increased violence and a coup. Similarly, when Haiti transitioned from dictatorship to democracy in 1990, Jean Bertrand Aristide, a priest representing a new group in politics, won the election. Aristide proposed several reforms, such as

a military under civilian control and much more redistribution. These policies generated violent reactions from the old elite, which culminated in a violent military coup in 1991 (Collins Jr & Cole, 1996). While these examples suggest that political inclusion has a potentially destabilizing effect when groups with very different policy preferences have access to power, it is hard to determine whether the political inclusion of a formerly excluded group was what caused the increase in violence. Our study allows us to address this causal question more systematically.

Finally, our paper also relates to the literature on the incumbency (dis)advantage. While Gelman and Huang (2008) claim that "incumbency advantage is one of the most widely studied features in American legislative elections" (p. 437), an incumbency curse or *dis*advantage has been documented in other settings, mostly in developing countries, which are often characterized by weak parties and politicians' incentives to use local office opportunistically (Roberts, 2008; Uppal, 2009; Klašnja & Titiunik, in press; Klašnja, 2015). Our findings point to the *de facto* reaction of elites as a complementary explanation for the incumbency disadvantage of some parties in weakly institutionalized democracies.

The remainder of the paper is organized as follows. Section 2 discusses the general context and describes the history of local elections in Colombia. Section 3 presents our empirical strategy and data. In Section 4 we present our main result: the election of a left-leaning mayor in Colombia leads to increased violence in his or her constituency perpetrated by rightwing paramilitary groups. This section also reports some basic robustness checks and validates the underlying assumptions of our empirical approach. In Section 5 we address and rule out alternative interpretations of our results. Section 6 provides evidence to support our preferred interpretation of the reasons behind the increase in violence following left-wing victories. In Section 7 we document the consequences of the surge in violence after the electoral success of left-wing parties. In Section 8 we discuss some anecdotal evidence, and in Section 9 we conclude and discuss the implications of our findings and contribution.

2 Context: Local elections in Colombia's political landscape

Figure 1 provides a brief outline of Colombia's recent political history. Colombian politics were dominated by the Liberal and Conservative parties from independence until the late 20^{th} century (Bushnell, 1993). Inter-party violence was widespread during that time, and reached its height between 1948 and 1953 in a period known as *La Violencia*. In order to pacify the country, both parties agreed to the *Frente Nacional* (National Front) deal, which included alternating the presidency every four years between 1958 and 1974, and ensuring parity in party representation in all government bodies.¹

The National Front blurred the ideological line dividing the two main parties and consolidated a highly clientelistic system of political exchange. There were relatively few differences in the socio-economic origins of supporters of both parties, which were ultimately seen as agents of different factions of economic elites (Leal-Buitrago & Davila, 1990; Davila, 1992, 1999). Indeed, the National Front openly excluded other political movements from national and local political

¹This parity agreement was facilitated by the prevailing local electoral rules. Up until 1988, municipal mayors were appointed by departmental governors, who were themselves appointed by the president.

processes. Among the excluded groups, peasants, workers and others ideologically aligned with the left stood out, and some of their most important demands, in particular land reform, were attempted but always failed under an elite-friendly National Front (Safford & Palacios, 2002, Chapter 14). The traditional parties more closely represented the interests of the landed elites, who were ideologically closer to the right. Bipartisan dominance persisted after the National Front formally ended in 1974, and only collapsed in the late 1980s and early 1990s with the adoption of the 1986 electoral reforms and the enactment of the 1991 constitution.

The absence of political opportunities for outsiders, combined with the lack of state presence in the Colombian periphery and the survival of Liberal rural guerrillas from *La Violencia*, led to the formation of left-leaning guerrilla movements in the early 1960s (Bushnell, 1993), the most powerful of which was the Armed Revolutionary Forces of Colombia (*Fuerzas Armadas Revolucionarias de Colombia* – FARC), which is still active today (although currently on the verge of demobilization following the signing of a peace agreement with the government).² In the late 1970s, to finance their activities the FARC and other guerrilla movements began kidnapping and extorting wealthy individuals, particularly landowners. Some of these landlords were also involved in the illegal drug industry and, while they fought the state as a result of their illegal activities, their interest in fighting the guerrillas overlapped with that of the traditional economic elite. This precipitated the creation of paramilitary self-defense militias, which in many cases operated with at least the implicit complacency of the national army, local politicians, and the local elite (Dudley, 2004; Duncan, 2007; Gutierrez-Sanin & Baron, 2005; Gutierrez-Sanin, 2008; Acemoglu, Robinson, & Santos, 2013).

By the early 1980s the Colombian state's legitimacy was at stake: there were few political options for third parties, violence in rural areas, and repression of left-leaning supporters by the government of Julio Cesar Turbay, from 1978 to 1982 (Bushnell, 1993; Centro Nacional de Memoria Histórica, 2013). This situation motivated the government of Belisario Betancur (1982-1986) to negotiate with insurgents. As part of the peace talks, and to signal a credible opening of the country's democratic system, the electoral system was reformed to allow the direct election of local mayors by simple plurality rule (Maldonado, 2001). This reform sought precisely to give voice to excluded groups, especially the traditionally excluded left. It became effective with the first local elections in 1988. The 1991 constitution further consolidated the opening of the political system and increased resources and devolved responsibilities to local governments.³

The reform allowed left-leaning groups that had been historically excluded – such as groups of peasants, union workers, and other political outsiders – to participate in local elections. As part of the peace negotiations with the government, the FARC created its own political party, the *Union Patriótica* (UP), thus combining "all forms of struggle" – ballots and guns. Initially the UP openly supported and received support from the FARC, and some FARC members

²Other guerrillas include the still-active National Liberation Army (*Ejército de Liberación Nacional* – ELN), and the *Movimiento 19 de Abril* or M-19, which demobilized shortly before the 1991 constitution and participated as a political party in the Constitutional Assembly.

 $^{^{3}}$ The 1991 constitution allowed citizens to collect signatures to either run independently without the support of any party, or to create a new party. In addition, public financing (proportional to the number of votes) and access to television was granted to all political parties. These reforms facilitated the creation of third parties and made politics more competitive.

participated in politics. This generated widespread criticism from different sectors of Colombian society and forced the UP to distance itself from the FARC, which reacted in turn by kidnapping several top UP politicians (Dudley, 2004). By the early 1990s most of the UP hardliners in favor of armed struggle had left the party and most of its remaining members openly criticized the FARC, but many outsiders conflated the FARC and the UP, which led to the assassination of UP supporters: two presidential candidates, eight congressmen, 13 deputies, 70 councilmen, 11 mayors, and thousands of militants were killed (Centro Nacional de Memoria Histórica, 2013, pg. 142).⁴ Referring to violence against the UP, Leal-Buitrago and Davila (1990) note that "facing any political movement representing a challenge to the status quo, the long-standing state weakness induced informal and illegal mechanisms to defend the system" (p. 85), which resonates with our results and interpretation. These illegal and informal mechanisms represent had recently begun to compete for local office.

The Colombian context we study is therefore characterized by three main features: (1) the declining importance of traditional parties, which had been largely stripped of their ideological differences and legitimacy with the signing of the National Front agreement, with a resulting heavy reliance on clientelism, (2) (left-leaning) political groups gaining access to the local political arena for the first time, and (3) the presence of both left- and right-wing violence in various parts of the country.

The distinction between these two types of violence is important. Left-wing guerrillas are clearly anti-establishment, and question the legitimacy of Colombia's democracy. The FARC, which was responsible for most of the violence in the period under study, emphasized the peasant struggle against landowners. Right-wing paramilitaries, however, colluded with the establishment, especially the army and local land-owning elites. In 1997, splinter paramilitary groups joined forces under an umbrella organization called *Autodefensas Unidas de Colombia* (AUC), which had clear political connections and goals. Its leaders signed a secret pact in 2001 in which politicians (including state governors and members of Congress) called for an explicit role for the AUC in electoral politics. Their objectives were to strengthen the agrarian model of large landholdings and to use violence and intimidation to protect regional elites from social and political opposition (Centro Nacional de Memoria Histórica, 2013, pg. 170).⁵

The distinction between left- and right-wing violence also helps explain the focus of our empirical investigation on the violent response of right-wing paramilitary groups to the local electoral victories of left-wing politicians. The left was the main outsider group to gain access to local executive power after the introduction of mayoral elections. The right, even in its extreme and violent versions like the paramilitary militias, mingled with the traditional elites and sought to play an active role in electoral politics (Acemoglu et al., 2013).

This is thus an ideal setting in which to evaluate elites' de facto responses to traditional

 $^{^{4}}$ Steele (2011) studies the Urabá region in northwest Colombia and shows that residents of urban neighborhoods that voted for the UP in local elections were selectively targeted by paramilitary groups and thus more likely to flee after the elections than residents of similar neighborhoods where the UP was less successful electorally.

⁵Most of the AUC demobilized in 2005 and 2006, following peace talks that started in 2003 under President Alvaro Uribe. However, remnant paramilitary groups persist to date.

outsiders gaining *de jure* access to power. While in principle increased violence from the left could have occurred in response to right-wing electoral victories, particularly in places with a strong guerrilla presence, the two situations are not entirely symmetrical: political exclusion affected only the left; the right had a comparative advantage in exercising *de facto* power with institutional acquiescence. Indeed, as we document below, we find no comparable systematic increase in violence when the right wins local elections by a narrow margin.

3 Empirical strategy and data

3.1 Left-wing electoral victories and violence: a regression discontinuity approach

The electoral victory of a left-wing candidate is plausibly correlated with a wide range of municipal-level socio-economic characteristics. Thus, a naive comparison of violent attacks across municipalities with and without newly elected left-wing mayors may confound the effect of other local characteristics. In order to address this problem, we use an RDD approach based on close elections. Specifically, we compare municipalities in which a left-wing candidate won a mayoral election by a narrow margin with those in which a left-wing candidate was the runner-up and lost by a narrow margin.⁶ The underlying identification assumption is that the outcome of very close elections is as good as random, and thus municipalities in which a left-wing candidate wins or loses by a narrow margin are similar across other characteristics, except for the ideological leaning of the winner.

Our empirical approach therefore focuses on the sample of races in which the left-wing candidate either wins or comes second. Focusing on these candidates, let X_{it} be the win margin defined as the vote share of the left-leaning candidate minus the vote share of the non-left candidate. The vote share is computed as a fraction of the total number of votes obtained by the top two candidates in the race. Then, we define our "treatment" as $L_{it} = 1$ if $X_{it} > 0$ and $L_{it} = 0$ if $X_{it} < 0$. We focus on the set of races in which X_{it} is "small" in absolute value (smaller than a bandwidth h), in the sense that the outcome of such races can be considered as good as random. Our treatment effect, α , is the average difference between violence V_{it} in a constituency in which the left narrowly wins vs. one in which the left narrowly loses:

$$\alpha = E \left[V_{it}(L_{it} = 1) - V_{it}(L_{it} = 0) | \quad |X_{it}| < h \right]$$
(1)

We can estimate α both parametrically and non-parametrically. The choice of bandwidth involves a trade-off between efficiency and bias in the non-parametric estimation: very small bandwidths are more likely to approximate the quasi-experimental assignment of the treatment variable and to attain balance in other observable covariates. Yet they often produce small sample problems and imprecise estimates. To deal with this issue, in our baseline estimates we use the optimal bandwidth, bias correction, and robust standard errors proposed by Calonico, Cattaneo, and Titiunik (2014). These estimates are a refinement of the non-parametric local

 $^{^{6}{\}rm Mayors}$ cannot run for re-election in Colombia, thus our discussion focuses on the potential re-election of (left-wing) parties.

polynomial estimators usually employed and we verify the robustness to the order of the polynomial (Lee & Lemieux, 2010). Following Gelman and Imbens (2014), we do so only for linear and quadratic polynomials.

We also report results using a parametric approach, which simply runs the following type of regression for our sample of close races with a margin of victory within our choice of bandwidth:

$$V_{it} = \alpha L_{it} + f(X_{it}) + \varepsilon_{it}.$$
(2)

In (2), $f(X_{it})$ is a polynomial in our forcing variable that allows different coefficients for races with $L_{it} = 0$ or $L_{it} = 1$, and ε_{it} is an idiosyncratic error term. As with our non-parametric estimates, we rely on Calonico et al. (2014) for the choice of bandwidth. We also show the robustness of our estimates to different bandwidth values, including that of Imbens and Kalyanaraman (2012).

3.2 Data

3.2.1 Violence

The source of our violence data is a dataset compiled by Restrepo, Vargas, and Spagat (2003), which was updated through 2014 by Universidad del Rosario. This dataset codes violent events recorded in the *Noche y Niebla* reports from the non-governmental organization (NGO) Centro de Investigación y Educación Popular (CINEP) of the Company of Jesus in Colombia, which provides a detailed description of the violent event, date, the municipality in which it occurred, the identity of the perpetrator, and the count of victims involved in the incident. *Noche y Niebla* sources include (Restrepo et al., 2003, p. 404): "1. Press articles from more than 20 daily newspapers of both national and regional coverage. 2. Reports gathered directly by members of human rights NGOs and other organizations on the ground such as local public ombudsmen and, particularly, the clergy." Notably, since the Catholic Church is present in even the most remote areas of the country, we have extensive coverage of violent events across the entire country.⁷ Violent events are coded for the period 1988 to 2014 as either an uncontested one-sided attack (e.g., shootings against the population, assaults on police stations, or an ambush on a military patrol) or a clash (in which two or more groups exchange fire).

This dataset allows us to identify the three main perpetrators of violence in the Colombian conflict: the government (armed forces), the paramilitaries, and the guerrillas. As explained in Section 2, we conjecture that paramilitaries are the main perpetrators of violence against leftwing politicians or their supporters. Therefore our main variable of interest is the number of attacks perpetrated by paramilitary groups during the mayor's term following a narrow victory or defeat by the left. In order to take into account the size of municipalities, we measure the number of attacks per 100,000 inhabitants. We also compute similar measures of violence perpetrated by the guerrillas and government to help rule out some alternative interpretations of our results.

⁷Figure A-1 in the Appendix shows two examples of events in our violence dataset. Both are paramilitary attacks in the municipality of Viotá, in Cundinamarca. One local councillor was "disappeared" in the first case, and in the second a thirteen year old faced the same fate, this time with the army's acquiescence.

3.2.2 Electoral results and party classification

We use the electoral data compiled by Pachón and Sánchez (2014), which is gathered from the Colombian national electoral authority, the *Registraduría Nacional del Estado Civil*. Figure 2 describes the timing of local elections since their introduction and the availability of electoral data for our analysis. Local elections take place in October, and the term starts in January of the following year. For all elections between 1988 and 1994, there is no detailed information on the vote count of losers; only the total votes cast for the election winners are available. Since the 1997 election is the first that has detailed information available on winners and losers, this is the first year for which we can implement an RDD.

Mayors who were elected in 1997 and 2000 (and who began their terms in 1998 and 2001, respectively) had three-year terms (up to 2000 and 2003, respectively). However, starting in 2003, the terms were extended to four years, so the remaining election years of our sample are 2003, 2007, and 2011, with associated terms starting, respectively, in 2004, 2008, and 2012. Violence data, while starting early enough, are available only until 2014. Given the difference in term lengths across the sample, as well as the lack of violence data for 2015, for our main results we focus on the effect of left-wing victories on violence during the years available for the government term.⁸

A central part of our empirical exercise involves identifying and coding left-leaning parties (we also need to identify and code right-wing parties for key robustness exercises reported in Section 5). This is a challenging task, since there are 505 different political parties that either won or came second in a local election during our sample period.⁹

The coding of parties as left-wing, right-wing, or neither followed a three-step sequential procedure that is explained in greater detail in Appendix Section A.1. Here we provide a brief summary of it. First, following Keefer (2012), we check party names, mottos, and slogans for words that identify the party as clearly left- or right-leaning (e.g., "communist"/socialist" or "conservative"/"Christian," respectively).¹⁰ For example, the Communist Party of Colombia was classified as leftist using this criterion. Second, since only a handful of parties can be classified directly using this method, following Budge, Bara, Volkens, and Klingemann (2001) we also search the party statutes (when available) for policy stances that are clearly left- or right-leaning. In particular, we code a party as left-wing if the party statutes include at least three of the following five leftist policy positions: (1) pro-peasant, (2) advocates greater market regulation, (3) thinks that workers should be defended against exploitation, (4) advocates stateowned or communal property rights, and (5) anti-imperialist. In turn, we code a party as rightleaning if its statutes include at least three of the following five right-wing policy positions: (1) economic growth is emphasized over redistribution, (2) advocates free market, orthodox policies, and privatization, (3) believes that family and religion are the moral pillars of society, (4) appeals to patriotism and nationalism, and accepts the suspension of some freedoms in

⁸The results using average violence during the first three years produce virtually identical results, and are available upon request.

⁹There was a large increase in the number of parties after the enactment of the 1991 constitution; recent reforms have sought to create incentives for the maintenance of fewer (but stronger) parties (Raga & Botero, 2006).

¹⁰The Colombian Conservative Party is an exception for the reasons discussed in Section 2.

order to guarantee security, and (5) prioritizes law and order. Parties that do not include at least three of the policy stances from either list in their statutes are classified as neither leftnor right-wing. Third, for parties for which official statutes are not available, we look at the government plan that candidates submit to the electoral authority before elections and, when available, search them for the same policy stances as in the second criterion.¹¹

Of the 505 parties analyzed, we were able to classify 247 (49%): 15 are left-wing, 16 are rightwing, and 216 are neither.¹² However, not all of these parties are included in our estimation sample, as some of them compete in races with winning margins outside the optimal bandwidth of Calonico et al. (2014). In particular, our estimation sample includes 178 parties, of which 14 are left-wing, 13 are right-wing, and 163 are neither. It is worth noting, however, that all the left-wing parties that either win or come second during our sample period do so in at least one close electoral race. This is important, because it implies that our analysis includes the entire set of left-wing parties that successfully contested mayoral elections in Colombia between 1997 and 2011.

The municipalities featuring electoral races in which the left either won or was the runner-up at any time during our sample period are highlighted in Figure 3 (black dots). Places in which these races were decided by a narrow margin are indicated by a black diamond; these constitute our baseline municipal sample. While this is a small number of municipalities, reflecting the limited success of the left (which our results partly help explain), they appear to be spread across the entire country. This is important for at least two reasons. First, it gives additional external validity to our results, since they are not limited to a specific region or set of municipalities. Second, the geographic distribution makes it less likely that our results are driven by other confounding characteristics of these municipalities, an issue that we investigate in greater detail in Section 4.3.

3.2.3 Additional variables

Finally, a fundamental assumption of our research strategy is that, except for the ideology of the elected mayor, treated and control municipalities have similar characteristics. In order to examine whether this assumption holds, we collected data on a broad range of predetermined municipal characteristics.

A detailed description of all the variables and their sources is available in Appendix Section A.3 and Table A-1, including those used for robustness, falsification tests, and testing the underlying mechanisms.

Finally, throughout our analysis we drop cities with a population greater than 300,000 since guerrilla and paramilitary attacks are very rare in large cities.¹³

¹¹For independent candidates who do not run on behalf of a party, we first check if they were supported by a coalition of parties and assign the ideology of the coalition to them, provided that the ideology matches across all parties in the coalition. Second, if there is no supporting coalition or if the ideologies of the coalition parties do not match, we turn to the third step and search their government plan. See Appendix Section A.1 for details.

¹²Parties that cannot be classified in steps 1 to 3 of the coding procedure are assumed to be neither left- nor right-wing. However, our results are robust to dropping them (and the associated races in which they compete) from the sample. We also explore the robustness of our results to including a fourth classification step that assigns to parties that are factions of, or splinter movements from, other parties (that in turn are classifiable in steps 1 to 3) the ideology of the parent party (see Table B-1).

¹³Of the 12 Colombian cities of this size, only four held elections in which a left-wing party won or came second

3.2.4 Descriptive statistics

Table 1 presents descriptive statistics for our main variables. The sample in Panels A through G includes the 254 elections in which a left-wing party was either the winner or the runnerup. These occur in 193 municipalities (17% of the country): 153 of them appear only once, 27 appear twice, and 13 appear three or more times. That is, a large majority (79%) of the municipalities in our sample appears only once during our sample period.

Panel A shows average yearly attacks during the mayor's term. Paramilitary groups perpetrated an average of 1.98 attacks per 100,000 inhabitants per year in our sample, half of the corresponding figure for attacks by guerrilla movements. Clashes and attacks by other groups were less frequent. The variation in both measures is rather large; most municipalities have no attacks, on average, but the most affected municipalities experience as many as 76 paramilitary attacks and 90 guerrilla attacks per year. Government one-sided actions in our sample are 0.66 per year, again with a median of zero and a maximum of 35 attacks per 100,000 inhabitants. The incidence of clashes (Panel B) is much lower, with an average of 0.17 guerrilla vs. paramilitary confrontations per year, 2.25 guerrilla vs. government clashes, and 0.07 paramilitary vs. government confrontations per 100,000 inhabitants. The low number of guerrilla–paramilitary clashes is consistent with the different strategies of both armed groups: while guerrilla groups engage more frequently in combat with the government, the paramilitaries specialize in massacres and selective assassinations (Gutiérrez-Sanín, 2008).

Moving to other outcome variables, Panel C shows that 23% of the municipalities in our sample updated their land cadaster (registry) during the mayor's term. In turn, Panel D examines the incidence of corruption indicators originally collected by Martinez (2016), and Panel E looks at the three indices of local government performance.

Finally, in Panels F and G we show our forcing variable, the win margin for the left-wing candidate relative to that of the opponent. Looking at the absolute value of this difference the average win margin is of 9.4 percentage points with a median value of 6.7. Recall that this is the margin relative to the votes obtained by the top two candidates—rather than to the total number of votes. In addition, local elections in Colombia often field many candidates; the average number of candidates in our sample is 4.6 (with a median of 4, and a maximum of 17 candidates). Thus, this represents a relatively small win margin.

In the final panel we restrict the sample to Calonico et. al. (2014)'s optimal bandwidth for our baseline estimates. The sample drops to 157 observations. That is, over two thirds (67%) of the races relevant for our study (involving a left versus a non-left candidate) are close using this criterion.

Descriptive statistics for the sample of electoral races in which a right-wing party came in first or second are reported in Appendix Table B-4.

during our sample period. Only in Bogotá (in 2003 and 2011) and Bucaramanga (in 2011) was the winning margin within our optimal bandwidth. Our main results remain unchanged when we include these two cities (which had a total of three races that fit the criteria).

4 Main results and robustness

4.1 Baseline results

In Table 2 we report our main result: electing a left-wing mayor leads to a substantial and statistically significant increase in subsequent paramilitary violence. Panel A reports the non-parametric estimates following Calonico et al. (2014) and Panel B the parametric estimates of the treatment effect.¹⁴ Columns 1 and 5 include no controls; Columns 2 and 6 control for time-invariant geographic characteristics of the municipalities (such as altitude, average historical rainfall, distance to Bogotá, and region-specific dummies); Columns 3 and 7 include pre-determined socio-economic and political controls (such as the vote share of left- and right-wing presidential candidates in 1994, rurality, literacy rates, presence of coca, and historic violence); and Columns 4 and 8 include all the controls simultaneously. While in principle the inclusion of these covariates should not have a major impact on the coefficients, doing so may help improve the precision of the estimates (Lee & Lemieux, 2010).

The non-parametric estimates are positive and statistically significant across all specifications. The parametric estimates are smaller and not significant under a linear polynomial specification, but are statistically significant (and of similar magnitude) to the non-parametric estimates under the quadratic polynomial.

Focusing on the non-parametric estimates, the election of a left-wing mayor leads to an additional 4.4 to 6.8 attacks per 100,000 inhabitants per year during his or her term. This increase is quantitatively important. It is equivalent to 2.2 to 3.4 times the sample mean and 63-97% of a standard deviation. Despite our very small sample by the standards of typical RD analyses, the coefficients are statistically significant at standard confidence levels. Moreover, our results do not depend on our choice of bandwidth, and are robust to considering less-competitive elections. Panel A of Figure 5 shows the estimated coefficient and the 95% confidence interval using a wide range of bandwidths. The effect of a left-wing electoral victory on paramilitary attacks remains positive and statistically significant for bandwidths as small as 0.07 and as large as 0.2.¹⁵ For bandwidths of 0.05 or smaller, the point estimates become small and noisy, and the sample sizes become prohibitively small. For bandwidths larger than 0.2 the coefficients remain positive and stabilize at around 40% of a standard deviation, even if no longer statistically significant at conventional levels.¹⁶

Figure 4 illustrates these (non-parametric) findings. Observations within Calonico et al. (2014)'s bandwidths for a polynomial of orders one and two are displayed in the left- and right-

 $^{^{14}}$ In Panel A, we implement Calonico et. al (2014)'s bias correction and robust standard errors, as well as their optimal bandwidths for local polynomials of orders one (Columns 1 to 4) and two (Columns 5 to 8). Optimal bandwidths range from 4.8% to 11.9% depending on the controls included. Estimates in Panel B fit linear and quadratic polynomials (in Columns 1–4 and 5–8, respectively) and restrict the sample to that defined by the optimal bandwidth computed for the non-parametric case without including controls.

 $^{^{15}\}mathrm{In}$ order to compare the size of the effects across multiple outcomes, Figure 5 reports the effects on standard-ized outcomes.

 $^{^{16}}$ As a validation test, we re-estimate the treatment effect at different "placebo" cutoffs other than the threshold at which treatment occurs (in this case 0). This practice is especially useful when there are other cutoffs of the forcing variable that may capture changes that are erroneously attributed to the treatment of interest. While this is unlikely in close election settings, for completeness we estimate the effect of left-wing electoral victories on violence for different cutoffs in the range of -0.14 to 0.14. Estimates at alternative cutoffs (not reported) are unstable, imprecisely measured, and not statistically different from zero.

hand side panels, respectively. Each point represents the average of our paramilitary attacks variable within bins of equal size selected so that there are 10 bins at each side of the cutoff. Linear and quadratic fits (based on the raw, unbinned data with no controls) are depicted together with the bin averages. A jump in the number of attacks across the threshold is evident in both figures.

4.2 Robustness to party coding

Even after following a very strict three-step procedure to code the ideology of political parties, some parties were left unclassified. As described above, these parties were coded as neither leftnor right-wing in our baseline analysis. In Appendix Section B.1 we show that our estimates remain very similar if we drop these unclassified parties (Panel A of Table B-1), or if we code the ideology for some of them as the same as their parent party (Panels B and C of Table B-1).

4.3 Verifying RD assumptions and additional robustness checks

Our empirical approach relies on the underlying assumption that the outcome of close races is as good as random. This assumption would be violated if left-wing parties win in inherently different municipalities, and thus our estimates simply reflect the effect of other confounding characteristics on violence. To rule out this possibility, and assess the validity of our approach, we conduct three robustness checks.

First, we look for evidence of manipulation of electoral results, which would translate into an endogenous selection of winners. If candidates somehow manipulated the electoral results, for example via cheating or electoral fraud, this would invalidate the assumption that the assignment of treatment (i.e., win or lose an election) resembles a coin toss. If the results are manipulated, then any subsequent violence could be triggered by suspicions of fraud, rather than the political stance of the winner. Testing for sorting around the threshold is a useful way of examining potential manipulation (Lee & Lemieux, 2010). We thus follow McCrary (2008) and check the distribution of our forcing variable around the winning threshold. A discontinuous jump in either direction would indicate that the left is systematically more or less likely to win close races. Figure 6 shows the results of this test, and reports the statistic of the null hypothesis of no jump in the distribution. Reassuringly, there is no jump in the density at the threshold.¹⁷

Second, we test for balance in municipal characteristics across municipalities in which the left narrowly won or lost. In particular, we want to make sure that a left-wing victory is not correlated with pre-election trends in paramilitary (or other forms of) violence. We study this in Panels D to I of Figure 5, where we plot RD estimates (for several bandwidths) of the effect of a left-wing electoral victory on pre-election violence. Panels D, E and F focus on violence during the mayor's term prior to the election. In turn, Panels G, H and I focus on violence in the *year* prior to the election, since this may be when armed groups are likely to try use violence to shape electoral outcomes. All the point estimates are statistically insignificant across the six panels, for both small and relatively larger bandwidths. The only exception is paramilitary attacks in Panel D when focusing on a very short range of bandwidths just above 0.1. Even in

 $^{^{17}\}mathrm{The}$ estimate is 0.09 with a standard error of 0.24.

this case, however, the point estimates are just over half of our benchmark effect of close leftwing victories on subsequent paramilitary attacks, and just marginally significant. For other bandwidths, and for the case of paramilitary violence in the year prior to the election (Panel G), the point estimates are very close to zero. This is also the case for preceding guerrilla attacks.¹⁸ Overall, Figure 5 provides compelling evidence that previous violent dynamics are unlikely to explain our main findings.

Third, we test for balance across other municipal characteristics. Systematic differences on observables would raise doubts as to whether our estimates reflect the impact of a left-leaning victory, or instead are the result of confounding observables. In Appendix Section B.3 (Table B-2) we report estimates of the effect of a left-wing victory in a close election (Column 3) on a large set of covariates. Reassuringly, we find no statistically significant differences between treatment and control municipalities for most of these variables. The only exception is the number of years since the land registry was last updated, which is higher by about 4 years and significant at the 95% level in municipalities in which the left won, an issue we return to below.

4.4 Endogenous selection and external validity of close races

Our empirical strategy estimates the effect of a left-wing victory only for municipalities in which the election outcome was decided by a narrow margin. This may generate the concern that our estimates lack external validity for less competitive electoral races. This is a common limitation of RD estimates that focus on observations for which the assignment to treatment can be considered as good as random. A related concern is that the sample of electoral races in which a left-leaning party ends up winning or losing by a narrow margin is endogenous to the strategic behavior of elites and the voters. For example, in places where the elite exerts more effort in preventing a left-wing victory, or where voters anticipate the violent consequences of a narrow left-wing victory, elections are less likely to have a left-wing candidate win or come second. Thus, the concern is that our sample consists of municipalities in which elites and voters failed to behave in this strategic manner.

We address this concern in four main ways. First, McCrary (2008)'s test in Figure 6 and the reported balance across many observables in Table B-2 suggest that if elites engaged in any sort of manipulation, this is not correlated with municipal characteristics and did not bias the outcome of the election in a systematic way. Thus, our main results are *internally* valid.

Second, Panel A of Figure 5 shows the robustness of our main coefficient of interest to different bandwidth values. Reassuringly, the positive effect of a left-wing victory on paramilitary attacks remains positive, large, and statistically significant for a wide range of bandwidths (between 0.07 and 0.2). This implies that our results based on close elections are qualitatively similar to those of not-so-close elections, and thus may have broader external validity for other Colombian municipalities.¹⁹

Naturally, for larger bandwidths we can no longer give our RD estimates a causal interpreta-

¹⁸This is not to say that the guerrillas do not increase their attacks during election years (in fact, they historically have), but our findings suggest that this is uncorrelated with the outcome of the election.

¹⁹Recall that all the parties classified as left-leaning are involved in at least one close election, and that most electoral races in which the left came first or second are close. Figure (3) also suggests that our results have external validity for races in which the left may have won or lost by larger margins.

tion, as municipalities in which the left wins by a large margin may be very different from those in which the left loses by a large margin. However, recall that in Panels D–I of Figure 5 we show no differences in any preceding form of violence in either competitive or uncompetitive municipalities. In addition, in Appendix Section B.3 we show that some key municipal characteristics such as economic development, institutional quality, historical political preferences, and other electoral variables exhibit no major differences for municipalities far from the threshold. Thus, while estimates for larger bandwidths should be interpreted cautiously, they do not seem to confound other characteristics of these municipalities.²⁰

Third, Appendix Figure B-2, which plots the distribution of the win margin between the winners and runners-up in mayoral elections, shows that, consistent with Figure 3, most elections in which a left-wing party either wins or comes second are decided by a small vote margin (Panel A), and that this is not the case for the sample of all Colombian local mayoral elections (Panel B). In particular, while about 65% of all elections contested by a left-wing candidate are decided by a margin smaller than 10% (Panel A, first three bars), less than 40% of all local executive elections in the country are decided by such small margins (Panel B, first four bars). Thus, for the case of races with a left-wing winner or runner-up, close races are particularly representative of the overall universe of races.

Fourth, the strategic behavior by elites and voters to prevent an electoral victory of the left (discussed at the beginning of this section) is more likely in municipalities in which a left-wing candidate has previously won. In the absence of any local history of left-wing victories in local elections (which is very likely, given the exclusion of the left from politics throughout most of the 20^{th} century – see Section 2), it seems plausible that elites and voters failed to anticipate, respectively, the outcome (or competitiveness) of the election and the consequences of a leftwing victory.²¹ It is well documented that individuals often fail to anticipate events that have never occurred (Benoit & Dubra, 2013) and thus it is unlikely that our sample of close elections is endogenous to prior actions or elite/voter failure to anticipate the outcome.

However, following the first narrow electoral victory or defeat by a left-wing party, elites will learn that these parties represent a real electoral threat, and voters will experience the resulting spike in paramilitary violence. This suggests that constituencies in which a left-wing party either wins or comes second *for the first time* are less likely to be subject to strategic behavior by elites or voters. Dropping recurring municipalities from the sample (i.e., those that show up more than once in our sample because they have more than one close election with left-wing participation) yields results that are, as expected, larger in magnitude, in both close and non-close races (see Appendix Figure B-3, Panel A).²²

 $^{^{20}}$ We also estimated basic *difference-in-differences* regressions to study the effect of electing a left-wing mayor on various forms of violence. Estimates using this approach exploit variation from all municipalities in which the left ever held power, and not only those in which a left-wing party won in a close election. The estimates (not reported) are positive for paramilitary attacks (and larger than for other groups), though not statistically significant.

²¹Also, polling prior to elections in Colombia is very rare outside large cities, and often there are many candidates competing. Thus, it is usually very hard to predict who will win local elections.

 $^{^{22}}$ At the optimal bandwidth of Calonico et. al (2014) the non-parametric (parametric) estimates are 5.8 (5.1) and 6.1 (5.8) additional paramilitary attacks, on average, for local polynomials of orders one and two, respectively. Moreover, Figure B-3 (Panels B, C and D) confirms that for this alternative sample, there are no statistically significant differences in pre-electoral violence (as measured by paramilitary, guerrilla, or government attacks).

In sum, the evidence presented above suggests that our results are not just an artifact of the RD approach, in which inference is based on elections decided by a narrow margin of votes. Rather, they hold for a larger set of elections in which a left-wing candidate was either the winner or the runner-up. Nonetheless, it is important to study whether municipalities in which the left was relatively successful in local elections are representative of all Colombian municipalities. We find that in several respects they are not. In Table B-3 we investigate the characteristics of municipalities in our sample relative to all other municipalities in the country. Panel A shows that our sample of municipality-years in which left-wing parties won or came second experienced more one-sided attacks by armed groups than those in which the left was not competitive. This is important, as our argument hinges on the comparative advantage of local elites to use *de facto* (violent) means to counteract the democratic threat of the left. Also, not surprisingly, these are also areas in which the left (right) has higher (lower) average support than in the rest of the country, in both local and national elections (Panel C). In addition, municipalities in our sample have larger populations (hence the importance of normalizing our violence variables) and twice the historic incidence of coca crops relative to municipalities not included in our sample (Panel C). They also have a weaker institutional capacity, as measured by the per capita number of local public servants (Panel B).

5 Alternative interpretations

So far we have focused on single-sided attacks by the paramilitary, arguing that such attacks best exemplify the type of *de facto* response that traditional elites might exert when facing increased *de jure* contestation by left-wing outsiders with different political preferences. However, there are other potential interpretations of our results.

We start by examining the impact of a narrow left-wing electoral victory on other types of violence. It is important to rule out, for instance, the possibility that paramilitary attacks might have risen in response to either increasing or decreasing guerrilla attacks. If the armed and democratic left are strategic complements (substitutes), then we would expect a spike (decrease) in guerrilla violence following a left wing victory. In turn, because of their counterinsurgent nature, paramilitaries are likely to react to these dynamics with violence, either by contesting an empowered armed left or by filling the power vacuum left by a guerrilla retreat. Likewise, and through similarly complex mechanisms related to the complementarity/substitutability of violence across armed groups (which are beyond the scope of this study), the surge in paramilitary violence may be partly driven by a change in the incidence of attacks by government forces following a left-wing victory. Finally, another alternative is that left-wing mayors are simply unable to curb (any type of) violence, perhaps because they do not prioritize security and law and order (see Appendix Section A.1).

We reject these hypotheses by showing that neither guerrilla nor government attacks change differentially in municipalities in which a left-wing candidate narrowly wins vs. comes second. This is reported in Columns 1 and 2 of Panel A of Table 3: not only are the point estimates not statistically significant, but the magnitude of the coefficients for both guerrilla and government attacks is rather small (0.7 and 1.6 additional attacks per 100,000 inhabitants, respectively, which is much smaller than our baseline effect for paramilitary violence).²³ For completeness, we also look at two-sided armed confrontations (clashes) between different groups, and confirm that no other type of violence increases as a result of a left-wing candidate being elected mayor. This is reported in Columns 3 to 5 of Panel A, Table 3 for close races (as defined by the optimal bandwidth of Calonico et al. (2014)).

Another hypothesis is that left-wing parties and politicians are targeted not because they advocate policies that are contrary to the interests of traditional elites, but because their governments are corrupt or perceived as inept.²⁴ While measuring corruption is challenging, in Panel B of Table 3 we test whether in places where the left won, the mayor (Columns 1 to 3) or other top municipal officials at the rank of secretary (Columns 4 to 6) are more likely to be investigated for misconduct by Procuraduría General de la Nación, the government Watchdog Agency (Columns 1 and 4), found guilty (Columns 2 and 5), or removed from their post (Columns 3 and 6). We find no evidence that left-wing mayors or their secretaries are more corrupt than municipal executive officials from other parties. The point estimates are statistically insignificant (especially in the case of mayors) and small in magnitude compared to the average in the sample (Table 1). Furthermore, in Panel C we look at the three indices of government performance described in Section 3.2 (Columns 1 to 3), as well as municipal capital and current fiscal expenditure, to check whether left-wing mayors spend more than non-left-wing incumbents (Columns 4 and 5). We find no evidence that left-wing mayors perform worse than those from other parties.²⁵ In short, the evidence does not corroborate the hypothesis that the violent reaction we observe is driven by higher (or lower) corruption levels or the poorer (better) governance of left-wing mayors.

Another potential interpretation of our results is that, due to the weak legitimacy of the democratic system in Colombia, a violent reaction would have taken place after a narrow victory of other parties as well. Our baseline estimates imply that violence does not increase when the non-left narrowly defeats the left in local elections. However, the non-left includes a large and heterogeneous group of parties, some of which may incite violence after winning office and some of which may not. For example, increased violence may follow the election of a candidate from any party on the extremes of the ideological spectrum. The most natural comparison is assessing the impact of narrow electoral victories of right-wing parties on levels of violence. Panels A and B of Table 4 report the estimated impact on different types of violence of narrow victories by right-wing vs. non-right-wing parties in mayoral elections in Colombia during our sample period. There is no significant effect on either total attacks (aggregated across all groups), or on attacks perpetrated by the paramilitary or guerrilla groups. Attacks carried out by government forces are *negative* and significant, and the point estimate suggests that, after narrow victories of right-wing parties, government attacks drop by 0.5 per 100,000 inhabitants during the mayor's term in office. However, this is a small effect, equivalent to less than 40% of

 $^{^{23}}$ While the coefficient for paramilitary violence is over three times the mean and almost a full standard deviation, the estimated effect on guerrilla violence is about a fifth of the mean and less than a tenth of a standard deviation.

²⁴The contrary is also a plausible: the left may be more honest and competent than previous local administrations, and hence may be targeted for changing the way in which municipalities are traditionally run.

 $^{^{25}}$ These estimates, especially those reported in Columns 2 and 3, are based on a smaller subset of years due to data availability.

a standard deviation.²⁶ With the exception of attacks by government forces, the null effects for other types of violence are robust to varying the estimation bandwidth across a large range of values (Figure B-4, Panels A, B and C).²⁷ In addition, the magnitude of the coefficients is small compared to our baseline estimates for paramilitary violence after left-wing parties win in a close election. The point estimate for paramilitary attacks in Table 4 is 0.18, which is equivalent to 30% of the sample mean and 5% of a standard deviation, as reported for this sample in Table B-4. In summary, and in line with our expectations given the nature of Colombia's political history, the right is not a political outsider, and thus its victories are less threatening to existing interest groups with the capacity to react via *de facto* means.

Another possibility is that our estimates simply reflect the effect of the electoral victories of new parties. As discussed in Section 2, the 1991 constitution facilitated the creation of new political movements across the entire ideological spectrum, many which (leftist or not) have been electorally successful in some places. Thus, the violent response of paramilitaries may reflect a more general reaction to the threat of new political actors to traditional elites' grip on power, and not necessarily a reaction to left-wing ideology. To address this possibility we first follow Galindo-Silva (2015) and code as a new party any party in a given municipality that (1) is not one of the two traditional parties (Conservative and Liberal) and (2) has never won an election in that municipality. We then estimate the effect of a narrow electoral victory of a new party on paramilitary attacks. Importantly, we drop from our estimation sample all leftwing parties and thus isolate the effect of new parties that were not associated with a left-wing ideology. The effect of narrowly electing a mayor from a non-left new party on paramilitary attacks is reported in Table B-5. The estimates are very small (about a tenth or less of the baseline effects of Table 2) and statistically insignificant (with the exception of the parametric estimates fitting a linear polynomial). This implies that our results are related to the ideological stance of left-wing parties, and are not explained by the fact that left-wing parties were simply new to the local political arena. In the Colombian context, only left-wing parties seem to have been particularly threatening to the interests of local elites.

One remaining question is whether our estimates reflect a widespread phenomenon associated with all left-wing parties, or are simply driven by the persecution of the UP, the party formerly associated with the FARC (see Section 2).²⁸ While the persecution of the UP is partly the phenomenon that we are documenting in this paper, if our results are entirely driven by the UP this would potentially decrease the external validity of our results, and call into question our claim regarding a *de facto* response to the *de jure* accumulation of power by any left-wing party, not only the party with past connections to communist guerrillas. To address this possibility, we revisit the baseline empirical exercise of Columns 1 and 5 of Panel A of Table 2 but add as controls a dummy for whether the left-wing party in the close electoral race is the UP and the

²⁶Panel A of Table 4 reports non-parametric estimates and Panel B reports parametric estimates. All estimates are based on local linear polynomials within the optimal bandwidth and include bias correction and robust standard errors. The results for the second-order polynomials are similar in magnitude and also not significant.

²⁷Moreover, Appendix Figure B-5 shows that there is no significant evidence of manipulation of the running variable in close elections in which right-wing parties are either the winners or the runners-up.

²⁸Even as recently as this year, a UP leader who returned to Colombia from exile in 2015 was the victim of a violent attack. See "Defensoría pide esclarecer con urgencia ataque contra líder de Unión Patriótica," *El Espectador*, May 7, 2016. Available at http://www.elespectador.com/noticias/nacional/bolivar/defensoria -pide-esclarecer-urgencia-ataque-contra-lider-articulo-631172 (last accessed May 16, 2016).

interaction of this dummy with an indicator of whether the left-wing party won. The results are reported in Appendix Table B-6. The point estimates become somewhat smaller but remain statistically significant. This suggests that our baseline estimates are not simply driven by the UP, and that paramilitary violence also followed the election of other left-wing parties. The interaction term between the UP and the victory dummy is positive, as expected, suggesting that violence in places where the UP narrowly won was much larger. However, the coefficient is not statistically significant, probably due to power limitations (the UP contested eight elections during our sample period, and won half of them).

6 Mechanisms

In this section we present additional evidence that supports our preferred interpretation. We start by testing what happens to our overall effect after 2006, when the paramilitaries (which by then had joined forces under the AUC umbrella organization) demobilized after signing a peace agreement with the Uribe government.²⁹ Table 5 interacts the dummy of a left-wing victory with a time indicator that captures all local elections that took place after 2006 (i.e., in 2007 and 2011). The estimated interaction coefficient is negative and statistically significant. Interestingly, we cannot reject the null hypothesis that the effect of a left-wing victory in elections after 2006 is equal to zero, which suggests that the increase in violence following the election of left-wing candidates may have disappeared altogether after the demobilization of the AUC.³⁰

The timing of the observed increase in paramilitary attacks following left-wing victories also has implications for the validity of our interpretation. We argue that in order to avoid the consolidation of political power in the hands of left-wing parties, paramilitaries are likely to concentrate their violent reaction as the subsequent elections approach, thus preventing the left from winning again.³¹ Known paramilitary tactics include "terrorizing voters to vote in particular ways, ... to stay away from the polls so they could stuff ballots, voting instead of citizens by confiscating their identify cards, terrorizing politicians so that they would not run against their preferred candidates, and manipulating subsequent vote totals electronically" (Acemoglu et al., 2013). Table 6 presents estimates of the effect of electing left-wing candidates as mayor on paramilitary attacks during each year of his or her term in office.³² The results indicate that the increase in paramilitary violence is driven by increased attacks in the year of the subsequent election. The coefficient for the first year is positive (4.8), while the coefficient for the second year is negative (though relatively small in magnitude, -1.2). However, the coefficients for the third year (10.9) and the year of the subsequent election (18.5) are not only positive but also substantially larger than the baseline estimates. These estimates are noisy, and only the one for the third year is significant at conventional levels, which is a consequence

 $^{^{29}}$ While splinter paramilitary groups persisted after this time, they were mainly guided by economic rather than political motivations.

³⁰We must nonetheless interpret this result cautiously, since a simple time dummy may also capture other changes that took place after 2006 in Colombia in addition to the demobilization of paramilitaries. For example, it may indicate an overall improvement in institutions and state capacity in the last decade, or changes in the electoral law that may have shifted the incentives of political parties.

³¹This incumbency (dis)advantage is discussed further in Section 7.

³²Recall from Section 3.2 that mayoral terms are either 3 or 4 years.

of our small sample. But the point estimates suggest a pattern in which violence tends to spike right after the left-wing candidate is elected and, more significantly, approaching the year of the subsequent election. The next section examines whether this paramilitary strategy of increasing violence in the last year of a mayor's term is effective.

7 The consequences of violent paramilitary responses

We now look at the performance of left-wing parties in the subsequent election - i.e., the one after the close race in which they narrowly won or lost - and establish whether they suffer from an incumbency disadvantage, at least relative to other political parties. There are several challenges in estimating incumbency advantage or disadvantage: incumbency status is usually correlated with other party characteristics that explain both why the party was successful in getting elected in the first place and its performance in the next election. Moreover, as discussed in Section 3.2, the large number of local parties in Colombia, many of which are short-lived and disorganized, makes it harder to identify the electoral effects of incumbency.

To assess subsequent electoral performance we follow Klašnja and Titiunik (in press), who use a close-elections-based RD approach very similar to the one we use in this paper. For each electoral period t they focus on incumbent parties (those elected in period t - 1) and estimate the effect of the (arguably random) arrival in office on future electoral success. Our main measure of future success is a dummy variable for whether incumbent parties run in and win the next election (in period t + 1). For close races, for which the outcome of the time t election is plausibly as good as random, a dummy indicating whether the period t incumbent wins in t+1 compares the subsequent electoral success of the incumbent party in municipalities in which it was a close winner vs. a close loser.

We report the estimates from this exercise in Table 7. Columns 1 to 4 of Panel A estimate the average degree of incumbency advantage in Colombia.³³ The estimates for the election winner dummy are negative and very similar to those reported by Klašnja and Titiunik (in press) for Colombia.³⁴ This suggests that political parties in Colombian local elections experience an incumbency disadvantage. However, in Columns 5 and 6 we extend the exercise of Klašnja and Titiunik (in press) and interact the winner dummy with an indicator for whether the party is left-wing. The interaction term is negative, statistically significant, and very large. The point estimate suggests that left-wing parties in Colombian local elections experience an incumbency disadvantage that is five to six times larger than that of other (non-left-wing) parties.³⁵ We argue that this may be (at least partly) explained by the attacks targeted at left-wing incumbent

³³Columns 1 and 2 follow the non-parametric approach using polynomials of orders 1 and 2, respectively, while in Columns 3 and 4 we report estimates from a parametric approach.

 $^{^{34}}$ For this analysis we use a somewhat larger sample than the one used in the rest of the empirical exercises, because the 1994 electoral results (which, as explained in Section 3.2, are not available for election losers) allow us to identify incumbent parties that participated in the 1997 elections, the first of our sample period. While we want our sample to be as large as possible, the incumbency disadvantage estimates are not sensitive to this change.

 $^{^{35}}$ To test whether paramilitary violence following close left-wing municipal victories affects voters' support of left-wing parties in subsequent *national* elections, we estimate the effect of a narrow left-wing victory in mayoral elections on the municipal vote share of left-wing parties in the next presidential and congressional (Senate and House) elections. The results (not shown) suggest that such violence does not affect support for the left in national elections.

parties right before their potential re-election.³⁶

The exercise presented in Panel A may hide an important consequence of the attacks aimed at preventing left-wing parties from remaining in power. After being subjected to violent intimidation, incumbent parties may simply decide not to run in the next election. We explore this alternative definition of incumbency disadvantage in Panel B of Table 7. The dependent variable is no longer whether the incumbent party that competed in the election in period truns and wins in t + 1, but simply whether the incumbent party runs at all. In contrast to the results presented in Panel A, we find no statistically significant average effects for non-left parties who win the election at t. However, resonating with the results of Panel A, we find that the interaction term of the winning party with an indicator for left-wing parties is negative and significant (and larger in absolute terms than Panel A's interaction coefficients). This implies that left-wing incumbent parties are less likely than non-left-wing incumbents to put forward a candidate in the next election.³⁷

Another objective of local elites' *de facto* responses to the election of left-wing mayors is to prevent these outsiders from implementing elite-threatening policies. Table 6 hints that this is likely the case, as the attacks are concentrated during the first and final years of the mayor's term in office. While the higher intensity of attacks at the end of the period is intended to shape the results of the subsequent election, the increase in violence at the beginning of the term is likely designed to intimidate the incumbent into maintaining the status quo in terms of policies. We present anecdotal evidence that this is likely the case in Section 8. Here we focus on the policy that is the most threatening to local elites, most of whom are landowners: land registry updates. Municipal mayors have the constitutional authority to update local land registries in order to keep the value of land up to date for the purpose of calculating property and land taxes. This is the most important source of revenue for most Colombian municipalities, and one of the few taxes collected at the local level (Vargas & Villaveces, 2016).³⁸

We gathered data on land registry updates and estimate the effect of a narrow left-wing victory on the probability that the registry will be updated at least once during the new mayor's term. The results are reported in Table 8. Columns 1 and 2 focus on the non-parametric estimates and Columns 3 to 6 on the parametric ones. Odd (even) columns fit a linear (quadratic) local polynomial. The results are not significant in any specification, which suggests that, even if left-wing candidates are in principle much more likely to adopt redistributive policies, they are unable to do so while in office. Recall from Table B-2 that municipalities in which a left-

³⁶Admittedly, this conclusion is based on very few observations. There are just four instances in which left-wing incumbent parties (in t - 1) won the election in t and contested a new mayoral election in t + 1. Of these, they lost three and won one. Since even fewer right-wing incumbent parties (unsuccessfully) contest new elections, for these instances the interaction term is perfectly collinear with the "right-wing party" dummy, which makes it impossible to replicate Table 7 for the right.

³⁷While the evidence in Table 7 is obtained using Klašnja and Titiunik (in press)'s approach to studying incumbency advantage *conditional on being an incumbent* (that is, on having been elected to office in t - 1), an alternative approach is to estimate the success in period t + 1 of all parties that won elections in t, regardless of their incumbency status. We estimate this alternative specification and report the results in Table B-7. In contrast to the results from Table 7, when departing from the approach of Klašnja and Titiunik (in press), we find no incumbency disadvantage for the left. Our argument that right-wing paramilitary violence following left-wing electoral victories generates an incumbency disadvantage for the left should thus be interpreted with caution.

³⁸The others are sales taxes, fuel taxes, and temporal taxes on specific activities. The non-local municipal sources of revenue are transfers from the central government and royalties obtained from the exploitation of natural resources.

wing party narrowly won present a larger lag since the last registry update. Columns 5 and 6 further control for this covariate, but we still find no effect of a left-wing electoral victory on the probability of updating the land registry.

In addition to the regression evidence shown so far, a look at some qualitative studies can help complement our regressions by further understanding the underlying causal mechanisms (Franzese, 2007; Mahoney & Villegas, 2007). The next section discusses some revealing examples and codes the nature of the paramilitary attacks on which our regressions are based.

8 Evidence from case studies

Our interpretation of the econometric results is in line with abundant anecdotal evidence on the nature of paramilitary violence. The Centro Nacional de Memoria Histórica (2013, pg. 50), an autonomous group commissioned by the government to compile the history of victims of violence in Colombia, notes that from 1988 to 1992 following the introduction of local elections, "big massacres were true expeditions to punish social mobilization and reject the political success of the left, in particular the *Unión Patriótica* and the *Frente Popular*." This source cites some of the most emblematic cases of massacres of left-wing militants and the general population in areas where the left scored important electoral victories. Perhaps the best-known massacre took place in Segovia, in the department of Antioquia, on November 11, 1988 (Centro Nacional de Memoria Histórica, 2014). This attack killed 46 people in retaliation for the election of a UP mayor. Before the mayor's election, leaflets were distributed with the following message:

"We back the big *caudillo* in this region, César Pérez García (...) We will not accept Communist mayors or municipal councils made up of idiotic peasants or vulgar workers like those who make up the *Unión Patriótica*. They don't have the intelligence to handle these positions and manage these municipalities that have always been ours. Now we will get them back NO MATTER WHAT IT COSTS! ... You wait ... We will hit you with a mortal blow" (Dudley, 2004, pg. 121, upper case in the original).

In 2000, the UP candidate, Adelia Benavides, was narrowly elected mayor in the Liberal Party stronghold of Viotá. In 2003, in the last year of Benavides' term, Viotá experienced almost 20 paramilitary attacks. While paramilitary leaders justified this violence as a counter-insurgency strategy,³⁹ the attacks were likely triggered by the new mayor's aggressive property tax plans, which threatened to substantially increase the tax burden of local landowners.⁴⁰ Viotá has not elected a leftist mayor again since experiencing these unprecedented levels of violence against civilians. In 2003 the left placed third with only 11% of the votes, and in 2011 it received 3.5% of the votes. In 2007 there was no leftist candidate in the mayoral race.

In another example, Carlos Zambrano, the leftist party Polo Democrático's candidate, was narrowly elected mayor of the municipality of Baranoa in 2003. Zambrano planned to increase

³⁹Paramilitary leader Martín Llanos once argued that the Viotá campaign was launched to "help the displaced landowners of the guerrillas return to their lands." However, our dataset indicates that post-2000 paramilitary violence in Viotá was entirely targeted against civilians; there were no clashes with guerrillas.

 $^{^{40}}$ By 2003, Benavides had plans to increase property tax revenues by up to 70% after her Liberal predecessor had allowed property tax revenues to drop to less than 30% of total tax revenues by the end of the term in 2000.

taxes on the relatively wealthy in order to subsidize the utility bills of the poor, which made him unpopular with the local elite. He also forced local utility providers to cut their tariffs.⁴¹ In 2004 paramilitary groups started killing local Polo Democrático leaders who worked closely with Zambrano in this initiative.⁴² One of the victims was Elías Durán, a board member of the Civic Committee for the Defense of Utilities, created by Zambrano.⁴³ Another victim was a community leader who led a civic initiative in 2003 for citizens to stop paying their water bill because of the high rates.⁴⁴ In 2005 Zambrano was forced by paramilitary leader "Jorge 40" to flee the municipality.⁴⁵

In 2000 Oscar Quintero, representing the indigenous leftist political movement Autoridades Indígenas de Colombia, was narrowly elected mayor in the municipality of Corinto. Starting in 2001, paramilitary groups killed local indigenous political leaders who they labeled "guerrilla supporters." In two roadblocks in 2001 and 2002, paramilitaries killed a leader of the "Indigenous Civic Guard" and three members of Corinto's Cabildo (the semi-autonomous indigenous government).⁴⁶

On November 27, 2000, shortly before the end of his tenure as mayor of Unguía, Rigoberto Castro was killed by paramilitary forces. Castro had won the 1997 election by a small margin. Castro's friends reported that his request to the local police chief for additional protection after receiving threats by armed men was ignored. In 2015 the State Council found that the National Police was at fault for not protecting Castro, and awarded his family US\$ 400,000.⁴⁷

These are just a few examples of a much wider and deliberate campaign by paramilitary groups to target left-wing politicians. In some cases the available information makes it clear that, once in office, the victims intended to adopt policies that hampered the interests of powerful local elites, which may have triggered the violence. In order to study how systematic this pattern was, we reviewed the descriptions in our conflict dataset (see Section 3.2) of *every single* paramilitary attack that occurred during the term of a left-wing mayor elected by a narrow margin – or in the years following the narrow *defeat* of a left-wing candidate. Our dataset is comprised of reports in national and local newspapers and other media sources; we particularly focused on information about whether the victim was involved in local politics as well as his or her political affiliation (see Appendix Section A.2 for details on the coding protocol).

Two patterns emerge from this exercise, which are consistent with our hypothesis. First, 3.5% of the victims of paramilitary attacks in municipalities in which a left-wing mayor was narrowly elected were left-wing activists, compared with 0.8% where the left barely lost the

⁴¹ "Baranoa busca acuerdo con consecionario," *El Heraldo*, November 1, 2010. Available at http://www.elheraldo.co/local/baranoa-busca-acuerdo-con-consecionario-15703 (last accessed March 2, 2016).

⁴² "Amenazas a 63 Alcaldes," *El Tiempo*, June 10, 2004. Available at http://www.eltiempo.com/archivo/ documento/MAM-1533589 (last accessed March 2, 2016).

⁴³http://www.nocheyniebla.org/files/u1/29/pdf/13Mayo2004.pdf.

 ⁴⁴http://www.nocheyniebla.org/files/u1/31/pdf/05casos31.pdf, (last accessed November 21, 2016).
 ⁴⁵Ibid.

⁴⁶ "Colombia: masacres en la zona rural de Corinto, Cauca; y en zonas rurales de El Santuario, Cocorná, La Pintada, y San Carlos, Antioquia. Durante estos hechos fueron asesinadas cerca de 25 personas," *Organización Mundial Contra la Tortura*, November 22, 2001. Available at http://www.omct.org/es/urgent-campaigns/urgent-interventions/colombia/2001/11/d16132/ (last accessed March 2, 2016).

⁴⁷ "La condena a la Nación por el homicidio de un alcalde por parte de 'paras," *El Espectador*, March 28, 2015. Available at http://www.elespectador.com/noticias/judicial/condena-nacion-el-homicidio-de-un -alcalde-parte-de-para-articulo-551888 (last accessed March 2, 2016).

election. That is, the incidence of left-wing victimization in paramilitary attacks is almost four and half times higher in places where the left won by a small margin than in places where it lost. Second, 86% of the leftist activists killed by paramilitary groups in municipalities in which the left won were actually involved in local politics (some were the elected mayors), while the figure for places where the left barely lost is 75%.

9 Discussion

In the late 1980s and early 1990s Colombia undertook a number of democratizing reforms, notably the introduction of mayoral elections. The opening up of the political system marked the entry of traditionally excluded groups, particularly left-leaning parties. But these reforms, and the overall shift towards a more inclusive set of institutions, threatened the traditional balance of power in authoritarian enclaves where economic and political elites held a significant amount of both institutionalized and illegal (violent) power, a feature that is typical of countries with an uneven distribution of functioning institutions.⁴⁸

In this paper we show that left-wing party victories in mayoral elections in Colombia triggered a surge in attacks by right-wing paramilitaries. As predicted in Acemoglu and Robinson (2008)'s theory about the persistence of power and elites in weakly-institutionalized environments, we interpret this increase in violence as a *de facto* reaction of local political and economic elites to counteract the increase in the *de jure* power of traditional outsiders. We rule out several alternative hypotheses and provide evidence of mechanisms that support this interpretation. For instance, we show that the surge in violence is concentrated in the year of the subsequent election, which gives left-wing parties in Colombia a large incumbency disadvantage.

Our interpretation, however, raises some important questions. For example, why did political elites agree to open up the political system in the first place? If they were powerful enough to respond to the electoral success of outsiders with violence, shouldn't they have been able to prevent reforms that threatened their local monopoly of power? We posit that this is due to two main reasons. First, the reform that introduced local elections in 1986 was promoted by the central government (as an outgrowth of its peace negotiation with the rebels), not by the local elites. In turn, the 1991 constitution (which complemented the 1986 reform) was promoted by a student movement calling for a Constitutional Assembly. Hence, these reforms were largely imposed exogenously on local elites, and thus their only alternative was to respond with strategies of boundary control that, given the low state capacity across the country, were able to coexist with democratizing national reforms (Robinson, 2013, 2016). The second reason has to do with uncertainty about the outcome of future elections. Traditional political groups may have overestimated their electoral success (or underestimated the appeal of outsiders), thus gambling their chances of losing power when the reform was adopted.

Another important question is why is there violence when the left wins? And, relatedly, why is there no violence when other non-left parties win? We argue that this relates to the combination of the persistent *de facto* power of traditionally strong elites and the relative convergence in

⁴⁸This feature has been the focus of the "subnational authoritarianism" strand of political science literature, which emphasizes the coexistence of national-level democratization and local authoritarianism (see (Gibson, 2014)).

policy platforms among traditional parties. Given Colombia's history of political exclusion and the power-sharing pact between traditional parties, the entry of the excluded left, with its radically different policy preferences, makes it hard to bargain a policy compromise. This creates incentives for a *de facto* reaction by traditional insiders. The nature of connections between the local elites and paramilitary groups in Colombia – which features institutional capture, state acquiescence, and strong connections to legal structures (Romero, 2004; Centro Nacional de Memoria Histórica, 2014) – facilitates paramilitary violence. In contrast, the election of traditional politicians from non-leftist parties with similar policy preferences constitutes no threat to local elites, and thus violence perpetrated by insiders is unlikely. Finally, left-wing sympathizers do not systematically respond violently when non-left challengers are elected mayor because they do not enjoy such close links with the local political establishment and security forces.

One implication of our findings is that several dimensions of institutions must effectively function together in order for democracy to prosper. Open elections that are not accompanied by a state monopoly over violence, or by checks and balances against the disproportional accumulation of political power in the hands of a few individuals, may have unintended negative consequences. The absence of strong and functioning institutions across all dimensions is likely to lead to *see-saw* effects in elites' use of different forms of power. When democratizing reforms strengthen political institutions, elites may simply switch their investments away from the formal or *de jure* exercise of political power, and towards other more violent means to preserve their influence and power. Our findings are thus relevant in other countries in which the political system is opened up in a context of weak institutions and informal means of local authoritarian control over the territory. This has been the case in many developed countries, and is the case today in several developing countries with nominally democratic regimes.

Fox (1994) discusses democratization in Latin America and the attempts to eliminate local authoritarian enclaves. Examples include the uneven nature of state democratization in Mexico, where the PRI has held onto power via violent means: "This pattern was most notable in Michoacan, the only state where the PRD had a serious chance of winning a governorship. (...) Political violence against the opposition went unpunished" (p.112). Gibson (2014), when referring to Santiago del Estero in Argentina, also notes that "where institutional control and clientelism failed to neutralize opponents, outright oppression filled the void." In the Philippines, after the restoration of democracy in 1946, a new left-wing party representing the organized peasantry (the Democratic Alliance, DA), participated in legislative elections despite being violently repressed by the private armies of landlords, and won legislative races in six congressional districts. However, an elite-controlled Congress illegally refused to allow the DA to take its seats (Franco, 2001). Even in the US South, where authoritarian enclaves could devise strategies of control through "perfectly legal" means, "the mixes of boundary-control strategies –violent and nonviolent, legal and illegal – shifted with features of the national territorial regime" (Gibson, 2014, p.73).

References

- Acemoglu, D., García-Jimeno, C., & Robinson, J. A. (2015, August). State capacity and economic development: A network approach. *American Economic Review*, 105(8), 2364-2409. Retrieved from http://www.aeaweb.org/articles?id=10.1257/aer.20140044 doi: 10.1257/aer.20140044
- Acemoglu, D., & Robinson, J. A. (2006). Economic origins of dictatorship and democracy. Cambridge: Cambridge : Cambridge University Press.
- Acemoglu, D., & Robinson, J. A. (2008). Persistence of power, elites, and institutions. American Economic Review, 98(1), 267–93. Retrieved from http://www.aeaweb.org/articles .php?doi=10.1257/aer.98.1.267 doi: 10.1257/aer.98.1.267
- Acemoglu, D., Robinson, J. A., & Santos, R. J. (2013). The monopoly of violence: Evidence from Colombia. Journal of the European Economic Association, 11, 5–44. Retrieved from http://dx.doi.org/10.1111/j.1542-4774.2012.01099.x doi: 10.1111/j.1542 -4774.2012.01099.x
- Acevedo, K. M., & Bornacelly, I. D. (2014, July). Panel Municipal del CEDE (Documentos CEDE No. 2014-26). Universidad de los Andes-CEDE. Retrieved from https://ideas .repec.org/p/col/000089/012223.html
- Bandiera, O., & Levy, G. (2011). Diversity and the power of the elites in democratic societies: Evidence from Indonesia. Journal of Public Economics, 95(11-12), 1322 1330. Retrieved from http://www.sciencedirect.com/science/article/pii/S0047272711000533 (Special Issue: International Seminar for Public Economics on Normative Tax Theory) doi: http://dx.doi.org/10.1016/j.jpubeco.2011.04.002
- Benoit, J.-P., & Dubra, J. (2013). On the problem of prevention. International Economic Review, 54(3), 787–805. Retrieved from http://dx.doi.org/10.1111/iere.12017 doi: 10.1111/iere.12017
- Bruce, R., & Rocha, R. (2014, June). The Reaction of Elites in a Democratization Process: Evidence from Brazil (Working Papers, Department of Economics No. 2014-09). University of Sao Paulo (FEA-USP).
- Budge, I., Bara, J., Volkens, A., & Klingemann, H. (2001). Mapping policy preferences: Estimates for parties, electors and governments, 1945-98. Oxford University Press.
- Bushnell, D. (1993). The making of modern Colombia : a nation in spite of itself. Berkeley: Berkeley : University of California Press.
- Calonico, S., Cattaneo, M. D., & Titiunik, R. (2014). Robust nonparametric confidence intervals for regression-discontinuity designs. *Econometrica*, 82(6), 2295–2326. Retrieved from http://dx.doi.org/10.3982/ECTA11757 doi: 10.3982/ECTA11757
- Casper, G., & Taylor, M. M. (1996). Negotiating democracy: Transitions from authoritarian rule. University of Pittsburgh Press.
- Centro Nacional de Memoria Histórica. (2013). *¡basta ya! Colombia: Memorias de guerra y dignidad.* Bogotá: Pro-Off Set.
- Centro Nacional de Memoria Histórica. (2014). Silenciar la democracia. Las masacres de Remedios y Segovia, 1982 1997 (2nd ed.). Bogotá: CNMH.
- Chacón, M., Robinson, J. A., & Torvik, R. (2011). When is democracy an equilibrium? theory and evidence from Colombia's La Violencia. *Journal of Conflict Resolution*, 55(3), 366-396.
- Collins Jr, E., & Cole, T. M. (1996). Regime legitimation in instances of coup-caused governments-in-exile: The cases of presidents Makarios and Aristide. J. Int'l L. & Prac., 5, 199.
- Davenport, C. (1997). From ballots to bullets: an empirical assessment of how national elections influence State uses of political repression. *Electoral Studies*(4), 517-541.

Davenport, C. (2007). State repression and political order. Annual Review of Political Science, 10, 1–23. doi: 10.1146/annurev.polisci.10.101405.143216

- Davila, A. (1992). "¿Del bipartidismo a un nuevo sistema de partidos? crisis, constituyente y reconstrucción de un orden político democrático en Colombia (No. 3).
- Davila, A. (1999). Clientelismo intermediación y represetación política en Colombia: ¿qué ha pasado en los noventa? (No. Julio-Diciembre).
- Dudley, S. S. (2004). Walking ghosts : murder and guerilla politics in Colombia. New York, London: New York, London : Routledge.
- Duncan, G. (2007). Los senñores de la guerra. Bogotá: Editorial Planeta Colombiana.
- Eifert, B., Miguel, E., & Posner, D. N. (2010). Political competition and ethnic identification in Africa. American Journal of Political Science, 54 (2), 494–510. Retrieved from http://dx.doi.org/10.1111/j.1540-5907.2010.00443.x doi: 10.1111/j.1540-5907.2010.00443.x doi: 10.1111/j.1540-5907.2010.00443.x
- Fergusson, L., & Vargas, J. F. (2013, February). Don't Make War, Make Elections. Franchise Extension and Violence in XIXth-Century Colombia (DOCUMENTOS CEDE No. 010584). UNIVERSIDAD DE LOS ANDES-CEDE. Retrieved from http://ideas.repec .org/p/col/000089/010584.html
- Fergusson, L., Vargas, J. F., & Vela, M. A. (2013, February). Sunlight Disinfects? Free Media in Weak Democracies (DOCUMENTOS CEDE No. 010487). UNIVERSIDAD DE LOS ANDES-CEDE. Retrieved from http://ideas.repec.org/p/col/000089/010487 .html
- Fox, J. (1994). Latin America's emerging local politics. Journal of Democracy, 5(2), 105–116.
- Franco, J. C. (2001). *Elections and democratization in the philippines*. Routledge. Retrieved from https://books.google.com/books?id=fAq9kgbKBAUC
- Franzese, R. (2007). *Multicausality, context-conditionality, and endogeneity*. Oxford University Press.
- Galindo-Silva, H. (2015). New parties and policy outcomes: Evidence from colombian local governments. Journal of Public Economics, 126, 86 - 103. Retrieved from http:// www.sciencedirect.com/science/article/pii/S0047272715000560 doi: http://dx .doi.org/10.1016/j.jpubeco.2015.04.001
- Gelman, A., & Huang, Z. (2008). Estimating incumbency advantage and its variation, as an example of a before–after study. *Journal of the American Statistical Association*, 103(482), 437-446. doi: 10.1198/01621450700000626
- Gelman, A., & Imbens, G. (2014, August). Why high-order polynomials should not be used in regression discontinuity designs (Working Paper No. 20405). National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w20405 doi: 10.3386/w20405
- Gibson, E. (2005). Boundary control: Subnational authoritarianism in democratic countries. World Politics, 58(1), 101-132.
- Gibson, E. (2014). Boundary control: Subnational authoritarianism in federal democracies. Cambridge University Press.
- Giraldo, F., Lozada, R., & Muñoz, P. (2001). *Colombia: Elecciones 2000*. Pontificia Universidad Javeriana, Bogota.
- Giraudy, A. (2010). The politics of subnational undemocratic regime reproduction in Argentina and Mexico. *Journal of Politics in Latin America*, 2(2), 53-84.
- Gutierrez-Sanin, F. (2008). Telling the difference: Guerrillas and paramilitaries in the Colombian war. *Politics & Society*, (36), 3-34.
- Gutiérrez-Sanín, F. (2008). Telling the difference: Guerrillas and paramilitaries in the Colombian war. Politics & Society, 36(1), 3-34. doi: 10.1177/0032329207312181
- Gutierrez-Sanin, F., & Baron, M. (2005). Re-stating the state: Paramilitary territorial control and political order in Colombia, 1978-2004 (Tech. Rep.). London: London School of Economics. (Crisis States Program, Working Paper #1)

Horowitz, D. (1993). Democracy in divided societies. Journal of Democracy(4), 18-38.

- Huntington, S. P. (1991). The third wave: Democratization in the late twentieth century. University of Ockalhoma Press.
- Imbens, G., & Kalyanaraman, K. (2012). Optimal bandwidth choice for the regression discontinuity estimator. The Review of Economic Studies, 79(3), 933-959. Retrieved 2014-05-09, from http://restud.oxfordjournals.org/content/79/3/933.short
- Keefer, P. E. (2012). Database of political institutions: Changes and variable definitions. 2012. Development Research Group. The World Bank.
- Klašnja, M. (2015). Corruption and the incumbency disadvantage: Theory and evidence. *The Journal of Politics*, 77(4), 928-942.
- Klašnja, M., & Titiunik, R. (in press). The incumbency curse: Weak parties, term limits, and unfulfilled accountability. *American Political Science Review*.
- Kurzman, C., Werum, R., & Burkhart, R. (2002). Democracy's effect on economic growth: A pooled time-series analysis, 1951–1980. Studies in Comparative International Development, 37(1), 3–33. Retrieved from http://dx.doi.org/10.1007/BF02686336 doi: 10.1007/BF02686336
- Leal-Buitrago, F., & Davila, A. (1990). *Clientelismo: El sistema político y su expresión regional*. Bogota: Instituto de Estudios Políticos y Relaciones Internacionales.
- Lee, D. S. (2008, February). Randomized experiments from non-random selection in U.S. house elections. *Journal of Econometrics*, 675–697.
- Lee, D. S., & Lemieux, T. (2010, June). Regression discontinuity designs in economics. Journal of Economic Literature, 48, 281–355.
- Mahoney, J., & Villegas, C. (2007). Historical enquiry and comparative politics. Oxford University Press.
- Maldonado, A. (2001, November). Evaluación de la decentralización municipal en colombia. avances y resultados de la descentralización política en Colombia (ARCHIVOS DE ECONOMÍA No. 002625). DEPARTAMENTO NACIONAL DE PLANEACIÓN. Retrieved from http://ideas.repec.org/p/col/000118/002625.html
- Martinez, L. R. (2016). Sources of revenue and government performance: Evidence from Colombia. Unpublished, London School of Economics.
- McCrary, J. (2008, February). Manipulation of the running variable in the regression discontinuity design a density test. *Journal of Econometrics*, 142(2).
- Mulligan, C. B., Gil, R., & Sala-i Martin, X. (2004). Do democracies have different public policies than nondemocracies? *Journal of Economic Perspectives*, 18(1), 51-74. Retrieved from http://www.aeaweb.org/articles.php?doi=10.1257/089533004773563430 doi: 10.1257/089533004773563430
- Pachón, M., & Sánchez, F. (2014). Base de datos sobre resultados electorales cede. 1958 2011. Documentos CEDE.
- Raga, J. C. R., & Botero, F. (2006). Ordenando el caos: Elecciones legislativas y reforma electoral en colombia. *Revista de Cienca Poítica*, 26(1), 138-151.
- Regan, P. M., & Henderson, E. A. (2002, February). Democracy, threats and political repression in developing countries: Are democracies internally less violent? *Third World Quarterly*, 23(1), 119–136. Retrieved from http://www.jstor.org/stable/3993579 doi: 10.2307/ 3993579
- Restrepo, J., Vargas, J., & Spagat, M. (2003). The dynamics of the Colombian civil conflict: A new data set.
- Roberts, A. (2008). Hyperaccountability: economic voting in central and eastern europe. Electoral Studies, 27(3), 533-546.
- Robinson, J. A. (2013). Colombia: Another 100 years of solitude? *Current History*, 112(751), 43-48.
- Robinson, J. A. (2016). La miseria en Colombia. Desarrollo y Sociedad, 76(1), 1-70.

- Romero, M. (2004). Democratización política y contra reforma paramilitar en colombia. In G. Sánchez & E. Lair (Eds.), Violencias y estrategias colectivas en la región andina: Bolivia, Colombia, Ecuador, Perú y Venezuela. Grupo Editorial Norma-IFEA.
- Safford, F., & Palacios, M. (2002). Colombia: Fragmented land, divided society. Oxford University Press.
- Sahin, Y., & Linz, J. J. (1995). Between states: Interim governments and democratic transitions. Cambridge University Press.
- Sidel, J. (2014). Economic foundations of subnational authoritarianism: insights and evidence from qualitative and quantitative research. *Democratization*, 21(1), 161-184.
- Snyder, J. (2000). From voting to violence: Democratization and nationalist conflict. W. W. Norton & Company.
- Snyder, J. L. (2000). From voting to violence: democratization and nationalist conflict. New York: New York: Norton.
- Steele, A. (2011). Electing displacement: Political cleansing in apartadó, colombia. Journal of Conflict Resolution(3), 423-445.
- Uppal, Y. (2009). The disadvantaged incumbents: Estimating incumbency effects in Indian state legislatures. *Public Choice*, 138(1/2), 9-27.
- Vargas, J. F. (2009, February). Military Empowerment and Civilian Targeting in Civil War (HiCN Working Papers No. 56). Households in Conflict Network. Retrieved from http:// ideas.repec.org/p/hic/wpaper/56.html
- Vargas, J. F., & Villaveces, J. (2016). Rural property tax revenue in the face of economic concentration and political competition: Evidence from Colombia (Tech. Rep.).

Tables

Table 1: Descriptive Statistics of main variables (Sample: Electoral races in which left-wing parties won or came second: 1997-2014)

	Mean	Std. Dev.	Minimum	Median	Maximum
Panel A. Average yearly att	acks ner	100 000 inhal	oitants durina	aovernmen	t neriod
Paramilitary	1.980	7.015	0.000	0.000	75.750
Guerrilla	3.820	7.948	0.000	0.065	89.908
Government	0.663	2.561	0.000	0.000	35.224
Panel B. Average yearly cla	shes per	100,000 inhab	vitants during	governmen	t period
Guerrilla-Paramilitary	0.169	0.930	0.000	0.000	7.251
Guerrilla-Government	2.247	4.912	0.000	0.000	51.322
Paramilitary-Government	0.074	0.691	0.000	0.000	10.093
Panel C. Mean occurrence of	of land co	idaster update	s during gover	rnment peri	od
Land cadaster update	0.233	0.424	0.000	0.000	1.000
Panel D. Mean occurrence of Mayor is	of corrup	tion episodes of	during govern	ment period	ļ
Investigated	0.204	0.404	0.000	0.000	1.000
Found Guilty	0.121	0.327	0.000	0.000	1.000
Impeached	0.089	0.286	0.000	0.000	1.000
Top local official is					
Investigated	0.064	0.245	0.000	0.000	1.000
Found Guilty	0.038	0.192	0.000	0.000	1.000
Impeached	0.025	0.158	0.000	0.000	1.000
Panel E. Average value of g	overnme	nt performanc	e indices duri	00	ent period
Fiscal performance	61.687	7.950	39.210	60.793	87.715
Legal rules compliance	73.278	15.581	17.020	75.562	98.170
Administrative capacity	73.604	15.929	28.090	79.112	97.620
Panel F. Forcing variable					
$\frac{Votes \ left-Votes \ non-left}{Votes \ top \ 2}$	-0.012	0.133	-0.500	-0.000	0.382
$\Big \frac{Votes \ left - Votes \ non - left}{Votes \ top \ 2}\Big $	0.094	0.095	0.000	0.067	0.500
Panel G. Forcing variable u	vithin bar	ndwidth:			
Votes left-Votes non-left	0.004	0.047	-0.093	0.007	0.091
Votes top 2 Votes left-Votes non-left	0.040	0.026	0.000	0.034	0.093

Notes: Number of observations: 254 in Panels A-C and F (corresponding to 193 municipalities); 157 in Panel D (only available since 2000); and 157 in panel G. In Panel E there are 152 observations for fiscal performance (only available since 2000), and 94 observations for the indices of legal rules compliance and administrative capacity (only available for 2007 and 2011). In Panels A-F the sample includes all mayoral elections where a left-wing party is either the winner or the runner-up and the corresponding variable is available. The sample in Panel G is restricted to Calonico et. al (2014)'s optimal bandwidth (corresponding to the estimate of the effect of left-wing electoral victories on paramilitary attacks, with first-degree local polynomials and no controls.

Dependent variable: Average yearly paramilitary attacks per 100,0 Linear polynomials						00 inhabitants during term in office Quadratic polynomials			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Panel A: Non-parametric	estimates								
Left-wing mayor elected	4.351^{**} (2.200)	5.258^{**} (2.247)	6.366^{***} (2.401)	6.757^{***} (2.555)	5.750^{**} (2.385)	5.321^{**} (2.348)	6.121^{**} (2.471)	6.300^{**} (2.594)	
Observations Bandwidth	$157 \\ 0.0930$	$\begin{array}{c} 121 \\ 0.0620 \end{array}$	$\begin{array}{c} 106 \\ 0.0520 \end{array}$	$\begin{array}{c} 100 \\ 0.0480 \end{array}$	$\begin{array}{c} 186\\ 0.119\end{array}$	$136 \\ 0.0770$	$156 \\ 0.0930$	$\begin{array}{c} 143 \\ 0.0810 \end{array}$	
Panel B: Parametric estim	mates								
Left-wing mayor elected	3.688^{*} (2.075)	3.564 (2.217)	3.520 (2.186)	3.561 (2.292)	5.225^{**} (2.466)	5.221^{**} (2.529)	5.782^{**} (2.670)	5.880^{**} (2.864)	
Observations Bandwidth	$\begin{array}{c} 144 \\ 0.0930 \end{array}$	$\begin{array}{c} 144 \\ 0.0930 \end{array}$	$\begin{array}{c} 143 \\ 0.0930 \end{array}$	$\begin{array}{c} 143 \\ 0.0930 \end{array}$	$\begin{array}{c} 144 \\ 0.0930 \end{array}$	$\begin{array}{c} 144 \\ 0.0930 \end{array}$	$\begin{array}{c} 143 \\ 0.0930 \end{array}$	$\begin{array}{c} 143 \\ 0.0930 \end{array}$	

Table 2: Effect of electing a left-wing mayor on paramilitary attacks

Notes: Standard errors in parentheses. * is significant at 10%, ** 5%, and *** 1% level. Calonico et al. (2014) optimal bandwidth and triangular kernel weights in all columns. In Columns 1 to 4 and in Columns 5 to 8 of Panel A, the (unknown) polynomial is approximated with local linear and quadratic polynomials respectively. All regressions in Panel A include the bias correction and robust standard errors of Calonico et al. (2014). Panel B reports parametric OLS estimates that vary the polynomial degree consistently with Panel A. Columns 1 and 5 include no controls. All the other columns include pre-determined controls: columns 2 and 6 include geographic controls (altitude, average historical rainfall, distance (in km) to Bogotá and to the closest market place), and region dummies (Caribbean, Eastern, Andean and Pacific); Columns 3 and 7 include socio-economic controls (vote share for left and right presidential candidates in 1994 elections, rurality index, total population, literacy index in 1993, presence of coca plantations in 1994 and historic incidence of political violence during *La Violencia* civil war in the mid 20th century); and Columns 4 and 8 include all the controls simultaneously.

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Dependent varia	uble: Average y Attac		or clashes per 1	00,000 during Clashes betwe		ı group
	guerrillas	government	guerrilla & paramilitary	guerrilla & government	paramilitary & government	
Left-wing mayor elected	$\begin{array}{c} 0.731 \\ (1.886) \end{array}$	1.602 (1.544)	$0.228 \\ (0.229)$	1.776 (1.437)	0.281 (0.186)	
Observations Bandwidth	$135 \\ 0.0761$	$\begin{array}{c} 177\\ 0.112\end{array}$	$\begin{array}{c} 148 \\ 0.0850 \end{array}$	$\begin{array}{c} 142 \\ 0.0787 \end{array}$	$\begin{array}{c} 129 \\ 0.0704 \end{array}$	
Panel B. Dependent varia	ıble: disciplina	ry prosecution Mayor is	8		Top official is	
	investigated	guilty	impeached	investigated	guilty	impeached
Left-wing mayor elected	$0.168 \\ (0.225)$	$0.173 \\ (0.166)$	$0.0890 \\ (0.141)$	$0.0468 \\ (0.103)$	-0.0675 (0.0505)	-0.000592 (0.0340)
Observations Bandwidth	$99 \\ 0.0861$	$\begin{array}{c} 72 \\ 0.0580 \end{array}$	$\begin{array}{c} 73 \\ 0.0592 \end{array}$	$\begin{array}{c} 123 \\ 0.121 \end{array}$	$78\\0.0648$	$\begin{array}{c} 66 \\ 0.0519 \end{array}$

Table 3: Effect of electing a left-wing mayor on other forms of violence,corruption and government performance measures

Panel C. Dependent variable: local government performance

		Index of		Capital	Current
	fiscal performance	legal rules compliance	admin. capacity	expenditure	expenditure
Left-wing mayor elected	-7.663 (4.947)	$7.869 \\ (9.592)$	-11.19 (8.909)	$0.210 \\ (0.401)$	-0.108 (0.365)
Observations Bandwidth	90 0.0799	$62 \\ 0.0871$	$\begin{array}{c} 41 \\ 0.0519 \end{array}$	$\begin{array}{c} 174 \\ 0.114 \end{array}$	$\begin{array}{c} 182 \\ 0.118 \end{array}$

Notes: Standard errors in parentheses. * is significant at 10%, ** 5%, and *** 1% level. Calonico et al. (2014) optimal bandwidth, bias correction, robust standard errors, triangular kernel weights and linear local polynomials in all panels and columns.

Dependent variable: Average yearly attacks per 100,000 during term in office by:							
	All groups	Paramilitary	Guerrilla	Government			
	(1)	(2)	(3)	(4)			
Panel A. Non-parametric e	estimates						
Right-wing mayor elected	0.440	0.175	0.0440	-0.543**			
	(1.124)	(0.612)	(0.143)	(0.274)			
Observations	386	380	269	437			
Bandwidth	0.0657	0.0644	0.0443	0.0754			
Panel B. Parametric estim	ates						
Right-wing mayor elected	0.274	0.186	0.0198	-0.508**			
	(0.864)	(0.472)	(0.118)	(0.229)			
Observations	386	378	268	436			
Bandwidth	0.0660	0.0640	0.0440	0.0750			

Table 4: Effect of electing a right-wing mayor on violence

Notes: Standard errors in parentheses. * is significant at 10%, ** 5%, and *** 1% level. Calonico et al. (2014) optimal bandwidth, bias correction, robust standard errors, triangular kernel weights and linear local polynomials in all panels and columns.

Dependent variable: Average yearly paramilitary attacks per term in office	er 100,000	during
	(1)	(2)
A Left-wing mayor elected	5.659**	7.332**
	(2.343)	(2.942)
Post AUC demobilization	2.337	2.341
	(1.792)	(1.796)
B Post AUC demobilization × Left-wing mayor elected	-5.345**	-5.429**
	(2.304)	(2.336)
Constant	-0.435	-1.083
	(0.483)	(0.872)
A + B	.314	1.903
Ho: $A + B = 0$		
F-statistic	.02	.86
P-value	.88	.36
(Local) polynomial order	1	2

Table 5: Effect of electing a left-wing mayor on paramilitary attacks Heterogeneous effects by timing of AUC demobilization

Notes: Standard errors in parentheses. * is significant at 10%, ** 5%, and *** 1% level. Parametric estimates. Triangular kernel weights, bias correction and optimal bandwidth of

Calonico et al. (2014) in all columns.

Table 6: Effect of electing a left-wing mayor on paramilitary attacks	
Heterogeneous effects by year of violence after the election	

Dependent variable: Average yearly paramilitary attacks per 100,000 inhabitants in year of term in office								
	Year 1 Year 2 Year 3 Next							
	(1)	(2)		election				
	(1)	(2)	(3)	(4)				
Left-wing mayor elected	4.783	-1.203	10.90*	18.48				
	(3.375)	(1.410)	(6.355)	(11.56)				
Observations	148	149	150	100				
Bandwidth	0.0842	0.0860	0.0881	0.0677				

Notes: Standard errors in parentheses. * is significant at 10%, ** 5%, and *** 1% level. Calonico et al. (2014) optimal bandwidth, bias correction, robust standard errors, triangular kernel weights and linear local polynomials in all panels and columns.

	N	on-parame	tric estimat	tes	Parametric estim	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Dependent variable: Indicate	or of wheth	er party el	ected in t r	runs and wa	ins in $t+1$	
Winner party in t	-0.183**	-0.213**	-0.167**	-0.194**	-0.166**	-0.195**
- *	(0.0895)	(0.107)	(0.0725)	(0.0911)	(0.0726)	(0.0912)
Left-wing party	· /		· · · ·	```	0.570***	0.576***
					(0.0274)	(0.0334)
Winner party in t \times Left-wing party					-0.946***	-0.979***
					(0.0511)	(0.0541)
Observations	810	1032	809	1029	809	1029
Bandwidth	0.0890	0.126	0.0890	0.126	0.0890	0.126
Panel B. Dependent variable: Indicate	or of wheth	er party el	ected in t r	uns in t +	1	
Winner party in t	-0.0474	-0.0961	-0.0283	-0.0702	-0.0273	-0.0706
	(0.0920)	(0.112)	(0.0734)	(0.0938)	(0.0734)	(0.0939)
Left-wing party					0.386^{***}	0.397^{***}
					(0.0264)	(0.0332)
Winner party in t \times Left-wing party					-1.060^{***}	-1.079^{***}
					(0.0427)	(0.0438)
Observations	826	1027	830	1029	830	1029
Bandwidth	0.0920	0.126	0.0920	0.126	0.0920	0.126
(Local) polynomial order	1	2	1	2	1	2

Table 7: Incumbency advantage in Colombia

Notes: Standard errors in parentheses. * is significant at 10%, ** 5%, and *** 1% level. Calonico et al. (2014) optimal bandwidth in all columns. Triangular kernel weights used in all columns. In Columns (1) and (2) the (unknown) polynomial is approximated with local linear and quadratic polynomials, respectively, and include the bias correction and robust standard errors of Calonico et al. (2014). Columns (3) - (6) are parametric estimates with polynomials of the forcing variable not displayed. (3) & (5) Linear estimates with varying slopes. (4) & (6) Quadratic estimates with varying slopes.

Dep. variable: Indicator of wi	Non-pai	<i>istry was</i> rametric nates	updated a	pdated during term in office Parametric estimates			
	(1)	(2)	(3)	(4)	(5)	(6)	
Left-wing mayor elected	0.173 (0.177)	0.140 (0.201)	0.157 (0.141)	0.0622 (0.201)	0.116 (0.148)	0.0250 (0.208)	
Years since cadastral update	()	()	(-)	()	0.0119^{*} (0.00693)	(0.0108) (0.00688)	
Observations	148	194	148	148	148	148	
Bandwidth	0.0851	0.127	0.0850	0.0850	0.0850	0.0850	
(Local) polynomial order	1	2	1	2	1	2	

Table 8: Effect of electing a left-wing mayor on land registry updates

Notes: Standard errors in parentheses. * is significant at 10%, ** at 5%, and *** at 1% level. Calonico et al. (2014) optimal bandwidth in all columns. Triangular kernel weights used in all columns. In Columns (1) and (2) the (unknown) polynomial is approximated with local linear and quadratic polynomials, respectively, and we report the bias correction and robust standard errors of Calonico et al. (2014).

Figures

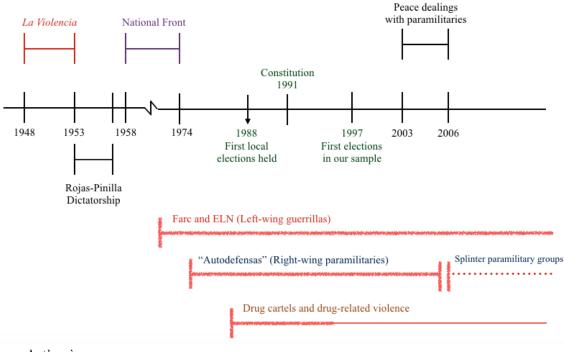


Figure 1: Brief historical timeline

Source: Authors' own.

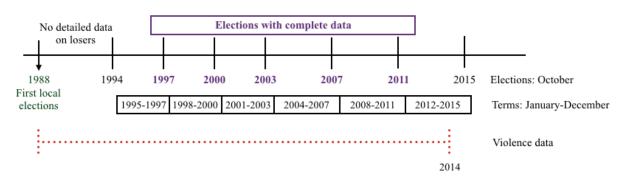
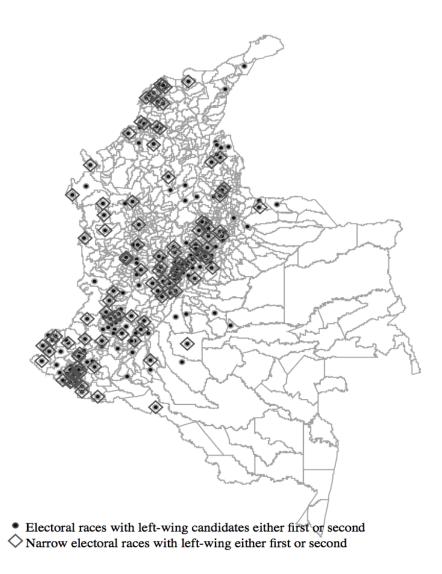


Figure 2: Election years and available data

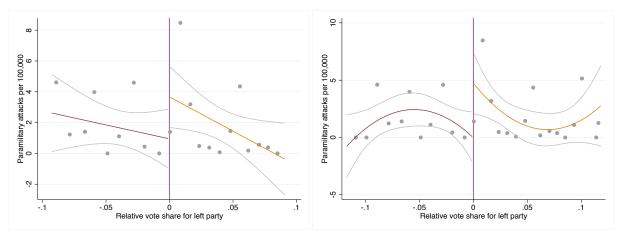
Source: Authors' own.

Figure 3: Geographical distribution of electoral races in which a left-wing party won or came second, 1997–2011



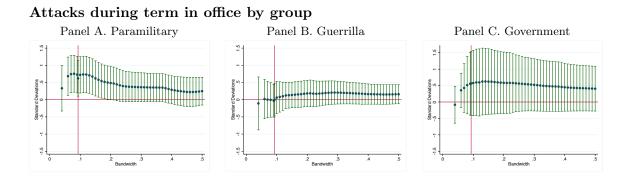
Notes: Light gray lines indicate the municipality boundaries. Black circles are drawn in the centroid of municipalities that, during our sample period, elected a left-wing candidate as mayor or runner-up. Diamonds indicate close elections, as defined by the optimal bandwidth of Calonico et al. (2014).

Figure 4: Effect of electing a left-leaning mayor on paramilitary attacks

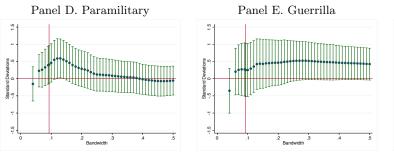


Notes: Observations within Calonico et al. (2014)'s bandwidth displayed. Left: linear fit. Right: quadratic fit. 10 bins of equal size at each side of the cutoff.

Figure 5: Effect of electing a left-leaning mayor on measures of violence



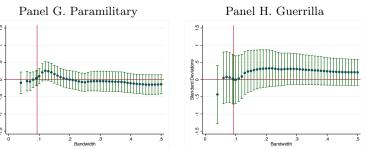
Attacks during previous term in office by group



solution of the second second

Panel F. Government

Attacks in year before elections by group



Panel I. Government

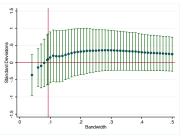
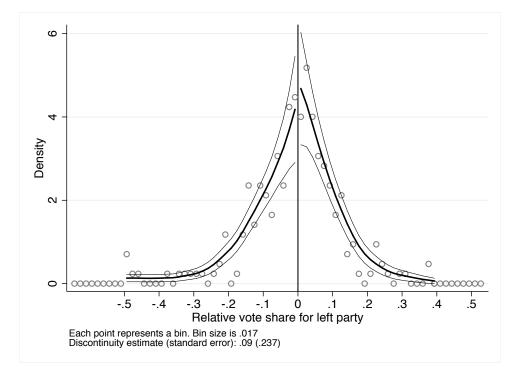


Figure 6: McCrary test: Sorting around the winning threshold for the left



Online Appendix

(Not for publication)

A Data appendix: description of coding protocol and variables

A.1 Coding left-wing and right-wing parties

In this appendix we explain the classification of parties into left-wing, right-wing, or neither left- nor right-wing. We apply the following procedure to the 505 parties that either won or came second in mayoral elections during our sample period.⁴⁹

- 1. As in Keefer (2012), we first code parties as left-leaning if they self-define, based on their name, motto, or slogan as "communist," "socialist," "social democratic," or simply "left-wing." The parallel terms for right-leaning parties are "conservative," "Christian democratic," or "right-wing."⁵⁰ Most parties, however, cannot be classified based on this criterion, in which case we move to step 2.⁵¹
- 2. When available, we look at the party statutes and, following Budge et al. (2001), code the party as left-wing if at least three of the following five policy stances are present in the document:
 - (a) pro-peasant or social re-vindication in nature,
 - (b) more market regulation,
 - (c) defense of workers' rights against exploitation,
 - (d) defense of state-owned or communal property rights,
 - (e) anti-imperialism.

Also following Budge et al. (2001), we code the party as right-wing if at least three of the following five policy stances are mentioned in its statutes:

- (a) emphasis on economic growth/development over inequality and redistribution,
- (b) endorsement of free-market, orthodox policies, a limited role for the state, and the promotion of private enterprises,
- (c) family and religion as crucial moral pillars of society,
- (d) appeal to patriotism and/or nationalism and the suspension of some freedoms in order to protect the state against subversion,
- (e) priority of law and order and a military approach to preserve the state's monopoly of violence.

Parties that, according to their statutes, are neither left- nor right-wing are classified as neither.⁵² If the party statutes are not available, we apply the next criterion.

 $^{^{49}}$ It is worth noting that 78 of these parties (15% of the 505) simply represent individual politicians who ran under their own name, even if they are often endorsed by a coalition of parties. In this case the classification procedure is slightly different than for actual parties, as explained in the text.

 $^{^{50}}$ An exception is the Colombian Conservative Party, which in spite of its right-wing origins in the 19th century has been a centrist party since the start of the National Front in 1958 (see Section 2). This is confirmed by the party's policy stance, which is also the criterion used to classify both the Conservative and Liberal parties as neither left- nor right-wing (see criterion 2 below).

 $^{^{51}}$ Using this criterion, we identified eight left-leaning parties and no right-wing parties. Note that this criterion only allows us to classify left- and right-wing parties, but cannot be used to identify those in the "neither" category; the subsequent criteria allow us to do so.

 $^{^{52}}$ Using this criterion, we identified seven left-leaning parties, six right-wing parties, and 15 parties that are neither left- nor right-wing.

- 3. We look at the government plan that the party drafts for each municipality/election and, as in step 2, we identify the policy stance associated with a left- or right-wing ideology.⁵³ Parties that, according to their government plan, are neither left- nor right-wing are classified as neither.⁵⁴
- 4. In some robustness specifications (see Table B-1), we make further classification attempts. Some short-lived parties for which formal statutes or government plans (steps 2 and 3, respectively) are not readily available are factions of, or splinter movements from, other (well-established and thus readily classifiable) parties, or simply old parties that changed their name. In these cases we assign the ideology of the predecessor party. Parties that, according to their predecessor party, are neither left- nor right-wing are classified as so.⁵⁵

We do not include splinter parties or factions in our baseline estimates, since this category relies on the classification of other parties, and is thus indirect and probably more prone to measurement error. For these estimates we prefer to use a conservative classification procedure. However, as shown in Table B-1, the results are substantively unchanged if we include parties classified in this way.

The procedure for the 78 candidates that run under their own name is somewhat different:

- 1A. Because we are interested in classifying the ideology of parties, rather than individual politicians, we first determine whether these candidates in effect represent a coalition of parties with a known ideological stance (using the 4-step procedure described above). This information is available from the National Registry Bureau. If this is the case, and the ideology of the parties forming the coalition coincides (as either left-wing, right-wing, or neither), then the same ideology is assigned to the candidate. However, if the candidate does not represent a coalition, or if he/she does but the ideology of the parties forming the coalition does not match, then we apply the next criterion.⁵⁶
- 2A. Same as step 3 above.⁵⁷
- 3A. Same as step 4 above.⁵⁸

The resulting classification can be found online at: https://docs.google.com/spreadsheets/ d/1e-3buFuLZPMqza4aeJKfQg8rrQhmMmCcYCVeulFmABg/edit?usp=sharing. The first sheet classifies all 505 parties that contested local mayoral elections, and the second sheet classifies the parties that contested presidential elections (used for a robustness exercise described in footnote 35). We code left-wing parties as 1, right-wing parties as 2, and parties that are neither as 3. Parties that cannot be classified according to their ideology are coded 4. We also indicate the criterion used to make the classification (from the list above), whether the political entity is an actual party or an independent candidate, the justification for the classification, links to the source(s) that back the choice (e.g., candidate's government plan or National Registry Bureau website that lists supporting coalitions), whether a candidate belongs to a coalition (and the names of the parties in the coalition), the name of the predecessor party (if applicable), and a column with clarifying notes.

⁵³Since all candidates running for municipal executive office are required to submit their government plan prior to the election, in principle these plans are also available for runners-up.

 $^{^{54}}$ Using this criterion we identified no left-leaning parties, seven right-wing parties, and classified 141 parties as neither.

 $^{^{55}\}mathrm{Using}$ this criterion, we identified nine left-leaning parties, 18 right-wing parties, and classified 105 parties as neither.

 $^{^{56}}$ Using this criterion, we identified no left- or right-leaning parties, and classified 36 parties as neither.

⁵⁷Using this criterion, we classified no left-leaning parties, three right-wing parties, and 24 parties as neither.

 $^{^{58} \}rm Using$ this criterion we identified no left-leaning parties, one right-wing party, and classified four parties as neither.

A.2 Coding the ideological stance of victims

In this appendix we explain the classification of the ideological stance and involvement in politics of civilian victims in paramilitary attacks following a mayoral election in which a left-wing party narrowly won or came second. We focus on the sample of such close elections that took place during our period of study and identify all the paramilitary attacks that occurred during the mayor's term in office. To code the political ideology of the civilian victims of each attack, we follow a three-step procedure:

- 1. We search the main national and local newspapers for detailed information about the attacks.⁵⁹ If there is no information about the event, or if it is reported but the available information cannot be used to classify the resulting victim(s) as left-wing activists or not (for example because of the victim's affiliation with a union or a left-wing political party), then we turn to the next criterion.
- 2. We search the websites of human rights NGOs known for monitoring political violence in Colombia for detailed information about the attack.⁶⁰ If there is no information about the event, or if the event is reported but the available information cannot be used to classify the resulting victim(s) as left-wing activists or not, then we turn to the next criterion.
- 3. CINEP's Noche y Niebla magazine includes narratives with specifics on all the events included in our violence data.⁶¹ Within these narratives we look for hints that can be used to classify the resulting victim(s) as left-wing militants or not.

Victims who cannot be classified as either left-wing or non-left-wing after applying the three criteria are coded as having an "unknown" ideology.

The results from applying this protocol are used to compute the figures reported in Section 8. The entire classification can be found at https://docs.google.com/spreadsheets/ d/1U5KMlcq2yEE60SLFV4e3hY9F1GpN48RoA0NMsGSx9Mo/pubhtml. There, in addition to specifying whether the victim was likely to be leftist or not, we provide links to the documentation supporting each coding decision.

⁵⁹The newspapers include *El Tiempo*, *El Espectador*, *El Colombiano*, *El Heraldo*, *El Nuevo Siglo*, *El País*, and *Vanguardia*.

⁶⁰These include the World Organization Against Torture, the International Labor Organization (ILO), Verdad Abierta, Asociación Colombiana de Juristas, and Asociación de Cabildos de Indígenas del Norte del Cauca.

 $^{^{61}\}mathrm{Recall}$ from Section 3.2 that CINEP is the main source of this dataset.

A.3 Additional variables

The main source for variables used in balance tests is the municipal panel maintained and hosted by the Center For Economic Development Studies (CEDE) at Universidad de los Andes (Acevedo & Bornacelly, 2014). Specifically, we check balance across a number of geographic and socio-economic variables, described in Table A-1.

In addition, to explore whether the policies adopted by left-wing mayors differ from those adopted by mayors representing other parties, we look at land registry updates, which are available from the national land registry agency.⁶² Since land is mainly taxed based on assessed values recorded in the registry, updates to this registry are a policy tool that can be used to increase taxes on landowners.

Furthermore, in order to rule out the possibility that post-electoral violence following leftwing victories is driven by poorer performance by left-wing mayors relative to incumbents from other parties, such as a weaker / stronger fiscal management of the municipal treasury, we look at the governance indices developed by Departamento Nacional de Planeación (DNP, the National Planning Department). Specifically we use the DNP's "index of fiscal performance," "index of legal requirements," and "index of administrative capacity." The first index summarizes the performance of municipal governments based on the size of the deficit and the proportion of municipal income that is spent on operational costs vs. invested, as well as the proportion of income that originates from national government transfers vs. municipal tax revenue. The second index assesses the compliance of the municipal administration with national rules on how to spend the central government transfers (targeted specifically at items related to improving the municipality health and education indicators). The third index measures the municipal administration's capacity to rule effectively, based on the turnover of top officials, the share of top officials that holds a professional degree, the share of top officials with access to computers, the administration's access to specialized software that helps automate processes, and the use of protocols for internal administrative controls.

Moreover, to make sure that post-electoral violence is not driven by the potential differential engagement of elected left-wing mayors in corrupt practices, we build on recent work by Martinez (2016), who uses information from *Procuraduría General de la Nación* (Colombia's Watchdog Agency), to code disciplinary prosecutions of the municipal mayor and his/her top officials, as a proxy for misbehavior.⁶³ Specifically, the author codes whether the official was investigated, found guilty, or impeached (which entails removal from office and a temporal ban from public service).⁶⁴

⁶²Data for the department of Antioquia come from the department's land registry agency, which is independent from the national agency.

 $^{^{63}}$ Unfortunately, the performance and corruption data are only available for a shorter period, which reduces the sample we can use to test for differences on these variables. Table 1 specifies the sample years for which these data are available.

⁶⁴Not all officials who are found guilty are impeached, as the sanction depends on the severity of the misconduct. Some guilty officials are fined.

Mayo 01/2003

DEPARTAMENTO: CUNDINAMARCA MUNICIPIO: VIOTA

Paramilitares desaparecieron a Miriam, concejal de Viotá por un movimiento cívico, en momentos en que se dirigía al municipio de Apulo, por la vía Recovecos-Puente Bala. Según la denuncia: "Iba a cumplir una citación que le habían hecho los grupos paramilitares, acompañada por el señor Ernesto García quien la conduciría al lugar de la cita. En este lugar es donde insistentemente ha manifestado la población que los paramilitares patrullan y hacen retenes permanentes".

Presuntos Responsables: PARAMILITARES

VIOLACIONES A LOS DERECHOS HUMANOS

Desaparición por Persecución Política MIRIAM CLAVIJO FLOREZ

Marzo 29/2003

DEPARTAMENTO: CUNDINAMARCA MUNICIPIO: VIOTA

Una menor de 13 años de edad, fue desaparecida con la aquiescencia de tropas del Ejército Nacional por miembros de un grupo paramilitar que se movilizaban en tres vehículos a la altura de la vereda Mogambo. El hecho se presentó hacia las 3:00 de la madrugada.

Presuntos Responsables: EJERCITO Y PARAMILITARES

VIOLACIONES A LOS DERECHOS HUMANOS

Desaparición por Persecución Política JANETH ZAMBRANO CASAS

Variable	Source	Description
Panel A. Dependent		
Total Attacks by all groups	Total number of attacks, by all groups, in the municipality during the first 3 years of the term in office (per 100,000 inhabitants). At- tacks are defined according to (Restrepo et al., 2003): a violent event in which there is no direct, armed combat between two groups.	(Restrepo et al., 2003) updated until 2014 by Universidad del Rosario.
Total attacks by the paramilitary	Same as above but the groups identified in the attacks are the paramilitary.	(Restrepo et al., 2003) updated until 2014 by Universidad del Rosario.
Total attacks by the guerrilla	Same as above but the groups identified in the attacks are the guer- rillas.	(Restrepo et al., 2003) updated until 2014 by Universidad del Rosario.
Total attacks by the government	Same as above but the groups identified in the attacks is the gov- ernment.	(Restrepo et al., 2003) updated until 2014 by Universidad del Rosario.
Panel B. Dependent Land registry update	variables: Land registry, Corruption & Performance Dummy = 1 if the land registry was updated during the first 3 years of the mayor's term in office.	Agustin Codazzi Ge- ographic Institute (Colombia's National Geographic Institute) and Antioquia Land Registry Agency. (Agency for the An- tioquia department).
Mayor investigated, guilty, or impeached	Dummy variables indicating whether the mayor was investigated, found guilty, or impeached for corruption by <i>Procuraduría General</i> <i>de la Nación</i> , the government agency that investigates disciplinary faults by public officials.	Martinez (2016), with data from <i>Procu-</i> raduría General de la Nación.
Top official inves- tigated, guilty, or impeached	Dummy variables indicating whether a top local official (at the rank of Secretary) was investigated, found guilty, or impeached for cor- ruption by <i>Procuraduría General de la Nación</i> .	Martinez (2016), with data from Procu- raduría General de la Nación.
Fiscal performance in- dex	Index of fiscal performance based on $(+ \text{ improves the index}, - \text{deteriorates it})$: size of the municipality's debt $(-)$, % of income from own resources $(+)$, % invested $(+)$, % spent on administrative functioning $(-)$.	Colombia's National Planning Department
Compliance with legal rules index	Index based on whether the municipality complies with legal spend- ing rules, comparing budgeted and executed resources as well as expenditure in each sector compared to what is legally permitted.	Colombia's National Planning Department
Administrative capac- ity index	Index aggregating: the stability of directives in the municipality, personnel qualifications, the extent to which internal processes fol- low a clear system, and the existence of internal controls.	Colombia's National Planning Department.
Panel C. Forcing Var Left party win margin (normalized around 0)	Tiable Winning margin (in %) of the left-wing incumbent, normalized around 0. Values above 0 indicate that the left won (below $0 =$ the left lost).	Electoral results at the municipality level, obtained from the Colombian national registry and com- piled by (Pachón & Sánchez, 2014).

Table A-1: Variables and sources

Continued on next page

Variable	ble A-1 – Variables and sources, continued from previous pa Description	age Source
Panel D. Other pred	etermined covariates	
Political covariates % of votes for the left-leaning presiden- tial candidates in 1990	% of total votes (in the municipality) for all left-leaning presidential candidates in 1990	Colombia's Nationa Registry data com piled by (Pachón & Sánchez, 2014).
% of votes for the Con- servative Party pres- idential candidate in 1990	% of total votes (in the municipality) for Rodrigo Lloreda, the Conservative Party presidential candidate in 1990	Colombia's Nationa Registry data com piled by (Pachón & Sánchez, 2014).
Presence of historic vi- olence (1948–1953)	Dummy = 1 if there was historic violence in the municipality in $(1948-1953)$. This variable is based on the magazine <i>Criminalidad</i> published by the National Police from 1958–1963, which described the municipalities affected by historic partian violence in each year.	National Police. Data coded by CEDE Uni versidad de los Andes
Demographic Covariates Initial population	$\frac{5}{2}$ Number of inhabitants in the municipality in 1993	DANE (Colombia' National Departmen of Statistics) 199 National Census.
Literacy Rate	(%) of literate in the municipality	DANE's 1993 Nationa Census.
Geographic covariates Meters above sea level.	Altitude of municipality seat above sea level, in meters.	CEDE, Universidad de los Andes
Index of soil erosion	Based on georeferenced information at the sub-municipality level. Land is classified into seven ordinal categories, and the number of acres in each category is counted to estimate an index. The index is standardized between 0 and 4.5, where high values represent more soil erosion.	Estimates by CEDI Universidad de los An des, based on Agustin Codazzi Geographi Institute
Distance to depart- ment capital, km	Straight line distance to the capital of the department in which the municipality is located.	Estimates by CEDI Universidad de los An des, based on Agustin Codazzi Geographi Institute
Distance to main city, km	Straight line distance to the four main Colombian cities (Medellín, Cali, Bogotá, and Barranquilla)	Estimates by CEDI Universidad de los An des, based on Agustin Codazzi Geographi Institute
Index of rurality	(Rural population / total population) in municipality. Data from 1993.	Estimates by CEDI Universidad de los An des, based on infor mation provided by DANE
Connection to the country center	Dummy = 1 if the municipality has a road connection the country center	Coded in (Vargas 2009) from analysis by (Giraldo, Lozada, & Muñoz, 2001). Continued on next pag

Ta	ble A-1 – Variables and sources, continued from previous pa	ge
Variable	Description	Source
Index of soil aptitude for agriculture	Land is categorized into seven ordinal categories based on its suit- ability for agriculture, and the number of acres in each category is counted to estimate an index.	Estimates by CEDE Universidad de los An- des, based on infor- mation provided by DANE
Average precipitation, in mm	Mean annual rainfall level in each municipality.	IDEAM, Institute of Hydrology, Meteorol- ogy and Environmen- tal Studies

B Additional results and robustness tests

B.1 Robustness to party coding

Parties that could not be classified based on their name or slogan, statutes, or government plan were coded as neither left- nor right-wing in our baseline analysis. This may potentially introduce bias if a sufficient number of such parties is actually either left- or right-wing. One extreme alternative is to drop all unclassified parties from the sample, at the cost of drastically reducing the sample size. Panel A of Table B-1 reports the robustness of our main results to this alternative sample. The structure of the columns is the same as that of Table 2. Note that the sample size drops in all columns relative to that of the baseline regressions. Reassuringly, most of the coefficients remain significant and of similar magnitude (4.1 to 5 additional paramilitary attacks during the term in office).

Another approach is to use alternative criteria to code the ideological stance of parties that could not be classified in steps 1-3. For instance, because many of the 505 parties that participated in local elections during our sample period originated from previously established parties (notably from the two traditional parties), we could assign to them the ideology of their parent party (see criterion 4 of the classification procedure described in Appendix Section A.1). This, however, is subject to some caveats, particularly if the ideology of the faction or splinter movement is different to that of its predecessor (which may have motivated the split). Since it is impossible to know a priori whether including this additional party classification step (that we refer to as step 4) represents an improvement over our baseline estimates, we take an agnostic position and investigate the robustness of the baseline results to using the ideology of predecessor parties as an additional classification criterion.

Panels B and C of Table B-1 report the estimates after using this criterion (step 4) to code the ideology of parties that could not be classified in steps 1-3. As in the baseline results of Table 2, Panel B assumes that all the parties left unclassified after steps 1-4 are neither left- nor right-wing. In turn, similar to Panel A of Table B-1, Panel C drops from the estimation sample all parties left unclassified after steps 1-4. Most of the point estimates (particularly in Panel B) remain statistically significant and of similar magnitude to those reported for our baseline sample (Table 2). This is reassuring, and suggests that our specific choices of party ideology classification are not driving our substantive findings.

Table B-1: Effect of electing a left-wing mayor on paramilitary attacks
(Alternative samples resulting from different codings of party ideology)

Dependent variable: Ave	Dependent variable: Average yearly paramilitary attacks per 100,000 inhabitants during term in office Linear polynomials Quadratic polynomials									
	(1)									
	(1)	(2)	(3)	(4)	(5)	(0)	(7)	(0)		
Panel A. Dropping all un	identified	parties af	ter applyi	ng criteria	1 to 3 ^a					
Left-wing mayor elected	2.674	2.686	4.578**	4.486***	3.067	4.050**	4.967**	5.010**		
	(1.761)	(1.637)	(1.920)	(1.708)	(1.872)	(2.027)	(2.005)	(1.964)		
Observations	136	114	101	97	178	114	143	122		
Bandwidth	0.0990	0.0770	0.0620	0.0590	0.156	0.0770	0.109	0.0820		
Panel B. Coding all unide 1 to 4^a	entified po	arties as b	eing neithe	er left- nor	right-wing	after app	lying criter	ria		
Left-wing mayor elected	2.736	4.227**	4.528**	4.746**	4.764**	4.351**	4.744**	4.394*		
	(1.891)	(1.931)	(2.191)	(2.339)	(2.037)	(1.898)	(2.238)	(2.335)		
Observations	195	137	120	111	202	152	178	154		
Bandwidth	0.122	0.0760	0.0610	0.0540	0.129	0.0860	0.107	0.0900		
Panel C. Dropping all unidentified parties after applying criteria 1 to 4^{a}										
Left-wing mayor elected	2.057	2.184	2.917^{*}	2.233	3.280**	3.133*	3.222*	2.668		
	(1.541)	(1.450)	(1.755)	(1.642)	(1.593)	(1.664)	(1.859)	(1.924)		
Observations	163	142	116	124	179	137	162	141		
Bandwidth	0.103	0.0840	0.0630	0.0680	0.119	0.0790	0.103	0.0850		

Notes: Standard errors in parentheses. * is significant at 10%, ** 5%, and *** 1% level. Calonico et al. (2014) optimal bandwidth and triangular kernel weights in all columns. In Columns 1 to 4 and in Columns 5 to 8 of Panel A, the (unknown) polynomial is approximated with local linear and quadratic polynomials, respectively. All regressions in Panel A include the bias correction and robust standard errors of Calonico et al. (2014). Panel B reports parametric OLS estimates that vary the polynomial degree consistently with Panel A. Columns 1 and 5 include no controls. All the other columns include pre-determined controls: Columns 2 and 6 include geographic controls (altitude, average historic rainfall, distance (in km) to Bogotá and to the closest marketplace, and region dummies (Caribbean, Eastern, Andean, and Pacific); Columns 3 and 7 include socio-economic controls (vote share for left and right presidential candidates in 1994 elections, rurality index, total population, literacy index in 1993, presence of coca plantations in 1994, and historic incidence of political violence during *La Violencia*. Columns 4 and 8 include all the controls simultaneously.

B.2 Balance on covariates

In Table B-2 we report estimates of the effect of a narrow left-wing victory (Column 3) on a large set of covariates. In Panel A we look at the election year to verify whether left-leaning candidates were disproportionately more likely to win close races earlier or later in the sample period. Panel B examines geographic variables including altitude, rainfall, and distance to main cities and the department capital. Panel C includes socio-economic and political variables, such as having experienced violence during *La Violencia* in the 1940s and 1950s, and socio-economic conditions of municipalities like the share of population living in rural areas, a dummy for the presence of coca plantations, total population, and the literacy rate (all measured prior to our sample period). In Panel D we look at variables related to land inequality and land policy, such as the number of years since the land registry was last updated, measured in the election year prior to when the winner of the close race would have taken office. In Panel E we look at different measures of tax revenue, also measured in the election year prior to when the winner of the close race would have taken office. In Panel E we look at a different measures of tax revenue, also measured in the election year prior to when the winner of the close race would have taken office. In Panel E we look at different measures of tax revenue, also measured in the election year prior to when the winner of the close race would have taken office. Finally, Panel F focuses on basic electoral variables such as the average number of parties competing in the race, the average number of candidates, and overall turnout.

We find no statistically significant differences between treatment and control municipalities for most of these variables. The only exception is the number of years since the land registry was last updated, which is about 4 years higher and significant at the 95% level in municipalities in which the left won. However, for the remaining variables the estimated effect of a narrow left-wing victory is both small (typically just a fraction of the mean and standard deviation) and insignificant. Thus, these are precisely estimated coefficients that allow us to reject even small effects. Overall, the results reported in Table B-2 give us further confidence that our benchmark estimates capture the causal effect of a left-wing electoral victory on paramilitary violence rather than the effect of other municipal characteristics.

Table B-2: Effect of electing a left-wing mayor on municipal characteristics

Dependent variable	Mean	Std. Dev.	Left victory	Std. Error	Obs.	Bandwidth
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Election year						
Year elected	2002.701	5.447	1.257	2.426	167	.1
Panel B. Geographic characteristics						
Altitude, meters	1752.587	3469.152	69.265	671.765	94	.042
Average precipitation	93.010	18.665	1.505	8.379	152	.09
Distance to department capital, km	81.129	53.511	-1.778	23.432	152	.089
Distance to main city, km	145.999	91.279	6.226	41.881	129	.069
Andean region dummy	0.417	0.494	128	.203	142	.08
Pacific region dummy	0.398	0.490	.025	.165	156	.092
Eastern region dummy	0.098	0.298	065	.112	126	.066
Caribbean region dummy	0.087	0.282	.143	.105	166	.099
Panel C. Socioeconomic characteristics						
Vote % left-wing presidential cand., 1994	0.067	0.070	019	.019	111	.056
Vote % conservative presidential cand., 1994	0.422	0.209	006	.103	129	.069
La Violencia incidence (1948-1953)	0.146	0.353	146	.16	142	.079
Rurality index	0.654	0.238	035	.091	178	.114
Initial population, 1993	26328.799	33888.293	18839.104	17523.015	148	.083
Coca, 1994	0.075	0.264	.089	.093	120	.062
Literacy rate, 1993	85.452	8.783	664	3.646	150	.088
Panel D. Land variables						
Land GINI, based plot sizes	0.707	0.118	023	.05	81	.075
Land GINI, based on landowner holdings	0.722	0.113	013	.049	67	.06
Number of years since last cadaster update	5.435	5.109	4.157**	1.972	118	.061
Panel E. Tax Revenue	0.071	0.000	101	150	2000	1.45
Tax income (per capita)	0.071	0.308	191	.156	206	.145
Non-tax income (per capita)	0.015	0.029	015	.012	199	.136
Property tax income (per capita)	0.017	0.057	046	.035	196	.129
Sales tax income (per capita)	0.027	0.188	092	.087	216	.163
Panel F. Electoral variables						
Number of candidates in election	4.593	2.547	.163	1.157	138	.079
Number of parties in election	3.826	2.165	.525	.885	131	.074
Voter turnout	0.598	0.139	012	.047	143	.089

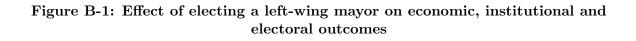
Notes: Columns 1 and 2 report the basic descriptive statistics of each variable. Column 3 reports RDD point estimates of the effect of a left-wing victory in Mayor elections on each variable, using Calonico et al. (2014)'s optimal bandwidths (reported in column 6), bias correction, and robust standard errors (column 4), with linear local polynomials and triangular kernels. Column 5 reports the number of observations including in each estimation.

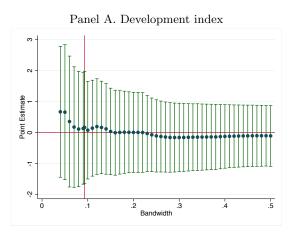
B.3 External validity

In Figure B-1 we report estimates analogous to those displayed in Figure 5, but where the dependent variables correspond to key potential confounders. This exercise is similar to the one reported in Table B-2, except that we report estimates for a larger set of bandwidths. Panels A and B show that, for all bandwidth values, municipalities in which a left-wing party won the elections are no different from those in which the left came second in terms of their economic development and institutional quality, respectively.⁶⁵

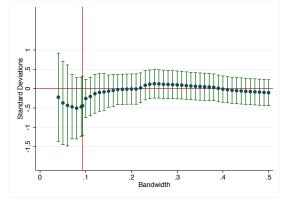
Similarly, and perhaps somewhat surprisingly, municipalities in which a left-wing party won are no different in terms of the ideological alignment of voters in national elections prior to our sample period. Panels C and D show no differential support for the left- and right-wing candidates, respectively, in the 1994 presidential elections. Municipalities in which the left won by a small margin also do not differ in terms of the number of candidates running for mayor or turnout (Panels E and F).

⁶⁵The development index comprises variables for total population, literacy rate, urbanization, and per capita tax income. The institutional index, as defined by (Acemoglu, García-Jimeno, & Robinson, 2015), includes central government employees per capita, local government employees per capita, and public agencies per capita.

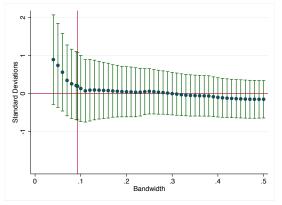


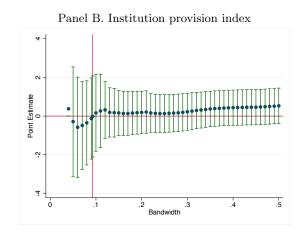


Panel C. Vote % for left-wing presidential candidates in 1994

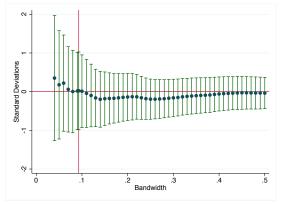


Panel E. Number of candidates in elections





Panel D. Vote % for right-wing presidential candidates in 1994



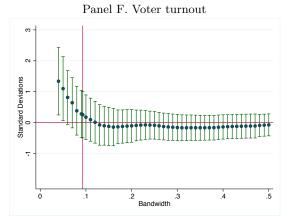
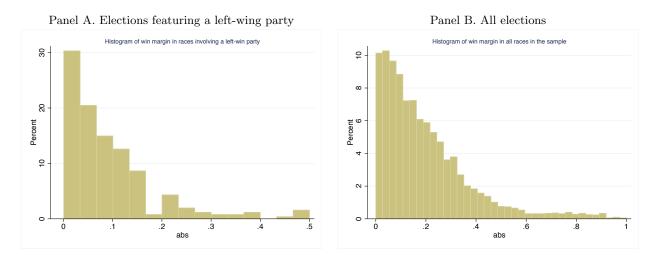
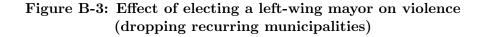


Figure B-2: Distribution of the absolute value of the win margin between the winner and the runner up in Colombian elections

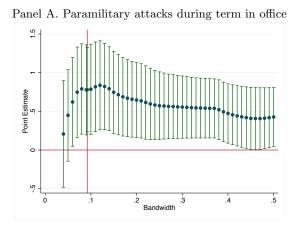


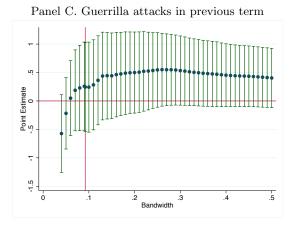
Notes: The histograms plot the frequency of mayoral races that are decided by different win margins, ranging from 0 to 50% in absolute value in elections in which a left-wing party is either the winner or the runner-up (Panel A) and from 0 to almost 100% in all elections (Panel B).



ò

à.





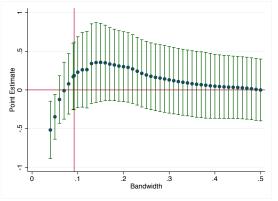
1.5 -Point Estimate ŝ $\overline{\gamma}$.5 .2 Bandwidth

Panel B. Paramilitary attacks in previous term

Panel D. Government attacks in previous term

.3

.4



	Sample mean			
	Out	In	Diff.	P-value
Panel A. Main variables				
Average yearly attacks per 100,000 inhabitants by:				
All groups	5.7358	8.5606	-2.8248^{***}	.0046
Paramilitary	1.2567	1.9804	7238	.1044
Guerrilla	2.619	3.8203	-1.2013**	.0193
Government	.2699	.6629	393**	.016
Average yearly clashes per 100,000 inhabitants between:				
Total clashes	1.9444	2.5092	5647	.1008
Guerrilla and paramilitary	.1395	.1691	0296	.6276
Guerrilla and government	1.7612	2.2469	4857	.1282
Paramilitary and government	.038	.074	0361	.412
Panel B. Institutional characteristics				
Number per 100,000 inhabitants of:				
National public employees	26.5433	25.0599	1.4834	.3792
Local public employees	2.3102	2.0784	.2318*	.09
Panel C. Socioeconomic & political characteristics				
Vote share of left-wing parties in mayor elections	0	.2383	2383***	0
Vote share of left-wing candidates in 1994 presidential elections	.0438	.0667	023***	0
Vote share of conservative candidates in 1994 presidential elections	.4789	.4224	$.0566^{***}$	0
Incidence of violence during La Violencia (1948-1953)	.1449	.1457	0007	.974
Rurality index	.6343	.6541	0198	.1975
Population in 1993	21824.6429	26328.7992	-4504.1564**	.0401
Coca 1994	.0367	.0748	0381**	.0242
Literacy rate in 1993	85.2676	85.4519	1844	.7446

Table B-3: Balance in and out of sample

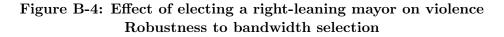
Notes: "In" is the sample of mayoral elections in which a left-wing party was wither the winner of the runner-up. "Out" refers to all other electoral races. Institutional variables are not time varying. All cities with more than 300,000 inhabitants are excluded from sample.

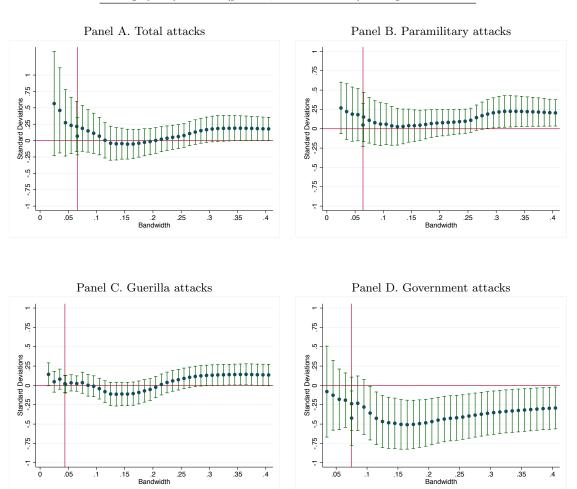
B.4 Alternative Interpretations: right wing parties, new parties and the UP

Variable	Mean	Standard Deviation	Minimum	Median	Maximum
Panel A. Average yearly att	acks per 1	00.000 inhabitants	during term in	n office	
Total attacks	1.910	6.451	0.000	0.000	93.864
Paramilitary	0.597	3.595	0.000	0.000	76.573
Guerrilla	0.511	2.143	0.000	0.000	30.315
Government	0.211	1.285	0.000	0.000	15.803
Panel B. Forcing Variable:					
$\frac{Votes \ right-Votes \ non-right}{Votes \ top \ 2}$	-0.000	0.113	-0.405	0.001	0.372
$\Big \frac{Votes \ top \ 2}{Votes \ top \ 2}\Big $	0.088	0.070	0.000	0.072	0.405
Panel C. Forcing Variable u	vithin band	dwidths			
$\frac{Votes \ right-Votes \ non-right}{Votes \ top \ 2}$	0.001	0.036	-0.066	0.000	0.066
$\frac{ Votes \ top \ 2}{ Votes \ top \ 2} $	0.031	0.019	0.000	0.029	0.066

Table B-4: Descriptive statistics of the main variablesSample: Electoral races in which right-wing parties are winners or runners-up:1997 - 2014

Notes: Number of observations: 838 in Panels A and B (for 634 municipalities) and 386 in Panel C. The sample in Panels A and B is the set of mayoral elections where a right-wing candidate was the winner or runner up and the corresponding variable is available. Panel C in addition restricts the sample to the Calonico et. al (2014) optimal bandwidth for our baseline estimates of the effect of right wing victories on total attacks (by all groups) with first-degree local polynomials.





Average yearly attacks (per 100,000 inhabitants) during term in office

Notes: Attacks by paramilitary or guerilla groups (per year and per 100,000 inhabitants) during the 3 years preceding each election (90% confidence bands). The solid line marks the Calonico et al. (2014) optimal bandwidth, the dashed line the Imbens and Kalyanaraman (2012) optimal bandwidth. Non-parametric estimates with bias correction, robust standard errors, triangular kernels, and linear local polynomials (Calonico et al., 2014).

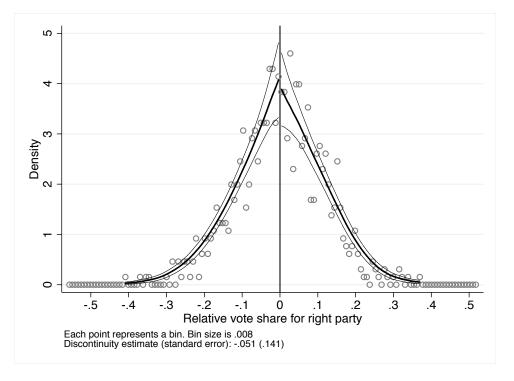


Figure B-5: McCrary test: Sorting around the winning threshold for the right

 Table B-5: Effect of electing a mayor from a new (non-left) party on paramilitary attacks

Dep. variable: Average yearly paramilitary attacks per 100,000 inhabitants during term in office							
	Non-par	rametric nates	Parametric estimates				
	(1)	(2)	(3)	(4)			
(Non left) New party elected	$\begin{array}{c} 0.475 \ (0.334) \end{array}$	$0.446 \\ (0.424)$	0.500^{*} (0.285)	0.274 (0.407)			
Observations	1099	1268	1100	1100			
Bandwidth	0.0757	0.0942	0.0760	0.0760			
(Local) polynomial order	1	2	1	2			

Notes: Standard errors in parentheses. * is significant at 10%, ** 5%, and *** 1% level. Calonico et al. (2014) optimal bandwidth in all columns. Triangular kernel weights used in all columns. In Columns (1) and (2) the (unknown) polynomial is approximated with local linear and quadratic polynomials, respectively, and include the bias correction and robust standard errors of Calonico et al. (2014).

Dependent variable: Average yearly paramilitary attacks per 100,000 during term in office							
1 / 5 0	(1)	(2)					
Left-wing mayor elected	2.660*	4.558**					
	(1.521)	(1.938)					
Unión Patriótica (UP)	-0.657	-0.736					
	(0.916)	(1.049)					
UP \times Left-wing may or elected	14.51	14.88					
	(11.65)	(11.60)					
Observations	157	157					
Bandwidth	0.0930	0.0930					
(Local) polynomial order	1	2					

Table B-6: Effect of electing a left-wing mayor on paramilitary attacks(Differential effect of UP)

Notes: Standard errors in parentheses. * is significant at 10%, ** 5%, and *** 1% level. Calonico et al. (2014) optimal bandwidth and triangular kernel weights in all columns. In Columns 1 and 2 the (unknown) polynomial is approximated with local linear and quadratic polynomials respectively. We report bias correction and robust standard errors of Calonico et al. (2014).

B.5 Incumbency disadvantage

Table B-7: Incumbency advantage in Colombia using alternative approach (not conditioning on past incumbency)

	Non-parametric estimates				Parametric estimates	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Dependent variable: Indicate	or of wheth	er party el	lected in t ru	uns and wir	ts in t + 1	
Winner party in t	-0.0420	-0.0441	-0.0465**	-0.0470*	-0.0551***	-0.0497*
	(0.0270)	(0.0285)	(0.0230)	(0.0258)	(0.0181)	(0.0259)
Left-wing party	()	()	()	()	-0.207***	-0.207***
					(0.0202)	(0.0202)
Winner party in t \times Left-wing party					0.0139	0.0135
					(0.0242)	(0.0242)
Observations	5524	7990	5504	7984	7984	7984
Bandwidth	0.0840	0.151	0.0840	0.151	0.151	0.151
Panel B. Dependent variable: Indicate	or of wheth	er party el	ected in t ru	uns in $t+1$		
Winner party in t	0.0136	0.0170	0.0122	0.0153	0.0127	0.0129
	(0.0293)	(0.0333)	(0.0248)	(0.0301)	(0.0211)	(0.0302)
Left-wing party	· /	· /	. ,	· /	-0.259***	-0.259***
					(0.0217)	(0.0218)
Winner party in t \times Left-wing party					-0.0321	-0.0324
					(0.0277)	(0.0278)
Observations	5794	7540	5814	7540	7540	7540
Bandwidth	0.0910	0.135	0.0910	0.135	0.135	0.135
(Local) polynomial order	1	2	1	2	1	2

Notes: Standard errors in parentheses. * is significant at 10%, ** 5%, and *** 1% level. Calonico et al. (2014) optimal bandwidth in all columns. Triangular kernel weights used in all columns. In columns (1) and (2) the (unknown) polynomial is approximated with local linear and quadratic polynomials, respectively, and include the bias correction and robust standard errors of Calonico et al. (2014). Columns (3) - (6) are parametric estimates with polynomials of the forcing variable not displayed. (3) & (5) Linear estimates with varying slopes. (4) & (6) Quadratic estimates with varying slopes.