Journal of Peace Research

Democracy in the countryside: The rural sources of violence against voters in Colombia

Journal of Peace Research
2019, Vol. 56(2) 264–278

DOI: 10.1177/0022343318802986
journals.sagepub.com/home/jpr
SAGE

Camilo Nieto-Matiz

Department of Political Science, University of Notre Dame

Abstract

What are the subnational variations of violence against voters? This article studies the effect of land concentration on electoral violence in the context of armed conflict in Colombia. My central argument is that electoral violence tends to be higher in municipalities where landowners are a relevant social actor. More concretely, in areas where violent groups dispute territorial control, higher levels of land inequality – a proxy for landowner prominence – have a positive effect on electoral violence. However, actors do not make the simple choice between violence or no violence but may also resort to fraudulent tactics. Because electoral fraud requires greater cooperation and coordination with the state, I argue that violent groups with stronger links to state officials and political elites are more likely to engage in fraudulent tactics compared to anti-government actors. To estimate the effect of land inequality on electoral coercion and fraud, I exploit the levels of soil quality as an instrumental variable for land concentration in Colombia between 2002 and 2011. This article contributes to the literature on the politics of land inequality; elections and electoral manipulation; and the use of violence in democratic settings.

Keywords

armed conflict, armed groups, Colombia, electoral fraud, electoral violence, landed elites

Introduction

What accounts for the use of violence during electoral contests? A common explanation holds that incumbents and contenders resort to coercion when they fear that electoral results will diminish their chances of keeping or attaining political power (Hafner-Burton, Hyde & Jablonski, 2014; Wilkinson, 2006). Other accounts, acknowledging the high levels of land inequality in developing countries, suggest that the problem of land tenure and redistribution lies at the heart of violence and is an obstacle for democratization. Indeed, because landowners derive much of their power from land, electoral contests cannot be fully understood without accounting for patterns of land inequality (Ansell & Samuels, 2014; Albertus, 2017).

The presence of non-state armed groups adds another layer of complexity. In Mexico, subnational democratization and the alternation of political parties at the regional level produced the breakdown of informal government protection and motivated drug cartels to create their own private armies (Trejo & Ley, 2017). In Brazil, while the state initially tolerated paramilitaries when it was electorally profitable, it then found itself unable to eliminate them (Hidalgo & Lessing, 2015). To the extent that they maximize territorial control, violent actors – insurgents, paramilitaries, drug cartels, and gangs – have the capacity and incentives to shape political order through the electoral process. Certainly, the collusion of political officials and violent actors influences the electoral landscape (Albarracín, 2017).

It follows that electoral competition is part of politicians' calculations, but whether there is electoral violence or not is largely shaped by armed groups and landowners. What accounts for the geographic variation of electoral violence and fraud in contexts of land concentration?

Corresponding author:
cnietoma@nd.edu

This article studies the effect of land concentration on electoral violence and fraud in the context of armed conflict in Colombia. While the study of electoral violence has been on the scholarly agenda for some years, we know less about the way in which politicians, armed groups, and landowners give way to violence and fraud in electoral settings. In addition to the interaction between incumbents and voters, armed groups change the landscape of electoral politics, by constraining voters and making it possible for social actors – such as landed elites – to collude with them (Dunning, 2011; Kasara, 2016; Steele, 2011).

In this article, I argue that electoral manipulation – violence and fraud – occurs more frequently in areas where landed elites are a relevant social actor. Two potential mechanisms explain why the prominence of landed elites gives way to violence and fraud: on the one hand, resource-rich areas attract violent groups with incentives to intervene in elections, by depressing turnout, favoring certain candidates, or engaging in manipulative tactics; on the other hand, large landowners have the capacity to mobilize violence against threats and attempt to preserve their position by intervening in elections. Thus, the impact of landed elites on violence or fraud is mediated by the presence of different armed groups: in areas where violent groups dispute their territorial presence, higher levels of land concentration – a proxy for landowner prominence – have a positive effect on the occurrence of electoral violence. However, violence is not the only tactic available to groups interested in influencing elections: as is the case with coercion, fraud can shape electoral outcomes, but it requires greater cooperation and coordination with state officials and politicians. As a consequence, violent groups with stronger links to state officials and political elites (e.g. paramilitaries) are more likely to pursue fraudulent tactics. In sum, the theoretical argument suggests that the impact of landowners on electoral manipulation – violence or fraud – is contingent on the type of armed configuration.

To capture landowner presence in a given municipality, I use the Gini coefficient for land concentration, a quantity of dispersion typically used to measure income concentration. Because land concentration may be endogenous to the use of violence and fraud during elections, I use an instrumental variables approach. More specifically, I leverage the plausibly exogenous variation of soil quality at the municipal level to instrument for levels of land concentration: since high quality soils have a higher economic potential, the demand for these lands is likely to produce a more concentrated landownership. Indeed, results from the first stage indicate that areas with higher soil quality give way to a more concentrated land tenure structure. The second-stage results confirm the main hypotheses and suggest that the effect of land concentration on electoral violence is moderated by the presence of armed actors. In municipalities where two or more armed groups are present, land concentration has a positive effect on election violence and fraud. I also find that land concentration has a differential effect on both outcomes depending on the armed group: while fraud and violence tend to take place in areas of high land concentration and contested armed control, paramilitaries are the only actors that consistently engage in electoral fraud as land concentration increases.

A key implication from this argument suggests that even in the presence of armed groups, incidents of electoral violence or fraud are less likely to occur if land concentration is low. For instance, in the southern region of Colombia, characterized by its vast tropical rainforest and lower soil quality, the incidence of election-related violence and fraud has been significantly lower compared to the rest of the country (see Figure 2). Although this region has served as a stronghold and transit area for violent groups, land concentration has ranked below the country's average. In contrast, in municipalities in the Atlantic coast and Andean region, relatively high levels of land concentration coupled with armed group presence has given way to higher levels of election violence and fraud.

I test my argument by studying six electoral processes in Colombia between 2002 and 2011. Colombia constitutes an ideal case to test my hypotheses: while a long conflict has set the state against multiple violent groups – insurgents, paramilitaries, and drug cartels – the country has had uninterrupted democracy for several decades. Therefore, some of the key conclusions and implications from the Colombian case may be relevant to other cases, such as India or Kenya, where some level of democratic participation coexists with the use of violence.

In this article, I make a contribution to three bodies of literature. First, I deal with the political consequences of land concentration in developing countries. Thus, I add to a burgeoning literature in political science seeking to understand how levels of land concentration and rural elites impact democracy and state-building (Boone, 2014; Albertus, 2015; Klaus & Mitchell, 2015). In line with this recent scholarship, I bring the rural dimension back to the study of politics. Second, I engage with the literature on elections and electoral manipulation in violent democracies. I seek to understand when electoral processes can take a violent or fraudulent turn. Since

elections are an essential dimension of democracy, studying how different actors affect them is key to understanding political dynamics in both democratic and hybrid regimes (Ansell & Samuels, 2014; Boix, 2003). Third, I contribute to the understanding of armed politics, especially the involvement of violent groups in electoral politics. Because armed organizations may resort to fighting and voting as strategic complements, the challenge is to understand the dynamics and consequences of the sustained use of weapons in politics (e.g. Dunning, 2011; Staniland, 2017).

The remainder of the article is organized as follows. After surveying the literature, I develop an argument about electoral manipulation in conflict-ridden contexts. Next, I provide a brief background on the Colombian conflict and describe the empirical strategy. Lastly, I discuss the empirical results and finish with some conclusions.

Elections and violence: Previous literature

What are the causes of electoral violence? A prevalent explanation in the comparative literature stresses the role of political institutions and levels of electoral competition (Chacón, Robinson & Torvik, 2011; Fjelde & Höglund, 2016). It is argued that politicians' fear of losing power is a strong determinant of their decision to use election violence. With a focus on the Indian case, Wilkinson (2006) argues that whether high levels of political competition either increase or decrease electoral violence depends on the electoral payoffs derived from protecting specific groups from violence. Thus, not only do political parties assess their power relative to other political contenders, but they also consider the importance of undecided voters in swinging the elections (Chaturvedi, 2005; Collier & Vicente, 2012; Hafner-Burton, Hyde & Jablonski, 2014).

While exclusively emphasizing political parties and state security forces is undeniably critical, this 'top-down' approach ignores the prominence of social actors with high stakes in the political game, such as landed elites. Indeed, a burgeoning literature in political science has begun to bring the rural dimension back into the study of politics (Ansell & Samuels, 2014; Albertus, 2015; Boone, 2014; Ziblatt, 2009). A conclusion from this literature is that democracy and social actors in rural contexts are intimately related. Ansell & Samuels (2014) argue that land inequality is associated with resistance to democracy, for strong and conservative landowning elites are unwilling to share political power with rising and competing groups. Boix (2003) supports this claim by suggesting that land's low asset mobility makes property holders especially vulnerable to pressures for expropriation and redistribution.

Thus, elections in agrarian settings can become overpoliticized. With micro-level data from 19th-century Germany, Ziblatt (2009) finds that economic disparities in the countryside subverted the functioning of the democratic game, by giving way to fraud, coercion, and election rigging. The mechanism proposed by Ziblatt is institutional: landed elites attempt to preserve their electoral dominance in the countryside by capturing the rural public officials and institutions at the local level. As Boone (2014) describes for sub-Saharan Africa, different forms of land tenure institutions give way to varying types of land-related conflict at the local level. Land allows politicians to allocate resources to voters depending on electoral payoffs. During elections, conflict is likely to arise because it opens the possibility of redistribution of land rights. Elections provide political elites with opportunities to mobilize voters, buy electoral support, and frame grievances against political contenders (Klaus & Mitchell, 2015).

While there is agreement in the literature that landed elites hold political agendas, there is less understanding of the concrete ways in which rural elites fight, bargain, or coalesce with political elites and armed groups. Indeed, in focusing on the relationship between landowners and the state, this literature says little about the role of non-state violent actors.

Theory: Land, violence, and fraud during elections

What is the impact of landed elites on the geographic variations of electoral violence and fraud? I argue that land concentration – a proxy for landowner prominence – has a positive effect on electoral violence and fraud. I identify two mechanisms linking land concentration and electoral manipulation – both coercive and fraudulent: in the first, resource-rich areas attract armed groups that intervene in elections; in the second, large landowners mobilize as a response to threats and intervene in electoral periods. In these contexts, both violence and fraud are used to manipulate electoral results by depressing turnout, favoring certain candidates, and altering the local balance of power.

However, there are crucial differences between these two tactics: while the use of violence is cheaper and requires less organizational effort, it may attract greater attention from the state. In contrast, fraudulent tactics are less visible, yet they require stronger linkages to state

officials and politicians. As a consequence, I posit a differential choice of tactic depending on the type of armed configuration: the effect of land concentration has a positive effect on *electoral violence* in areas where multiple armed groups dispute their presence. In contrast, land concentration has a positive effect on *electoral fraud* in areas dominated by groups with more robust links to the state apparatus, such as paramilitaries.

Landed elites and violent groups during elections

Landowners, I suggest, vary in their strength and capacity to influence land policy and local politics. Everything else being equal, prominent and cohesive landed elites are better able to coordinate resistance against peasant demands, have a higher control of agricultural policy, and have a larger set of connections among local officials and other key economic actors. Conversely, weaker and divided landowners lack both the organizational and the material capability to mount resistance against pressures for land and exert major influence on the formulation of favorable policy at the local level, let alone the national level. Paradoxically, although large rural elites possess more and better resources and networks to influence institutions and local politics, their privileged position also makes them more vulnerable to challenges by other actors. To be sure, while strength and capacity for mobilization are largely determined by organizational skills and connections with other groups, the amount of land they possess, relative to other groups, is an important source of their strength. Land, in other words, is one of the main sources of their political power.

I identify two mechanisms linking the presence of large landowners to electoral manipulation. First, regions with large areas of land attract violent groups interested in influencing elections through both coercive and non-coercive means. In this mechanism, the existence of land and resources affects the incidence of electoral violence and fraud through the presence of armed actors searching for such resources. Surely, violence in these areas may be directed against both landowners and other social groups, and emerge as a result of electoral and non-electoral processes. This mechanism, however, suggests that as these municipalities attract violent groups with interest in local politics, intimidation against voters and fraudulent tactics are likely to take place in electoral periods.

As an important body of research has suggested, when armed groups are interested in territorial control, they are likely to demand information and establish rules of civilian behavior (Arjona, 2017; Arias, 2010; Kalyvas, 2006). These groups, however, find in elections important events for influencing or disrupting power at the local level. Thus, violence or fraud can be employed to depress turnout in elections as a way to favor certain candidates or challenge the government's legitimacy (e.g. Acemoglu, Robinson & Santos, 2013). The presence of armed groups in resource-rich areas can also be instrumental for certain politicians interested in changing the electoral composition of certain districts (e.g. Kasara, 2016).

A second potential channel through which areas with large landowners lead to increasing electoral manipulation, especially violence, is via armed mobilization. Landowners controlling large areas of land have the capacity to engage in organized violence when threats from peasants, insurgents, and other groups become stronger. Since landowners may be more inclined to use violence as threats become stronger, this potential channel is closely related to the mechanism discussed above. In Colombia, when FARC rebels entered richer zones of the country, landowners agreed to pay a 'revolutionary tax' in exchange for security and protection. Increasing pressures and demands from FARC led to an outcome of armed opposition and resistance that ultimately forced the rebels to abandon the region (Gutiérrez Sanín, 2004; Romero, 2003).

Threatened landowners may become agents of violence by forming self-defense militias or colluding with already organized groups. These groups are likely to regulate general aspects of civilian life, but also influence electoral processes favorable to their rule. For instance, landed elites in conjunction with militias may have motivations to target left-wing politicians favoring changes in land concentration and promoting agendas against the status quo. Further, these groups may engage in strategic displacement of voters when electoral results reveal information about political preferences unfavorable to their interests (e.g. Steele, 2011).

Manipulating elections: Violence or fraud?

I have argued thus far that the occurrence of electoral violence and fraud is more likely in areas with high land concentration. Actors, however, must make a choice between the use of fraud and violence, use both tactics simultaneously, or refrain from exerting any influence on electoral contests at all.

I argue that the effect of land concentration on either violence or fraud is moderated by the type of armed presence in a given municipality. In areas where multiple armed groups contest their territorial presence, the effect of land concentration is likely to produce violence

against voters. As research has shown, the existence of multiple violent actors makes violence a more likely outcome (e.g. Kalyvas, 2006). For one, the absence of hegemonic rule implies that actors must resort to violence in order to alter results in their favor while preventing other groups from doing the same. In this context, violence against voters can be used as a way to favor the vote for certain candidates or punish defectors. Moreover, in areas without hegemonic rule, armed groups with diverging agendas give both incumbents and landed elites the possibility to collude with some groups but not with others. For instance, in areas where rebels systematically victimize landed elites, these can collude with paramilitaries to obtain protection and expel them from the area.

Based on these observations, it is possible to hypothesize the following:

> *Hypothesis 1:* Electoral violence – The effect of land concentration on electoral violence is higher in municipalities where multiple groups dispute their presence.

Compared to violence, the use of fraud does not attract much attention and may be effective in tilting the balance of power in favor of certain candidates. Yet, electoral fraud is, compared to coercive tactics, a more costly strategy requiring a higher organizational effort and even some degree of leniency by authorities. In fact, the political economy literature has treated the use of violence as a strategy used by the weak (e.g. Grossman, 1991). Likewise, Collier & Vicente (2012) observe, in their analysis of elections in sub-Saharan Africa, that violence is a comparatively cheap tactic to intimidate voters, while bribery and fraud are more likely to be used by strong actors. This is not to say that coercive tactics are overwhelmingly preferred by militarily and organizationally weak actors. Rather some actors' comparative advantage enables them to use some tactics more than others.

Pro-state militias and paramilitaries, while not entirely dependent on the state, enjoy closer links to state officials than insurgent groups (Carey, Colaresi & Mitchell, 2015; Staniland, 2015). Because electoral fraud requires greater cooperation and coordination with state officials and politicians, it is to be expected that only those violent groups more organically related to state officials are likely to be capable of committing fraud. Indeed, while both coercion and fraud require some degree of territorial presence and coordination, the use of fraudulent practices requires better coordination and networks to be able to stuff ballot boxes, bribe officials, and rig electoral results. For instance, the support of paramilitaries in Colombia was critical to politicians whose chances of being elected would have been low otherwise. Rebels, on the other hand, engaged systematically in coercion against politicians and voters but less so in fraud. While both insurgents and paramilitaries are equally able to mobilize resources and solve collective action problems, the closeness of pro-state militias to politicians and state officials can be a crucial factor to their advantage.

The previous discussion carries a key observable implication about electoral *fraud*:

> *Hypothesis 2:* Paramilitaries and fraud – The effect of land concentration on electoral fraud is higher where paramilitaries have a stronger presence.

Background on the Colombian conflict

The political and organizational legacies from *La Violencia* – a civil war between the Liberal and Conservative parties in the 1940s and 1950s – contributed to the emergence of several insurgent groups. Among those, the National Liberation Army (ELN) and the Revolutionary Armed Forces of Colombia (FARC) are the two main left-wing groups since the conflict's early period. While the ELN emerged in 1964 from intellectuals, students, and union members, the FARC appeared two years later as a peasant-based self-defense group influenced by the Communist Party. Other important groups, all of which demobilized in the early 1990s, included the Popular Liberation Army (EPL), the 19 April Movement (M-19), and the indigenous-based Quintín Lame.

The decade of the 1990s witnessed the worsening of the conflict. On the one hand, both FARC and ELN resorted to extortion, kidnapping, looting, and in the case of FARC, the involvement in the drug business (Gutiérrez Sanín, 2004). With the increase of rebel activity, pro-state militias emerged with the coordination of regional elites, cattle ranchers, drug-traffickers, and former army officials (González, Bolívar & Vázquez, 2002; Gutiérrez Sanín, 2008). In 1997, the United Self-Defense Forces of Colombia (AUC) was born as a confederation of the local militias of the 1980s and 1990s. Considered the guerrillas' nemesis, paramilitaries also became central actors in the *parapolítica* scandal, whereby paramilitaries delivered votes to politicians in exchange for participation in their governments and political agenda (Acemoglu, Robinson & Santos, 2013). The episodes of paramilitary politics show the extent to which paramilitaries managed to infiltrate the

state, negotiate with political actors, and set rules of interaction at all levels of political power.

In 2005, paramilitaries demobilized, but many of its units remilitarized and formed new paramilitary and criminal groups (Daly, 2016). Groups such as Urabeños, Rastrojos, and Paisas – remnants of the demobilized paramilitary groups – are mostly dedicated to drug-trafficking activities, thus impacting the numbers of incidents of violence and displacement (Bargent, 2017). In September 2016, and after almost four years of negotiations, a peace agreement between the Colombian government and FARC was signed in La Havana, Cuba. The negotiation process put an end to over five decades of violent confrontation. However, the Colombian public remains skeptical and pessimistic about the country's prospects for peace: recent evidence suggests that FARC remains a controversial actor and the average citizen is unwilling to endorse the group's participation in politics (Matanock & Garbiras, 2018). Thus, the implementation of the peace process is not without its challenges. In addition to the skepticism and strong pushback led by the opposition, the Colombian government has had to deal with FARC dissidents as well as the assassination of several social activists.

The Colombian case provides good leverage for testing the proposed arguments. A wide array of armed groups, both left-wing insurgents and right-wing paramilitaries, have influenced electoral processes in multiple ways, by depressing turnout, colluding with candidates, boycotting elections, or forcing citizens to vote for their preferred candidates. While both paramilitaries and guerrillas have engaged in violence against voters and public officials, the former concentrated most of their efforts in colluding with regional politicians and engaging in fraudulent practices. Moreover, these links transcended the local dimension, as it was established that 30% of Congress members had close ties with paramilitary groups (López, 2010; Acemoglu, Robinson & Santos, 2013). Without a doubt, drug-trafficking has played an important role in shaping both the violent confrontation and everyday politics, although it would be incorrect to reduce the nature of Colombian politics to this concrete element (Taylor, 2009; Gutiérrez Sanín, 2004). Moreover, many of the violent patterns have been associated with conflicts over land tenure and distribution. Colombia is considered as one of the most unequal countries in Latin America, and attempts to implement an integral land reform have been successfully blocked by political and rural elites over the past decades.

Lastly, Colombian subnational units have exhibited different levels of political competition, despite the presence of violent groups. Until the end of the National Front – a power-sharing agreement between 1958 and 1974 – Colombia's politics was dictated by the Conservative and Liberal parties. With the end of the National Front and the constitutional reform of 1991, the historical two-party system gave way to a multiparty system. Much of this party fragmentation deepened in 2002, when pro-Uribe candidates sought power under new and small party labels (Moreno, 2005; Pachón & Shugart, 2010). Decentralization reforms implemented in the 1980s – especially political and fiscal – were advanced as a way to devolve authority and autonomy to departments and municipalities.[1] Decentralization, however, increased disputes over local power, as the flow of resources and local elections gave violent groups an incentive to exert influence over rents and political actors (Eaton, 2006).

Data

Outcome variables: Violence and fraud

My first outcome of interest is the number of electoral violence incidents in a municipality-year. By *Electoral violence* I mean the use or threat to use armed violence against voters, in order to support a particular candidate and/or deter individuals from voting for certain candidates. To be sure, while candidates and public officials can also be targeted in contexts of elections, this definition focuses on a narrow yet key subset of actors playing a critical role in elections – voters. Additionally, it solely focuses on acts of coercion, thereby excluding other types of incidents, such as vote-buying or vote fraud. Thus, it imposes a stricter criterion on the definition by exclusively focusing on events where the use of violence is involved. By sacrificing generalizability across targets of violence, one can gain a more specialized and clearer understanding about the underlying logic of each type of violence. The second variable, *Electoral fraud*, is the number of election-related fraudulent practices in a municipality-year. A municipality is reported to have vote fraud when there exists voter impersonation, ballot box stuffing, or unauthorized voting. See Figure 1.

Both variables come from Misión de Observación Electoral (MOE; 2017), one of the most complete information platforms on electoral practices in Colombia. The operationalization of both variables is based on the legal definition of electoral coercion and fraud, as per

[1] Specifically, the first mayoral and gubernatorial elections took place in 1988 and 1991, respectively; and since 1994, both mayoral and gubernatorial elections have taken place simultaneously.

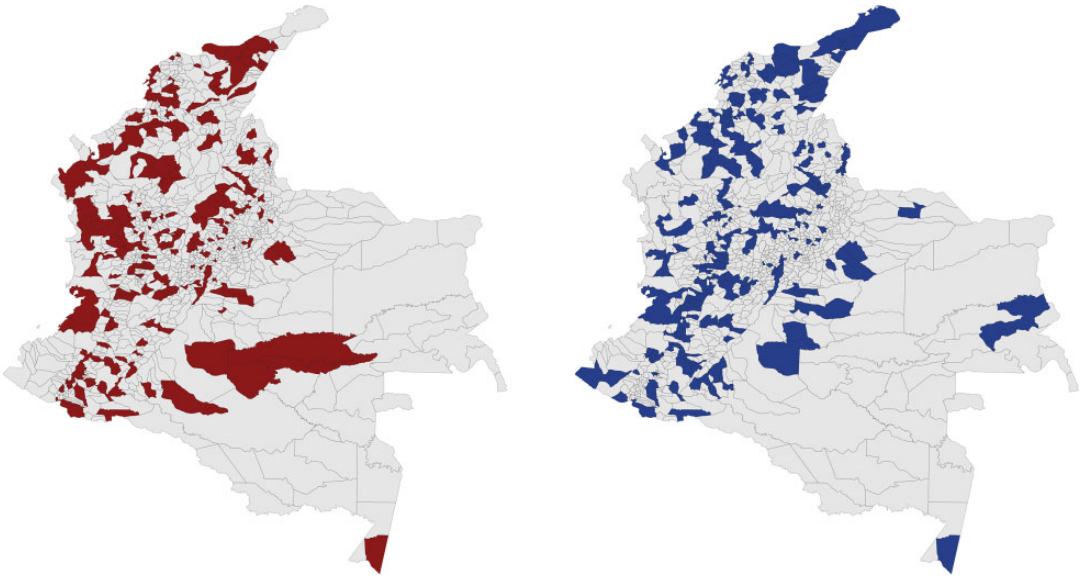

Figure 1. Electoral violence (left) and fraud (right) in Colombia
The figure shows municipalities where at least one incident has occurred.

Colombian law. That the MOE's data collection and operational definition are based on a legalistic approach is an advantage, especially when defining electoral fraud, for 'it permits assessing the location of the boundaries between acceptable and unacceptable political activity' (Lehoucq, 2003: 235). The MOE is a civil society-based organization, independent from the government, political parties, or private interests, with the objective of promoting electoral participation and collecting transparent information about its practices. The construction of both variables is based on reports and information from the Civil Registration Office, Ombudsman, Prosecutor's Office, media outlets, other civil society organizations, and citizens. The heterogeneity and relative independence of the sources guarantees that the information is not systematically biased. Furthermore, the MOE has increased its regional presence across Colombian territory in recent years, currently with offices in 381 of the 1122 municipalities. Because a potential bias in the information can stem from the centralized nature of the information-gathering entity, the MOE's various sources and ample territorial presence minimize this issue.

Independent variables: Landowners and armed groups

Land concentration. I use *Land concentration* as a proxy for landed elites' prominence in a municipality. Concretely, I use the Gini coefficient for land concentration, a measure of dispersion typically used to capture wealth and income concentration. The data for the Gini coefficient are collected and processed by the Agustin Codazzi Geographic Institute (IGAC). Its coefficients range from 0 to 1, where a value of 1 indicates a situation where all the land is owned by a single individual, and values approaching 0 indicate that the land is equally distributed among individuals. Recent critics persuasively suggest that the Gini coefficient of land concentration does not fully account for class dynamics (i.e. rural middle class vs. large landowners vs. peasants). This is an important warning, for it calls attention to how our theories interpret the available data. This critique is especially threatening for studies inferring multiple group incentives from the Gini coefficient. For instance, Ansell & Samuels's (2014) argument about the effect of the rising power of the middle class (measured by income Gini) would be challenged. As Velasquez (2016) suggests, the extremes in the Gini coefficient are more informative about class than the variation around the center of the distribution.

Being aware of these concerns, I avoid attributing incentives and behaviors to multiple groups, but rather argue that, everything else being equal, higher land concentration indicates greater landowner presence. Indeed, I am agnostic about their preferences for democracy. Landed elites, as important research suggests, are not inherently anti-democratic players, for they may support democracy in some contexts and hinder it in others (Albertus, 2015, 2017).

Armed group presence. I control for the presence of armed actors in a given municipality. I include three dummy variables indicating the presence of the main armed organizations in Colombia: the left-wing insurgent groups, FARC and ELN, as well as the AUC, the largest paramilitary organization that ever operated in Colombia. The raw measure for these variables is coded as follows: a group is considered to have territorial *Presence* in a municipality-year if that armed group was involved in and perpetrated one or more violent actions, including attacks against infrastructure, homicides, kidnappings, ambushes, massacres, battles, and civilian victimization. This raw coding of armed group *Presence* comes from the Center of Studies on Economic Development (CEDE) and is based on official reports from the National Police, Defense Ministry, Department of National Planning, and other Colombian authorities.

A problem with this raw variable is that violence does not constitute a reliable indicator of territorial presence or control. As studies based on rich micro-level data have forcefully demonstrated, the absence of violence may as well be a manifestation of hegemonic presence (e.g. Arjona, 2017; Kalyvas, 2006). Consequently, this raw variable is likely to overemphasize armed groups' capacity to maintain presence in a specific area. In order to remedy this and minimize the risk of measurement error, I recode *Presence* in a stricter way: an armed group has presence in a given municipality only if, according to the raw measure, such group has had presence in that municipality for the last three years. For instance, to code paramilitaries as having presence in the municipality of Girón in 2005, paramilitaries must have been coded as having presence in 2003, 2004, and 2005, according to the raw measure. To be sure, this approach is unlikely to capture levels of territorial control in all its complexity and nuances, but it constitutes a better measure than the raw scores, for it imposes a stricter threshold of what constitutes armed presence in a municipality.

Control variables

Other control variables are also included in the models. I include a dummy variable for the type of election, where 1 indicates the years in which regional-level elections – including mayor, governor, and council elections – took place and 0 indicates national-level elections. Since local elections provide a mechanism for defining and shaping the distribution of political power at the municipal level, electoral violence will be more prominent during this type of election. Further, since violence during elections is largely determined by electoral and political incentives, I control for electoral competition based on Laakso & Taagepera's (1979) effective number of parties. I expect coercion against voters to go up as electoral competition increases. Vote share data come from the Civil Registration Office.

Because electoral violence may be sensitive to the state's coercive presence, I include a one-year lagged variable indicating whether a municipality received police backups in a particular year. In 2002, the elected president, Álvaro Uribe, implemented an ambitious counterinsurgency program across Colombia, which included the strengthening of police presence in those municipalities most affected by violence. The data for this variable come from the CEDE panel dataset. In order to control for the impact of natural resources, I include a dummy variable indicating the presence of coca crops in a given municipality. As the literature in natural resources has suggested, resource wealth is associated with the intensity of conflict (Ross, 2004). Lastly, I include population density to control for the fact that more densely populated areas are more prone to violence. This variable comes from the National Administrative Department of Statistics. See Table I for summary statistics.

Empirical strategy

This article estimates the effect of landed elites on the incidence of violence against voters during elections. To estimate the effect of landowners on electoral violence, I employ a two-stage least squares estimation by leveraging soil quality as an instrumental variable for land concentration. In addition to this strategy, I estimate both OLS and negative binomial models and obtain results consistent with the theoretical expectations (Online appendix D).

Instrumental variables approach

A way to estimate the effect of land concentration on violence and fraud is to use multiple control variables and use a one-year lag of the endogenous variable, land concentration. The use of time lags makes it possible to capture the delayed effect of land concentration on the outcome of interest. Even with such specification, endogeneity is likely to be a threat to inference. It is possible that the use of intimidation in electoral contests changes the distribution of landownership. This could certainly be a possibility in areas where intense and systematic violence against voters forces peasants and landowners alike to flee, thus changing the land's ownership structure. Another possibility is that a third, unobserved, variable explains both electoral violence and land

Table I. Summary statistics

Variable	*N*	*Mean*	*St. dev.*	*Min*	*Max*
Electoral violence	6,733	0.069	0.433	0	16
Electoral fraud	6,733	0.262	3.347	0	225
Soil quality	6,348	2.668	1.226	0	8
Land concentration	5,731	0.712	0.101	0	0.983
Regional elections	6,733	0.500	0.500	0	1
FARC	6,732	0.279	0.449	0	1
ELN	6,732	0.091	0.288	0	1
AUC	6,732	0.059	0.236	0	1
Contested presence	6,732	0.093	0.290	0	1
Electoral competition	6,426	2.626	0.877	1	8.134
Police backups	6,716	0.094	0.292	0	1
Coca crops	6,732	0.174	0.379	0	1
Population density	6,732	141.557	631.455	0	15,020.290

concentration in a municipality. Because ignoring both problems may lead the researcher to infer erroneous conclusions, I employ an empirical strategy based on a two-stage least squares instrumental variables (IV) estimation.

I exploit the exogenous variation of *Soil quality* as an instrument for land concentration. With this approach, it is possible to estimate the effect of an endogenous variable – land concentration – if we are able to identify a variable that affects the outcome only through its effect on land concentration. Municipalities with higher soil quality are likely to have a more concentrated land structure: because soils with higher quality are better suited for agricultural activity and have a higher economic potential, the demand for these lands is likely to be higher. The level of quality/suitability, however, is exogenous to electoral violence. *Soil quality* is a continuous measure capturing the extent to which lands are suitable for agricultural use. While human action may certainly take its toll on the quality of lands, crop suitability is exogenously shaped by factors such as climate, topography, erosion, and rainfall. Figure 3 shows the distribution of soil quality and plots the relationship between soil quality and land concentration.

The first stage estimates the effect of soil quality on land concentration through the following equation:

$$LC_{it} = \lambda Soil\ quality_{it} + \mathbf{X}_{it} + \alpha_{it} + \delta_{it} + \varepsilon_{it} \quad (1)$$

where LC is a continuous variable measuring land concentration in municipality i and year t. The instrumental variable, $Soil\ quality_{it}$, is a continuous variable ranging from 1 to 8, which captures soil quality and its suitability for agricultural use. $\mathbf{X}_{it}$ is a vector of time-varying control variables, including the type of elections, electoral competition, armed group presence, police backups, coca crops, and population density. α_{it} is department fixed effects and δ_{it} is year fixed effects.

Thus, the second-stage equation estimates the effect of land concentration on electoral violence, by regressing electoral violence on the predicted values obtained in the previous equation. The second stage is estimated by the following equation:

$$Y_{it} = \alpha_{it} + \beta\widehat{LC_{it}} \times AG_{it} + \mathbf{X}_{it} + \alpha_{it} + \delta_{it} + \varepsilon_{it} \quad (2)$$

where Y_{it} is the number of incidents in municipality i and year t, $\widehat{LC_{it}}$ are the predicted values for land concentration obtained in Equation (1), and AG_{it} is a measure of armed group presence. β is the quantity of interest and represents the coefficient of the interaction effect between land concentration and armed group presence. While interaction effects in the context of IV are not widely used, the econometrics literature defends the validity of the approach (Balli & Sørensen, 2013; Bun & Harrison, 2014).[2] According to my hypothesis, I expect β to be positive. Lastly, $\mathbf{X}_{it}$ is a vector of time-varying covariates (i.e. type of elections, electoral competition, police backups, coca crops, and population density), and α_{it} and δ_{it} are vectors of department and year fixed effects, respectively.

Soil quality, land concentration, and electoral violence

Soil quality positively affects land concentration, by increasing the demand for high-quality soil. Lands better suited for agricultural activity are likely to have a higher demand than lands with lower agricultural suitability. Indeed, a body of literature in agricultural economics observes that better soil quality creates a higher demand for land. With a special focus on 19th-century Europe, this literature has contended that better soils created higher demand for land, which, in turn, led to a more fragmented land tenure system (Cinnirella & Hornung, 2016; Boserup, 2011).

While the European evidence supports this story, I argue that in contexts where property rights and institutions are weakly enforced, a higher demand for land – driven by soil quality – leads to more concentrated

[2] In the words of Balli & Sørensen (2013): 'In the case where, say, X_2 is endogenous, X_1 is exogenous, and Z is a valid instrument for X_2, X_1Z will be a valid instrument for X_1X_2.'

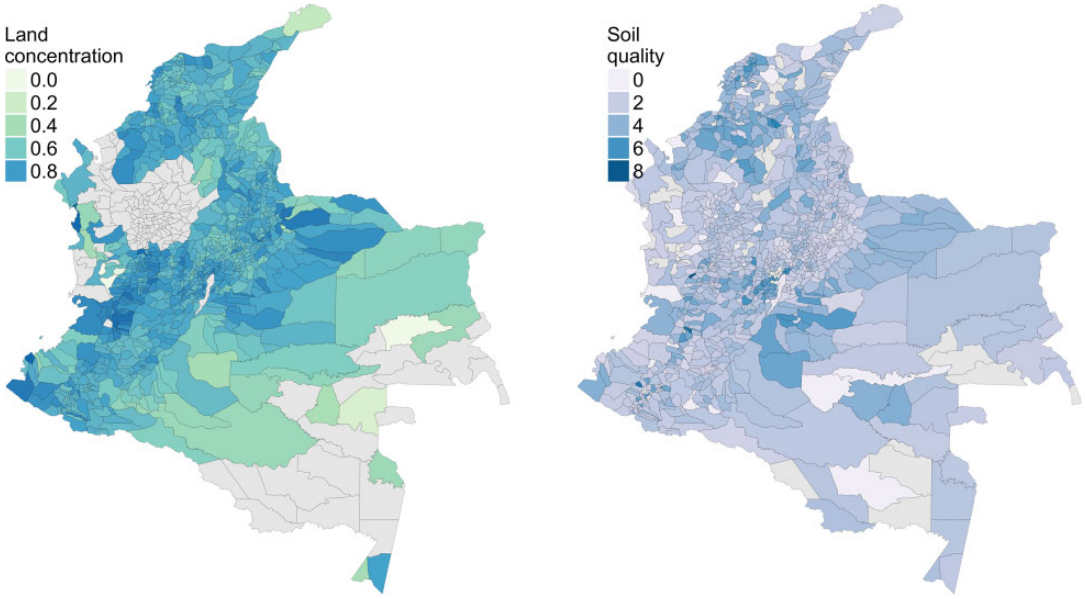

Figure 2. Average land concentration and soil quality in Colombia, 2002–2011

Land concentration is measured through the Gini coefficient. Soil quality is a continuous measure capturing the extent to which lands are suitable for agricultural use.

ownership. This story fits more closely the experience of Colombia, as well as other developing countries, where weak and unstable institutions make it easier for some groups to capture property by means of expropriation and even legal means. The pioneering work by LeGrand (1986) documents how landowners laid claim to large portions of land in early 20th-century Colombia. Interestingly, the author finds that public land conflicts in that era were not all violent and that many of them were settled through the mediation of the state. See Figures 2 and 3.

A valid instrumental variable requires two main assumptions. First, *Soil quality* must be correlated with *Land concentration*. This is an important assumption, because if the correlation between soil quality and land concentration is only marginally different from zero, bias can be greater than with OLS. In other words, I expect λ in Equation (1) to be positive and statistically significant. The first-stage results in Table II show the relationship between soil quality and land concentration. Additionally, Panel B in Figure 3 plots the relationship between these two variables. As expected, municipalities with higher soil quality are likely to have a more concentrated land structure, even after controlling for different covariates. In Column 1 of Table II, I regress land concentration on soil quality and find a positive and statistically significant relationship with confidence at the 99%. In Columns 2 and 3, the instrument is interacted with two different

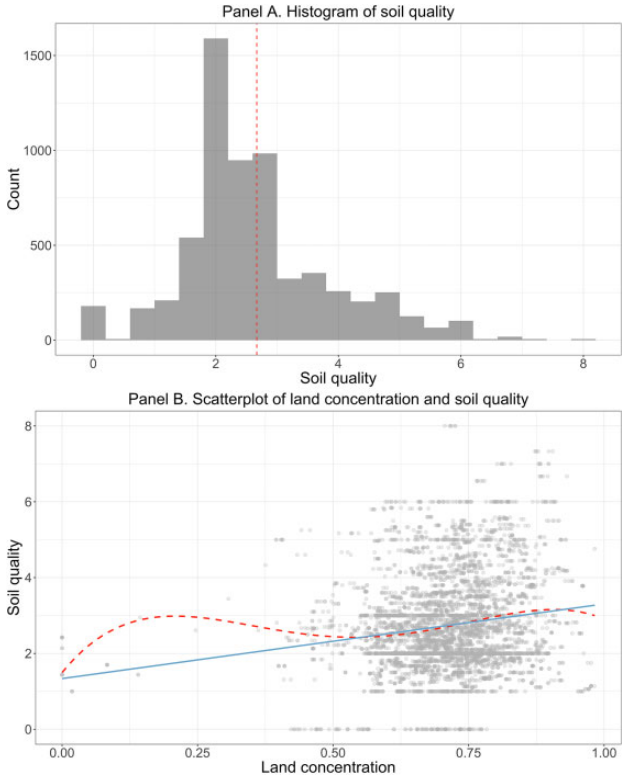

Figure 3. Municipal-level soil quality

measures of armed presence – a dummy indicating the presence of any armed actor, and a factor disaggregating the type of armed group. In both, after controlling for

Table II. First-stage results - land concentration and soil quality

	Dependent variable is Land concentration		
	(1)	*(2)*	*(3)*
(Intercept)	0.612**	0.612**	0.616**
	(0.010)	(0.010)	(0.010)
Soil quality	0.007**	0.007**	0.007**
	(0.001)	(0.001)	(0.001)
Soil quality × armed presence		−0.003	
		(0.004)	
Soil quality × rebels			0.000
			(0.002)
Soil quality × paramilitary			0.013
			(0.008)
Soil quality × contested			−0.003
			(0.004)
Department FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
F statistic	61.28	59.79	60.17
R^2	0.318	0.318	0.320
Adj. R^2	0.313	0.313	0.314
No. obs.	5,292	5,292	5,292
RMSE	0.082	0.082	0.082

$^{**}p < 0.01, {}^{*}p < 0.05, {}^{\dagger}p < 0.1$.
Soil quality is a continuous measure ranging from 1 to 8. All columns include the type of election (local positions vs. presidential), armed group presence, electoral competition, coca crops, population density, and police backups. All columns include department and year fixed effects. Robust standard errors in parentheses.

Table III. Second-stage IV results - electoral violence

	Dependent variable is Electoral violence		
	(1)	*(2)*	*(3)*
(Intercept)	−0.20	0.08	0.39
	(0.36)	(0.36)	(0.34)
Land concentration	0.05	−0.37	−0.82
	(0.55)	(0.55)	(0.51)
Armed presence × land con.		3.94*	
		(2.27)	
Contested × land con.			4.59*
			(2.33)
Rebels × land con.			1.59
			(1.43)
paramilitary × land con.			0.68
			(0.71)
R^2	0.10	0.05	0.03
Adj. R^2	0.09	0.05	0.02
No. obs.	5,292	5,292	5,292
RMSE	0.36	0.37	0.37

$^{**}p < 0.01, {}^{*}p < 0.05, {}^{\dagger}p < 0.1$.
Electoral violence is a count variable for all municipality-years. All models are based on presidential elections (2002, 2006, 2010) and regional elections (2003, 2007, 2011). All columns include department and year fixed effects. Robust standard errors in parentheses.

other covariates and including both department and year fixed effects, soil quality is correlated with land concentration with a p-value of less than 0.01.

A second key identifying assumption underlying the IV approach refers to the exclusion restriction, whereby soil quality should only affect the outcome via land concentration and not through any other alternative pathways. Unfortunately, unlike the first assumption, there is no formal way of testing the exclusion restriction. A clear violation of this assumption would happen if soil quality exclusively affected electoral violence and fraud through the activity of violent groups. While armed actors play an important role, I suggest that this is not a threat to the exclusion restriction: topographically, while the more suitable lands tend to be flatlands, the less suitable ones are mountainous terrains. Furthermore, as the civil conflict literature shows, mountainous terrains are essential for armed groups' survival (e.g. Fearon & Laitin, 2003). In other words, while armed groups value lands, they are also tactically constrained by conflict dynamics and must resort to rugged terrain (which tends to be of lower quality) in order to avoid military setbacks.

Empirical results

I use a panel dataset covering the timespan between 2002 and 2011 for all municipalities in Colombia. Since the focus of my analysis is the use of violence in the context of elections, I restrict my sample to electoral years only. During this period, six nationwide electoral processes took place in Colombia: three national-level elections (2002, 2006, 2010) and three regional-level elections (2003, 2007, 2011). The sample includes 6,732 observations (municipality-years) of which only 4.5% take on non-zero values in the dependent variable.

Table III reports the IV results for the effects of land concentration on electoral violence in Colombia. When compared to the OLS and NB models, a major difference of the IV approach is that land concentration by itself is not a predictor of electoral violence. If the proposed instrumental variable is a valid solution to endogeneity, the results suggest that the model specification should include an interaction term with armed groups.

Thus, the remaining specifications indicate that the effect of land concentration on electoral violence is

moderated by the presence of armed actors. According to the results in Model 2, as land concentration increases, the presence of more than one armed group has a positive and stronger effect on electoral violence, compared to areas where no armed actor is present. After controlling for different predictors of electoral violence and including temporal and spatial fixed effects, this result remains significant at the 95% confidence level.

Likewise, the third model includes an interaction term between land concentration and different armed groups. In this specification, instead of a dichotomous measure, I use a categorical variable that disaggregates armed group presence into rebels, paramilitaries, and contested control. According to the model, higher land concentration has a positive effect on election-related violence, when *multiple* armed groups dispute control. Land concentration – consistent with the results from the negative binomial (NB) models – is not statistically significant when interacted with rebels or paramilitaries. Interestingly, however, the signs for such interaction terms are positive (unlike the NB models), which is more consistent with theoretical expectations as well as more specific findings from the specialized literature on the Colombian case (Taylor, 2009).

To be sure, the fact that municipalities with armed presence experience a higher incidence of violence is not entirely counterintuitive. However, two points are worth noting: first, election violence during civil conflicts cannot be disconnected from the logics of armed groups. Second, and more importantly, results from the IV model suggest that the interaction between landowners and armed groups may jointly produce incidents of electoral violence: it is the process of conflict, bargaining, and dispute between armed groups and landed elites that produces varying levels of violence.

Now I investigate the occurrence of electoral violence versus the use of fraudulent practices in elections. In Table IV, I estimate two sets of models with the number of fraud incidents in Columns 1 and 3, and the number of fraud *and* violence incidents in Columns 2 and 4. The interaction effect between land concentration and armed group presence has a positive and significant effect on both fraud and the combination of fraud and violence. Moreover, the empirical results show remarkable variation in the type of actor involved and the type of electoral irregularity. Thus, while fraud and violence tend to happen in areas of high land concentration and contested armed control, paramilitary groups are the only actor that consistently has a positive effect on electoral fraud as land concentration increases. This is a finding that provides substantive evidence on how armed groups with various electoral interests pursue different strategies towards state actors (Staniland, 2015; Dunning, 2011).

Table IV. Second-stage IV results - electoral fraud

	Dependent variable is			
	Only fraud (1)	*Fraud and EV (2)*	*Only fraud (3)*	*Fraud and EV (3)*
(Intercept)	28.50	32.58†	3.00	3.39†
	(17.78)	(18.39)	(1.95)	(2.00)
Armed presence × land con.	25.11	29.04†		
	(16.23)	(16.61)		
Contested × land con.			26.83	31.42†
			(16.65)	(17.05)
Rebels × land con.			4.01	5.60
			(2.89)	(3.60)
Paramilitary × land con.			6.30†	6.99†
			(3.67)	(3.81)
R^2	0.09	0.10	0.09	0.09
Adj. R^2	0.09	0.10	0.08	0.09
No. obs.	5,292	5,292	5,292	5,292
RMSE	1.83	1.91	1.84	1.92

$^{**}p < 0.01$, $^{*}p < 0.05$, $^{\dagger}p < 0.1$.
Electoral violence and electoral fraud are count variables. All models are based on presidential elections (2002, 2006, 2010) and regional elections (2003, 2007, 2011). All columns include department and year fixed effects. Robust standard errors in parentheses.

Based on the statistically significant and positive coefficient of paramilitaries in Columns 3 and 4, two elements are worth noting: first, the null findings for paramilitary presence in the electoral violence models (Table III) were not indicative of weakness or lack of interest in electoral politics. Rather, as a rich body of evidence has demonstrated, paramilitaries in Colombia resorted to multiple tactics, especially the use of fraud and collusion with political elites (Acemoglu, Robinson & Santos, 2013; López, 2010). Second, compared to the use of violence, electoral fraud requires a more concerted effort, a better use of resources, and even the collaboration of certain political elites. This observation is likely to explain why paramilitaries and not rebels are associated with more instances of fraud.

Summary and implications

Electoral processes constitute an opportunity to shape the local distribution of power. In societies where land concentration and violent actors are present, the outcome is not exempt from coercive and fraudulent practices. In these contexts, the (potential) losers of electoral contests may have an incentive to influence elections in

non-electoral ways: elections reveal key information about political preferences, provide armed groups with incentives to capture local governments, and may, ultimately, threaten the power of landed elites.

In exploring the relationship between land concentration and violence against voters, I argue that electoral violence occurs more frequently in areas where landed elites are a relevant actor. I identify two distinct but related pathways: first, resource-rich areas *attract* armed groups with incentives to intervene in elections, by depressing turnout, favoring certain candidates, and punishing outcomes unfavorable to their agendas. Second, large landowners *mobilize* against threats (e.g. armed groups and/or voters with redistributive preferences) and attempt to preserve their position by intervening in elections. Furthermore, whether violence or fraud is employed is likely to be a function of the type of violent group involved.

To isolate the effect of land concentration, the empirical strategy used in this article takes advantage of the exogenous variation of soil quality at the municipal level to instrument land concentration in Colombia. Empirically, this article makes two key contributions. First, my findings indicate that the effect of land concentration on election violence is moderated by the presence of multiple armed groups. Not only does the existence of various armed groups make electoral violence a more likely outcome (e.g. Kalyvas, 2006), but it also makes it a more complex issue: armed groups with diverging agendas give both the incumbents and landed elites the possibility to collude with some groups but not with others. Insurgents in Colombia, El Salvador, and Peru have coerced strong landowners – through kidnapping, extortion or threats – as a way to obtain financial resources or change the local distribution of land. In those contexts, while some landowners have acquiesced to rebel demands, others have resisted and mobilized against insurgency. With ample support by landowners, the emergence of progovernment militias, self-defense groups, and local vigilantes has resulted from rebel violence (Fumerton & Castelein, 2012; Wood, 2003).

Second, my findings also show that, compared to other groups, violent actors with linkages to state officials and political elites are more strongly related to electoral fraud than to electoral violence. In fact, the IV estimation suggests that in areas with high land concentration, paramilitary presence has a positive but statistically insignificant effect on election violence. I show, however, that in those same areas, paramilitary presence carries a positive effect on fraudulent practices. Certainly, the absence of election-related coercion does not mean lack of interest in electoral politics, for the decision to use violence is not binary (e.g. violence vs. no violence), but it has to consider the possibility of resorting to violence, fraud, or both. That paramilitary groups – but not rebels – are more closely related to fraud speaks to previous studies on the subject and shows the importance of studying the heterogeneous effects of violent actors on the decision to use violence or fraud. More generally, this finding supports several calls in the literature to take the *type* of actor and its relationship with the state more seriously (e.g. Staniland, 2015; Dunning, 2011).

While Colombia provides an ideal setting to study the link between land and electoral violence and fraud, both the theoretical argument and empirical implications travel well beyond this case. Empirically, patterns of land concentration and resource asymmetry have been associated with fraud, violence, and clientelism in contexts such as 19th-century Germany (Ziblatt, 2009), sub-Saharan Africa (Klaus & Mitchell, 2015), and El Salvador (Wood, 2003), just to name a few. Furthermore, while some may treat Colombia as a special case of violence – given the duration of its conflict and the number of actors involved – it is far from unique. Recent research shows that violent actors, such as drug cartels, militias, and self-defense groups, also seek to shape electoral politics by using coercion against voters, assassinating politicians, and colluding and seeking protection from state officials (Trejo & Ley, 2017; Hidalgo & Lessing, 2015; Duran-Martinez, 2015).

Understanding the links between land concentration and electoral malpractices can potentially inform related questions on democratic consolidation and political order. First, the existence of subnational democratic institutions is not a guarantee of effective democratic procedures. This is especially true of contexts where land disparities are acute. In fact, in democracies in violent contexts, political and violent competition are faces of the same coin: a host of political and violent players may have incentives to alter electoral dynamics in such a way that it affects the fairness and competitiveness of the process. Second, if both patterns of land distribution and the presence of violent actors are deciding factors of coercion and fraud, the state has a crucial role in igniting, tolerating, and preventing electoral mispractices. In discussing the Indian case, Wilkinson (2006) observed that, in addition to local electoral incentives, the government's will and capacity to control the police and army determine whether violence is likely to stop. Furthermore, state officials may delegate violence to armed groups if their objectives are compatible (e.g. Carey, Colaresi & Mitchell, 2015). To be sure, political competition and

state-building are more intertwined than previous scholarship has acknowledged.

Replication data

The dataset, codebook, and R-scripts for the empirical analysis in this article, along with the Online appendix, can be found at http://www.prio.org/jpr/datasets.

Acknowledgements

I am particularly grateful to Juan Albarracín, Ana Arjona, Rodrigo Castro-Cornejo, Omar Coronel, Sarah Daly, Laura Gamboa, Gary Hollibaugh, Aníbal Pérez-Liñan, Ana Petrova, Luis Schenoni, and Lucía Tiscornia for their comments at different stages of the project. I also wish to acknowledge the *JPR* editorial team and three anonymous reviewers for their excellent feedback, as well as participants at the Notre Dame Comparative Politics Workshop, the Kroc-Kellogg Violence Workshop, and the 2016 meeting of the American Political Science Association. All errors and omissions remain my own.

ORCID iD

Camilo Nieto-Matiz https://orcid.org/0000-0002-1917-003X

References

Acemoglu, Daron; James A Robinson & Rafael J Santos (2013) The monopoly of violence: Evidence from Colombia. *Journal of the European Economic Association* 11(S1): 5–44.

Albarracín, Juan (2017) Criminalized electoral politics in Brazilian urban peripheries. *Crime, Law and Social Change* 69(4): 553–575.

Albertus, Michael (2015) *Autocracy and Redistribution: The Politics of Land Reform*. Cambridge: Cambridge University Press.

Albertus, Michael (2017) Landowners and democracy: The social origins of democracy reconsidered. *World Politics* 69(2): 233–276.

Ansell, Ben W & David J Samuels (2014) *Inequality and Democratization*. New York: Cambridge University Press.

Arias, Enrique Desmond (2010) Gangs and politics in Kingston, Jamaica and Rio de Janeiro, Brazil. Paper presented at the meeting of the Latin American Studies Association, Toronto.

Arjona, Ana (2017) *Rebelocracy: Social Order in the Colombian Civil War*. New York: Cambridge University Press.

Balli, Hatice Ozer & Bent E Sørensen (2013) Interaction effects in econometrics. *Empirical Economics* 45(1): 583–603.

Bargent, James (2017) Mass displacements on the rise as Colombia's war recedes (https://www.insightcrime.org/news/analysis/mass-displacements-rise-as-colombia-war-recedes/).

Boix, Carles (2003) *Democracy and Redistribution*. New York: Cambridge University Press.

Boone, Catherine (2014) *Property and Political Order in Africa: Land Rights and the Structure of Politics*. New York: Cambridge University Press.

Boserup, Ester (2011) *The Conditions of Agricultural Growth: The Economics of Agrarian Change under Population Pressure*. New York: Transaction.

Bun, Maurice JG & Teresa D Harrison (2014) OLS and IV estimation of regression models including endogenous interaction terms. Working paper, University of Amsterdam.

Carey, Sabine C; Michael P Colaresi & Neil J Mitchell (2015) Governments, informal links to militias, and accountability. *Journal of Conflict Resolution* 59(5): 850–876.

Chacón, Mario; James A Robinson & Ragnar Torvik (2011) When is democracy an equilibrium? Theory and evidence from Colombia's La Violencia. *Journal of Conflict Resolution* 55(3): 366–396.

Chaturvedi, Ashish (2005) Rigging elections with violence. *Public Choice* 125(1/2): 189–202.

Cinnirella, Francesco & Erik Hornung (2016) Landownership concentration and the expansion of education. *Journal of Development Economics* 121(July): 135–152.

Collier, Paul & Pedro C Vicente (2012) Violence, bribery, and fraud: The political economy of elections in sub-Saharan Africa. *Public Choice* 153(1–2): 117–147.

Daly, Sarah Zukerman (2016) *Organized Violence After Civil Wars: The Geography of Recruitment in Latin America*. New York: Cambridge University Press.

Dunning, Thad (2011) Fighting and voting: Violent conflict and electoral politics. *Journal of Conflict Resolution* 55(3): 327–339.

Duran-Martinez, Angelica (2015) To kill and tell? State power, criminal competition, and drug violence. *Journal of Conflict Resolution* 59(8): 1377–1402.

Eaton, Kent (2006) The downside of decentralization: Armed clientelism in Colombia. *Security Studies* 15(4): 533–562.

Fearon, James D & David D Laitin (2003) Ethnicity, insurgency, and civil war. *American Political Science Review* 97(1): 75–90.

Fjelde, Hanne & Kristine Höglund (2016) Electoral institutions and electoral violence in sub-Saharan Africa. *British Journal of Political Science* 46(2): 297–320.

Fumerton, Mario A & Klaas J Castelein (2012) The endogeneity of militias in civil wars: Ayacucho's 'Comités de Autodefensa' and Teso's 'Arrow Group' in comparative perspective. Working paper.

González, Fernán E; Ingrid Bolívar & Teófilo Vázquez (2002) *Violencia Política en Colombia: De la Nación Fragmentada a*

la Construcción del Estado. Bogota: Centro de Investigación y Educación Popular (CINEP).
Grossman, Herschell I (1991) A general equilibrium model of insurrections. *American Economic Review* 81(4): 912–921.
Gutiérrez Sanín, Francisco (2004) Criminal rebels? A discussion of civil war and criminality from the Colombian experience. *Politics & Society* 32(2): 257–285.
Gutiérrez Sanín, Francisco (2008) Telling the difference: Guerrillas and paramilitaries in the Colombian war. *Politics & Society* 36(1): 3–34.
Hafner-Burton, Emilie M; Susan D Hyde & Ryan S Jablonski (2014) When do governments resort to election violence? *British Journal of Political Science* 44(1): 149–179.
Hidalgo, F Daniel & Benjamin Lessing (2015) Endogenous state weakness: Paramilitaries and electoral politics. Working paper.
Kalyvas, Stathis N (2006) *The Logic of Violence in Civil War*. Cambridge & New York: Cambridge University Press.
Kasara, Kimuli (2016) Electoral geography and conflict: Examining the redistricting through violence in Kenya. (http://www.columbia.edu/kk2432/elecgeog0316.pdf).
Klaus, Kathleen & Matthew I Mitchell (2015) Land grievances and the mobilization of electoral violence: Evidence from Côte d'Ivoire and Kenya. *Journal of Peace Research* 52(5): 622–635.
Laakso, Markku & Rein Taagepera (1979) 'Effective' number of parties: A measure with application to west Europe. *Comparative Political Studies* 12(1): 3–27.
LeGrand, Catherine (1986) *Frontier Expansion and Peasant Protest in Colombia, 1830–1936*. Albuquerque, NM: University of New Mexico Press.
Lehoucq, Fabrice (2003) Electoral fraud: Causes, types, and consequences. *Annual Review of Political Science* 6(1): 233–256.
López, Claudia (2010) Y refundaron la patria: De cómo mafiosos y políticos reconfiguraron el Estado colombiano [And they re-founded the homeland: How mafiosi and politicians reconfigured the Colombian state]. Bogotá: Random House Mondadori.
Matanock, Aila & Natalia Garbiras (2018) Considering concessions: A survey experiment on the Colombian peace process. *Conflict Processes and Peace Science*. https://doi.org/10.1177/0738894218787784.
Misión de Observación Electoral [Electoral Observation Mission] (2017) Datos Electorales [Electoral Data] (http://www.datoselectorales.org, accessed November 2017).
Moreno, Erika (2005) Whither the Colombian two-party system? An assessment of political reforms and their limits. *Electoral Studies* 24(3): 485–509.
Pachón, Mónica & Matthew S Shugart (2010) Electoral reform and the mirror image of inter-party and intra-party competition: The adoption of party lists in Colombia. *Electoral Studies* 29(4): 648–660.
Romero, Mauricio (2003) *Paramilitares y Autodefensas, 1982–2003 [Paramilitaries and Self-defense Groups, 1982–2003]*. Bogotá: Editorial Planeta.
Ross, Michael L (2004) How does natural resource wealth influence civil war? Evidence from 13 cases. *International Organization* 58(1): 35–67.
Staniland, Paul (2015) Armed groups and militarized elections. *International Studies Quarterly* 59(4): 694–705.
Staniland, Paul (2017) Armed politics and the study of intrastate conflict. *Journal of Peace Research* 54(4): 459–467.
Steele, Abbey (2011) Electing displacement: Political cleansing in Apartadó, Colombia. *Journal of Conflict Resolution* 55(3): 423–445.
Taylor, Steven Lynn (2009) *Voting Amid Violence: Electoral Democracy in Colombia*. Boston, MA: Northeastern University Press.
Trejo, Guillermo & Sandra Ley (2017) Why did drug cartels go to war in Mexico? Subnational party alternation, the breakdown of criminal protection, and the onset of large-scale violence. *Comparative Political Studies* 51(7): 900–937.
Velasquez, Mauricio (2016) Compositions vs Gini: A new metric to evaluate the effects of land-income disparities. Working paper, UC-Los Angeles.
Wilkinson, Steven I (2006) *Votes and Violence: Electoral Competition and Ethnic Riots in India*. New York: Cambridge University Press.
Wood, Elisabeth Jean (2003) *Insurgent Collective Action and Civil War in El Salvador*. New York: Cambridge University Press.
Ziblatt, Daniel (2009) Shaping democratic practice and the causes of electoral fraud: The case of nineteenth-century Germany. *American Political Science Review* 103(1): 1–21.

CAMILO NIETO-MATIZ, b. 1986, PhD Candidate in Political Science (University of Notre Dame), Kellogg Institute Doctoral Affiliate; current research interests include state-building, political and criminal violence, and post-conflict politics.