Territorial control and vote choice in Colombia
A multilevel approach

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Abstract: This paper develops a theoretical framework for understanding the relationship between violent contexts of territorial control and vote choice by drawing on insights from literature on the contextual determinants of political behavior and civil wars. It tests the hypothesis that individuals living in a violent context tend to behave in line with the strategic objectives and ideological orientations proclaimed by the armed actor dominating the area. Using a national survey conducted in Colombia in 2005, and contextual level data, this paper employs hierarchical regression models to test this hypothesis. Results suggest that on moving from areas dominated by the colombian state to regions controlled by right-wing paramilitary groups, individuals were more likely to support a presidential candidate on the right of the ideological spectrum. However, this relationship appears to be conditioned by partisanship, as minority party sympathizers' vote choices are the most affected by changes in violent contexts.

Keywords: territorial control, vote choice, Colombia, multilevel approach.

Control territorial y decisión de voto en Colombia: Un enfoque multinivel

Resumen: Este artículo investiga la relación entre el control territorial de grupos armados y las decisiones de voto de los individuos sometidos al mismo. Prueba la hipótesis de que las personas que viven en un contexto violento tienden a alinearse con los objetivos estratégicos y las orientaciones ideológicas del actor que domina el área. A partir de una encuesta nacional realizada en Colombia en 2005 y datos de nivel contextual, se emplean modelos de regresión jerárquica para probar la hipótesis. Los resultados sugieren que, al pasar de áreas dominadas por el Estado colombiano hacia regiones controladas por grupos

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paramilitares de derecha, los individuos se vuelven más proclives a apoyar un candidato presidencial de la derecha del espectro ideológico. Sin embargo, esta relación resulta estar condicionada por el partidismo, pues las decisiones de voto de los simpatizantes de partidos minoritarios son las más afectadas por cambios en contextos violentos.

Palabras clave: control territorial, decisión de voto, Colombia, enfoque multinivel.

Introduction

The emergence of a democratic order signified the defeat of violence as a political instrument in most developed nations. Experiences in Western Europe and the United States show that democracy has been a mechanism through which competing political forces were able to settle their differences without resorting to violence (Przeworski, 1999). During the past few decades, electoral democracy has expanded to a significant number of developing countries. Almost every Latin American nation, and a growing number of African and Asian states, use democratic procedures to select their governments. However, unlike developed nations, many of these new democracies coexist with political violence, and in some cases with legal and illegal agents willing to challenge democratic institutions and procedures (Bratton, 2008; Collier and Vicente, 2008; Wilkinson, 2004). In fact, during the last decade of 49 countries that suffered some sort of internal conflict 29 held elections involving more than one party.

Despite this paradox, most research on political behavior continues to be based on experiences of countries where political violence does not represent a major challenge to the functioning of electoral democracy. Furthermore, the majority of studies have relied on individual determinants to explain phenomena such as political participation, vote choice, policy preferences, or partisanship. However, as electoral democracy extends to developing nations, it can be expected that contextual factors may affect individuals' political behavior and opinions. In particular, the electoral impact of social environments characterized by different levels of political violence deserves attention. The purpose of this article is to advance our understanding of the relationship between violent contexts and political behavior. Specifically, this study asks: what is the link between violent contexts and vote choice? This question is explored for the case of Colombia, a country that provides an exceptional opportunity to study this link for several reasons. Firstly, this county has been recognized as one of the most stable Latin American democracies (Hartlyn and Valenzuela, 1997). Electoral processes have unfolded under relatively open competition, fraud has

been generally absent, and winning candidates have been considered legitimate by most citizens. Secondly, this nation has suffered a prolonged and bloody armed conflict between the State, left-wing guerrillas, and right-wing paramilitary bands. Finally, and more importantly, as the internal conflict intensified and powerful extrainstitutional actors consolidated their power in several regions of the country, it has become increasingly clear that political violence had an effect on electoral processes, electoral outcomes, and the configuration of political power. In short, Colombia represents the paradox mentioned above: a relatively well established electoral democracy functioning in a context of widespread political violence.

Drawing on insights from the literature on the contextual determinants of political behavior, and from studies on civil wars, this article presents and empirically tests a theoretical framework for understanding the relationship between violent contexts and vote choice. The general argument of this work is that citizens living in a violent context vote in accordance with the strategic objectives and ideological orientations proclaimed by the armed actor dominating the area. Hence, the extent to which a violent context affects voting behavior is a function of the level of control a violent agent achieves in a given region. Compared to disputed areas, as a single armed actor consolidates its territorial control, citizens may be more likely to support candidates, and parties backed by the dominant armed actor. However, the relationship between violent contexts and political behavior is not expected to be homogeneous, as it is moderated by partisanship. Specifically, vote choices of minority party sympathizers are more affected by violent contexts.

Social contexts and political behavior

Most studies on voting behavior have paid little attention to context "viewing vote choices as the product of a "personal" rather than a "social" calculus" (Beck *et al.*, 2002, p. 57). Yet, during the last few decades, contextual analyses of voting behavior have experienced a revival as a growing number of scholars have demonstrated that social and political contexts do play a significant role in explaining citizens' political decisions. These works have studied the effects of structurally imposed contexts and social networks. For instance, studies on the effects of the first type of contexts have showed that individuals living in low-status neighborhoods were more likely to vote for left wing parties than were those living in affluent areas (Miller, 1956; Putnam, 1966; Johnston and Pattie, 2005); and that local economic environ-

ments affect citizens' evaluations of the national economy, and consequently their chances of supporting the incumbent (Books and Prysby, 1999; Johnston *et al.*, 2000). Finally, other contextual factors, particularly the local distribution of political preferences, appeared to be unrelated to vote choice (Beck *et al.*, 2002).

Social networks have displayed a consistent and significant impact on voting behavior. When the preferences of individuals with whom a person discusses politics move toward a particular candidate, the chances of supporting that politician will increase (Baker *et al.*, 2006; Beck *et al.*, 2002; Huckfeldt *et al.*, 2004b; Kenny, 1998; Levine, 2005). Thus, social networks not only contribute to consolidate people's political preferences, they are also a key factor in explaining preference change when individuals face political disagreement among their social network (Ames *et al.*, 2012; Baker *et al.*, 2006). This line of research has also demonstrated that discussants who follow politics, and those perceived as knowledgeable, are the most influential. Furthermore, friendship and frequent contact tend to enhance the effect of social networks on citizens' electoral choice (Kenny, 1998).

As most of the literature on contextual effects has focused on the impact of socioeconomic contexts and social networks on political behavior, and despite of a growing interest for analyzing the relationship between fighting and voting (Dunning, 2011), there are very few studies on the relationship between violent contexts and individual voting decisions. Most of the literature on fighting and voting has studied municipal and national variations on turnout and electoral returns. Thus, some pieces have found a negative effect of violence on political participation (Bratton, 2008; Collier and Vicente, 2008; Fornos *et al.*, 2004; García-Sánchez, 2007). Others have suggested that in politically unstable contexts, information about the military strength of the competing political parties will affect voters' preferences and, consequently, electoral outcomes. If the cost of violence is sufficiently high, voters may simply vote for the strongest party (Ellman and Wantchekon, 2000; Wantchekon, 1999). Similarly, analyses of the Israeli and Turkish cases found that right wing parties increase their vote share after terrorist attacks (Berrebi and Klor, 2008; Kibris 2011). Finally, another study concluded that armed actors affect elections by expelling opposition parties' supporters (Steele, 2011).

All of these studies have in common that they work with aggregate units of analysis, so there is practically no research on how political violence affects individual political behavior. Although aggregate analyses on this

matter are crucial to understanding how political violence affects the balance of political power, research centered on the individual is also critical to understand the relationship between fighting and voting. Electoral outcomes, as aggregate realities, are the product of thousands of individual decisions; however, aggregate outcomes works differently than individual decisions. Therefore, it is not possible to assume that relationships observed in groups hold for individuals (Freedman *et al.*, 1998). In addition, focusing on individual units embedded in particular contexts allows capturing: variations in citizens' behavior due to changes in contextual political violence, differences in vote decisions within the same violent context, and the effect of the interaction between violent contexts and citizens' characteristics. Thus, this paper attempts to fill existing gaps in the literature on voting behavior and fighting and voting, by analyzing the relationship between different violent scenarios and individuals' vote choices.

Violent contexts and vote choice

Unlike common violence, political violence grows out of an interaction between opponents, and serves specific instrumental purposes (Tilly, 1978). According to Powell, political violence has three general objectives: "to change the bargaining rules of the democratic game, to undermine the support enjoyed by the regime or its major parties, or to intimidate the opposition while mobilizing support" (Powell, 1982, p. 158). In the same way, other scholars have suggested that one of the central functions of violence in civil wars is to generate citizens' obedience (Kalyvas, 2006; Wickman-Crowley, 1990; Kalyvas, 1999); thus, in contexts of internal conflict, the actual use of violence or the threat of its use is "intended to shape the behavior of a targeted audience by altering the expected value of particular actions" (Kalyvas, 2006, p. 26).

In a situation in which elections and a violent conflict coexist, armed actors' territorial control affects the social and political context in which individuals make political decisions. Thus, by consolidating territorial control armed actors increase their ability of signaling citizens their preferred candidate or political party. As a result, this paper argues that individuals are more likely to support candidates and political patties close to the dominant armed actor. However, what are the mechanisms through which the context of territorial control has an effect on electoral behavior? At least four mechanisms can be identified. First, a militant group dominating a region can at-

tempt to influence voters' choices through blackmail and post-electoral punishment. However, using intimidation to have an electoral influence may be costly for the armed actor as it implies enforcing its preferences and monitoring people's behavior. Recent studies suggest that in areas controlled by armed actors only about 8 per cent of voters reported direct pressures from militant groups (García-Sánchez and Pantoja, 2015). Second, when and armed actor controls a territory, it may also be able to boost political support for certain parties or candidates as it develops a social base through the provision of social services or the use of large amounts of financial resources (Olson, 1993; Berman, 2000; Berman and Laitin, 2008; Díaz-Cayeros *et al.*, 2011). Here the dominant armed actor uses its economic resources as a tool to promote its candidates by funding campaigns, distributing benefits to voters or simply buying votes. Third, a dominant armed actor can have an electoral influence by forcing certain political parties or politicians to exit electoral competition, affecting the menu of candidates or parties from which citizens can chose (Gómez and Rodríguez, 2007). In this case, armed actors intimidate those politicians that are ideologically distant from them, forcing certain politicians to abandon politics. This may be a more effective strategy, as it is easy to enforce and monitor. Finally, dominant armed actors can target the electoral base of their political enemies, forcing these individuals to leave the municipality (Steele, 2011).

Through any of these mechanisms a dominant armed actor can have an influence on citizens' electoral behavior as voters may end up supporting candidates and political patties close to or backed by the dominant armed actor. However, what are the expected vote choices as we move from one violent context to another? I other words, how does electoral preferences change as we move from an area controlled by one armed actor to a region controlled by a competing armed actor?

In order to answer the previous questions and state the main hypothesis of this paper, it is necessary to clarify various assumptions. First, there are two competing armed actors. They are an illegal armed actor close to the government —a counterinsurgent— and an insurgent group opposed to the existing government —the challenger—. The state may be a third actor, but it is not considered here as areas controlled by the state are assumed to be competitive, therefore the state is not in the game of signaling citizens any specific political preference.

Second, these armed groups have political counterparts, "allied" or "preferred" political parties that compete in the electoral arena. Some armed

actors have close links to political parties as they share a common political goal, whereas others develop alliances with political parties as a strategic decision to reach a common political aim without having a close ideological connection. The political dimension of armed actors leads to a third assumption. These organizations may also differ in terms of their strategies toward the political system. Some armed actors may want to influence politics by trying to affect electoral results —this may be the case of counterinsurgents—, while others may want to undermine the existing political system, by blocking elections or by overthrowing elected authorities —this may the case of insurgents—. Consequently, counterinsurgents are expected to use their dominant status to generate a context favorable to candidates and political parties favorable to the existing political *statu quo*. Conversely, insurgents will use their dominant position to undermine political support for those parties around which the existing political *statu quo* is articulated.[1]

Finally, competing armed actors differ in terms of their level of control over a given region. On the one hand, there is a situation of fragmented control; this is typically the case in disputed or contested areas in which there are two relatively equal military powers (Kalyvas, 1999, p. 252). On the other hand, there are areas of full or close to full control. Here one of the competing armed actors exercises full sovereignty or at least enjoys a dominant position. For an armed actor to have an influence on electoral behavior it is necessary that it consolidates a position of full or close to full control so it can move from fighting to politics. In areas disputed by the competing armed actors, they are in a more difficult situation to have an influence on electoral behavior, as they are busy fighting its opponents in the battlefield. In sum, the impact of a violent context on electoral behavior is a function of armed actors' political interest and strategies and, specially, of their capacity to consolidate a territorial control.

Based on the previous discussion, a first hypothesis states that in regions controlled by an armed actor attempting to undermine the existing political

[1] In some cases, armed actors may practice a "mixed" political strategy. This implies that while a given armed actor is trying to influence politics, at the same time it attempts to undermine the political system. "Mixed" strategies tend to take place at the national level, as an armed actor changes its strategy from one region to another within the same country. At the local level, armed actors have less room for a "mixed" strategy, because they need to focus their activities and resources towards a single set of political institutions (mayor and city council), making it inefficient to set in motion contradictory effort. Since this analysis focuses on the local level, it will not analyze empirically the impact of "mixed" strategies.

order (insurgents), on average, individuals will support less those parties and candidates representing the current *statu quo*. Conversely, a second hypothesis states that in regions controlled by an armed actor attempting to sustain the existing political order (a counterinsurgent force), on average, individuals will tend to support more those parties and candidates representing the current *statu quo*. Finally, in disputed regions, the violent context will not have an effect on individuals' electoral preferences, as armed actors need a minimal advantage over their competitors to shape the political contexts and generate some influence on individuals' electoral choice.

If areas controlled by the state are considered as a point of reference and support for the incumbent is defined as the dependent variable, these hypotheses can be expressed as follows:

> H1. Compared to regions controlled by the state, in areas controlled by insurgents the probability of supporting the incumbent will be significantly lower.
> H2. Compared to regions controlled by the state, in areas controlled by counterinsurgents the probability of supporting the incumbent will be significantly higher.
> H3. Compared to regions controlled by the state, in areas disputed by the competing armed actors the probability of supporting the incumbent will be the same.

The hypotheses presented above assume that all individuals are equally affected by different violent contexts. However, as the contextual literature has demonstrated, structurally imposed contexts may have a stronger or weaker effect on political behavior depending on individual level variables (Huckfeldt and Sprague, 1993; Weatherford, 1982; Gimpel and Lay 2005). Therefore, which individuals are more affected by armed actors dominance and which are more resistant to these dominance?

Studies are nonexistent on how the relationship between violent contexts and political behavior are moderated by individual level factors. However, within the contextual literature, there are studies suggesting that individual partisanship and ideological orientations play an important role in mediating the effects of social contexts on political behavior. Particularly, a group of authors has shown that identifiers of political minorities and weak partisans are more likely to be affected by their social environments than those individuals identified with mainstream parties and citizens with strong partisan attachments (Canache *et al.*, 1994; Finifter and Finifter, 1989; Huckfeldt *et al.*, 2005; Huckfeldt and Sprague, 1987).

Sympathizers of majority parties are expected to be relatively impermeable to the effects of a context that contradicts their partisan allegiances, because these individuals know they are part of a national majority. This may give them confidence and resources to contradict the political preferences enjoying a dominant position in their immediate environment. Conversely, militants of minority parties may feel an extra pressure towards compliance with majoritarian views when their immediate political environment supports the political parties dominating at the national level. For instance, these individuals may be able to use the party's national structure to report violent threats coming from armed actors. This will increase the cost for the dominant armed actor of using violence against these individuals. In the same way, members of mainstream parties may have more access than members of minority parties to state protection. Following this logic, the last hypothesis states that militants and sympathizers of minority parties will be more likely to support candidates and political parties backed by the armed actor dominating the area than militants of majority parties.

An overview of the armed actors

The violent conflict that currently affects Colombia can be traced back to the mid 1960s. Most left-wing insurgent organizations emerged during the 1960s and 1970s, being the National Liberation Army (ELN), and The Revolutionary Armed Forces of Colombia (FARC) the only groups that remain active today.[2] Right-wing paramilitary bands joined the confrontation during the early 1980s, and many of them operated until the mid 2000s.

Between 1966 and the late 1990s, the FARC experienced an enormous expansion as it went from a small organization grouping a couple of hundred peasants to an insurgency with more than 13 000 combatants present in almost all the national territory. During the past years the FARC suffered a significant weakening as the colombian government developed a successful counterinsurgent strategy. Also founded in the 1960s, the ELN grew slowly and focused its actions on a few departments. After almost facing extinction in the 1970s, in the early 1980s the ELN increased its manpower and expanded its scope of action. By the late 1990s, this insurgency experi-

[2] All other *guerrillas* were dismantled between 1988 and 1993, after peace talks with the Colombian government.

enced a new setback as paramilitaries initiated a process of expansion into areas with presence of this organization.

Paramilitary groups emerged as a counterinsurgent and anti-left project sponsored by a coalition of cattle ranchers, agro-industrial entrepreneurs, drug lords and members of the armed forces (Romero, 2003). Originally, these bands had close connections with the military and lacked a central command. However, by the 1990s they gained autonomy and developed a central authority, allowing paramilitaries to coordinate their counterinsurgent actions, expand their presence to new regions, and increase their number of troops.[3] In 2002, president Uribe's government started peace talks with paramilitary bands, which resulted in the dissembling of most of these organizations. Despite the peace process, some paramilitary structures remain intact, and other groups reorganized themselves after some paramilitary leaders abandoned the peace negotiations (Nussio and Howe, 2014). The absolute number of paramilitary troops also decreased significantly.

Politically, all illegal armed actors have combined violence with political action to promote their interests. However, the relative weight of military *versus* political actions as part of armed actors' strategies has changed over time. The early links between the Communist Party and the FARC, and the emergence in the mid 1980s of the *Unión Patriótica* (UP), a political party with close links to the FARC, evidence the emphasis placed by this organization on electoral politics during the early stages of its development. However, as the FARC became a strong military apparatus, some prominent leftist politicians started to criticize the armed struggle, and when approximately 3 500 militants of UP were assassinated (Dudley, 2008), the FARC decided to emphasize its military dimension (Ferro and Uribe, 2002).

The case of the ELN describes a somewhat different path. In its early years, this guerrilla remained relatively distant from electoral politics, promoting electoral abstention (Harnecker, 1987). In the mid 1980s, the ELN changed its political strategy and decided to develop an instrumental relationship with local power in an attempt to extract economic resources from local governments (Cubides, 2004, p. 152). However, the deterioration suffered by this organization has reduced its military initiative as well as its political influence on elections. Summing up, since the mid 1990s both the FARC and ELN have centered their "political" efforts towards blocking elec-

[3] Between 1997 and 2000, combatants increased from 4 000 to 8 000 (Romero, 2003).

tions and attacking politicians from the traditional Liberal and Conservative parties and from newly created right wing parties.

Conversely, paramilitaries' political evolution describes a process of increasing involvement in electoral politics. The first generation of paramilitary groups emphasized military actions, devoting most of their efforts against guerrillas and left wing politicians and sympathizers. As paramilitaries gained autonomy from the military and were able to conquer several regions, these groups started to have a strong influence on local and national elections. By the late 1990s, the United Self-Defense Forces of Colombia (AUC) continued its fierce battle against guerrillas and leftist parties, and started to influence politics by "promoting" candidates, financing campaigns and developing successful alliances with right wing politicians (Valencia, 2007).

Data and methods

This paper uses both individual and municipal level data. Individual level data comes from a national survey conducted in Colombia in 2005 by the Latin American Public Opinion Project (LAPOP) of Vanderbilt University, which interviewed 3 083 adults from 76 municipalities.[4] This survey is divided into two samples. The first one is a nationally representative sample of 1 487 adults from 48 municipalities covering all of Colombia's geographical regions. The second is a sample of 1 596 adults, representative of regions affected by the political conflict. The latter sample included individuals from 28 municipalities. The same questionnaire was applied to both samples. This paper also uses contextual level data on armed actors territorial control and socioeconomic factors for the 76 municipalities included in the survey. Therefore, the data for this study has a hierarchical structure, as it has information on individual level variables (level-1) and municipal level factors (level-2).

As the data used in this paper comes from a single survey, the analysis does not attempt to capture individual changes, instead the way to test the hypotheses is by comparing the average support for the incumbent as we move from municipalities controlled by one armed actor to municipalities

[4] The peak of the colombian conflict took place between the mid-1990s and the mid-2000s so using data from 2005 allows capturing a moment in which competing armed actors were still active. As mentioned before, by 2006 most paramilitary bands demobilized.

controlled by a different armed actor, and to areas disputed or not controlled by any armed actor.

Variables

This analysis works with vote intention for the incumbent as the dependent variable. This variable captures whether an individual was planning to vote for president Álvaro Uribe in the 2006 presidential elections.[5] It represents a vote choice for the existing *statu quo*, as Uribe was running for reelection. This choice also embodies a conservative position as president Uribe represented the right-wing segments of the Liberal and Conservative parties. A possible concern regarding the dependent variable's validity is that it may reflect a social desirability bias, as some respondents may have expressed the political preferences they thought enumerators wanted to hear. However, this appears not to be the case for the variable vote intention, as there is a high and significant correlation between the real percentage of votes, in the municipalities with 30 or more respondents, and the aggregate vote intention ($r = 0.68$ $p < 0.00$).[6] Another possible limitation of this variable is that it does not measure the actual electoral choice since the survey was conducted before the 2006 elections. Therefore, the vote intention variable may be capturing presidential approval or support for the government coalition. Nevertheless, considering the correlation between the real percentage of votes and the aggregate vote intention, presented previously, it can be argued that the dependent variable is a reliable measure of electoral choice.

The different violent contexts described in the previous section are measure using three variables: *1)* guerrilla control, *2)* paramilitary control and *3)* dispute. Each variable is a dichotomous indicator that takes the value of one if: a municipality is controlled by guerrillas or paramilitaries, or if they dispute the municipality, and zero otherwise, respectively. In direct correspondence to these measures is the variable state control, which is coded one for areas not affected by the armed conflict and zero otherwise. This variable is used as a baseline category in the analyses.

The measure of armed actor territorial control is based on Kalyvas' insight that control produces different patterns of violence (which we can

[5] Vote intention was coded so that one is equal to vote intention for the incumbent, and zero is equal to vote intention for any other candidate.

[6] The correlation for the entire sample of municipalities was $r = 0.64$ $p < 0.00$.

observe) —specifically, that contesting control implies the use of violence by multiple actors, but then violence decreases once one consolidates control (Kalyvas, 2006). This classification uses longitudinal information on political violence for each armed actor from 1997 to 2003 (the period prior to the 2005 survey) to perform semiparametric group-based modeling (Nagin, 2005), which allows the identification of clusters of municipalities following different trajectories of violence perpetrated by different armed actors.[7] Then these trajectories are combined to identify status of control by municipality. This method is used in other disciplines for such sorting (*e.g.* Griffiths and Chávez, 2004; Nagin and Piquero, 2010), and it is described in depth, in the supporting information.

In addition to the variables capturing the different scenarios of military balance, three other contextual variables were considered in the analysis: *1)* historic voting trend, *2)* hectares of coca and *3)* rurality. The inclusion of these variables in the analyses attempted to control a possible endogeneity problem which may occur if armed actors move to places where the population already shares their political preferences, or to municipalities with certain geographical and economic characteristics (Collier and Hoeffler, 2004; Sánchez and Chacón, 2006). There is also the possibility that people move to places controlled by the armed actor close to their ideological preferences, therefore the variation in vote intention between municipalities may be caused by a self selection process. This is a very slim possibility for two reasons: First, the literature on contextual effects has demonstrated that people do not select their residence places on political grounds (Huckfeldt, 2007). Second, despite that Colombia has suffered an important process of internal displacement, movements of people occur from rural areas to big cities not controlled by illegal armed actors (Ibáñez, 2009). In addition, people do not displace voluntarily, in fact internal displacement has been one of the strategies used by armed actors to influence the composition of the electorate.[8]

[7] Violent actions included in the database are: terrorist acts, attacks on public property, attacks on private property, blocking of roads, ambushes, combats, piracy, massacres, homicides, assaults against individuals, political kidnappings, and assaults against public officials. The source of this database was a report on violent actions published by Centro de Investigación y Educación Popular (Cinep).

[8] To control for the remote possibility of self selection, it was estimated a model with a level-2 variable capturing the amount of incoming displaced population as a percentage of municipality's total population. Results from this model are including in Annex 3.

The variable historic voting trend captures the political preferences at the municipal level. Using local electoral results from 1988 to 2003, winning parties were coded using a 1 to 5 scale. Left-wing parties were coded 1, while right-wing parties were assigned a 5. An average score was created for each municipality. Low scores indicate consistent support for left-wing parties in local elections, while high scores show regular support for the right. The variable hectares of coca measures the number of hectares of coca cultivated in each municipality in 2004. Finally, rurality is a variable which combines population density and isolation to capture the rural bias of a municipality in 2004. A municipality is considered to be more rural if its population density is lower than 150 inhabitants per square kilometer, and if it takes more than an hour by ground transportation to reach the closest population with more than 100 000 inhabitants. This variable was measured in a 0 to 100 scale, where 100 represent the highest rural bias (González *et al.* 2011).[9]

Several individual level factors that the literature on political behavior has found to have an impact on vote choice were also included in the analyses. These variables are: age, gender, education, socioeconomic status, ideology, party identification, and sociotropic evaluations of the economy. A detailed description of these variables and descriptive statistics are presented in Annex 1 and 2.

Analytical strategy

The relationship between violent contexts and vote intention was examined using two-level hierarchical linear models (HLM, Raudenbush and Bryk, 2002). Vote intention was modeled at level-1 nested within municipalities at level-2. All models were estimated in HLM 6.7 using full information maximum likelihood estimation, and a two-level model for binary outcomes (Raudenbush and Bryk, 2002, p. 23). The first step in the analyses was to estimate the unconditional model to examine how much variability in the dependent variable can be attributed to municipalities *versus*

[9] A measure of contextual poverty (unsatisfied basic needs) was considered for inclusion in the analyses; however, this variable was highly correlated with rural ($r = 0.68$; $p < 0.00$). To avoid a problem of multicollinearity between these measures, the final estimations only included the variable rural. This variable was preferred over poverty, as it is a more complex measure. There was also a restriction on the number of level-2 predictors due to the number of level-2 units (municipalities) included in the analysis. Results from the HLM models with poverty as a level-2 predictor are presented in Annex 3.

individuals, and whether or not contextual level factors must be considered to model vote intention. For binary outcomes, the level-1 equation for the unconditional model is:

$$n_{ij} = \log\left(\frac{\varphi_{ij}}{1-\varphi_{ij}}\right)$$

$$n_{ij} = \beta_{0j}$$

and the level-2 equation is: $\beta_{0j} = \gamma_{00} + u_{0j}$; $u_{0j} \sim N(0, \tau_{00})$ where γ_{00} is the average log-odds of expressing the intention to vote for the incumbent across municipalities, τ_{00} is the variance between municipalities in municipality-average log-odds of the outcome variable, and u_{0j} represents the random effect associated with unit *j* (Raudenbush and Bryk, 2002, p. 297). The unconditional model predicts the dependent variable within each level-1 unit with the intercept (β_{0j}) as the only level-2 parameter, which corresponds to the mean outcome for the *j*th unit.

The next step was to build a model to account for the changes of the dependent variable. The conditional model includes level-1 and level-2 predictors, to understand why some municipalities have higher level of support for the incumbent than others, and why in some municipalities the relationship between the level-1 predictors and the outcome variable is stronger than in others. The units at level-1 are individuals and each person's outcome is a function of individual characteristics. At level-2 the units are municipalities, and the intercept (the mean outcome) and the level-1 slopes are conceived as the dependent variables which are hypothesized to depend on certain contextual factors.

In this study two types of conditional models were estimated. The first one modeled only the intercepts (intercepts-as-outcomes model), to explore whether violent contexts predict significant differences in mean vote intention. Whilst one of the goals of this paper is to analyze the extent of the association between contextual level factors and the outcome variable, changed at different values of party identification, the second one modeled both intercepts and level-1 slopes (intercepts-and slopes-as-outcomes model). Therefore, by estimating an HLM model with a cross-level interaction between the variables capturing armed actors territorial control and identification with the incumbent's party, this paper attempted to capture whether sympathizers of minority parties were

more affected by violent contexts than those individuals identified with governing coalition parties.[10]

In all conditional models, the continuous independent variables were centered on the grand mean, and the dummy variables were included uncentered. By centering the variables in this way, the models' intercepts represent the average log-odds of a certain event or the average value of the dependent variable, when the continuous variables take their mean values and the dummy variables are equal to zero.

Results

Analyses began by estimating the unconditional model to determine whether there was significant variation, between municipalities, in vote intention for the incumbent. A significant intercept in the unconditional model indicates an important variation in the mean vote intention between municipalities (Model 1, Table 1). The intercept also shows that the average probability of expressing an intention to vote for president Uribe was equal to 0.73;[11] in other words, the probability of supporting the incumbent in the 2006 elections was high. This result is not surprising as Uribe's government maintained a popular support above 50 per cent during his first term in office (Rodríguez-Raga and Seligson, 2007), and eventually won his second term with a support of 62.3 per cent. However, the model's variance component τ_{00} shows a significant variation between municipalities in the average probability of vote intention for Uribe. In fact, 95 per cent of the municipalities lie between 0.45 and 0.90 with respect to this probability.[12] It appears that while in some municipalities about 90 per cent of citizens intended to vote for Uribe, in others only about half the adults were planning

[10] Álvaro Uribe was supported by a coalition of Liberal and Conservative politicians. Colombians refer to these two organizations as "traditional parties" since they have dominated politics since the late ninetieth century. Historically, the left has been relatively small, although in recent years it has gained more power. Finally, in the recent decades new independent parties have joined the electoral competition. In this paper, identifiers of both Liberal and Conservative parties are labeled as traditional parties sympathizers. Identifiers of leftist and independent parties are referred as non-traditional.

[11] p = OR/(1+OR); OR = 2.7, therefore 2.7/(1+2.7) = 0.73.

[12] This interval was obtained by first estimating the log-odds interval using the following formula: $\gamma_{00} \pm (1.96^{*}\sqrt{\tau_{00}})$. Then the log-odds interval was transformed into an odds ratio interval (OR = $\exp^{[\text{log-odds}]}$), and finally into a probabilities interval using the formula presented in foot note 9.

to support the incumbent in the 2006 elections. In short, the fully unconditional model suggests that, between municipalities, changes in support for Uribe should be associated with contextual level factors.

The conditional model for vote intention included, at level-1, the following individual level controls: education, age, ideology, gender, socioeconomic status, party identification, and current and prospective sociotropic evaluations of the economy. At level-2, the level-1 intercept was modeled as a function of various dichotomous measures capturing dispute, guerrilla control and paramilitary control a municipal level measure of ideology, hectares of coca and a measure of a municipality's rural bias. The level-1 equation is:

$$\eta_{ij} = \beta_{0j} + \beta_{1j}(\text{education})_{ij} + \beta_{2j}(\text{age})_{ij} + \beta_{3j}(\text{ideology})_{ij} + \beta_{4j}(\text{gender})_{ij} + \beta_{5j}(\text{SES})_{ij} + \beta_{6j}(\text{party ID})_{ij} + \beta_{7j}(\text{current sociotropic})_{ij} + \beta_{8j}(\text{prospective sociotropic})_{ij}.$$

The level-2 equation for vote intention is:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{dispute})_{j} + \gamma_{02}(\text{guerrilla control})_{j} + \gamma_{03}(\text{paramilitary control})_{j} + \gamma_{04}(\text{historical voting trend})_{j} + \gamma_{05}(\text{hectares of coca})_{j} + \gamma_{06}(\text{rural})_{j} + u_{0j}.$$

Results from the conditional model displayed in column 2 of Table 2 support hypotheses 2 and 3.[13] Note that the variables capturing territorial control, included in the analyses, exclude the measure of state control, therefore coefficients for dispute, guerrilla control and paramilitary control must be interpret with respect to the baseline category State control.

As expected, the log-odds of expressing intention to vote for president Uribe were positively and significantly related to the variable paramilitary control, and not related to the variable dispute. In areas controlled by paramilitaries, the average probability of expressing support for the incumbent appeared to be significantly higher than in those municipalities controlled by the state or not affected by the armed conflict. Holding all other variables constant at their means, in municipalities controlled by right-wing paramilitaries the average probability of vote intention for Uribe was 0.82,

[13] Similar models including one by one the variables capturing territorial control were also estimated. Results are very similar to those presented in Table 1, therefore an easier presentation of results a model that includes al variables simultaneously was preferred. See Annex 3 for result from the separate models.

whereas in municipalities controlled by the State such probability was 0.73; almost ten points lower. In municipalities controlled by guerrillas, results indicate that there is no difference in the average probability of supporting the incumbent (Uribe), compared to areas controlled by the state.

Results also support the hypothesis that armed actors need to consolidate a minimum level of military control to have a significant influence on individuals' political behavior, as there is no relationship between the variable dispute and the outcome variable. In other words, citizens living in peaceful regions behaved similarly to residents of areas disputed by guerrillas and paramilitaries. Is this a counterintuitive result? Not necessarily, since a similar outcome may be the product of different paths. In peaceful regions citizens are free to express their electoral preferences as electoral competition unveils without interferences. On the other hand, in disputed regions as armed actors are fighting each other, they are not in a position to exercise their political influence; consequently electoral preferences appear to be similar to those in peaceful regions. As mentioned above, armed actors need to consolidate a territorial control to have an influence on political behavior.

What explains that only in municipalities controlled by paramilitaries (and not in guerrilla controlled areas) the probability of supporting the incumbent was different than in state control areas?

An ideological proximity between the paramilitaries and the incumbent may have motivated this criminal group to "promote" a candidate representing a political project favorable to their interests. In addition, there is evidence that politicians belonging to Uribe's congressional coalition used paramilitaries to increase their electoral returns by intimidating the electorate and their political competitors (López, 2007; Valencia, 2007). If politicians from outside Uribe's coalition could not promote their own candidacies, they were also unable to promote their presidential candidates; consequently, Uribe may have emerged as a single candidate in regions in which politicians from his coalition were backed by the right-wing paramilitaries. Finally, beyond the ideological proximity between paramilitaries and a right-wing incumbent, and the pacts politicians developed with these groups, Uribe's good performance in paramilitary controlled areas can also be explained by the fact that paramilitary bands eliminated leftists and opposition sympathizers in areas under their influence (Dudley, 2008; López, 2007). In sum, in these municipalities converge various factors that may explain Uribe's tremendous electoral support: paramilitaries'

TABLE 1. HLM models of vote intention (presidential elections)

	Model 1	Model 2	Model 3
	Fully unconditional	Conditional	Conditional with cross-level Interactions
Fixed effects	**Coefficient (Robust SE)**	**Coefficient (Robust SE)**	**Coefficient (Robust SE)**
Level-2 predictors			
Intercept γ_{00}	0.9931*** (0.085)	0.8484*** 0.1817	0.8044*** 0.1826
Dispute γ_{01}		-0.0477 0.2454	-0.0539 0.2466
Guerrilla control γ_{02}		-0.0396 0.2296	-0.0438 0.2302
Paramilitary control γ_{03}		0.5380* 0.2384	0.7708** 0.2739
Historic voting trend γ_{04}		0.5006** 0.1776	0.5019** 0.1775
Hectares of coca γ_{05}		-0.0002** 0.0000	-0.0002** 0.0000
Rural bias γ_{06}		-0.0128* 0.0060	-0.0129* 0.0060
Level-1 predictors			
Education γ_{10}		-0.0402** 0.0150	-0.0408** 0.0150
Age γ_{20}		-0.0078* 0.0035	-0.0079* 0.0035
Ideology γ_{30}		0.0117*** 0.0018	0.0116*** 0.0018
Gender (male) γ_{40}		-0.1526 0.0931	-0.1526 0.0937
Socioeconomic status γ_{50}		-0.0010 0.0030	-0.0008 0.0030
Party ID (traditional) γ_{60}		0.4645*** 0.1364	0.5619** 0.1464
Paramilitary control γ_{61}			-0.4862 0.3189
Sociotropic (current) γ_{70}		0.0142*** 0.0019	0.0140*** 0.0019

TABLE 1. HLM models of vote intention (presidential elections) (continuation)

	Model 1	Model 2	Model 3
	Fully unconditional	**Conditional**	**Conditional with cross-level Interactions**
Fixed effects	**Coefficient (Robust SE)**	**Coefficient (Robust SE)**	**Coefficient (Robust SE)**
Sociotropic (Future) γ_{80}		0.0088*** 0.0013	0.0089*** 0.0013
Randon effects variance components			
Municipal level effect τ_{00}	0.3681***	0.2929***	0.2931***
Individual level effect σ^2	0.6067	0.5412	0.5414
Reliability of intercept	0.67	0.53	0.5330

Source: Estimations by the author based on individual level information from the Americas Barometer, Colombia 2005; and contextual level data from: *Centro de Educación e Investigación Popular* (CINEP), the Integrated System of Monitoring of Illicit Crops of the United Nations Office on Drugs and Crime and the National Registry Office. *p < 0.05; **p < 0.01; ***p < 0.001.

willingness to promote a right-wing incumbent, a close connection between paramilitary bands and local politicians belonging to Uribe's coalition, and a hegemonic status of right-wing parties.

On the other hand, in insurgent controlled regions, it seems that guerrillas were unwilling or unable to affect electoral behavior. As showed before, by 2006 the popularity of Uribe was so high that his reelection was secure. In fact, results indicate that the average probability of supporting Uribe was 0.73. Therefore, in that particular situation, even if guerrillas might have been interested in undermining electoral support for an incumbent that was their main political enemy, implementing a strategy to decrease electoral support for Uribe could have been difficult or simply ineffective given his tremendous popularity. Moreover, unlike right-wing politicians, most leftist parties have been very careful of not developing electoral links with the insurgency.[14] Finally, Colombian guerrillas may have not been inter-

[14] The assassination, by paramilitaries and state agents, of hundreds of Unión Patriótica sympathizers showed the left the risk of having close links with insurgent groups. By the 2000s the Colombian left did not have political relationships with guerrilla groups.

ested in influencing or affecting national contests as they pay more attention to local elections in which they have more chances of having a real political influence (Ferro and Uribe, 2002).[15]

Therefore, along with the ability to control a territory, the electoral influence of an armed actor depends of its capability or willingness of getting involved in electoral politics, and its links with local and national politicians. In the case of the 2006 Colombian elections paramilitaries were both ideologically close to the incumbent, and used by right-wing politicians as a tool to "promote" Uribe's candidacy.

Results from the other contextual variables indicate that there is a positive and significant relationship between the variable historic voting trend and the average vote intention for the incumbent, and a negative and significant correlation between hectares of coca and rural bias and support for Uribe. The coefficient of historic voting trend indicates that municipalities with a history of electoral support for rightist parties have a significantly higher average probability of supporting a right-wing incumbent than municipalities in which parties closer to the left have won the local executive. In the first type of municipalities, the predicted probability of supporting Uribe was 0.84; this probability dropped to 0.60 for municipalities consistently governed by the left. This result suggests that citizens have a higher chance of backing candidates and political parties representing an ideological orientation that has achieved a dominant status. As a party consistently gains access to power, it will be in a privileged position to promote its political views among the citizenry, and to consolidate a political network which will help the organization to maintain or increase its electoral base.

Conversely, an increment in the area of coca plantations is associated with a reduction in the average probability of supporting a right-wing incumbent like Uribe. Thus, in municipalities without coca plantations, the expected probability of supporting the incumbent is about 0.75, while in the municipality with the highest number of hectares of coca this probability drops to 0.58. What is behind the nature of this relationship? Although both guerrillas and paramilitaries have been deeply involved in the drug trafficking business, the former organization is more associated with the phases of growing and harvesting coca leaves and its transformation into coca paste, as most coca plantations are located in the South of Colombia, a region traditionally under guerrilla influence. In fact the average number of

[15] I would like to thank one of the anonymous reviewers for highlighting this point.

hectares of coca in municipalities under guerrilla influence, included in the sample, is 239, while this average in municipalities under any level of paramilitary control is 33. However, while coca is associated with armed actor presence, it is also associated directly with a weak and distant state apparatus. In an ethnography of the *cocaleros*, Ramírez (2001) shows that popular distrust of the Colombian state is high in regions with coca cultivations, driven by perceptions of government institutions as distant, unresponsive and repressive. Therefore, the significant decrease in the levels of electoral support for the incumbent, as hectares of coca cultivations increase, may have been the consequence of citizens' distrust in the existing government.

Contextual results also indicate that in more rural municipalities the average electoral support for the incumbent is significantly lower than in urban areas. Thus moving from urban municipalities to those with the highest rural bias, the average probability of supporting Uribe decreases from 0.82 to 0.66. In other words, support for the incumbent was concentrated in urban areas.

Results from level-1 variables are consistent with the literature on the effects of partisanship and economic evaluations on vote decisions. Being Liberal or Conservative (traditional party identification) significantly increases the probability of supporting Uribe, a president backed by a bipartisan coalition in Congress.[16] Similarly, ideology has a significant impact on vote intention for the incumbent, so the closer the self-identification with the right, the greater the individual's probability of supporting a right-wing incumbent like Uribe. Beyond partisan and ideological identifications, the economy has a significant impact on vote intention for the incumbent. Individuals with positive assessments of the current and future state of the colombian economy, have a high probability of rewarding the incumbent with their electoral support. On the other hand, education and age were found to have a negative and significant impact on vote intention for Uribe. More educated individuals are probably less supportive of the incumbent as they are able to have access to more and better sources of political information, or because a rightist incumbent like Uribe finds less support among educated citizens as they may be more liberal (Glaser, 2001; Shaffer, 1982). Finally, gender and socioeconomic status do not have an impact on

[16] A model with Party ID decomposed as three dummy variables (Conservative, Liberal, left) produced similar results (see Annex 3). However, a blunt measure of party identification was preferred in the interest of parsimony.

support for the incumbent. This result is not surprising because Colombian political parties are not articulated around class lines, and although Uribe abandoned the Liberal Party, he attracted an important contingent of conservative and liberal politicians who have helped him to build a bipartisan and multi-class electoral coalition.

The last step of the analyses was exploring the extent to which the strength of the association between armed actors presence, particularly paramilitary presence, and vote intention for the incumbent was affected by differences in partisanship. Thus, as paramilitary control was the only variable, capturing armed actors' control, that was statistically significant, the final model included a cross-level interaction between traditional party ID and paramilitary control. The equation for the cross-level interaction is:

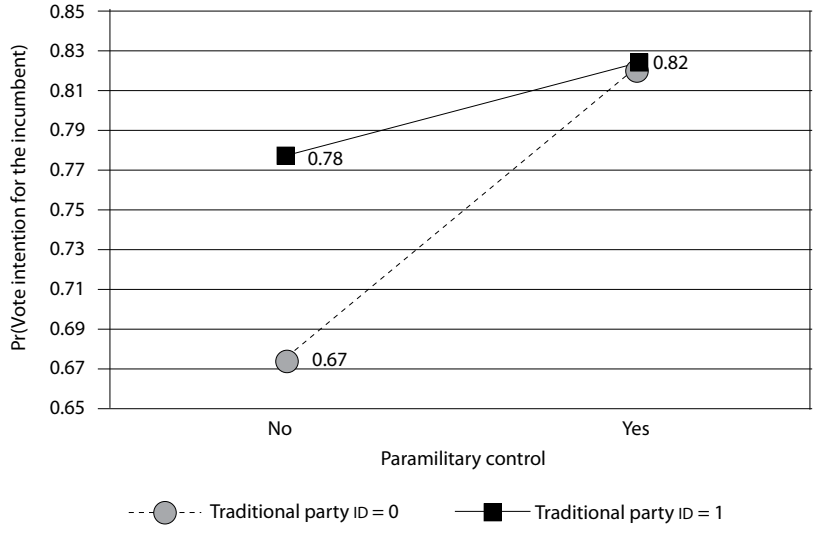
$$\beta_{6j} = \gamma_{60} + \gamma_{61}(\text{paramilitary control})_j$$

$$\beta_{kj} = \gamma_k$$

Where γ_{60} is the intercept for the traditional party ID slope, γ_{61} is the effect of paramilitary control, and γ_k are the remaining intercepts.

Results displayed in the last column of Table 1 show that the coefficient of party identification is significant. As this variable is being interacted with paramilitary control, the coefficient of party identification captures the "effect" of this variable in municipalities controlled by the state (paramilitary control = 0). Thus in this type of municipalities individuals identified with the Liberal and Conservative parties are more likely to support the incumbent. But what happen in municipalities controlled by the paramilitaries? And what is the "effect" of paramilitary control for the different values of party identification? To answer these questions it is necessary to estimate the predicted probabilities of supporting the incumbent for different values of party identification and paramilitary control. These probabilities appear depicted in Figure 1. The solid line shows that, among traditional party followers, moving from an area controlled by the state to a municipality controlled by paramilitaries had a small effect on their average probability of supporting the incumbent. In other words, identifiers of the Liberal and Conservative parties had a high chance of supporting a right wing incumbent. On the other hand, the dotted line indicates that among identifiers of the left and independent parties, the situation is completely different because they were strongly affected by changes in paramilitary control. Thus,

FIGURE 1. Predicted probability of vote intention for the Incumbent for different values of partisan identification and paramilitary control



Source: Estimations by the author based on individual level information from the Americas Barometer, Colombia 2005; and contextual level data from: *Centro de Educación e Investigación Popular* (CINEP), the Integrated System of Monitoring of Illicit Crops of the United Nations Office on Drugs and Crime and the National Registry Office.

leftist and independents living in areas controlled by the state had an average probability of supporting a right-wing incumbent such as Uribe of 0.66. On the other hand, in areas in which paramilitaries are in control, this probability reached 0.82, for leftist and independents. The convergence of both lines indicates that in areas controlled by paramilitaries the average probability of supporting the incumbent for the two values of party identity was the same.

Why are leftist and independent militants more affected by changes paramilitary territorial control? Paramilitary violence targeted militants of the leftist parties to a higher extent that it did to militants of other parties. As mentioned above, in the 1980s and 1990s more than 3 500 left wing politicians and sympathizers were assassinated by paramilitaries and state agents. Thus, in a context controlled by paramilitaries, sympathizers of minority parties may not be in a safe position to express their political preferences or they simply had no chance to do so. On the other hand, members of these organizations may have weaker partisan loyalties than militants of the Liberal and Conservative parties; consequently, a weak commitment to

their parties may explain why these individuals are somehow susceptible to the influence of a political context which is at odds with their political views.

Conclusions

This study supports previous findings on the effects of social and political contexts on political behavior, according to which individuals tend to line up their political views with those prevailing in their political milieu (Huckfeldt *et al.*, 2004a; MacKuen and Brown 1987; Mondak *et al.*, 1996). However, this article represents an important contribution to the literature on political behavior as it deals with a type of context previously not analyzed by the research on contextual effects, namely armed actors territorial control. Results from this analysis indicated that as an armed actor consolidates its presence in a region it has the possibility to exercise an influence on individuals' vote choices. More importantly, the nature of this influence is closely related to the balance of military power between the competing armed actors (guerrillas and paramilitaries), and each actor strategic objectives towards the political system or a particular election.

Results presented here indicated that, in the 2006 Colombian presidential elections, only paramilitaries were capable or willing to use their dominant status to have an influence on popular support towards the incumbent. Moving from areas dominated by the Colombian state to regions controlled by right-wing paramilitary groups, individuals were more likely to support a presidential candidate placed on the right of the ideological spectrum. In areas that were controlled by this armed actor, political dissent represented a risk to individuals' security, so the threat of violence compelled voters to support the candidates and political parties preferred by the dominant armed group. Additionally, paramilitary dominated regions offered citizens a limited array of electoral options.

Consolidating territorial control is a key element, for an armed actor, to have an influence on political behavior. However, such impact also depends on the political strategy of the dominant group, as not all armed actors decide to exercise an electoral influence. Thus, Colombian paramilitaries were able to influence voters' behavior in the areas under their influence because they combined a set of actions that included: intimidating citizens and political opponents, developing links with local politicians, and creating the conditions for their political allies to be in a hegemonic status. In sum, this work suggest that a dominant armed actors may employ violence,

or the threat of its use, to shape individuals' political behavior by altering the expected value of certain political actions and reducing the menu of electoral options.

The hierarchical nature of this analysis allowed testing of the effect of several individual level factors on electoral participation and vote intention. In general, results from these variables supported previous findings of the literature on political behavior. More importantly, the hierarchical approach allowed exploring of the extent to which the strength of the associations between contextual level factors and the outcome variables were moderated by individuals' characteristics. Partisanship was shown to have a role in moderating the effect of violent contexts on vote intention. Consistent with the literature on contextual effects, members of the national majority, in this case members of the Liberal and Conservative parties, appeared to be less affected paramilitary control than followers of minority parties. Sympathizers of the left and independent parties were more likely to change their political preferences, aligning them with the dominant armed actor's ideological orientation, in this case the paramilitaries.

Finally, although the findings of this paper are only applicable to the Colombian case as they are difficult to translate to conflicts where identity politics and foreign militias are central to the internal conflict, they highlight the relevance of taking into account contextual factors in the analysis of political behavior in developing democracies. In Latin America, only Colombia suffers from an internal conflict; however, outside the region several countries are trying to consolidate or build democracies in the midst of a violent conflict. These are the cases of Iraq, Afghanistan or the Philippines, just to mention a few countries. Thus, further comparative analyses are appropriate in order to extend the results of this paper to other cases, and to strengthen the knowledge on the impact of conflict, violence and political unrest on political behavior.

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Annex 1
Description of Level-1 variables

. *Age*. This variable was measured as the respondent's number of years.
. *Gender*. This is a dummy variable coded 1 if male, and 0 if female.
. *Education*. This variable measures each respondent's years of formal education.
. *Socioeconomic status*. This is an index of individuals' ownership of nine consumption goods. These goods are: television, refrigerator, conventional telephone, cellular telephone, automobile, washing machine, microwave, indoor running water, indoor bathroom, and personal computer. This index is measured on a 0 to 100 scale.
. *Traditional party identification*. This is a dummy variable coded 1 if an individual self identified himself with the Liberal or the Conservative parties, and 0 otherwise.
. *Current sociotropic evaluation of the economy*. This variable captures respondents' opinion on the current situation of the national economy. It is based on the following question: What is your evaluation of the state of the national economy? Individuals had 5 response options in which 1 was "very good" and 5 was "very poor". The scale was inverted and transformed into a 0 to 100 scale.
. *Prospective sociotropic evaluation of the economy*. This variable captures respondents' opinions on the future situation of the national economy. It is based on the following question: Do you think that in the following year the state of the national economy will be better, the same, or worst than today? Individuals had 3 response options in which 1 was "better", 2 was "the same" and 3 was "worst". This scale was inverted and transformed into a 0 to 100 scale.

Source: Individual level information from the Americas Barometer, Colombia 2005. Contextual level data from: *Centro de Educación e Investigación Popular* (Cinep), the Integrated System of Monitoring of Illicit Crops of the United Nations Office on Drugs and Crime and the National Registry Office.

Annex 2
Descriptive statistics

Variable	N	Mean	Std. Dev.	Min	Max
D.V.					
Vote intention incumbent	2989	0.71	0.46	0	1.00
Level-2					
Dispute	75	0.09	0.29	0	1.00
Guerrilla control	75	0.33	0.47	0	1.00
Paramiltary control	75	0.19	0.39	0	1.00
State control	75	0.39	0.49	0	1.00
Ideology	75	3.21	0.43	1.83	4.29
Hectares of coca	75	106.13	568.01	0	4806
Rural bias	75	37.63	14.94	2.99	69.13
Poverty (UBN)	75	40.4	23.84	9.96	100.00
Displaced population (incoming)	75	0.01	0.03	0	0.26
Level-1					
Education	3081	8.04	4.37	0	18.00
Age	3083	36.58	14.09	18	86.00
Ideology	2502	64.7	27.29	0	100.00
Socioeconomic status	3083	47.08	21.64	0	100.00
Party ID (traditional)	3002	0.49	0.5	0	1.00
Party ID (conservative)	3002	0.14	0.35	0	1.00
Party ID (liberal)	3002	0.35	0.48	0	1.00
Party ID (left)	3002	0.05	0.22	0	1.00
Sociotropic (current)	3067	39.8	20.3	0	100
Sociotropic (past)	2909	42.39	37.63	0	100

Source: Individual level information from the Americas Barometer, Colombia 2005. Contextual level data from: *Centro de Educación e Investigación Popular* (Cinep), the Integrated System of Monitoring of Illicit Crops of the United Nations Office on Drugs and Crime and the National Registry Office.

Annex 3
Additional HLM conditional models of vote intention

Models with only one control variable

	Model 1 (W/ L2. Dispute)	Model 2 (W/ L2. Guerrilla control)	Model 3 (W/ L2. Paramilitary control)
Fixed Effects	**Coeff. (R. SE)**	**Coeff. (R. SE)**	**Coeff. (R. SE)**
Level-2 predictors			
Intercept	0.950***	1.007***	0.823 ***
	0.122	0.126	0.126
Dispute	-0.150		
	0.209		
Guerrilla control		-0.218	
		0.192	
Paramilitary control			0.565**
			0.192
Historic voting trend	0.398*	0.397*	0.504 **
	0.191	0.183	0.175
Hectares of coca	0.000***	0.000**	0.000***
	0.000	0.000	0.000
Rural bias	-0.008	-0.007	-0.013 *
	0.005	0.005	0.005
Level-1 predictors			
	YES	**YES**	**YES**
Randon effects variance components			
Municipal level effect τ_{00}	0.316***	0.315***	0.276 ***
Individual level effect σ^2	0.562	0.561	0.525
Reliability of intercept	0.55	0.55	0.52

Annex 3 (continuation)
Additional HLM conditional models of vote intention

Models with additional level 2 controls and separate measures of partisanship

	Model 1 (W/ L2. Poverty)	Model 2 (W/ L2. Displaced population)	Model 3 (W/ partisanship disagregated)
Fixed Effects	**Coeff. (R. SE)**	**Coeff. (R. SE)**	**Coeff. (R. SE)**
Level-2 predictors			
Intercept	0.911***	0.864***	0.926***
	0.172	0.182	0.185
Dispute	-0.145	-0.040	-0.060
	0.236	0.246	0.250
Guerrilla control	-0.116	-0.038	-0.052
	0.224	0.229	0.229
Paramilitary control	0.409†	0.499*	0.521*
	0.228	0.241	0.241
Historic voting trend	0.391*	0.533**	0.466**
	0.177	0.182	0.177
Hectares of coca	0.000**	0.000***	0.000***
	0.000	0.000	0.000
Rural bias		-0.014*	-0.012*
		0.006	0.006
Poverty (UBN)	-0.004		
	0.278		
Displaced population (incoming)		0.000	
		0.000	
Level-1 predictors			
Education γ_{10}	-0.040**	0.015**	-0.037**
	0.015	0.015	0.015
Age γ_{20}	-0.008*	-0.008*	-0.007*
	0.003	0.003	0.003
Ideology γ_{30}	0.012***	0.012***	0.012***
	0.002	0.002	0.002
Gender (male) γ_{40}	-0.154	-0.155	-0.143
	0.093	0.093	0.093

Annex 3 (continuation)
Additional HLM conditional models of vote intention

Models with additional level 2 controls and separate measures of partisanship

	Model 1 (W/ L2. Poverty)	Model 2 (W/ L2. Displaced population)	Model 3 (W/ partisanship disagregated)
Fixed Effects	**Coeff. (R. SE)**	**Coeff. (R. SE)**	**Coeff. (R. SE)**
Socioeconomic Status γ_{50}	0.000	-0.001	-0.001
	0.003	0.003	0.003
Party ID (Traditional) γ_{60}	0.454***	0.464***	
	0.135	0.137	
Party ID (Conservative)			0.665***
			0.178
Party ID (Liberal)			0.288*
			0.146
Party ID (Left)			-0.615**
			0.222
Sociotropic (Current) γ_{70}	0.014***	0.014***	0.014***
	0.002	0.002	0.002
Sociotropic (Future) γ_{80}	0.009***	0.009***	0.009***
	0.001	0.001	0.001
Randon effects variance components			
Municipal level effect τ_{00}	0.314***	0.292***	0.294***
Individual level effect σ^2	0.5601	0.540	0.542
Reliability of intercept	0.55	0.53	0.53

Source: Estimations by the author based on individual level information from the Americas Barometer, Colombia 2005; and contextual level data from: *Centro de Educación e Investigación Popular* (Cinep), the Integrated System of Monitoring of Illicit Crops of the United Nations Office on Drugs and Crime and the National Registry Office. † $p < 0.1$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Supporting Information

Measurement of armed actors territorial control

Stathis Kalyvas (2006) proposes that armed actor territorial control ranges from zones of total incumbent/counterinsurgent control to zones of total insurgent control. Following this framework, I developed the measure of armed actor territorial control to capture whether a municipality is under state —paramilirary or guerrilla control— or disputed by the last two groups.

Drawing on Kalyvas' insight that armed actor control produces different patterns of violence (2006), I use what can be observed (patterns of violence) to capture a phenomenon that has an unobservable dimension (armed actor control). The measure builds on a longitudinal database on violent actions perpetrated by guerrillas and paramilitaries in every Colombian municipality between 1997 and 2003. Using these data, I developed a procedure attempting to distinguishing municipalities controlled or disputed by different armed actors. The advantage of the measure is that, although it uses information on armed actions, the variables that it produces are not raw measures of violent events perpetrated by armed actors. Daniel Nagin developed a statistical method to capture trajectories emerging from longitudinal data: in these longitudinal data, there is the possibility that observations will follow common patterns within subgroups that differ from others in the sample (Nagin, 2005). This technique allows the identification of subgroups of observations that describe a similar developing pattern (Nagin, 2005, p. 15).

Using Nagin's method, I identify different trajectories of violent events perpetrated by each armed actor over time. Longitudinal data on violent events in Colombia show clear differences in patterns across the sample but similarities within subgroups. In some municipalities, the incidence of armed actions is almost zero; others show continuous high levels of violent events, or increasing or decreasing trajectories. These trajectories represent subgroups of municipalities that have similar patterns in terms of violent events. In order to measure territorial control, then, I first identified trajectories of violent events perpetrated by the different armed actors. Using the longitudinal data on violent actions executed by guerrillas and paramilitaries in every Colombian municipality from 1997 to 2003, I estimated a semiparametric group-based model for each armed

actor.[1] To estimating the trajectories, I had to make three general decisions: parametric form (Poisson *vs.* normal *vs.* logit), the number of groups or trajectories, and the form of the trajectory over time. The selection of the parametric form depends on the type of data analyzed. To choose the number of groups that best described the data, I compared the Bayesian Information Criteria (BIC) of models with different groups. Once the addition of an extra group resulted in a weaker BIC, I identified the previous number as the optimal number of trajectories. Once I identified the numbers of groups, I again relied on BIC scores and intuitions about the behavior of the data to identify their form, as recommended (Nagin, 2005). Figure SI.1 depicts the trajectories obtained from the two semi-parametric group-based models. Results from these models capture a picture of the different trajectories of political violence between 1997 and 2003.[2] Solid lines represent trajectories of paramilitary violence and dotted lines represent those of guerrilla violence.

Given that Kalyvas' levels of territorial control are associated with changes in violence intensity by different armed actors, we can use this analysis to identify different scenarios of territorial control. These trajectories describe variation in violent events over time, and by combining these armed actor trajectories, I can identify what the status of that municipality is at the end of our longitudinal data. Contested municipalities feature high levels of violent events perpetrated by multiple armed actors. Municipalities controlled or under strong influence of guerrilla groups, on the other hand, feature a few violent events by paramilitary groups, for example, but then guerrilla-perpetrated violent events that then decrease over time as the guerrillas consolidate a hegemonic position.

Municipalities can thus be contested or controlled by any of the armed actors involved in the conflict. These zones of control are similar to those described by Kalyvas (2006, pp. 220-224): consolidating territorial control implies the use of an important amount of violence; but, once an armed actor reaches hegemonic status, violent events decrease. Thus, from the intersection of trajectories of violent events perpetrated by different armed actors, I created three dummy variables capturing state, guerrilla and paramilitary control. In another variable, I also separately capture those territories that are then contested. Table SI.3 displays the scenarios of control

[1] All models were estimated using a SAS based routine called PROC TRAJ developed by Jones, Nagin and Roeder (2001).

[2] Parameter estimates and model fit measures are presented in tables SI1 and SI2.

resulting from the intersection of the trajectories.Municipalities controlled by insurgents resulted when the path of guerrilla actions was clearly above a paramilitary's trajectory for the whole period of analysis. The same logic was used to identify municipalities dominated by right- wing paramilitaries. For instance, municipalities in which there was an intersection between guerrillas' "High increasing-decreasing" path, and paramilitaries' "Very low stable" trajectory, were considered under insurgent control. In this case while guerrilla actions ranged from 4 to 10, paramilitaries did not commit any violent action; therefore, guerrillas were in a dominant position. A somewhat different example of control, in the case of paramilitary dominance, was captured by the intersection between paramilitaries' "Decreasing" path and guerrillas' "Low stable" trajectory. Municipalities in which these two trajectories coexisted represent a scenario in which although guerrillas are active, they are overpowered by paramilitaries. Another element which distinguishes this scenario is that paramilitaries reduce their violent actions, probably because they consolidate their control; yet, they continue overpowering guerrillas.

Municipalities controlled by the state are those resulting from the intersection of guerrilla and paramilitaries trajectories of very low or no activity from 1997 to 2003, as well as those that had initially moderate levels of guerrilla activity that then decreases during the same period. In both cases, the state is thought to come out on top. For instance, the cities of Bogotá, Barranquilla, Cali, and Medellín are included in this group because they registered very low levels of both paramilitary and guerrilla activity. Also included in this group are municipalities that report near to zero violent events.

Disputed municipalities resulted from the intersection of paths in which guerrilla and paramilitary actions described very similar and close trajectories, but unlike municipalities in which there is no conflict, here both guerrillas and paramilitaries are perpetrating acts of violence. Similarly, when two paths crossed there was a situation of dispute; for instance, the intersection between increasing and decreasing trajectories, or between increasing and stable paths. Previous studies have shown that contested areas are characterized by a situation in which the challenging armed actor enters a region perpetrating an elevated number of violent actions, in an attempt to overwhelm its enemy (Kalyvas, 2006). So when an armed actor suddenly increases its violent activities to the level of its contender and then surpasses it, there is a situation of dispute. In Table A1 cells labeled as "Dispute" identify situations described above.

Note that this method of measuring control implies observing the trajectory of violent events perpetrated by the different armed actors in the previous years. We use the combinations of these trajectories, as well as the theoretical expectations on territorial control and use of violence developed by Kalyvas (2006), in order to create these measures of armed actor territorial control. Therefore, this method is not identifying control simply as a function of violent events in a single moment of time.

It is worth mentioning that although the scenarios of control are inspired by Kalyvas (2006) the resulting variables don't exactly match Kalyvas scenarios of control. For instance when I talk about guerrilla or paramilitary control I am capturing a situation of guerrilla or paramilitary hegemony or close control. Thus these variables do not distinguish total control from close to total control.

As a reliability test I decided to compare the classification of control, against a very different variable that may also capture control by illegal actors (either guerrillas or paramilitaries). For this purpose, I created a variable to identify municipalities included in the "Espada de Honor" program, a military initiative for critical municipalities that the Colombian government targeted to regain full control. The limitations of this variable, as a measure of control, is that it does not distinguish which illegal armed actor dominated the region and that this strategy was launched in 2010. There is still a statistically significant relationship between guerrilla control and dispute and the variable identifying the "Espada de Honor" municipalities (guerrilla: $\chi 2$ (1) = 26.16 Pr = 0.000; Paramilitaries $\chi 2$ (1) = 2.61 Pr = 0.106; Dispute $\chi 2$ (1) = 10.1452 Pr = 0.001). As expected, then, most guerrilla and disputed municipalities that I identified are those included in the "Espada de Honor" strategy. There is no relationship between "Espada de Honor" and paramilitary control. This result is not surprising considering that most paramilitary fronts demobilized in 2005 after a peace process.

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TABLE SI.1. Parameter estimates for trajectories of paramilitary violence 1997-2003: Semiparametric group-based modeling approach

Trajectory (group)		Coeff.	SE
Very low stable	Intercept	-0.503***	0.077
Moderate decreasing	Intercept	17.854***	4.066
	Linear slope	-2.082***	0.625
	Quadratic slope	0.069**	0.024
Increasing	Intercept	58.214***	11.747
	Linear slope	-10.310***	1.868
	Quadratic slope	0.472***	0.072
Decreasing	Intercept	149.606***	10.079
	Linear slope	-19.855***	1.574
	Quadratic slope	0.672***	0.060

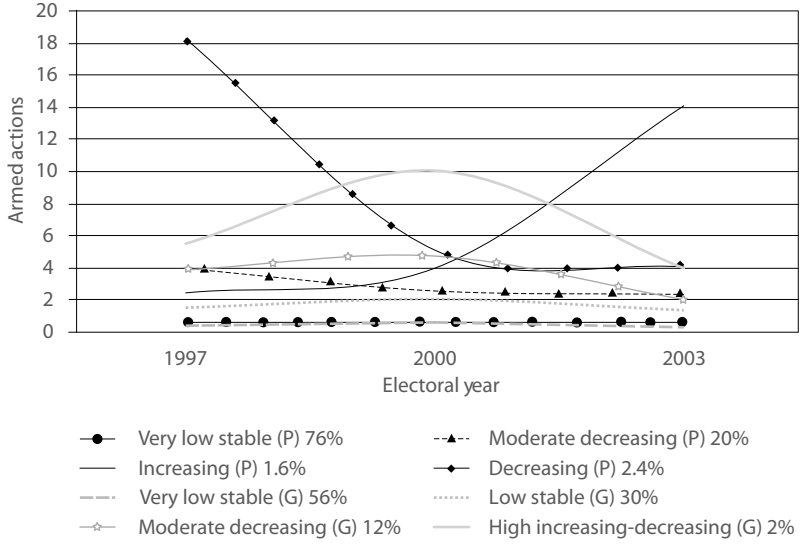
Source: Estimations by the author based on data from *Centro de Educación e Investigación Popular* (CINEP).
***$p < .001$. BIC = -5416.75 (N= 3123) BIC = -5409.06 (N= 1041) AIC= -5374.42.

TABLE SI.2. Parameter estimates for trajectories of guerrilla violence 1997-2003: Semiparametric group-based modeling approach

Trajectory (group)		Coeff.	SE
Very low stable	Intercept	-7.851***	1.116
	Linear slope	1.281***	0.176
	Quadratic slope	-0.050***	0.007
Low stable	Intercept	-10.360***	1.560
	Linear slope	1.933***	0.250
	Quadratic slope	-0.075***	0.010
Moderate decreasing	Intercept	-24.889***	2.637
	Linear slope	4.867***	0.420
	Quadratic slope	-0.199***	0.016
High increasing-Decreasing	Intercept	-86.580***	6.014
	Linear slope	15.120***	0.953
	Quadratic slope	-0.591***	0.036

Source: Estimations by the author based on data from *Centro de Educación e Investigación Popular* (CINEP).
***$p < .001$. BIC = -4912.10 (N= 3123) BIC = -4903.31 (N= 1041) AIC= -4863.73.

FIGURE SI.1. Trajectories of paramilitary and guerrilla violence



Source: Estimations by the author based on data from *Centro de Educación e Investigación Popular* (CINEP).

TABLE SI.3. Scenarios of guerrilla and paramilitary control and dispute, 1997-2003

		Guerrillas' Trajectories			
		Very low stable	**Low stable**	**Moderate decreasing**	**High Increasing-Decreasing**
Paramilitaries' trajectories	Very low stable	State control / No conflict	Guerrilla	Guerrilla	Guerrilla
	Moderate Decreasing	Paramilitaries	Paramilitaries	Dispute	Guerrilla
	Increasing	Paramilitaries	Paramilitaries	Dispute	Dispute
	Decreasing	Paramilitaries	Paramilitaries	Paramilitaries	Dispute

Source: Analysis by the author based on trajectories presented in Figure SI.1.