Legislating During War: Conflict and Politics in Colombia

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Abstract

This paper studies how politicians and their constituents respond to political violence by investigating the case of the Colombian civil conflict. I use data on rebel attacks, legislators' tweets and roll-call votes, and I employ event study and difference-in-differences empirical methods. Twitter engagement (as a proxy for popular support) increases after rebel attacks for both incumbent party legislators and for tweets with a "hard-line" language. Legislators increase their support for the incumbent party after attacks, but only when the government has a hard-line policy position, as inferred both from the recent historical context and from text analysis of the president's tweets. Though the effects are initially large they last less than two weeks. The empirical results are consistent with a political economy model of legislative behaviour in which events that shift voters' views, and the presence of *rally 'round the flag* effects, elicit different politician responses depending on the policy position of the incumbent party. Finally, I identify a set of potentially affected congressional votes, suggesting that these conflict-induced swings in incumbent support can have persistent policy consequences.

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1 Introduction

Civil conflict is common in developing countries (Besley and Persson, 2010; Blattman and Miguel, 2010) and often persists even in places where an electoral democracy has been established (Collier and Rohner, 2008; Collier, 2011). The effects of civil conflict on political processes are, however, not well-understood. Though we have substantive evidence that external security threats boost popular support for both incumbent politicians, known as the *rally 'round the flag* effect (Baker and Oneal, 2001; Merolla and Zechmeister, 2009, 2013), and for right-wing parties (Berrebi and Klor, 2006; Gould and Klor, 2010; Elster, 2019), these dynamics remain considerably understudied in developing countries facing internal conflicts.[1]

At the same time, while most previous work has examined how security threats affect voters and the general public, understanding the extent to which these threats influence the behaviour of *politicians* is central to recognizing the mechanisms through which conflict persists. Changes in political behaviour as a result of violent attacks, by which politicians either "rally" behind the incumbent government, or become more "right-wing", can have important policy implications. If political violence strengthens the mandate of hard-line governments, it can lead to investments in top-down state building and military capacity. However, strengthening state capacity in these dimensions may have adverse consequences in the context of developing countries: prolonged conflict, in the presence of perverse electoral incentives (Fergusson et al., 2016); a weakening of local governance (Dell and Querubin, 2017); and government violations of human rights, if judicial institutions are weak (Acemoglu et al., forthcoming).

This paper investigates the effect of rebel attacks on legislative decision-making in Colombia between 2006 and 2015.[2] I examine the relationship between attacks by the country's largest historical rebel group, FARC, and political coalescence in the country's legislature. In particular, I study how legislative support for the incumbent party, the *Partido de la U* (PU), changed following rebel attacks. To do this, I use roll-call voting records which include around 11,600 congressional votes, and over 780,000 individual votes. The period of study provides a distinct case study to examine this relationship, as the policy position of the incumbent party shifted when the government started peace negotiations with the rebel group in 2012. This policy change, from what may be described as a right-wing (hard-line, hawkish) position, to a more left-wing (concessionary, dovish)

[1] Exceptions include Arce (2003), which examines presidential approval rating polls in Peru, and arguably Kibris (2011), which studies electoral choices in Turkey in the 1990s. In addition, Mian, Sufi and Trebbi (2014) presents suggestive evidence of the *rally* effect after large terrorist attacks in a cross-country analysis which includes both developed and developing countries.

[2] Colombia is an electoral democracy that suffered from the longest enduring conflict in the Americas. See Oquist (1980) for a history of political violence in Colombia and Robinson (2015) for a recent analysis.

position, allows me to investigate how the effect of rebel attacks on legislative behaviour varies depending on the policy position of the incumbent party.

The analysis is framed using a simple political economy model of legislator behaviour based on Levitt (1996). Legislators choose an optimal policy position in which they weight the preferences of both the incumbent party and their constituents. Rebel attacks affect the weight that legislators assign to the incumbent policy position (the *rally 'round the flag* effect) and the bliss point of their constituents (the increased right-wing support effect). Given these effects, attacks affect the *policy distance* between legislators and the incumbent party, depending on the initial policy position of the incumbent party relative to the voters. In particular, if the policy position of the incumbent government is to the right of the constituents' preferred position, then rebel attacks which induce voter preferences to shift to the right, and *rally* effects which increase the weight that legislators place on the policy position of the government, both lead to a decrease in the policy distance between legislators and the incumbent party. On the other hand, if the policy position of the incumbent party is to the left of that of the voters, then the two effects induce opposing legislator responses, and the overall direction of the effect of attacks on policy distance is ambiguous.

I exploit variation in the timing of rebel attacks, in an event study which exploits high-casualty events, to examine how vote-alignment with the incumbent party changed following attacks. The event study framework exploits the unexpected timing of rebel attacks and the panel structure of the congressional voting record (repeated observations for each politician) to study the dynamics of the effect of interest.[3] The analysis reveals that, before the government started negotiations with the rebels (in the *pre-peace process* period), legislators' votes were up to 25 percentage points more likely to be aligned with the position of the incumbent party in the days just following a rebel attack. The support dissipated quickly and tended to last less than two weeks. In contrast, once the incumbent government had a concessionary policy position, in the *post-peace process* time period, there were no significant legislator responses. Taken together, the results suggest that both the *rally 'round the flag* and the increased right-wing support effects are important determinants of the responses of politicians. Since the effects acted in opposite directions when the policy position of the incumbent government was "left-wing", they tended to offset each other once the peace process started.

To examine whether constituents themselves react to rebel attacks I use data on follower engagement from Twitter (likes and re-tweets). I construct a dataset of more than 350,000 tweets published by 305 Colombian politicians between 2010 and 2015. I then create a measure of the political leaning of a tweet by benchmarking its language against that

[3] Balcells and Torrats-Espinosa (2018) and Clark, Doyle and Stancanelli (2020) use similar empirical designs, exploiting short-run variation in the timing of terrorist attacks, and measuring outcomes in the days before events relative to the days after.

of the two main political leaders over the period of study, Juan Manuel Santos, president 2010-2018, and Álvaro Uribe, president 2002-2010 and current senator, both active Twitter users representing polar sides of the political debate regarding the peace negotiations with the rebel group (that is, what I refer to as the "left-wing" and the "right-wing" positions).[4] I find evidence for both the *rally 'round the flag* and the increased right-wing support effects. Following attacks by FARC, engagement for right-leaning tweets and tweets from politicians of the incumbent party (the PU) increased relative to other tweets. Consistent with the observations from the legislative voting responses, these follower responses also dissipated quickly over time (the effects disappeared within two weeks of the event). In a complementary exercise, I also document significant but similarly short-lived surges in public attention using data from Google trends.

The mechanisms proposed by the conceptual framework have additional testable implications which I can bring to the data. First, I find that the change in the overall effect (post-peace process relative to pre-peace process) was significantly stronger for legislators who were themselves more right-wing, and for whom the two effects would indeed offset each other when the policy position of the incumbent government shifted to the left. Second, using only the time-period of the Santos government, and variation in the policy position of the government inferred from text analysis of the president's tweets, I find that indeed legislators' responses are heterogeneous depending on the government's position, and that again this pattern is stronger for right-wing legislators. Third, I find that the effects are stronger both for politicians whose legislative seats are less safe, as measured by their preceding electoral performance, and just before upcoming legislative elections.

Though the empirical framework is designed to capture effects at the legislator level, I propose a counterfactual exercise based on a *potential outcomes* framework to map the estimated individual effects to the congressional vote level. I estimate that about 30 percent of votes which resulted in the outcome opposite to the one preferred by the incumbent party, were sensitive to being "flipped" in favour of the incumbent party by an attack. More specifically, I identify 40 congressional votes that may have been potentially affected to favour the incumbent position as a result of these documented transitory shocks in legislators' behaviour. These cover a broad range of issues including the implementation of Colombia's free trade agreement with the United States, pension and social programs, and the functioning of intelligence agencies.

Identifying a causal relationship between conflict and politics is challenging because politically motivated rebel groups are likely to act strategically in response to their political

[4] Their Twitter usernames (and link) are @JuanManSantos and @AlvaroUribeVel. Some recent studies that have created novel measures of political polarization using media and language include Azzimonti (2018), Jensen et al. (2012) and Gentzkow, Shapiro and Taddy (2016). My measure of political leaning for tweets is similar to Gentzkow and Shapiro (2010)'s measure of newspaper slant, but I know of no studies which build comparable measures using data from Twitter. Studies in political economy using data from social media include, among others, Acemoglu, Hassan and Tahoun (2017); Halberstam and Knight (2016); Enikolopov, Makarin and Petrova (2017); Petrova, Sen and Yildirim (2017); Morales (2020).

environment. The empirical strategies described address this challenge by using high-frequency data and "zooming in" in time, using daily variation in measures of political coalescence in congress (from roll-call voting records), political support (from Twitter), and rebel attacks. Identification therefore relies on the assumption that the precise timing of FARC attacks is unrelated to these outcomes in the very short-run. This assumption is plausible given that the hierarchical structure of FARC is highly decentralized and responds mostly to local conditions. In addition, I do a series of empirical exercises to further support this idea. I document that there are no significant differences in the characteristics of the congressional votes that occur before and after these events. I also find no significant differences in the characteristics of congressional votes which take place on the exact days of attacks. The results are also robust to controlling for vote specific characteristics, and to removing conflict-related congressional votes (which the rebels may be particularly invested in). Most importantly, following Oster (2019), I estimate potential biases due to unobservables by examining the sensitivity of the treatment to the observable controls, and conclude that these biases are likely to be small. Finally, I analyze the cross-geography covariance matrix of FARC attacks and find limited evidence for coordination of attacks.[5]

1.1 Related literature

The paper contributes to a growing literature in the economics of conflict that studies how civil war affects political behaviour and attitudes. The literature has focused on the long-run effects of civil conflict on victims and combatants (Bellows and Miguel, 2009; Blattman, 2009; Voors et al., 2012),[6] however, few studies have examined how civil conflict affects legislators' decision-making.[7] I find that attacks by the rebel group have an effect on both Twitter users (as a proxy for voters or the general public), and on politicians, who increase their legislative alignment with right-wing incumbents.

Though the increased incumbent and right-wing support effects have been widely documented for voters, how political violence affects the behaviour of politicians is less clear. Two studies that examine politicians' reactions to terrorism include Indridason (2008), which studies coalition formation, and Chowanietz (2011), which looks for criticism in the media from political elites. However, both of these examine the case of Western democracies' reaction to external security threats in cross-country analyses. That elected legislators in conflict settings experience transitory shocks in political behaviour as a result of violent attacks, by "rallying" behind the incumbent government, and by becoming

[5] An idea explored in Trebbi and Weese (2019) to infer coalition structures in Afghanistan and Pakistan.

[6] See Bauer et al. (2016) for a review.

[7] Shayo and Zussman (2011) find an effect of terrorism on judges' decision-making by increasing ingroup bias. The *rally 'round the flag effect* and the results I present are consistent with these findings, considering the state to be the ingroup and the rebel group to be the outgroup.

more "right-wing", reveals that internal conflict can have direct policy implications. These effects may, in turn, have important implications for the potential of peace settlements, especially if right-wing governments are both less willing to negotiate and strengthened in the legislature by conflict.

More generally, by studying the actions of politicians, the paper contributes to a literature in political economy that investigates the determinants of legislators' behaviour which includes, among others, Levitt (1996), List and Sturm (2006), Washington (2008), Conconi, Facchini and Zanardi (2014) and Bouton et al. (forthcoming). The main finding I highlight is that transitory shocks induced by conflict events have short-run but observable effects on the decisions of politicians. Furthermore, I present suggestive evidence that voters can *affect* policy, as electoral incentives seem to be important determinants of politicians' responses following violent attacks. The relationship I document, and in particular the increased right-wing support effect, is stronger: for politicians who were more electorally vulnerable, before legislative elections relative to after legislative elections, and for politicians representing the locations of the events (shown in the appendix). These findings contribute to the debate on the role of voters in electoral politics (which includes Lee, Moretti and Butler, 2004; Albouy, 2011; Jones and Walsh, 2016) and suggests that electoral incentives can mediate legislative responses to conflict.

The paper also contributes to the specific literature on the relationship between conflict and politics in Colombia.[8] Acemoglu, Robinson and Santos (2013) documents a relationship between paramilitary influence in legislative elections and legislators voting in favour of policies preferred by these groups in three congressional votes. The analysis I present complements this work and suggests that the impact of armed non-state actor violence on politicians' votes in congress is even broader and more systematic. Fergusson et al. (2016) argues that the hard-line government of Uribe (2002-2010) had a comparative advantage in fighting the insurgencies, and thus benefited electorally from their presence. This article reveals a new mechanism through which right-leaning politicians benefit from conflict: increased support in the legislature.

The paper is organized as follows. Section 2 discusses the relevant context of the conflict and legislative institutions in Colombia. Section 3 outlines the conceptual framework which highlights the role of the *rally 'round the flag* and the increased right-wing support effects in mediating legislators' responses to conflict. Section 4 describes the data on conflict, social media and legislative voting. Section 5 discusses the empirical research design and the identification challenges. Section 6 presents the results and section 7 concludes. In the online appendix, I document additional descriptive statistics and details on the data, propose a series of empirical extensions and robustness checks, provide proofs for

[8] Works include Gallego (2011); Weintraub, Vargas and Flores (2015); Acemoglu, Robinson and Santos (2013); Galindo-Silva (2019); Fergusson et al. (2016, 2017); Steele and Schubiger (2018); Ch et al. (2018), among others.

the propositions in the theoretical framework, and present an extended discussion on the Colombian conflict and peace process with FARC in light of the effects documented.

2 Background

This section provides background on the recent history of the Colombian conflict with emphasis on the period of study, as well as an outline of the legislative institutions. An extended historical background and discussion can be found in the online appendix.

2.1 Historical context

The Colombian civil war is generally described in the media as a decades-long conflict in which an estimated 220,000 people were killed and more than five million were displaced.[9] Though such portrayal is, of course, an oversimplification, it concisely captures the graveness and magnitude of the war. The start of the conflict is generally characterized to have been the 1960s, decade in which the country's two main rebel groups, the Revolutionary Armed Forces of Colombia (FARC) and the National Liberation Army (ELN), were founded. The emergence of these Marxist guerrilla groups ended a transition from violence between political parties to one of a subversive nature.

After an attempt at peace negotiations with the FARC broke down in 2002, Álvaro Uribe Vélez was elected president in that year, running on a platform of aggressive military campaigning against the rebel insurgencies. In 2005, a new political party, the *Partido de la U* (PU) was founded with the objective of uniting Uribe's supporters (the "Uribistas"). During Uribe's eight years as president (having been re-elected in 2006), the army intensified its efforts of combating the guerrilla groups. Uribe's "democratic security" policy received substantial support from the US government in what was denominated "Plan Colombia" (Dube and Naidu, 2015). Between 2002 and 2010, the government effectively recovered a substantial share of the country's territory that was previously under FARC and ELN control (Spencer, 2011; Delgado, 2015). Despite these efforts, some areas remained without effective state presence at the end of Uribe's mandate (Cortés et al., 2012; Fergusson et al., 2016). In 2010, the then minister of defense, Juan Manuel Santos, was elected president on a campaign platform of continuing the fight against the insurgencies, running for the PU with the support of Uribe.

Soon after being elected, Santos distanced himself from Uribe and his policies, most notably by re-establishing diplomatic relationships with the government of Hugo Chavez in Venezuela.[10,11] In August of 2012 the government of Santos announced the beginning

[9] See for instance http://www.bbc.com/news/world-latin-america-34338208.

[10] See http://www.bbc.com/news/world-latin-america-10926003.

[11] A new political alliance also emerged with the Liberal party. Santos's government has been described as being politically inclusive as opposed to Uribe's (see http://razonpublica.com/index.php/politica-y-gobierno-temas-27/1613-santos-la-coalicion-incluyente-y-

of a new peace process with FARC.[12] This policy shift has been described as an "180-degree turn in the conception that the Colombian state had with respect to war and peace" (Acosta, 2015, p.18). Following this shift to the left by the PU, and the rising tensions between Uribe and Santos, the *Centro Democrático* (CD) is founded in January of 2013 by Uribe and other right-wing politicians to oppose the PU and Santos's peace negotiations with FARC.

In the legislative elections of March 2014, Uribe is elected senator for the CD. The presidential elections of the same year represented a *de-facto* referendum on Santos's peace process (Weintraub, Vargas and Flores, 2015). In June of 2014, Santos, running again for the PU, was re-elected in run-off elections against Oscár Iván Zuluaga, a former member of the PU who was running for the CD with the support of Uribe, and had come in first place during the first round of elections the previous month.

The peace process was successful in reducing violence and de-escalating the conflict during the four years of negotiations (CERAC, 2016; Ordoñez et al., 2018). A bilateral ceasefire between FARC and the government was put in place in August of 2016, when a final accord between the two parts was announced. Santos was awarded the Nobel Peace Prize in October of this year and the final accord was ratified by the Colombian congress in November of 2016. FARC's disarmament process was completed in June of 2017.[13] As a result of the peace process, FARC became a political party with representation in the Colombian congress (with 5 seats in each chamber). Further discussion of these events, revisited in light of the framework and the results presented below, can be found in the online appendix.

2.2 Legislative institutions

The congress of Colombia consists of two chambers, the Senate, formed by 102 senators, and the House of Representatives, formed by 166 representatives. All members of congress are elected by popular vote for four-year terms (without term limits) through party-lists in proportional representation.[14] The years of these legislative elections coincide with the years of presidential elections, but while legislative elections are held in March, presidential elections are held in May (and runoff elections in June), and government sessions start July 20 (independence day). There are 36 electoral constituencies in the Chamber of Representatives: 32 departments, Bogotá (the capital), Colombians abroad, Indigenous communities and Afro-Colombians. Constituencies in the House of Represen-

la-resurreccion-del-liberalismo.html for an analysis of these political developments.)

[12] An exploratory phase of dialogues had begun in February of the same year.

[13] See http://www.nytimes.com/2016/11/13/world/americas/colombia-peace-deal-farc-rebels.html, https://www.nytimes.com/2016/11/30/world/americas/colombia-farc-accord-juan-manuel-santos.html http://www.bbc.com/news/world-latin-america-40413335

[14] The way that seats are distributed since 2003 has been using the D'Hondt method. See Taylor (2008) for a discussion of these electoral rules in the context of Colombia.

tatives range from 1 to 18 seats. There are 2 electoral constituencies in the Senate, a single national constituency with 100 seats, and an Indigenous communities constituency for the remaining 2 seats.

Figure A2 shows the distribution of seats by party for each of the governments during the period of study. The PU held the most seats throughout the period of study and was the party of the president for all three governments.[15] I treat the PU as the incumbent party throughout.[16]

3 Conceptual framework

To frame the analysis I present a simple model of legislative behaviour based on the framework of Levitt (1996). The model is simplified to focus on legislators' policy position in relation to that of the incumbent party and the preferred policy of the constituents, but extended to allow civil conflict to affect legislators' value of the incumbent's policy (the *rally 'round the flag* effect), as well as voters preferences (the increased right-wing support effect). The framework is also related to Merolla and Zechmeister (2013), which takes into account incumbency and partisanship to address the interaction of these effects for the United States.

The policy space $X \in R$ is unidimensional and policy preferences are single-peaked.[17] There are J legislators each representing a single electoral district. The bliss point of voters in district j is represented by x_{Vj}.[18] The incumbent party chooses its preferred policy x_I, which does not necessarily match the preferences of the electorate.[19] For simplicity, the model reduces Levitt (1996)'s framework such that legislators care only about the policy preferences of the incumbent party and of their constituents. In particular, assume that legislator j chooses a policy position x_j to maximize:

$$V_j = -[\omega_I(x_j - x_I)^2 + \omega_V(x_j - x_{Vj})^2]$$

where ω_I is the weight that the legislator assigns to the policy position of the incumbent party and ω_V is the weight that the legislator places on the bliss point of voters in her dis-

[15]The Liberal party had more seats in the House of Representatives in the 2006-2010 government, but the PU had more seats in the Senate and received more votes at the national level.

[16]Note however that the ruling coalition changes. In 2006-2010, the coalition excluded the Liberal party and included the Conservative party. In 2010-2014, the coalition included both traditional parties. In 2014-2018, the coalition excludes the Conservative party and includes the Liberal party. These shifts in coalitions are consistent with the overall policy shift of the PU described in the previous subsection.

[17]See Osborne (1995) for a review of this type of spatial models.

[18]Such that x_{Vj} could be the bliss point of the median voter in j. One could also interpret x_{Vj} as the voter that politicians target, where underlying this decision is a probabilistic voting model in which voters can differ in their intensity of preferences or their responsiveness to policy changes (Persson and Tabellini, 2002; Bouton et al., forthcoming). Empirically, this interpretation is related to the observation that Twitter users may not be representative of the population of voters, but to the extent that they have more intense preferences, or are more responsive to politicians' actions, then politicians may choose to target their policies accordingly.

[19]I do not explicitly model the process by which the incumbent party chooses its policy position, but consider for instance a citizen-candidate model in which the elected leader (or party) implements his (or their) preferred policy (Osborne and Slivinski, 1996; Besley and Coate, 1997).

trict. The legislator cares about these preferences due to political and electoral incentives. The optimization yields the legislator's chosen policy as a weighted average of the two positions she considers:

$$x_j^* = \frac{\omega_I x_I + \omega_V x_{Vj}}{\omega_I + \omega_V}$$

Define the *policy distance* between the legislator's optimal position and the position of the incumbent party as $D_j^* \equiv |x_I - x_j^*|$, which results in:

$$D_j^* = \left| \frac{\omega_V (x_I - x_{Vj})}{\omega_I + \omega_V} \right|$$

and we are interested in how this object changes with increased violence.

3.1 Effect of civil conflict on policy distance

Consider the effect that rebel attacks have on the chosen policy position of a legislator. The analysis allows both the weight that legislators assign to the incumbent party and the preferred policy position of voters to change in response to the level of violent conflict. In particular, define $\omega_I(c)$ as the weight assigned to the policy position of the incumbent party and $x_{Vj}(c)$ as the preferred policy position of the voters associated with violent conflict level c. Assume that $\frac{\partial \omega_I}{\partial c} > 0$, the *rally 'round the flag* effect, and that $\frac{\partial x_{Vj}}{\partial c} > 0$, the increased right-wing support effect. What is $\partial D_j^* / \partial c$?

If the incumbent party has a policy position which is relatively right-wing (it is to the right of that preferred by voters in j), as conflict c increases from its initial level (c_0), the chosen policy position gets closer to that of the incumbent, and D_j^* decreases. That is, $\partial D_j^* / \partial c < 0$. Intuitively, both of the effects shift the chosen policy x_j^* to the right, closer to x_I, as conflict increases. Specifically:

Proposition 1: Right-wing incumbent. Let x_I^R be a right-wing incumbent position, such that $x_I^R > x_{Vj}(c_0)$, then $\partial D_j^{*R} / \partial c < 0$.
See appendix for formal proof.

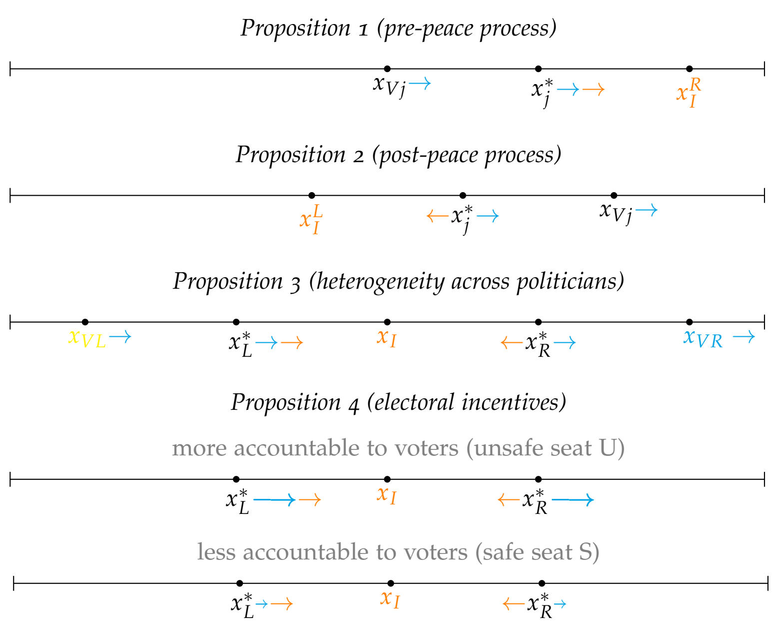
Consider now what happens when the policy position is relatively left-wing (to the left of the voters' initial bliss point). In this case, the two effects move x_j^* in opposite directions. The *rally 'round the flag* effect pulls x_j^* closer to x_I as c increases (to the left). On the other hand, increased right-wing support pushes x_j^* to the right, towards x_{Vj}. Thus, we have:

Proposition 2: Left-wing incumbent. If $x_I^L < x_{Vj}(c_0)$, then $\partial D_j^{*L} / \partial c$ is ambiguous.

However, $\partial D_j^{*L}/\partial c > \partial D_j^{*R}/\partial c$ for *similarly extreme* positions, ie. if $|x_I^L - x_{Vj}(c_0)| \leq |x_I^R - x_{Vj}(c_0)|$.
See appendix for formal proof and discussion.

While propositions 1 and 2 consider the relative position of the incumbent to make aggregate predictions about legislators' behaviour, one direct extension considers the ideological position of voters. In particular, legislators whose constituents' bliss point is to the left of the incumbent, reduce their policy distance as conflict increases. On the other hand, the prediction for legislators' whose constituents' bliss point is to the right of the incumbent is ambiguous.

Figure 1: Conceptual framework



Notes: The figure summarizes the conceptual framework where the policy space is represented by a line, x_I represents the incumbent party, x_{Vj} represents voters, and x_j^* represents legislators' optimal chosen policy position. The right-wing effect is highlighted as blue arrows, and the rally effect is highlighted as orange arrows.

Proposition 3: Left-wing and right-wing voters. If $x_{Vj}(c_0) < x_I$, then $\partial D_j^*/\partial c < 0$. If $x_{Vj}(c_0) > x_I$, then $\partial D_j^*/\partial c$ is ambiguous.

Proposition 3 is a direct extension of propositions 1 and 2, but considers the position of voters, x_{Vj}, as opposed to that of the incumbent, x_I. However, the implication is that the preferences of the incumbent party and the preferences of voters interact to produce different outcomes depending on their relative positions.

Consider now the case of varying electoral incentives by which some legislators are relatively more accountable to voters, and in particular two situations, U and S, where these indicate an *unsafe* legislative seat (or the time *up to* or before a legislative election), and *safe* legislative seats (or the time *subsequent* or after legislative elections). Normalizing the policy weights such that $\omega_I + \omega_V = 1$,[20] and assuming $\omega_V^U > \omega_V^S$, that is, U places higher weight on voters' bliss points relative to S, electoral incentives result in U responding relatively more to the right-wing effect, and increasing their alignment with the incumbent relatively *more* before the peace process starts, and relatively *less* after.

Proposition 4: Electoral incentives. If $x_{Vj}^U = x_{Vj}^S, \frac{\partial x_{Vj}^U}{\partial c} = \frac{\partial x_{Vj}^S}{\partial c}, \frac{\partial \omega_I^U}{\partial c} = \frac{\partial \omega_I^S}{\partial c}$, and $\omega_V^U > \omega_V^S$, then $\partial D_j^{*U}/\partial c < \partial D_j^{*S}/\partial c$ when $x_{Vj}(c_0) < x_I$, and $\partial D_j^{*U}/\partial c > \partial D_j^{*S}/\partial c$ when $x_{Vj}(c_0) > x_I$.

Assuming that both initial conditions and the size of the underlying mechanisms (rally and right-wing) are the same for U and S, then U gets closer to the incumbent in the pre-peace process (or when voters' bliss points are to the left of the incumbents'), and gets *less* close in the post-peace process. See theoretical appendix for proof.

Figure 1 summarizes the propositions of the model. The two assumptions, $\frac{\partial \omega_I}{\partial c} > 0$, the *rally 'round the flag* effect, and $\frac{\partial x_{Vj}}{\partial c} > 0$, the increased right-wing support effect, are shown as arrows. These are based on empirical evidence from previous related work and will be evaluated in this context using data from Twitter and an event study framework. I evaluate propositions 1 and 2 empirically using roll-call votes and an event study framework which looks at the aggregate effect of conflict events on vote-alignment with the incumbent party. In particular, I examine the effects separately for the pre-peace process, when the incumbent party had a right-wing position, and the post-peace process, when the party had a more left-wing position (perhaps best characterized as a center-left position). Proposition 3 is evaluated in a similar empirical framework, but I allow for heterogeneity across an estimated policy position at the politician level, in a triple-interaction framework, comparing left-leaning vs. right-leaning politicians. In a complementary exercise, I use Santos' language on Twitter to proxy for the position of the incumbent party x_I and examine heterogeneity along this margin. Finally, I examine proposition 4 with three empirical exercises which attempt to highlight the role of electoral incentives: studying behaviour for politicians in "safer" legislative seats in a triple-interaction framework, comparing conflict responses before and after legislative elections, and (in the online appendix) examining

[20] This normalization simplifies the analysis and removes some extreme cases, see theoretical appendix for details.

responses to attacks in legislators' own jurisdictions.

4 Data and descriptive statistics

Three main sources of data were used for this study: data on rebel attacks from the Global Terrorism Database, compiled by the START program at the University of Maryland; a dataset of congressional votes collected from *Congreso Visible* at the University of the Andes in Colombia; and politicians' tweets and network structure from Twitter. This section describes each of these and provides some descriptive statistics. More details and additional descriptive statistics are presented in the online appendix.

4.1 Conflict data

The main explanatory variable uses data on attacks by FARC from the Global Terrorism Database (GTD) (START, 2015). The GTD is compiled through news media sources published in the day of, or days just after, events. These events received national and international media attention and are therefore ideal to capture the short-run effects of interest (more on this below). In the online appendix, I discuss in detail alternative conflict datasets from Colombian sources.

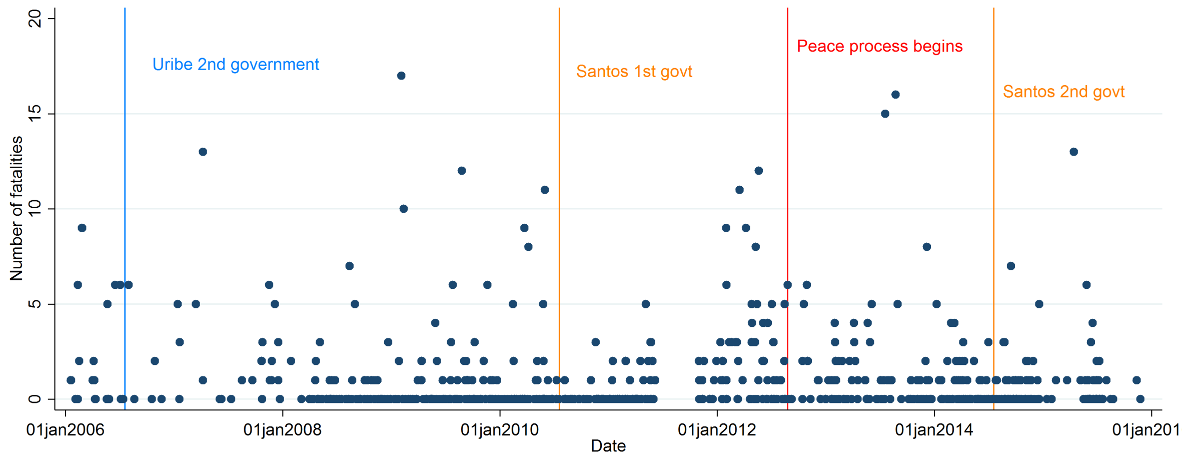
There were a total of 881 attacks by FARC between 2006 and 2015. The frequency of attacks (on average one attack every four days) presents an empirical challenge for estimating the effect of interest. I restrict the main analysis to attacks with at least three casualties (91 events). Statistics for different casualty thresholds are summarized in Table A2 and the main analysis is replicated with alternative thresholds in the online appendix. Other than fatalities and injuries, there do not seem to be large systematic differences between the categories of attacks. In particular, there are no apparent differences in the timing of these attacks across categories. Figure 2 shows attacks by FARC across time. Each point indicates a single attack, with the number of fatalities on the y-axis and the date of the attack on the x-axis. The start of the peace process is labeled with a red line.

4.2 Twitter data

Of the 650 legislator profiles available from Congreso Visible for the period of study, 305 of them had an active Twitter account. I collect tweets for these politicians, as well as for the two main political leaders, Juan Manuel Santos (@JuanManSantos) and Álvaro Uribe (@AlvaroUribeVel). The final dataset I use for the analysis contains approximately 365,000 tweets (shown across time in A8). The majority of these tweets were published after the peace process started, which limits the interpretation of the analysis shown below.

For each tweet I have data on date and time of publication, user (politician), the text of

Figure 2: Attacks by FARC across time by number of fatalities



Notes: The figure shows all events classified as attacks by FARC between 2006 and 2015 by the Global Terrorism Database (START, 2015). The y-axis shows the number of fatalities of a particular event, and the x-axis shows the date of the event. The vertical lines indicate the start of the second Uribe government, the first Santos government, the official start of the peace process with FARC, and the start of the second Santos government, respectively.

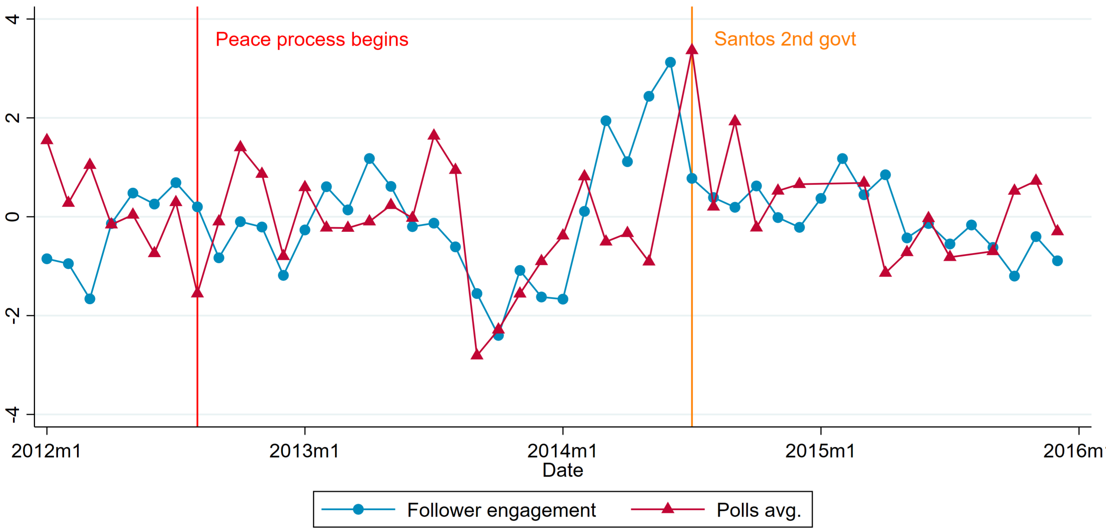
the tweet, and the number of likes and re-tweets. I use these last two variables to measure follower engagement. In particular, I define $tweetEngagement = log(likes + retweets + 1)$ for each tweet.[21] One concern with using follower engagement on Twitter as a measure of popular support is that Twitter users may not be representative of voters in general. To the extent that politicians are relatively more responsive to citizens who are more politically active (or who have more intense preferences, as in Bouton et al., forthcoming, see also footnote 18), then follower engagement captures an important dimension of citizens' preferences. In addition, figure 3 plots the average approval rating of Juan Manuel Santos across four polls, and follower engagement for @JuanManSantos, across time. The two variables are positively and significantly correlated, suggesting that tweet engagement is a good proxy for popular support.[22]

I measure the political leaning of these tweets through text analysis. For each tweet, I create a vector X_i of dummy variables such that x_{ij} is equal to one if tweet i contains word or phrase j, zero otherwise. To reduce the dimension of the vector, I use only the most frequently used 1,000 words by each of the leaders (after removing common stopwords), and the most used 500 two-word phrases. I use tweets by @JuanManSantos, president 2010-2018 and Nobel Peace Prize winner, and @AlvaroUribeVel, president 2002-2010, current senator and right-wing leader, after the start of the peace process (once

[21]Twitter users sometimes re-tweet a message they disapprove of, but this is usually prefixed by a comment. The twitter platform does not count tweets prefixed by a comment as a re-tweet. Thus, I interpret re-tweets as a form of approval or endorsement for the message in the tweet.

[22]The relationship between the polls average and the follower engagement index is statistically significant at the 90% confidence level. The relationship between the polls average and the *lag* of the follower engagement index is statistically significant at the 95% confidence level. The sample has monthly observations from 2012 to 2015. Other studies that have documented correlations between social media derived-outcomes and measures of political support include DiGrazia et al. (2013), Barberá (2016) and Krakowski, Morales and Sandu (2020), among others.

Figure 3: Tweet engagement and approval rating for @JuanManSantos across time



Notes: The plot shows a time-series graph of tweet engagement and the average approval rating of Juan Manuel Santos across four polls, after de-trending (using a square time trend) and standardizing. Follower engagement at the monthly level is measured by regressing *tweetEnagement* on a set of year-month dummies. The vertical lines indicate the official start of the peace process with FARC, and the start of the second Santos government. Polls source: http://colombiareports.com/santos-approval-rating-at-44-says-colombias-most-optimistic-pollster/

Santos's political stance regarding FARC is stable), and estimate the following regression equation:

$$aUribe_i = \alpha + \boldsymbol{\beta} X_i + \varepsilon_i$$

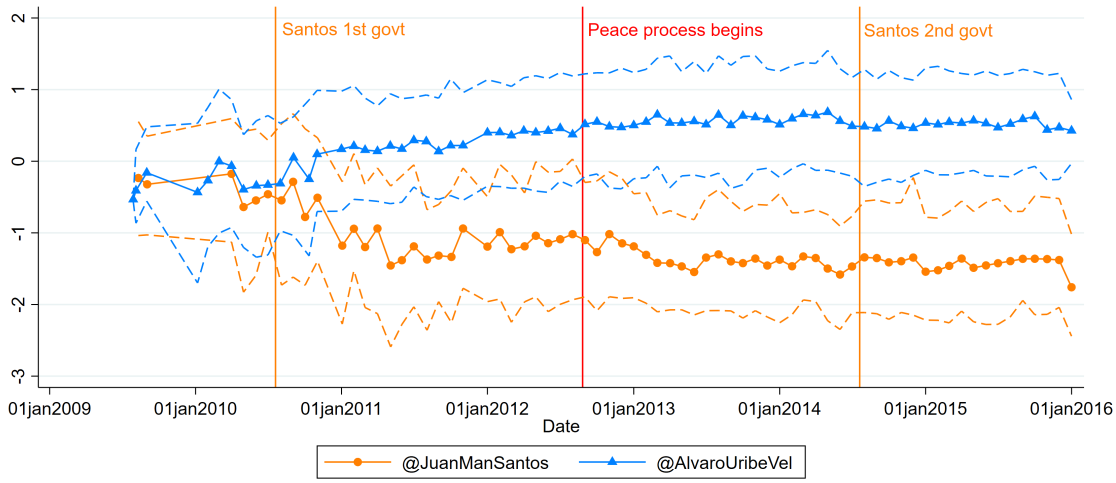
where $aUribe_i$ is an indicator variable equal to one if tweet i was written by Uribe. This estimation results in $\hat{\boldsymbol{\beta}}$, a vector of coefficients of dimension J. Note that if word j is more frequently used by Uribe relative to Santos, the estimated $\hat{\beta}_j$ coefficient will be positive, and vice versa.

I then define the political leaning index for *each* tweet in the database as:

$$polLanguage_i = \hat{\alpha} + \hat{\boldsymbol{\beta}} X_i$$

such that if tweet i uses language similar to Uribe's, $polLanguage_i$ will tend to be positive, and if tweet i uses language similar to Santos's, it will be negative. The index is standardized to have mean zero and standard deviation one. Figure A10 shows the histogram of the estimated political language for the tweets of the leaders. A clear separation is visible between the distributions of the two politicians, indicating that i) the language they use on Twitter is distinct from each other, and that ii) the procedure employed is able to capture these differences. The clear separation between the language used by the two leaders is also apparent over time (figure 4). The time-series of their political language shown is consistent with the historical context and reveals the political divergence between San-

Figure 4: Political language index of leaders across time



Notes: The graph shows the monthly average political language index for each leader across time, as well as the 90th and 10th percentile value for each month. The vertical lines indicate the start of the first Santos government, the official start of the peace process with FARC, and the start of the second Santos government, respectively.

tos and Uribe as dicussed in section 2. Additional descriptive statistics are shown in the online appendix.

4.3 Congressional votes

The main dependent variable measures politicians' alignment with the incumbent (or ruling) party in the Colombian congress, as a proxy for the *policy distance* between legislators and the incumbent party. Using the website *congresovisible.org*, which contains information on congressional votes, I compiled datasets for congressional votes occurring between 2006 and 2015.[23] The dataset includes over 11,600 congressional votes and 780,000 individual votes by over 650 legislators. Summary and descriptive evidence are presented in the online appendix.

The *Partido de la U* (Uribe's former and Santos's party) is defined as the incumbent party throughout the period of study. I define the following variables to quantify these votes: i) *voteValue* is defined as 1 if approve, 0 if abstained, -1 if reject; and ii) *voteWithX* is defined as 1 if the vote matched the majority of X votes, and 0 otherwise, where X is a subset of all politicians. I consider an abstention to be a negative vote in this case.[24] In particular, I define this as:

[23]Most of the votes available through Congreso Visible occur starting with the second Uribe government in 2006. The only votes removed by this restriction are 28 votes that occurred in 2002 and 2003, and there is no data available for 2004 and 2005.

[24]Defining an abstention as supporting or rejecting a vote depending on the position of politicians' own party yields similar results for the main analyses.

$$voteWithX_{iv} = \mathbb{1}(voteValue_{iv} \leq 0) \, * \, \mathbb{1}(\sum_{\forall j \in X_v} voteValue_{vj} \leq 0) +$$
$$\mathbb{1}(voteValue_{iv} > 0) \, * \, \mathbb{1}(\sum_{\forall j \in X_v} voteValue_j > 0)$$

For individual vote i and congressional vote v. The main outcome of interest will be alignment with the incumbent party, *voteWithPU*.[25]

The *Polo Democratico* party, is the strongest left-wing party in Colombia and it generally did not vote with the ruling party during the period of study (see online appendix). After the legislative elections of 2014, the *Centro Democratico* (Uribe's new party and an "extreme right" party), also tends to vote against the ruling party. The tendency of legislators to vote with these "polar" parties over the period of study provides a proxy for their ideological position and can be used to evaluate whether the effects are heterogeneous across this dimension (as suggested by the conceptual framework). I create a simple measure of left-right ideology equal to the share of votes aligned with the right-wing party (Centro Democrático) minus the share of votes aligned with the left-wing party (Polo Democrático) at the legislator level, and normalized around the median legislator at zero.[26]

5 Empirical strategies

5.1 Event study design: The effect of rebel attacks on legislative alignment

To study the effect of rebel attacks on politicians' votes in congress, I first use an event study framework which exploits the frequency of the voting data and the unexpected timing of the rebel attacks (I discuss the timing of attacks below). Estimating these effects is challenging given that there are many attacks throughout the period of study (recall figure 2), and that FARC's actions are likely to be correlated with government policy positions. Due to these challenges, I focus on the short-run effect of these attacks, by comparing the behaviour of politicians just before, with that just after an attack. In particular, I estimate the following regression:

$$\begin{aligned} voteWithPU_{ipuvt} = & \alpha + \sum_{t=-12,-9,\ldots}^{15} \beta_t daysSinceAttack_t + \\ & \gamma_p + \theta^t F(t) + \theta^u T_u + \theta^v X_v + \varepsilon_{iptuv} \end{aligned} \tag{1}$$

[25]In the appendix I extend the main analysis by breaking up this definition and looking directly at *voteValue* as a dependent variable.

[26]For legislators who are not in office during the last government (2014-2018), the share of votes for CD is imputed as the mean of all other legislators. Mapping this to the conceptual framework, the left-right index can be thought of as a measure of the chosen policy position x_j^* of these politicians. Since x_j^* is a weighted average of x_{Vj} and x_I, but x_I is common across all legislators, heterogeneity in the left-right index captures heterogeneity in the bliss point of constituents x_{Vj}.

for individual vote i, politician p, political party u, congressional vote v, on day t.

The data is inherently noisy due to the nature of the voting process: votes do not occur every day, congressional votes across days may pertain different issues, and not all politicians vote on every congressional vote. To alleviate some of these issues and obtain more precise estimates, the coefficients of interest, β_t, are estimated in grouped three-day bins such that $t = i$ includes days i, $i+1$ and $i+2$. The event-time dummy variable $daysSinceAttack_t$ is equal to one if the vote occurred during the three-day t period, and zero otherwise. The β_t coefficients capture the mean change in politicians' vote-alignment with the incumbent party in the days after an attack, controlling for other determinants of vote-alignment. In the main specification, I set β_{-3} as the excluded coefficient ($\beta_{-3} = 0$), such that other coefficients measure changes with respect to this baseline.

The regression includes politician fixed effects; a function of time $F(t)$ which includes year fixed effects, month fixed effects, day of the week fixed effects, and calendar day (linearly); and party specific linear trends, T_u. Note that $F(t)$ will capture overall trends in government support as well as trends in the overall intensity of FARC attacks. Some specifications also use a vector of vote-level controls X_v which includes dummies for the type of vote (policy vs. procedural), keywords (conflict or non-conflict related votes), and for whether the vote was proposed by a PU member or by a member of the politician's own party.[27] The outcome of interest is alignment with the ruling party (the PU), as defined in section 4. The regression captures the causal effects of interest as long as the error term (ε_{iptuv}) is uncorrelated with the regressors of interest ($daysSinceAttack_t$). I discuss this important assumption in detail in the following subsections.

I do the analysis separately for the pre and post peace process time periods, as this marks the most significant policy shift for the PU. Due to the frequency of attacks and because politicians may be more likely to react to events with more casualties (which are more salient), I limit the analysis throughout to high-casualty events, those with at least three fatalities (in the online appendix, I replicate the main analysis using instead a one or a five casualty threshold)

In addition, the main analysis is restricted to votes which occur in the event-window of a single attack. Since votes which occur near two events will appear in more than one bin, and likely in bins both in the pre-attack and the post-attack period, they have the potential to bias the coefficients of interest towards zero. These votes are excluded from the main analysis (around thirteen percent of votes). That is, votes which have more than one "event dummy" equal to one are dropped, requiring a "clean" event window of 30 days. The sample of isolated attacks comprises 33 events (listed in detail in online

[27]These congressional vote level controls may be *bad controls* (Angrist and Pischke, 2008), in the sense that the types of votes presented to the floor may endogenously change in response to the attacks. I discuss this possibility further in the results section. In addition, in an exercise which estimates bias from unobservables, I use an extended set of vote-level controls (see below).

Table 1: Mean of outcomes around rebel attacks

	Pre-attack	Post-attack	Pre-post diff	Events
	N-only pre + N-both	*N-only post + N-both*		
		Tweet engagement		
Right-wing tweets	2.756	2.832	0.076	All
	N=4233 + 1182	*N=3886 + 1182*		
	2.919	3.059	0.140	Isolated
	N=2581	*N=2156*		
PU tweets	1.420	1.397	-0.023	All
	N=8114+2157	*N=6913+2157*		
	1.523	1.666	0.143	Isolated
	N=5116	*N=3367*		
Other tweets	1.540	1.504	-0.035	All
	N=29504+7448	*N=25064+7448*		
	1.636	1.682	0.046	Isolated
	N=17263	*N=12591*		
		Legislative alignment with PU		
Pre-peace process	0.671	0.708	0.037	All
	N=40295+13672	*N=41499+13672*		
	0.657	0.743	0.086	Isolated
	N=23501	*N=26829*		
Post-peace process	0.693	0.722	0.029	All
	N=39405+10715	*N=26674+10715*		
	0.695	0.756	0.061	Isolated
	N=27704	*N=12630*		

Notes: The table provides the mean of the main outcomes of interest around the dates of FARC attacks. *All* events include FARC attacks with 3+ casualties, and *isolated* events are those for which there is at most one event during the event-study window. Some observations (if all events are included) may both precede and follow an attack, the number of overlapping observations are shown as *N-both* — this number, by construction, is equal to zero for the isolated events.

appendix table A6). The main tables show results both with and without this restriction. Standard errors are two-way clustered at the politician and the week level to allow for non-nested correlation in these dimensions (Cameron, Gelbach and Miller, 2012).

Table 1 shows the mean of the main outcomes of interest around the dates of attacks for a one week window, for both all events and isolated events. Even without controls, mean outcomes of engagement and support for the PU appear greater in the weeks after attacks, relative to the weeks before attacks.

5.2 A triple-interaction framework: Heterogeneity across legislators' ideology

To study whether the effects are heterogeneous across the spectrum of politicians' ideology, I pool the entire period of study together and interact pre and post peace process indicators, the left-right ideology index, and event indicators, in a triple-interaction framework. In particular, I study regressions of the following form:

$$\begin{aligned} voteWithPU_{iptuv} = & \beta_0 postAttack_t + \beta_1 postPeaceProcess_t * postAttack_t \\ & + \beta_2 postPeaceProcess_t * LRindex_p + \beta_3 postAttack_t * LRindex_p \\ & + \beta_4 postPeaceProcess_t * postAttack_t * LRindex_p \\ & + \gamma_p + \theta^t F(t) + \theta^u T_u + \theta^v X_v + \varepsilon_{iptuv} \end{aligned} \tag{2}$$

for individual vote i, politician p, political party u, congressional vote v, on day t. Where $postAttack_t$ is an indicator variable equal to one if the vote occurred in the week after an attack, $postPeaceProcess_t$ is an indicator variable equal to one if the vote occurred after the peace process began, and $LRindex_p$ is the left-right index of politician p. The non-interacted $postPeaceProcess_t$ variable is also included in the regression but already partly captured by $F(t)$, thus considered part of this function. The non-interacted $LRindex_p$ is captured by the politician fixed effects γ_p. The $LRindex_p$ is coded both as a dummy variable (below or above median, as shown in figure A6), and a continuous variable, depending on the specification. Some specifications include an *attackWindow* dummy, an indicator variable equal to one if the vote occurred within two weeks of an attack (fully interacted with the other relevant variables), such that the interpretation of the $\boldsymbol{\beta}$ coefficients is changes in alignment relative to the week before the events. As before, the preferred specification restricts the sample to isolated events around a 30-day window of time (consistent with the restriction of the event-study) in which at most one event occurs.

The β_0 coefficient will capture the overall change in alignment with the incumbent in the week after an attack (ie. the rally plus the right-wing support effect) and β_1 will capture the change in the effect after the peace process starts.[28] Of particular interest is coefficient β_4, which will capture the change for politicians who are relatively more right-wing. Following the conceptual framework, the effect of attacks on incumbent alignment will mostly change for these politicians after the peace-process starts, as they are the ones for whom now the rally and the right-wing effects tend to go in opposite directions. On the other hand, for politicians who remain left of the incumbent, the two effects affect the policy distance in the same direction in both periods, despite the relative change in the policy position of the incumbent party.

5.3 Threats to identification

The empirical strategies presented assume that, conditional on the sets of controls, the timing of attacks by FARC are not correlated with unobserved factors which affect the patterns of voting in the Colombian congress in the short-run (when the effects are identified). In particular, I treat the specific timing of the attacks as exogenous with respect to

[28]Under some assumptions, it can also be shown that this is equivalent to the right-wing effect times -2.

vote-alignment with the incumbent party in the legislature. Two specific concerns would be that i) FARC attacks occur in anticipation of congressional voting patterns, or ii) that FARC plan attacks in order to *influence* voting in congress (which could lead to biased results). Such short-run strategic timing in military operations has been documented, for instance, for the Israeli army in Durante and Zhuravskaya (2017). I present evidence suggesting that the military capacity of FARC rebels is actually closer to that of Palestinian militants (for whom Durante and Zhuravskaya, 2017, find no such patterns).

Though FARC's general strategy and direction are dictated from the top of the organization, the precise planning and carrying out of specific attacks respond mostly to local economic factors (Angrist and Kugler, 2008; Dube and Vargas, 2013; Wright, 2016) and military opportunities (Spencer, 2011). The latter is especially true of the period of study, in which Uribe's aggressive campaign against the group, including the modernization of the military and the implementation of new strategies, forced FARC to adopt more defensive military tactics, retreating deeper into the jungle and relying on refuge in Venezuela and Ecuador (Spencer, 2011; Delgado, 2015; Martínez, 2017). FARC's intelligence is also highly decentralized:

> "The bloc mounts attacks if leaders determine that they are feasible at minimal risk. FARC 'campaigns' thus are sums of decentralized tactical actions, not integrated operations. They reflect only very general strategic goals. The intelligence required correspondingly also is mainly tactical military in nature." (Gentry and Spencer, 2010, p.458)

Note also that the results (to be shown in detail below) suggest that attacks by FARC increased support for the right-wing government when in power. It could be the case that FARC aimed to influence policy and succeeded (it wanted to increase right-wing support). However, such a strategy is not consistent with the group's military and political goals (Spencer, 2011; Zambrano and Zuleta, 2017). Furthermore, rogue units were extremely rare (Spencer, 2011). In addition, it is not clear that FARC's military and organizational capabilities would allow for such a strategy to be as sustained as to produce the statistical patterns I present below, much less a strategy as perplexing as the one described. Overall, these considerations suggest that the very precise timing of FARC attacks is unlikely to be related to events in the Colombian legislature.

In addition to this qualitative evidence, I perform a series of quantitative exercises to further the argument presented here. First, as a balance test, in table 2 I show mean differences in outcomes between congressional votes which occurred the week prior to attacks relative to the week following attacks. Specifically, I run regressions of the form:

$$Y_{vt} = \alpha + \beta_1 preAttack_{vt} + \beta_2 postAttack_{vt} + \varepsilon_{vt} \quad (3)$$

where Y_{vt} is a congressional-vote level characteristic, and $preAttack_{vt}$ and $postAttack_{vt}$ are dummy variables indicating whether the vote took place the week before or the week after an attack with at least three casualties (a restriction consistent with the main empirical analysis). This analysis is done at the congressional-vote level (N=11,666). Column 7 of table 2 tests for differences between the corresponding two coefficients. I find statistically significant differences in only 3 out of 51 outcomes.

There are three possible interpretations for these differences: i) type I errors, ii) differences due to deliberate timing of attacks by FARC, and iii) differences due to strategic manipulation of the legislative agenda by politicians. If ii) was the case, these differences would be likely to persist regardless of the casualty threshold restriction, however, these differences are not significant for FARC attacks with at least one casualty,[29] suggesting that these congressional-vote characteristics are not systematically correlated with FARC actions. Interpretation i) is very plausible given the number of tests. In fact, none of the differences are statistically significant using the Bonferroni correction for multiple comparisons. I further discuss interpretation iii) in the results section.

In a complementary exercise to further study the possibility of FARC attacks being deliberately timed, I also examine which congressional-vote characteristics are associated with the occurrence of an attack. I examine vote characteristics in the week *preceding* events by examining regressions of the following form:

$$Y_{vt} = \alpha + \beta preAttack_{vt} + \theta^t F(t) + \varepsilon_{vt} \tag{4}$$

The analysis includes a function of time $F(t)$ which includes year fixed effects, month fixed effects, day of the week fixed effects, and calendar day (linearly), as in the baseline regressions.

The results are shown in table A7. Without including time controls, 9 out of 51 outcomes appear statistically significant (at a 95 percent confidence level; but only 1 using the Bonferroni correction for multiple comparisons). Once time controls are included, only 6 out of 51 appear statistically significant (and none using the Bonferroni correction). None of them stand out as being particularly relevant to the FARC, with one important exception, the keyword "terrorist", though this disappears with controls. The direction of the coefficient suggests that FARC attacks were *less* likely to occur following legislative votes with this keyword — which may be consistent with the idea of FARC avoiding actions in sensitive political times to prevent a backlash. Such behaviour may in fact imply that the main estimates I present would be downward biased. I later use the "unbalanced" controls from this analysis in an exercise aimed at bounding the treatment effects by estimating

[29] The p-values are 0.41, 0.41 and 0.12 for "Fifth committee in the senate", "Law project" and "Legislative acts" respectively. Using instead a five-casualty threshold, the p-values are 0.22, 0.57 and 0.1 respectively. The fifth committee is responsible for matters of agriculture, ecology, the environment and natural resources, land management, fishing and maritime affairs, and mining.

Table 2: Congressional-vote characteristics

	cons	se_{cons}	$\beta_{preAttack}$	$se_{preAttack}$	$\beta_{postAttack}$	$se_{preAttack}$	p-value ($\beta_{preAttack} - \beta_{postAttack}$)
Vote group/committee							
Vote in Senate	0.2307	(0.0230)	-0.0069	(0.0446)	-0.0906	(0.0426)	0.189
Vote in Chamber of Reps	0.2765	(0.0206)	0.0051	(0.0468)	0.0095	(0.0560)	0.954
Primera de Senado	0.0927	(0.0136)	0.0835	(0.0523)	0.0262	(0.0313)	0.380
Segunda de Senado	0.0418	(0.0063)	-0.0170	(0.0111)	-0.0022	(0.0124)	0.394
Tercera de Senado	0.0211	(0.0036)	-0.0087	(0.0070)	0.0097	(0.0128)	0.255
Cuarta de Senado	0.0158	(0.0043)	-0.0124	(0.0038)	-0.0119	(0.0041)	0.817
Quinta de Senado	0.0279	(0.0073)	-0.0232	(0.0077)	0.0061	(0.0132)	0.054*
Sexta de Senado	0.0374	(0.0068)	-0.0070	(0.0119)	0.0066	(0.0195)	0.548
Séptima de Senado	0.0348	(0.0149)	-0.0117	(0.0183)	0.0149	(0.0327)	0.493
Primera de Cámara	0.1136	(0.0142)	0.0560	(0.0525)	-0.0297	(0.0284)	0.195
Segunda de Cámara	0.0430	(0.0065)	-0.0270	(0.0093)	0.0039	(0.0153)	0.107
Tercera de Cámara	0.0354	(0.0053)	-0.0007	(0.0131)	-0.0065	(0.0142)	0.786
Cuarta de Cámara	0.0211	(0.0041)	-0.0215	(0.0050)	0.0059	(0.0174)	0.184
Quinta de Cámara	0.0241	(0.0068)	0.0082	(0.0207)	0.0173	(0.0219)	0.782
Sexta de Cámara	0.0348	(0.0072)	-0.0025	(0.0226)	0.0243	(0.0236)	0.467
Séptima de Cámara	0.0416	(0.0092)	-0.0145	(0.0156)	0.0104	(0.0295)	0.500
Vote statistics							
Number of Votes	44.5853	(2.3146)	0.0706	(4.2694)	-7.0187	(3.8431)	0.190
Number of Abstentions	27.2763	(1.6806)	-1.3528	(2.9459)	-4.8212	(2.9862)	0.399
Percent of Abstentions	0.3218	(0.0064)	-0.0030	(0.0131)	-0.0172	(0.0152)	0.505
Vote type							
Votación Proyecto de Ley	0.4072	(0.0260)	-0.0799	(0.0352)	0.0311	(0.0502)	0.061*
Votación Acto Legislativo	0.0778	(0.0126)	0.0692	(0.0429)	-0.0328	(0.0218)	0.036**
Votación Proposiciones	0.2008	(0.0195)	-0.0227	(0.0334)	-0.0550	(0.0285)	0.417
Votación Impedimentos	0.1384	(0.0160)	0.0679	(0.0394)	0.0554	(0.0516)	0.852
Votación Orden del Día	0.0559	(0.0073)	-0.0249	(0.0107)	-0.0180	(0.0110)	0.633
Votación Otros Asuntos	0.0269	(0.0049)	-0.0127	(0.0054)	-0.0076	(0.0063)	0.421
Votación Sesión Permanente	0.0121	(0.0034)	-0.0044	(0.0052)	-0.0034	(0.0045)	0.877
Vote keywords							
Keyword Militar	0.0286	(0.0127)	0.0370	(0.0459)	-0.0136	(0.0168)	0.357
Keyword Salud	0.0573	(0.0203)	-0.0499	(0.0197)	0.0021	(0.0362)	0.186
Keyword Paz	0.0127	(0.0041)	0.0018	(0.0075)	-0.0057	(0.0055)	0.276
Keyword TLC	0.0036	(0.0012)	0.0093	(0.0088)	0.0211	(0.0167)	0.590
Keyword Justicia	0.0422	(0.0115)	0.0583	(0.0451)	-0.0106	(0.0210)	0.173
Keyword Víctimas	0.0100	(0.0052)	0.0011	(0.0090)	0.0130	(0.0178)	0.576
Keyword Infraestructura	0.0080	(0.0037)	-0.0028	(0.0045)	-0.0039	(0.0042)	0.831
Keyword Tributaria	0.0424	(0.0269)	-0.0298	(0.0226)	-0.0372	(0.0232)	0.279
Keyword Empleo	0.0057	(0.0043)	-0.0051	(0.0036)	-0.0036	(0.0038)	0.278
Keyword Educación	0.0051	(0.0018)	0.0074	(0.0082)	0.0052	(0.0062)	0.849
Keyword Terrorista	0.0040	(0.0019)	-0.0034	(0.0016)	-0.0034	(0.0016)	0.838
Keyword Social	0.0075	(0.0032)	-0.0022	(0.0035)	0.0064	(0.0066)	0.245
Keyword Corrupción	0.0102	(0.0033)	0.0063	(0.0109)	-0.0021	(0.0093)	0.604
Keyword Transporte	0.0047	(0.0016)	0.0021	(0.0042)	0.0016	(0.0037)	0.947
Keyword Televisión	0.0080	(0.0039)	-0.0034	(0.0046)	-0.0074	(0.0034)	0.307
Keyword Servicios	0.0065	(0.0017)	0.0039	(0.0043)	-0.0041	(0.0023)	0.116
Keyword Equilibrio	0.0640	(0.0197)	-0.0116	(0.0334)	-0.0332	(0.0270)	0.616
Keyword Penitenciario	0.0031	(0.0016)	0.0072	(0.0075)	0.0000	(0.0037)	0.388
Vote proposer (by party)							
Partido Liberal	0.0740	(0.0070)	0.0250	(0.0201)	0.0043	(0.0189)	0.495
Partido Cambio Radical	0.0313	(0.0047)	-0.0025	(0.0085)	0.0187	(0.0177)	0.335
Partido Conservador	0.0689	(0.0075)	-0.0092	(0.0109)	-0.0024	(0.0132)	0.694
Partido de la U	0.0828	(0.0071)	-0.0031	(0.0200)	0.0645	(0.0392)	0.164
Polo Democrático Alternativo	0.0406	(0.0048)	0.0178	(0.0198)	-0.0131	(0.0092)	0.199
Centro Democrático	0.0244	(0.0056)	0.0052	(0.0099)	0.0004	(0.0100)	0.742
No proposer	0.6783	(0.0211)	-0.0331	(0.0424)	-0.0781	(0.0575)	0.552

Notes: The table shows the conditional correlations of vote characteristics and timing of events. Each row corresponds to a regression of vote characteristic as an outcome, on week-before and week-after dummy variables (columns 3 and 5). N=11,666 for all regressions except *Vote statistics*, see Table A1.

potential omitted variable bias.

I also repeat the analysis using data from Twitter, looking at the volume of legislators' tweets in the week preceding the events, as well as a set of keywords (selected to match those from the legislative agenda). None of these variables appear to be significantly correlated with FARC actions (Table A25).

Though there appears to be no evidence for strategic timing of FARC attacks along these observable dimensions, unobservable selection arising from rebel behaviour may still bias the coefficients estimated. To more directly address concerns over omitted variable bias, in section 6.7 I follow Oster (2019) and use the sensitivity of the estimated coefficients to added controls to assess the potential for bias due to unobservables. I present an extended empirical framework in which unobservable factors affect legislative behaviour and the timing of FARC attacks to illustrate the methodology and I estimate bias-adjusted treatment effects. Importantly, the treatment effects are remarkably stable relative to changes in R-squared movements when adding observable controls. The exercise suggests that the potential bias due to unobservables is small (and this is particularly true before the peace process started).

Finally, in the online appendix I perform two additional exercises. I discuss and evaluate the possibility that FARC coordinate attacks across locations by examining the covariance matrix of events (based on ideas from Trebbi and Weese, 2019) and do not find strong evidence of this. Second, in a similar exercise to the one shown above, I find that congressional-vote characteristics do not appear significantly correlated with the *exact* days in which attacks occur. These findings are consistent with the idea that FARC intelligence is decentralized and again suggests that their actions are not correlated to events in the Colombian congress in the short-run.

6 Empirical analysis and results

6.1 Effect of rebel attacks on tweet engagement

Before investigating whether attacks by the rebel group affect politicians' voting behaviour in congress, I investigate whether Twitter users respond to these attacks. I examine these relationships in the very short-run, by analyzing the effect of high-casualty attacks by the rebel group (more than three fatalities) on tweet engagement, for tweets from incumbent politicians (PU), and for right-leaning tweets. I estimate an event study regression similar to the one outlined in equation 1.[30]

[30]More precisely:

$$tweetEngagement_{ipt} = \alpha + \sum_{t=-12,-9,\ldots}^{15} \beta_t daysSinceAttack_t + \gamma_p + \theta^t F(t) + \theta^u T_u + \varepsilon_{ipt} \quad (5)$$

The results of these regressions are shown in figure 5. The coefficients estimated suggest that tweets from PU members received about 12 percent more engagement (top), and right-leaning tweets received about 30 percent more engagement (middle) in the three days after an attack by FARC, relative to the three days before the attack occurred.[31] An analogous regression on all other (non-PU, non-"right-wing") tweets revealed no overall spike in activity (bottom). The response of Twitter users suggests that support for both the incumbent party and for right-leaning messages increased following attacks by the rebel group.[32] Furthermore, the strong initial reaction seemed to dissipate quite rapidly.

6.2 Effect of rebel attacks on vote alignment with the ruling party

Data on tweet engagement suggests that both incumbent politicians and right-wing views experienced a short-run boost in support following attacks by the rebel group. Next, I investigate whether politicians themselves changed their behaviour as a response, specifically, whether rebel attacks affected the behaviour of legislators.

Figure 6 shows the results from the event study specification outlined in section 5 (equation 1). A clear pattern is evident in these specifications. Before the peace process started (top figure), vote alignment with the ruling party increased by around 25 percentage points in the three days following an attack, relative to the three days before. The effect then weakens progressively. In the post-peace process period (middle figure), however, the coefficients are considerably smaller and most are not statistically different from zero. Finally, I run a specification which pools all pre and post votes and test for the difference in coefficients by interacting the event-time dummies with a post-peace process dummy. The differences in the coefficients (bottom figure) show that there is a statistically significant difference in the short-run reaction from these attacks, as suggested by the conceptual framework.[33]

The results of this section suggest that, following attacks by the rebel group, the *rally 'round the flag* effect shaped legislator behaviour, as observed by increased alignment with the ruling party. The fact that the effect weakens in the post-peace process period is explained by the shift in the policy position of the government, from a *hard-line* right-wing position, to a *concessionary* left-leaning position. The post-peace process results suggest that the increased right-wing support effect reduced the overall effect after the incumbent

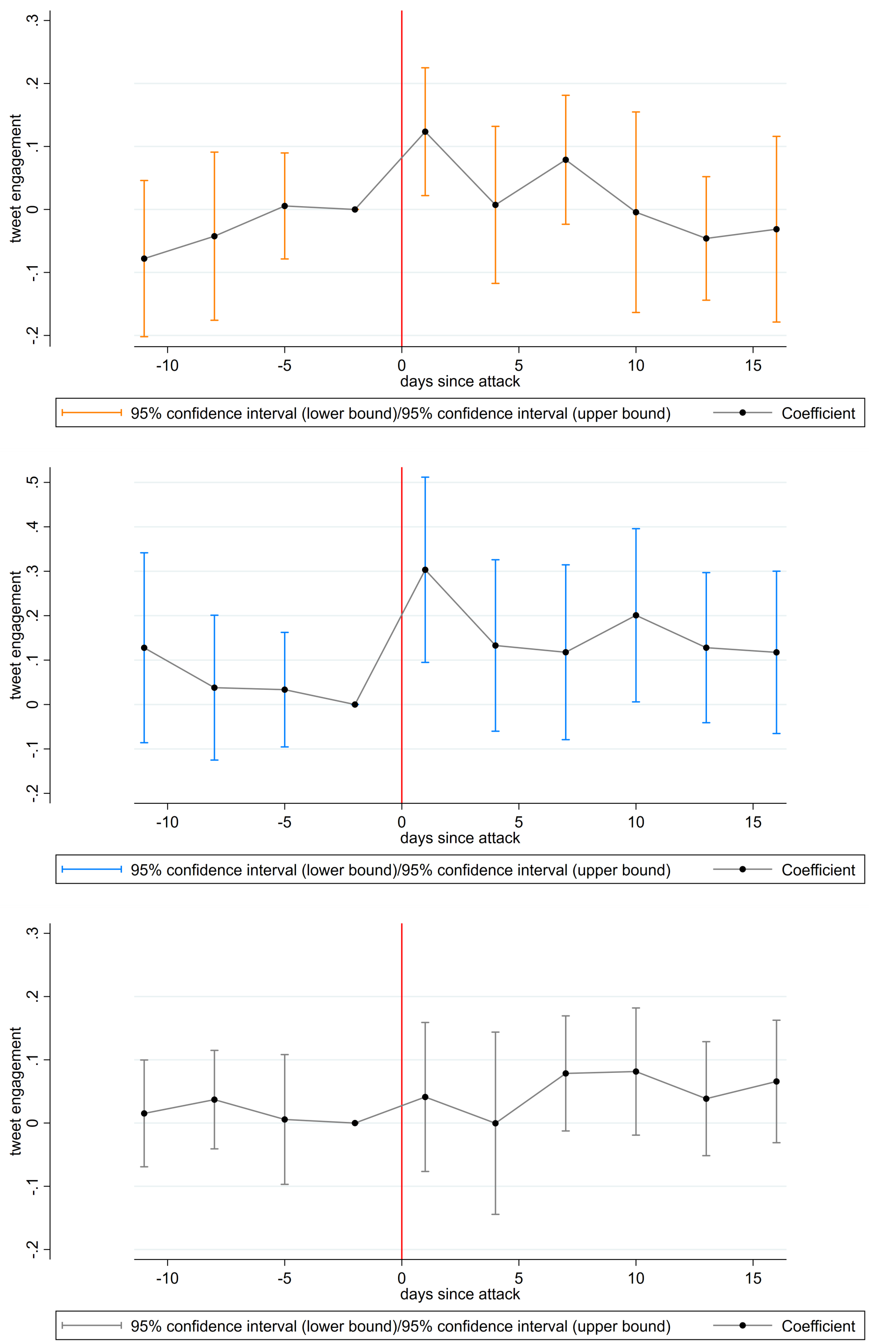
for tweet i, politician p, on day t. The regression includes politician fixed effects and a flexible function of time to capture non-linear trends in Twitter activity.

[31] I also find a positive but small and insignificant effect on the computed political language index, that is, following FARC attacks politicians' language became (slightly) more "right-wing" (not shown). To some extent, the public itself may respond to these attacks due to influence from their representatives. Carlsson, Dahl and Rooth (2016) presents evidence of public attitudes changing in the years following elections depending on the politicians elected to office. However, given the very short-run nature of the analysis I present (over days), the extent to which these responses may be driven by influence from politicians is likely to be limited.

[32] Note that this is despite the fact that most of these tweets were published after the peace process started, when the incumbent party had a left-wing policy position. Unfortunately, the pre-peace process sample is not large enough to split this part of the analysis.

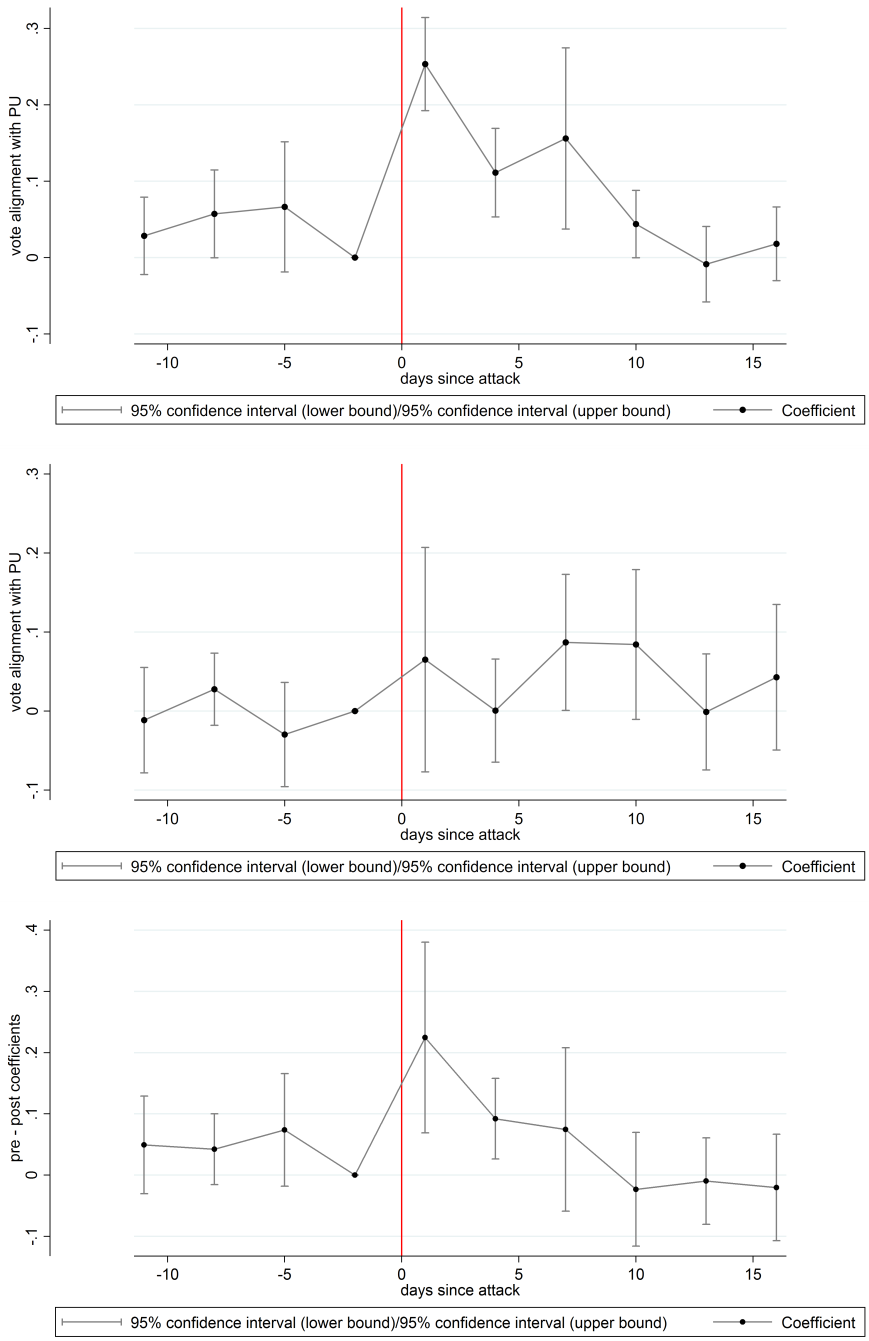
[33] Based on the conceptual framework, the difference in these coefficients can be interpreted as capturing (two times) the magnitude of the right-wing effect. I estimate the relative size of the two effects in the online appendix.

Figure 5: Event study: Effect of FARC attacks on tweet engagement



Notes: The figure illustrates the resulting coefficients from the event study design specification for tweets from the incumbent party (top), the 10 percent most right-leaning tweets (middle) and all other tweets (bottom). The regression includes politician fixed effects and a function of time as outlined in section 5. Coefficients are estimated in three-day bins. Events include all FARC attacks with at least three casualties, and the sample is restricted to tweets which occur only within the event window of at most one attack. Standard errors are two-way clustered at the politician and week level.

Figure 6: Event study: Effect of FARC attacks on vote alignment with the ruling party



Notes: The figure illustrates the resulting coefficients from the event study design specification for the pre-peace process period (top) and the post-peace process period (middle). The regression includes politician fixed effects and a function of time as outlined in section 5. Coefficients are estimated in three-day bins. Events include all FARC attacks with at least three casualties, and the sample is restricted to votes which occur only within the event window of at most one attack. The bottom figure shows the difference between the post-peace process and pre-peace process coefficients, computed by running a pooled regression and interacting the three-day bins with a post-peace process dummy. Standard errors are two-way clustered at the politician and week level, 95% confidence intervals shown.

government changed its policy position. In the online appendix I show results from an alternative model that does not define the event-time dummies, but simply compares vote alignment after and before attacks, for a one week window around the events and looking at a wider set of specifications, as well as a series of robustness checks and other empirical extensions.

6.3 Public attention and duration of the effects

The dynamics of the effects, both on Twitter and in congress (pre-peace process), tend to be relatively consistent. The study shows a sharp spike of support (for the incumbent party in congress pre-peace process, and for both the incumbent and right-wing tweets on Twitter) in the days just after the events, which dissipated quickly thereafter and returned to the pre-event levels in less than two weeks.[34] Salience of the events is an important mechanism through which these effects arise. If legislators and the public do not learn about these events, we would not expect to see reactions. The Global Terrorism Database is comprised of events which were covered in the media in the days soon after the events, and therefore capture this important dimension of the attacks. I examine here whether the dynamics of public attention are also consistent with the effects observed.

I first use data from Google Trends to examine public reactions by using volume of Google searches (measured from 0-100) for "FARC Attack" ("Ataque FARC") as an outcome.[35] In addition, I also use the Twitter dataset to see whether legislators mentioned these events in their tweets. The results are shown in figure 7. The patterns observed in these analyses are similar to those of the event-study exercises above, suggesting that the attention that these events captured also tended to be short-lived. In addition, I observe no pre-event changes in attention, suggesting that the attacks were indeed unanticipated by legislators and the public.

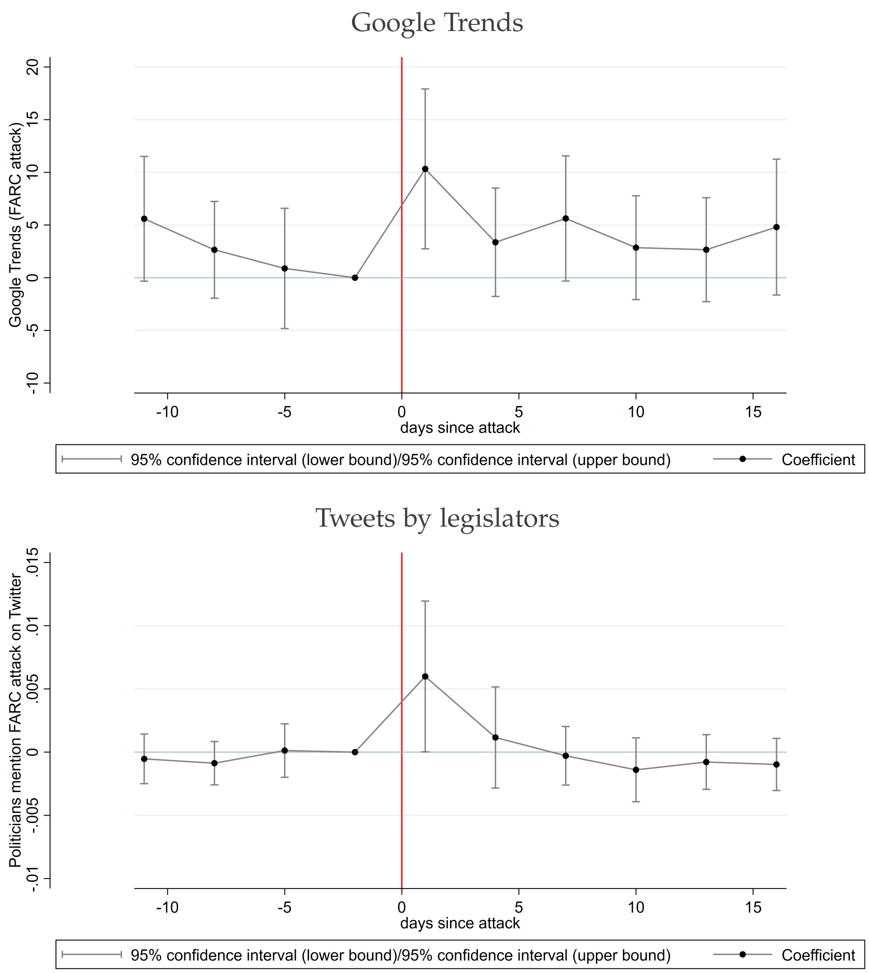
The dynamics of attention appear also consistent with those of terrorist attacks in other contexts. Figure 8 shows Google search volume for three major terrorist events (London 2005, Paris 2015 and Orlando 2016) and one FARC attack in Colombia (Cauca 2015), for comparison. The dynamics of public interest for these events are consistent with the effects I document: a sharp spike which quickly dissipates and lasts in total less than two weeks. These dynamics are also consistent with those found by studies in other settings (Willer, 2004; Clark, Doyle and Stancanelli, 2020; Krakowski, Morales and Sandu, 2020).[36]

[34] In the online appendix I further study these dynamics by grouping the event-study coefficients in short-run, medium-run, and long-run estimates.

[35] Google Trends data is normalized to 100 on the days of highest attention within the search window. I collected Google Trends data in rolling windows to get daily variation on public attention. The results shown use the raw data, however, with overlapping windows the data can be re-normalized. The results with the re-normalized data are indistinguishable from the ones presented here (as the time fixed effects partly absorb such a normalization).

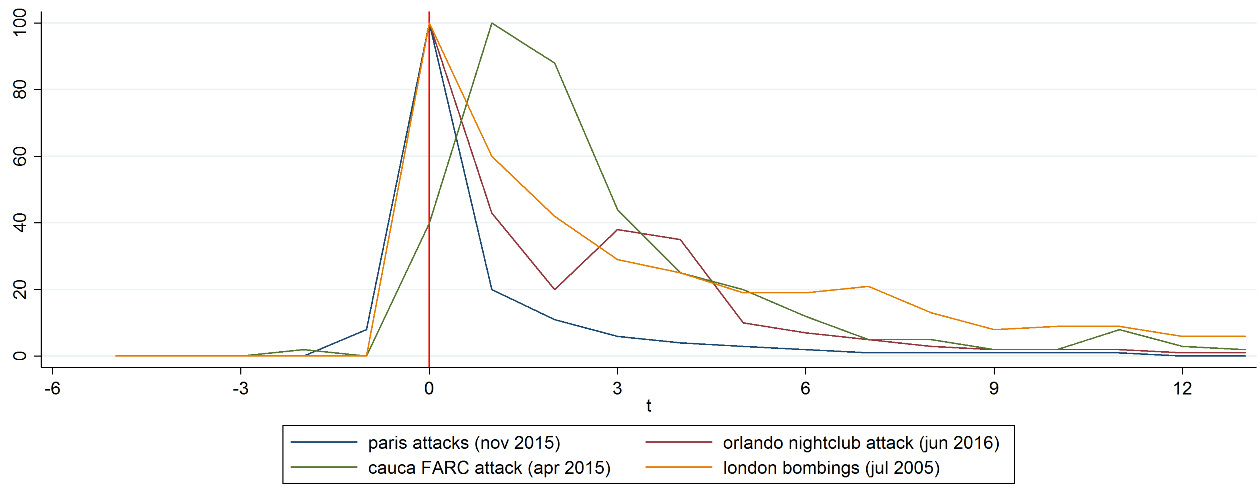
[36] Willer (2004) studies the duration of the effect of government-issued terror warnings on approval ratings and finds suggestive

Figure 7: Event study: Effect of FARC attacks on public attention



Notes: The figure illustrates the resulting coefficients from the event study design specification on attention from Google Trends and Twitter data. Outcome is volume of Google Trends (measured from 0-100) for “FARC Attack” (“Ataque FARC”), and legislators mentions of the events on Twitter (tweets that mention both "FARC" and "Attack"). Coefficients are estimated in three-day bins. Events include all FARC attacks with at least three casualties, and the sample is restricted to days which occur only within the event window of at most one attack. Standard errors are clustered at the week level.

Figure 8: Dynamics of public interest: google trends and attacks



Notes: The figure shows Google search volume for one major FARC attack in Colombia (Cauca 2015), and three other terrorist attacks (London 2005, Paris 2015 and Orlando 2016). Google trends data is normalized around the date of highest search volume (set at 100). I restrict the search criteria to the month of each event. See https://trends.google.com/trends/.

6.4 Heterogeneity across legislators' ideological position

One additional testable implication from the conceptual framework is that the difference in the effects between the pre and post peace process periods will be larger for politicians representing voters who are relatively more right-wing (*Proposition 3*). This section studies whether the effects documented are heterogeneous across the estimated ideological position of politicians (which recall is conceptually a weighted average of the incumbent party's and their constituents' bliss points). In particular, whether the changes in the magnitude of the effects, from the pre-peace process to the post-peace process period, is larger for relatively more right-wing politicians. As the policy position of the incumbent shifts from the right to the left, it is precisely for relatively more right-wing legislators for whom the right-wing support effect would now push them away from the incumbents' new left-leaning position.

To analyze this hypothesis, I interact the continuous left-right index with dummy indicators for whether the votes occurred in the week just after the attacks, and dummy indicators for post-peace process, as outlined in equation 2.[37] The results are presented in table 3. Note first that the main effect, as captured by the coefficient on the post-attack

evidence that the effects are "of relatively short duration", but that in general they do not persist for more than two weeks. Clark, Doyle and Stancanelli (2020) studies the effects of the Boston Marathon bombing on individual well-being and find that the effects do not persist for more than one week. Krakowski, Morales and Sandu (2020) study the effect of a political assassination on public opinion and find that the effects dissipate after two weeks.

[37]The attack-window dummies are indicators for whether the vote occurs in a two-week window around the event. Including these dummies may capture some omitted variables but also allows us to interpret the coefficients presented as the change in alignment relative to the week before the attack. These dummies are not shown in the tables for brevity, but they are small and not statistically significant in almost all specifications. This pattern is also reassuring in that it indicates that there are no significant changes in voting alignment in the week just before attacks.

dummy (row 1), is statistically significant and robust across specifications. Second, the effect weakened in the post-peace process period, though the overall difference is not always statistically significant for the one-week post-attack (row 2, post-attack x post-peace process). These coefficients are relatively large but imprecisely estimated. The results also suggest that there is heterogeneity in the main effect, with right-wing legislators being overall more responsive to the events (row 3), though these are not always statistically significant. Note that this particular heterogeneity is not addressed by the conceptual framework, and is instead an empirical finding suggesting that the magnitude of the effect is on average larger for these legislators.[38]

Table 3: Effect of FARC attacks on vote alignment with ruling party, one week after attacks, heterogeneity by legislators' ideology

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Post-attack, 3+ caslts.	0.0700***	0.101***	0.140***	0.132***	0.134***	0.137***	
	(0.0187)	(0.0367)	(0.0275)	(0.0320)	(0.0313)	(0.0333)	
Post-attack x post peace process	-0.0502	-0.0435	-0.0909*	-0.0757	-0.101**	-0.0605	
	(0.0320)	(0.0600)	(0.0494)	(0.0505)	(0.0418)	(0.0517)	
Post-attack x LRindex	0.340**	0.378	0.539***	0.491*	0.493	0.262	0.513*
	(0.165)	(0.254)	(0.185)	(0.287)	(0.335)	(0.369)	(0.298)
Post-attack x LRindex x post PP	-0.603**	-0.772	-1.018***	-0.881***	-1.190**	-0.915**	-0.896***
	(0.299)	(0.510)	(0.256)	(0.336)	(0.514)	(0.401)	(0.336)
N	781076	674318	674316	674316	620544	152385	674316
N. politicians	666	662	662	662	597	60	662
Politician FE	no	no	yes	yes	yes	yes	no
Day FE	no	no	no	no	no	no	yes
Attack window dummies	no	yes	no	yes	yes	yes	yes
Isolated events	no	yes	yes	yes	yes	yes	yes
Time function	no	no	yes	yes	yes	yes	no
Party trends	no	no	yes	yes	yes	yes	yes
Exclude polar parties (PD and CD)	no	no	no	no	yes	no	no
Only always in office	no	no	no	no	no	yes	no
Politician x period FE	no	no	no	no	no	no	yes

Notes: Estimates from the triple-interaction specification where the dependent variable is alignment with the ruling party. Column 1 includes no controls or fixed effects. Column 2 includes a dummy for the two-week window around the event and restricts the sample to isolated events. Column 3 includes politician fixed effects and a function of time as outlined in section 4. Column 5 removes politicians from the main polar parties, the left-wing Polo Democratico, and the right-wing Centro Democratico (alignment with these parties is used to measure the left-right index). Column 6 restricts the sample to only politicians who are in office during the entire period of study (elected for 2006-2018). Column 7 includes politician x period (pre or post peace process) specific fixed effects and day fixed effects. Two-way clustered standard errors at the politician and week level in parentheses.

Most importantly, the reduction in the magnitude of the effect is larger and statistically significant for relatively more right-wing legislators (row 4). This finding is consistent with and predicted by the conceptual framework. The coefficients in the preferred specification (column 4) suggest that a legislator one standard deviation to the right of the median (0.13 units in the left-right index) increased his alignment with the incumbent party by about 19 percentage points in the week just after an attack, relative to the week just before ($0.132 + 0.13*0.491 = 0.1958$), in the pre-peace process period. On the other hand, in the

[38]If for instance, right-wing voters tended to shift their preferred policy position to the right more than left-wing voters following an attack (the right-wing support effect), then we would observe this.

post-peace process period, the legislator increased his alignment with the incumbent by just 0.5 percentage points (0.132 + 0.13*0.491 - 0.0757 - 0.13*0.881 = 0.0056). This pattern is relatively unchanged if legislators from the two polar parties used to measure the left-right index (the PD and the CD) are removed from the sample (column 5), or if the sample is restricted to only legislators who were in office during the entire period of study (column 6). The last specification includes politician-period fixed effects and day fixed effects, allowing only for the identification of the relative change in alignment for relatively more right-wing politicians (column 7). The results are robust to the inclusion of these fixed effects. Additional robustness checks are shown in table A12, which include a series of sample restrictions, using a dummy variable for the left-right index, excluding sensitive political times (before legislative elections and the announcement of the peace process) and the inclusion of congressional vote-level controls.

Consistent with the conceptual framework, the overall effect weakened after the peace process started, but especially so for relatively more right-wing legislators, for whom the two forces, the *rally* and the right-wing support effect, had opposing directions. In the next section I perform a complementary exercise but instead of using the two time periods (pre and post peace process) to evaluate the heterogeneity depending on the incumbent position, I use the language in president Santos's tweets as a continuous measure of the party's position.

6.5 Twitter language as proxy for incumbent's political position

I have so far separated the analysis in pre and post peace process periods, as the start of the negotiations with FARC marked the most significant shift in the policy position of the PU since the party's inception (Acosta, 2015). This section examines whether changes in the incumbents' policy position, as measured by Twitter language, also map into heterogeneous responses to rebel attacks. To do so, I restrict the analysis to only the Santos government and use the political language index of the president's tweets as a measure of the political position of his party. Though this is a potentially endogenous measure of political position, changes in the language of the president are a good signal to legislators about the party's position, and can thus be used to evaluate the conceptual framework with a more continuous measure of the incumbent party's position, as an additional empirical exercise. Figure 4 shows this measure (Santos) across time. In particular, I use a monthly measure of the president's political stance.[39] I study regressions of the following

[39]Note that finer time disaggregation will lead to more noise in the measure and exacerbates concerns about endogeneity. In the online appendix, I show that the results are robust to using a lagged measure of the monthly political language index.

form:

$$\begin{aligned} voteWithPU_{iptuv} = {} & \beta_0 polLanguageIncumbent_t + \beta_1 postAttack_t \\ & + \beta_2 polLanguageIncumbent_t * postAttack_t + \gamma_p \\ & + \theta^t F(t) + \theta^u T_u + \theta^v X_v + \varepsilon_{iptuv} \end{aligned} \tag{6}$$

where $polLanguageIncumbent_t$ is the monthly measure of the political language of the president (as proxy for his party's political position) at time t. The coefficient of interest, β_2, captures the heterogeneity of the effect of rebel attacks on political support for the PU, depending on the language of the president. In addition to the baseline estimate shown above, some specifications also include an interaction of the treatment ($postAttack_t$) with a linear trend (to capture the gradual shift of the party's position to the left and other potential changes in the political environment), as a control, as well as an interaction with a post-peace process indicator.[40] I also study a triple-interaction model, analogous to the regression outlined in equation 2, to estimate heterogeneity across politicians' ideological positions (a testable implication of the conceptual framework).

The results from this analysis are presented in table 4. Column 2 shows the baseline results and reveals that in months in which the president uses a relatively more right-wing language on Twitter, the effects of rebel attacks on political support for his party tend to be larger ($\beta = 0.115$), though this coefficient is not statistically significant. Once we control for the interaction between the post-attack dummy indicator and both the post-peace process indicators and a linear trend (which will capture the broader shift in the incumbent party's position), we see that the interaction with the political language becomes much larger and statistically significant (column 3). Columns 4-9 reveal that, as suggested by the conceptual framework, there is substantial heterogeneity in the reaction to the president's language across politicians' political position. In particular, the estimate on the triple interaction suggests that politicians who are themselves more right-wing decrease their support for the incumbent party differentially as the language of the president moves to the left (positive coefficient in row 5).[41]

The range in the political language index of Santos during his government is of about half a unit, from a high of around zero (-0.0197 in September of 2010) to a low of around -0.5 (-0.5033 in June of 2014). The preferred estimates (column 5) suggest that, in the week following an attack, a neutral politician (left-right index equal to zero) would increase their alignment with the incumbent party by about 12 percentage points when the language of Santos is zero (i.e., more right-wing in relative terms), in-line with the pre-peace

[40] For clarity, the full equation estimated is: $voteWithPU_{iptuv} = \beta_0 polLanguageIncumbent_t + \beta_1 postAttack_t + \beta_2 polLanguageIncumbent_t * postAttack_t + \beta_5 linearTrend_t + \beta_6 linearTrend_t * postAttack_t + \beta_5 postPeaceProcess_t + \beta_6 postPeaceProcess_t * postAttack_t + \gamma_p + \theta^t F(t) + \theta^u T_u + \theta^v X_v + \varepsilon_{iptuv}$

[41] Also note that the differential effect across the language of Santos is robust to the inclusion of a treatment dummy interacted with both a linear trend and a post peace process indicator, and to the inclusion of day fixed effects (columns 6 and 7).

Table 4: Effect of FARC attacks on vote alignment with ruling party, heterogeneity by Twitter political language

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Post-attack, 3+ caslts.	0.0715*	0.104***	-0.0638	0.104***	0.123***	-0.0442		0.0449**	0.207***
	(0.0412)	(0.0181)	(0.0422)	(0.0327)	(0.0191)	(0.0433)		(0.0206)	(0.0205)
Post-attack x Pol. language	0.140	0.115	0.682***	0.223**	0.169	0.740***		-0.0329	0.385***
	(0.107)	(0.114)	(0.255)	(0.0927)	(0.110)	(0.260)		(0.131)	(0.105)
Post-attack x post peace process			-0.223**			-0.223**			
			(0.100)			(0.101)			
Post-attack x LRindex				0.986***	0.833***	0.848***	0.882***		
				(0.347)	(0.114)	(0.107)	(0.123)		
Post-attack x Pol. language x LRindex				2.611***	2.342***	2.474***	2.477***		
				(0.896)	(0.570)	(0.531)	(0.546)		
N	632108	540098	540098	632108	540098	540098	540098	315508	224590
N. politicians	441	441	441	441	441	441	441	221	220
Politician FE	no	yes	yes	no	yes	yes	yes	yes	yes
Day FE	no	no	no	no	no	no	yes	no	no
Attack window dummies	no	yes	yes	no	yes	yes	yes	yes	yes
Isolated events	no	yes	yes	no	yes	yes	yes	yes	yes
Time function	no	yes	yes	no	yes	yes	no	yes	yes
Party trends	no	yes	yes	no	yes	yes	yes	yes	yes
Post-attack x linear trend	no	no	yes	no	no	yes	yes	no	no
Legislators	all	all	all	all	all	all	all	left	right

Notes: Estimates from time-series specification where the dependent variable is alignment with the ruling party and examining heterogeneity by the political language index of president Santos's tweets. Columns 1 includes no controls or fixed effects. Column 2 includes a dummy for the two-week window around the event, restricts the sample to isolated events, includes politician fixed effects and a function of time as outlined in section 4. Column 3 includes a post-attack dummy interacted with both the post-peace process indicator and a linear trend. Columns 3-6 are analogous but include now a interactions with the left-right index. Column 7 includes also day fixed effects. Two-way clustered standard errors at the politician and week level in parentheses.

process estimates throughout the paper. On the other hand, when the language index of Santos is at -0.5 (more concessionary or left-wing), a neutral politician would increase their alignment by only about 4 percentage points (0.123 + (0.169)x(-0.5)) after an attack. For a right-wing legislator (one standard deviation to the right of the median, 0.13 units in the left-right index), the corresponding estimates would be a 23 percentage point increase (0.123 + (0.833 x 0.13)) when Santos is at his most right-wing (index equal to zero), and a 0.5 percentage point change in support (0.123 + (0.833 x 0.13) + ((0.169)x(-0.5)) + ((2.342)x(0.13)x(-0.5))), when Santos is at his most left-wing. And for a legislator one standard deviation to the left of the median the estimates would be a 1.5 percentage point increase (0.123 + (0.833 x -0.13)), and a 8.2 percentage point increase (0.123 + ((0.833) x (-0.13)) + ((0.169)x(-0.5)) + ((2.342)x(-0.13)x(-0.5))), respectively.

These last results may be somewhat less accurate due to the extrapolation of the linear coefficient estimates to the left-wing legislators, for whom in fact there should be no relationship between changes in language and the strength of effects. In particular, as the president moved from a right-wing (language very close to Uribe) to a "center-left" position, the overall effect should persist for left-wing legislators (whose constituents remain left of the incumbent) regardless of the relative change in language. This implication from the theory, that there is a non-linear relationship between the changes in language (or incumbent political position) across politicians' own ideological positions, can be mapped to this regression framework by running separate regressions for left-wing and right-wing legislators. This exercise is done in columns 8 and 9. Consistent with the previous results and with the conceptual framework, left-wing legislators are not responsive to changes in the incumbent position (as proxied by the president's Twitter language), but right-wing legislators are (columns 8 and 9, row 2). The estimates imply that while for left-wing legislators the effect of attacks on incumbent support is relatively constant, from 4.5 percentage points to 6.1 percentage points based on the estimated coefficients (0.0449 + (-0.0328)x(-0.5)), right-wing legislators go from an increase of 20.7 percentage points to an almost null effect of 1.5 percentage points (0.207 + (0.385)x(-0.5)), as the political language index of Santos goes from 0 to -0.5.

Additional robustness checks are shown in table A13. These include a series of sample restrictions, using the lagged monthly political language index, and the inclusion of congressional vote-level controls. I also show that the results are robust to excluding members of the incumbent party (which is important if we think that their positions are likely to closely follow those of the president).

Overall, the results from this section suggest that i) the magnitude of the effect, of rebel attacks on legislative support for the incumbent, decreases when the political position of the incumbent is relatively more left-wing, and ii) this decrease is larger for relatively more right-wing politicians. Despite using only the Santos government time period and a very different measure of the change in the incumbent political position, the evidence presented is strongly consistent with that of the main empirical analyses and the predictions of the conceptual framework.

6.6 Electoral incentives

This section examines whether electoral incentives are a possible mechanism that mediates the documented increase in legislative support for the incumbent party. I first examine whether legislators with "safer" seats respond *less* to voters. *Proposition 4* suggests that legislators who are more responsive to the right-wing effects (ie. as voters shift their policy preferences to the right), would increase their alignment more with the incumbent party before the peace process, and less after the peace process. To study this hypothesis, I first create a simple measure of seat "safeness": the ratio of the votes that the politician received in the previous legislative elections to the votes of the *last* politician in the same electoral district.[42] Politicians in the *least* safe seats have by definition a seat safeness equal to 1, and all others' seat safeness is measured with respect to these individuals (and is greater than 1). In an alternative specification I use the *rank* of politicians according to their electoral results within their districts. I then run triple-interaction specifications (analogous to that in equation 2) to examine whether electoral incentives, as proxied by seat safeness, matters for the legislative voting responses.

[42] Legislators in parties with closed lists are assigned the total votes of the party divided by the number of elected candidates. I also exclude these politicians in an alternative specification.

The results are shown in table 5. The baseline specification in column 1 reveals a pattern consistent with that predicted by the conceptual framework: before the peace process started, legislators in "safer" seats responded relatively less to the attacks (row 3). However, this electoral pressure is mitigated once the peace process starts (and the incumbent party moves the left, row 4). Columns 2, 3 and 4 present a series of specification checks: removing politicians from closed-list parties, winsorizing the seat "safeness" measure and using *rank* as an alternative safeness measure.

Table 5: Effect of FARC attacks on vote alignment with ruling party, heterogeneity by legislative seat *safeness*

	(1)	(2)	(3)	(4)	(5)	(6)	(7) pre-PP	(8) post-PP
Post-attack, 3+ caslts.	0.134^{***}	0.134^{***}	0.134^{***}	0.135^{***}	0.0794^{***}	0.217^{***}	0.213^{***}	-0.00828
	(0.0238)	(0.0242)	(0.0237)	(0.0269)	(0.0203)	(0.0429)	(0.0410)	(0.0349)
Post-attack x post peace process	-0.0891^{**}	-0.0921^{**}	-0.0885^{**}	-0.107^{***}	0.0149	-0.219^{***}		
	(0.0384)	(0.0389)	(0.0379)	(0.0397)	(0.0434)	(0.0522)		
Post-attack x Safeness	-0.00449^{*}	-0.00456^{*}	-0.00453^{*}		-0.00120	-0.0105^{*}	-0.0102^{*}	0.00851^{***}
	(0.00241)	(0.00261)	(0.00244)		(0.00187)	(0.00580)	(0.00583)	(0.00312)
Post-attack x Safeness x post PP	0.00852^{**}	0.00819^{*}	0.00840^{*}		-0.00119	0.0182^{***}		
	(0.00423)	(0.00456)	(0.00495)		(0.00526)	(0.00658)		
Post-attack x Rank				-0.00131^{***}				
				(0.000500)				
Post-attack x Rank x post PP				0.00242^{***}				
				(0.000772)				
N	660908	633054	660908	658403	362006	298902	147938	150964
N. politicians	655	611	655	654	328	327	213	234
Politician FE	yes	yes	yes	yes	yes	yes	yes	yes
Attack window dummy	yes	yes	yes	yes	yes	yes	yes	yes
Isolated events	yes	yes	yes	yes	yes	yes	yes	yes
Time function	yes	yes	yes	yes	yes	yes	yes	yes
Party trends	yes	yes	yes	yes	yes	yes	yes	yes
Exclude closed lists	no	yes	no	no	no	no	no	no
Winsorize safeness	no	no	yes	no	no	no	no	no
Legislators	all	all	all	all	left	right	right	right

Notes: Estimates of heterogeneous effects by safeness of the legislative seat, where dependent variable is alignment with the ruling party. Seat safeness is measured as the ratio of legislative votes that the politician received to those of the *last place* elected politician in their congressional district. Seat safeness is included as a control (not shown) as it varies for politicians who are in office more than once. Two-way clustered standard errors at the politician and week level in parentheses.

The relationship between seat safeness and voting responses is strongest for right-wing politicians (column 6) and not statistically different from zero for left-wing politicians (column 5). This finding is consistent with the conceptual framework, recall that it is these politicians who found themselves opposing the government after the incumbent party shifted its policy position to the left. That the interaction between seat safeness and attacks does not result in decreased alignment for left-wing politicians also suggests that the right-wing effect may be weaker for them (ie. their voters shift their policy preferences less, this is not part of the model but is also observed empirically in the previous subsection). In columns 7 and 8, I split the sample between pre and post peace process for right-wing politicians and find that seat safeness, as predicted by the model, has opposite signs between the two time periods. Right-wing legislators in the least safe seats increased their alignment with the government relatively more before the peace process started. After the peace process started, these legislators increased their alignment with the government relatively less, suggesting they were more responsive to their constituents' distancing from the now dovish PU.

One additional test of the electoral incentives hypothesis arises from exploiting the timing of the attacks relative to the timing of legislative elections. Legislative elections in Colombia occur in March (of 2010 and 2014 in my dataset), however, legislators are in office until July. This *lame duck* period presents another opportunity to examine the role of electoral incentives, in particular by checking whether the right-wing effect was stronger in the pre-election periods. I define the post-election period as that between the election date (March 14th in 2010, and March 9th in 2014) and the date of the change in government (July 20th). I define the pre-election period as the period of the same length of days, preceding the election.[43]

Table 6: Effect of FARC attacks on vote alignment with ruling party close to legislative elections, one week after the attack

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	2010 elec	2010 elec	2010 elec	2010 elec	2014 elec	2014 elec	2014 elec	2014 elec
Post-attack, 3+ caslts.	0.105***	0.158***	0.0867*	0.103	0.0324	-0.00734	0.0462**	0.0931***
	(0.00350)	(0.00642)	(0.0469)	(0.0936)	(0.0234)	(0.0193)	(0.0181)	(0.0181)
N	43813	43804	35592	24318	17514	17514	7701	7700
N. politicians	281	272	292	283	262	262	261	261
Politician FE	no	yes	no	yes	no	yes	no	yes
Attack window dummy	no	yes	no	yes	no	yes	no	yes
Isolated events	no	yes	no	yes	no	yes	no	yes
Time function	no	yes	no	yes	no	yes	no	yes
Party trends	no	yes	no	yes	no	yes	no	yes
pre/post elections	pre	pre	post	post	pre	pre	pre	post

Notes: Estimates from time-series specification where the dependent variable is alignment with the ruling party, for the periods just before and just after legislative elections. The preferred empirical specification is used in even-numbered columns. Two-way clustered standard errors at the politician and week level in parentheses.

Table 6 shows the results from this analysis. The positive effect documented for the pre-peace process period is present and strong in the period preceding the 2010 legislative elections (columns 1 and 2). For the post-election period, the effect becomes somewhat weaker and statistically insignificant in the preferred specification (column 4). Before the 2014 elections, attacks by FARC appear to have no overall effect (columns 5 and 6), and after the 2014 elections, attacks appear to increase support for the ruling party (despite its pro-peace policy position). The results are consistent with the idea of the right-wing effect being larger before legislative elections, while the *rally 'round the flag* effect persists even after the elections have taken place. Given that there are fewer events in these particular periods of time, these estimates should be viewed with caution.[44] In the online appendix, a robustness check excluding sensitive political times from the estimation (six months before the elections and before the announcement of the peace process) finds evidence consistent with this, and in particular suggests that the right-wing effect is strongest in

[43]Since congress is closed in January and February most of the pre-election votes happen in November and December.

[44]Lower FARC activity around the 2014 elections, in particular, is consistent with the idea that attacks may draw support for the right-wing candidate, which would be detrimental to the peace process and arguably inimical to FARC's objectives. Based on an economic framework and observed FARC actions, Zambrano and Zuleta (2017) argue that the rebel group was indeed invested in a positive outcome for the peace process.

these periods. I also repeat the exercise looking at the differential effects of localized attacks and this analysis reveals consistent patterns.

6.7 Assessing potential omitted variable bias from unobservables

I have argued that the extent to which FARC strategically chooses the precise timing of attacks to influence legislative voting appears limited. However, following Oster (2019), I estimate potential biases from such unobservable factors by looking at changes in coefficient estimates and the value of R-squared when controlling for observable factors. Consider the following extended empirical framework:

$$\underbrace{voteWithPU_{ipuvt}}_{Y\text{: outcome of interest}} = \beta \underbrace{postAttack_t}_{\text{X: dependent variable of interest}}$$

$$+ \underbrace{\gamma_p + \theta^t F(t) + \theta^u T_u + \theta^v X_v}_{W_1\text{: observable controls}}$$

$$+ \underbrace{\omega S_{vt}}_{W_2\text{: unobservable factors}} + \varepsilon_{iptuv}$$

Where $postAttack_t$ is an indicator equal to one in the week after a high-casualty FARC attack and S_{vt} is an unobserved factor that is correlated with both Y (support for the PU) and X (the timing of rebel attacks), such as a FARC strategy of precisely choosing the day of attacks in anticipation of specific legislative processes. As outlined in Oster (2019), under some assumptions the omitted variable bias affecting β may be estimated consistently.

I first illustrate the methodology under Oster (2019)'s *restricted estimator*, which can approximate this bias as a simple function of regression statistics. Consider three regressions:

$$Y = \mathring{\beta} X + \mathring{\varepsilon} \quad \text{(M-1)}$$

$$Y = \tilde{\beta} X + W_1 + \tilde{\varepsilon} \quad \text{(M-2)}$$

$$Y = \beta X + W_1 + W_2 + \varepsilon_{max} \quad \text{(M-max)}$$

And let R_{max}, $\mathring{R}$, and $\tilde{R}$, respectively, denote the R-squared of these regressions. If FARC strategy (S_{vt}) anticipated increased support for the incumbent government, and launched attacks in the days preceding this surge in legislative support, then $\mathring{\beta}$ would be upward biased due to unobservable selection across time. By including the controls in W_1, and if W_1 can explain some of the variation in Y and in X, these selection concerns may be partially alleviated in M-2. Examining changes in the β coefficients and the R-squared statistics between M-1 and M-2 provides information about the magnitude of these selection concerns and can be used to assess the potential degree of omitted variable bias that arises from not including W_2 in the estimated regression.

In particular, define the *proportional selection relationship* as $\delta \frac{Cov(X,W_1)}{Var(W_1)} = \frac{Cov(X,W_2)}{Var(W_2)}$, where δ is defined as the coefficient of proportionality, a measure of the relative degree of selection on observed and unobserved variables. An approximation of the bias-adjusted treatment effect can be obtained by:

$$\beta^* = \tilde{\beta} - \delta(\mathring{\beta} - \tilde{\beta}) \frac{R_{max} - \tilde{R}}{\tilde{R} - \mathring{R}}$$

For the main results computed below, I use the *unrestricted estimator*,[45] however, results from the *restricted estimator* presented above are similar, and the equation above is useful for the discussion. The equation makes explicit that the bias is proportional to the ratio of changes in explanatory power between the full model (M-max) and the restricted model (M-2), and that of the the restricted model and the model without controls (M-1).

I discuss statistics here for the pre-peace process period, when the largest effects are observed. Note first that $\mathring{R}$ (for model M-1) is relatively small, only 0.3 percent of individual politicians' alignment with the incumbent can be explained by the post-attack dummies. For M-2, the model which includes politician fixed effects, vote-level controls (including both baseline and twelve unbalanced controls from table A7), party trends and $F(t)$ (year, month, day of the week fixed effects, and calendar day linearly), $\tilde{R}$ is 7.5 percent, a significant increase over M-1. At the same time, the β coefficients from M-1 and M-2 are $\mathring{\beta} = 0.09734$ and $\tilde{\beta} = 0.09625$ respectively, remarkably stable. These are reported in table A14.

To define R_{max}, which is an unobserved theoretical population value, Oster (2019) considers a scaling factor such that $R_{max} = \Pi\tilde{R}$, and suggests that setting $\Pi = 1.3$ is an appropriate value to be used by researchers. In this exercise, that would mean setting R_{max} at 9.75 percent. Consider a strategy in which FARC can choose the exact day in which to attack. Such a strategy S_{vt} would be collinear with day fixed effects. A regression which includes day fixed effects (as well as vote-level controls, politician fixed effects, and party trends, ie. W_1) yields an R-squared of 8.7 percent, which would be an *upper bound* for R_{max} in this case. However, a more sophisticated strategy could be one in which FARC chooses the date and location of an attack, if for instance they would like to influence legislators from a particular department to vote in a certain way (effects of localized attacks are documented in the online appendix). A regression which includes day fixed effects $\times$ legislator department (and the non-collinear controls in W_1) yields an R-squared of 10.3

[45] Estimated with the *psacalc* STATA package.

percent, using this as R_{max} would be close to the suggested value of Π. Further, suppose an unobserved factor S_{vt} correlated with specific congressional votes and the timing of attacks. A regression with congressional-vote fixed effects (and the non-collinear controls in W_1) yields an R-squared of 13.3 percent (using this as R_{max} would be as setting $\Pi \approx 1.8$). For the exercises below I set R_{max} using two values of Π: 1.3, which would already imply a remarkably high level of sophistication and capability in FARC's strategy (and is the suggested value of Π), and 2, which is decidedly conservative given these estimates.

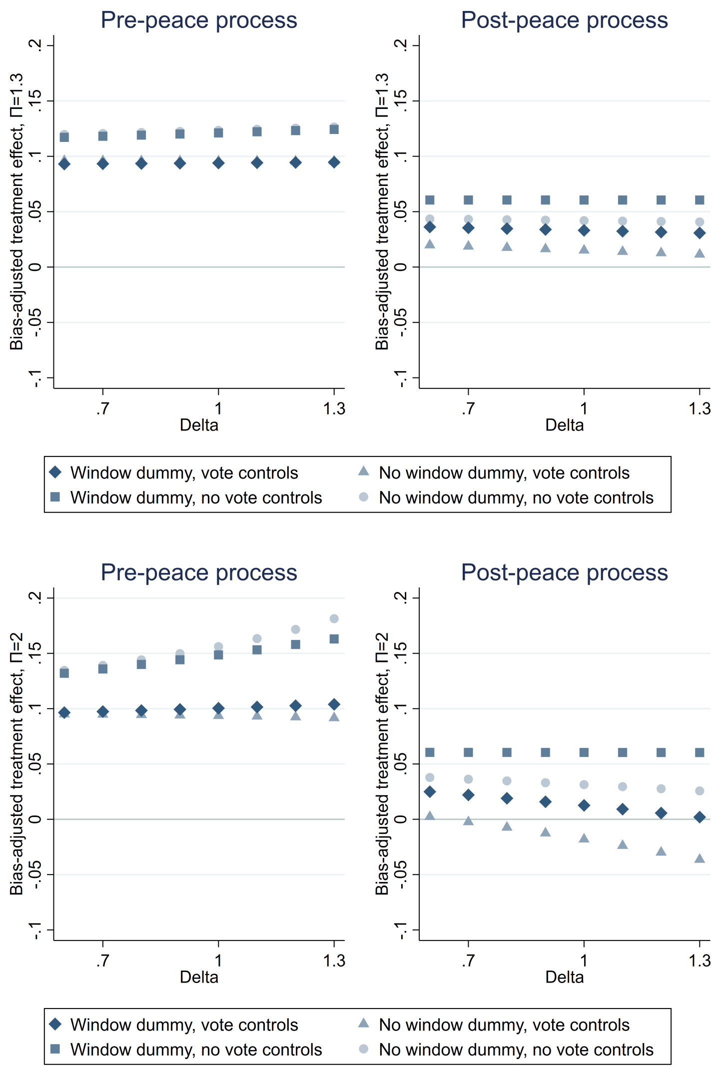
For $\delta = 1$ and $R_{max} = 0.15$ ($\Pi = 2$), the *restricted estimator* yields a bias-adjusted treatment effect $\beta^* = 0.09512$, suggesting that legislators increase their support with the PU by *at least* 9.5 percentage points in the week after an attack. Figure 9 presents estimates of bias-adjusted treatment effects (using the unrestricted estimator in Oster, 2019) for four different model specifications: with and without the attack-window dummies (such that the interpretation of the β coefficient is relative to the week before), and with and without congressional-vote level controls (as previously discussed these may be *bad* controls). I do so for different values of δ close to 1, which both Altonji, Elder and Taber (2005) and Oster (2019) argue is an appropriate upper bound. As discussed above, I set $R_{max} = \{1.3\tilde{R}, 2\tilde{R}\}$. Finally, I present these separately for the pre and post peace process periods.

The estimates are remarkably robust, highlighting that the potential bias is small, which is intuitively the result of i) the β coefficients being very stable, despite the fact that ii) the controls can explain a large share of the potential variation of Y, and iii) the controls explain a large share of the variation in X (a regression of X on W_1 results in an R-squared of 0.304). That is, the changes in β when moving from M-1 to M-2 are small, relative to the changes in R-squared. Furthermore, in the models without vote-level controls for the pre-peace process, $\tilde{\beta} > \mathring{\beta}$, which implies a negative bias. If, for instance, FARC *avoids* attacks because these induce a strengthening of the hard-line stance of the government, then as previously discussed, the estimates may be a lower-bound of the true treatment effect — which results in the large bias-adjusted treatment effects observed in these specific models. The bias-adjusted treatment effects for the post-peace process period, on the other hand, are smaller and some are below zero, consistent with the main results.

6.8 Policy implications: From individual to aggregate effects

The empirical framework I have presented is designed to measure the causal effect of FARC attacks on politician behaviour at the individual level. The documented effect on policymaking is likely to have both observable and unobservable implications on actual policy. The direct implications that can be observed at the congressional vote level are somewhat limited by the political process that determines whether bills or propositions

Figure 9: Assessing omitted variable bias from unobservables



Notes: Following Oster (2019), the figure shows the estimated bias-adjusted treatment effects of FARC attacks on alignment with the incumbent party in the following week, for a range of values of δ, separately for the pre-peace process and post-peace process periods. Vote-level controls include dummies for the type of vote (policy vs. procedural), keywords (conflict or non-conflict related votes), and for whether the vote was proposed by a PU member or by a member of the politician's own party, as well as all unbalanced characteristics as highlighted in table XX.

are voted on in the first place. The outcome of most votes is approval by a vast majority (figure A13 shows the kernel density of the share of approve votes for each congressional vote). More importantly, the percentage of congressional votes which are close is very small (less than four percent of votes had share approved between 0.4 and 0.6). This pattern indicates that the outcome of many votes is predetermined even before the votes are on the floor, thus restricting the direct impact that the short-run effects measured here could have. Finally, only about 3.3 percent of congressional votes resulted in the outcome not preferred by the incumbent party, further limiting the potential for direct policy implications from the effects documented.

To measure these policy implications, I propose a *potential outcomes* framework (as introduced in Rubin, 1974) that maps the estimated causal effect of attacks on individual votes to outcomes at the congressional vote level. For each congressional vote, assume two potential outcomes (indexed by 0 and 1): a no-attack, or "non-treated", outcome and an attack, or "treated", outcome. For each treated congressional vote (occurring in the days following an attack with at least three casualties), a share of politicians were induced to align their legislative individual votes with the incumbent party as a result of the event (as documented here). I then compute counterfactual outcomes for all congressional votes.

Define a congressional vote occurring t days from an event and treated by an attack as $V_{1t} = \{Y_{1t}, N_{1t}, A_{1t}\}$, and an untreated vote as $V_{0t} = \{Y_{0t}, N_{0t}, A_{0t}\}$, where Y is the number of aligned individual votes, N is the number of non-aligned individual votes, and A is the number of abstentions. The treated vote V_{1t} is a function of the untreated vote V_{0t} and the estimated individual effect β_t, where β_t corresponds to the estimated coefficient from the event study analysis (see figure 6, panel A). In particular, the treated vote can be defined as:

$$V_{1t} = \{Y_{0t} + \beta_t N_{0t} + \beta_t A_{0t}, (1 - \beta_t) N_{0t}, (1 - \beta_t) A_{0t}\} \tag{7}$$

That is, a share of politicians β_t was induced to align their vote with the incumbent party as a result of the event.[46]

For the empirical exercise, I limit the sample to the pre-peace process period (when the attacks have statistically significant effects). With this framework in place, I estimate the counter-factual vote outcome for each congressional vote. For votes occurring 0-11 days after an attack, I estimate V_{0t}, and for votes outside of the event window I estimate V_{1a}, and define β_a as the average of β_t for days 0-11. I then compute the counterfactual result *share of approve votes*$_{vt} = Y_{vt}/(Y_{vt} + N_{vt})$.[47] Of particular interest are two types of votes, those that were *potentially affected*, votes that occurred in the days just after an event for which the result (pass/fail) changed as a consequence, and those that were *potentially*

[46] The non-treated outcome can be defined as a function of the treated outcome and the individual coefficients as $V_{0t} = \{Y_{1t} - \beta_t N_{1t}/(1-\beta_t) - \beta_t A_{1t}/(1-\beta_t), N_{1t}/(1-\beta_t), A_{1t}/(1-\beta_t)\}$.

[47] I round the estimated outcomes to the nearest integer.

Table 7: Counterfactual policy outcomes

	Post-attack (0-11 days)	**Not post-attack**
Number of congressional votes	1778	5237
Votes against PU, attack/treated outcome	31	*102*
Potentially affected votes	*40*	
Potentially vulnerable votes		*63*
Votes against PU, no-attack/untreated outcome	*71*	165
Share votes against PU, attack/treated outcome	1.744%	*1.948%*
Share votes against PU, no-attack/untreated outcome	*3.993%*	3.151%

Notes: The table summarizes the results of the counterfactual exercise which studies the policy implications of the effects in terms of congressional vote outcomes for the pre-peace process period. Numbers in *italics* are unobserved and estimated in the counterfactual analysis. See section 6 for details.

vulnerable, votes that occurred outside of the event window but had an event occurred in the previous days (assuming the average size effects), the result of the congressional vote would have changed.[48]

The results of the exercise are summarized in table 7. There were a total of 7015 congressional votes in the pre-peace process time period. Of these, 1778 occurred in the event window (0-11 days after an attack). During the event window, only 1.7 percent of votes resulted against the position of the incumbent party, but the exercise suggests that the PU would have lost 3.9 percent of votes otherwise; outside of the event window, 3.1 percent of votes were lost by the PU, but had an event occurred in the days before, the incumbent party would have lost only 1.9 percent. Combined, the exercise suggests that about 30 percent of all votes that result in an outcome against the incumbent position have the potential to be flipped in favour of the incumbent by an attack.

The exercise identifies 40 congressional votes potentially affected. The list of potentially affected votes is presented in table A9. They cover a broad range of policy issues including the implementation of Colombia's free trade agreement with the United States, pension and social programs, and the functioning of intelligence agencies. I repeat the exercise outlined above using the estimated upper and lower bounds of the 95 percent confidence intervals of the estimated coefficients β_t, and find 26 congressional votes potentially affected at the lower bound, and 129 at the upper bound.

In addition to these estimated direct policy consequences, there are likely to be other indirect effects. I have restricted my analysis to short-run effects from high-casualty attacks in order to be able to credibly estimate these causal relationships. However, the impact of conflict on politics is certainly likely to extend beyond the results I present. Studying how the content of the bills themselves may be endogenously affected by conflict in the longer-run remains outside of the scope of this paper, but may be an important

[48] Formally, these are defined as congressional votes such that the "treated" and the "untreated" potential outcomes are different, ie. i) *share of approve votes*$_{1v} >= 0.5$ and *share of approve votes*$_{0v} < 0.5$, or ii) *share of approve votes*$_{1v} < 0.5$ and *share of approve votes*$_{0v} >= 0.5$.

avenue for future research to further understand the reach of these effects.

6.9 Robustness checks

In the online appendix I propose a series of empirical extensions and robustness checks. These include a difference-in-differences analysis exploiting the location of attacks, repeating the analysis with alternative casualty thresholds, a series of sample restrictions, as well as the inclusion of various vote-level controls, among others.

7 Conclusion

This paper studies the relationship between civil conflict and policymaking in Colombia. I first show that following rebel attacks with a high number of casualties, both tweets from incumbent politicians, as well as tweets that use a hard-line language, received increased follower engagement relative to other tweets. This evidence is consistent with effects previously documented by studies examining the relationship between political violence and voter behaviour, the *rally 'round the flag* and the increased right-wing support effects. In addition, the effects I find dissipate quickly and disappear completely before two weeks from the date of the attacks.

I then examine whether, not just voters, but politicians themselves react to these attacks. The analysis is framed in a political economy model of legislative behaviour in which conflict generates both increased support for right-wing (or hard-line) policy positions and *rally 'round the flag* effects. When the incumbent government has a policy position that is right-wing (in the pre-peace process period), that is, to the right of voters' preferences, conflict shocks which move voters' preferences to the right, and *rally* effects which increase the strength of the incumbent position, both generate increased support for the incumbent party in the legislature. On the other hand, if the incumbent government has a relatively left-wing position (in the post-peace process period), conflict shocks which move voters' preferences to the right, and *rally* effects which increase the strength of the incumbent position, generate opposing forces.

I analyze the process of policymaking by using data from politicians' roll-call votes in congress from 2006 to 2015, and studying whether politicians were more likely to vote together with legislators of the incumbent party after conflict events. The government of Juan Manuel Santos started peace negotiations with FARC in 2012, but rebel attacks continued as the talks progressed. Before this, and especially when Álvaro Uribe was in power, the government had a hard-line policy position which aimed at defeating the rebel group militarily. I separate my analysis into two time periods, pre-peace process and post-peace process. Before the peace process started, FARC attacks made politicians more likely to align their votes with the incumbent party (by up to 25 percentage points), in the days just after the event. As for voters, the effect on politicians dissipated quickly and disappeared around two weeks after the date of the events. After the peace process started, there is no significant effect of attacks on politicians' behaviour.

The non-significant effects after the peace process started mask important heterogeneity across the spectrum of legislators' political positions. The effect is in fact relatively unchanged for legislators who are relatively more left-wing. On the other hand, the further right a legislator is, the larger the decrease in magnitude for the post-peace process period. Consistent with the conceptual framework, the *rally 'round the flag* and the increased right-wing support effects are more likely to pull legislators in opposite directions the further right their policy ideology is. In an additional empirical analysis, I show that during the Santos government, politicians increased their support for the incumbent party relatively more when attacks occurred in months in which the language of his tweets was relatively more right-wing. In addition, electoral incentives also appear to be important determinants of politicians' responses following violent attacks. The relationship I document, and in particular the increased right-wing support effect, is stronger for politicians who were more electorally vulnerable, and before legislative elections relative to after legislative elections.

Finally, to consider the direct policy implications of these effects, I identify a set of 40 potentially affected congressional votes. These votes occurred in the pre-peace process period, days following a violent event, and had results in favour of the incumbent party by a relatively small margin. The votes cover a broad range of policy issues and may have been altered by the effects documented, and in particular, "flipped" in favour of the incumbent position.

Colombia is a country undergoing a fundamental transition in the process of development, the resolution of internal conflict. After more than fifty years since its inception, the largest insurgency in the Americas, the Revolutionary Armed Forces of Colombia (FARC), put down their weapons and is now instead sitting in congress. The circumstances that led to this event spanned multiple governments, involved a delicate balance between hardline and concessionary policies and polarized public opinion across the country. Many lessons can be drawn from these events for developing countries as they come across similar challenges. The results presented shed new light on policymaking processes in conflict settings, reveal some of the incentives politicians face when making legislative decisions, and highlight a specific mechanism through which political violence can have persistent policy implications.

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8 For Online Publication

8.1 Data appendix

8.1.1 FARC attacks across space

The map in figure A1 shows attacks by FARC across space. The map shows the number of events with at least three fatalities in each of Colombia's departments.[49] FARC's presence is most salient in the southwest of the country, the departments of Cauca (17 attacks with at least 3 fatalities), Caquetá (9) and Nariño (9) are amongst the most violent. The department of Antioquia in the center/north-west, where ex-president Uribe is from, is the sixth department with most events (5 attacks with at least three fatalities).

8.1.2 Alternative conflict datasets

The Global Terrorism Database (GTD), which is documented and publicly available at START, is the main source used to build the conflict variables of interest. The main advantage of the GTD is that it captures event from media sources in the days of or just after the event. It is precisely these salient events for which we expect to see effects on public and politician behaviour. In this section I discuss two alternative conflict datasets from Colombian sources. From their online public access, I obtain the Noche y Niebla (NyN) dataset (https://www.nocheyniebla.org/) and the Centro de Memoria Histórica (CMH) dataset (http://centrodememoriahistorica.gov.co/).

The emphasis of the Noche y Niebla dataset is on violations of human rights, in particular extrajudicial executions, homicides outside of combat, torture, forced disappearances and kidnappings (CINEP, 2016). These very often come from witness and victim accounts (submitting cases is open to the public on their website). They also have a strong focus on paramilitary and state violence. Because of these emphases, many of these are smaller events and it does not include many which appear in the GTD and in the CMH datasets. Though the dataset has more FARC attacks than the GTD overall for the period of study (1350, compared to 881), it has less high-casualty events (56, compared to 91, with at least 3 casualties), and in fact, only 4 of these high-casualty events in the NyN occur in the post-peace process period, severely limiting the potential measurement of the effects of interest as proposed by the paper.

The CMH dataset is a much broader dataset which documents 12,012 FARC attacks and 239 with 3 or more casualties in the period of study. The dataset has a combination of different event types, and aims to cover all violent actions from any of the Colombian conflict actors – guerrilla groups, paramilitaries, and state actors (Observatorio de Memoria

[49]Departments are an administrative division equivalent to states in the US. The maps for all events and other thresholds (more than one/five casualties), are available upon request.

y Conflicto, 2016). These events include many smaller events as those from the NyN and "bigger" events as the ones that appear in the GTD. The dataset comes from hundreds of different sources including testimonials, victim associations, government agencies, NGOs, and religious organizations, among others. Unfortunately, the exact details on the source of each event is not available.

Of the main isolated 33 events used (listed in A6), 24 appear in the CMH dataset, but only 7 appear in the NyN dataset. Of the 9 events from the GTD that do not appear in the CMH dataset, they occur: 2 in 2006, 2 in 2007, 2 in 2008, 1 in 2009 (7 pre-peace process) and 2 in 2014 (post-peace process). Perhaps somewhat surprisingly, the CMH dataset does not include some significant events.[50] As a robustness check, I therefore remove from the dataset those events that do not appear in the CMH dataset. The dynamics in the event-study are very similar (figure A16, panel C), and the triple-interaction coefficients of interest are not statistically different from those in the main analyses (tables A12 and A13, column 6).

To further validate the GTD with respect to the alternative conflict datasets, I repeat the public attention analyses using the alternative conflict datasets. The results are shown in figure A18. Recall that on the days after attacks in the GTD, I observe a significant increase in public attention as measured both in Google Trends and on legislators' tweets (panel A). The CMH attacks are also followed by increased attention, but the relationship is less precisely measured, somewhat smaller and relatively more short-lived. Lastly, legislators and the public do not appear to react at all to attacks in the NyN data. Looking at a specification with just a dummy for the week post reveals similar patterns, both with and without controls and sample restrictions (tables A23 and A24). Comparing across datasets, attacks in the GTD are followed by the largest and most precisely measured changes in public attention. Running a "horse race" regression with events from all datasets shows that the effect of attacks in the GTD on public attention remains statistically significant and large, while those in the CMH do not. In other words, it appears that the GTD is the best dataset to capture changes in public and legislators' attention. As previously argued, following attacks by the FARC, we should observe changes in legislators' behaviour in favour of the government only if they (and the public) are aware of these attacks. The GTD, with its focus on immediate media coverage, captures exactly this causal path and is therefore used as the main dataset throughout the study.

8.1.3 Congressional votes and political alignment

Table A1 lists some of the summary statistics for each of the roughly 11,600 congressional votes. The variables include the share of politicians who voted to approve, reject or abstain

[50] Such as a bomb in Antioquia in August of 2009 which left 7 dead and 52 injured (El Espectador), or an attack against the Justice Palace in Cali in September of 2009 (Wikipedia).

from a vote, as well as dummy indicators for the type of vote ("Votación"), keywords that the description of the vote contains, and the party of the politician who proposed the vote (PP) if available. Figure A3 shows the share of congress members who voted to approve each of the votes on the y-axis and the date of the vote on the x-axis. The dark points represent monthly averages. In chronological order, the vertical lines indicate the start of the second Uribe government, the start of the first Santos government, the official start of the peace process, and the start of the second Santos government. The data on the aggregate votes shows, for instance, that many votes were approved near the end of the Uribe government, but that this share decreased over time after Santos came into power. I also collect data on individual votes, at the politician-congressional vote level: voted to approve, voted to reject, or abstained from voting in each congressional vote. The data consists of over 780,000 individual votes representing more than 650 politicians. Summary statistics at the individual vote level are shown in table A3. Figure A4 shows the average number of votes which are aligned with the incumbent party (as defined in the main text), by party, and figure A5 shows the average of this alignment across time.

In Table A4, I regress *voteValue* (-1 if reject, 0 if abstain, 1 if approve) on a set of dummy variables which indicate the party of the politician who proposed the congressional vote, as an additional descriptive statistic for these data.[51] I run this analysis separately for each party. Unsurprisingly, politicians are much more likely to vote in favour of proposals by members of their own party (see the highlighted coefficients diagonally). Proposals by the more extreme parties (Polo Democrático to the left, and Centro Democrático to the right) tend to be less favoured by other politicians. Also, proposals which are associated with a certain author (or party) are much less favoured than proposals with no proposer attached to them.

Summary statistics for the left-right index, and other politician characteristics, are shown in table A5. Figure A6 shows the distribution of politicians across parties for those left of the median and those right of the median of this left-right index. Finally, the relationship between the left-right index and overall alignment with the incumbent party is shown in figure A7. The relationship is positive and statistically significant, however, note again that legislators from the two polar parties, the PD and the CD, which are used to estimate the left-right index, are on average those least likely to align their votes with the incumbent party.

[51] I extract information on the identity of the politician who proposed the vote from its description. The description of the congressional vote looks something like this: *"Votación Proposiciones: Aprobación de proposición aditiva presentada por el Representante **Simón Gaviria** al artículo 1 del Proyecto Acto Legislativo número 169 de ..."*. I match the name of the proposer to the names in the list of politicians (and their party). Doing this I am able to match 3,408 out of the 11,666 votes in the data to their proposer (or proposers).

8.1.4 Twitter network and political language

I collect tweets for 305 politicians in the Congreso Visible database which have a linked Twitter account, through the Twitter API, with the limitation that only the last 3,200 tweets can be accessed for each politician. However, this limit is binding for only around 5% of politicians. The tweet collection process was executed twice, first in July of 2015, and again in January of 2016. In addition, an extended tweet collection process which involved crawling the Twitter mobile site was employed to collect older tweets for the two main political leaders, Juan Manuel Santos (@JuanManSantos) and Álvaro Uribe (@AlvaroUribeVel). The final dataset I use for the analysis contains around 365,000 tweets (shown across time in A8).

Figure A9 maps connections on Twitter between politicians in a network graph. Some features of the network are worth noting. First, it appears as though politicians from right-leaning parties (Centro Democrático and Conservador) and those from left-leaning parties (Partido de la U, Liberal, and most other) tend to cluster together (consistent with evidence in Barberá, 2015; Halberstam and Knight, 2016). Second, politicians from the ruling party (PU), appear closer to the center of the graph. Finally, both @JuanManSantos and @AlvaroUribeVel, highlighted as larger nodes, take central positions in the network. I use the tweets of these two leaders to measure political language.

Recall I measure the political leaning of the language in these tweets through text analysis, using a linear regression methodology. In order to further evaluate the validity of this measure, I define the political language index of each politician, $polLanguage_p$, by taking the average political language over all of his or her tweets. The distribution of the politicians' language by party is shown in Figure A11 (excluding Santos and Uribe).[52] The figure shows that, out of all the parties, politicians in the Centro Democrático use language which is closest to that of Uribe, as expected. Finally, figure A12 shows the correlation between $polLanguage_p$ and the average vote alignment of politicians with the PU after the peace process started (ie. the main dependent variable averaged at the politician level). There is a statistically significant negative correlation between the two variables. In particular, a one standard deviation increase in the political language index (closer to Uribe) is associated with a 4.2 percentage point decrease in alignment with the Santos's ruling party. As a robustness check, I also employ a more sophisticated text classification procedure using machine learning methods, discussed below.

[52] Alternatively, one could show the distribution across all tweets. The approach I take weights each politician equally, regardless of their tweeting intensity.

8.2 Additional empirical exercises and robustness checks

8.2.1 Alternative specifications for time-series evidence

Table A10 further studies the dynamics of the main effects based on groupings of the event-study bins: the contemporaneous effect (the first three-day bin), the short-run effect (which groups bins 1-3, or days 0-8), the long(er)-run effect (bins 4-6, or days 9 to 17), and the average effect (all post bins). Note that in the long(er) run the effect is not statistically significant for the pre-peace process period, suggesting that the effect is indeed short lived. Furthermore, the average effect for the post-peace process period is marginally significant, though about half the size of that for the pre-peace process period.

In a simpler specification, I use time-series variation to identify the overall effects of rebel attacks on political alignment, but instead of defining event-time dummies, I use one week windows around the events and compare weeks post-attack to weeks pre-attack, shown in table A11. Columns 1 and 5 include no controls. Columns 3 and 7 present the preferred controls (used in the main event-study analysis). Columns 4 and 8 include congressional vote level controls, which may be important depending on the desired interpretation of these results. The attacks may lead to a change in the type of votes which go on the floor (policy versus procedural votes, conflict-related, or who proposes the bills, etc; as perhaps suggested by table 2). This change in the composition of votes is part of the effect estimated in the main specification. However, one may wish to assess whether, *conditional* on the type of vote, vote alignment increases (this is further discussed below). The results from the preferred specification suggest that following attacks by FARC, politicians vote in congress are 11 percentage points more likely to be aligned with the incumbent party in the week following the attack, for the pre-peace process period. Once the peace process started, the effect remains positive (6 percentage points), but becomes statistically insignificant (the effect is imprecisely measured partly due to the heterogeneity across politicians ideological points, as previously documented).

8.2.2 Sample restrictions

I evaluate the robustness of the main results by re-running the main analyses, for the preferred specifications, with five specific restrictions. First, I use vote keywords, provided by *congreso visible*, to categorize votes on "conflict-related" issues. I define conflict-related votes as those which include the words "military", "victims", "peace", "terrorist", "penitentiary" and "justice".[53] We may expect votes on these particular issues to be particularly sensitive to the effect of rebel attacks on political behaviour. I exclude these votes from the analysis to evaluate this hypothesis. Second, I exclude votes which were proposed by members of the ruling party, the PU. Third, I exclude politicians who are members

[53] In Spanish, "militar", "victimas", "paz", "terrorista", "penitenciario" and "justicia".

of the PU. Fourth, I exclude politicians from the three most violent departments (Cauca, Caquetá and Nariño).

Figure A15 shows the resulting estimates from these sample restrictions on the time-series analysis. The patterns observed are very similar across these subsamples. In particular, the pre-peace process effect remains positive and significant in the days just after the events, but the effect weakens considerably for the post-peace process time period.

These sample restrictions are also imposed on the analyses of heterogeneity across politicians ideological positions and Santos's Twitter language, in tables A12 and A13. The triple-interaction coefficients of interest are robust across all specifications.

8.2.3 Sensitive political times

Three critical dates, before of which increased FARC and legislative activity is observed, may drive the main results of interest. These dates are the 2010 legislative elections, the 2014 legislative elections, and the announcement of the peace process. In a robustness check, I remove the 6-months prior to these dates and re-run the main analyses.

The shape and size of the dynamic effects estimated in the event-study remain very much in line with those in the paper (figure A16, panel D). In addition, the main point estimates from the tables which study the heterogeneity of these effects remain statistically significant and close to the coefficients in the main specification (tables A12 and A13, column 5).

One feature worth highlighting from the analysis of heterogeneity by legislators' ideology (table A12) is that, though the estimates are not statistically significant, support for the PU generally weakens in the post-peace process period (row 2). However, this pattern does not hold in column 5, revealing that this overall weakening of support may be sharpest during these sensitive political times. This finding is in line with the effects documented before elections. That is, if the right-wing effect is strongest during these sensitive times, then by removing them from the analysis the coefficient becomes close to zero (since the right-wing effect is the one that drives this overall difference between the pre and the post peace process period, as outlined by the model). Importantly however, the heterogeneity across politicians remains (row 5), revealing that the main theoretical insight with respect to this, that right-wing legislators weaken their post-attack support most after the peace process starts, is independent of these sensitive political times.

8.2.4 Reverse causality and placebo exercise

Recall that the *Noche y Niebla* (NyN) dataset of FARC attacks is comprised of events which, instead of being collected from media sources, are collected mainly from witness and victims' accounts. As such, these events do not generate *immediate* responses on Google trends searches for FARC attacks or legislators tweets about these (figure A18, panel C). That is, as politicians and the public were unaware of these events when they occurred, they appear not to generate public interest responses. These events should therefore also not generate any effects on legislative behaviour, simply because legislators do not appear to have learnt about these at the time. However, if FARC anticipated legislative trends and performed military actions based on these, then it may be possible to still observe "effects" of these attacks. We can therefore use this dataset for a "placebo" exercise. The results are shown in figure A19, and reassuringly, there are no changes following events in this dataset.

8.2.5 Congressional-vote controls

As discussed earlier, there is some weak evidence that the composition of votes may be different before attacks than after attacks. In particular, table 2 suggests a substitution away from "Legislative Acts" and towards "Law Projects" following the events. If this is a deliberate strategy from the government to take advantage of the effects documented, then the interpretation of the coefficients estimated should be slightly different. The coefficients I estimate, without controlling for the type of congressional-vote, can be thought of as the "equilibrium" outcome of two distinct effects: i) the "vote-composition effect", the type of vote changing as a strategic response of politicians, and ii) the "vote-alignment effect", the vote-alignment of individual politicians shifting (regardless of the type of vote being presented). Credibly identifying the "vote-composition effect" is difficult due to issues of statistical power (there are 11,000 congressional votes, whereas there are 700,000 individual votes). In figure A16, panel A, I repeat the main event-study analysis controlling for a series of dummy variables, including whether the vote was a "Law Project" or a "Legislative Act", as well as whether the vote was proposed by a specific legislator, whether the vote was proposed by the PU, whether the vote was conflict-related, whether the vote was proposed by member of their own party, and whether vote occurred in the Senate. The analysis suggests that the extent to which the "vote-composition" effect can drive the main results is limited, and the generally observed patterns are the same (the coefficient on the first treated bin - days 0-2 post-attack - is smaller, 0.20, relative to 0.25, but not statistically different).

8.2.6 Difference-in-differences: Differential effects by the location of attacks

The empirical frameworks presented above exploit the timing of the attacks to estimate the effects of interest. An alternative strategy exploits both the timing and the location of the attacks to study whether politicians whose electoral districts are the location of the attacks are more responsive to the events (this is formalized below in the theoretical appendix as

Proposition 5). I match the location of the attacks to the politicians *home department*, the location which they either i) directly represent, for Representatives, or ii) got most votes from in the legislative elections, for Senators.[54] The analysis includes time fixed effects that absorb time-shocks common across all individuals and examines whether politicians react differentially to attacks which occur in their *home department*. I estimate the following equation:

$$\begin{aligned} voteWithPU_{iptuv} = &\alpha + \beta postAttackinHD_{pt} + \theta^{pt} attackWindowinHD_{pt} + \\ &\gamma_p + \gamma_t + \theta^{u} T_u + \theta^{vu} X_{vu} + \varepsilon_{iptuv} \end{aligned} \tag{8}$$

for individual vote i, politician p, political party u, congressional vote v, on day t.

The regression includes politician fixed effects, day fixed effects and party specific linear trends. I define $postAttackinHD_{pt}$ as an indicator variable equal to one if the vote occurred during the week following an attack in the politicians home department,[55] and zero otherwise. The variable $attackWindowinHD_{pt}$ is an indicator variable equal to one if the vote occurred within two weeks of an attack in the politicians home department,[56] and zero otherwise. By including the $attackWindowinHD_{pt}$ dummy, the β coefficient captures the difference in vote alignment in the week just following the attack to that in the week just before the attack, and can therefore be thought of as the treatment effect of the event. In some specifications I include a set of congressional vote level controls, X_{vu}, these include the same controls as in the event study as well as a variable capturing the average vote alignment with the ruling party for other members of the politician's party.[57]

This empirical strategy estimates the differential effect of an attack occurring in a politician's *home department*, over the potential reaction of all politicians (which will be captured by the day fixed effects). The analysis again uses events with at least three fatalities and observations with overlapping events are excluded (however, because the analysis is now disaggregated at the department level, only less than one percent of votes are affected by this restriction).[58] Standard errors are clustered at the politician level.[59]

Table A17 shows the main results from the difference-in-differences specification, which captures time-shocks using day fixed effects, thus absorbing the overall effect previously documented. The columns which do not include day fixed effects (1,2,5,6) include a *post-attack dummy* (equal to one if the vote took place within one week following an event), such that the coefficient for the *post-attack in home department* variable can be interpreted

[54] This definition of home location matches the place of birth in more than 90 percent of cases.

[55] More specifically, $postAttackinHD_{pt}$ is equal to one if the vote occurs on days 0 to 6, where 0 is the day of the attack and days 1-6 are the days following the attack.

[56] That is, $attackWindowinHD_{pt}$ is equal to one if the vote occurs on days -7 to 6.

[57] To be precise, this is equal to $\sum_{k \in u, k \neq p} voteWithPU_{icktu} / (n_{uv} - 1)$, where n_{uv} are the total number of politicians from party u who took part in congressional vote v.

[58] Again, I replicate the main analysis using instead a one or a five casualty threshold and discuss the results in the online appendix.

[59] Unlike the event study design, the diff-in-diff methodology uses time fixed effects which will absorb within-time clustering. See Cameron and Miller (2015) for a discussion of these issues.

as a differential effect in all specifications.

The preferred specification (columns 3 and 7) includes day fixed effects and party-specific linear trends. Column 3 indicates that before the peace process started, politicians who were "treated" (the attack occurred in their home department), are 7 percentage points more likely to align their votes with the ruling party in the week following the event, relative to both "control" politicians and to the week prior to the event. However, after the negotiations with FARC started, politicians were 4 percentage points less likely to align their votes with the PU during the week following attacks in their home department (column 7). Columns 4 and 8 suggest that even after controlling for both observed characteristics of the congressional votes, and the average vote alignment of other members of the "treated" politicians' party, the effect remains present and statistically significant.

The evidence suggests that the transitory shocks in preferences induced by conflict events have observable effects on the behaviour of elected politicians. In particular, the results in this section suggest that politicians from departments where an attack occurs respond differentially to these events, and that they do so in the direction of the increased right-wing support effect. Before the peace process started, these "treated" politicians were more likely to align their votes with the *hard-line* incumbent government, relative to "control" politicians. After the peace process started "treated" politicians were less likely to align their votes with the *concessionary* incumbent government, again relative to "control" politicians. These findings are consistent with *proposition 5*, which suggests that conflict events in legislators' home departments induce larger differential changes in the increased right-wing support effect.

Table A18, shows the results of the sample restrictions on the difference-in-differences specification. Two important results arise. The differential positive effect of rebel attacks on incumbent support, documented in the pre-peace process period, is partly driven by conflict-related votes. The coefficient estimated (column 1) shows that, after removing these votes, the effect remains positive but weakens (p-value = 0.103). This result suggests that it is in this dimension that politicians most change their vote-alignment after an attack in their home department, and is somewhat consistent with the idea that the increased right-wing support effect may be especially pronounced for these votes, and that legislators are responsive to their constituents' preferences. Second, the negative effect documented in the post-peace process period is driven by politicians in the most violent departments. Attacks from these departments constitute more than 50% of events in the post-peace process period. There are in total 27 events in this period, and 14 of these occurred in the three departments excluded.

8.2.7 Timing of elections in localized effects

The evidence from the difference-in-differences strategy suggests that politicians care differentially about attacks which occur in the departments from which they draw the most political support, suggesting that electoral incentives, coupled with a rightward shift in voter preferences, determine legislators' short-run responses to these events. An alternative hypothesis is that the preferences of politicians themselves shift to the right following the attacks, and that they do not, in fact, respond to the change in preferences of their constituents.[60] I repeat the analysis of looking around legislative elections to try to disentangle these hypotheses.

Table A19 shows the results. The results suggest that the differential effect for localized attacks is stronger before the 2010 elections relative to after these elections. I also observe a large and negative differential change in alignment for localized attacks before the 2014 elections, suggesting a strong right-wing effect which reduces legislators' support for the pro-peace PU. The effect is not significant after legislative elections, consistent with the idea of a weaker right-wing effect which is offset by the *rally* effect.

8.2.8 Separating the two effects

In this section I estimate the magnitudes of the right-wing and the *rally 'round the flag* effects. This exercise is based on the observations from the conceptual framework that i) the estimated coefficient for the pre-peace process period represents the addition of the *rally* and the right-wing effects (because the incumbent policy position is right-wing), and that ii) the estimated coefficient for the post-peace process period represents the subtraction of the right-wing effect from the *rally* effect (because the incumbent policy position is left-wing). Given these observations, and under the assumption that the effects are homogeneous across the two periods,[61] the magnitude of the two effects can be easily estimated using the coefficients from the event study analysis.[62] Figure A14 shows the results. Both of the effects are positive, but the estimates suggest that the *rally* effect is stronger and lasts longer (12 days) than the right-wing effect (6 days).

8.2.9 Alternative casualty thresholds

In this section I replicate the main results using two alternative casualty thresholds, attacks with at least one casualty, and attacks with at least five casualties. Restricting the analysis to a lower threshold implies that imposing a sample restriction around event-windows of

[60]In the context of the conceptual framework presented, an alternative model would be one in which legislators weight their own views and those of the incumbent government.

[61]Note that to the extent that the *rally* effect itself may depend on the policy-position of the incumbent, then this assumption is likely to be too strong. Depending on the nature of the heterogeneity, one of the effects will be larger than estimated, while the other effect will be smaller than estimated.

[62]By solving the two unknowns (*rally*, *rightwing*) in the two equations: i) $precoefficient = rally + rightwing$ and ii) $postcoefficient = rally - rightwing$

isolated attacks results in a much smaller sample. For this reason, I show results both with and without the event-window restriction. I also show the baseline three-casualty threshold results for comparison.

The time-series analysis is presented in table A15. Columns 1-2 and 7-8 show that overall politicians are not responsive to events with at least one casualty. This finding is not surprising given that there are many of these events and that they are likely to receive less attention (and reaction) than events with larger numbers of casualties. The fact that attacks occur very frequently also limits the statistical power when trying to estimate the effect of these events. Columns 5-6 show that, before the peace process started, the magnitude of the effect for events with at least five casualties is very similar to those for events with at least three casualties. The overall effect of rebel attacks on political alignment is not statistically significant for any of the post-peace process analyses.

The difference-in-difference analysis is presented in table A20. Though politicians did not seem to react overall to events with at least one casualty before the peace process started (table A15, columns 1-2), the differential effect is however positive and statistically significant (table A20, columns 1-2). These results suggest that though these events are lesser in magnitude, politicians are aware and react to these when they occur in their electoral districts. In particular, in the week following rebel attacks with at least one casualty, politicians from these electoral districts increase their support with the incumbent party by around 4.6 percentage points (column 2, the preferred estimate with the event-window restriction), relative to other politicians. The coefficient in the pre-peace process specification with at least five casualties and no event-window restriction (column 5) is imprecisely measured but is almost statistically significant (p=0.127), but most importantly, the magnitude of the coefficient is positive and similar to that in the three casualty threshold specification. After imposing the event-window restriction, the effect becomes statistically significant (column 6). In the post-peace process period, politicians do not react differentially to events with at least one casualty which occur in their home departments (columns 7-8), but the coefficients are negative. For events with at least five casualties, the coefficients are large and negative as in the three casualty threshold specification, but again, imprecisely measured due to a reduced number of events (columns 11-12).

8.2.10 Disentangling the dependent variable

The dependent variable *voteWithPU* summarizes vote alignment by comparing the politicians' votes with those of the ruling party. Tables A16 and A21 break apart the main regressions across the different components of the *voteWithPU* variable. Columns 1-3 include only votes which the ruling party voted to approve, that is, the average *voteValue* for members of the PU is positive, and columns 4-6 includes only votes which the ruling party rejected, or the average *voteValue* was less than or equal to zero (recall *voteValue* is equal to 1, 0 or -1 if politicians approve, abstain, or reject, respectively). The dependent variables in this analysis are indicator variables for whether politicians rejected (columns 1 and 4), abstained (columns 2 and 5) or approved (columns 3 and 6) a congressional vote.

Note that the time-series results rely on changes of both *voteValue*, how politicians vote individually, and *voteWithPU*, how incumbent politicians vote as a group. Thus, the effect may be partly driven by *co-movements* in voting for all politicians, and not necessarily a deliberate individual decision to support (or not) the ruling party. By splitting the sample by incumbent party position, the analysis limits the extent to which these *co-movements* drive the estimated effects. The extended analysis asks, given only votes which the incumbent party approved (or rejected) - as well as politician fixed effects, party-specific time trends and a function of time - is there a change in individual behaviour (approve, abstain or reject)?

The analysis for the time-series specification (table A16) suggests that the effect on individual vote positions is statistically significant (though weaker) than the overall effect. Before the peace process, the positive effect is driven by politicians changing their votes from an abstention to an approval, on votes which the ruling party voted to approve (panel A, columns 2-3). The sign of the coefficients for votes rejected by the incumbent party is consistent with the main results, other politicians are also more likely to reject, but not statistically significant (panel A, columns 4-6). After the peace process started (panel B), we see increased rejection of both votes which the incumbent party supported and not - leading to the overall null effect measured in the main results. The results suggest that attacks decreased approve votes overall, regardless of the position of the incumbent party on the vote.

The analysis for the difference-in-differences strategy (table A21) reveals two interesting patterns underlying these results. First, the effect on vote alignment is stronger for votes which the ruling party voted to approve, both in the pre and the post-peace process periods (columns 1-3). Second, the effect comes from politicians changing their votes from an abstention to an approval, in the pre-peace process period (panel A), and from an approval to an abstention in the post-peace process period (panel B). After an attack in their home department, politicians were around 8 percentage points less likely to abstain from and 9 percentage points more likely to approve a vote which the PU supported, before the policy shift. Once the peace process started, attacks had an opposite effect (around 9 percentage points less likely to approve, 7 percentage points more likely to abstain, and 2 percentage points more likely to reject). That is, the effect of attacks by the rebel group is reversed when the policy position of the ruling party shifts. The pattern suggests that politicians on the margin between an abstention and an approve vote are those who react to the attacks by changing their legislative positions.

8.2.11 Removing potentially coordinated attacks

I examine the covariance structure of attacks across Colombian departments to evaluate the possibility that these actions may be centrally coordinated by FARC for strategic purposes, one of which may be to influence congressional decisions. This empirical exercise is based on the idea that we can infer features about insurgent group structures by evaluating whether attacks in two different locations, on the same days, occur with higher frequency than that expected by random chance (as in Trebbi and Weese, 2019).[63] I restrict the analysis to departments with at least 10 attacks by FARC between 2006 and 2015. The cross-department covariance matrix of FARC attacks for the period of study reveals four pairs of departments with higher than random frequency of same-day events (out of 136 possible pairs, Table A22). These correspond to attacks on 22 different days which may have been potentially coordinated by FARC.[64] I then remove observations within the event window of these identified event-days from the sample and re-run the main analysis. The results are nearly identical to those in the main specification (figure A16, panel B).

8.2.12 Relationship between congressional-vote characteristics and exact day of attacks

I test whether congressional-vote characteristics are correlated with the precise day of events by examining regressions of the following form:

$$Y_{vt} = \alpha + \beta dOfAttack_{vt} + \theta^t F(t) + \varepsilon_{vt} \tag{9}$$

where Y_{vt} is a congressional-vote level characteristic, and $dOfAttack_{vt}$ is a dummy variable indicating whether the vote took place the day of an attack with at least three casualties. The analysis includes a function of time $F(t)$ which includes year fixed effects, month fixed effects, day of the week fixed effects, and calendar day (linearly), as in the baseline regressions.

The results are shown in table A8. Without including time controls, 9 out of 52 outcomes appear statistically significant (at a 95 percent confidence level; but only 2 using the Bonferroni correction for multiple comparisons). Once time controls are included, only 4 out of 52 appear as statistically significant (and none using the Bonferroni correction). Out of the 4 characteristics that remain statistically significant after including time controls (fourth committee of the senate, first committee of the house, third committee of the house, and the keyword "Equilibrio"),[65] only 1 is also statistically significant for alternative

[63] I do not replicate the complete analysis in Trebbi and Weese (2019) but instead use the matrix to identify potentially coordinated events.

[64] In total, around five percent of all attacks occur on these days, providing additional evidence that FARC intelligence and actions are largely decentralized, as previously discussed.

[65] The equilibrium keyword refers to the issue of the equilibrium of power across the different branches of the government.

casualty thresholds, first committee of the house. The coefficient is negative suggesting that FARC attacks were less likely to occur on days in which this particular committee meets.

The first committee of the house of representatives deals with issues of constitutional reform, territorial organization, the legislative branch of government, intellectual property and policies for peace, among others. Further analysis suggests that the pattern is present before the peace process started ($\beta = -0.117$, p-value$= 0.043$), but not in the post peace process period ($\beta = -0.031$, p-value$= 0.623$). Considering the number of statistical tests, it is likely that this is a type I error. On the other hand, if FARC understood the effects documented, and wanted to avoid attacks on days in which this particular committee was voting (to avoid strengthening legislative support for the PU on these issues), then this would tend to bias the coefficients I estimate towards zero. As a robustness check, the results from analyses removing votes from this particular committee are somewhat stronger but not statistically different from the main results (available upon request). Note too that there are no statistical differences on days of FARC attacks in the share of either congressional votes with the "peace" keyword, or votes by the perhaps more relevant second committee (neither for the senate or the house), which deals with issues of national defense and law enforcement.

Overall these results support the hypothesis that the very precise timing of FARC attacks were unlikely to be systematically correlated with events occurring in the Colombian congress.

8.2.13 Heterogeneity across legislators' ideological position: Event study

An alternative way to estimate whether the effects are heterogeneous across the spectrum of politicians' ideology is to cut the sample by politicians who are left and right of the median of the left-right index, and to estimate the main empirical framework separately for these groups. I present results from this exercise here. In particular, I repeat the event-study analysis on subsamples of "left-wing" vs. "right-wing" politicians (classified by their propensity to align their votes with the two parties which have clear ideological positions, the left-wing PD and the right-wing CD, as outlined in section 4). This analysis is shown in figure A17. In the pre-peace process period, the effect is statistically significant in the days just after the event for both groups of legislators. The effect becomes insignificant in the post-peace process period for both groups, but the change is larger for the "right-wing" group, as seen in the bottom figures (the difference in the pre and post coefficients is larger for this group, and statistically significant). These results are consistent with those presented in Table 3.

8.2.14 Alternative specification for Twitter analysis

An alternative analysis to the event-study framework, which instead compares engagement the week before attacks to the week after attacks is presented in table A26.[66] The results suggest that in the week following a rebel attack, politicians from the PU received almost 8 percent more engagement (column 2), the most right-leaning tweets received about 22 percent more engagement (column 3), and tweets from PU members which were in the top most right-leaning tweets received about 25 percent more engagement (column 4), following attacks by the rebels. In addition, I estimate a difference-in-differences regression analogous to that in equation (2) with *tweetEngagement* as the outcome variable. Though imprecisely measured (columns 5-8), the direction of the coefficients suggests that engagement for right-leaning tweets from "treated" politicians, whose home department was the location of a rebel attack, may differentially increase after these events (column 7), but that tweets from PU members received less differential engagement (column 6). The direction of the coefficients are consistent with the interpretation that the differential local effect is driven by the increased right-wing support effect, but that, once the peace process started, PU members lost local support.

8.2.15 Conflict and polarization on Twitter

To evaluate whether rebel attacks increase support not just for extreme right-wing views, but also extreme left-wing views, I repeat the main event study analysis on the top-most left-wing tweets as measured by the political leaning index. The results from this exercise are shown in figure A20. Though there appears to be some increased engagement for left-wing tweets, suggesting that there is an overall increase in polarization, it occurs not immediately after attacks, but starting 3 days after the attacks. The relative magnitude of the largest coefficient (3-6 days) is about half the size of the increased engagement for right-wing tweets. To further study this, I repeat the time-series analysis from table A26 for left-wing tweets in table A27, column 1. The coefficient is not statistically significant but is relatively large in magnitude. These results suggest that there is indeed an increase in polarization due to conflict and that tweets with extreme language (as measured), receive increased support in the social media platform.

To examine whether there is an overall shift to the right in addition to an increase in

[66] More precisely: $tweetEngagement_{ipt} = \alpha + \beta_0 attackWindow_t + \beta_1 postAttack_t + \gamma_p + \theta^t F(t) + \varepsilon_{ipt}$. Where the dummy *attackWindow* is equal to one if the tweet was published within a two-week window of the attack (one week before, one week after), and the *postAttack* dummy is equal to one if the tweet was published the week after an attack.

polarization, I study a regression of the following form:

$$\begin{aligned} tweetEngagement_{ipt} = &\beta_0 postAttack_t + \beta_1 politicalLeaning_i * postAttack_t \\ &+ \beta_2 politicalLeaning_i^2 * postAttack_t + \omega_1 politicalLeaning_i \\ &+ \omega_2 politicalLeaning_i^2 + \gamma_p + \theta^t F(t) + \varepsilon_{ipt} \end{aligned} \tag{10}$$

for tweet i, by politician p, on day t; where $postAttack_t$ is an indicator variable equal to one if the vote occurred in the week after an attack and $politicalLeaning_i$ is the political leaning measure of tweet i. All specifications also include an *attackWindow* dummy, an indicator variable equal to one if the vote occurred within two weeks of an attack (fully interacted with the other relevant variables), such that the interpretation of the $\boldsymbol{\beta}$ coefficients is changes in alignment relative to the week before the events. The coefficients of interest are β_1, which evaluates whether more right-leaning tweets receive increased differential engagement following attacks, and β_2 which evaluates whether tweets with more extreme language (both left or right) receive increased differential engagement following attacks. The $\boldsymbol{\omega}$ coefficients assess whether more right-wing language and more extreme language tweets are associated with higher engagement overall.

The results are presented in table A27, columns 3-6. I first present the results without the squared term for the political leaning measure (columns 3-4). The interaction coefficient β_1 is positive but statistically insignificant. This result suggests that even though the overall shift in support may be stronger for right-wing tweets, the suggested increase in polarization weakens the precision in these estimates, as extreme left-wing tweets also see some increased support. In columns 5-6, after controlling for the squared term in political leaning, the β_1 coefficient remains positive but is now more precisely estimated and statistically significant. In addition, the β_2 coefficient is also positive and statistically significant. Taken together, the results suggest that conflict events increase polarization on Twitter, but once we control for this effect, the overall shift in support is stronger for right-wing tweets.

A back of the envelope calculation (using the estimates from the last column, which include day fixed effects) suggests that following attacks by FARC, a tweet with political leaning one standard deviation to the right of a neutral tweet receives on average 6 percent more engagement $((1) \times 0.0404 + (1^2) \times 0.0233)$ than the neutral tweet (political leaning equal to zero). On the other hand, a tweet one standard deviation to the left, receives 1.7 percent less engagement $((-1) \times 0.0404 + (-1^2) \times 0.0233)$.[67] An extreme-right tweet three standard deviations away (99+ percentile) receives 33 percent more engagement $((3) \times 0.0404 + (3^2) \times 0.0233)$ following an attack, whereas an extreme-left tweet $((-3) \times$

[67] The $\boldsymbol{\omega}$ coefficients are both positive suggesting that at baseline right-wing tweets and extreme language tweets receive more engagement overall. The estimates presented are for differential changes in engagement.

$0.0404 + (-3^2) \times 0.02330.)$ receives 9 percent more engagement, both of these relative a neutral tweet.

8.2.16 The ruling coalition and the *rally round' the flag* effect

I treat the incumbent party and party of the president, the PU, as the main anchor of the "flag" throughout the study. An important question would be whether the *rally* effect extends to politicians in other parties that were also part of the ruling coalition, the *Unidad Nacional*. The main parties included in this coalition are the Conservative party (from 2006 to 2014), *Cambio Radical* (throughout the entire period of study), and the Liberal party (2010-2018). I investigate this question by repeating the Twitter event study analysis on all members of the ruling coalition. The results are presented in figure A21. Though no individual coefficients are statistically significant at the 95% confidence level, two of them are at the 90% confidence level (0-2, and 6-8). In addition, the pooled coefficient for one week after attacks is statistically significant (β= 0.093, p-value = 0.004, not shown), and larger than for just the PU (β= 0.077, table A26, column 1). The results from these exercises suggest that the *rally* effects documented may in fact have extended beyond the incumbent party.

8.2.17 Alternative text analysis methodology

I use a linear regression based on the most used words of the two leaders (Santos and Uribe) to measure the political leaning of tweets. This methodology is simple and intuitive to most social scientists. In this section, results are presented from using an alternative and more sophisticated approach which uses machine learning methods to classify these tweets. In particular, I estimate a multinomial naive Bayes model, using the post-peace process tweets of the leaders as the training set. These tweets are categorized into right-leaning (Uribe) and left-leaning (Santos), tokenized (ie. a vector of word frequencies is created for each, similar to the base methodology), and then used by the classifier to "learn" what a right-leaning or a left-leaning tweet is (or more precisely, to estimate the parameters of the model). The classifier then fits the model to the rest of the data (all other tweets) to estimate a probability that these are right-leaning or left-leaning.[68]

The correlation between the political leaning measure estimated using the linear regression methodology and the probability estimated by the multinomial naive Bayes model is 0.62 at the tweet level. Note that the linear model political leaning index for tweets ranges from around -5 to 5. In contrast, the multinomial naive Bayes probability is by construction (and definition) bounded between 0 and 1. If the measures are averaged at the politician level, the correlation between the two indexes is 0.87. The tweet engagement

[68]The process is implemented using the scikit-learn Python package, see scikit-learn.org for more details.

event study using the alternative measure yields very similar results as those from using the base measure. The scatter plots for these two relationships and the alternative event study plot are all shown in figure A22.

8.3 Theoretical appendix

Recall the two main assumptions 1) $\frac{\partial \omega_I}{\partial c} > 0$ (the *rally 'round the flag* effect) and 2) $\frac{\partial x_{Vj}}{\partial c} > 0$ (the increased right-wing support effect). And recall the definition of the *distance* between the policy positions of the legislator and the incumbent government:

$$D_j^* = |\frac{\omega_V (x_I - x_{Vj})}{\omega_I + \omega_V}|$$

Depending on the relative position of the incumbent government x_I and the bliss point of voters at location x_{Vj}, let us define two cases to eliminate the absolute value operation:

if $x_I > x_{Vj}$, then

$$D_j^{*R} = \frac{\omega_V (x_I - x_{Vj})}{\omega_I + \omega_V}$$

otherwise, if $x_I < x_{Vj}$, then

$$D_j^{*L} = \frac{\omega_V (x_{Vj} - x_I)}{\omega_I + \omega_V}$$

now, with these two cases we can proceed to the proofs.

Proposition 1: Right-wing incumbent. Let x_I^R be a right-wing incumbent position, such that $x_I^R > x_{Vj}(c_0)$, then $\partial D_j^{*R} / \partial c < 0$.

Proof 1:

$$\begin{aligned} \frac{\partial D_j^{*R}}{\partial c} &= \frac{\partial D_j^{*R}}{\partial \omega_I} . \frac{\partial \omega_I}{\partial c} + \frac{\partial D_j^{*R}}{\partial x_{Vj}} . \frac{\partial x_{Vj}}{\partial c} \\ &= \underbrace{- \frac{\omega_V (x_I - x_{Vj})}{(\omega_I + \omega_V)^2} . \frac{\partial \omega_I}{\partial c}}_{rally \text{ effect}} \underbrace{- \frac{\omega_V}{(\omega_I + \omega_V)} . \frac{\partial x_{Vj}}{\partial c}}_{right-wing \text{ effect}} \end{aligned} \tag{11}$$

Given assumptions 1, $\frac{\partial \omega_I}{\partial c} > 0$, and 2, $\frac{\partial x_{Vj}}{\partial c} > 0$ it follows that $\partial D_j^{*R} / \partial c < 0$

■

Note that both the *rally* and the *right-wing* effects are negative in equation (1). That is, both of these effects *reduce* the distance between the incumbent position and the legislator position.

Proposition 2: Left-wing incumbent. If $x_I^L < x_{Vj}(c_0)$, then $\partial D_j^{*L}/\partial c$ is ambiguous. However, $\partial D_j^{*L}/\partial c > \partial D_j^{*R}/\partial c$ if $|x_I^L - x_{Vj}(c_0)| \leq |x_I^R - x_{Vj}(c_0)|$.

Proof 2.1:
The proof for the first part of the proposition is similar to that of proposition 1.

$$\begin{aligned}\frac{\partial D_j^{*L}}{\partial c} &= \frac{\partial D_j^{*L}}{\partial \omega_I}.\frac{\partial \omega_I}{\partial c} + \frac{\partial D_j^{*L}}{\partial x_{Vj}}.\frac{\partial x_{Vj}}{\partial c} \\ &= \underbrace{-\frac{\omega_V(x_{Vj}-x_I)}{(\omega_I+\omega_V)^2}.\frac{\partial \omega_I}{\partial c}}_{\textit{rally}\text{ effect}} \underbrace{+\frac{\omega_V}{(\omega_I+\omega_V)}.\frac{\partial x_{Vj}}{\partial c}}_{\textit{right-wing}\text{ effect}}\end{aligned} \tag{12}$$

Given assumptions 1, $\frac{\partial \omega_I}{\partial c} > 0$, and 2, $\frac{\partial x_{Vj}}{\partial c} > 0$ it follows that the sign of $\partial D_j^{*L}/\partial c$ is ambiguous.

Proof 2.2:
If it is the case that $|x_I^L - x_{Vj}(c_0)| \leq |x_I^R - x_{Vj}(c_0)|$, then we can use equations (1) and (2) to prove the second part of the proposition:

$$\begin{gathered}|x_I^L - x_{Vj}(c_0)| \leq |x_I^R - x_{Vj}(c_0)| \\ x_{Vj} - x_I^L \leq x_I^R - x_{Vj} \\ -\frac{\omega_V(x_{Vj}-x_I^L)}{(\omega_I+\omega_V)^2}.\frac{\partial \omega_I}{\partial c} \geq -\frac{\omega_V(x_I^R-x_{Vj})}{(\omega_I+\omega_V)^2}.\frac{\partial \omega_I}{\partial c} \\ -\frac{\omega_V(x_{Vj}-x_I^L)}{(\omega_I+\omega_V)^2}.\frac{\partial \omega_I}{\partial c} + \frac{\omega_V}{(\omega_I+\omega_V)}.\frac{\partial x_{Vj}}{\partial c} > -\frac{\omega_V(x_I^R-x_{Vj})}{(\omega_I+\omega_V)^2}.\frac{\partial \omega_I}{\partial c} - \frac{\omega_V}{(\omega_I+\omega_V)}.\frac{\partial x_{Vj}}{\partial c} \\ \partial D_j^{*L}/\partial c > \partial D_j^{*R}/\partial c\end{gathered}$$

■

In fact, as observed from the second last step here, the assumption $|x_I^L - x_{Vj}(c_0)| < |x_I^R - x_{Vj}(c_0)|$ is in fact too strong and could be relaxed further. However, the main point of the proposition is clear. For two "similarly extreme" incumbent governments, conflict will benefit the right-wing government more than the left-wing government - in terms of legislator convergence towards the incumbent's platform. The intuition is similarly straightforward. The *rally* effect will pull the legislator's position closer to the position of the incumbent for both governments, but while the right-wing effect will also pull the legislator's position closer to the right-wing incumbent's position, it will push the legislator's position further from that of the left-wing incumbent.

Proposition 4: Electoral incentives. If $x^U_{Vj} = x^S_{Vj}, \frac{\partial x^U_{Vj}}{\partial c} = \frac{\partial x^S_{Vj}}{\partial c}, \frac{\partial \omega^U_I}{\partial c} = \frac{\partial \omega^S_I}{\partial c}$, and $\omega^U_V > \omega^S_V$, then $\partial D^{*U}_j / \partial c < \partial D^{*S}_j / \partial c$ when $x_{Vj}(c_0) < x_I$, and $\partial D^{*U}_j / \partial c > \partial D^{*S}_j / \partial c$ when $x_{Vj}(c_0) > x_I$.

Proof 4:

Recall we normalize the weights such that $\omega_I + \omega_V = 1$.[69] Therefore, re-write:

$$D^*_j = |(1 - \omega_I)(x_I - x_{Vj})|$$

Taking the derivative with respect to c (for right-wing incumbent / left-wing voters) yields:

$$\begin{aligned} \frac{\partial D^{*R}_j}{\partial c} &= \frac{\partial D^{*R}_j}{\partial \omega_I}.\frac{\partial \omega_I}{\partial c} + \frac{\partial D^{*R}_j}{\partial x_{Vj}}.\frac{\partial x_{Vj}}{\partial c} \\ &= \underbrace{-(x_{Vj} - x_I).\frac{\partial \omega_I}{\partial c}}_{rally \text{ effect}} \underbrace{-(1 - \omega_I).\frac{\partial x_{Vj}}{\partial c}}_{right-wing \text{ effect}} \end{aligned} \tag{13}$$

Since the initial conditions are the same and the only difference is that $\omega^U_V > \omega^S_V$, or equivalently $\omega^U_I < \omega^S_I$, it follows that $\partial D^{*U}_j / \partial c < \partial D^{*S}_j / \partial c$. The difference is entirely driven by the right-wing effect. The proof for left-wing incumbent / right-wing voters follows equivalently.

I now extend the model to consider the case where conflict varies across districts, such that $\frac{\partial x_{Vk}}{\partial c} > \frac{\partial x_{Vj}}{\partial c}$. For instance, if district k is the location of where rebel attacks takes place.[70] If the incumbent's position is relatively right-wing, then legislator k gets closer to the incumbent position x_I because voters in her district become more right-wing relative to voters in j. Alternatively, if the incumbent's position is relatively left-wing, then, for the

[69] This normalization simplifies the analysis and removes some extreme cases in which the proposition does not hold. In particular, consider the case of the right-wing effect being very small, ie. $\frac{\partial x^U_{Vj}}{\partial c} \to 0$, and the relative weight on the incumbent of accountable legislator U being very small, ie. $\frac{\omega^U_I}{\omega^S_V} \to 0$, then conflict could induce larger changes for S, as it responds to the rally effect, but U is "stuck" closer to voters (who themselves respond very little).

[70] Alternatively, let c_j be the level of conflict in district j, $c_k > c_j$ and $c = \sum_{\forall j \in J} c_j$. Voters preferred policy depends on the level of conflict in their district, $x_{Vj}(c_j)$.

same reason, legislator k chooses a position further from x_I than j's.

Proposition 5: Localized effects. If $\frac{\partial x_{Vk}}{\partial c} > \frac{\partial x_{Vj}}{\partial c}$ and $x_{Vk}(c_0) = x_{Vj}(c_0)$ then:

1. If $x_I^R > x_{Vj}(c_0)$, $\partial D_k^{*R}/\partial c < \partial D_j^{*R}/\partial c < 0$, and
2. If $x_I^L < x_{Vj}(c_0)$, $\partial D_k^{*L}/\partial c > \partial D_j^{*L}/\partial c$

Proof 5.1:

The first part of the proof follows from the assumption and equation (1):

$$\frac{\partial x_{Vk}}{\partial c} > \frac{\partial x_{Vj}}{\partial c}$$

$$-\frac{\omega_V}{(\omega_I + \omega_V)}.\frac{\partial x_{Vk}}{\partial c} < -\frac{\omega_V}{(\omega_I + \omega_V)}.\frac{\partial x_{Vj}}{\partial c}$$

$$-\frac{\omega_V(x_I - x_{Vk})}{(\omega_I + \omega_V)^2}.\frac{\partial \omega_I}{\partial c} - \frac{\omega_V}{(\omega_I + \omega_V)}.\frac{\partial x_{Vk}}{\partial c} < -\frac{\omega_V(x_I - x_{Vj})}{(\omega_I + \omega_V)^2}.\frac{\partial \omega_I}{\partial c} - \frac{\omega_V}{(\omega_I + \omega_V)}.\frac{\partial x_{Vj}}{\partial c}$$

$$\partial D_k^{*R}/\partial c < \partial D_j^{*R}/\partial c$$

The *rally* effect is the same size for both k and j, however, because legislator k's voters respond more to conflict, the right-wing effect is larger, resulting in an overall larger reduction of the policy distance in this case. Note that both $D_k^{*R}/\partial c < 0$ and $\partial D_j^{*R}/\partial c < 0$ follow from proposition 1.

Proof 5.2:

The second part of the proof is analogous to 3.1, it follows from the assumption and equation (2):

$$\frac{\partial x_{Vk}}{\partial c} > \frac{\partial x_{Vj}}{\partial c}$$

$$\frac{\omega_V}{(\omega_I + \omega_V)}.\frac{\partial x_{Vk}}{\partial c} > \frac{\omega_V}{(\omega_I + \omega_V)}.\frac{\partial x_{Vj}}{\partial c}$$

$$-\frac{\omega_V(x_{Vk} - x_I)}{(\omega_I + \omega_V)^2}.\frac{\partial \omega_I}{\partial c} + \frac{\omega_V}{(\omega_I + \omega_V)}.\frac{\partial x_{Vk}}{\partial c} > -\frac{\omega_V(x_{Vj} - x_I)}{(\omega_I + \omega_V)^2}.\frac{\partial \omega_I}{\partial c} + \frac{\omega_V}{(\omega_I + \omega_V)}.\frac{\partial x_{Vj}}{\partial c}$$

$$\partial D_k^{*L}/\partial c > \partial D_j^{*L}/\partial c$$

■

As in 3.1, the *rally* effect is the same size for both k and j, however, because legislator k's voters respond more to conflict, the right-wing effect pushes k further from the left-wing incumbent, resulting in an overall larger policy distance in this case.

8.4 Extended historical background and discussion of the Colombian conflict in light of the results

This section provides an extended historical perspective, and a speculative discussion regarding the particularities of the Colombian context viewed through the lens of the results I present.

8.4.1 Historical background before Uribe and previous attempts at peaceful resolutions

The period preceding the commonly cited start of the Colombian conflict is referred to as *La Violencia* (The violence). The period started in the late 1940s and was an era characterized by violence between the two traditional political parties, the Liberals and the Conservatives, in which as many as 200,000 people are estimated to have died. The transition to the era known as the Colombian conflict began in 1958 with a power-sharing deal between these two parties, known as the National Front (*El Frente Nacional*). The start of the conflict is characterized to have been the 1960s, when the country's two main rebel groups, the Revolutionary Armed Forces of Colombia (FARC) and the National Liberation Army (ELN), were founded.

The 1980s saw an expansion of rebel activities and the emergence of right-wing paramilitary groups. The first attempt at a negotiated peace settlement between the Colombian government and the guerrilla groups also occurred in the 1980s. The peace process initiated by the government of Belisario Betancur, described as a process of "democratic opening", resulted in a signed ceasefire with four rebel groups in 1984 (including the FARC), as well as the creation of the *Unión Patriótica* (UP) political party by FARC leaders (Chernick, 1988). The UP obtained 14 seats in the 1986 congressional elections. Despite the ceasefire, confrontations between the military and the FARC continued. In addition, thousands of UP members were killed in the late 1980s and early 1990s, including several elected officials, in what has been described as a "political genocide" (Garcia-Peña, 2007). Right-wing paramilitaries were involved in many of these deaths. In addition, most armed groups increased their involvement in drug production and trafficking activities, further contributing to the intensification of the conflict.

Andrés Pastrana was elected president in 1998, year in which he began peace negotiations with FARC once more. Pastrana's was the third attempt at peace negotiations with FARC since 1982.[71] An important step of these dialogues was the creation of a "demilitarized zone" in southern Colombia between the departments of Meta and Caquetá.

[71] See Gonzáles Posso (2004) for a brief review of these processes.

Despite this concession, there was no ceasefire. Instead, the FARC used the demilitarized zone to expand their military capabilities during the peace process (Crandall, 2002; DeShazo, Primiani and McLean, 2007). Following a series of high-profile actions by the FARC, including the hijacking of an airplane, the negotiations ended in February of 2002, year in which Uribe was elected.

8.4.2 The Colombian conflict in light of the effects presented

I study the relationship between support for right-wing views and incumbent politicians on Twitter in light of previous work that has documented both *rally 'round the flag effects* and increased support for right-wing parties following terrorist attacks in other contexts. One could argue that the somewhat sudden rise of Uribe in the 2002 presidential campaign, after the failure of the 1998-2002 peace process, and his re-election in 2006, following an increase in rebel violence, reveal a pattern consistent with these effects. [72]

Violent attacks by the rebel group increased politicians' support in congress for the right-leaning, hard-line government while it was in power. His continued public support allowed the Uribe government to pursue a strong military campaign against the FARC and to effectively recover the monopoly of violence over many parts of Colombia, while reducing the rebels' military capabilities. Conflict with the rebel groups strengthened the mandate of Uribe: the constitution was reformed to allow re-election, a controversial demobilization process with paramilitary groups took place, and Santos was elected with his support.

Facing a weakened FARC, the Santos government begins peace negotiations with the group in 2012, yet negotiating without an effective ceasefire. In the post-peace process period, the relationship between rebel attacks and increased support in congress subsides. Though the government's policy shift resulted in it no longer benefiting from the increased right-wing support, *rally* effects seem to have persisted, allowing the incumbent government to pursue its new policy of achieving a peace settlement with the rebels. *Rally* effects are likely to have allowed Santos to pursue the peace process without a ceasefire: in the absence of this incumbent advantage, attacks by the rebel group would have weakened the government (as suggested by the diff-in-diff results) and potentially jeopardized the negotiations.

FARC's actions revealed that it was both aware of these broad effects and invested in the peace process. The endogeneity of FARC actions is what makes the effects hard to identify in the long-run (and why I focus instead on short-run effects). Note first that

[72]However, no *quantitative* studies had documented similar casual relationships for Colombia (to the extent of my knowledge). Weintraub, Vargas and Flores (2015) documents an inverted-U-shaped relationship between violence and support for Santos in 2014, which is partially consistent with the studies above. However, the study presents a relationship between voting and historical violence (over a period of more than 20 years). Gallego (2011) examines a related question, but the main outcome of interest is voter turnout. The author also investigates changes in third-party vote share (versus traditional parties), however, these parties are not classified into a left-right spectrum, or by incumbency status.

there were fewer attacks before the 2014 elections relative to the 2010 elections, which was important if, as I have argued, the right-wing effect is stronger closer to elections. As the public's patience for the negotiations dwindled and the approval rating of Santos fell (as well as presumably the strength of the *rally* effect), a unilateral ceasefire announced by the rebels in 2015 was an important step in the process.

When the ceasefire broke in April of 2015, Santos quickly retreated to his old *hard-line* self by re-instating bombardments against FARC camps, allowing him to minimize the damage of these events to his public image, and to take advantage of the increased right-wing support effect.[73] In addition, FARC attacks were particularly concentrated on infrastructure during this break in the ceasefire. Had there been more attacks with casualties (for which I have documented the effect), the peace process is more likely to have failed.

Despite the bilateral ceasefire and the efforts of the government, what was supposed to be the final agreement between the two parties was turned down by Colombians in a popular vote in October of 2016. The plebiscite on whether the accord would be implemented resulted in the "no" option, supported by Uribe and the CD, winning by a small margin.[74] Following the results from the plebiscite, the government and FARC continued negotiations and announced a revised agreement, which hoped to address some of the criticisms from the opposition. Analysts have pointed out that citizens in places that had been hardest hit by the FARC were more likely to vote 'yes' to the agreement,[75] suggesting that the local increased right-wing support effect dissipates in the long-run, while for those outside of conflict areas the effect may persist longer.

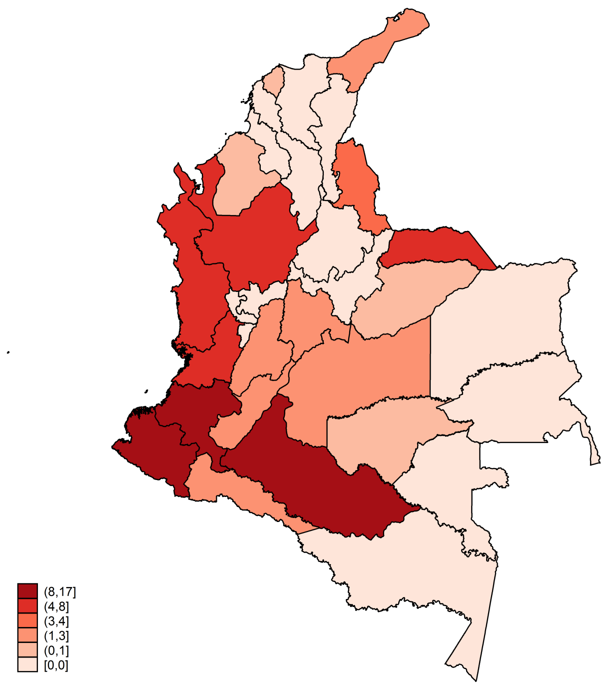
[73] See for instance (links): tweet 1 and tweet 2

[74] http://www.nytimes.com/2016/10/03/world/colombia-peace-deal-defeat.html

[75] See http://lasillavacia.com/hagame-el-cruce/asi-es-el-pais-que-voto-no-58201 and https://sites.google.com/site/miscelaneadelapaz/datos

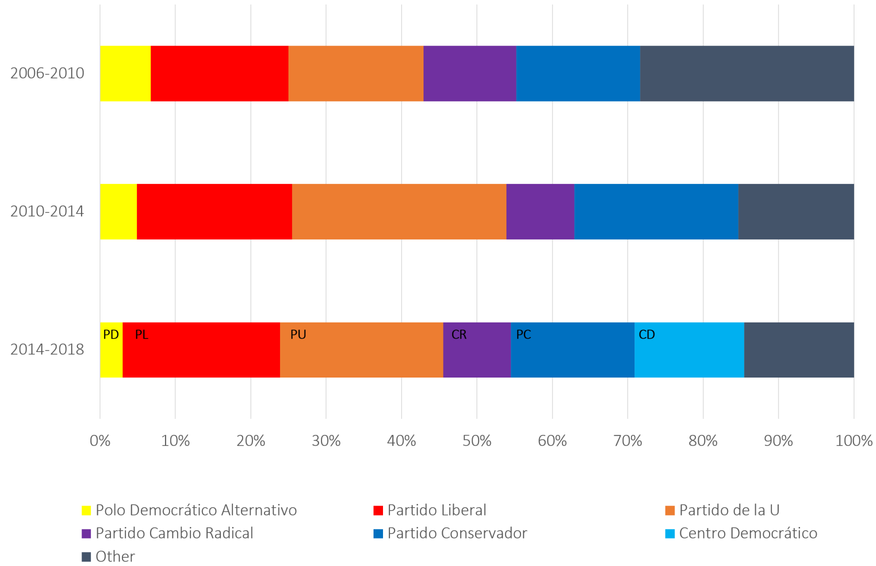
8.5 Appendix figures and tables

Figure A1: Attacks by FARC with at least three fatalities across departments



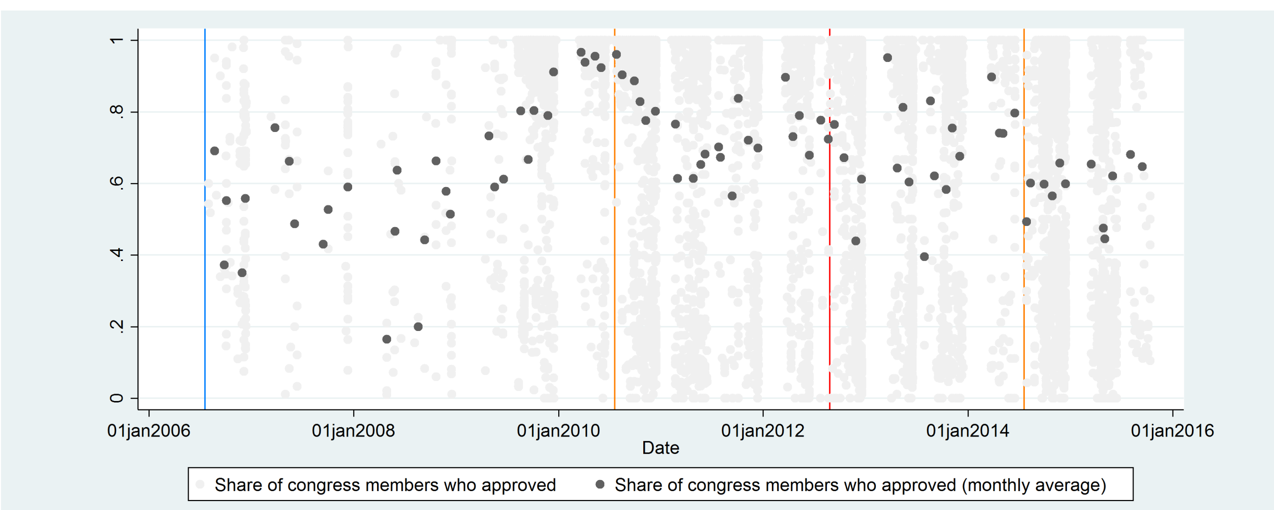
Notes: The map shows all attacks by FARC with at least three fatalities between 2006 and 2015 across Colombian departments, using data from the Global Terrorism Database (START, 2015).

Figure A2: Distribution of seats in congress by political party



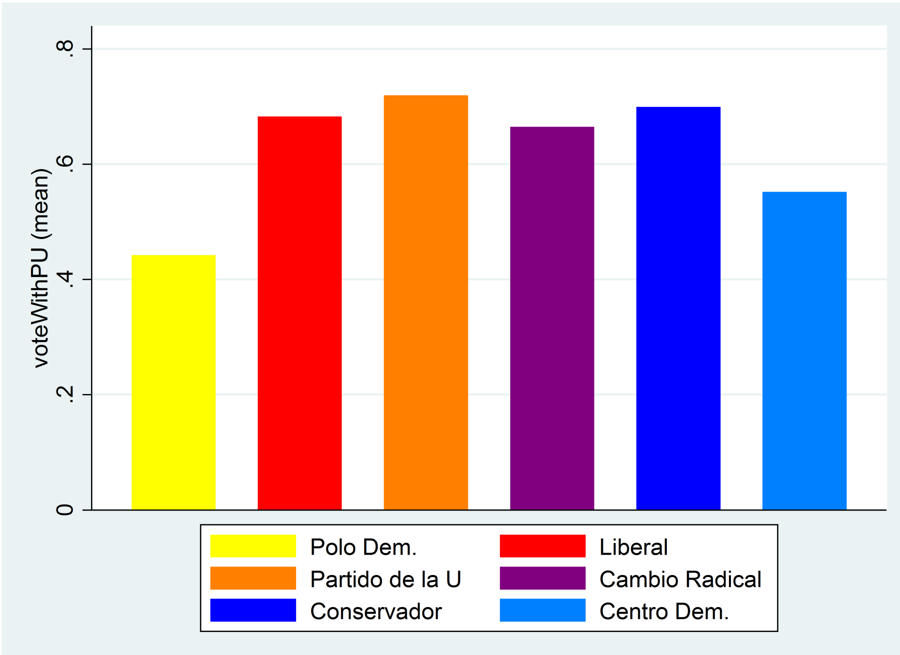
Notes: The figure shows the share of seats in congress held by each of the main political parties for each of the governments in the period of study. The Partido de la U is the ruling party across the study.

Figure A3: Share *approve* votes for each congressional vote



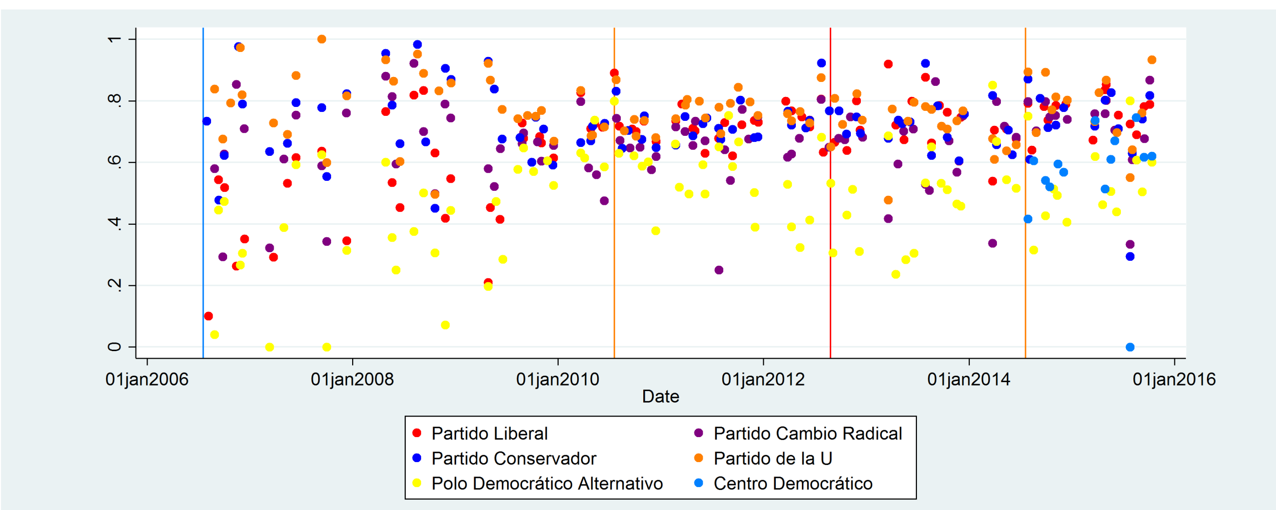
Notes: The figure shows congressional votes between 2006 and 2015. The y-axis shows the number of politicians who voted to approve a particular vote, and the x-axis shows the date of the vote. The vertical lines indicate the start of the first Santos government, the official start of the peace process with FARC, and the start of the second Santos government, respectively.

Figure A4: Support for PU across parties



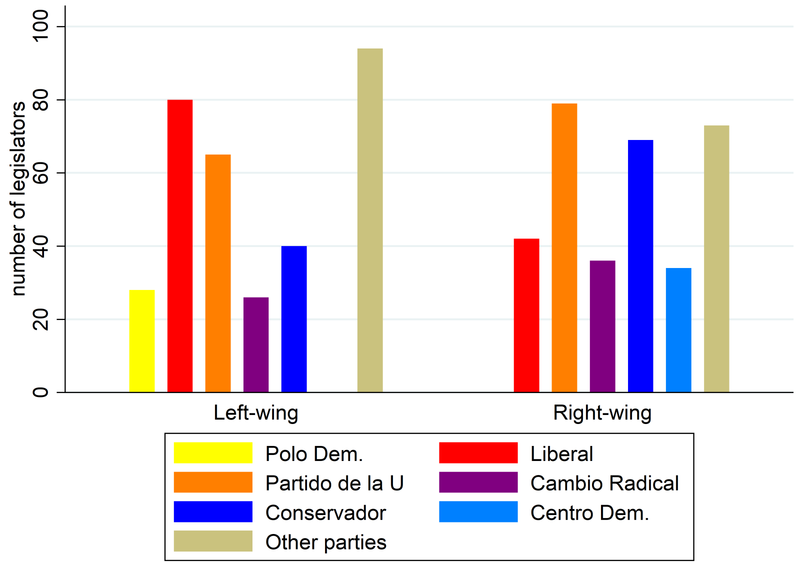
Notes: The figure shows the average vote alignment with the PU across parties for all individual votes.

Figure A5: Support for PU across parties and time



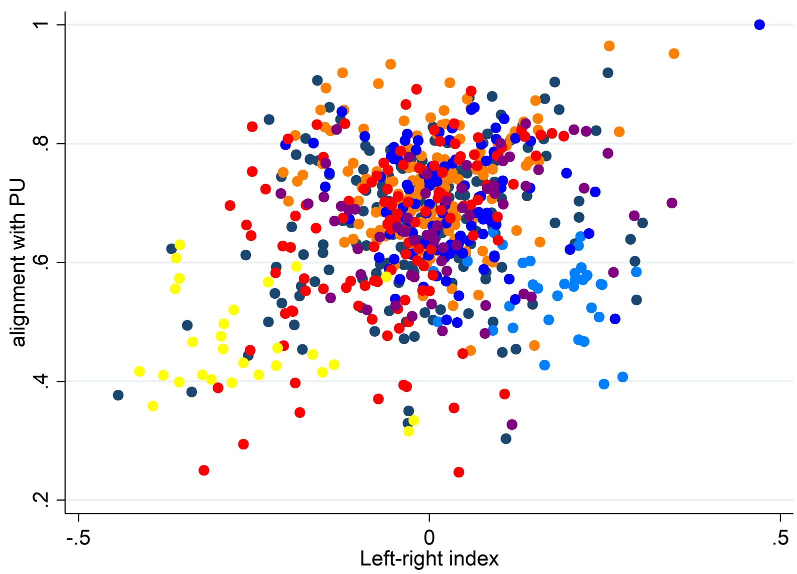
Notes: The figure shows the average vote alignment with the PU across parties and time. Each point is a party-month observation. The y-axis shows the average vote alignment with the PU (*voteWithPU*) of all individual votes, and the x-axis shows the date.

Figure A6: Classification of legislators



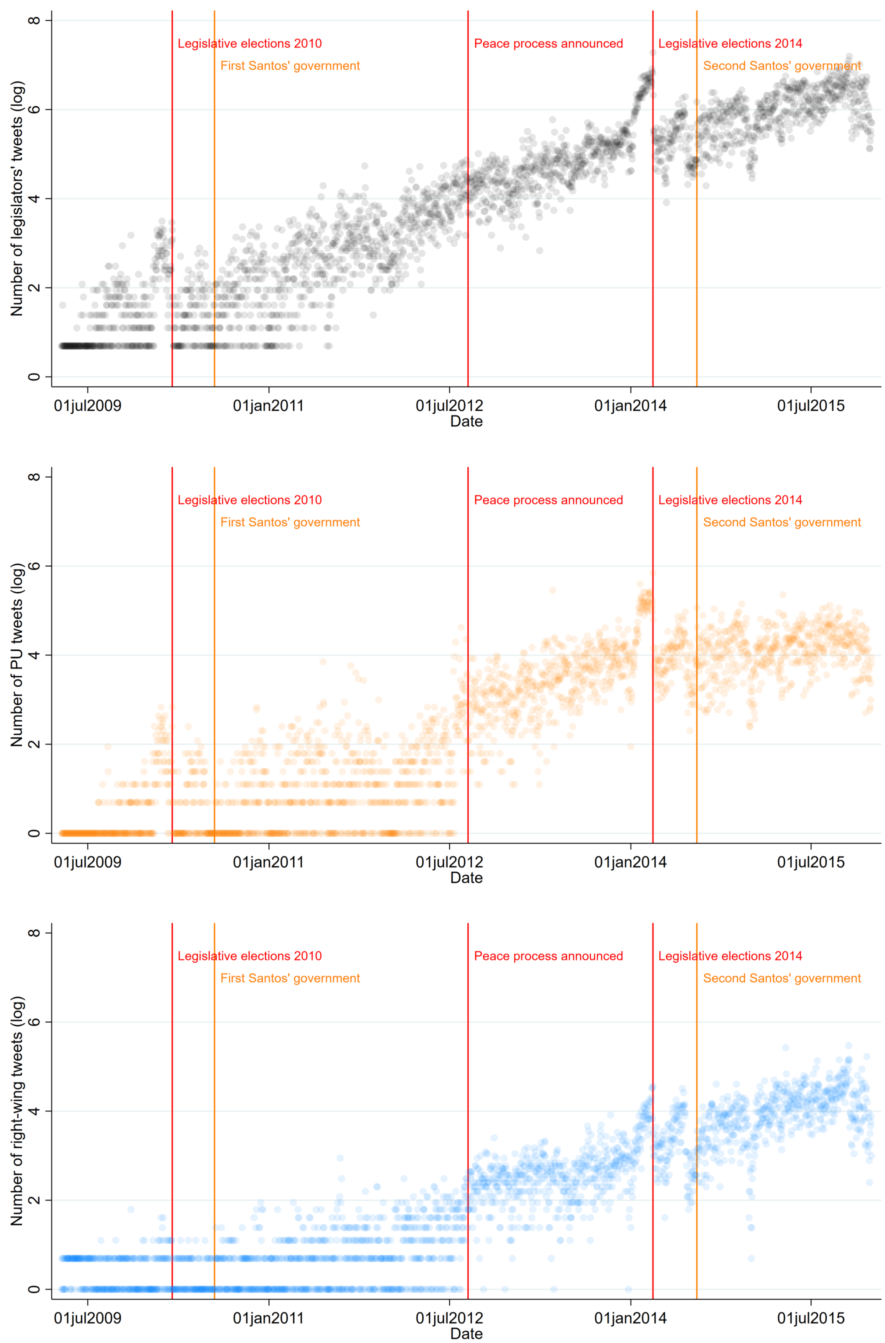
Notes: The figure shows the number of legislators by party classified in the left-wing and right-wing categories depending on their overall alignment with the relatively more extreme parties, the Polo Democratico and the Centro Democratico.

Figure A7: Relationship between left-right index and alignment with the incumbent party (PU)



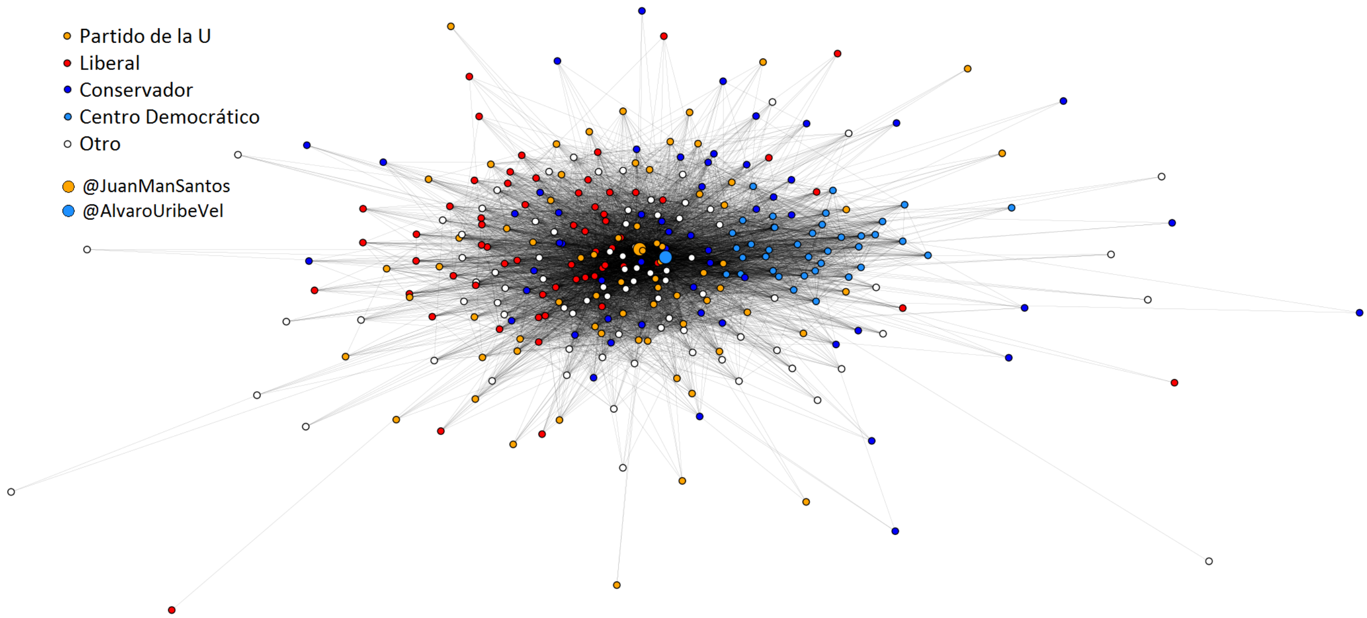
Notes: The graph shows the relationship between the left-right index and the average vote alignment of politicians with the incumbent PU party. The colors indicate the party of the politician as in previous figures. The relationship is positive ($\beta = 0.223$) and statistically significant (t-stat = 5.95).

Figure A8: Number of tweets by date in the Twitter database



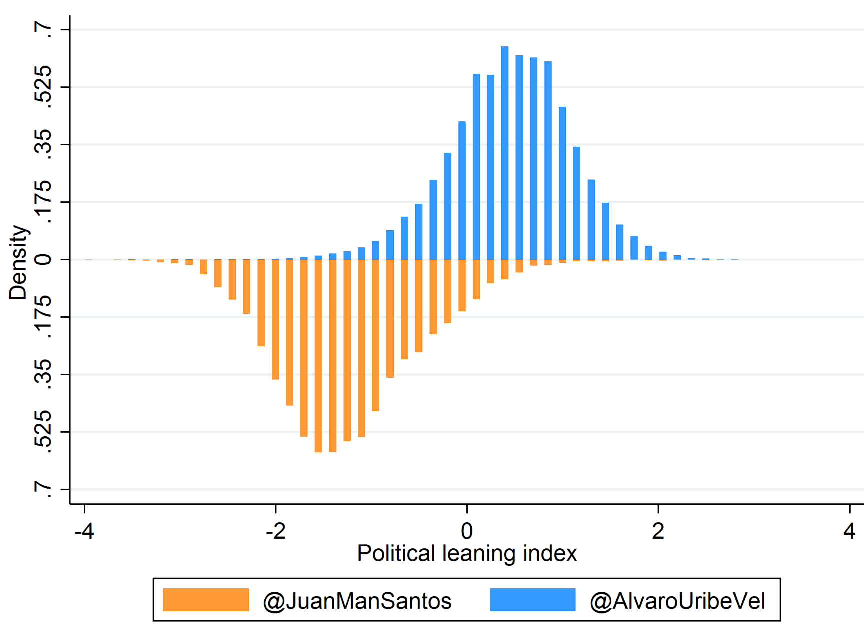
Notes: The plot shows the number of tweets in the database by date (in logs), separately for all tweets, tweets by incumbent PU legislators, and tweets classified as right-wing through the linear text analysis methodology.

Figure A9: Network of politicians on Twitter



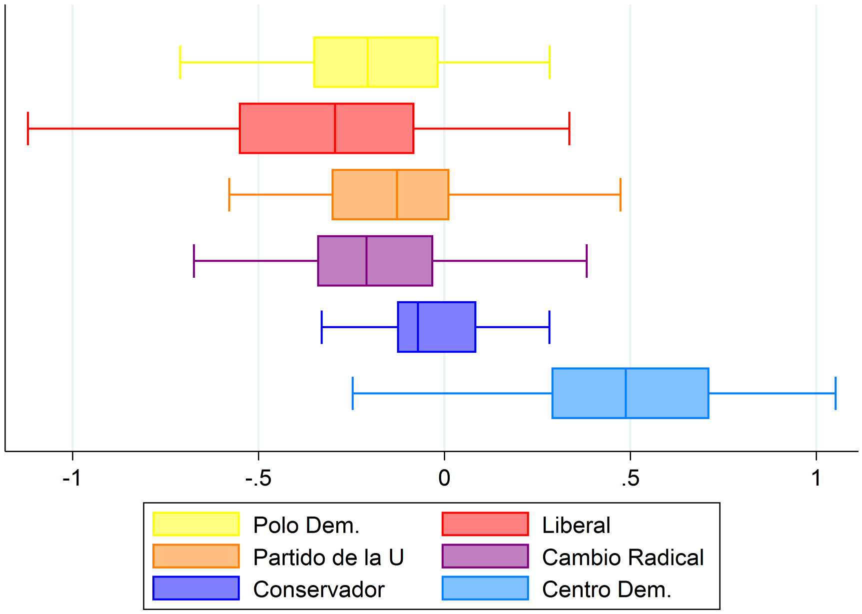
Notes: The figure illustrates the network of politicians on Twitter as an undirected graph. Each node represents a politician, colour-coded by political party, and an edge is drawn between two nodes if either of the politicians follows the other. The graph is drawn using a force-directed algorithm (Fruchterman and Reingold, 1991) which results in nodes being clustered around their connections, and roughly organized by centrality (more connected nodes closer to the center). @JuanManSantos (in orange) and @AlvaroUribeVel (in light blue) are highlighted as larger nodes.

Figure A10: Distribution of the political language index of leaders



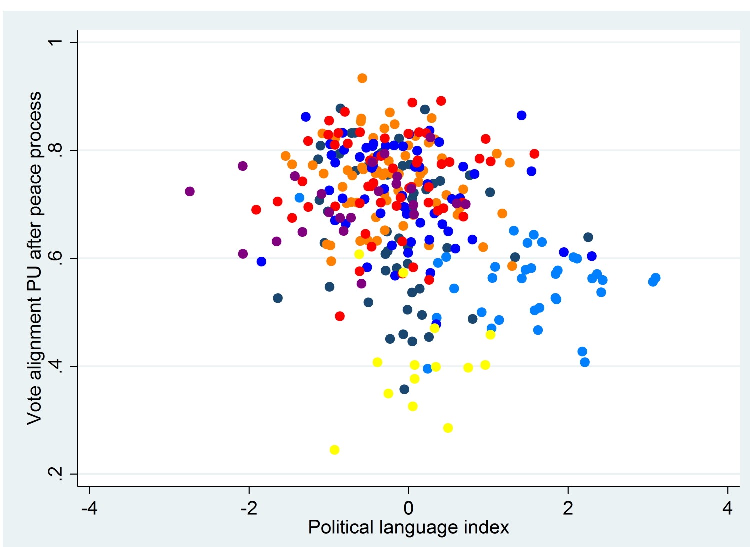
Notes: The histogram shows the distribution of tweets by political language for each of the two main leaders in the period of study.

Figure A11: Distribution of political language index of politicians by party



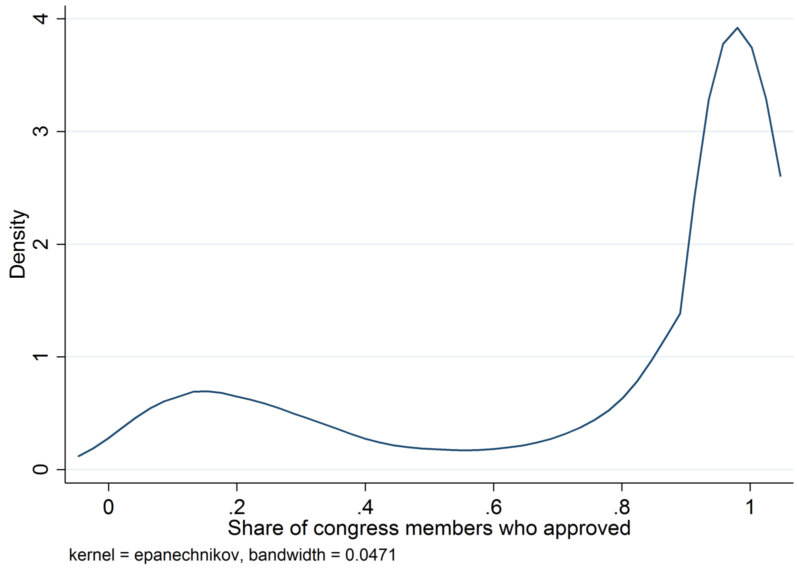
Notes: The graph shows the distribution of the political language index for all politicians across the main parties.

Figure A12: Political language index of politicians and vote alignment with the incumbent party (PU)



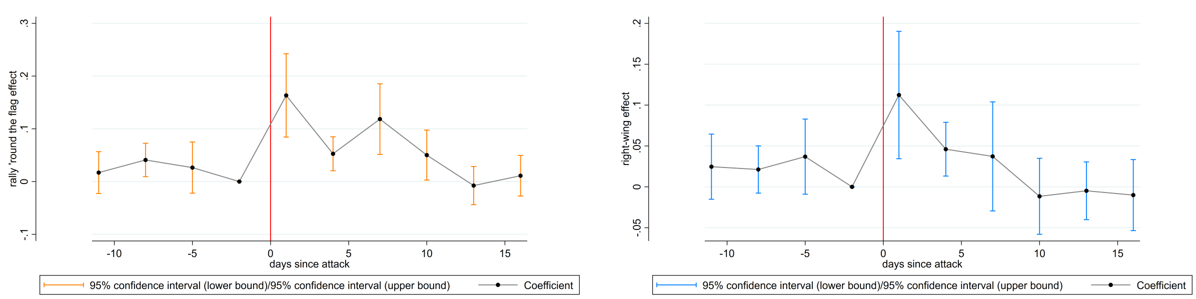
Notes: The graph shows the relationship between the *polLanguage* index and the average vote alignment of politicians after the peace process started. The colors indicate the party of the politician as in previous figures. The relationship is negative ($\beta = -0.042$) and statistically significant (t-stat $= -5.37$).

Figure A13: Kernel density of approval rate for congressional votes



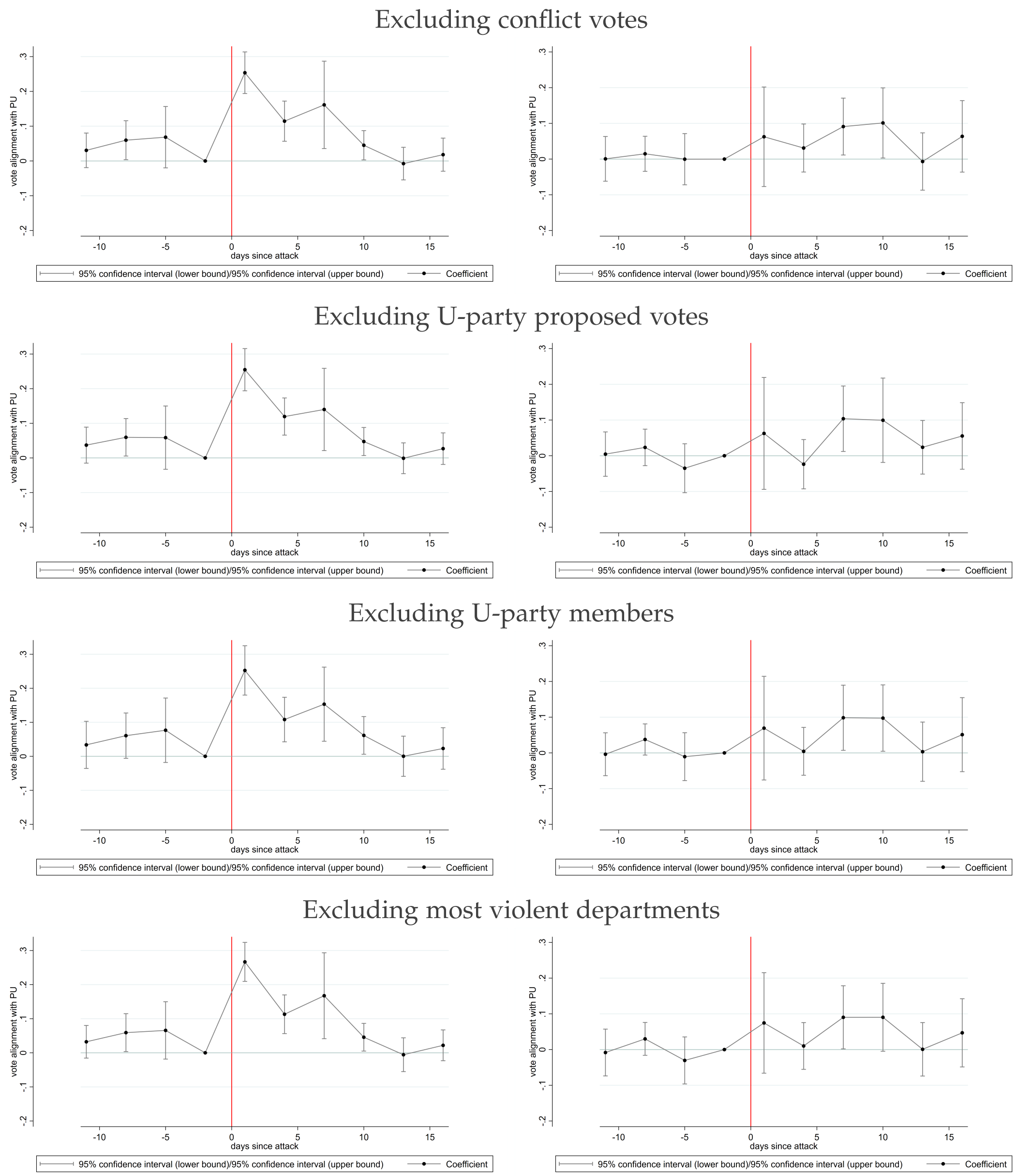
Notes: The figure shows the estimated kernel density of the approval rate ($numVotesApprove_v / numVotes_v$) for all congressional votes.

Figure A14: Estimated *rally 'round the flag* and right-wing effects based on event study specification



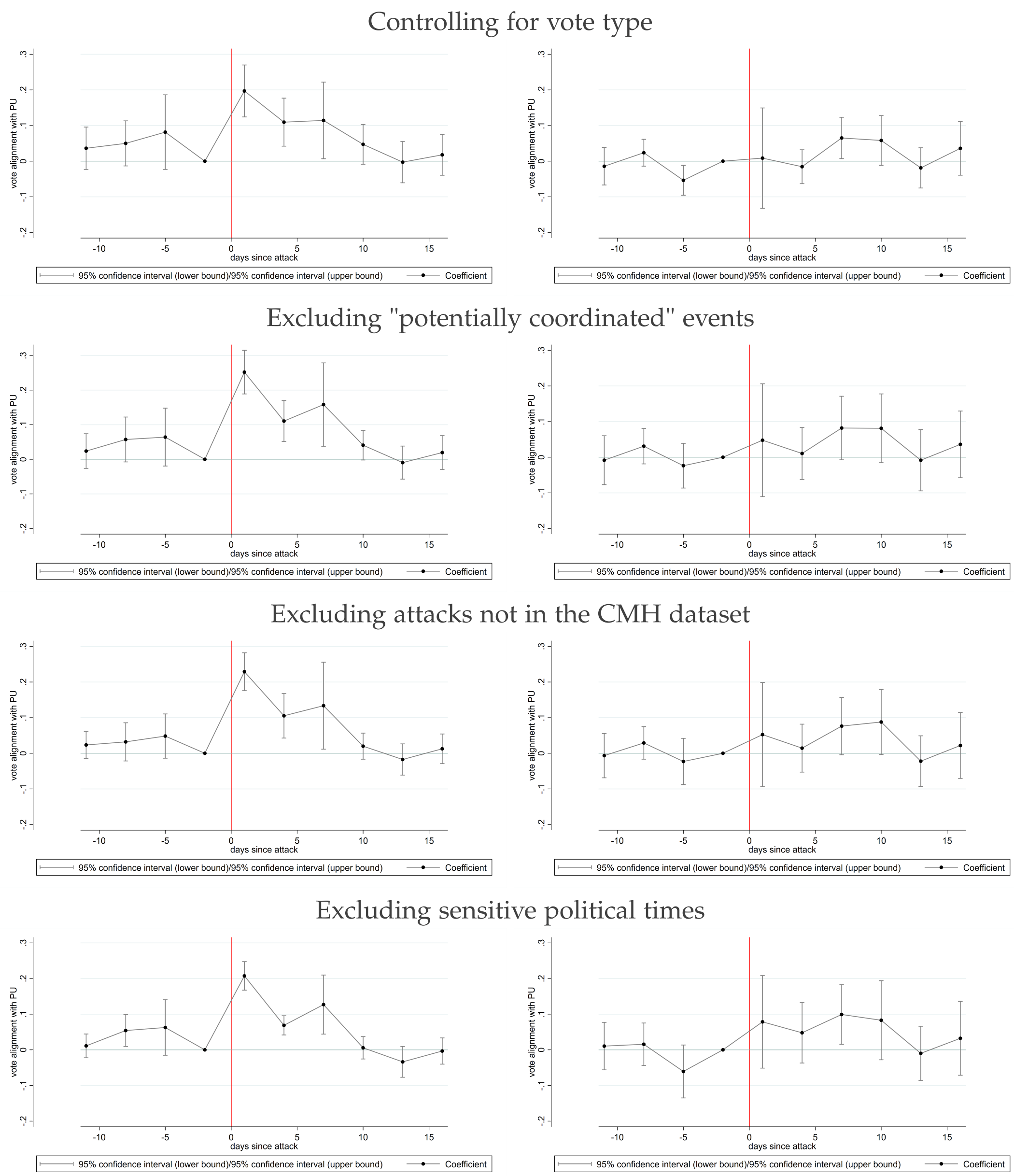
Notes: The figure shows the estimated rally and right-wing effects for the legislature, computed by running a pooled regression and interacting the three-day bins with a post-peace process dummy, and then estimating the effects by solving the two unknowns ($rally$, $rightwing$) in the two equations: i) $precoefficient = rally + rightwing$ and ii) $postcoefficient = rally - rightwing$. Standard errors are two-way clustered at the politician and week level.

Figure A15: Event study: Effect of FARC attacks on vote alignment with the ruling party, robustness checks 1



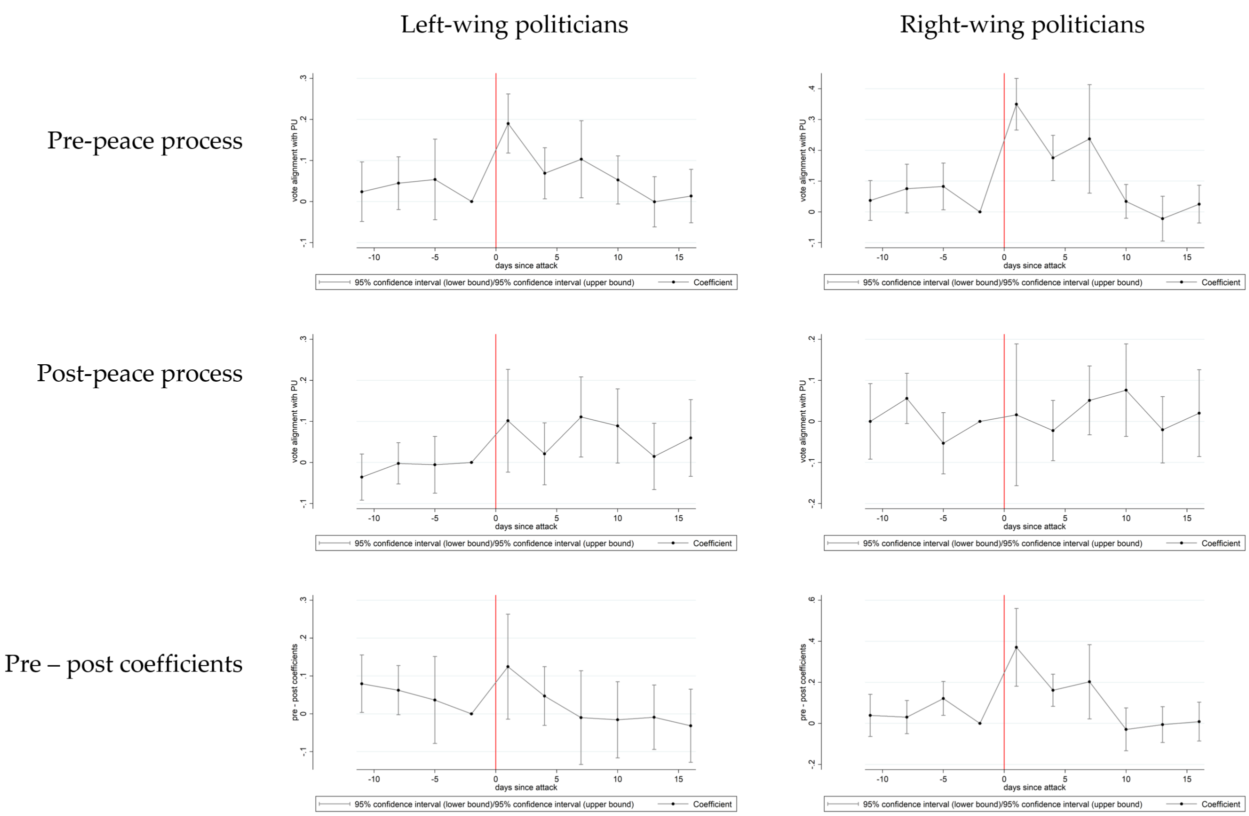
Notes: The figure illustrates the resulting coefficients from the event study design specification for the pre-peace process period (top) and the post-peace process period (bottom). The regression includes politician fixed effects and a function of time as outlined in section 5. Coefficients are estimated in three-day bins. Events include all FARC attacks with at least three casualties, and the regression. Each regression imposes a sample restriction as described in 6. Standard errors are two-way clustered at the politician and week level, 95% confidence intervals shown.

Figure A16: Event study: Effect of FARC attacks on vote alignment with the ruling party, robustness checks 2



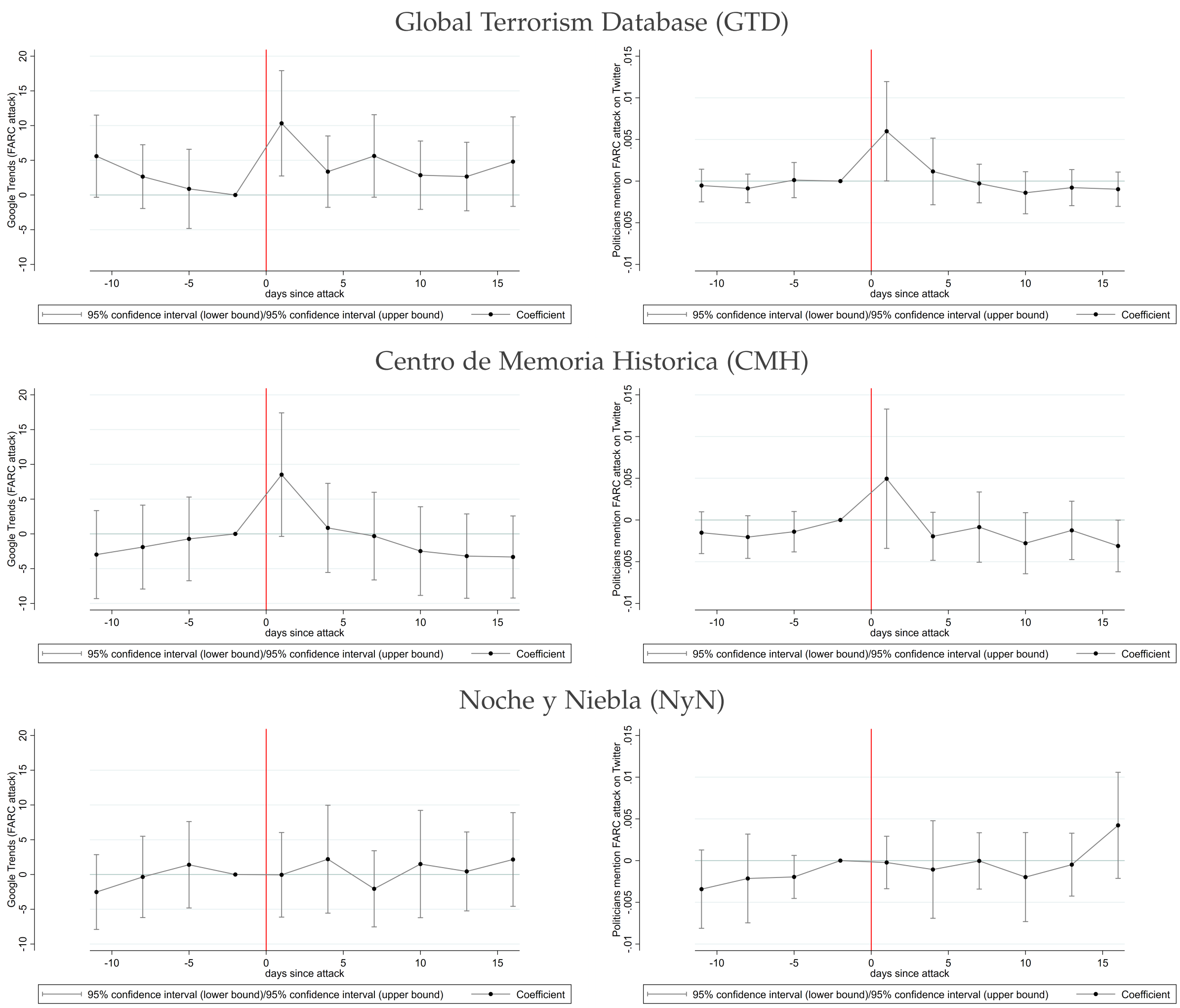
Notes: The figure illustrates the resulting coefficients from the event study design specification for the pre-peace process period (top) and the post-peace process period (bottom). The regression includes politician fixed effects and a function of time as outlined in section 5. Coefficients are estimated in three-day bins. Events include all FARC attacks with at least three casualties. Top panel includes vote-type controls (including dummies for Law Project and Legislative Act, vote was proposed by legislator, vote was proposed by U-party, conflict-related vote, proposed by member of own party, vote occurred in the Senate). Second panel excludes "potentially coordinated" attacks, as outlined in section 6. Third panel removes attacks which do not appear in the CMH dataset. The bottom panel removes sensitive political times. Standard errors are two-way clustered at the politician and week level, 95% confidence intervals shown.

Figure A17: Event-study, heterogeneity by ideological position



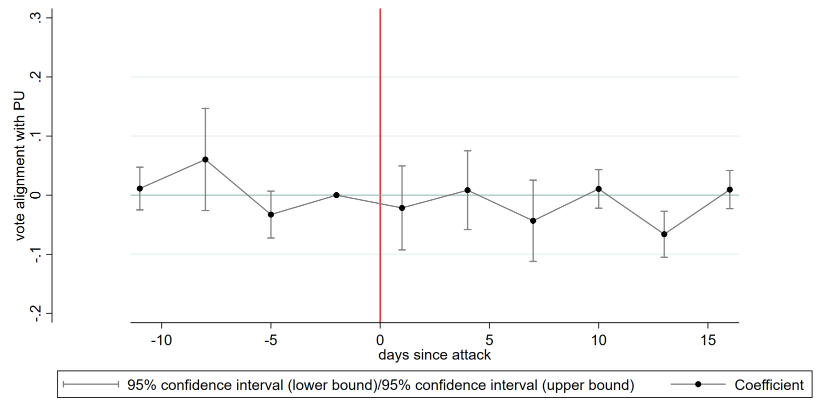
Notes: The figure shows the estimated event-study coefficients across subsamples of votes depending on legislators' ideology (left-wing vs. right-wing) and period (pre vs. post peace process). The bottom figures are estimated by running a pooled regression on the entire period of study and interacting the event dummies with a post-peace process indicator. All coefficients are normalized relative to the first pre-event indicator. Standard errors are clustered at the politicians and week level.

Figure A18: Event study: Effect of FARC attacks on public attention (alternative conflict datasets)



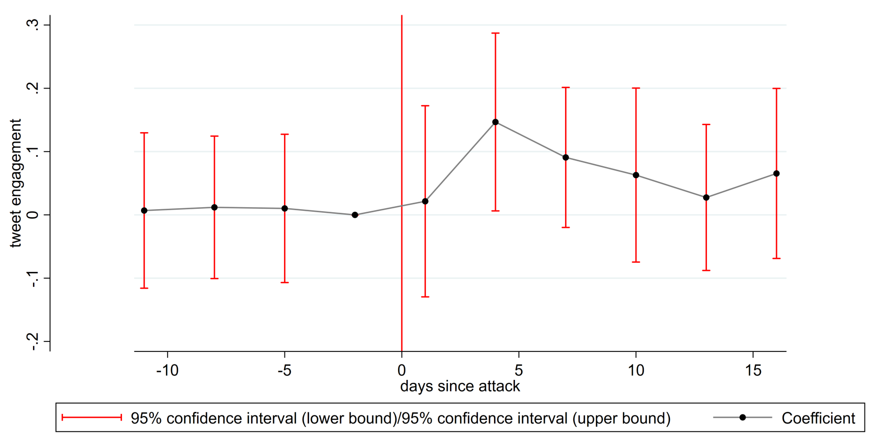
Notes: The figure illustrates the resulting coefficients from the event study design specification on Google Trends data using different conflict datasets. Outcome is volume of Google Trends (measured from 0-100) for "FARC Attack" ("Ataque FARC"). Coefficients are estimated in three-day bins. Events include all FARC attacks with at least three casualties, and the sample is restricted to days which occur only within the event window of at most one attack. Standard errors are clustered at the week level.

Figure A19: Event study placebo: FARC attacks and support for PU, Noche y Niebla dataset



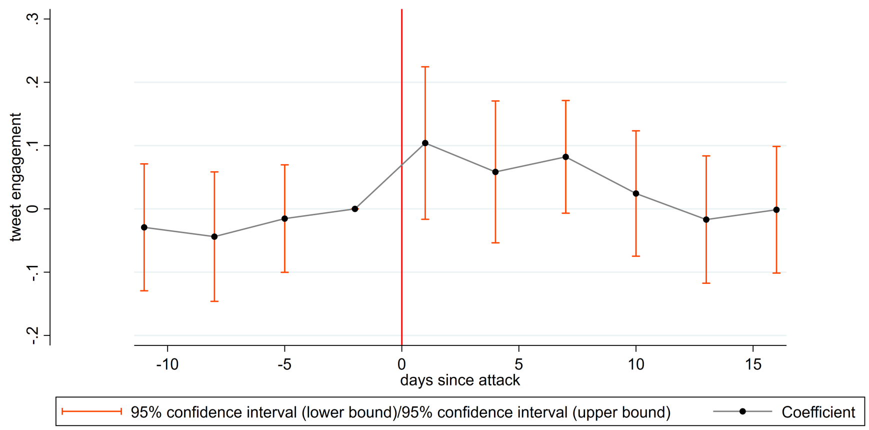
Notes: The figure illustrates the resulting coefficients from the event study design specification using the NyN dataset as a placebo exercise. As the public and legislators are unaware of these events, they do not generate legislative responses. Shown are the estimates for the pre-peace process time period. Standard errors are clustered at the week level.

Figure A20: Event study: Effect of FARC attacks on tweet engagement, 10 percent most left-leaning tweets



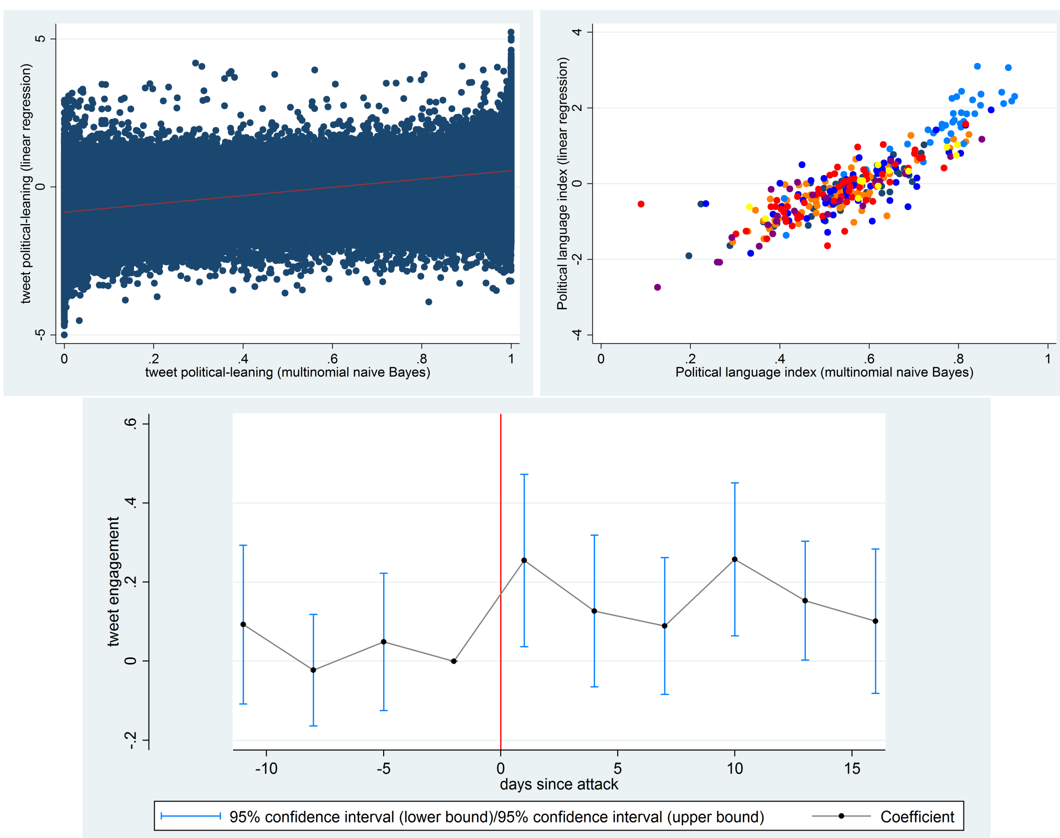
Notes: The figure illustrates the resulting coefficients from the event study design specification for the 10 percent most left-leaning tweets. The regression includes politician fixed effects and a function of time as outlined in section 4. Coefficients are estimated in three-day bins. Events include all FARC attacks with at least three casualties, and the sample is restricted to tweets which occur only within the event window of at most one attack. Standard errors are two-way clustered at the politician and week level.

Figure A21: Event study: Effect of FARC attacks on tweet engagement, support for ruling coalition



Notes: The figure illustrates the resulting coefficients from the event study design specification for the politicians from the ruling coalition (*Unidad Nacional*). The regression includes politician fixed effects and a function of time as outlined in section 4. Coefficients are estimated in three-day bins. Events include all FARC attacks with at least three casualties, and the sample is restricted to tweets which occur only within the event window of at most one attack. Standard errors are two-way clustered at the politician and week level.

Figure A22: Text analysis alternative: multinomial naive Bayes classifier



Notes: The figure illustrates the results from the alternative machine learning text analysis procedure which uses multinomial naive Bayes to compute the political leaning of tweets. Top-left shows the correlation between the base measure and the alternative measure at the tweet level. Top-right shows the correlation between the two measures at the politician level. Bottom shows the event study procedure for the top ten percent most right-leaning tweets as classified by the alternative methodology.

Table A1: Summary statistics for congressional votes

Variable	Mean	Std. Dev.	Min.	Max.	N
Vote date					
Year	2011.438	2.013	2006	2015	11666
Month (1-12)	8.513	2.924	2	12	11666
Calendar day	15.385	8.442	1	31	11666
Day of the week (0-6)	2.555	0.837	1	7	11666
Vote statistics					
Number of Votes	43.649	35.138	0	223	11149
Number of Approve votes	30.679	30.572	0	223	11149
Number of Reject votes	12.97	22.819	0	119	11149
Share that approved	0.758	0.334	0	1	10667
Number of Abstentions	26.422	26.683	0	152	11149
Percent of abstentions	0.319	0.131	0	1	10669
Vote Passed	0.747	0.435	0	1	11666
Vote type					
Law Proyect	0.483	0.5	0	1	11666
Policy vote	0.673	0.469	0	1	11666
Procedural vote	0.229	0.421	0	1	11666
Permanent Session	0.011	0.105	0	1	11666
Vote keywords					
Keyword Militar	0.032	0.175	0	1	11666
Keyword Salud	0.051	0.22	0	1	11666
Keyword Paz	0.012	0.11	0	1	11666
Keyword TLC	0.008	0.088	0	1	11666
Keyword Justicia	0.048	0.215	0	1	11666
Keyword Victimas	0.012	0.109	0	1	11666
Keyword Infraestructura	0.007	0.084	0	1	11666
Keyword Tributaria	0.033	0.179	0	1	11666
Keyword Empleo	0.005	0.067	0	1	11666
Keyword Educación	0.007	0.083	0	1	11666
Keyword Terrorista	0.003	0.055	0	1	11666
Keyword Social	0.008	0.089	0	1	11666
Keyword Corrupción	0.011	0.103	0	1	11666
Keyword Transporte	0.005	0.072	0	1	11666
Keyword Televisión	0.007	0.08	0	1	11666
Keyword Servicios	0.006	0.08	0	1	11666
Keyword Equilibrio	0.058	0.233	0	1	11666
Keyword Penitenciario	0.004	0.063	0	1	11666
Vote proposer					
PP is Partido Liberal	0.078	0.268	0	1	11666
PP is Partido Cambio Radical	0.034	0.18	0	1	11666
PP is Partido Conservador	0.067	0.251	0	1	11666
PP is Partido de la U	0.091	0.288	0	1	11666
PP is Polo Democratico Alternativo	0.041	0.199	0	1	11666
PP is Centro Democratico	0.025	0.156	0	1	11666
No vote proposer identified	0.663	0.473	0	1	11666

Notes: The table shows the summary statistics for congressional votes. The variables include the share of politicians who voted to approve, reject or abstain from a vote, as well as dummy indicators for the type of vote (Votación), keywords that the description of the vote contains, and the party of the politician who proposed the vote (PP) if available.

Table A2: Summary statistics for FARC attacks

	(1) All events mean/sd	(2) 1+ fatalities mean/sd	(3) 3+ fatalities mean/sd	(4) 5+ fatalities mean/sd
Year	2011.27	2011.29	2010.93	2010.34
	(2.54)	(2.67)	(2.70)	(2.83)
Month (1-12)	6.44	6.14	5.59	5.75
	(3.32)	(3.43)	(3.07)	(3.19)
Calendar day	15.70	14.86	15.42	15.09
	(8.80)	(8.88)	(8.93)	(8.97)
Day of the week (0-6)	3.00	2.96	3.10	3.17
	(2.01)	(1.99)	(2.11)	(2.08)
Latitude	4.17	4.03	4.15	4.40
	(2.71)	(2.53)	(2.70)	(2.56)
Longitude	-75.35	-75.52	-75.44	-75.53
	(1.84)	(1.84)	(1.99)	(2.06)
No. Fatalities	0.84	2.67	5.67	7.58
	(1.97)	(2.75)	(3.25)	(3.24)
No. Injured	1.87	4.28	7.38	10.21
	(5.65)	(9.01)	(12.75)	(16.11)
Observations	881	279	91	53

Notes: Summary statistics for FARC attacks: all events, events with at least one fatality, at least three fatalities and at least five fatalities, in columns 1-4 respectively. Standard errors in parentheses.

Table A3: Summary statistics for individual votes

Variable	Mean	Std. Dev.	Min.	Max.	N
Vote value (approve, abstain or reject)	0.252	0.747	-1	1	782190
Vote with ruling party (Partido de la U)	0.677	0.468	0	1	781076
Vote with left-wing party (Polo Democratico)	0.503	0.5	0	1	758393
Vote with right-wing party (Centro Democratico)	0.558	0.497	0	1	166833
Vote with majority	0.678	0.467	0	1	782190
Vote with own party	0.734	0.442	0	1	782190

Notes: The table shows the summary statistics for individual votes. The variables include the voteValue: voted to approve (1), abstain (0) or to reject (-1) a congressional vote, as well as alignment with the majority, own party, ruling party (PU), left-wing party (PD), or right-wing party (CD).

Table A4: Relationship between voteValue and party of proposer across parties

	(1) all	(2) PD	(3) PL	(4) PU	(5) CR	(6) PC	(7) CD
proposed by member of PD	-0.193***	**0.407*** **	-0.213***	-0.228***	-0.247***	-0.206***	-0.422***
	(0.0258)	(0.0284)	(0.0321)	(0.0311)	(0.0304)	(0.0298)	(0.0788)
proposed by member of PL	0.00429	-0.00705	**0.0854*** **	-0.0271	-0.0165	0.0393	-0.0606
	(0.0202)	(0.0286)	(0.0244)	(0.0254)	(0.0228)	(0.0245)	(0.0457)
proposed by member of PU	0.0295	-0.0506*	0.00556	**0.0835*** **	0.00552	0.101***	-0.0838*
	(0.0198)	(0.0280)	(0.0242)	(0.0252)	(0.0220)	(0.0237)	(0.0451)
proposed by member of CR	0.0282	-0.00177	0.00834	0.00404	**0.140*** **	0.0770**	0.0179
	(0.0267)	(0.0392)	(0.0328)	(0.0351)	(0.0296)	(0.0316)	(0.0530)
proposed by member of PC	0.0255	-0.0722**	0.0280	0.00816	0.0268	**0.146*** **	-0.111**
	(0.0217)	(0.0307)	(0.0271)	(0.0272)	(0.0240)	(0.0252)	(0.0455)
proposed by member of CD	-0.158***	-0.180***	-0.314***	-0.205***	-0.183***	-0.171***	**0.103** **
	(0.0251)	(0.0398)	(0.0336)	(0.0335)	(0.0307)	(0.0328)	(0.0425)
no proposer	0.498***	-0.0434*	0.545***	0.591***	0.471***	0.617***	0.0549
	(0.0164)	(0.0229)	(0.0201)	(0.0205)	(0.0188)	(0.0202)	(0.0414)
Constant	-0.0649***	0.180***	-0.0847***	-0.125***	-0.0401**	-0.157***	0.181***
	(0.0156)	(0.0212)	(0.0191)	(0.0194)	(0.0177)	(0.0191)	(0.0329)
N	781247	35697	162143	201096	72086	159907	25540

Notes: The table shows a regression of *voteValue* (1 if approve, 0 if abstain, -1 if reject) on dummy variables indicating the party of the politician who proposed the vote. The regression is run separately for members of each party (across columns). Standard errors clustered at the congressional vote level. The bold coefficients indicate support for their own party.

Table A5: Summary statistics for politicians

Variable	Mean	Std. Dev.	Min.	Max.	N
Average alignment with ruling party (PU)	0.665	0.128	0	1	666
Left-right index	-0.006	0.13	-0.443	0.471	666
Right-wing legislator dummy	0.5	0.5	0	1	666
Seat safeness (mean)	5.413	6.209	1	61.578	659
Seat safeness, winsorized (mean)	5.305	5.505	1	32.652	659
Always in office (2006-2018)	0.089	0.284	0	1	666
P. Liberal	0.182	0.386	0	1	666
P. Cambio Radical	0.096	0.295	0	1	666
P. Conservador	0.164	0.37	0	1	666
P. de la U (incumbent/ruling party)	0.21	0.408	0	1	666
P. Polo Democratico (left-wing party)	0.047	0.211	0	1	666
P. Centro Democratico (right-wing party)	0.051	0.22	0	1	666

Notes: The table shows summary statistics at the politician level.

Table A6: GTD FARC Attacks: List of isolated events

Date	City	Department	Attack Type	Fatalities	Injured	START listed media sources
2006-02-12	Sabanalarga	Atlántico	Armed Assault	6	0	Deutsche Presse-Agentur, Calgary Sun
2006-05-22	Morales	Cauca	Bombing/Explosion	5	9	OSC Report
2006-06-18	Bogota	Cundinamarca	Unknown	6	0	ACAN-EFE
2006-08-02	Abrechi	Antioquia	Bombing/Explosion	6	7	Associated Press
2007-03-16	Buenaventura	Valle del Cauca	Bombing/Explosion	5	10	Deutsche Presse-Agentur, Associated Press
2007-04-09	Tame	Arauca	Armed Assault	13	0	National Counter Terrorism Center
2007-10-26	Buenaventura	Valle del Cauca	Bombing/Explosion	3	6	Agence France Presse, Global Insight, Indo-Asian News Service
2007-11-17	*Unknown*	Tolima	Bombing/Explosion	6	3	Desert Morning News, ITAR-TASS News Agency
2008-05-06	Pedregal	Cauca	Bombing/Explosion	3	1	Triton Reports, El Tiempo
2008-08-14	Ituango	Antioquia	Bombing/Explosion	7	52	El Espectador, Lexis Nexis, Deutsche Presse-Agentur
2008-09-01	Cali	Valle del Cauca	Bombing/Explosion	5	26	EFE News Agency, Deutsche Presse-Agentur
2008-12-22	Solano	Caquetá	Bombing/Explosion	3	1	National Counterterrorism Center
2009-05-29	Garzon	Huila	Hostage Taking (Kidnapping)	4	3	El Pais, El Tiempo, National Counterterrorism Center
2009-08-26	Tumaco	Narino	Armed Assault	12	2	The Guardian, Reuters, Press TV
2009-10-08	*Unknown*	Huila	Armed Assault	3	4	Diario del Huila, El Tiempo
2009-11-20	Ricaurte	Cundinamarca	Armed Assault	6	13	National Counterterrorism Center
2010-02-14	San Jose del Guaviare	Guaviare	Armed Assault	5	1	El Tiempo, Agence France Presse, National Counterterrorism Center
2010-03-24	Buenaventura	Valle del Cauca	Bombing/Explosion	9	51	New York Times, Daily Telegraph, National Counterterrorism Center
2010-11-19	Roncesvalles	Tolima	Bombing/Explosion	3	12	EFE News Agency, El Tiempo
2011-05-07	Buenos Aires	Cauca	Hostage Taking (Kidnapping)	5	0	Denver Post, Xinhua News Agency, Colombia Reports
2012-01-13	Tibu	Norte de Santander	Bombing/Explosion	3	2	Reuters, IHS Global Insight, Dow Jones International News
2012-04-07	*Unknown*	Chocó	Bombing/Explosion	9	2	Agence France Presse, Associated Press
2013-02-01	Maicao	La Guajira	Armed Assault	3	0	Colombia Reports, American Banking News
2013-04-06	San Antonio de Getucha	Caquetá	Bombing/Explosion	3	5	Latin American Herald Tribune, OSC Report
2013-07-20	El Mordisco	Arauca	Armed Assault	15	5	Agence France Presse, El Tiempo, Fox News Latino
2013-12-07	Inza	Cauca	Bombing/Explosion	8	38	Associated Press, Agence France Presse
2014-01-09	Anori	Antioquia	Armed Assault	5	0	Colombia Reports, OSC Report
2014-04-08	*Unknown*	Caquetá	Unknown	3	0	EFE News Agency, Colombia Reports, OSC Report
2014-07-02	La Gabarra	Norte de Santander	Bombing/Explosion	3	1	Agence France Presse, Xinhua News Agency, Fox News Latino
2014-09-16	Tierradentro	Córdoba	Bombing/Explosion	7	5	Associated Press, Colombia Reports, Big News Network
2014-12-19	Vilachi	Cauca	Hostage Taking (Kidnapping)	5	5	Agence France Presse, Reuters
2015-04-15	Timba	Cauca	Bombing/Explosion	13	19	Agence France Presse, Boston Globe
2015-05-28	Las Tropicales	Arauca	Facility/Infrastructure Attack	6	0	Agence France Presse, Xinhua News Agency

Notes: The table lists the events used in the main empirical analysis with information from the Global Terrorism Database from START (2015).

Table A6: (Continued) GTD FARC Attacks: List of isolated events

Date	START source 1 (headline and date)
2006-02-12	"Six Die in Massacre in Colombia, French Woman Found Dead," Deutsche Presse Agentur, February 12, 2006.
2006-05-22	"Highlights: Colombia Military/Guerrilla/Paramilitary Activities 21-22 May 06," Colombia – OSC Report, May 22, 2006.
2006-06-18	1. "Colombia: Suspected FARC Members Kill Six for Violating Ban Imposed by Group". ACAN-EFE. June 18, 2006.
2006-08-02	Associated Press Online, "Mine Kills 6 Colombia Coca Eradicators," August 2, 2006.
2007-03-16	"Bomb Attack Leaves at Least 5 Dead in Colombia," Deutsche Presse-Agentur, March 16, 2006.
2007-04-09	National Counter Terrorism Center, 2007 Report on Terrorism
2007-10-26	"Blast kills three in Colombia," Agence France Presse, October 27, 2007.
2007-11-17	"World datelines," Desert Morning News, November 18, 2007.
2008-05-06	Triton Reports, "FARC Launched Grenade Attack at Civilians in Corinto," Triton Reports , May 06, 2008.
2008-08-14	El Espectador, "Seven Dead and 52 Injured were Left from Terrorist Attack of the FARC in Ituango," El Espectador, August 15, 2008.
2008-09-01	EFE, "Police Report Car Bomb Explosion in Cali, Four Killed, 26 Wounded "Car Bomb Kills 4 in Colombia" World News Connection, EFE, September 1, 2008.
2008-12-22	National Counterterrorism Center, "One Civilian, One Child, One Soldier Killed, One Civilian Wounded, in Improvised Explosive Device (IED) Attack by Suspected Revolutionary Armed Forces of Colombia (FARC) in Solano, Caqueta, Colombia," Worldwide Incidents Tracking System, November 30, 2009.
2009-05-29	El Pais,"The FARC Confirms to Have Captive The Councilman of Garzon," July 30, 2009, http://www.elpais.com.co/paisonline/ediciOnes_anteriores/ediciOnes.php?p=/historico/jul302009/PRI.
2009-08-26	The Guardian."Militia Kill Twelve in Cocaine Region," http://www.guardian.co.uk/world/2009/aug/27/colombia-awa-massacre-cocaine (August 27, 2009).
2009-10-08	Ministry of Defense, "FARC Murdered Ranchers in Colombia," http://www.fac.mil.co/?idcategoria=43370 (October 8, 2009).
2009-11-20	National Counterterrorism Center, "Four Civilians, Two Children Killed in Arson, 12 Civilians, One Child Wounded in Armed Attack by Suspected FARC in Ricaurte, Narino, Colombia," Worldwide Incidents Tracking System, April 15, 2010.
2010-02-14	El Tiempo, "Five Dead in FARC Attack in Guaviare and One Injured Candidate in Attempt of Abduction," http://www.eltiempo.com/archivo/documento/MAM-3839694 (February 15, 2010).
2010-03-24	New York Times, "Car Bomb Kills Nine in Colombian Port Town," New York Times, March 24, 2010.
2010-11-19	Jane's Intelligence, "IED Kills Two Civilians in Colombia's Tolima," Terrorism Watch Report, EFE News Agency / Exposiciones Fotograficas Espania, November 22, 2010.
2011-05-07	Denver Post, "Massacre of Five Afro-Colombians Investigated," Associated Press, May 11, 2011, http://www.denverpost.com/vivacolorado/ci_18041973.
2012-01-13	"Colombia rebels selling cows as drug money drops-Santos," Reuters News, January 16, 2012.
2012-04-07	"Six Colombian soldiers, three rebels killed in FARC ambush," Agence France Presse – English, April 8, 2012.
2013-02-01	"FARC kill three policemen in north Colombia," Colombia Reports, February 1, 2013.
2013-04-06	"Security Forces Kill 4 FARC Rebels in Colombia," Latin American Herald Tribune, April 8, 2013.
2013-07-20	"Rebels killed 14 Colombian soldiers: updated toll," Agence France Presse – English, August 25, 2013.
2013-12-07	"Colombia: 9 killed in rebel attack," The Associated Press, December 8, 2013.
2014-01-09	"FARC claims responsibility for bomb attack in west and helicopter crash in northern Colombia," Colombia Reports, January 24, 2014.
2014-04-08	"3 Colombian police killed in rebel ambush," EFE, April 9, 2014.
2014-07-02	"Three soldiers killed in Colombia bombing," Agence France Presse – English, July 4, 2014.
2014-09-16	"FARC rebel ambush kills 7 police in Colombia," The Associated Press, September 16, 2014.
2014-12-19	"FARC frees Colombian soldier," Agence France Presse – English, December 26, 2014.
2015-04-15	"Death toll from FARC attack in Colombia rises to 11 soldiers," Agence France Presse – English, April 16, 2015.
2015-05-28	"Six soldiers, guerillas die in fresh Colombia clashes," Agence France Presse – English, May 29, 2015.

Notes: The table lists the events used in the main empirical analysis with information from the Global Terrorism Database from START (2015).

Table A7: Congressional-vote characteristics on weeks before attacks

	β_{pre}	se_{pre}	β_{pre}	se_{pre}
Vote group/committee				
Vote in Senate	-0.0112	(0.0436)	-0.0493	(0.0317)
Vote in Chamber of Reps	0.00556	(0.0468)	-0.00786	(0.0403)
Primera de Senado	0.0847	(0.0522)	0.0962**	(0.0448)
Segunda de Senado	-0.0171	(0.0111)	-0.0131	(0.0123)
Tercera de Senado	-0.00828	(0.00676)	0.00588	(0.00631)
Cuarta de Senado	-0.0130***	(0.00394)	-0.00487*	(0.00275)
Quinta de Senado	-0.0229***	(0.00766)	-0.0186**	(0.00732)
Sexta de Senado	-0.00672	(0.0120)	-0.00862	(0.0119)
Séptima de Senado	-0.0110	(0.0181)	-0.0105	(0.0187)
Primera de Cámara	0.0545	(0.0523)	0.0407	(0.0375)
Segunda de Cámara	-0.0268***	(0.00915)	-0.0298**	(0.0129)
Tercera de Cámara	-0.00103	(0.0130)	0.0115	(0.0115)
Cuarta de Cámara	-0.0212***	(0.00458)	-0.0144***	(0.00536)
Quinta de Cámara	0.00901	(0.0205)	0.0129	(0.0181)
Sexta de Cámara	-0.00137	(0.0221)	0.0142	(0.0246)
Séptima de Cámara	-0.0140	(0.0152)	-0.00346	(0.0140)
Vote statistics				
Number of Votes	-0.307	(4.181)	-1.979	(3.461)
Number of Abstentions	-1.612	(2.902)	-2.075	(2.447)
Percent of Abstentions	-0.00427	(0.0128)	-0.00534	(0.0124)
Vote type				
Votación Proyecto de Ley	-0.0784**	(0.0358)	-0.0712**	(0.0307)
Votación Acto Legislativo	0.0676	(0.0429)	0.0574*	(0.0316)
Votación Proposiciones	-0.0254	(0.0328)	-0.0514*	(0.0303)
Votación Impedimentos	0.0705*	(0.0387)	0.0577*	(0.0347)
Votación Orden del Día	-0.0258**	(0.0110)	-0.00642	(0.00662)
Votación Otros Asuntos	-0.0130**	(0.00553)	-0.00877	(0.00592)
Votación Sesión Permanente	-0.00459	(0.00526)	-0.00129	(0.00446)
Vote keywords				
Keyword Militar	0.0363	(0.0455)	0.0199	(0.0340)
Keyword Salud	-0.0498**	(0.0199)	-0.0454**	(0.0182)
Keyword Paz	0.00156	(0.00761)	0.00365	(0.00720)
Keyword TLC	0.0103	(0.00854)	0.00729	(0.0106)
Keyword Justicia	0.0578	(0.0450)	0.0377	(0.0307)
Keyword Víctimas	0.00176	(0.00892)	0.00606	(0.00763)
Keyword Infraestructura	-0.00301	(0.00455)	-0.00488	(0.00528)
Keyword Tributaria	-0.0316	(0.0236)	-0.0593*	(0.0342)
Keyword Empleo	-0.00524	(0.00380)	-0.00200	(0.00282)
Keyword Educación	0.00769	(0.00807)	0.0102	(0.00793)
Keyword Terrorista	-0.00356**	(0.00166)	-0.000610	(0.00221)
Keyword Social	-0.00187	(0.00368)	-0.0102	(0.00777)
Keyword Corrupción	0.00621	(0.0108)	0.0122	(0.0103)
Keyword Transporte	0.00214	(0.00415)	-0.000438	(0.00398)
Keyword Televisión	-0.00380	(0.00470)	0.00147	(0.00326)
Keyword Servicios	0.00373	(0.00434)	0.00481	(0.00439)
Keyword Equilibrio	-0.0132	(0.0333)	-0.0302	(0.0283)
Keyword Penitenciario	0.00724	(0.00751)	0.00844	(0.00698)
Vote proposer (by party)				
Partido Liberal	0.0252	(0.0200)	0.0226	(0.0186)
Partido Cambio Radical	-0.00162	(0.00839)	0.00432	(0.00738)
Partido Conservador	-0.00929	(0.0109)	-0.00757	(0.0139)
Partido de la U	-0.0000305	(0.0189)	0.0109	(0.0187)
Polo Democrático Alternativo	0.0172	(0.0197)	0.00647	(0.0111)
Centro Democrático	0.00520	(0.00986)	-0.00755	(0.00790)
No proposer	-0.0368	(0.0419)	-0.0326	(0.0316)
Function of time controls	No		Yes	
No. of stat. significant outcomes (p<0.05)	9		6	
No. significant w/ Bonferroni correction	1		0	

Notes: Each coefficient corresponds to a separate regression of vote characteristic as an outcome, on a *preAttack* indicator equal to 1 if the vote occured in the week before an attack (columns 1 and 3). Column 3 regressions include a function of time controls, including year, month and day of the week fixed effects, and calendar day (linear).

Table A8: Congressional-vote characteristics on days of attacks

	$\beta_{DofAttack}$	$se_{DofAttack}$	$\beta_{DofAttack}$	$se_{DofAttack}$
Vote group/committee				
Vote in Senate	-0.00247	(0.106)	0.0405	(0.0989)
Vote in Chamber of Reps	-0.064	(0.0657)	0.00405	(0.065)
Primera de Senado	-0.0365	(0.0307)	-0.0584*	(0.0324)
Segunda de Senado	-0.00321	(0.0227)	-0.0193	(0.0251)
Tercera de Senado	-0.00779	(0.0129)	-0.000391	(0.0132)
Cuarta de Senado	-0.0140***	(0.00374)	-0.00969**	(0.00433)
Quinta de Senado	0.0133	(0.0349)	0.0194	(0.0285)
Sexta de Senado	0.00404	(0.0323)	0.000658	(0.0343)
Séptima de Senado	-0.017	(0.0162)	-0.0306	(0.0272)
Primera de Cámara	-0.0442	(0.0287)	-0.100**	(0.0474)
Segunda de Cámara	0.00927	(0.0295)	0.00382	(0.0289)
Tercera de Cámara	-0.0277***	(0.00887)	-0.0272**	(0.0119)
Cuarta de Cámara	0.00522	(0.0227)	0.00399	(0.0214)
Quinta de Cámara	0.00613	(0.0282)	-0.000262	(0.0284)
Sexta de Cámara	0.115*	(0.0645)	0.119*	(0.0611)
Séptima de Cámara	-0.0240*	(0.0122)	-0.0211*	(0.0122)
Vote statistics				
Number of Votes	-5.87	(6.377)	0.537	(6.06)
Number of Abstentions	-4.563	(4.116)	0.819	(4.107)
Percent of Abstentions	-0.00346	(0.0179)	0.0107	(0.0183)
Vote type				
Votación Proyecto de Ley	-0.0494	(0.0736)	-0.0155	(0.0636)
Votación Acto Legislativo	0.0526	(0.0865)	0.0163	(0.0651)
Votación Proposiciones	-0.0225	(0.0446)	-0.0463	(0.0546)
Votación Impedimentos	0.024	(0.0659)	0.0453	(0.0557)
Votación Orden del Día	-0.0141	(0.0195)	-0.00132	(0.0094)
Votación Otros Asuntos	0.0135	(0.0179)	0.0141	(0.0193)
Votación Sesión Permanente	-0.00961***	(0.00144)	-0.00364	(0.00293)
Vote keywords				
Keyword Militar	-0.0315**	(0.0136)	-0.0613*	(0.0314)
Keyword Salud	-0.023	(0.0315)	-0.00651	(0.0238)
Keyword Paz	0.00984	(0.0225)	0.0175	(0.0219)
Keyword TLC	0.0108	(0.0158)	0.00664	(0.0166)
Keyword Justicia	0.0827	(0.0927)	0.0477	(0.0721)
Keyword Víctimas	-0.0134**	(0.00529)	-0.0083	(0.00925)
Keyword Infraestructura	-0.000148	(0.00798)	0.0000769	(0.00918)
Keyword Tributaria	-0.0372	(0.0233)	-0.0124	(0.0229)
Keyword Empleo	-0.00509	(0.00369)	0.00237	(0.00309)
Keyword Educación	0.0314	(0.0232)	0.0370*	(0.0211)
Keyword Terrorista	-0.00346**	(0.00161)	0.00125	(0.00162)
Keyword Social	0.0184	(0.0273)	0.0107	(0.0265)
Keyword Corrupción	-0.0120***	(0.00347)	-0.0116	(0.00786)
Keyword Transporte	0.00979	(0.0113)	0.00748	(0.0122)
Keyword Televisión	-0.00730**	(0.00339)	-0.00244	(0.00544)
Keyword Servicios	-0.00329	(0.00418)	-0.00341	(0.00482)
Keyword Equilibrio	-0.0608***	(0.0182)	-0.0850**	(0.0356)
Keyword Penitenciario	-0.000602	(0.00428)	0.000949	(0.00509)
Vote proposer (by party)				
Partido Liberal	-0.0159	(0.0143)	-0.0128	(0.0135)
Partido Cambio Radical	0.0137	(0.0166)	0.0182	(0.0139)
Partido Conservador	-0.0113	(0.0176)	-0.00451	(0.0165)
Partido de la U	0.0299	(0.0287)	0.0354	(0.0271)
Polo Democrático Alternativo	-0.0131	(0.0109)	-0.0108	(0.0112)
Centro Democrático	-0.00458	(0.0105)	-0.0135	(0.00987)
No proposer	0.011	(0.064)	-0.00564	-(0.0457)
Function of time controls	No		Yes	
No. of stat. significant outcomes (p<0.05)	9		4	
No. significant w/ Bonferroni correction	2		0	

Notes: Each coefficient corresponds to a separate regression of vote characteristic as an outcome, on a day-of-attack (3+ casualties) dummy variable (columns 1 and 3). Column 3 regressions include a function of time controls, including year, month and day of the week fixed effects, and calendar day (linear).

Table A9: Potentially affected votes

Link	Date	Days since attack	House	Incumbent position	Share approved	Counterfactual share apprv	Type of vote	Keywords
1408	Aug 08/2006	6	c	For	0.52	0.42	Otros Asuntos	n/a
1547	Dec 11/2007	5	R	Against	0.45	0.53	Acto Legislativo	n/a
1540	Dec 11/2007	5	S	Against	0.48	0.57	Proyecto de Ley	Concursos carrera administrativa
1578	May 13/2008	7	R	Against	0.46	0.61	Otros Asuntos	n/a
1822	Sep 01/2009	6	R	Against	0.39	0.53	Impedimentos	n/a
1833	Sep 01/2009	6	R	Against	0.47	0.64	Impedimentos	n/a
1764	Nov 24/2009	4	R	Against	0.42	0.51	Impedimentos	n/a
2486	Apr 14/2010	7	c	Against	0.38	0.50	Otros Asuntos	n/a
7149	Jun 02/2010	1	c	Against	0.38	0.58	Proposiciones	n/a
3322	Jun 08/2010	7	c	Against	0.37	0.50	Orden del Día	n/a
4772	Nov 23/2010	4	c	Against	0.47	0.53	Acto Legislativo	Ley de sostenibilidad fiscal
4447	Nov 24/2010	5	c	For	0.5	0.44	Acto Legislativo	Ley de sostenibilidad fiscal
4444	Nov 24/2010	5	c	For	0.53	0.47	Acto Legislativo	Ley de sostenibilidad fiscal
4785	Nov 25/2010	6	c	For	0.53	0.44	Acto Legislativo	Ley de sostenibilidad fiscal
4784	Nov 25/2010	6	c	For	0.53	0.44	Acto Legislativo	Ley de sostenibilidad fiscal
5564	May 11/2011	4	R	Against	0.40	0.51	Ley Estatutaria	Marco jurídico inteligencia y contrainteligencia
5736	May 24/2011	2	R	Against	0.43	0.82	Impedimentos	Estatuto de Seguridad Ciudadana
7253	May 24/2011	2	c	Against	0.28	0.54	Impedimentos	Edad de retiro forzoso para Magistrados
7258	May 24/2011	2	c	Against	0.26	0.50	Impedimentos	Edad de retiro forzoso para Magistrados
5702	May 24/2011	2	S	Against	0.39	0.65	Proyecto de Ley	Ley de víctimas, restitución de tierras
7257	May 24/2011	2	c	Against	0.29	0.58	Impedimentos	Edad de retiro forzoso para Magistrados
7029	May 25/2011	0	c	Against	0.30	0.57	Proposiciones	Creación del Sistema Nacional de Migraciones
6687	May 25/2011	0	c	Against	0.47	0.63	Proposiciones	Sistema Ncnl de Voluntarios de Primera Respuesta
6907	May 25/2011	0	c	For	0.58	0.38	Proyecto de Ley	Ley General de Bomberos
6969	Jun 01/2011	7	c	Against	0.42	0.55	Proyecto de Ley	Pensión de vejez
7698	Apr 10/2012	3	R	Against	0.40	0.50	Proposiciones	Implementación del TLC con Estados Unidos
7853	Apr 17/2012	10	c	For	0.5	0.47	Acto Legislativo	Salud como derecho fundamental
7720	May 08/2012	0	R	Against	0.35	0.61	Impedimentos	Régimen distrital
7721	May 08/2012	0	R	For	0.78	0.56	Impedimentos	Régimen distrital
8026	May 09/2012	1	S	Against	0.36	0.24	Proyecto de Ley	Derecho a no padecer hambre
8153	May 15/2012	0	c	Against	0.39	0.60	Proposiciones	n/a
8152	May 15/2012	0	c	For	0.55	0.32	Proposiciones	n/a
8384	May 16/2012	1	c	Against	0.42	0.58	Otros Asuntos	Pago del combustible de funcionarios del Estado
8028	May 16/2012	1	S	Against	0.40	0.82	Acto Legislativo	Derecho a no padecer hambre
8384	May 16/2012	1	c	For	0.5	0.33	Otros Asuntos	Pago del combustible de funcionarios del Estado
9094	May 23/2012	2	c	For	0.64	0.44	Proposiciones	Promoción del turismo
8298	Jun 05/2012	1	S	Against	0.43	0.78	Proposiciones	Vivienda de interés social
7906	Jun 12/2012	8	R	Against	0.40	0.53	Proyecto de Ley	Vivienda de interés social
8613	Aug 22/2012	6	S	Against	0.41	0.54	Proposiciones	Garantías mobiliarias
8593	Aug 22/2012	6	S	Against	0.42	0.55	Proposiciones	Garantías mobiliarias

Notes: The table lists congressional votes potentially affected by FARC attacks. House indicates "S" if the vote occured in the Senate, "R" if it occured in the House of Representatives and "c" if it occured in one of the smaller legislative committees. These are votes which occured soon after an event and which resulted in a close outcome in favour of the incumbent party. For more details on each vote, a link to the relevant congresovisible.org page is provided. See section 6 for details.

Table A10: Effect of FARC attacks on vote alignment with ruling party

	(1) Contemporaneous	(2) Short-run	(3) Long(er)-run	(4) Average
Pre-peace process	.2533***	.1735***	.0177	.0956***
	(.031)	(.0293)	(.022)	(.0232)
Post-peace process	.065	.0508	.042	.0464*
	(.0724)	(.0319)	(.0305)	(.0256)

Notes: Estimates from time-series specification where the dependent variable is alignment with the ruling party. Short-run effects refer to the average of the coefficients in bins t = 0-2, 3-5, and 6-8. Long-run effects refer to the average of the coefficients in periods t = 9-11, 12-14, and 15-17. Average effect refers to the average of coefficients in all of the post-attack bins. Two-way clustered standard errors at the politician and week level in parentheses.

Table A11: Effect of FARC attacks on vote alignment with ruling party, time-series, one week after the attack

	(1) pre-PP	(2) pre-PP	(3) pre-PP	(4) pre-PP	(5) post-PP	(6) post-PP	(7) post-PP	(8) post-PP
Post-attack, 3+ caslts.	0.0587***	0.0862***	0.111***	0.0956***	0.0232	0.0608	0.0607	0.0406
	(0.0182)	(0.0325)	(0.0278)	(0.0264)	(0.0228)	(0.0533)	(0.0400)	(0.0325)
N	432414	369576	369574	369574	348662	304742	304742	304742
N. politicians	517	515	513	513	421	421	421	421
Politician FE	no	no	yes	yes	no	no	yes	yes
Attack window dummy	no	yes	yes	yes	no	yes	yes	yes
Isolated events	no	yes	yes	yes	no	yes	yes	yes
Time function	no	no	yes	yes	no	no	yes	yes
Party trends	no	no	yes	yes	no	no	yes	yes
Vote controls	no	no	no	yes	no	no	no	yes

Notes: Estimates from time-series specification where the dependent variable is alignment with the ruling party. Columns 1-4 show regressions for the pre-peace process period, and columns 5-8 for the post-peace process period. Columns 1 and 5 include no controls or fixed effects. Columns 2 and 6 include a dummy for the two-week window around the event and restricts to isolated events. Columns 3 and 7 include politician fixed effects and a function of time as outlined in section 4. Columns 4 and 8 include congressional vote level controls including dummies for the type of vote (policy vs. procedural), keywords (conflict or non-conflict related votes), whether the vote was proposed by a PU member or by a member of the politician's own party. Two-way clustered standard errors at the politician and week level in parentheses.

Table A12: Effect of FARC attacks on vote alignment with ruling party, one week after attacks, heterogeneity by legislators' ideology, robustness checks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Post-attack, 3+ caslts.	0.137***	0.130***	0.138***	0.136***	0.103***	0.132***	0.109***	0.0852***
	(0.0339)	(0.0293)	(0.0331)	(0.0334)	(0.0365)	(0.0296)	(0.0289)	(0.0257)
Post-attack x post peace process	-0.0784	-0.0778	-0.0802	-0.0729	-0.000890	-0.0733	-0.0680	-0.00322
	(0.0487)	(0.0566)	(0.0526)	(0.0508)	(0.0493)	(0.0483)	(0.0449)	(0.0578)
Post-attack x LRindex	0.502*	0.449	0.524*	0.481	0.419	0.518*	0.457	
	(0.281)	(0.288)	(0.272)	(0.295)	(0.346)	(0.312)	(0.280)	
Post-attack x LRindex x post PP	-0.889***	-0.854***	-0.897***	-0.905***	-1.007***	-0.910**	-0.893***	
	(0.338)	(0.323)	(0.319)	(0.335)	(0.361)	(0.354)	(0.325)	
Post-attack x Right-wing dummy								0.0707*
								(0.0423)
Post-attack x RW dummy x post PP								-0.118**
								(0.0560)
N	604063	611622	500653	620974	568222	615443	674316	674316
N. politicians	662	662	537	625	662	658	662	662
Excludes conflict votes	yes	no	no	no	no	no	no	no
Excludes PU-proposed votes	no	yes	no	no	no	no	no	no
Excludes PU politicians	no	no	yes	no	no	no	no	no
Exc. most violent depts	no	no	no	yes	no	no	no	no
Exc. sensitive political times	no	no	no	no	yes	no	no	no
Exc. events not in CMH data	no	no	no	no	no	yes	no	no
Vote-level controls	no	no	no	no	no	no	yes	no
Left-right index dummy	no	no	no	no	no	no	no	yes

Notes: Estimates from the triple-interaction specification where the dependent variable is alignment with the ruling party. All columns include politician fixed effects, a function of time, an event-window dummy, party time trends, and restrict to isolated events. Robustness checks include a series of sample restrictions (columns 1-6), include vote-level controls (column 7), and use left-right dummy variable (above median, column 8). Two-way clustered standard errors at the politician and week level in parentheses.

Table A13: Effect of FARC attacks on vote alignment with ruling party, heterogeneity by Twitter political language, robustness checks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Post-attack, 3+ caslts.	0.133***	0.139***	0.132***	0.118***	0.0886***	0.122***	0.129***	0.0905
	(0.0207)	(0.0198)	(0.0206)	(0.0208)	(0.0129)	(0.0197)	(0.0158)	(0.0560)
Post-attack x LRindex	0.920***	0.861***	0.870***	0.813***	0.806***	0.833***	0.850***	1.306**
	(0.132)	(0.141)	(0.0856)	(0.103)	(0.0590)	(0.113)	(0.123)	(0.543)
Post-attack x Pol. language	0.180	0.208	0.188	0.143	-0.0376	0.159	0.213**	
	(0.111)	(0.129)	(0.123)	(0.115)	(0.107)	(0.108)	(0.0920)	
Post-attack x Pol. language x LRindex	2.535***	2.375***	2.400***	2.397***	3.176***	2.352***	2.502***	
	(0.600)	(0.594)	(0.489)	(0.507)	(0.259)	(0.561)	(0.562)	
Post-attack x Pol. language (t-1)								0.0800
								(0.193)
Post-attack x Pol. language (t-1) x LRindex								3.592**
								(1.382)
N	471035	482364	397685	498031	499206	537171	540098	540098
N. politicians	441	441	340	415	441	441	441	441
Excludes conflict votes	yes	no	no	no	no	no	no	no
Excludes PU-proposed votes	no	yes	no	no	no	no	no	no
Excludes PU politicians	no	no	yes	no	no	no	no	no
Exc. most violent depts	no	no	no	yes	no	no	no	no
Exc. sensitive political times	no	no	no	no	yes	no	no	no
Exc. events not in CMH data	no	no	no	no	no	yes	no	no
Vote-level controls	no	no	no	no	no	no	yes	no
Previous month pol. language	no	no	no	no	no	no	no	yes

Notes: Estimates from time-series specification where the dependent variable is alignment with the ruling party and examining heterogeneity by the political language index of president Santos's tweets. All columns include politician fixed effects, a function of time, an event-window dummy, party time trends, restrict to isolated events, and restrict to votes only during the Santos government. Robustness checks include a series of sample restrictions (columns 1-6), include vote-level controls (column 7), and use the month-prior political language index (column 8). Two-way clustered standard errors at the politician and week level in parentheses.

Table A14: Effect of FARC attacks on vote alignment with ruling party, one week after the attack (assessing bias from unobservables)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	pre-PP	pre-PP	pre-PP	pre-PP	post-PP	post-PP	post-PP	post-PP
Post-attack, 3+ caslts.	0.0973***	0.0963***	0.0862***	0.0918***	0.0554	0.0264	0.0608	0.0406
	(0.0264)	(0.0203)	(0.0325)	(0.0269)	(0.0541)	(0.0365)	(0.0533)	(0.0347)
R-squared	0.00281	0.0756	0.00285	0.0756	0.000584	0.110	0.000598	0.110
N	369576	369574	369576	369574	304742	304742	304742	304742
N. politicians	515	515	515	513	421	421	421	421
Isolated events	yes	yes	yes	yes	yes	yes	yes	yes
Attack window dummy	no	no	yes	yes	no	no	yes	yes
Politician FE	no	yes	no	yes	no	yes	no	yes
Time function	no	yes	no	yes	no	yes	no	yes
Party trends	no	yes	no	yes	no	yes	no	yes
Vote controls (inc unbalanced)	no	yes	no	yes	no	yes	no	yes
Model	M-1	M-2	M-1	M-2	M-1	M-2	M-1	M-2

Notes: Estimates from time-series specification where the dependent variable is alignment with the ruling party. Columns 1-4 show regressions for the pre-peace process period, and columns 5-8 for the post-peace process period. Odd-numbered columns include no controls or fixed effects. Even-numbered columns include a full set of controls, including F(t) and baseline + unbalanced congressional-vote controls. R-squared's are reported to assess potential bias from unobservables following Oster (2019).

Table A15: Effect of FARC attacks on vote alignment with ruling party, varying casualty threshold

	(1) pre-PP	(2) pre-PP	(3) pre-PP	(4) pre-PP	(5) pre-PP	(6) pre-PP	(7) post-PP	(8) post-PP	(9) post-PP	(10) post-PP	(11) post-PP	(12) post-PP
Post-attack, x+ caslts.	0.0123	0.00549	0.0544**	0.111***	0.0879**	0.108**	-0.00135	-0.0187	0.0267	0.0607	0.0449	0.0590
	(0.0146)	(0.0218)	(0.0224)	(0.0318)	(0.0354)	(0.0440)	(0.0199)	(0.0440)	(0.0268)	(0.0437)	(0.0416)	(0.0461)
N	432414	217611	432414	369576	432414	408249	348662	92911	348662	304742	348662	344011
Casualty threshold	1	1	3	3	5	5	1	1	3	3	5	5
N. politicians	517	510	517	515	517	517	421	418	421	421	421	421
Politician FE	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Attack window dummy	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Isolated events	no	yes	no	yes	no	yes	no	yes	no	yes	no	yes
Time function	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Party trends	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Vote controls	no	no	no	no	no	no	no	no	no	no	no	no

Notes: Estimates from time-series specification where the dependent variable is alignment with the ruling party. Columns 1-6 show regressions for the pre-peace process period, and columns 7-12 for the post-peace process period. Even-numbered columns restrict the analysis to isolated events.

Table A16: Effect of FARC attacks on vote value, by ruling party position, time-series

Panel A: Pre-peace process

	(1) reject	(2) abstain	(3) approve	(4) reject	(5) abstain	(6) approve
Post-attack, 3+ caslts.	0.00962	-0.0587**	0.0491*	0.0394	-0.0237	-0.0157
	(0.00911)	(0.0263)	(0.0269)	(0.0405)	(0.0278)	(0.0295)
N	281898	281898	281898	87782	87782	87782
N. politicians	512	512	512	511	511	511

Panel B: Post-peace process

	(1)	(2)	(3)	(4)	(5)	(6)
Post-attack, 3+ caslts.	0.0241**	0.0218	-0.0460*	0.0457	0.00685	-0.0525***
	(0.0118)	(0.0240)	(0.0243)	(0.0297)	(0.0284)	(0.0197)
N	166594	166594	166594	138160	138160	138160
N. politicians	421	421	421	419	419	419
Politician FE	yes	yes	yes	yes	yes	yes
Day FE	no	no	no	no	no	no
Attack window dummy	yes	yes	yes	yes	yes	yes
Isolated events	yes	yes	yes	yes	yes	yes
Time function	yes	yes	yes	yes	yes	yes
Party trends	yes	yes	yes	yes	yes	yes
avg. PU vote	appr (>0)	appr (>0)	appr (>0)	rejct (<=0)	rejct (<=0)	rejct (<=0)

Notes: Estimates using the main time-series specification (politician fixed effects, time function, party linear trends) where the dependent variables are indicator variables for whether politicians reject, abstain from, or approve a congressional vote. Columns 1-3 include only votes which the ruling party voted to approve and columns 4-6 includes only votes which the ruling party rejected. Two-way clustered standard errors at the politician and week level in parentheses.

Table A17: Effect of FARC attacks on vote alignment with ruling party, diff-in-diff, one week after the attack

	(1) pre-PP	(2) pre-PP	(3) pre-PP	(4) pre-PP	(5) post-PP	(6) post-PP	(7) post-PP	(8) post-PP
Post-attack in HD, 3+ caslts.	0.0998***	0.118***	0.0699***	0.0668***	-0.0469*	-0.0549**	-0.0430*	-0.0423*
	(0.0320)	(0.0261)	(0.0268)	(0.0256)	(0.0272)	(0.0252)	(0.0238)	(0.0250)
N	432414	432172	432172	405240	348662	348662	348662	334963
N. politicians	517	516	516	503	421	421	421	416
Post dummy	yes	yes	no	no	yes	yes	no	no
Politician FE	no	yes	yes	yes	no	yes	yes	yes
Day FE	no	no	yes	yes	no	no	yes	yes
Attack window dummy	no	yes	yes	yes	no	yes	yes	yes
Isolated events	no	yes	yes	yes	no	yes	yes	yes
Time function	no	yes	no	no	no	yes	no	no
Party trends	no	yes	yes	yes	no	yes	yes	yes
Vote controls	no	no	no	yes	no	no	no	yes

Notes: Estimates from diff-in-diff specification where the dependent variable is alignment with the ruling party. Columns 1-4 show regressions for the pre-peace process period, and columns 5-8 for the post-peace process period. Columns 1 and 5 include no controls or fixed effects. Columns 2 and 6 use the time-series specification. Columns 3 and 7 include politician fixed effects, day fixed effects and party specific linear trends. Columns 4 and 8 include congressional vote level controls including dummies for the type of vote (policy vs. procedural), keywords (conflict or non-conflict related votes), whether the vote was proposed by a PU member or by a member of the politician's own party, and the average alignment for other members of the party. Clustered standard errors at the politician level in parentheses.

Table A18: Effect of FARC attacks on vote alignment with ruling party, diff-in-diff, robustness checks

	(1) pre-PP	(2) pre-PP	(3) pre-PP	(4) pre-PP	(5) post-PP	(6) post-PP	(7) post-PP	(8) post-PP
Post-attack in HD, 3+ caslts.	0.0407	0.0740***	0.106***	0.0652**	-0.0487**	-0.0615**	-0.0475*	-0.0109
	(0.0249)	(0.0273)	(0.0315)	(0.0331)	(0.0193)	(0.0283)	(0.0285)	(0.0578)
N	386670	403470	317278	396625	297422	304497	262523	322181
N. politicians								
Excludes conflict votes	yes	no	no	no	yes	no	no	no
Excludes PU-proposed votes	no	yes	no	no	no	yes	no	no
Excludes PU politicians	no	no	yes	no	no	no	yes	no
Exc. most violent depts	no	no	no	yes	no	no	no	yes

Notes: The table shows the results from the main diff-in-diff analysis with various sample restrictions as outlined in the online appendix. Standard errors clustered at the politician level. All columns include politician fixed effects, day fixed effects, an event-window dummy, party time trends, and restrict to isolated events. Significance levels *p<0.10, **p<0.05, ***p<0.01.

Table A19: Effect of FARC attacks on vote alignment with ruling party close to legislative elections, one week after the attack

	(1) 2010 elec	(2) 2010 elec	(3) 2010 elec	(4) 2010 elec	(5) 2014 elec	(6) 2014 elec	(7) 2014 elec	(8) 2014 elec
Post-attack in HD, 3+ caslts.	0.0623**	0.0638**	0.0244	-0.0365	-0.155**	-0.234***	-0.117**	0.0186
	(0.0286)	(0.0273)	(0.0598)	(0.0445)	(0.0681)	(0.0753)	(0.0464)	(0.0187)
N	43804	43775	35585	35585	17514	17514	7700	7700
N. politicians	272	271	285	285	262	262	260	260
Politician FE	yes	yes	yes	yes	yes	yes	yes	yes
Day FE	yes	yes	yes	yes	yes	yes	yes	yes
Attack window dummy	no	yes	no	yes	no	yes	no	yes
Isolated events	no	yes	no	yes	no	yes	no	yes
Party trends	no	yes	no	yes	no	yes	no	yes
pre/post elections	pre	pre	post	post	pre	pre	post	post

Notes: Estimates from diff-in-diff specification where the dependent variable is alignment with the ruling party and treatment dummy is a an attack occurring in legislators' own constituency. Columns 1-4 show regressions for the pre-peace process period, and columns 5-8 for the post-peace process period. The preferred empirical specification is used in even-numbered columns. Two-way clustered standard errors at the politician and week level in parentheses. Significance levels shown below *p<0.10, ** p<0.05, ***p<0.01.

Table A20: Effect of FARC attacks on vote alignment with ruling party, varying casualty threshold

	(1) pre-PP	(2) pre-PP	(3) pre-PP	(4) pre-PP	(5) pre-PP	(6) pre-PP	(7) post-PP	(8) post-PP	(9) post-PP	(10) post-PP	(11) post-PP	(12) post-PP
Post-attack in HD, x+ caslts.	0.0313**	0.0499***	0.0673**	0.0699***	0.0522	0.0569*	-0.00502	-0.0152	-0.0430*	-0.0430*	-0.0534	-0.0534
	(0.0154)	(0.0188)	(0.0272)	(0.0268)	(0.0341)	(0.0331)	(0.0136)	(0.0146)	(0.0238)	(0.0238)	(0.0534)	(0.0534)
N	432414	426453	432414	432172	432414	432298	348662	345016	348662	348662	348662	348662
Casualty threshold	1	1	3	3	5	5	1	1	3	3	5	5
N. politicians	517	516	517	516	517	516	421	421	421	421	421	421
Politician FE	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Attack window dummy	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Isolated events	no	yes	no	yes	no	yes	no	yes	no	yes	no	yes
Day FE	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Party trends	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Vote controls	no	no	no	no	no	no	no	no	no	no	no	no

Notes: Estimates from the diff-in-diff specification where the dependent variable is alignment with the ruling party. The regression compares alignment after rebel attacks for politicians whose home department was the location of the attack, relative to other politicians. Columns 1-6 show regressions for the pre-peace process period, and columns 7-12 for the post-peace process period. Even-numbered columns restrict the analysis to isolated events.

Table A21: Effect of FARC attacks on vote value, by ruling party position, diff-in-diff

Panel A: Pre-peace process

	(1) reject	(2) abstain	(3) approve	(4) reject	(5) abstain	(6) approve
Post-attack in HD, 3+ caslts.	-0.00554	-0.0847**	0.0903**	0.0573	-0.0801	0.0228
	(0.0107)	(0.0362)	(0.0352)	(0.0454)	(0.0490)	(0.0297)
N	328255	328255	328255	104023	104023	104023
N. politicians	516	516	516	515	515	515

Panel B: Post-peace process

	(1) reject	(2) abstain	(3) approve	(4) reject	(5) abstain	(6) approve
Post-attack in HD, 3+ caslts.	0.0170	0.0693**	-0.0863***	0.00274	0.0344	-0.0372
	(0.0189)	(0.0276)	(0.0304)	(0.0521)	(0.0475)	(0.0262)
N	195249	195249	195249	153426	153426	153426
N. politicians	421	421	421	419	419	419
Politician FE	yes	yes	yes	yes	yes	yes
Day FE	yes	yes	yes	yes	yes	yes
Attack window dummy	yes	yes	yes	yes	yes	yes
Isolated events	yes	yes	yes	yes	yes	yes
Time function	no	no	no	no	no	no
Party trends	yes	yes	yes	yes	yes	yes
avg. PU vote	appr (>0)	appr (>0)	appr (>0)	rejct (<=0)	rejct (<=0)	rejct (<=0)

Notes: Estimates using the main diff-in-diff specification (politician and day fixed effects, party linear trends) where the dependent variables are indicator variables for whether politicians reject, abstain from, or approve a congressional vote. Columns 1-3 include only votes which the ruling party voted to approve and columns 4-6 includes only votes which the ruling party rejected. Clustered standard errors at the politician level in parentheses.

Table A22: Cross-department covariance matrix of FARC attacks

	Antioquia	Arauca	Boyaca	Caqueta	Cauca	Choco	Cundinama~a	Guaviare	Huila	Meta	Narino	NdeSantan~r	Putumayo	Santander	Tolima	Guajira	Valle
Antioquia	1																
Arauca	0.0031	1															
Boyaca	-0.0043	-0.003	1														
Caqueta	0.0132	0.0099	-0.0035	1													
Cauca	**0.1078***	-0.0066	-0.0058	0.0473	1												
Choco	-0.0115	-0.0079	-0.0022	0.0209	0.0225	1											
Cundinama~a	0.0071	-0.0095	-0.0026	-0.0112	0.0133	-0.007	1										
Guaviare	-0.0083	-0.0057	-0.0016	-0.0068	-0.0111	-0.0042	-0.0051	1									
Huila	0.0469	0.0049	-0.0041	-0.0008	0.0545	-0.0109	0.009	0.0283	1								
Meta	-0.0117	-0.0081	-0.0023	0.02	0.0028	-0.006	-0.0072	-0.0043	0.0145	1							
Narino	0.006	-0.0147	**0.0651***	0.0158	0.0234	-0.0109	-0.013	0.0283	-0.0058	**0.0658***	1						
NdeSantan~r	**0.0659***	0.0272	-0.0039	0.0534	0.0385	0.0173	0.0108	-0.0075	0.0111	0.0434	0.0111	1					
Putumayo	0.0447	0.0325	-0.0035	0.0234	0.0473	-0.0094	0.0142	-0.0068	-0.0008	0.02	-0.0008	0.0359	1				
Santander	-0.005	-0.0034	-0.001	-0.0041	-0.0067	-0.0026	-0.0031	-0.0018	-0.0047	-0.0026	-0.0047	-0.0045	-0.0041	1			
Tolima	0.0393	-0.0108	-0.003	-0.0128	0.0069	-0.008	0.0199	-0.0058	0.0237	-0.0082	-0.0148	0.0265	-0.0128	-0.0035	1		
Guajira	0.0356	-0.0083	-0.0023	-0.0098	0.002	-0.0061	-0.0074	-0.0044	0.0137	-0.0063	-0.0114	-0.0108	-0.0098	-0.0027	-0.0084	1	
Valle	-0.0016	0.011	-0.0034	0.0249	0.0378	-0.0091	-0.0109	0.0364	0.0002	0.0211	0.0514	0.02	0.0446	-0.004	0.0105	0.0203	1

Notes: The table shows the correlation between the timing of FARC attacks across departments between 2006 and 2015. *p<0.1, using the Bonferroni correction for multiple hypothesis testing.

Table A23: Effect of FARC attacks on Google Trends search volume (by dataset)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Post-attack, 3+ caslts. (GTD)	6.766***			6.871***	5.328**			6.118***	9.848**
	(1.559)			(1.557)	(2.206)			(1.701)	(4.312)
Post-attack, 3+ caslts. (CMH)		2.114**		0.445		3.617		1.960*	3.112
		(0.995)		(0.952)		(2.532)		(1.035)	(2.668)
Post-attack, 3+ caslts. (NyN)			0.448	-1.509			0.452	-1.454	-7.619**
			(1.658)	(1.523)			(2.613)	(1.848)	(3.484)
N	3690	3690	3690	3690	3098	2046	3358	3690	1786
Attack window dummies	no	no	no	no	yes	yes	yes	yes	yes
Isolated events	no	no	no	no	yes	yes	yes	no	yes
Time function	no	no	no	no	yes	yes	yes	yes	yes

Notes: The table shows the effect of FARC attacks on Google Trends search volume (where each observation is one day), by conflict dataset. Outcome is volume of Google Trends (measured from 0-100, with mean 8.8) for "FARC Attack" ("Ataque FARC"). The explanatory variables are dummies equal to one if the observation occurs in the one-week after a FARC attack with at least 3 casualties. Clustered standard errors at the week level in parentheses.

Table A24: Effect of FARC attacks on Twitter mentions of FARC attack (by dataset)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Post-attack, 3+ caslts. (GTD)	0.00340**			0.00387**	0.00379*			0.00286**	0.00386*
	(0.00157)			(0.00154)	(0.00221)			(0.00115)	(0.00203)
Post-attack, 3+ caslts. (CMH)		0.00126		-0.000765		0.00305		-0.000400	0.00163
		(0.00122)		(0.000918)		(0.00281)		(0.000615)	(0.00223)
Post-attack, 3+ caslts. (NyN)			0.00117	-0.000120			0.00109	-0.000850	-0.00236
			(0.00161)	(0.00165)			(0.00137)	(0.00102)	(0.00346)
N	373797	373797	373797	373797	322738	301849	368037	373794	283172
Attack window dummies	no	no	no	no	yes	yes	yes	yes	yes
Isolated events	no	no	no	no	yes	yes	yes	no	yes
Politician FE	no	no	no	no	yes	yes	yes	yes	yes
Time function	no	no	no	no	yes	yes	yes	yes	yes
Party linear trends	no	no	no	no	yes	yes	yes	yes	yes

Notes: The table shows the effect of FARC attacks on Twitter mentions for FARC attack (where each observation is one tweet), by conflict dataset. Outcome is a dummy equal to one if the tweet includes the keywords *farc* and *attack* (ataque/atac*) (with a mean of 0.002). The explanatory variables are dummies equal to one if the observation occurs in the one-week after a FARC attack with at least 3 casualties. Clustered standard errors at the politician and week level in parentheses.

Table A25: Twitter environment on weeks before attacks

	β_{pre}	se_{pre}	β_{pre}	se_{pre}
Tweet volume				
All tweets	-0.00733	(0.209)	-0.00617	(0.0583)
PU tweets	-0.123	(0.189)	-0.125*	(0.0729)
Right-leaning tweets	-0.149	(0.165)	-0.0720	(0.0531)
Tweet keywords				
Keyword Militar	-0.000399	(0.00184)	-0.000523	(0.00154)
Keyword Salud	-0.00188	(0.00270)	-0.00523**	(0.00256)
Keyword Paz	-0.0117	(0.00888)	-0.0154	(0.00939)
Keyword TLC	0.00211*	(0.00111)	0.00159	(0.00111)
Keyword Justicia	-0.000437	(0.00261)	0.000872	(0.00186)
Keyword Víctimas	0.000761	(0.000763)	0.000488	(0.000618)
Keyword Infraestructura	0.0000921	(0.000593)	0.000209	(0.000514)
Keyword Tributaria	-0.000116	(0.00136)	-0.000530	(0.00135)
Keyword Empleo	-0.00156	(0.00155)	-0.000992	(0.000920)
Keyword Educación	0.000286	(0.000520)	0.000123	(0.000427)
Keyword Terrorista	-0.000612	(0.00260)	0.000824	(0.00146)
Keyword Social	0.00266	(0.00213)	0.00184	(0.00134)
Keyword Corrupción	0.000262	(0.000364)	0.000255	(0.000270)
Keyword Transporte	-0.0000443	(0.000679)	0.00000223	(0.000607)
Keyword Televisión	-0.000425	(0.000519)	-0.000566	(0.000667)
Keyword Servicios	0.000635	(0.000560)	0.000598	(0.000565)
Keyword Equilibrio	0.00337	(0.00236)	0.00277	(0.00174)
Keyword Penitenciario	0.000326	(0.000284)	0.000265	(0.000242)
Function of time controls	No		Yes	
No. of stat. significant outcomes (p<0.05)	0		1	
No. significant w/ Bonferroni correction	0		0	

Notes: Each coefficient corresponds to a separate regression of tweet volume / tweet keywords as an outcome, on a *preAttack* indicator equal to 1 if the observation corresponds to the week before an attack (columns 1 and 3). Observations are days for rows 1-3 (N=2,321), and tweets for the remaining rows (N=373,734). Standard errors are clustered at the week level (row 1-3) and two-way at the week and politician level (remaining rows). Column 3 regressions include a function of time controls, including year, month and day of the week fixed effects, and calendar day (linear).

Table A26: Effect of FARC attacks on tweet engagement

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Post-attack, 3+ caslts.	0.0220	0.0770*	0.215***	0.246***				
	(0.0435)	(0.0391)	(0.0665)	(0.0777)				
Post-attack in HD, 3+ caslts.					0.115	-0.0499	0.201	0.0276
					(0.116)	(0.0937)	(0.214)	(0.260)
N	217980	55962	30905	3218	196570	53408	29814	2861
N. politicians	236	65	262	57	216	61	239	49
PU tweets	no	yes	no	yes	no	yes	no	yes
Top 10% right-leaning	no	no	yes	yes	no	no	yes	yes
Politician FE	yes	yes	yes	yes	yes	yes	yes	yes
Time function	yes	yes	yes	yes	no	no	no	no
Day FE	no	no	no	no	yes	yes	yes	yes

Notes: Columns (1) and (5) exclude PU and the most right-wing tweets. Columns (2) and (6) use only tweets by the incumbent party. Columns (3) and (7) use only tweets in the top 10 percentile of the political leaning index (most "right-wing" tweets). Columns (4) and (8) use only tweets by the incumbent party which are in the top ten percentile of the political leaning index. Two-way clustered standard errors at the politician and week level in parentheses for time-series analysis (columns 1-4). Standard errors clustered at the politician level for the diff-in-diff analysis (columns 5-8).

Table A27: Effect of FARC attacks on tweet engagement, polarization and increased right-wing support

	(1)	(2)	(3)	(4)	(5)	(6)
Post-attack, 3+ caslts.	0.0649	0.215***	0.0527		0.0230	
	(0.0436)	(0.0665)	(0.0426)		(0.0413)	
Post-attack x PolLean			0.0423	0.0342	0.0496***	0.0404**
			(0.0259)	(0.0257)	(0.0182)	(0.0194)
Political leaning			0.0197*	0.0179*	0.0281***	0.0258***
			(0.0112)	(0.0108)	(0.00973)	(0.00934)
Post-attack x PolLean^2					0.0276***	0.0233**
					(0.00959)	(0.00970)
Political leaning^2					0.0441***	0.0420***
					(0.00474)	(0.00441)
N	30145	30905	301639	301538	301639	301538
N. politicians	274	262	301	295	301	295
Politician FE	yes	yes	yes	yes	yes	yes
Day FE	no	no	no	yes	no	yes
Top 10% left-leaning	yes	no	no	no	no	no
Top 10% right-leaning	no	yes	no	no	no	no
All tweets	no	no	yes	yes	yes	yes

Notes: Columns 1-2 include only the tweets with the most extreme measured political language (left, column 1, right, column 2). Columns 3-6 include all tweets and interact the post-attack dummy indicator with the political language of each tweet (and its square). Two-way clustered standard errors at the politician and week level in parentheses for columns 1-3, and 5. All columns restrict the sample to isolated events, include an attack-window dummy, a function of time (except 4 and 6), and include party specific linear trends. Standard errors clustered at the politician level for columns 4 and 6.