

# Continuation of Politics by Two Means: Direct and Indirect Violence in Civil War

Laia Balcells<sup>1</sup>

## Abstract

This article distinguishes between “direct” and “indirect” violence during civil wars. These two types differ in their forms of production: while indirect violence is unilaterally perpetrated by an armed group, direct violence is jointly produced by an armed group and civilians, and it hinges on local collaboration. These differences have consequences for the spatial variation of each of these types: in conventional civil wars, indirect violence is hypothesized to be positively associated with levels of prewar support for the enemy group; in contrast, direct violence is hypothesized to increase with the level of political parity between factions in a locality. The predictions are tested with a novel dataset of 1,710 municipalities in Catalonia and Aragon during the Spanish civil war (1936–1939).

## Keywords

competition, violence, identity, civil war, Spain

---

<sup>1</sup> Institute for Economic Analysis-CSIC, Bellaterra, Barcelona, Spain, and Barcelona Graduate School of Economics, Barcelona, Spain

## Corresponding Author:

Laia Balcells. Institute for Economic Analysis-CSIC. Campus UAB. Bellaterra, Barcelona 08193, Spain  
Email: [laia.balcells@iae.csic.es](mailto:laia.balcells@iae.csic.es)

This article seeks to explain intentional violence against noncombatants in civil wars. Direct (or “face-to-face”) violence is distinguished from indirect violence, and two different logics, corresponding to each of these types of violence, are provided.<sup>1</sup> Political factors are placed at the core of the explanation, thereby challenging recent research on the dynamics of violence during conflict that has given primacy to economic, organizational, or military factors (e.g., Azam 2006; Humphreys and Weinstein 2006; Kalyvas 2006). Indeed, local political alignments are argued to be crucial in explaining the perpetration of violence during civil war, and that to do so in different ways, depending on the nature of violence—as defined by its form of production. This is the case because, concerning the perpetration of violence, political identities intervene at two different levels: (a) in the *decision to target* (by the armed groups) and (b) in the *decision to collaborate*, that is, acquiescing in the perpetration of violence and/or promoting it (by local civilians).

In this article, I focus on civil conflicts that primarily take the form of a conventional contest. Conventional civil wars (hereafter also CCW) are those that “have clear frontlines, in which attacks take place mostly from barricades and stable positions, and in which there are big major battles that are usually determinants for the war outcomes” (Kalyvas 2005). One of the main differences between them and irregular or guerrilla wars is that—except for zones that are extremely close to the frontline (i.e., battlefield areas)—the control of the armed groups over the population under their dominion is overwhelming; this is not the case in irregular civil wars, in which areas of total control coexist with areas of fragmented control where this must be shared with the rival. This means that while in guerrilla wars violence is largely the result of warfare and competition to gain territory, in CCW violence against civilians is much less connected to military competition (Balcells 2010a). In general terms, I argue that in CCW armed groups and civilians face a structure of incentives that broadly differs from that in civil wars fought via irregular warfare; nonetheless, some of these conditions may also occur in other civil war contexts, for example, in irregular civil wars where the group has full control of a territory for a long time, or in conventional international wars where groups claiming different nationhood share territory.

The hypotheses in this article are tested with data from municipalities in the regions of Catalonia and Aragon during the Spanish civil war (1936–1939; hereafter, also SCW), which have been collected from primary and secondary historical sources. The particular focus on these regions derives not only from the availability of fine-grained historical data but also from the fact that these territories display a rich variation in the dependent variable(s) and the independent variable(s) that will be taken into consideration.<sup>2</sup> Maybe even more importantly, these two regions allow for the comparison of violence that was perpetrated by two very different armed groups during the same period. On one hand, what I call Nationalist Aragon was controlled by the well-organized and disciplined Nationalist army, supported by

irregular Falangist and other right-wing militias; on the other hand, what I call Republican Catalonia was controlled by the loosely organized and less disciplined Republican army, which during a long time was under the influence of the anarcho-syndicalist and communist militias.<sup>3</sup> This clear-cut variation provides leverage for testing the role of organizational factors versus local-level political variables in explaining lethal violence against civilians.<sup>4</sup>

This article brings together types of violence that are often studied separately—that is executions and bombings. While almost all studies of civil and interstate wars focus on one or the other, I argue that there are common grounds for understanding them. Following Clausewitz ([1832] 1968), politics is their common denominator; yet again, because of the existence of diverging constraints on the perpetration of each of these types of violence, political variables are expected to affect them differently.

The organization of the article is as follows: the next section introduces the theoretical framework and hypotheses. Section 3 presents a comprehensive empirical test of the hypotheses, using multivariate regression techniques on a set of nested novel datasets (i.e., one for Catalonia, one for Aragon, and a third one for both regions). Section 4 concludes the article with a summary of the main findings of the article.

## **Theoretical Framework: Direct and Indirect Violence in Civil War**

This section tackles with the determinants of violence against civilians in the rear territories of a CCW. I exclude the explanation of battlefield violence, which in these wars predominantly implies the assassination of combatants.<sup>5</sup> I first define direct and indirect violence, identifying the main dimension over which these two types diverge: their technology of production. I then present a set of hypotheses on the determinants of each of these types of violence, which I argue are connected—although in diverging ways—to the distribution of political loyalties at the local level.

Crenshaw (1981) explains that “some terrorist acts require a more intimate contact between terrorist and victim than others. Thus, the form of terrorism practiced—how selective it is and how much personal domination of the victim it involves—would determine the relevance of different questions” (p. 391). Along similar lines, I distinguish between two types of violence depending on the way they are produced, and the degree of intimacy between combatant and victim they imply. Direct violence can be defined as violence perpetrated with light weaponry (e.g., guns, knives, shotguns, machetes) in a “face-to-face” type of interaction (e.g., individual or mass executions). The production of direct violence entails the interaction of armed groups and civilians living in the localities where this violence takes place because, in order to perpetrate direct violence, armed groups take actions that either require the collaboration of local citizens, or that are potentially hindered by a lack

of collaboration (i.e., “veto”) of the civilians. Civilian actions include procedures such as the localization of suspects, arrest, transportation to execution sites, and/or the execution itself. Local civilians may denounce their neighbors, help identify them, or they can even arrest them (this enhances the armed group’s capacity to assassinate). Conversely, civilians can hide potential victims, they can help them flee to other places, or they can give misleading indications to the groups (this constrains the armed group’s capacity to assassinate).<sup>6</sup> Civilian collaboration is particularly crucial if the armed group does not have local knowledge or it has no access to sources of information such as registration records or political militancy lists (I assume here that this is the case). Note that I argue that—vis-à-vis Kalyvas (2006)—the intersection of civilians and armed groups is relevant for the production of *any type of direct violence*, not necessarily selective.

Indirect violence, by contrast, is perpetrated with heavy weaponry (e.g., tanks, fighter planes), and it does not require a face-to-face interaction with the victims. Because its technology of production permits it, indirect violence is unilateral from an armed actor’s perspective, giving very limited agency (if any) to civilians.<sup>7</sup> Also, indirect violence can be perpetrated in territories where the armed group has no territorial control (e.g., through aerial strikes). All this makes the logic of direct and indirect violence different. A caveat: the theorization of the determinants of the use of indirect vis-à-vis direct violence is out of the scope of this article; this would be somewhat determined by the technology available to armed groups, as well as by patterns of territorial control and battlefield dynamics. And I am taking these as exogenous here. When used by a single armed group, direct and indirect violence can be conceived as complements (they are both aimed at eliminating adversaries from a territory).<sup>8</sup>

At the theoretical level, direct violence against civilians is quite puzzling in a CCW. From a perspective that emphasizes the strategic motivations of armed groups and civilians (Kalyvas 2006), this violence is counterintuitive because the armed group does not attain obvious utility from killing civilians who live in zones they control fully. And, insofar as the internal organization of groups does not vary across the rear territories, as is often the case in CCW, violence cannot be explained based on the greater or lesser degree of internal cohesiveness of the groups (Humphreys and Weinstein 2006; Weinstein 2006).<sup>9</sup> The same caveat applies to explanations based on greed incentives of groups (Azam and Hoeffler 2002): in these wars, spatial variation in victimization cannot be explained by attempts to occupy more desirable (i.e., wealthier) territories. Terrorization civilians in one’s side (Azam and Hoeffler 2002) does not account for direct violence in these contexts either, as individuals cannot defect to the other group. Finally, since armed groups fighting CCW have strong military capacities and rely on routinized conscription (Kalyvas and Balcells 2010), taxation and recruitment incentives (Azam 2006; Gates 2002) cannot be explaining violence in the rearguard territories. While violence against deserters or defectors is plausible, we should not expect them to be the norm from a rationalist perspective—as people have incentives to comply with armed groups fully controlling their territory (Balcells 2010a; Kalyvas 2006).

Indirect violence in the enemy's controlled territories is somewhat less puzzling than direct violence, as it is likely to be driven by the requirements of the military struggle. The logic in this case should be the same as the one explaining strategic bombings in international (Allen 2007; Belkin et al. 2002; Downes 2008; Pape 1996) or internal (Arreguín-Toft 2001; Downes 2008; Kalyvas 2006; Kocher et al. 2011; Lyall 2009) wars, in which violence is aimed at eliminating the military capacities of the enemy, demoralizing, and/or coercing the enemy in order to change her policies. However, armed groups sometimes choose to attack civilian locations that have no particular geostrategic or military value: we should be able to explain what leads them to target some locations and not others. This question is particularly striking in CCW, where the bombing of rearguard locations is unlikely connected to the military struggle, with some exceptions (e.g., bombings taking place during military operations).

This article relies on the assumption that variation in intentional violence against civilians can be explained from a framework in which groups are driven by strategic motivations, and in which violence is aimed at eliminating supporters of the enemy who—due to prewar political mobilization—have strong loyalties with the group, and they may eventually become a military threat (Balcells 2010a).<sup>10</sup> Since mobilization reflects prewar cleavages, it follows that the targeting of noncombatants will likely relate to these cleavages; in other words, political identities will be crucial for the groups' detection of potential threats behind the frontlines, and—as is explained—they will influence the extent to which there is variation in violence across space.

## Direct Violence

Let's imagine a hypothetical country where a civil war erupted after a period of intense political confrontation between political parties A and B, whose platforms are now championed by respective armed groups A and B. The citizenry of this country has been mobilized along the A–B cleavage. Now imagine a hypothetical armed group A that is patrolling a territory that has been newly conquered from group B. The two groups, which fight a conventional war with relatively stable frontlines, enjoy exclusive military control of relative large areas from which they have excluded the rival group. Relevant interactions in the territory controlled by A involve combatants of this group and all civilians living in it. In addition to fighting B on the battlefield in order to increase the share of territory under its control, A is interested in getting rid of strong supporters of B (hereafter, also  $B_{SS}$ ), who are perceived as a potential threat.<sup>11</sup> The crucial interactions leading to direct violence take place at the local level, where the degree to which A targets civilians depends on two factors: (a) the number of  $B_{SS}$  living in it and (b) the behavior of civilians in the locality, who can choose to back the killings or to constrain them. More specifically:

(a) In each locality there are political activists or individuals who are highly mobilized and who identify strongly with one of the groups (armed groups obtain

information on these  $B_{SS}$  through their local supporters). As a general norm we can expect that the presence of  $B_{SS}$  will be proportional to the existence of supporters of B in a locality (the same should hold for A and  $A_{SS}$ ). The number of  $B_{SS}$  will also be determined by the presence of particular institutions mobilizing along the lines of the war cleavage (e.g., trade union, churches, and professional organizations). Also, we can also expect more  $B_{SS}$  in places with a history of social unrest and polarizing political confrontation between A and B.

(b) Collaboration with the armed group in power (in our example, A) is subject to constraints. In this regard, local civilians who identify with group A are likely to take into consideration the effects of violence for the future of their locality. I argue that these considerations are shaped by the distribution of local power between groups, as expressed electorally: when electoral power approaches parity (i.e., the margin of victory is small), violence can decisively alter the local political balance; in this context, A supporters are likely to opportunistically push the armed group toward violence against B supporters. However, where A supporters are either a distinct majority or a distinct minority (i.e., the margin of victory is large), they are likely to restrain their respective armed groups. Where they are a majority, they do not need to use violence in order to change the status quo; where they are a minority, only genocidal levels of violence would help reverse the balance—short of that, they would endanger themselves without altering their position vis-à-vis B supporters.<sup>12</sup> Translating this conjecture into operational terms, we would expect A's supporters to promote armed group violence where the prewar electoral balance approaches parity (i.e., a 50–50 percent distribution) and to constrain armed group violence where this balance moves away from parity.

In a nutshell, as political competition approaches parity, both the identification of strong supporters of the enemy and civilian behavior combine to generate greater levels of violence.

*Hypothesis 1:* The greater the degree of prewar electoral parity between groups, the higher the level of direct violence perpetrated by the armed group controlling that locality.

This hypothesis assumes a one-shot, static setting; elsewhere (Balcells 2010a), this is extended to subsequent periods.

## Indirect Violence

Now imagine the same country, civil war, and territory. B is a well-equipped armed group, which has heavy artillery that permits it to shell from land (in places close to the frontline), sea (in places close to the seashore), and air (presumably, anywhere).<sup>13</sup> In addition to using this technology to attack A on the frontlines and/or militarily strategic enclaves, B can choose to deploy some of its resources to target civilian locations in A's rearguard. These attacks, while barbaric by definition,<sup>14</sup> can

be perpetrated on a selective basis: in other words, the group can decide to assassinate civilians in a particular locality and not in another.<sup>15</sup> This choice will be somewhat necessary for armed groups because their resources are limited.

Military-strategic factors normally play a crucial role in the decision to bomb a location. For this reason, industrial and other (i.e., energy) infrastructure locations are most likely to be targeted. The same happens with strategic communication enclaves, such as harbors, nodal train stations or roads. These variables have been widely scrutinized in the security studies literature (e.g. Arreguín-Toft 2001; Downes 2008; Horowitz and Reiter 2001; Pape 1996). Yet, political factors may play a relevant role too: everything else being equal, B is likely to attack places with a greater number of strong supporters of the enemy group, that is, number of ASS. This is because, following the framework above, B is ultimately interested in eliminating those who are providing greater support to A during the civil war (and highly mobilized people are those who are likely offering greater logistical and material support to A), or who will constitute a potential threat in a future period, when the group will potentially exert control over this territory. Given the degree of imprecision of indirect type of attacks such as bombings, the armed groups can only make sure that they are targeting strong supporters of the enemy by attacking locations with a relatively large density of these supporters. In these locations, more than anywhere else, the effects of indirect violence are more likely to be positive for the aims of the group, which are—among others—weeping the territory out of strong enemies.<sup>16</sup>

If we conceptualize the degree of support toward the enemy group in a locality—and therefore the relative number of strong supporters—with the degree of prewar electoral support for the enemy group, it follows that

*Hypothesis 2:* The greater the electoral support toward a group during the prewar period, the greater the likelihood that a locality will be the target of indirect violence by the enemy group.

## Empirical Test

In this section, Hypotheses 1 and 2 are tested with data I have collected from the Spanish regions of Aragon and Catalonia. During the SCW, with very few exceptions, most of the Catalan territory was under Republican control until the beginning of 1939.<sup>17</sup> This means that direct violence took place in two stages: a first period (from July 1936 to 1938/1939) in which violence was perpetrated by leftist militias and the Republican army and a second period (during and after its occupation of the territories) in which violence was perpetrated by the Nationalist army and right-wing militias. The focus here will only on the violence that took place in the first stage.<sup>18</sup> The distribution of this violence across municipalities of Catalonia is depicted in Map A1 (see online appendix).

Indirect violence took place in Catalonia in the form of aerial strikes perpetrated not only by the Nationalist army, but also by the Italian and German armies—whose actions were, however, closely supervised by Nationalist commanders, and very particularly, by General Franco (Balfour and Preston 1999; Solé i Sabaté and Villarroya 2004). This violence took place throughout the whole conflict: in 1936 and 1937 they mostly focused on strategic locations such as big industries, harbors, or cross-roads locations, but they increased in intensity and dispersion in 1938 and until the end of the conquest of Catalonia in February 1939 (Solé i Sabaté and Villarroya 1986). Map A2 (see the online appendix) depicts the spatial distribution of the total of aerial strikes perpetrated by the right in Catalonia (1936–1939).

In Aragon, a total of 366 municipalities were under Nationalist control during the entire civil war; the remaining municipalities in the region (582) were under leftist control at some point during the war—I label them as Republican (*vis-à-vis* Nationalist). The focus here is on executions that were perpetrated by the right in the first subset of localities (Map A3; see online appendix). Why focus only on this area of Aragon? On one hand, in locations of the Republican zone of Aragon, rightist violence took place in a second phase of the conflict, once leftist violence had already occurred; thus, violence was likely to be (at least partly) influenced by factors such as revenge, resentment, or retaliation—in connection with the events in the previous phase (Balcells 2010a). These types of factors are not contemplated in the theoretical framework above. On the other hand, my theoretical framework does not account for violence taking place in battlefield zones: violence against noncombatants in battlefield areas of a CCW is likely to be determined by military factors (e.g., location of the troops or militias, the location of the battles, etc.), and not as much by political factors. This area of Aragon hosted the longest frontline of the SCW (the Ebro frontline), around which ferocious battles between the two armies were fought. Localities in this frontline switched hands several times, and suffered the side effects of battlefield violence.<sup>19</sup>

The hypotheses will be tested by means of multivariate linear regression techniques using three nested self-built cross-sectional data sets: (a) a dataset of all 1,060 municipalities in Catalonia; (b) a data set of the 366 municipalities in Nationalist Aragon; and (c) a data set of all municipalities in Aragon and Catalonia, including Republican Aragon (a total of 2,008). In reference to direct violence, I estimate negative binomial II (NB) and zero-inflated negative binomial (ZINB) regressions, which are count models appropriate for the nature of the dependent variable (i.e., number of people executed by the armed group). NB permits to control for overdispersion; ZINB allows controlling both for overdispersion and for the excess of zeros in the dependent variable (Long 1997). This model generates two set of estimates: a first set of estimates explaining the probability of the nonoccurrence of violence (that is, that the DV is always 0)—through a logit regression; and a second set of estimates explaining the number of counts—through a NB regression—for all those cases that are “not always zero.” I present here the results of the ZINB regressions, which are more suitable to the data,<sup>20</sup> the NB results, which are included in the online appendix,



supply robustness to the results.<sup>21</sup> With regard to indirect violence, I estimate a number of binomial regressions models with two different dummy dependent variables: one for locations that were bombed and where at least one person was killed as a consequence of the bombing and another for locations that were bombed and at least ten people were killed.<sup>22</sup> This allows me to clean this variable from bombings that were purely aimed at infrastructures and that were not targeting people.

The data sets have been built from primary and secondary sources on the SCW, which are detailed in Tables A1 and A2 (see the online Appendix), for Catalonia and Aragon, respectively. They include history books, local histories, official censuses, trade union bulletins, and official military records. The dependent variables in the different models are *Executed Left* (for Catalonia) and *Executed Right* (for Aragon), which measure the total number of victims of direct violence in each of the localities. *Bombings* is a dummy variable with value 1 if the locality received *any* lethal strike during the civil war (with at least one death), and 0 otherwise; *Bombkilled10* is a dummy variable with value 1 if the locality received a lethal strike killing at least ten people, and 0 otherwise.

The independent variables in the models are *Support Left*, which measures the percentage of support toward leftist political parties in the Spanish general elections of February 16, 1936 (i.e., the parties in the *Popular Front* coalition); *Support Right*, which captures the percentage of support toward rightist political parties (i.e., those in the *Nationalist Front* coalition—called *Order Front* in Catalonia); *Competition*, which is the main independent variable in the models for direct violence, and consists of an index created from the returns in the 1936 elections, capturing the extent to which there is a balance of power or parity between the two factions:  $1 - [(\%VoteLeft36 - \%VoteRight/100)]^2$ . This index has value 0 when one of the groups received all of the votes in the elections (i.e., a 100 percent share), and it has value 1 when both groups received 50 percent of the vote;<sup>23</sup> following the theoretical framework, we expect this variable to have a positive effect on the number of executions. An alternative parity index, *Compabs* will be used in a set robustness checks:  $1 - |(\%VoteLeft36 - \%VoteRight/100)|$ . In the regressions for Aragon, I include also *Previous Violence*, which is not available for Catalonia, and it measures political violence in a locality during the prewar period; I expect it to have a positive incidence on wartime violence, as it is an indicator of the presence of strong supporters of the groups.<sup>24</sup>

The control variables in the models are: *Catholic center*, which is a dummy for places that had a Catholic archbishop, and that therefore had a relatively high density of religious population (i.e., members of the clergy), who were strong supporters of the right. We expect it to have a positive effect on violence; *CNT Affiliation* (Confederación Nacional del Trabajo) and *UGT Affiliation* (Unión General de Trabajadores) are additional proxies for political and social conflict in a locality, as well as for number of strong supporters of the left. I also expect these to take a positive sign for violence perpetrated by both armed groups.<sup>25</sup> A higher density of strong supporters implies larger number of executed because it not only means a greater presence of

would-be targets for the enemy armed group but also a greater presence of local collaborators of the group perpetrating violence. Indeed, both trade unionists and priests were crucial collaborators for the militias from the left and right, respectively.

A set of geographical variables that have potential effects on violence will also be included in the regressions as controls: Frontline captures the uncertainty that is likely to take place in zones close to the war frontline(s), where levels of victimization are consequently expected to boost. For Catalonia, I use a dummy variable; for Aragon, I use a somewhat more refined measure, *Latitude* of the locality: since the frontline was to the East of all these territories, the greater the latitude, the greater the proximity to the frontline. *Sea* is a dummy for localities in the seashore; this should capture the effect of a potential escape route on the number of killings taking place in a particular area (I expect that this will reduce them).<sup>26</sup> Since Aragon does not have seashore, this variable only applies to the Catalonia data set.<sup>27</sup> Proximity to the French border should also capture the effect of proximity to an escape route; as before, I use a dummy in the Catalonia dataset (*Border*), and a more refined measure, *Longitude*, for Aragon: the greater the longitude, the further south the locality and therefore the bigger the distance from France.<sup>28</sup> Altitude is a measure for *Rough terrain*, and it should capture the effect that knowledge of local terrain and access difficulties has on violence against civilians: in rough terrain locations, people can hide in the mountains or forests in order to avoid being killed to a greater extent than in other places; thus, we can expect this variable to take a negative sign.<sup>29</sup> Finally, I include inhabitants of the locality in 1936 (*Population*) in order to control for size of the locality.

Table 1 depicts the results of the ZINB models for leftist executions in Catalonia; model 1 includes Competition as the main independent variable. Model 2 replicates model 1, but it includes Support Left as the main independent variable in order to check for the competing hypothesis that support for the group in a locality reduces levels of direct violence. I call this the “Domination hypothesis,” implying that the more the group kills more the less it dominates a locality because it has a relative larger number of nonsupporters.<sup>30</sup> At the methodological level, the inclusion of this variable permits us to check for the possibility that the results obtained with the variable Competition are not driven by the imposition of a particular functional form (i.e., nonlinearity).

Table 1 indicates that, as hypothesized, Competition is substantively and statistically significant for explaining direct violence: the greater the level of parity between political factions in a locality, the greater the number of leftist executions. The coefficient of competition is not significant in the second part of the ZINB equation, which means that this variable is not relevant to explain the occurrence of violence. At the empirical level, there may be some factors that affect the occurrence of violence and that are independent of the degree of competition in a locality: for example, in many localities of the Republican side, the priest was the only victim of leftist violence.<sup>31</sup>

Support Left is not significant in explaining violence, so the alternative domination hypothesis can be ruled out. With regard to the control variables, CNT Affiliation has a significant effect, and it indicates that the presence of affiliates increases

**Table 1.** Executed by the Left in Catalonia. ZINB Models

	MI	MI	M2	M2
	Number of Executed (NB)	Nonviolence (Logit)	Number of Executed (NB)	Nonviolence (Logit)
Competition	1.46*** (.375)	1.79 (1.47)	—	—
Support left	—	—	0.001 (.00)	0.010 (.01)
Frontline	0.284** (.14)	0.69 (.7)	0.323*** (.14)	1.177 (.93)
Population (×1,000)	0.064*** (.001)	-6.8*** (1.9)	0.068*** (.02)	-8.350*** (2.77)
CNT	0.111*** (.02)	—	0.117*** (.02)	—
UGT	0.079 (.049)	0.038 (.504)	0.087* (.05)	0.150 (.60)
Border	-0.388** (.16)	-0.432 (.522)	-0.452*** (.16)	-0.658 (.59)
Sea	-0.118 (.154)	1.453 (.95)	-0.118 (.015)	2.332* (1.35)
Altitude (meter × 1,000)	-0.75*** (.28)	1.3 (1.02)	-0.781*** (.28)	2.213 (1.37)
Catholic center	2.15*** (.46)	—	2.208*** (.48)	—
Constant	0.296 (.37)	-1.64 (1.282)	1.525*** (.27)	-1.146 (1.24)
Ln $\alpha$	0.411*** (.083)	0.411*** (.083)	0.481*** (.08)	0.481*** (.08)
Observations	583	870	583	870
Wald chi-square	489.9	489.9	476.77	476.77
Probability > chi-square	.000	.000	.000	.000

Note: ZINB = zero-inflated negative binomial; NB = negative binomial II; CNT = Confederación Nacional del Trabajo; UGT = Unión General de Trabajadores; standard errors in parentheses. Significance level: \*.1, \*\*.05, \*\*\*.001.

the number of assassinations in the locality.<sup>32</sup> UGT Affiliation is also positive and significant in explaining levels of violence (in M2). With regard to the geographical variables, Frontline has a positive impact on violence, as predicted; proximity to the border and to the sea take the expected negative signs, indicating that a greater possibility of fleeing reduces the degree of victimization at the local level. Altitude also takes a negative sign, capturing the negative effect of rough terrain over executions. Finally, Catholic Center has a very strong positive effect on level of executions, indicating that the presence of larger number of strong supporters of the right (i.e., religious people) leads to greater levels of violence by the left.<sup>33</sup>

The results of the ZINB regressions for rightist violence in Aragon are depicted in Table 2. I included Previous Violence in two additional models, although—for some unknown reason—model 3 (with the variable Support Left and without Previous Violence) could not be optimized (this does not happen in the NB regressions, in Table A4 of the online appendix). As before, some variables (Previous Violence, UGT Affiliation, and Catholic Center) cannot be introduced into the logit equation of the ZINB models due to overdetermination issues.

The results in Table 2 are also supportive of Hypothesis 1, and they are coherent with what we observed for Catalonia: levels of direct violence increase together with the degree of political parity between groups; as before, Competition cannot explain

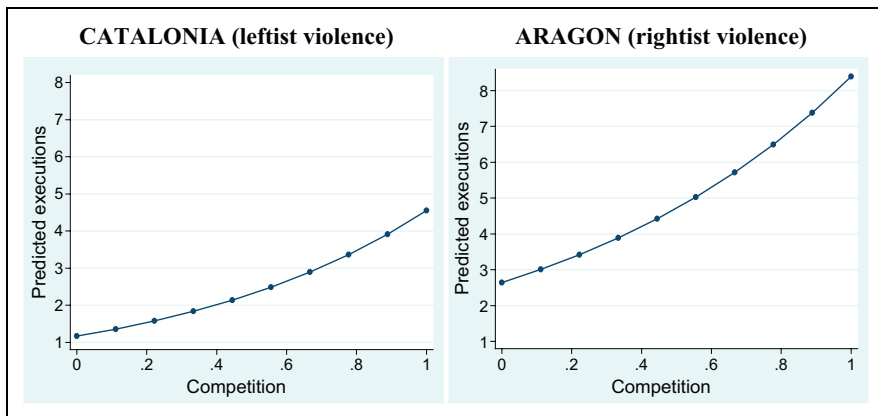
**Table 2.** Executed Right in Nationalist Aragon. ZINB Models

	MI	M2	M4
	Number of Executed (NB)	Number of Executed (NB)	Number of Executed (NB)
Competition	1.360*** (.43)	1.177*** (.42)	—
Population (× 1,000)	0.044 (.04)	0.028 (.02)	0.034* (.02)
CNT	0.034 (.05)	-0.039 (.05)	-0.073 (.05)
UGT	0.086** (.04)	0.072* (.04)	0.052 (.04)
Catholic center	2.021*** (.76)	1.661** (.74)	1.602** (.73)
Latitude	-0.072 (.29)	-0.196 (.28)	-0.141 (.27)
Longitude	0.952*** (.35)	0.810** (.35)	0.818** (.32)
Altitude (feet × 1,000)	-0.590*** (.13)	-0.601*** (.12)	-0.600*** (.12)
Previous violence	—	1.062*** (.33)	1.115*** (.34)
Support left	—	—	0.023*** (.01)
Constant	6.289 (12.15)	11.400 (12.04)	9.320 (11.60)
Inflate	Nonviolence (Logit)	Nonviolence (Logit)	Nonviolence (Logit)
Competition	-1.328 (1.04)	-1.410 (.97)	—
Population (× 1,000)	-1.552** (.67)	-1.559** (.66)	-1.734** (.68)
CNT	-0.131 (.17)	-0.155 (.20)	-0.201 (.26)
Latitude	0.789 (.65)	0.741 (.64)	0.459 (.58)
Longitude	2.095 (1.32)	1.803 (1.19)	1.954* (1.08)
Altitude (feet × 1,000)	1.035*** (.39)	1.006*** (.38)	1.041*** (.36)
Support left	—	—	0.002 (.02)
Constant	-31.674 (28.40)	-29.813 (28.10)	-18.779 (25.44)
Ln $\alpha$	.238 (.15)	.124 (.15)	.117 (.16)
Observations	251	251	251
Chi-square	207.368	218.257	220.324

Note: ZINB = zero-inflated negative binomial; NB = negative binomial II; CNT = Confederación Nacional del Trabajo; UGT = Unión General de Trabajadores; standard errors in parentheses. Significance level: \*.1, \*\*.05, \*\*\*.00.

the occurrence of violence. As expected, Previous Violence is significant to explain levels of direct violence. In Table 2 for M4: In M4, Support Left exhibits a significant effect on levels of direct violence by the right.<sup>34</sup>

Overall, the results indicate that the same mechanism accounting for variation in levels of violence perpetrated by the left in one territory (i.e., Catalonia) also explains variation in levels of violence perpetrated by the right in another territory (i.e., Aragon). That is the case despite the fact that, as explained, these armed groups had clearly divergent organizational characteristics and ideological platforms.<sup>35</sup>



**Figure 1.** Predicted executions on level of prewar competition

Further evidence along these lines is provided in Figure 1, which depicts the predicted number of killings in Catalonia and Aragon, by levels of political competition (all other variables set at their sample mean). We can observe that this variable exhibits a very similar substantive impact on levels of violence carried out by both armed groups.

We can test more optimally for the relative impact of local political vis-à-vis organizational factors by running a set of regressions with a dataset pooling together all municipalities in these two regions. The dependent variable is in this case total number of deaths (with no distinction of perpetrator): *Total Executed*; a dummy for *Control zone* (1 if Republican, 0 if Nationalist) allows measuring control by one or the other armed group. Table 3 includes the results of three alternative models: model 1, with the usual measure of Competition; model 2, with the index of *Competition* with absolute values (*Compabs*); model 3, with the variable Support Left—again, to test for the competing domination hypothesis. Georeferencing variables are not included in this regression because these would have contradictory effects (for Catalan localities, the frontline was to the West; for Aragon localities, it was to the East), and they could not be properly interpreted.

The results in Table 3 confirm the hypothesis that political competition, measured in both quadratic and absolute terms, is explanatory of levels of violence in localities of both the Republican and the Nationalist side. The coefficient for *ZoneRep* indicates that armed group is not explanatory of levels of violence. Yet, being in the Republican zone increases the likelihood of a locality experiencing violence; this may be indicative that there are differences across zones with regard to the spatial distribution of violence. Indeed, actual numbers indicate that violence was more diffused across localities in Republican Catalonia than in Nationalist Aragon: while 43 percent of municipalities in Nationalist Aragon had at least one executed, 62 percent of localities in Republican Catalonia had at least one executed.<sup>36</sup> The significance of Catholic center in the regressions of Table 3 explained by the fact

**Table 3.** Total Executed in Catalonia and Aragon, ZINB Models

	MI	M2	M3
	Number of Executed (NB)	Number of Executed (NB)	Number of Executed (NB)
Population (×1,000)	0.172*** (.02)	0.175*** (.02)	0.177*** (.02)
ZoneRep	0.038 (.11)	0.038 (.11)	0.057 (.11)
CNT	0.069*** (.02)	0.069*** (.02)	0.075*** (.02)
UGT	0.063** (.03)	0.064** (.03)	0.068** (.03)
Catholic center	1.637*** (.37)	1.634*** (.37)	1.654*** (.37)
Border	-0.526*** (.12)	-0.521*** (.12)	-0.505*** (.12)
Sea	-0.158 (.10)	-0.152 (.10)	-0.081 (.10)
Competition	0.511*** (.17)	—	—
Compabs	—	0.391** (.15)	—
Support left	—	—	-0.002 (.00)
Constant	1.301*** (.17)	1.458*** (.14)	1.752*** (.13)
Inflate	Nonviolence (Logit)	Nonviolence (Logit)	Nonviolence (Logit)
ZoneRep	-2.306*** (.41)	-2.328*** (.41)	-2.400*** (.41)
Population(×1,000)	-7.91*** (1.23)	-7.896*** (1.23)	-7.821*** (1.23)
Border	0.801*** (.31)	0.815*** (.31)	0.782** (.32)
Sea	0.385 (.38)	0.396 (.38)	0.433 (.38)
Competition	0.326 (.58)	—	—
Compabs	—	0.249 (.53)	—
Support left	—	—	0.002 (.01)
Constant	2.657*** (.63)	2.762*** (.57)	2.863*** (.54)
Ln $\alpha$	.479*** (.05)	.482*** (.05)	.486*** (.05)
Observations	1709	1709	1709
Chi-square	894.482	892.110	886.257

Note: ZINB = zero-inflated negative binomial; CNT = Confederación Nacional del Trabajo; UGT = Unión General de Trabajadores; standard errors in parentheses. Significance level: \*, \*\*, \*\*\*, .001.

that Catholic centers match the biggest cities in the data set, and thus, this is capturing the nonlinear effect of population density on executions.<sup>37</sup>

One methodological concern that can be raised in the light of the results above is that an omitted variable may be explaining both prewar distribution of power (i.e., competition) and violence. While at the qualitative level there is evidence showing that many localities with “peaceful” cohabitation before the war were affected by violence (Linz 1996, 407), we still need to make sure that the econometric results are not influenced by this potential bias. In order to deal with this, absent an adequate instrument for competition, I have run all the regressions above with county dummies (Chacón, Robinson, and Torvik 2006; Clarke 2005), and the results (not included here, but available upon request) remain consistent.

I turn now to the exploration of the determinants of a locality being targeted by a lethal bombing anytime during the conflict, with data from Catalonia (there is no systematic data on bombings available for Aragon that I could use to test this hypothesis). The converse of Hypothesis 2 is that a group will likely perpetrate *less* indirect attacks in places where it has *greater* electoral support; to facilitate the interpretation of the results, the hypothesis is operationalized in this way. The main independent variable in the model is Support Right in the elections, which I expect to have a negative effect on bombings perpetrated by Nationalist forces. Again, nonlethal bombings are not considered in the dependent variable: in this way we get rid of those attacks that were purely aimed at infrastructures, roads and harbors. CNT Affiliation and UGT Affiliation are also included in the regression model in order to control for the presence of strong supporters of the left—thus, we can expect these two variables to have a positive effect on bombings. Other control variables are Latitude and Longitude of the locality (in degrees); since they allow for a precise measurement of the geographical location, these variables serve as a corrector for the omitted variable bias caused by the noninclusion of military and geostrategic variables in the regression model. Altitude of the locality also allows us to control for geostrategic factors—we can expect locations in more mountainous (and therefore higher) places to be less relevant from a militaristic perspective and therefore less prone to be targeted by lethal bombings.<sup>38</sup> In addition, I test for the alternative hypothesis that political parity—and not political domination—is explaining the likelihood of a locality being bombed. For this purpose, I include Competition in a second regression model (M2). Compabs (Competition index measured with absolute values) is included in a third model (M3), in order to provide further robustness.

The results in M1 of Table 4 show that, controlling for all other variables in the model, support for the right in the 1936 elections has a significant negative effect on the likelihood of a locality suffering from a lethal bombardment. CNT affiliation and UGT affiliation take both positive and significant signs, thus indicating that the right was more likely to indirectly attack places with a greater proportion of leftist militants. Also, as expected, Altitude has a negative effect on the likelihood of bombings, as predicted. Catholic center is not statistically significant, thus not supporting the hypothesis that enclaves of the right such as religious centers were less likely to be targeted than other localities. Latitude takes a negative significant sign, indicating that eastern locations were more likely to be targeted: this is consistent with the fact that seashore localities were more relevant strategically, as well as that they could be more easily targeted due to the use of maritime artillery; Longitude, in contrast, has no significant effect on bombings. Population is positive and significant in M2 and M3 indicating a greater propensity of more densely population locations to be bombarded.

None of the alternative independent variables (in models 2 and 3) shows as significant to explain bombings. The nonsignificance of Competition (calculated with either the quadratic or the absolute index) allows us to rule out the hypothesis

**Table 4.** Logit on Lethal Bombings (At Least One Death)

	M1	M2	M3
Population ( $\times 1,000$ )	0.370 (.23)	0.392* (.23)	0.393* (.23)
CNT Affiliation	0.049* (.03)	0.047* (.03)	0.047* (.03)
UGT Affiliation	0.161** (.07)	0.171** (.07)	0.171** (.07)
Catholic center	2.224 (1.56)	1.891 (1.55)	1.909 (1.55)
Latitude ( $\times 1,000$ )	-0.005*** (.00)	-0.006*** (.00)	-0.006*** (.00)
Longitude ( $\times 1,000$ )	0.004 (.00)	0.005 (.00)	0.005 (.00)
Altitude ( $\times 1,000$ )	-1.410*** (.54)	-1.654*** (.56)	-1.663*** (.56)
Support Right 1936	-0.016** (.01)	—	—
Competition	—	0.862 (.73)	—
Competition (abs)	—	—	0.482 (.53)
Constant	-15.691 (15.87)	-24.234 (15.60)	-23.637 (15.66)
Observations	870	870	870
Chi-square	61.282	49.795	49.015
Aic	633.651	637.249	637.641

Note: CNT = Confederación Nacional del Trabajo; UGT = Unión General de Trabajadores; robust standard errors in parentheses. Significance level: \* .1 \*\* .05 \*\*\* .001.

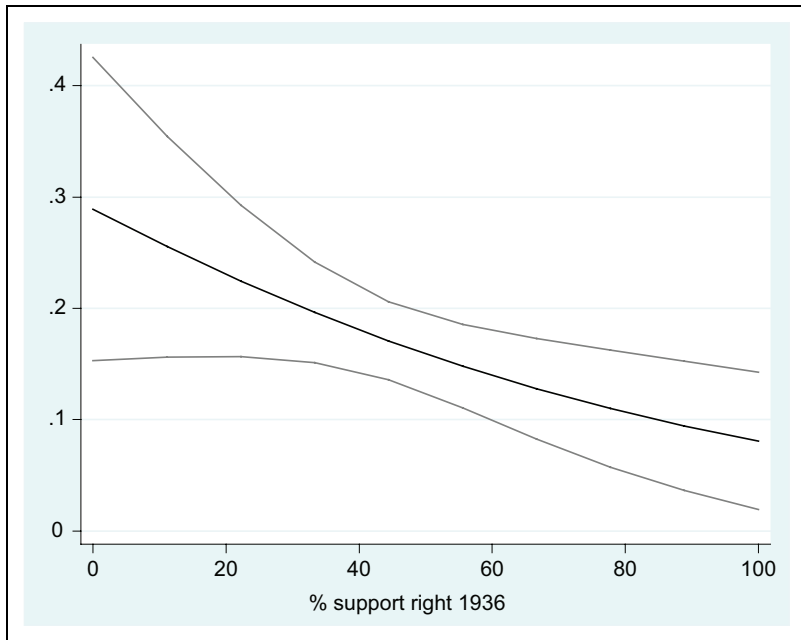
that indirect violence is explained by the same factors that account for direct violence, which is consistent with the theoretical model.

Figure 2 depicts the predicted likelihood of lethal strike by levels of support for the right in the elections (using M1 above, and with all other variables in the regression set at their sample mean). We can observe that the marginal impact of this variable is statistically significant and substantially relevant.

I perform the analyses above with a higher threshold: namely with the dependent variable *Bombkilled10*. The results are depicted in Table A5 (online appendix), and they are consistent: Support Right is the most significant variable explaining bombings with at least ten civilian deaths. CNT affiliation is not significant, and the geographical variables (except altitude) lose statistical significance—as compared to the previous model. This again supports the hypothesis that political factors were crucial in explaining bombings that targeted civilian population.<sup>39</sup>

To sum up, the results of the empirical test are coherent with the idea that civilian targeting in conventional civil wars is very much coupled with political identities and to prewar local level political dynamics. This is consistent across armed groups and control zones, except for battlefield areas, in which violence is likely to be mostly related to military dynamics.<sup>40</sup> The results also show that, as hypothesized, political cleavages and identities shape levels of direct and indirect violence in different ways. Regarding direct violence, the distribution of political loyalties determines the extent to which groups find local collaboration enabling the elimination of political enemies; this collaboration is more frequent in places with a balance of power between local political factions, as groups use it instrumentally in order to change the local state of affairs. In the case of indirect violence, political loyalties





**Figure 2.** Predicted likelihood of deadly bombings on level of prewar rightist support

serves as an indicator for the armed groups of the extent to which the imprecise attacks are going to be functional for eliminating political enemies.

## Conclusion

This article has sought to explain the dynamics of violence against civilians in a civil war context, by extending the analytical focus to conflicts fought conventionally. This has allowed theorizing on determinants of violence under a structure of incentives that is usually inexistent in the context of guerrilla wars. These conditions are, however, also possible to be found, in different moments of time and places, in other civil war contexts; for example, in zones of stable and full control by one armed group during an irregular civil war (e.g., different zones during the civil war in El Salvador, Colombia, or Peru), or in the context of international conventional wars involving groups claiming different nationhood (i.e., the civil war in South Ossetia, in Georgia). The focus has been on two distinct types of violence that take place in very differentiated ways in the context of CCW: direct violence (in the armed group's rear territory) and indirect violence (in the enemy's rear territory). The analysis has brought political variables back to the fore overcoming the neglect that they have suffered in recent research on violence.

At the empirical level, I have analyzed subnational variation in one single civil war in a way that follows current practice in the field and provides significant empirical leverage. Data collection at the microlevel (i.e., at the level of the locality), allows for a better exploration of the mechanisms than cross-national data sets (e.g., Raleigh and Hegre 2005), or regional data sets (e.g., Herreros and Criado 2009), which have greater measurement issues,<sup>41</sup> and do not permit a precise operationalization of theoretically crucial variables (e.g., geographic location, political competition).

Several implications follow: because civilian agency matters for direct violence and it does not matter for indirect violence, political alignments are associated differently with each of these types. On one hand, direct violence is not linearly associated with the number of supporters of the enemy group, as one could “naively” assume; instead, the relationship is nonmonotonic. We observe greater violence in places with a greater degree of parity between political blocs; that is the case because, in these contexts, local civilians have an interest in eliminating political enemies in order to change the local balance of power—thus, they do not “veto” but rather promote the perpetration of violence. On the other hand, we do observe a negative monotonic relationship between levels of support for a group in a locality and lethal indirect violence; that is the case because, *ceteris paribus*, with these indirect attacks, the group maximizes the chances of eliminating strong supporters of the enemy.

Second, the converging results regarding violence that took place in two different regions during the same time period, and—more importantly—violence perpetrated by armed groups with very different characteristics, indicate that local-level political dynamics are particularly robust in explaining levels of violence. While organizational factors seem to be capturing the degree of diffusion of violence across a rear territory, they do not account for levels of violence. Thus, the findings here are in partial contradiction with Weinstein (2006) and Humphreys and Weinstein (2006), although they also indicate that organizational variables can have a complex effect on violence, that they can be operating to explain one dimension of it (i.e., dispersion) but not another (i.e., intensity). A caveat is that the explanatory power of organizational variables may be conditional on the type of conflict—potentially less crucial in conventional civil wars than in other types (this is to be explored in further comparative research). The results also partially challenge purely strategic approaches such as Kalyvas’s (2006) or Valentino’s (2004), which overlook the role of local political factors.

In other to make the findings in this article more generalizable, further research should explore microlevel violence in other conventional civil wars. Yet, the result that political competition is explanatory of direct violence connects with existing research on civil war: for example, although they refer to different mechanisms, Chacón et al. (2006) also observe that violence in “La Violencia” of Colombia (1948–1958) was greater in municipalities where electoral support for parties was more evenly balanced. Also, the hypotheses above are not only applicable to ideological civil wars; it should also be possible to extrapolate them to contexts where mobilization has taken place along different lines (e.g., religion, ethnicity).

In this sense, fine-grained evidence from the conflict in Bosnia is also supportive of the idea that, even in polarized ethnic settings, domination cannot explain violence (Bulutgil 2009; Gagnon 2004; Kalyvas and Sambanis 2005). For example, Kalyvas and Sambanis (2005) find that spatial variation in violence in Bosnia was explained by the strategic and economic importance of the area, but that at the local level “polarization seems more significant than either fractionalization or dominance” (p. 221) in explaining violence. Gagnon (2004) argues that heterogeneous communities in the most ethnically plural parts of Croatia were those more intensively targeted by the elites of Belgrade and Zagreb. Or, in the current civil war in Iraq (2003–today), Condra and Shapiro (2009) argue that violence is greater in mixed areas, as compared to places dominated by either Shia or Sunnies.

With regard to indirect violence, the results here also have connections with findings in previous research: for example, Kocher, Pepinsky, and Kalyvas (2011) emphasize the relevance of political alignments at the local level to explain bombings. They provide evidence from Vietnam, an irregular civil war where what they describe as indiscriminate violence (empirically referring to bombings) tended to occur in political strongholds of one side or the other. Interestingly, these authors argue that, in conventional conflicts, indirect violence will take place only in the most contested zones of the battlefield; the findings in this contradict this, and they suggest that, as in irregular conflicts, indirect violence in conventional civil wars is also targeting rearguard civilian locations on the basis of tactical and strategic motives.

### **Author’s Note**

Earlier versions of this paper benefited from feedback received at the HiCN Workshop 2008, the ISA and ASN Conventions 2009, the MPSA Annual Meeting 2009, and the Elections and Violence conference held at Yale University. I am especially indebted for comments and suggestions to Stathis Kalyvas, Elisabeth Wood, Thad Dunning, Macartan Humphreys, David Carter, Alexandra Hartman, Alexander Downes, José Luis Ledesma, Carles Boix, Ana Arjona, and Gema García-Albacete. I also thank Anna Palacios, Albert Sesé, Mercè Tafalla, and Josep Ventura for research assistance in the data digitalization process, and Nacho Campanero for assistance in mapping the data. Replication materials are available at: <http://jcr.sagepub.com> and <http://balcells.iae-csic.org>.

### **Declaration of Conflicting Interests**

The author declared no conflicts of interest with respect to the authorship and/or publication of this article.

### **Funding**

The research in this article has benefited from financial support from the Leylan Fellowship in the Social Sciences, the John F. Enders Fellowship, the Macmillan Center Dissertation

Research Grant, and the Leitner Program in International and Political Economy Research Grant—at Yale University, and the *Centro de Investigaciones Sociológicas (Ayuda a la Finalización de Tesis Doctorales 2009)* of the Spanish Ministry of the Presidency.

## Notes

1. In the typology here, direct and indirect violence are both intentional; the classification thus differs from that in Valentino, Huth, and Balch-Lindsay (2004), who also include nonintentional deaths (i.e., as a consequence of famine) as indirect violence. The typology also differs from Arreguín-Toft's (2001), whose categories refer to warfare strategies: "direct" stands for approaches that target an adversary's armed forces in order to destroy that adversary's capacity to fight; "indirect" stands for approaches that seek to destroy an adversary's will to fight.
2. Reliable microlevel data on violence during the Spanish civil war are still not available for a large number of provinces.
3. This was the case until May 1937, when the Communists imposed a much more centralized structure. However, by that time, a large proportion of the executions on the Republican side had already taken place. Direct violence took place mostly during the first weeks of the conflict (Solé i Sabaté and Villarroya 1989); the temporal pattern was similar on the Nationalist side (Casanova et al. 2001).
4. This could be considered a *quasi-experimental* setting (Przeworski 2007), although I will avoid using this term, as well as the term *natural experiment*. I cannot straightforwardly assume that the distribution of control areas by each of these armed groups was "as if" random (Dunning 2008), even if different pieces of historical evidence suggest that this was the case.
5. Unlike in irregular wars, in conventional wars violence against civilians and combatants takes place in clearly delineated spaces.
6. Civilians can also presumably be neutral to the actions of the groups (Wood 2003). Yet, remaining neutral does not seem to be easy in wartime contexts (Kalyvas 2006; Petersen 2001).
7. Attacks with precision guide munitions (PGMs), or predator strikes exploiting intelligence from local informers to locate high-priority targets, may be an exception to this (I thank Alex Downes for this caveat). Yet, for the sake of parsimony, and due to the relative rarity of these attacks (PGMs were only started to use after the Vietnam war), I will assume no civilian agency in indirect violence.
8. We can think that, armed groups will prefer to use direct violence—which can be more selective—as opposed to indirect violence—which risks generating casualties among own supporters.
9. In conventional wars, armed groups often (although not always) rely on routinized conscription mechanisms, and consist of disciplined and strong organizations (Kalyvas and Balcells 2010).
10. It should be emphasized that, in the context of a CCW, prewar mobilization—and not wartime mobilization—is the one that matters to explain violence. During wartime, armed groups are equally likely to mobilize civilians in their respective rear territories, and civilians have incentives to respond positively to these mobilization efforts (e.g.,

- enlisting in recruitment lists, political organizations, etc.), based on survival maximization reasons.
11. Note that I am assuming that the armed group focuses on the elimination of only strong supporters, who are those least malleable (i.e., willing to assimilate) and who constitute a bigger threat behind the frontlines. Although the assumption here is that prewar mobilization is what makes people more or less malleable, it could be that ascriptive characteristics also plays a role, for example, in instances of ethnic civil war. A related question, to be addressed in further research, is what explains that groups decide to opt for assimilation in some cases, and for elimination or forced displacement in others.
  12. Following Valentino (2004), interest in genocide usually comes from strategically oriented national leaders, with long-term views (i.e., “radical communization of their societies”). These motivations are therefore less likely to exist among local-level leaders, who will be interested in maximizing their chances of survival (first and foremost), of holding power in the near future, and of eliminating their private adversaries.
  13. I conceptualize indirect violence as aerial, artillery, or maritime bombardments. The use of nuclear weapons can also be included in this category, but given its rarity (especially in civil conflicts), I will not take this technology into account.
  14. “Historically, the most common forms of barbarism include the murder of noncombatants (e.g., prisoners of war or civilians during combat operations); the use of concentration camps; and since 1939, strategic bombing against targets of no military value” (Arreguín-Toft 2001, 102).
  15. Indirect violence is not necessarily indiscriminate, although it surely is following Kalyvas’s (2006) definition. Yet, this definition does not take into account the fact that there can be some degree of selectivity even in attacks against localities/collectivities. Pape (1996) explains, for instance, that aerial power has a lot of comparative advantage (over land power and naval power) with regard to selectivity: “Unlike sea power, bombing can focus on specific categories of targets, attacking either political, economic, population, or military targets in isolation or combination” (p. 45).
  16. The group is trying to maximize the elimination of enemies while minimizing damage to their own supporters. Possible retribution against its supporters, or the effect of bombings on alienation of constituents in future periods, are not taken into account because there is no clear evidence that these mechanisms are in place (see, for example, the findings in Lyall 2009).
  17. The total occupation of Catalonia ended on February 12, 1939 (Solé i Sabaté 2000).
  18. Focusing on this period will allow a comparison with violence that was perpetrated by the other armed group (the Nationalists) during the same period of time, in another region (Aragon).
  19. The characterization of this area as a battlefied zone draws on evidence from numerous sources, including Casanova (1985), Ledesma (2009), Martínez de Baños (2004), Maldonado (2007). I have run the same regressions estimating violence in rearguard territories for the subset of localities in this battlefield zone (Table A6 in the online appendix). As expected, the coefficient of the main explanatory variable in the model (Competition) is not significant in these estimations.

20. In all the regressions below, the *Vuong* test will indicate that the zero-inflated specification is necessary, that is that zero-inflated negative binomial (ZINB) results should be more reliable than NB results. Also, if we test the different count regression models potentially applicable to these data, and we check graphically the way they fit to the real data (following Long 1997, 247–48), the ZINB model shows as the most appropriate.
21. In addition to the count models, I also run a set of OLS regressions with the dependent variable normalized on the size of the locality, that is number of executed per thousand inhabitants. The results are robust, and they are available upon request.
22. In this case, count models (with number of bombings as the dependent variable) are also run as robustness checks. They are available upon request.
23. This index is based on the polarization index in Chacón, Robinson, and Torvik (2006). I label it differently because polarization, following Esteban and Ray's definition (1994) is a continuous measure that captures the distribution of groups in society and intergroup distance.
24. This variable takes value 1 if there was any violent conflict in the period January–July 1936 and 0 if not. The data is obtained from Casanova (1985, 52). I put together all his categories of conflict, which are: strikes; occupation of private properties including those ending with expulsion; order alterations or clashes between groups; governmental intervention to solve conflicts; violent aggressions against peasants; occupation of communal lands; and situations of tension solved through negotiations. None of these categories include either crimes of passion or normal delinquency.
25. CNT stands for Confederación Nacional del Trabajo; this was the major anarchist trade union in Spain during the Second Republic. UGT stands for Unión General de Trabajadores; this was the major socialist trade union, and it had organizational connections with the socialist party, PSOE.
26. Note that my theoretical framework does not account for the causes of displacement: I merely assume that greater opportunities fleeing (by would-be targets of the groups) will reduce victimization at the local level.
27. During the civil war, many refugees left Catalonia by sea (Dòll-Petit 2004).
28. I run the regressions for Catalonia also with Longitude and Latitude, and the results do not change. Here, I present the results with the dummy variables Frontline and Border because they are more intuitive.
29. In alternative specifications, I use altitude range of a locality to proxy for rough terrain, which is a measure somewhat more consistent with Fearon and Laitin's (2003). The results are robust.
30. According to Collier (2001), a society qualifies societies as dominated (*vis-à-vis* polarized) if the largest group contains between 45 and 90 percent of the overall population. With this index, I am not applying a dichotomous measure of domination but rather a continuous one.
31. Delgado (1992) argues that killing the priest became a sort of a revolutionary obligation that could not easily be avoided by militiamen (even in those cases where they spared the lives of other citizens, e.g., landowners).
32. This variable cannot be included in the logit piece of the ZINB model because it overpredicts violence; there are no places with positive levels of CNT affiliation that did not observe leftist violence.

33. Like CNT Affiliation, Catholic Center is a variable that over-determines the occurrence of violence and it cannot be included in the logit part of the ZINB models.
34. This coefficient is, however, capturing a nonlinear relationship, and it loses significance if we include the squared value of Support Left in the regression (results available upon request).
35. In the particular case of Spain, the thesis that violence perpetrated on each side followed “different logics” (Herrerros and Criado 2009; Luengo 1998) is thus challenged by these results.
36. The total number of executed by the right in the 366 localities of Nationalist Aragon was 6,035; the total number of executed by the left in the 1,062 localities in Republican Catalonia was 8,009.
37. Catholic Center is a variable that takes value 1 mostly for big urban centers. If we include a dummy for urban centers instead of Catholic center, we get similar results.
38. As before, the inclusion of the variable *Altitude* leads us to lose a significant number of cases. If we run this same regression without this variable (and a total of 1,052 cases) the results remain robust.
39. The significance of Catholic Center in M1 of Table A5 is probably again due to the urban bias of these locations.
40. Balcells (2010b) shows that while spatial dependence patterns exist in violence data of these battlefield zones, they do not exist in violence data of rearguard zones.
41. The microlevel focus has allowed me to concentrate on regions for which data on violence is extremely reliable. For most of the remaining regions in Spain, there are still many lacunae and imprecision regarding the figures of the civil war casualties (on this topic, see Juliá 2004). Using them is thus methodologically risky.

## References

- Allen, Susan H. 2007. “Time Bombs: Estimating the Duration of Coercive Bombings Campaigns.” *Journal of Conflict Resolution* 51:112–33.
- Arreguín-Toft, Ivan. 2001. “How the Weak Win War: A Theory of Asymmetric Conflict.” *International Security* 26:93–128.
- Azam, Jean-Paul. 2006. “On Thugs and Heroes.” *Economics of Governance* 7:53–73.
- Azam, Jean-Paul, and Anke Hoeffler. 2002. “Violence Against Civilians in Civil Wars: Looting or Terror?” *Journal of Peace Research* 39:461–85.
- Balcells, Laia. 2010a. “Rivalry and Revenge. Violence Against Civilians in Conventional Civil Wars.” *International Studies Quarterly* 54:291–313.
- Balcells, Laia. 2010b. *Behind the Frontlines: Identity, Competition, and Violence in Civil Wars*. PhD Dissertation, Yale University.
- Balfour, Sebastian, and Paul Preston. 1999. “Introduction”. In *Spain and the Great Powers*, edited by S. Balfour and P. Preston. 1–12. London: Routledge.
- Belkin, Aaron., Michael, Clark., Gulriz, Gokcek., Robert, Hinckley., Thomas, Knecht., and Eric, Patterson. 2002. “When is Strategic Bombing Effective? Domestic Legitimacy and Aerial Denial.” *Security Studies* 11:51–88.

- Bulutgil, Zeynep. 2009. *Territorial Conflict and Ethnic Cleansing*. PhD Dissertation, Political Science, University of Chicago, Chicago.
- Casanova, Julián. 1985. *Anarquismo y revolución en la sociedad rural aragonesa. 1936-1938* [Anarchism and Revolution in the Rural Aragonian Society. 1936-1938]. Madrid: Siglo Veintiuno de España Editores.
- Casanova, Julián., Angela, Cenaarro Lagunas., Julita, Cifuentes., M<sup>a</sup> Pilar, Maluenda., and M<sup>a</sup> Pilar, Salomón. 2001. *El pasado oculto. Fascismo y violencia en Aragón (1936-1939)* [The Hidden Past: Fascism and Violence in Aragón (1936-1939)]. 3rd ed. Zaragoza: Mira Editores.
- Chacón, Mario, James A. Robinson, and Ragnar Torvik. 2006. *When is Democracy an Equilibrium? Theory and Evidence From Colombia's "La Violencia."* NBER Working Papers.
- Clarke, Kevin A. 2005. "Phantom Menace: Omitted Variable Bias in Econometric Research". *Conflict Management and Peace Science* 22 (4):341-352.
- Clausewitz, Carl von. [1832] 1968. *On War*. Edited by Colonel F. N. Maude and translated by Colonel J. J. Graham. New York: Barnes and Noble.
- Collier, Paul. 2001. "Implications of Ethnic Diversity." *Economic Policy* 16:129-66.
- Condra, Luke N., and Jacob N. Shapiro. 2009. "Who Takes the Blame? The Strategic Effects of Collateral Damage." Paper presented at the Order, Conflict and Violence Speaker Series, Yale University.
- Crenshaw, Martha. 1981. "The causes of Terrorism." *Comparative Politics* 13:379-99.
- Delgado, Manuel. 1992. *La ira sagrada. Anticlericalismo, iconoclastia y antirritualismo en la España contemporánea* [Holy Rage. Anticlericalism, Iconoclasy and Antirritualism in Contemporary Spain]. Barcelona: Humanidades.
- Dóll-Petit, Rubén. 2004. "Repressió, Salvament i Fugida a la Reraguarda Catalana, 1936-1939" [Repression, salvation and flight in the Catalan rearguard, 1936-39]. *Revista Internacional de la Guerra Civil Ebre* 38 (2):49-60.
- Downes, Alexander. 2008. *Targeting Civilians in War*. Ithaca, NY: Cornell University Press.
- Dunning, Thad. 2008. "Improving Causal Inference: Strengths and Limitations of Natural Experiments." *Political Research Quarterly* 61:282-93.
- Esteban, Joan, and Debraj Ray. 1994. "On the Measurement of Polarization." *Econometrica* 62:819-51.
- Fearon, James D., and David D. Laitin. 2003. "Ethnicity, Insurgency and Civil War." *American Political Science Review* 97: 75-90.
- Gagnon, Philip. 2004. *The Myth of Ethnic War: Serbia and Croatia in the 1990s*. Ithaca, NY: Cornell University Press.
- Gates, Scott. 2002. "Recruitment and Allegiance. The Microfoundations of Rebellion." *Journal of Conflict Resolution* 46:111-30.
- Herreros, Francisco, and Henar Criado. 2009. "Pre-Emptive or Arbitrary. Two Forms of Lethal Violence in a Civil War." *Journal of Conflict Resolution* 53:419-45.
- Horowitz, Michael, and Dan Reiter. 2001. "When Does Aerial Bombing Work? Quantitative Empirical Tests, 1917-1999." *Journal of Conflict Resolution* 45:147-73.
- Humphreys, Macartan, and Jeremy Weinstein. 2006. "Handling and Manhandling Civilians in Civil War." *American Political Science Review* 100:429-47.



- Juliá, Santos, ed. 2004. *Víctimas de la guerra civil* [Victims of the Civil War]. Madrid: Temas de Hoy.
- Kalyvas, Stathis N. 2005. "Warfare in Civil Wars." In *Rethinking the Nature of War*, edited by J. Angstrom (pp. 88-108). Abingdon: Frank Cass.
- Kalyvas, Stathis N. 2006. *The Logic of Violence in Civil War*. New York: Cambridge University Press.
- Kalyvas, Stathis N., and Laia Balcells. 2010. "International System and Technologies of Rebellion: How the Cold War Shaped Internal Conflict." *American Political Science Review* 104:415–29.
- Kalyvas, Stathis N., and Nicholas Sambanis. 2005. "Bosnia's Civil War: Origins and Violence Dynamics." In *Understanding Civil War: Evidence and Analysis*, edited by P. Collier and N. Sambanis, 191–229. Washington, DC: The World Bank.
- Kocher, Matthew, Thomas Pepinsky, and Stathis Kalyvas. 2011. "Indiscriminate Violence and Local Control in Insurgency: An Empirical Analysis of Bombing in the Vietnam War." *American Journal of Political Science* (Forthcoming).
- Ledesma, José Luis. 2009. *Las justicias del pueblo: Violencia, justicia y revolución en la zona republicana durante la Guerra Civil española (1936-1939)* [The Justices of the People: Violence, Justice and Revolution in the Republican Zone During the Spanish Civil War (1936-1939)]. PhD dissertation, The European University Institute, Florence.
- Linz, Juan. 1996. *La violencia en la guerra civil y en la posguerra* [Violence in the Civil War and the Postwar]. Unpublished Manuscript, Yale University.
- Long, Scott J. 1997. *Regression Models for Categorical and Limited Dependent Variables*. London: SAGE.
- Lyall, Jason. 2009. "Does Indiscriminate Violence Incite Insurgent Attacks?" *Journal of Conflict Resolution* 53:331–62.
- Luengo, Félix. 1998. "Algunas características de las violencias durante la Guerra Civil de 1936" [Some characteristics of the violence during the civil war of 1936] *Vasconia* 26:251-258.
- Maldonado, José María. 2007. *El frente de Aragón. La guerra civil en Aragón (1936-1938)* [The Frontline of Aragon. The Civil War in Aragon (1936-1938)]. Zaragoza: Mira Editores.
- Martínez de Baños, Fernando, ed. 2004. *Guerra Civil Aragón* [Civil War Aragon]. Cuarte de Huerva: Delsan.
- Pape, Robert A. 1996. *Bombing to Win. Air Power and Coercion in War*. Ithaca, NY: Cornell University Press.
- Petersen, Roger. 2001. *Resistance and Rebellion: Lessons From Eastern Europe*. New York: Cambridge University Press.
- Przeworski, Adam. 2007. "Is the Science of Comparative Politics Possible?" In *Oxford Handbook of Comparative Politics*, edited by C. Boix and S. Stokes (pp.146-171). New York: Oxford University Press.
- Raleigh, Clionadh, and Håvard Hegre. 2005. "Introducing ACLED: An Armed Conflict Location and Event Dataset." Paper presented to the conference on "Disaggregating the Study of Civil War and Transnational Violence," University of California Institute of Global Conflict and Cooperation, San Diego, CA, 7–8 March.

- Solé i Sabaté, Josep M. 2000. *La repressió franquista a Catalunya. 1938-1953* [The Francoist repression in Catalonia. 1938-1953]. Barcelona: Edicions 62.
- Solé i Sabaté, Josep M., and Joan Villarroya. 1986. *Catalunya sota les bombes* [Catalonia Under the Bombs]. Barcelona: Publicacions de l'Abadia de Montserrat.
- Solé i Sabaté, Josep M., and Joan Villarroya. 1989. *La Repressió a la Reraguarda de Catalunya (1936-1939)* [The Repression in the Rearguard of Catalonia (1936-1939)]. Barcelona: Publicacions de l'Abadia de Montserrat.
- Solé i Sabaté, Josep M., and Joan Villarroya. 2004. *España en llamas* [Spain on Fire]. Madrid: Temas de Hoy.
- Valentino, Benjamin. 2004. *Final Solutions. Mass Killing and Genocide in the 20th Century*. Ithaca, NY, and London: Cornell University Press.
- Valentino, Benjamin A., Paul Huth, and Dylan Balch-Lindsay. 2004. "Draining the Sea: Mass Killing, Genocide, and Guerrilla Warfare." *International Organization* 58:375-407.
- Weinstein, Jeremy M. 2006. *Inside Rebellion: The Political Economy of Rebel Organization*. New York: Cambridge University Press.
- Wood, Elisabeth J. 2003. *Insurgent Collective Action and Civil War in El Salvador*. New York: Cambridge University Press.