

C A G E

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CAGE working paper no. 511

September 2020

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Punishing or Rallying ‘Round the Flag?Á

Heterogeneous Effects of Terrorism in South TyrolÁ

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Abstract

This paper studies heterogeneous electoral responses following terrorist attacks. I examine a rich panel data set containing detailed information on the geography of terrorism in South Tyrol, a Northernmost and predominantly German-speaking region of Italy, for a period spanning along 35 years. Exploiting the diverse nature of 337 attacks, I find that the Italian-speaking minority reacted to an increase in exposure to terrorist attacks by punishing the government party at the ballot box and supporting an extreme right-wing party. However, when terror prompted casualties, I find that more exposure was conducive of rally-round-the-flag momenta. I interpret these results in light of recent findings in social psychology on heterogeneous emotional reactions induced by terrorist attacks. My results inform the literature as well as the public debate on the diverse implications of terrorism.

Keywords: Terrorism, voting, punishment effect, rally-effect, South Tyrol

JEL Classification: D72, D74

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1 Introduction

Well beyond disruption and losses of lives, terrorist attacks seem to leave a footprint on civilians' sentiments, emotions, and attitudes. A wealth of studies have documented how individuals exposed to terrorism typically exhibit a higher level of anger (e.g., [Canetti et al., 2009](#); [Gould and Klor, 2015](#); [Böhmelt, Bove and Nussio, 2019](#)), commit more hate crimes (e.g., [Hanes and Machin, 2014](#); [Ivandic, Kirchmaier, and Machin, 2019](#)), and are relatively more supportive of extreme-right platforms (e.g., [Berrebi and Klor, 2008](#); [Getmansky and Zeitzoff, 2014](#)). Additional works have underlined the tendency of voters to punish incumbency in the wake of terrorist attacks, either for lack of security or because judged as inadequate to stop future attacks (e.g., [Bali, 2007](#); [Gassebner, Jong-A-Pin and Mierau, 2008](#); [Kibris, 2011](#); [Montalvo, 2011, 2012](#); [Park and Bali, 2017](#)). These results, however, contrast with another strand of literature that document unusual increases in popularity and support of incumbent actors, unity among political forces, a general sentiment of strong in-group identity, and rally-round-the-flag momenta after critical terrorist attacks (e.g., [Baker and Oneal, 2001](#); [Gaines, 2002](#); [Collins, 2004](#); [Skitka, 2005](#); [Chowanietz, 2011](#)).

What does explain such different emotional and electoral patterns? Understanding this question is of the utmost importance. Hate, in fact, typically begets hate and retaliation. Political parties which pander to such sentiments spend considerably more in defense, at the expense of other economic enhancing public expenditure categories or of macroeconomic stability (e.g., [Gupta et al., 2004](#)). In sum, terrorism seems to impact considerably on economic growth and elections are a likely, crucial mechanism.

In this study I examine this question rigorously and in a systematic setting, by analyzing a series of 337 terrorist attacks which have occurred, from 1956 to 1991, in sparse areas of South Tyrol, a region of Italy as large as the state of Delaware. Relying on a large panel data set and rich micro information on the characteristics of each terrorist attack, my findings indicate that voters are prone to punish the government party and move rightward as long as terror hits the constituency but do not produce a real threat to the civilians' life. By contrast, looking at acquaintances, neighbors, friends, or relatives shot dead or seriously injured makes voters more likely to rally-round-the-flag.

The region of South Tyrol provides a suitable setting to study the electoral effects of terrorism. Predominantly German-speaking and previously part of the Habsburg Empire, South Tyrol was forcedly Italianized during the fascist rule (1922-1943). An Italian-

speaking minority settled sparsely across the region and took control over its crucial assets. Hopes to rejoin Austria were unfulfilled after World War II, giving rise to hostility and a violent backlash against the Italian group, which endured until 1991.

I examine the electoral reactions of the Italian-speaking community of South Tyrol in support or against the government party in subsequent elections after high frequent terrorist attacks. Within the period I scrutinize (1953-1992) same political actors contended, under the same electoral rules, seats in the Parliament in ten national elections. Among these actors, *Democrazia Cristiana* (Christian Democracy, DC) was the largest party in Parliament, governing throughout the entire period in successive coalitions. This setting entails an important advantage relative to [Berrebi and Klor \(2008\)](#) or [Getmansky and Zeitzoff \(2014\)](#): despite the large- T size of my panel data set, I can test for differential trends across 116 South Tyrolean municipalities in the vote shares secured by the *same* party, thus holding fixed the ideological position of the incumbent across elections.

Using a set of municipality fixed effects, election year fixed effects, and holding fixed the population and the share of Italians in the population, I estimate a reduction in the vote shares of the government party that is equivalent to a 3% drop in the average sample period, following a standard deviation increase, within a municipality, in the number of terrorist attacks occurred before the election. Importantly, the effect enlarges considerably when a high number of attacks hit a municipality in a given period. For example, I find that a shift in the number of terrorist attacks from null to more than 10 prompts a sizable backlash within the electorate that is equivalent in magnitude to half of the average obtained by the Christian Democrats during the period of scrutiny.

To obtain testable predictions that allow me to disentangle the punishment effect from the rally-effect, I exploit the diverse nature of such attacks. Attacks were typically conducted by deploying dynamite, or by engaging in firearms dispute against police force patrols, or by assaulting public places. Most of them were aimed at causing interruptions in critical services, such as lengthy power outages and interruptions in the railway line connecting the region to the rest of Italy and in other businesses. Others were intended for delegitimizing the presence of the Italian state in the region, such as the attacks against the police force and the military barracks, or for rooting the brand-new collective memory of the Italian group out in the region, such as the attacks against monuments and related symbols. I find that interruptions of services are a good predictor of the

punishment of the government. In line with the findings in [Chowanietz \(2011\)](#), I find that collective memories were rather conducive to a rally-effect (although the estimated effect is statistically imprecise).

The grain of the data employed also allows me to exploit heterogeneity in the type of victims killed or seriously injured in a terror act. Police officers were among the most frequent targets of terrorists. During several attacks, 15 police officers were killed and 24 were seriously injured. Interestingly, I find that injuries among police officers prompted a punishment effect on the incumbent party but killings acted a glue-like factor, capable of activating rally-round-the-flag momenta. Casualties among civilians always prompted an increase in support for the government, irrespective of whether killings or injuries were reported. Finally, I document an increase in the votes shares of the government party after a terrorist was found killed in a firearms dispute.

An important aspect of the analysis is whether the above effects can be interpreted as causal. To this aim I perform a number of additional analyses and robustness checks. I investigate whether results are driven by differential trends in education or in specific labor market segments and how important are likely to be unobservables. I also perform a placebo estimation, using the number of terrorist attacks that failed in producing any damages, and show that results are not driven by the specific functional form of the right hand-side variable or by strategic complementarity. Finally, I test whether geography, population or the presence of Italians are able to explain my results and whether a specific group of municipality exerts a particular influence. Overall, the conducted analysis documents the robustness of the results and makes likely that the estimated effects are causal.

In the last part of the paper, I explore where this shift in votes come from. In line with an established evidence on terror being effective to shift votes rightward (e.g., [Berrebi and Klor, 2008](#); [Gould and Klor, 2010](#); [Kibris, 2011](#); [Getmansky and Zeitzoff, 2014](#)), I find that voters who punished the incumbent party swung towards an extreme right-wing party. *Movimento Sociale Italiano* (Italian Social Movement, MSI), a post-fascist party, increased its vote share by 8%, relative to the average sample period, following a standard deviation increase, within a municipality, in the number of terrorist attacks. However, my findings indicate that the extreme-right party did not gain support after terrorist attacks that reported casualties. This may suggest that the channel through which the rally-

effect emerged was the political concordance within the entire political community (e.g., [Brody and Shapiro, 1989, 1991](#)). Finally, my results are consistent with the evidence on terrorism increasing the salience of political participation ([Robbins, Hunter and Murray, 2013](#); [Balcells and Torrats-Espinosa, 2018](#)). The estimated effect is however small, due to a very high average turnout rate in my data (about 94 percentage points) and a limited variation.

This paper connects with a large literature examining the electoral effects of terrorist attacks. While many of these studies take advantage of post-electoral surveys (e.g., [Bali, 2007](#); [Böhmelt, Bove and Nussio, 2019](#)), there are fewer works that examine electoral outcomes (e.g., [Gould and Klor, 2010](#); [Kibris, 2011](#); [Montalvo, 2011, 2012](#)). Relative to the latter, this paper uses an unusual long period of scrutiny (about forty years) and high frequent attacks over time to obtain consistent estimators. Also, unlike previous works that utilize panel data set, relying on grouped data at country level (e.g., [Gassebner, Jong-A-Pin and Mierau, 2008](#)), my results are estimated using a micro-level of analysis that makes results easier to interpret relative to a cross-country analysis.

While there is a number of studies that focus on the heterogeneous causes of terrorism (e.g., [Kis-Katos, Liebert and Schulze, 2014](#); [Brockhoff, Krieger and Meierrieks, 2016](#)), lesser is known on its multifaceted electoral effects. An important study is that of [Chowanietz \(2011\)](#) that utilizes information on 181 terrorist attacks in Western countries and evidence of rallies around the flag on the major media outlets. [Chowanietz \(2011\)](#)'s cross-sectional results show a strong correlation between the number of fatalities caused by an attack and the occurrence of a rally-round-the-flag. He also documents, in line with my results, that attacks against the symbols of the state are relatively more capable of generating a rally. Nonetheless, it is unclear whether such correlations can be interpreted as causal or is the result of unobservable factors.

Important theoretical advancements, to better interpret these results, come from social psychology studies that, relying on individual-level survey data, documented a systematic heterogeneous emotional reactions elicited during exposure to terror ([Lerner et al., 2003](#); [Giner-Sorolla and Maitner, 2013](#)). According to these studies, individuals appraise events, like terrorist attacks, in a very different way based on the nature of emotions that become salient during the backlash.¹ These emotions, in turn, persist beyond the eliciting situation

¹In an interesting study, [Romanov, Zussman, and Zussman \(2012\)](#) document that exposure to terrorism made Arab citizens of Israel more unhappy, while no effects is estimated for the Jewish population.

and become central in interpreting future situations and taking choices, such as voting (e.g., [Keltner, Ellsworth and Edwards, 1993](#); [Lerner and Keltner, 2001](#); [Tiedens and Linton, 2001](#)). Among these emotions, anger and fear are the most recurrent ([Lerner et al., 2003](#)). While fear seems to prompt risk-aversion, delay backlash, and promote unity, anger typically calls for action, counter-terrorist responses, and a change in policies.

This theoretical framework can be of help in interpreting our results. While the Italian government systematically sought for a diplomatic solution, a belligerent retaliation was on the agenda of an extremist, influential right-wing party in the region. This party gained considerably support in the most hit areas where angry voters punished the government for the inconveniences caused by the disruption and the failure of the counter-terrorist policy. However, when attacks caused killings and serious injuries among civilians, anxious voters responded by increasing the in-group cohesion around the ‘Italian flag’ and the government party.

The remainder of the paper is organized as follows. In [Section 2](#) I describe the most salient historical aspects, the evolution and nature of terrorist attacks, and the political background in the region. I also illustrate the data employed. [Section 3](#) lays out the empirical strategy and the main results. [Section 4](#) presents a number of robustness checks and additional analyses. In [Section 5](#) I show results for other political parties. [Section 6](#) concludes.

2 Background and data description

I test the link between voting and terrorist attacks by analyzing the South Tyrol case — a predominantly German-speaking region at the Northern bound of Italy — where 337 attacks have been conducted in around 35 years. In this section, I describe the nature and the implications of terrorism as well as the political parties acting in the region.

2.1 Terrorism in South Tyrol

As historians documented (e.g., [Alcock, 1970](#); [Steininger, 2003](#)), terrorism in South Tyrol has profound historical roots that date at least in 1919, when the region, previously part of the Hasburg-Hungarian Empire, was annexed to the Kingdom of Italy at the end of World War I. A massive program of Italianization, conducted by the fascist regime, and inflows of

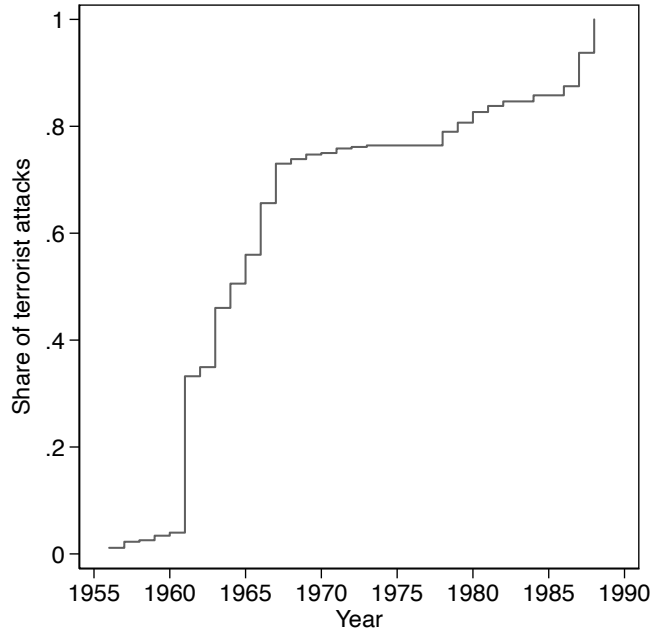
migrants from neighboring regions structurally changed the language group composition of the region, empowering the Italian-speaking minority.

The resentments of the German-speaking group grew progressively, especially after World War II, when expectations on rejoining Tyrol and Austria, were heavily disappointed. The state of Austria, blamed by the winners as liable of the catastrophic consequences that WWII entailed, was deprived of political autonomy and divided among the Ally forces, while South Tyroleans were just a small minority in the big state of Italy. Hence, their petitions remain unheard at international as well as domestic level. This status-quo changed rapidly when Austria regained political independence in 1955. This path-breaking event was likely, according to historians (see, for example, [Steininger, 2003](#)), to generate a substantial boost in the expectations helping small German-speaking groups to overcome the underneath collective action problem and organize themselves in armed groups.

The deployment of violence and the manifest political motives, two distinguishing features of terrorist acts ([Enders and Sandler, 2011](#); [Sandler, 2015](#)), marked the series of 337 attacks conducted in the region between 1956 and 1991. The major goal was, in fact, to destabilize the Italian state in the region as well as to threaten the Italian-speaking citizens that settled in South Tyrol. Typically, attacks were conducted by deploying a massive quantity of dynamite, or by engaging in firearms dispute against police force patrols, or assaulting public places.

Information on the terrorist attacks have been digitized from the historical archive of the Italian Senate (*“Atti terrorismo e stragi prodotti dalla Commissione per il filone Alto Adige durante la X legislatura”*). The archive contains detailed information on the place and time of the terrorist attacks in the region and whether the attacks produced injuries and killings as well. In Figure 1, I illustrate the cumulative distribution of the attacks across the years. The first attack was committed on the day of September 20, 1956, nearby Bolzano (the biggest center of the region). The explosion destroyed the overhead wires conveying electric power to the most important railway route, the Brenner route, that connected the region to the rest of Italy. Many other attacks followed, reaching a dramatic spike during the *night of fires* (11th June, 1961) when 37 raids damaged severely several electric pylons and set in darkness a large slice of the region, including Bolzano. After that the growth in the number of attacks grew steadily until 1969 when a season

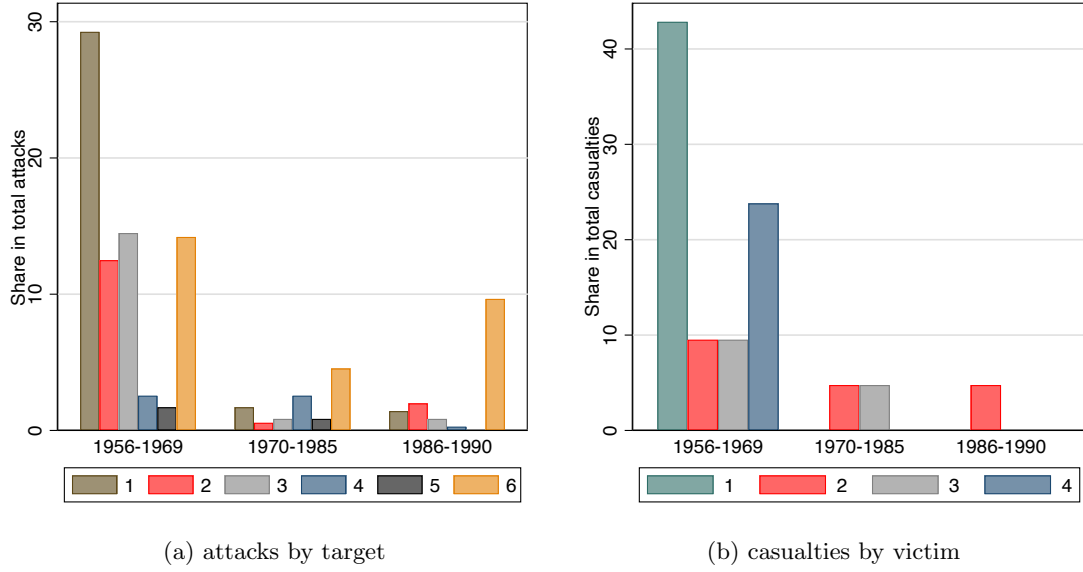
Figure 1: Cumulative distribution of terrorist attacks across 1956-1991



of relative peace held for about 10 years. Attacks resumed at the end of the seventies and were marked by particular violence after 1986 when a new armed group *Ein Tirol* put in action a number of attacks against the Italian population in the region. The last attacks were committed in 1991 and ceased after the Italian government decided to meet the requests of the German-speaking minority.

Most of the attacks were conducted during the first phase (1956-1969), about 74% of the total, by an armed group called *Befreiungsausschuss Südtirol* (BAS). As illustrated in Figure 2a, that reports graphically the distribution of attacks by target-and-terrorist phase, most of them, during this first phase, targeted the overhead power line that supplied electric power to the region and to part of the North of Italy (the olive bars). The second most frequent target was private properties and civilians (the orange bars) — a strategy that frequently recurred also in the two other phases. The red bars draw the shares of attacks against the Brenner railway, while the grey ones indicate the shares of assaults against police officers and attacks aimed at damaging police stations/military barracks. As one can see, these two types were frequent during the first phase but scarcely utilized during the last one. Finally, the least recurrent targets were the monuments and other symbols of the Italian group’s collective memory (in blue) and the popular houses (in black), one of the most important strategy the government used to expand the Italian

Figure 2: Distribution of terrorist attacks and casualties by target and terrorist phase



Notes: The figure illustrates the distribution of terrorist attacks by target and terrorist phase. Terrorist phases are: 1) 1958-1969; 2) 1970-1985; 3) 1986-1990. In Panel (a) the number of terrorist attacks are categorized by material target as follows: 1 = electric lines; 2 = railway; 3 = police forces; 4 = monuments and symbols of the Italian group's collective memory; 5 = popular houses; 6) private targets. In Panel (b) the number of casualties are categorized by victims as follows: 1 = injured among police officers; 2 = injured among civilians; 3 = deaths among terrorists; 4 = deaths among police officers.

presence in the region.

In Figure 2b I rather look at the distribution of casualties by victim-and-terrorist phase. I distinguish between wounded police officers (in green), wounded civilians (in red), killed terrorists (in grey), and killed police officers (in blue). It is immediate to see that, with about 85% of the total casualties in the region, the first phase stands out as the most violent. 15 police officers were killed and 24 were seriously injured. Attacks against civilians were less frequent but more stable across the three phases. In sum, the inspection of Figures 2a and 2b reveals that the first years were the most cruel and violent, but that the threat against civilians kept high until the outset of the nineties.

In the regression analysis, I aggregate data at municipality-by-election year level. To do so I assign an attack to a municipality if the offensive has occurred within the boundaries of the municipality in the five year period before the election.² In Table 1 I report the main statistics for this unit of analysis. The average number of terrorist attacks at municipality-by-election year level is 0.295 and the standard deviation is 1.342. The table also reports

²To get a sense of the spatial distribution of the attacks, Figure A1 in the Appendix maps the exposure to at least one terrorist attack across municipalities for each five-year period.

the statistics for the number of attacks by material target and for the casualties at the same level of analysis. As one can read, the average municipality-by-election year number of injuries is 0.025 and of killings is 0.011.

2.2 Political parties and voting

The Italian political system that came up in the aftermath of WWII, and two years of harsh and bloody civil war (e.g., Costalli and Ruggeri, 2015; Fontana, Nannicini and Tabellini, 2018), was highly polarized and dominated by two main forces: the Christian Democrats (DC) and the Communists (PCI). Together they accounted for about 60-70% at the national level and, under a proportional rule, were both substantially represented in the Parliament. Despite they competed vigorously, DC always outweighed PCI and, for about 45 years, the Christian Democrats' party was the party at the government.

These two institutional forces were challenged, in some parts of Italy, such as in South Tyrol, by a post-fascist party, the *Movimento Sociale Italiano*, MSI. This party, founded by former hierarchies of the Italian fascist regime, shared with it strong common values, and was particularly concerned in South Tyrol by the increasing empowerment of the German-speaking population at the expense of the Italian community. The wording and messages of the MSI were direct and blunt (unlike the ones used by the two institutional forces) and were headed to increasing tensions with the other ethnic group.³

The last four rows in Table 1 report the summary statistics of the vote shares secured by these three forces, over 10 consecutive national elections (from 1953 to 1992), as well as statistics on the turnout rate.⁴ As one can see, DC secured, on average, 7.843% of the total votes in the region, followed by the Communists (PCI) and the post-fascist party (MSI), respectively 1.839% and 1.416%. The distribution of votes exhibits a substantial variation around the mean for both these forces (standard deviations are 9.890, 2.265, and 2.273, respectively). Finally, the turnout rate was quite high in the region accounting for a 94.54% average. In light of the high mean, variability across municipalities was limited

³Very few German-speaking voters supported DC, PCI, and none MSI. Because of its tormented history, the German community developed a strong identity and massively voted for an ethnic catch-all party, the South Tyrolean People's Party (*Südtiroler Volkspartei*, SVP), founded in 1945 when it was decided to gather together all the pre-existent German-speaking parties in the region. While these forces were very diverse, the SVP primarily aims at defending the interest of the German community in the Italian state.

⁴Data are gathered from the online archive of the Ministry of Internal Affairs (<https://elezionistorico.interno.gov.it/>). Election years are: 1953, 1958, 1963, 1968, 1972, 1976, 1979, 1983, 1987, 1992.

(standard deviation equals to 2.85%).

2.3 Demography, language composition and population characteristics

The basic covariates included in the regression analysis are the population and the shares of Italians in the population. As one can see from Table A1, which reports the summary statistics for the main covariates employed, the majority of the villages are small and the average number of inhabitants in the region is about 2,500. The 11% of this population belongs to the Italian group, on average, while the standard deviation is 17.37.

As a robustness check I also use the level of education in the Italian population (i.e., the number of Italian-speaking population with a bachelor degree, with a secondary school diploma, and cannot read and write), information on the distribution of the Italian workers across occupations (agriculture, industry, constructions, utilities, trade, transports, credit and banking, private services, and public administration) and across the hierarchical line (entrepreneurs, managers, and lower level employees). The summary statistics are also reported in Table A1, while their impact on the regression analysis is discussed in Section 4.

3 Government party and terrorist attacks

3.1 Empirical strategy

Figure 3 illustrates a set of scatterplots by election year (1953, 1958, 1963, 1968, 1972, 1976, 1979, 1983, 1987, 1992). Each scatterplot distributes municipalities (as black dots) relative to the vote shares secured by the government party in a given election year (y-axis) and the number of terrorist attacks occurred in the five-year period before that election (x-axis). For illustrative purpose, the figure highlights the evolution of three municipalities across election years: Bolzano/Bozen in green, Merano/Meran in yellow, and Campo Tures/Sand in Taufers in red. As one can see, Bolzano features four major shifts in the vote shares that are easy to single out graphically. During the elections held in 1963 the Christian Democrats lost about 5 percentage points, after the city was the theater of 22 terrorist attacks. The party partially recovered in the 1972 elections, after a period of relatively peace, but lost more than 10 points before the elections held in 1979 and 1987, when attacks resumed vigorously. Similarly, in Merano the government party

lost about 5 percentage points in 1968, after 8 attacks, and 5 more in 1987 after 7 attacks were reported. Finally, terrorists hit Campo Tures 17 times during the period 1958-1968 (11 before the 1963 elections and 6 before the 1968 elections). In 1968 the government party obtained a share of 1.97 — 58% votes less relative to 1958.

The relationship between votes and terrorist attacks can be studied more rigorously using the following regression analysis:

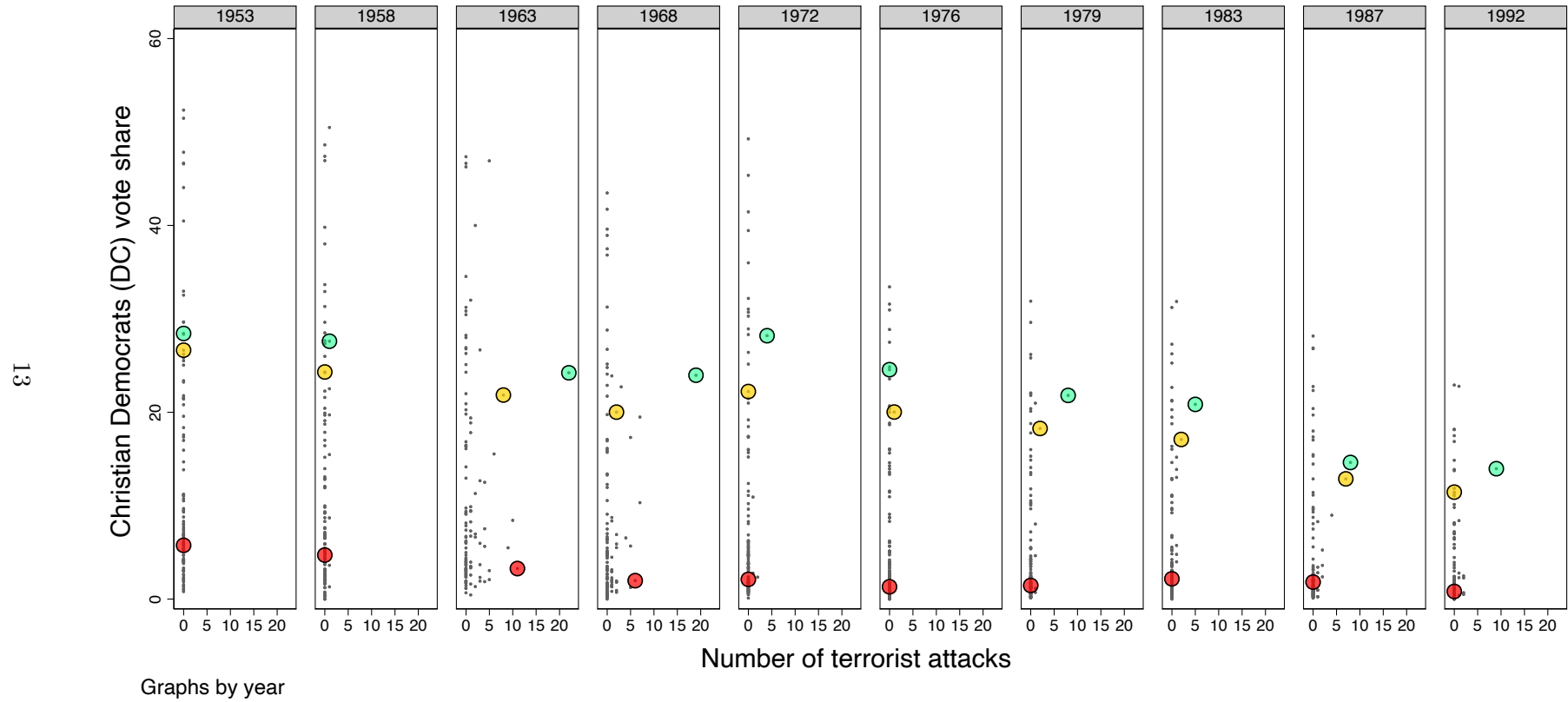
$$y_{it} = \lambda_i + \mu_t + \beta_1 \text{Attacks}_{it} + X_{it}\gamma + \varepsilon_{it}, \quad (1)$$

where i indexes municipalities and t election years and ε_{it} is the error term that I cluster at municipal level to take into account of potential intra-class correlation. The variables of interest are y_{it} , the government party vote shares, featuring on the left hand side, and Attacks_{it} , the number of attacks occurred in a municipality i in the 5-year period before the election year t — the main explanatory variable.

The identification of β_1 may be hindered by a number of empirical difficulties. First and most obvious, exposure to terrorism is unlikely to be as good as random. Terrorists typically seek for media visibility (e.g., [Jain and Mukand, 2004](#); [Jetter, 2017](#)) and aim at spreading terror and fear among the targeted population. As a result, bigger centers could be more likely to be a target of terrorism and so are areas with more out-group members. To absorb any of these fixed unobservables, that can explain differences in the exposure to terrorism across municipalities, the regression includes a set of municipality fixed effects, λ_i .

The inclusion of municipality fixed effects allows me to test for differential trends in voting, within a given municipality. However, electoral preferences may change in a given election year for a number of reasons unrelated to terrorism. In the baseline regression electoral shocks, common to the region, are absorbed by including a set of election year fixed effects, μ_t . In alternative models, I include terrorist phase fixed effects, Γ_T , in place of election year fixed effects, to capture peculiar features of each terrorist phase, T .

Figure 3: Government party vote shares and terrorist attacks across election years



Notes: The figure scatters the government party (Christian Democrats) vote share, in the y-axis, and the number of terrorist attacks, in the x-axis, by election year. Each circle is a municipality-election year pair. The green circles highlight the location of the city of Bolzano in the graph, the yellow ones Merano, and the red ones Campo Tures.

These factors cannot however rule out concerns on potential confounding effects on electoral behavior caused by a change in other relevant aspects, i.e. other than the exposure to terrorist attacks. To curb these concerns, in the regression analysis I include a vector, X_{it} , of time-varying characteristics. In the baseline specification, I control for changes in the population and the share of Italians, two basic aspects that are likely to affect both the occurrence of terrorist attacks and the electoral behavior.

The coefficient of interest is β_1 that has to be interpreted as the effect of the exposure to an additional terrorist attack on the government party vote shares, within a municipality i , holding fixed the population and the share of Italians in the population. My first hypothesis is that $\beta_1 < 0$, i.e. that exposure to terrorist attacks is conducive of a punishment effect.

My second hypothesis posits a rally-effect in areas where terrorist attacks caused casualties. To capture this additional effect, I add another term in the regression, which measures the number of casualties (injured and deaths) caused by a terroristic attack occurred in the municipality i , in the 5-year period before the election t , and estimate β_2 in the following empirical model:

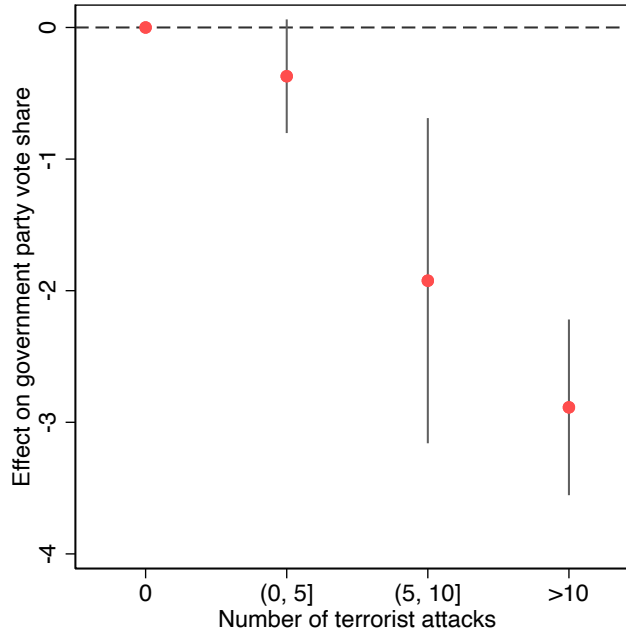
$$y_{it} = \lambda_i + \mu_t + \beta_1 \text{Attacks}_{it} + \beta_2 \text{Casualties}_{it} + X_{it}\gamma + \varepsilon_{it}. \quad (2)$$

It is worth remarking that in regression 2 differential trends in the support for the government party, induced by casualties, are estimated by holding fixed the total number of attacks which have occurred during the same period of scrutiny. This is important to compare areas with same exposure to violence. When estimating the model 2 I hypothesize that $\beta_2 > 0$.

3.2 Results

Table 2 reports estimations of β_1 using on the left hand side the vote share of the Christian Democrats (DC), the party that led the Italian political system in the period under scrutiny. Namely, I test whether an increase in the exposure to terrorism, immediately before the elections, induced Italian-speaking voters to reduce the support to the government party. Column 1 tests this hypothesis by solely including municipality as well as election year fixed effects. The estimated effect is, as expected, negative and statistically significant at 1% level and robust to the inclusion of basic controls such as the total pop-

Figure 4: Number of terrorist attacks and government party vote share



Notes: The figure illustrates the non-linear effect of terrorist attacks on the government party vote share by replicating column 2 of Table 2 using a discretized scale for the number of attacks. Each red dot is the point estimation of the differential effect relative to the baseline category (no attacks in the 5-year period prior to the elections). Vertical bars draw 90 percent level confidence intervals.

ulation and the share of Italians in the population (column 2). In column 3 of Table 2 I use terrorist phase fixed effects in place of election year fixed effects as a robustness check. Indeed, as explained above, tactics and terrorist groups were the same within each of these phases but different across. When these heterogeneous aspects are absorbed, the effect slightly reduces yet leaving results qualitatively unchanged (column 3).

To assess the magnitude of the effect estimated in the baseline specification (i.e., column 2), recall that a standard deviation in the number of attacks is 1.342. Hence, the effect estimated in column 2 is $-0.185 \times 1.342 = -0.25$ standard deviations — i.e., about 3% of the sample period average obtained by the Christian Democrats (which is 7.843). This may legitimately look like a small effect — a shift of 3% is indeed as hardly as a one that can open to a change in the government lead. However, it is worth noting that such number hides a non-linear impact of terrorist attacks on voting. In only 3 observations (in 127 municipality/election year ones), in fact, more than 10 attacks are counted; 11 observations count between 6 and 10 attacks, while 113 report between 1 and 5 attacks (in 68 only 1). To test for non-linear effects (i.e., whether the effect is larger in observa-

tions heavily exposed to terror as compared to those barely exposed to that), I re-estimate column 2 of Table 2 using four dummies for each group of observations: those with no attacks (baseline category), those between 1 and 5 attacks, between 6 and 10, and with more than 10 attacks. Results are presented graphically in Figure 4, where point estimations are drawn as red dots and confidence intervals as vertical bands. As expected, a higher exposure to terror led to an even higher reduction in the support of the government party. To assess the magnitude, the effect within each group of observations has to be compared relative to the baseline category. So, for example, a shift in the number of terrorist attacks from null to more than 10 prompts a sizable backlash within the electorate — i.e., a shift equals to about 4 standard deviations in the number of terrorist attacks or more than half the sample period average obtained by the Christian Democrats.

In Table 3 I move on by testing whether injuries and deaths, as caused by terrorist attacks, prompted a rally-effect within the population. Column 2 includes the number of people injured as well as those killed in a terrorist attacks, controlling for the total number of attacks occurred in the period, the number of inhabitants, and the share of Italians in the population. Column 1 replicates the baseline specification (i.e., column 2 of Table 2) for easiness of comparison. As one can see, while exposure to terror leads voters to blame the government for the lack of security, I find that an increase in deaths, as produced by terrorist attacks, within a municipality, can act as a glue-like factor and contribute to unify the entire community (Baker and Oneal, 2001; Skitka, 2005). Contrarily, the effect is small and not statistically significant with respect to injuries and wounded victims. It is thus likely that injuries were not sufficient to generate an in-group identity shift around the government.

In column 3 of Table 3 I further disentangle injuries and killings and injuries by victim (police officers, civilians, terrorists). Interestingly, when police officers got injured in a terrorist attack voters seem to react by blaming the government for that (the coefficient is -0.267 and it is statistically different from zero at 1% level); however, when civilians themselves remain victims of an attack voters seem to unify around the government (the coefficient is 1.214 and it is statistically significant). Killings prompted an increase in support for the government party irrespective to whoever is the target. The estimated coefficient is 1.145 for the number of police officers killed and 0.892 for the number of

fallen terrorists.⁵ However, while the killing of a police officer is likely to act as a glue-like event, the killing of a terrorist can be seen as a successful counter-terrorist action.

In column 4 of Table 3 I rather categorize terrorist attacks by material target. The regression includes the number of (i) attacks that were aimed to destroy electric pylons and to damage the overhead power line, (ii) attacks to damage the railway line which connects the region with the rest of the country, (iii) attacks against police stations and patrols, (iv) attacks against monuments and symbols of the Italian collective memory, (v) attacks aimed at ruining and destroying popular housing buildings, and (vi) attacks against private targets (such as houses and vehicles) and services generally attended by civilians (such as banks, churches, and alike). Results reveal that the government party lost votes after attacks that were likely to put in danger the life of civilians, such as the attacks against privates (the coefficient is -0.289 and it is statistically different from zero at 1% level) and that generated substantial disruption to the population, causing long power outages in big areas, like the attacks toward the overhead power line (the coefficient is -0.244 and it is statistically significant). The effect is also negative, yet not statistically significant, when the attacks hit police stations or patrols and popular houses, one of the symbols of the Italian settlement strategy in the region. The effect is rather positive (while it is not significantly different from zero) after attacks conducted against symbols of the Italian collective memory. Finally, I find no effect when attacks damaged the Brenner railway line, causing delays or interruption of the service to reach the rest of Italy.

To summarize, the results shown above indicate that terrorism is likely to impact on voters' behavior in a heterogeneous fashion, depending on the target and consequences of the attacks. Exposure to terrorist attacks seems to induce voters to punish the government for the lack of law and order; this punishment effect seems to enlarge when attacks harm police officers, as voters may turn angry against a failed state in controlling the territory, or when attacks cause disruption to the population, as in the case for interruption of services (electric power, banks, churches, etc) or damage of private properties. However, as soon as attacks turn serious, causing loss of lives and injuries in the population, voters seem to unify around the 'Italian flag', symbolized by the government party in the region, likely as a result of a mounting fear.

⁵Casualties among civilians only occurred within the period 1958-1963. Hence, the associated coefficient is absorbed by election year fixed effects.

4 Robustness checks

In this section, I explore a number of shortcomings of the above analysis. I investigate whether results are driven by differential trends in education or in specific labor market segments and how important are likely to be unobservables. I assess a number of sources of endogenous selection into treatment and perform a placebo estimation. Finally, I test whether geography, population or the presence of Italians are able to drive my results. Related tables are presented in the Appendix A. Overall, the conducted analysis documents the robustness of the analysis and helps supporting the interpretation that the above estimated effects are likely to be causal.

4.1 Trends in education and labor market segments

A first major issue concerning the estimates presented in Section 3.2 is the omitted variable bias. The bias is likely to stem from a change in a time-variant factor that simultaneously explains a shift in voting (recall, in fact, that the inclusion of municipality fixed effects absorb the leverage of time-invariant unobservables). Among the most important sources of omitted variable bias, in Table A2, I investigate the effect of education and the labor market. Controlling for trends in education is particular important as it is theoretically difficult to get a sense of the direction of the bias. For one thing, [Milligan, Moretti and Oreopoulos \(2004\)](#) have documented a casual positive link between schooling and political participation in the US, which can partially explain the shifts in votes estimated in Section 3.2. For another, [Belmonte \(2019\)](#) provides evidence that terrorist attacks caused a selection effect within the workforce in South Tyrol, inducing the highest educated to leave the region for near, unaffected areas in the North of Italy. When the number of Italians (*i*) with a bachelor degree, (*ii*) with a high-school diploma, and (*iii*) unable to read and write are controlled for the estimated effects remain substantially unaltered (columns 2 and 7).

In columns 3 and 8 of Table A2, I rather control for the number of Italian-speaking employees in the following occupations: agriculture, industry, constructions, utilities, trade, transports, credit, banking & finance services, other private services, and the public sector. The region, in fact, was predominantly based on agriculture until the fifties but quickly turned, during the 40-year period of scrutiny, in an industrial and tourism-oriented economy. These differential trends are likely to affect both the electoral behavior and the ex-

posure to terrorism. When these factors are included in the regression analysis (columns 3 and 8), the estimated coefficients turn slightly larger but overall qualitatively unchanged.

Finally, in columns 4 and 9 of Table A2, I include the number of Italian-speaking workers that declared themselves as entrepreneurs, managers, and lower level employees in the censuses. The first two categories of workers was those more likely to leave the region after a terrorist attack, relative to the low-level employees (Belmonte, 2019). While this differential trend in out-migration, within the Italian population, can in principle explain voting patterns, I find no particular leverage and estimations are substantially unchanged, relative to the baseline.

In columns 5 and 10 of Table A2, a full-fledge regression is estimated by including all the factors discussed above. Even in this rich set-up, the estimated effect of an additional attack remains negative and that of an additional casualty positive. Both the estimated effects hold statical precision and are statistically different from zero.

4.2 How important are likely to be unobservables?

Overall the coefficients of interest show quite stable when different sets of controls are added to. Coefficient stability is one of the way traditionally applied economists assess the impact of unobservables factors, relative to the observables. Specifically, I compute the Altonji, Elder and Taber (2005) ratio which compares the coefficient estimated in column 1 of Table A2, without additional controls but the basic ones, and the coefficient estimated in the full specification (i.e., in column 5). Denoting $\hat{\beta}_1$ the former and $\tilde{\beta}_1$ the latter, the ratio can be written as $\tilde{\beta}_1/(\hat{\beta}_1 - \tilde{\beta}_1)$. When the distance between $\hat{\beta}_1$ and $\tilde{\beta}_1$ is small, relative to $\tilde{\beta}_1$, the ratio is large indicating that the influence of unobservables should be very high in order to account for the effect of terrorist attacks on the government party support.⁶ In our case the Altonji, Elder and Taber (2005) ratio is 7.93, in absolute terms, indicating that selection on unobservables would have to be eight times larger than selection on observables in order to overthrow the above results.

⁶It is important however to remark that behind the Altonji, Elder and Taber (2005) ratio there is the assumption that the variances of the observable covariates are equal to those of the unobservables — an assumption which is difficult to test.

4.3 Extensive margin, strategic interaction, and placebo effect

In column 1 of Table A3 I test whether results are sensitive to the specific form of the explanatory variable. Specifically, I re-estimate column 2 of Table 2 using a dummy variable for the occurrence of at least a terrorist attack in place of the number of attacks. As one can see, the estimated coefficient is -0.468 which is, as expected from the analysis shown in Figure 4, sensibly smaller than the one estimated in the baseline specification (the standard deviation of the dummy is 0.31). Yet, it is reassuring to obtain an effect that is still negative and statistically significant.

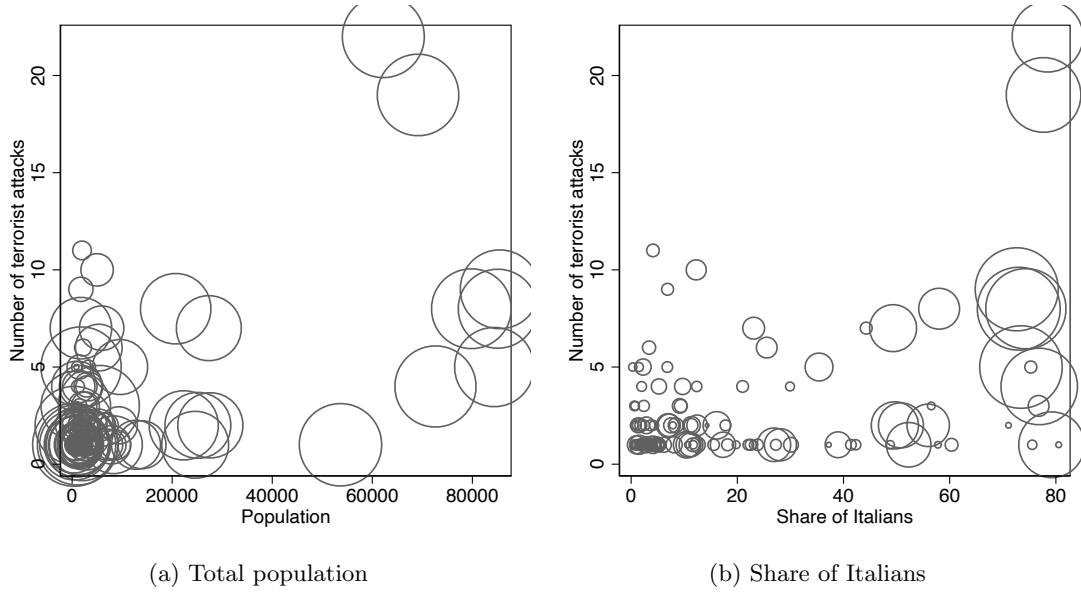
In column 2 I deal with a potential endogenous selection into treatment that may stem from strategic interaction: violence may cause anger within the targeted population that can in turn increase violence in future periods. To curb this concern I restrict the sample to municipalities that have been hit by terrorists at most once during the whole period of scrutiny. This yields a sample of 86 municipalities for a total 843 municipality \times election year observations. As shown in column 2 of Table A3, the effect in this restricted sample is still negative and statistically significant indicating that endogenous selection into treatment is unlikely to explain the above result.

Finally, in column 3 of Table A3 I run a placebo analysis where the occurrence of failed attacks are utilized as the explanatory variable. A failed attack is indeed unlikely to provoke disruption and any threat. Consistently with that I obtain an effect which is nearly zero and not statistically significant.

4.4 Geographical concerns

In Table A4 I address some potential geographical issues. A first and important concern is the pattern of the residuals ε_{it} , across time and space. So far, I have corrected standard errors for dependence across observations by clustering standard errors at municipal level. While this strategy is effective in correcting for intra-class correlation, it overlooks spatial dependence which is likely to arise between nearby municipalities. To this purpose in columns 1 and 2 I alternatively present standard errors within squared brackets using Conley (1999) correction for spatial correlation and the procedure illustrated by Colella et al. (2019) and setting residuals dependence within a circle with radius of length of 200

Figure 5: Number of terrorist attacks and demographic factors



Notes: Each circle is a municipality-election year pair. In panel (a) circles are weighted by the number of Italians in total population. In panel (b) circles are weighted by the total population.

kilometers.⁷ While standard errors slightly increase, results do not change. It is worth noting that they are not sensitive to the particular choice of this distance cutoff and changing it does not affect inference.

A second potential source of geographical bias may arise if the effect is peculiar to a specific area only. As shown in Figure A1, in the Appendix, this seems not to be the case and, as remarked in Section 2, attacks were sparse and diffuse across the region. A more rigorous way to address this concern is to include in the regression a set of election year \times latitude fixed effects and of election year \times longitude fixed effects, which absorb any shocks occurring in a specific 5-year period in a specific geographical area. Even in such specifications (columns 3 and 4 of Table A4), results remain substantially unchanged.

4.5 Demographic aspects

A critical concern is whether there are any influential observations that able to drive the effect of terrorist attacks on voting. For the reasons discussed in Section 3.1, the most populous municipalities and those hosting a larger Italian community are likely to be the most influential. Figure 5 shows that the correlation between the population and the

⁷It is worth remarking that the average distance between two municipalities in the region is 76 kilometers. Hence, this rule allows a residuals pattern that spreads along three municipalities on average.

number of attacks occurred (panel *a*) and between the share of Italians and the number of attacks occurred (panel *b*) is beyond a theoretical assertion and indeed the municipality of Bolzano is alone the target of one fifth of the total attacks. It is therefore important to investigate whether the estimated effect is entirely driven by Bolzano or other influential municipalities.

In Table A5 I take this concern seriously by re-estimating the two baseline regressions (columns 1 and 2 of Table 3) under different samples and estimators. Specifically, in columns 1 and 2 I re-estimate β_1 and β_2 using weighted least squares (WLS) where the weights are proportional to the population of the municipality. While the effect of an additional attack remain basically unchanged, the effects of an additional killing increase slightly. The rest of Table A5 excludes one-by-one each quartile of the distribution of municipalities in terms of population. In columns 3 and 4, I exclude the smallest municipalities, i.e. the first quartile of the distribution. In columns 5 and 6, the second quartile is removed from the sample. Columns 7 and 8 excludes the third quartile, while in columns 9 and 10 I exclude the most populated municipalities (such as Bolzano and Merano), i.e. the fourth quartile. Estimated coefficients are quite stable across specifications, with β_1 negative and β_2 positive and statistically significant, even when Bolzano and Merano are removed.

In Table A6 I conduct a similar exercise testing whether results are driven by a specific group of municipalities with a substantial presence of Italians. To this purpose, columns 1 and 2 of Table A6 re-estimates β_1 and β_2 using weighted least squares (WLS) where the weights this time are proportional to the share of Italians in the population. The rest of the columns remove one-by-one each quartile of the distribution of municipalities according to the share of Italian-speaking population. The estimated coefficients are overall stable, although the coefficient associated with the number of killings lose statistical significance while remaining positive.

5 Evidence from other political parties and voter turnout

The analysis conducted above indicates that the government party, the Christian Democrats, lost voter support after terrorist attacks — support that was partially recovered when attacks were particularly violent so as to cause casualties. An important aspect is which party gained from terrorism or whether violence prompted a high turnout. According to

recent studies, terrorism is an important leverage of extreme right voting (e.g., [Berrebi and Klor, 2008](#); [Getmansky and Zeitzoff, 2014](#)) but also a determinant of political participation ([Robbins, Hunter and Murray, 2013](#); [Balcells and Torrats-Espinosa, 2018](#)). In this section, I examine the evolution of the vote shares of an extreme right political party, the *Movimento Sociale Italiano* (MSI), the Communist party (PCI, the second largest force in the post-WWII-Italian political arena), and the voter turnout, and test how this evolution is associated with the exposure to terrorism.

In Table 4, I find that voters that punished the government party shifted their ballots to the extreme-right party. Both columns 1 and 2 (which includes the basic controls) show a positive, and statistically significant, estimation of β_1 when the share of votes secured by the MSI is employed in the left hand-side of Equation 1. The effect is also sizable. Consider column 2. The point estimation is 0.064. This means that the effect is 0.086 standard deviations in the number of terrorist attacks (i.e., 0.064×1.342), explaining a shift of 7% in the sample period average vote share achieved by the MSI between 1953 and 1992.

However, the extreme-right party did not gain support after reported killings in the attacks. The estimation of β_2 in columns 3 is not statistically significant and close to zero, relative to the size of the standard errors. This may suggest that the channel through which the rally-effect emerged was the political concordance within the entire political community ([Brody and Shapiro, 1989, 1991](#)). The MSI was by far the most important competitor in the region, strongly campaigning against the German group and blaming the government for the lack of attention towards the Italian minority in the region. However, it is likely that, after bloody attacks, members of this party set aside the disagreement with the government’s policies in the attempt to find a solution to the South Tyrolean question.

Finally, in the Online Appendix, I present evidence on the effect of terrorist attacks on the vote share of the Communist party (PCI), the second largest force in the post-WWII-Italian political arena, and on turnout. The first set of results are displayed in Table A7. They bring weak evidence on a punishment effect in the wake of terrorist attacks. β_1 is, in fact, negative although not statistically significant irrespective of whether controls are included in the regression (column 2). This ‘light’ punishment effect is not surprising in view of the particular political structure that characterized the political system and

that I described in Section 2. PCI and DC represented the institutional ground of the Italian political system. Voters did not limit punishing the government party (as shown in Table 2); they punished all the forces that in the Parliament could do something to stop terrorism but that failed to do it.

The second set of results are presented in Table A8. Specifically, I test whether exposure to terror can make political participation more salient in light of an increasing threat to their lives (Robbins, Hunter and Murray, 2013; Balcells and Torrats-Espinosa, 2018). I do find evidence on this channel, although the magnitude of the effect is small due to a high baseline level of voter turnout throughout the period of study (period average equals to 94%) and a limited variability across municipalities (standard deviation equals to 3.8%).

6 Conclusions

This paper examines the heterogeneous electoral effects of terrorist attacks by exploiting a unique historical setting capable of generating information on different types of terrorist attacks. Analyzing a time-window of 40 years, my findings indicate that voters punish the government party and move rightward when terror causes disruption or signal insecurity, but turn united around the government when terror generates killings and threatens seriously the life of civilians.

My analysis is able to inform and reconcile two different strands of literature that have been examining the electoral effects of terror adopting a different perspective. While many studies have documented an increase in popularity of the incumbent party following terrorist attack (e.g., Baker and Oneal, 2001; Gaines, 2002; Collins, 2004; Skitka, 2005; Chowanietz, 2011), a recent strand have found that voters are likely to punish it and increase their support towards right-wing ideological platforms (e.g., Bali, 2007; Gassebner, Jong-A-Pin and Mierau, 2008; Kibris, 2011; Montalvo, 2011, 2012; Park and Bali, 2017). My findings indicate that terrorist attacks may generate complex electoral consequences. These violent events, in fact, cause an electoral reaction which not necessarily undermines the electoral basis of the government party or makes right-wing, extremist parties stronger. Somewhat paradoxically, when terror reaches a high level of violence, that causes a human lives loss, the incumbent force may gain further support. This result is in tune with abundant evidence on the electoral effect of the attacks on 9/11. However, evidence on this channel outside the United States is rather scant.

I interpret this heterogeneous electoral backlash in light of recent findings in social psychology. Emotions are key to understand how people vote (e.g., [Marcus and MacKuen, 1993](#); [Brader, 2005](#)) and shocks as violent as terrorist attacks are eligible to elicit substantial emotional reactions. Electoral consequences may therefore be substantially different when voters feel a sentiment of fear or a sentiment of anger ([Lerner et al., 2003](#); [Giner-Sorolla and Maitner, 2013](#); [Huddy et al., 2005](#)). An important implication of my study is that future research should ideally move forward from reduced form analyses and incorporate more structure, in the attempt to map emotions to votes and terror to emotions.

References

- Alcock, A. E. (1970). The history of the South Tyrol question. London: Michael Joseph Ltd. for the Graduate Institute of International Studies, Geneva.
- Altonji, J. G., Elder, T. E., & Taber, C. R. (2005). Selection on observed and unobserved variables: Assessing the effectiveness of Catholic schools. *Journal of political economy*, 113(1), 151-184.
- Baker, W. D., & Oneal, J. R. (2001). Patriotism or opinion leadership? The nature and origins of the “rally-round the flag” effect. *Journal of Conflict Resolution*, 45(5), 661-687.
- Balcells, L., & Torrats-Espinosà, G. (2018). Using a natural experiment to estimate the electoral consequences of terrorist attacks. *Proceedings of the National Academy of Sciences*, 115(42), 10624-10629.
- Bali, V. A. (2007). Terror and elections: Lessons from Spain. *Electoral Studies*, 26(3), 669-687.
- Belmonte, A. (2019). Selection after terror: Evidence from 30 years of terrorism in South Tyrol. *Economics letters*, 179, 62-65.
- Berrebi, C., & Klor, E. F. (2008). Are voters sensitive to terrorism? Direct evidence from the Israeli electorate. *American Political Science Review*, 102(3), 279-301.
- Böhmelt, T., Bove, V., & Nussio, E. (2019). Can Terrorism Abroad Influence Migration Attitudes at Home?. *American Journal of Political Science*.
- Brader, T. (2005). Striking a responsive chord: How political ads motivate and persuade voters by appealing to emotions. *American Journal of Political Science*, 49(2), 388-405.

- Brockhoff, S., Krieger, T., & Meierrieks, D. (2016). Heterogeneous terrorism: determinants of left-wing and nationalist-separatist terrorism in Western Europe. *Peace Economics, Peace Science and Public Policy*, 22(4), 393-401.
- Brody, R. A., & Shapiro, C. R. (1989). Policy failure and public support: The Iran-Contra affair and public assessment of President Reagan. *Political Behavior*, 11(4), 353-369.
- Brody, R. A., & Shapiro, C. R. (1991). The rally phenomenon in public opinion. Assessing the President: The media, elite opinion, and public support, 45-77.
- Canetti, D., Halperin, E., Sharvit, K., & Hobfoll, S. E. (2009). A new stress-based model of political extremism: Personal exposure to terrorism, psychological distress, and exclusionist political attitudes. *Journal of Conflict Resolution*, 53(3), 363-389.
- Chowanietz, C. (2011). Rallying around the flag or railing against the government? Political parties? reactions to terrorist acts. *Party Politics*, 17(5), 673-698.
- Colella, F., Lalive, R., Sakalli, S. O., & Thoenig, M. (2019). Inference with arbitrary clustering. IZA Working Paper 12584.
- Collins, R. (2004). Rituals of solidarity and security in the wake of terrorist attack. *Sociological theory*, 22(1), 53-87.
- Conley, T. G. (1999). GMM estimation with cross sectional dependence. *Journal of econometrics*, 92(1), 1-45.
- Costalli, S., & Ruggeri, A. (2015). Forging political entrepreneurs: Civil war effects on post-conflict politics in Italy. *Political Geography*, 44, 40-49.
- Enders, W., & Sandler, T. (2011). *The political economy of terrorism*. Cambridge University Press.
- Fontana, N., Nannicini, T., & Tabellini, G. (2018). Historical roots of political extremism: The effects of Nazi occupation of Italy.
- Gaines, B. J. (2002). Where's the rally? Approval and trust of the president, cabinet, congress, and government since September 11. *PS: Political Science & Politics*, 35(3), 531-536.
- Gassebner, M., Jong-A-Pin, R., & Mierau, J. O. (2008). Terrorism and electoral accountability: One strike, you're out!. *Economics Letters*, 100(1), 126-129.
- Getmansky, A., & Zeitzoff, T. (2014). Terrorism and voting: The effect of rocket threat on voting in Israeli elections. *American Political Science Review*, 108(3), 588-604.

- Giner-Sorolla, R., & Maitner, A. T. (2013). Angry at the unjust, scared of the powerful: Emotional responses to terrorist threat. *Personality and Social Psychology Bulletin*, 39(8), 1069-1082.
- Gould, E. D., & Klor, E. F. (2010). Does terrorism work?. *The Quarterly Journal of Economics*, 125(4), 1459-1510.
- Gould, E. D., & Klor, E. F. (2015). The Long-run Effect of 9/11: Terrorism, Backlash, and the Assimilation of Muslim Immigrants in the West. *The Economic Journal*, 126(597), 2064-2114.
- Gupta, S., Clements, B., Bhattacharya, R., & Chakravarti, S. (2004). Fiscal consequences of armed conflict and terrorism in low-and middle-income countries. *European Journal of Political Economy*, 20(2), 403-421.
- Hanes, E., & Machin, S. (2014). Hate crime in the wake of terror attacks: Evidence from 7/7 and 9/11. *Journal of Contemporary Criminal Justice*, 30(3), 247-267.
- Huddy, L., Feldman, S., Taber, C., & Lahav, G. (2005). Threat, anxiety, and support of antiterrorism policies. *American journal of political science*, 49(3), 593-608.
- Ivandic, R., Kirchmaier, T., & Machin, S. (2019). Jihadi Attacks, Media and Local Hate Crime. IZA Working Paper No. 12352
- Jain, S., & Mukand, S. W. (2004). 'The Economics of High-Visibility Terrorism.' *European Journal of Political Economy*, 20(2), 479-494.
- Jetter, M. (2017). 'The Effect of Media Attention on Terrorism.' *Journal of Public Economics*, 153, 32-48.
- Keltner, D., Ellsworth, P. C., & Edwards, K. (1993). Beyond simple pessimism: effects of sadness and anger on social perception. *Journal of personality and social psychology*, 64(5), 740.
- Kibris, A. (2011). Funerals and elections: The effects of terrorism on voting behavior in Turkey. *Journal of Conflict Resolution*, 55(2), 220-247.
- Kis-Katos, K., Liebert, H., & Schulze, G. G. (2014). On the heterogeneity of terror. *European Economic Review*, 68, 116-136.
- Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of personality and social psychology*, 81(1), 146.
- Lerner, J. S., Gonzalez, R. M., Small, D. A., & Fischhoff, B. (2003). Effects of fear and anger on perceived risks of terrorism: A national field experiment. *Psychological science*, 14(2), 144-150.

- Marcus, G. E., & MacKuen, M. B. (1993). Anxiety, enthusiasm, and the vote: The emotional underpinnings of learning and involvement during presidential campaigns. *American Political Science Review*, 87(3), 672-685.
- Milligan, K., Moretti, E., & Oreopoulos, P. (2004). Does education improve citizenship? Evidence from the United States and the United Kingdom. *Journal of public Economics*, 88(9-10), 1667-1695.
- Montalvo, J. G. (2011). Voting after the bombings: A natural experiment on the effect of terrorist attacks on democratic elections. *Review of Economics and Statistics*, 93(4), 1146-1154.
- Montalvo, J. G. (2012). Re-examining the evidence on the electoral impact of terrorist attacks: The Spanish election of 2004. *Electoral Studies*, 31(1), 96-106.
- Park, J., & Bali, V. (2017). International terrorism and the political survival of leaders. *Journal of Conflict Resolution*, 61(7), 1343-1370.
- Robbins, J., Hunter, L., & Murray, G. R. (2013). Voters versus terrorists: Analyzing the effect of terrorist events on voter turnout. *Journal of Peace Research*, 50(4), 495-508.
- Romanov, D., Zussman, A., & Zussman, N. (2012). Does terrorism demoralize? Evidence from Israel. *Economica*, 79(313), 183-198.
- Sandler, T. (2015). Terrorism and counterterrorism: an overview. *Oxford Economic Papers*, 67(1), 1-20.
- Schubert, J. N., Stewart, P. A., & Curran, M. A. (2002). A defining presidential moment: 9/11 and the rally effect. *Political Psychology*, 23(3), 559-583.
- Skitka, L. J. (2005). Patriotism or Nationalism? Understanding Post-September 11, 2001, Flag-Display Behavior 1. *Journal of Applied Social Psychology*, 35(10), 1995-2011.
- Steininger, R. (2003). *South Tyrol: A minority conflict of the twentieth century*. Transaction Publishers.
- Tiedens, L. Z., & Linton, S. (2001). Judgment under emotional certainty and uncertainty: the effects of specific emotions on information processing. *Journal of personality and social psychology*, 81(6), 973.

Table 1: Summary statistics — Main variables

	mean	sd	min	max	count
<u>Terrorist attacks and casualties:</u>					
# Terrorist attacks	0.295	1.342	0	22	1142
# Terrorist attacks by target:					
Overhead power line	0.0867	0.679	0	14	1142
Railway	0.0963	0.623	0	10	1142
Police stations	0.0412	0.323	0	6	1142
Collective memory	0.0464	0.282	0	4	1142
Popular houses	0.0166	0.169	0	4	1142
Private targets	0.00788	0.142	0	4	1142
# People injured	0.0245	0.292	0	6	1142
# People killed	0.0114	0.148	0	3	1142
# Police officers injured	0.0193	0.271	0	6	1142
# Civilians injured	0.00525	0.102	0	3	1142
# Police officers killed	0.00788	0.129	0	3	1142
# Terrorists dead	0.00350	0.0724	0	2	1142
<u>Political parties and turnout (shares):</u>					
Democrazia Cristiana	7.843	9.890	0	52.35	1142
Movimento Sociale Italiano	1.416	2.273	0	24.85	1142
Partito Comunista Italiano	1.839	2.665	0	22.04	1142
Turnout	94.54	2.853	80.73	100	1142

Table 2: Government party and terrorist attacks

	Dependent Variable is: Government party (Vote %)		
	(1)	(2)	(3)
# Terrorist Attacks	-0.188*** (0.056)	-0.185*** (0.047)	-0.178*** (0.049)
Municipality FE	Yes	Yes	Yes
Year FE	Yes	Yes	No
Terrorist phase FE	No	No	Yes
Controls	No	Yes	Yes
Observations	1142	1142	1142
R^2	0.466	0.539	0.500

The unit of observation is municipalities \times election year. Time-variant controls are: population and the share of Italians in the population. Standard errors are clustered at the municipal level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 3: Government party and terrorist attacks — Heterogeneous analysis

	Dependent Variable is: Government party (Vote %)			
	(1)	(2)	(3)	(4)
# Terrorist attacks	-0.185*** (0.047)	-0.214*** (0.048)	-0.221*** (0.047)	
# People injured		-0.039 (0.173)		
# People killed		0.900** (0.393)		
# Police officers injured			-0.267*** (0.100)	
# Civilians injured			1.214*** (0.151)	
# Police officers killed			1.145** (0.505)	
# Terrorists dead			0.892* (0.532)	
Overhead power line				-0.244** (0.096)
Railway				0.065 (0.253)
Police stations				-0.029 (0.259)
Collective memory				0.510 (0.412)
Popular houses				-0.409 (0.392)
Private targets				-0.289*** (0.053)
Municipality FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	1142	1142	1142	1142
R^2	0.539	0.539	0.540	0.540

The unit of observation is municipalities \times election year. Time-variant controls are: population and the share of Italians in the population. Standard errors are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Extreme right party and terrorist attacks

	Dependent Variable is: Extreme right party (Vote %)		
	(1)	(2)	(3)
# Terrorist attacks	0.071*	0.064*	0.063*
	(0.036)	(0.036)	(0.037)
# People injured			-0.037
			(0.123)
# People killed			0.074
			(0.145)
Municipality FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	No	Yes	Yes
Observations	1142	1142	1142
R^2	0.190	0.221	0.221

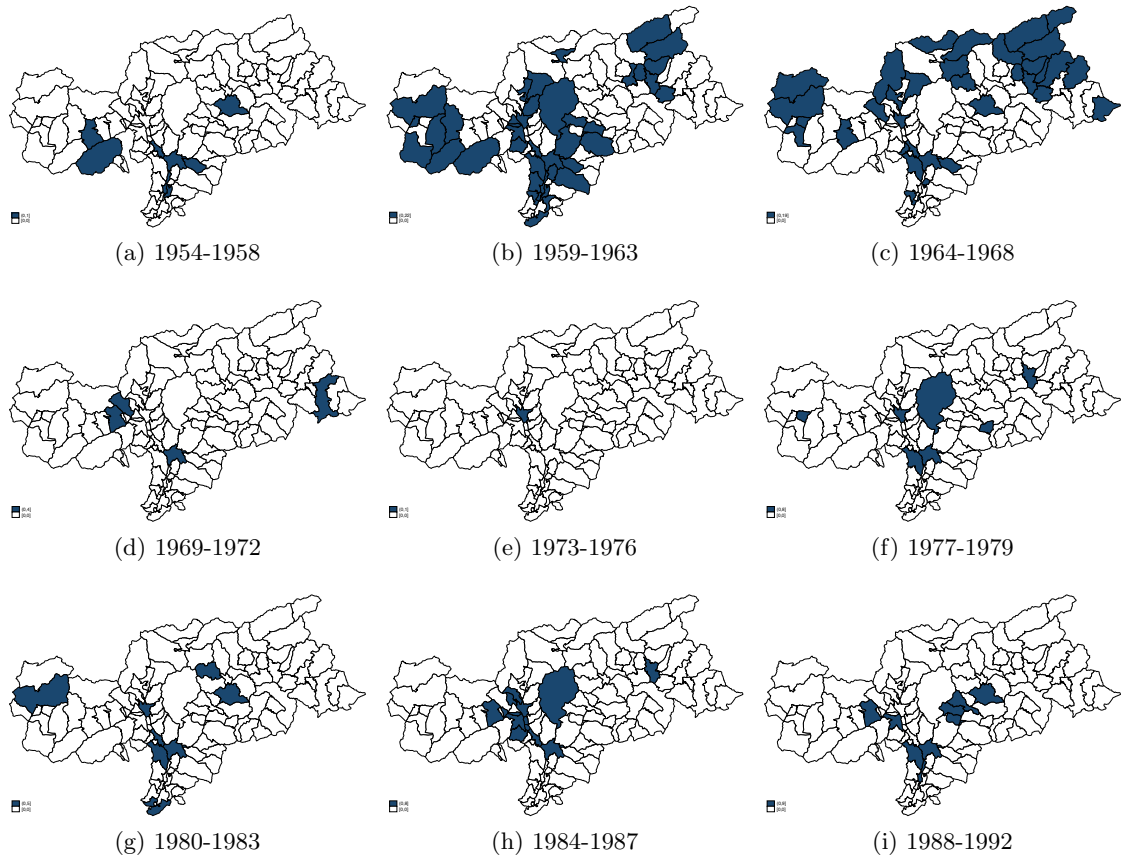
The unit of observation is municipalities \times election year.
Time-variant controls are: population and the share of
Italians in the population. Standard errors are clustered
at the municipal level. * $p < 0.10$, ** $p < 0.05$, ***
 $p < 0.01$

Online Appendix

Punishing or Rallying ‘Round the Flag’? Heterogeneous Effects of Terrorism in South Tyrol

A Additional figures and tables

Figure A1: Spatial distribution of terrorism across South Tyrolean municipalities.



Notes: The blue color indicates the occurrence of at least a terrorist attack in that municipality.

Table A1: Summary statistics — Covariates

	mean	sd	min	max	count
<u>Demography:</u>					
Italians in the total population (%)	11.39	17.35	0	94.87	1142
Population	2447.7	7118.8	118	85457	1142
<u>Education:</u>					
# Italians with a bachelor degree	27.71	215.9	0	3488.1	1141
# Italians with a diploma	121.2	910.9	0	14683.8	1141
# Italians illiterate	5.878	41.54	0	573.8	1141
<u># Italian workers by labor market segments:</u>					
Agriculture	12.09	44.01	0	433.9	1141
Industry	102.7	722.5	0	9667.4	1141
Constructions	46.05	281.2	0	2952	1141
Utilities	7.898	45.07	0	486	1141
Trade	100.7	669.5	0	9285.4	1141
Transports	41.07	247.3	0	2716.5	1141
Credit & Banking	21.69	196.4	0	4015.6	1141
Private services	68.69	483.9	0	6849.5	1141
Public sector	70.11	375.4	0	4809.6	1141
<u># Italian workers by hierarchy:</u>					
Entrepreneurs	16.62	137.0	0	2672.9	1141
Managers	163.8	1123.4	0	14457.3	1141
Low-level employees	224.0	1343.4	0	16086.6	1141

Table A2: Government party and terrorist attacks — Trends in education and labor markets

Dependent Variable is: Government party (Vote %)										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
# Terrorist attacks	-0.185*** (0.047)	-0.190*** (0.060)	-0.212*** (0.052)	-0.186*** (0.056)	-0.215*** (0.053)	-0.214*** (0.048)	-0.216*** (0.060)	-0.242*** (0.053)	-0.217*** (0.056)	-0.239*** (0.054)
# People injured						-0.039 (0.173)	-0.123 (0.106)	-0.123 (0.114)	-0.063 (0.120)	-0.109 (0.127)
# People killed						0.900** (0.393)	0.868** (0.406)	0.976** (0.431)	0.920** (0.423)	0.796* (0.467)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Education	No	Yes	No	No	Yes	No	Yes	No	No	Yes
Employees by labor markets	No	No	Yes	No	Yes	No	No	Yes	No	Yes
Workers composition	No	No	No	Yes	Yes	No	No	No	Yes	Yes
Observations	1142	1141	1141	1141	1141	1142	1141	1141	1141	1141
R^2	0.539	0.543	0.554	0.549	0.562	0.539	0.543	0.555	0.549	0.562

The unit of observation is municipalities \times election year. Baseline time-variant controls are: population and the share of Italians in the population. Covariates on education include: number of Italians with a bachelor degree, with a high-school diploma, and unable to read and write. Italian-speaking employees are distributed in the following labor markets segments (as collected by the censuses): agriculture, industry, constructions, utilities, trade, transports, credit, banking & finance services, other private services, and the public sector. Italian-speaking workers are distributed across the following classes (as done in the censuses): entrepreneurs, managers, and working class (lower level employees). Standard errors are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A3: Government party and terrorist attacks — Sensitivity analysis

	Dependent Variable is: Government party (Vote %)		
	(1)	(2)	(3)
1(# Terrorist Attacks > 0)	-0.468*	-0.684*	
	(0.246)	(0.394)	
1(# Failed terrorist Attacks > 0)			-0.227
			(1.558)
Municipality FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes
Observations	1142	843	1142
R^2	0.537	0.475	0.537

The unit of observation is municipalities \times election year. Time-variant controls are: population and the share of Italians in the population. Column 2 restricts the sample to municipalities that have been hit at most once by terrorists. Standard errors are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4: Government party and terrorist attacks — Spatial analysis

Dependent Variable is: Government party (Vote %)				
	(1)	(2)	(3)	(4)
# Terrorist attacks	-0.185*** (0.047) [0.055]***	-0.214*** (0.048) [0.053]***	-0.184*** (0.048)	-0.203*** (0.047)
# People injured		-0.039 (0.173) [0.214]		-0.140 (0.210)
# People killed		0.900** (0.393) [0.404]**		0.814* (0.423)
Municipality FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Year \times latitude FE	No	No	Yes	Yes
Year \times longitude FE	No	No	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	1142	1142	1142	1142
R^2	0.539	0.539	0.578	0.578

The unit of observation is municipalities \times election year. Time-variant controls are: population and the share of Italians in the population. Standard errors in rounded brackets are clustered at the municipal level. Standard errors in squared brackets are corrected for spatial correlation in the residuals within a radius of 200 km. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A5: Government party and terrorist attacks — Population

Dependent Variable is: Government party (Vote %)										
	weighted		1st quartile excluded		2nd quartile excluded		3rd quartile excluded		4th quartile excluded	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
# Terrorist attacks	-0.179*** (0.013)	-0.231*** (0.021)	-0.172*** (0.049)	-0.205*** (0.050)	-0.193*** (0.049)	-0.220*** (0.048)	-0.191*** (0.044)	-0.213*** (0.045)	-0.138 (0.108)	-0.203* (0.120)
# People injured		0.849*** (0.287)		0.054 (0.225)		-0.028 (0.176)		0.148 (0.358)		-0.210** (0.097)
# People killed		1.968** (0.876)		0.859** (0.405)		0.907*** (0.222)		0.898* (0.506)		1.031* (0.555)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1142	1142	856	856	856	856	856	856	855	855
R^2	0.728	0.742	0.561	0.563	0.578	0.578	0.531	0.532	0.497	0.498

The unit of observation is municipalities \times election year. Baseline time-variant controls are: population and the share of Italians in the population. Columns 1 and 2 use weighted least squares (WLS) estimations with weights given by the population of the municipality; columns 3 and 4 exclude the first quartile; columns 5 and 6 exclude the second quartile; columns 7 and 8 exclude the third quartile; and columns 9 and 10 exclude the fourth quartile. Standard errors are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A6: Government party and terrorist attacks — Share of Italians

Dependent Variable is: Government party (Vote %)										
	weighted		1st quartile excluded		2nd quartile excluded		3rd quartile excluded		4th quartile excluded	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
# Terrorist attacks	-0.128*** (0.045)	-0.166*** (0.042)	-0.166*** (0.051)	-0.201*** (0.050)	-0.171*** (0.047)	-0.203*** (0.047)	-0.196*** (0.050)	-0.232*** (0.051)	-0.261** (0.099)	-0.269*** (0.100)
# People injured		0.317 (0.236)		0.105 (0.224)		0.076 (0.243)		-0.075 (0.174)		-0.313*** (0.105)
# People killed		0.800** (0.357)		0.915*** (0.312)		0.794*** (0.242)		1.013* (0.516)		0.652 (0.562)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1142	1142	856	856	856	856	856	856	856	856
R^2	0.767	0.768	0.645	0.646	0.588	0.589	0.531	0.532	0.359	0.360

The unit of observation is municipalities \times election year. Baseline time-variant controls are: population and the share of Italians in the population. Columns 1 and 2 use weighted least squares (WLS) estimations with weights given by the share of Italians of the municipality; columns 3 and 4 exclude the first quartile; columns 5 and 6 exclude the second quartile; columns 7 and 8 exclude the third quartile; and columns 9 and 10 exclude the fourth quartile. Standard errors are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A7: Communist party and terrorist attacks

	Dependent Variable is: Communist party (Vote %)		
	(1)	(2)	(3)
# Terrorist attacks	-0.056 (0.034)	-0.065 (0.041)	-0.072 (0.044)
# People injured			0.001 (0.057)
# People killed			0.216 (0.142)
Municipality FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	No	Yes	Yes
Observations	1142	1142	1142
R^2	0.243	0.265	0.265

The unit of observation is municipalities \times election year. Time-variant controls are: population and the share of Italians in the population. Standard errors are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A8: Voter turnout and terrorist attacks

	Dependent Variable is: Voter turnout (%)		
	(1)	(2)	(3)
# Terrorist attacks	0.047 (0.053)	0.085* (0.045)	0.077* (0.044)
# People injured			-0.021 (0.247)
# People killed			0.264 (0.515)
Municipality FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	No	Yes	Yes
Observations	1142	1142	1142
R^2	0.180	0.241	0.241

The unit of observation is municipalities \times election year. Time-variant controls are: population and the share of Italians in the population. Standard errors are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$