Contents lists available at ScienceDirect





# Journal of Comparative Economics

journal homepage: www.elsevier.com/locate/jce

# 

Nicola Fontana<sup>a,b</sup>, Tommaso Nannicini<sup>c,d,e</sup>, Guido Tabellini<sup>f,d,g,\*</sup>

<sup>a</sup> Department of Economics & CEPH & TIME & TRiSS, Trinity College Dublin, Ireland

<sup>b</sup> CEP, London School of Economics, United Kingdom

<sup>c</sup> Department of Social and Political Sciences & IGIER, Bocconi University, Italy

<sup>d</sup> CEPR, United Kingdom

<sup>e</sup> IZA, Germany

f Department of Economics & IGIER, Bocconi University, Italy

<sup>g</sup> Ces-Ifo, Germany

# ARTICLE INFO

JEL classification: D74 N44 P10 Keywords: Civil War Political extremism Persistence

# ABSTRACT

We study the impact of the Italian Civil War and Nazi occupation of Italy in 1943–45 on postwar political outcomes. The Communist Party, which was more active in the resistance movement, gained votes in areas where the Nazi occupation was both longer and harsher, mainly at the expense of centrist parties. This effect persists until the late 1980s. These results suggest that civil war and widespread political violence reshape political identities in favor of the political groups that emerge as winners. This benefits extremist groups and hurts moderates since the former have a comparative advantage in organizing violent conflict.

## 1. Introduction

It is well understood that the presence of large extremist parties can hinder the functioning of democratic institutions. In the most severe cases, an extremist party can directly threaten the viability of democratic rule, or opposing groups may use its presence as an excuse to abandon democracy, as in Greece in 1967 or Chile in 1973. Even in stable democracies, the presence of large extremist parties raises policy uncertainty and volatility (Bordignon et al., 2016), makes political compromise more difficult, can prevent alternation of office between the incumbent and the opponent, and – in a dynamic setting – can induce distorting strategic behavior by the incumbent. The origin of political extremism is less well understood, however. Throughout the 1960s and 1970s, extremist parties in Italy and France gathered over 30% and over 20% of the votes, respectively, while they were virtually absent in Austria, Germany, and the Anglo-Saxon countries. How can we explain such large differences in neighboring countries with similar economic structures and at the same level of economic development? In this paper, we argue that political extremism can emerge as a legacy of civil war and foreign occupation.

Correspondence to: Department of Economics and IGIER, Universita' L. Bocconi, Via Roentgen 1, 20136 Milano, Italy

E-mail address: guido.tabellini@unibocconi.it (G. Tabellini).

#### https://doi.org/10.1016/j.jce.2023.05.006

Received 14 June 2022; Received in revised form 9 May 2023; Accepted 29 May 2023

Available online 20 June 2023

0147-5967/© 2023 The Authors. Published by Elsevier Inc. on behalf of Association for Comparative Economic Studies. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

 $<sup>\</sup>stackrel{\circ}{\sim}$  We are grateful to two anonymous referees for very helpful comments. We are grateful to Christian Dustmann, Pauline Grosjean, Stepan Jurajda, Ethan Kaplan, Marco Manacorda, Giacomo Ponzetto, Shanker Satyanath, Nico Voigtlander, Joachim Voth, and several seminar participants for helpful comments; to Carlo Gentile for sharing with us the data on the location of the German troops; to Brunello Mantelli for sharing with us the data on Italians deported to Germany; to Angelo Azzolini, Riccardo Bianchi Vimercati, Giampaolo Bonomi, Igor Cerasa, Viola Corradini, Giacomo Lemoli, Francesco Loiacono, Giacomo Magistretti, Alberto Mola, Carlo Medici and Sonny Stenson for excellent research assistance; to "IPR Feedback," and in particular to Massimo Di Filippo and Fabrizio Monaci, for conducting the 2015 survey; and to the European Research Council (Advanced Grant No. 230088 and Consolidator Grant No. 648833) for financial support.

A priori, civil war and foreign occupation can impact political extremism in several ways. We investigate three theoretical hypotheses. First (H1), the increased salience of political conflict during a civil war might polarize voters on both sides. This theory is suggested by a large literature on social identity (Bonomi et al., 2021, Abrams and Hogg, 1998): on the one hand, conflict induces individuals to choose one side and identify with one of the opposing political groups; on the other hand, social identification leads to polarization, because individuals conform to the in-group norm, which they perceive as more extreme than it really is. Second (H2), political groups that contributed to victory might be strengthened by the war. As emphasized by Shayo (2020) , individuals tend to identify with higher status groups; in this context, with whoever won the war. This effect is asymmetric, as it is observed only on the side that won the war, and for the groups that are perceived as contributing to victory, whether extremists or not. Nevertheless, extremist groups are more likely to benefit in practice. The reason is that they find it easier to solve the collective action problem and organize violence thanks to their radical ideology (Walter, 2017), and hence are more likely to be perceived as having contributed to victory. Third (H3), civil wars might directly impact the party system through the supply side, as military factions evolve into political organizations (e.g., Costalli and Ruggeri, 2015, Costalli and Ruggeri, 2019). The goal of this paper is to study these effects in an advanced democracy, sorting out these different mechanisms and investigating their persistence.

We study the domestic political consequences of the Italian Civil War and Nazi occupation during the final two years of World War II. Between July 1943 and May 1945, Italy was a battleground between the Allied and the German forces. Italians themselves were split, with troops loyal to the fascist regime fighting alongside the Germans and resistance fighters helping the Allies. About 360,000 people died during this period, of which about 155,000 were Italians. These violent events left a strong imprint on public opinion and on the postwar political system. Political parties evolved out of the resistance movement, where postwar political leaders played an important role, and political institutions were designed to minimize the risk of a relapse into civil war or dictatorship. Our empirical strategy exploits geographic variation in the intensity of the conflict. The Allies freed Southern and much of Central Italy almost immediately, while Northern-Central Italy remained under Nazi occupation for much longer and was the turf of conflict between fascists and the resistance movement. Moreover, the Nazi troops became particularly aggressive toward partisans and civilians in the last stage of the war, and this only affected areas under German occupation.

We first show – in a series of OLS correlations – that the vote share of the Communist Party in postwar national elections is higher in municipalities where the Nazi occupation was longer and more violent. To identify a causal effect, the rest of the paper exploits the fact that – because of weather conditions and exogenous factors – the battlefront between the Germans and the Allies remained stuck for over six months near the so-called "Gothic line," a defensive line cutting Northern-Central Italy from west to east. We apply a geographic Regression Discontinuity Design (RDD), comparing voting outcomes in municipalities just above vs below the line. The treatment is that, north of the line, the German occupation and the fighting by the resistance movement were both longer and harsher, while south of the line the Allies conducted a much less extractive occupation, free speech was allowed, and Italian political movements started claiming self-government responsibility for their country.

Our main result is that the vote share of the extreme-left parties in postwar elections is larger in municipalities just north of the line. This effect is quantitatively important (about 9 percentage points for the Communists in the 1946 elections), and persists until the end of the "First Republic" in the late 1980s-early 1990s. The communist gain above the line is mainly at the expense of the Catholic party, although this finding is less robust, suggesting that the Communists may also have gained votes from other moderate or center-left parties. Municipalities north of the line are also less likely to vote for the extreme right-wing parties linked to the fascist regime, but this effect occurs later in time and it is smaller than the vote loss of the Catholics. We find no impact on voters' turnout.

Thus, these results are inconsistent with the hypothesis that exposure to conflict induced a symmetric increase in polarization, H1 above. To shed light on the mechanisms of the communist gain, we investigate the two other explanations summarized above, H2 and H3. According to our second hypothesis, longer exposure to civil war and foreign occupation might directly affect voters' political attitudes. The Italian Communist Party was more active in the resistance movement than the others, and it had opposed Mussolini from the start (the Catholics instead had voted him into office). The shared emotions associated with the violent German occupation increased the salience of the conflict and could have led voters to identify with the political party that, more than others, was the symbol of the victorious resistance movement. According to our third hypothesis, instead, a longer Nazi occupation might have affected postwar political organizations. North of the line the resistance movement remained active for longer, and this may have given an advantage to the Communist Party in building grassroots organizations. These two hypotheses are not mutually exclusive.

The evidence is more consistent with the second hypothesis (H2). Indeed, the RDD analysis shows that left-wing partisan brigades were equally widespread just north and just south of the Gothic line, and their presence did not enhance the effects of the Nazi occupation on voting outcomes (i.e., the treatment effect of the longer German occupation is homogeneous in areas with and without left-wing partisan brigades). This is evidence against the mechanism that the Nazi occupation strengthened Communist Party organizations through its effect on the partisan movement. Moreover, the extreme right-wing parties, which were freer to self-organize north of the line, did not benefit from this greater freedom. A plausible interpretation of our findings is that a longer and more violent German occupation increased the salience of the civil conflict and led left-leaning voters to identify with the Communist Party, which was more active in the war. The interpretation that war benefits the parties that are perceived as contributing to victory (whether extremists or not) is corroborated by the RDD (treatment-heterogeneity) finding that the Catholic party also gained votes in the areas under a longer German occupation, but only if in those areas a Catholic brigade was active (which may have reinforced the perception that Catholics too contributed to victory).

To further corroborate our interpretation of the mechanism and to investigate the persistence of these effects, in November-December 2015 we conducted a random survey of about 2500 individuals resident in 242 municipalities within 50 km from the Gothic line. We find that memory of the civil war is stronger north of the line and among individuals who have a left-wing political orientation. There is also some weak evidence of mildly more anti-German attitudes north of the line. These findings too are suggestive that the mechanism underlying the reduced-form effects operates through the increased salience of the conflict in areas where the Nazi occupation lasted longer.

Despite its importance, the rigorous empirical literature on these issues is not very large – see also the surveys by Walden and Zhukov (2020) and Davenport et al. (2019). Our results and interpretation are consistent with the analyses of the political effects of more recent conflicts. Daly (2022), chapter 8, studies a large data set of civil wars between 1970 and 2015; she finds that parties who were more active in the war and on the winning side gained votes in postwar elections, irrespective of their involvement in mass atrocities.<sup>1</sup> Dell and Querubin (2018) also use geographic RDD, exploiting discontinuities in the US military strategies during the Vietnam war, and find that US bombing increased the political activities of the communist insurgency and reduced non-communist civic engagement. Thus, the mechanisms and outcomes discussed in our paper are not confined to an episode in WWII, but are part of a more general pattern.<sup>2</sup>

Some recent papers have applied geographic RDD to historical European data. Cannella et al. (2021) study the political effects of the Operational Zones temporarily annexed by Nazi Germany in the Italian North-East in 1943–45.<sup>3</sup> They find that in these areas the Nazi occupation was more violent and, consistent with our results, the vote share of the Communist Party was persistently higher. The vote share of the extreme right was also higher in the annexed zones, although the effect is much smaller in magnitude than for the Communist Party (in these provinces, unlike near the Gothic line, a fraction of the population is German speaking and may have been less hostile to the German annexation). Dehdari and Gehring (2022) take advantage of quasi-exogenous division of the French regions Alsace and Lorraine after the Franco-Prussian War to provide evidence about group identity formation, showing that being exposed to occupation and repression for many decades caused a persistently stronger regional identity. Other papers have applied similar RDD methodologies but focused on migration as the main mechanism behind the political effects. In particular, Ochsner and Roesel (2020) study the demarcation between the Soviet and US occupation zones in Austria during 1945–1955. They show that there was a large scale Nazi migration away from the Soviet zone, which led to long lasting right-wing extremism in the US zone. Grosfeld and Zhuravskaya (2015) study the long term consequences of the partition of Poland between Russia, Austria-Hungary, and Prussia.<sup>4</sup> Recently, Tur-Prats and Valencia Caicedo (2023) exploit exogenous shocks to military plans and RDD along a frontline to study the impact of the Spanish Civil war, finding that more violence is correlated with lower generalized trust and larger support for right-wing parties. Finally, Costalli and Ruggeri (2015) and Costalli and Ruggeri (2019) also study the effect of the Italian Civil War on the immediate postwar election, and some of their findings are consistent with ours, although they do not look at the Nazi occupation as treatment, they only focus on the 1946 election and do not exploit any geographic RDD to make causal inference.

Our empirical findings are consistent with an important tradition in political science, which has studied key historical junctures such as external or civil wars, when new parties are born and young generations build new political identities breaking with the past. Mayhew (2004) has argued that these special circumstances have lasting effects on the nature and intensity of the political conflict. On the supply side of politics, the goals and identities of political organizations can be shaped by traumatic events that give rise to new political parties. On the demand side, intense and widespread common social experiences can shape the political attitudes of citizens for years to come. For instance, writing a century after the US Civil War, Campbell et al. (1960) argued that partisan affiliations were still largely shaped by the geographic boundaries of that conflict.<sup>5</sup> Similarly, the Great Depression had a lasting influence on the image of the Republican Party as the party that mishandled those dramatic events. The notion of political realignments also motivates Balcells (2011), who studies the political attitudes of war veterans in the Spanish Civil War of 1936–38. Her results are consistent with ours, although she looks at opinion polls rather than actual behavior.

Finally, our findings that the political effects of the civil war and the violent Nazi occupation persisted for several decades, and that even today more exposed areas have a stronger memory of those dramatic events, are consistent with a large literature on the persistence of political attitudes and cultural traits. Acharya et al. (2018) document that contemporary differences in political attitudes across counties in the US South are correlated with the local prevalence of slavery around 1860, but this correlation is not present among second generation immigrants in those same counties. Voigtländer and Voth (2012) find strong persistence in anti-Semitism within Germany over more than five centuries. Fouka and Voth (2021) find evidence suggesting that Nazi occupation had persistent cultural effects in Greece; during the recent Greek financial crisis, sales of German cars fell more in the areas where

<sup>&</sup>lt;sup>1</sup> The finding that winning factions are not blamed for indiscriminate violence is not common to all studies, however. In particular, Condra and Shapiro (2012) use geocoded data on violence in Iraq and show that armed actors are punished for the collateral damage they inflict.

<sup>&</sup>lt;sup>2</sup> Several other papers have studied the effects of civil wars in Africa, South Asia, and in the Middle East, generally showing that such events reinforce ethnic identities (Besley and Reynal-Querol 2014, Blattman 2009, Bellows and Miguel 2009, Gilligan et al. 2014, Bauer et al. 2016, Camarena and Hagerdal 2020) and tend to increase violence and radicalization (Besley and Reynal-Querol 2014, Canetti and Lindner 2015, Canetti-Nisim et al. 2009, Grosjean 2014, Miguel et al. 2011). The effects on political participation are more mixed, with some of these papers finding that civil wars increase participation, while others find the opposite – see in particular Gallego (2018) and the survey by Walden and Zhukov (2020).

<sup>&</sup>lt;sup>3</sup> These were the current Italian Provinces of Bolzano, Gorizia, Trento, and Trieste.

<sup>&</sup>lt;sup>4</sup> Ferwerda and Miller (2014) study the demarcation between German and Vichy zones within France. They find a more active resistance movement in the German zone. These results are challenged by Kocher and Monteiro (2016), who argue that they are driven by the non-random location of the demarcation zone.

<sup>&</sup>lt;sup>5</sup> See also Sundquist (2011) on the long lasting legacy of the US civil war.

German troops committed war crimes against civilians. Avdeenko and Siedler (2017) study German longitudinal data and document the importance of the intergenerational transmission of political extremism from fathers to sons.<sup>6</sup>

The outline of the paper is as follows. The next section provides a historical summary. The data are described in Section 3. In Section 4 we outline our priors and empirical strategy. Sections 5 and 6 present our empirical findings, first the OLS correlations and then the RDD causal evidence, respectively. Section 7 illustrates the results of the survey, and the last section concludes.

### 2. Historical background

This section summarizes the main events that led to the birth of the post-WWII Italian political system. Since we compare the elections in the immediate postwar period to the latest free elections before the fascist dictatorship, we start with a brief account of the Italian political system before the advent of fascism. We then turn to the WWII period – discussing the nature of the foreign occupation and of the civil war (i.e., our treatment) – and finally to the postwar Italian political system.<sup>7</sup>

#### 2.1. Prewar period

At the end of World War I, Italy was a constitutional monarchy and the government was supported by a parliamentary majority of liberal-moderate representatives elected in 1913. Socialist and Catholic movements were emerging, however. These new parties appealed to Italian voters who had only recently been enfranchised.

Before the consolidation of Mussolini's dictatorship, three free elections were held in 1919, 1921, and 1924 under universal male suffrage. Average turnout was around 60%. In 1919 and 1921, the electoral system was proportional, but voters could cast a preference vote for candidates running in different lists (the so called "panachage" system). In 1924, the electoral system entailed a large majority premium that gave two thirds of the seats to the party gaining a relative majority in a single national district and assigned the remaining seats to the other parties according to a proportional rule. Thus, none of these electoral rules was identical to the pure proportional system with preference votes created after WWII, although all of them had important elements of proportionality.

In the 1919 election, the Italian political system was essentially split between three groups: a liberal-moderate coalition representing the political elites that had ruled Italy in the previous decades, and two emerging and antagonistic political groups, the Catholics and the Socialists. These new parties were on different positions on many issues and were unable to form viable political alliances between them. In 1919 the liberal coalition retained a relative majority but, despite a large absenteeism rate, it lost many votes and seats to the Socialists and Catholics. This outcome led to a short period of instability, which resulted in a new election in 1921. The main novelties of the 1921 election were the gains obtained by the fascist candidates, who ran in the same lists as the traditional liberal bloc, and the fact that the Communist Party entered the ballot for the first time.<sup>8</sup> The votes and seats obtained by the Catholics and Socialists were roughly unchanged (or slightly lower) compared to 1919.

After a period of political violence and instability, in 1922 Mussolini was asked by the King to form a government. He received a vote of confidence by a parliamentary majority that included the Catholic Party, while the Socialists (and the small communist group) voted against him. Mussolini soon changed the electoral law to a proportional system with a large majority premium for the party with a relative majority (see above). In 1924, a new election was held, and the Fascist Party obtained two thirds of the votes. Although formally free and regular, this election was held in a climate of violence and intimidation. Within a few years, Mussolini further consolidated his power into a dictatorship.

Elections in 1919, 1921, and 1924 are not easily comparable between each other, but each of them displays within-municipality variation that conveys information on the underlying political preferences of the (local) population. General elections were also held in 1929 and 1934. Following a parliamentary reform enacted in 1928, these elections took the form of a referendum with only the Fascist Party running and with a voting system that did not guarantee the secrecy of the vote.<sup>9</sup> Moreover, to our knowledge, no data are available at the municipality level. We thus ignore these last two elections.

## 2.2. War period

#### 2.2.1. The Gothic line

We can date the beginning of the Italian Civil War (Pavone, 1991) in July 1943, when the Allies landed in Sicily. Since then and until May 1945, Italy was ravaged by war. On one side were the Germans, supported by the forces that remained loyal to Mussolini.

<sup>&</sup>lt;sup>6</sup> See also Lupu and Peisakhin (2017), Iwanowsky and Madestam (2019), and Rozenas and Zhukov (2019) for related studies on the former Soviet Union and Cambodia.

<sup>&</sup>lt;sup>7</sup> A more detailed historical account of these periods and episodes are provided in Romanelli (1995), Leoni (2001), Baldissara (2000), Collotti et al. (2000, 2006), Gentile (2015), Pavone (1991), and Matta (1996).

<sup>&</sup>lt;sup>8</sup> The Italian Communist Party was founded on January 21, 1919 in Livorno as a split from the socialist movement. This was clearly a split from the extreme left as the reference model of the new party was the Bolshevik Revolution, and it was motivated by the claim "we want to do as in Russia".

<sup>&</sup>lt;sup>9</sup> Voters could vote either "Yes" or "No" to approve the list of deputies appointed by the Grand Council of Fascism. Voters were provided with two equally sized sheets, white outside, inside bearing the words "Do you approve the list of members appointed by the Grand National Council of Fascism?" The electoral sheet with the "Yes" was also accompanied by the Italian flag and a fascist symbol, while the one with the "No" had no symbol. Inside the voting booth there was a first ballot box where the voter left the discarded sheet and then delivered to the scrutineers the chosen sheet, so that they would ensure that it was "carefully sealed." Turnout was around 90% and approval of the fascist list over 98%.



Fig. 1. Italy under Nazi Occupation. Note: Italian territory by number of days under Nazi occupation.

On the opposite side the Allies were supported by the Italian resistance movement (operating in the areas occupied by the Germans). Throughout this period, the overall estimated casualties were about 360,000, of which about 155,000 Italians. The Italian victims of the Nazi occupation and of the civil war were 70,000–80,000. Of these, at least 10,000 were civilians killed by Nazis or fascists, and about 30,000 were resistance fighters, and about as many were fascists (see Gentile, 2015, pp. 4–5). In addition, about 40,000 civilians were deported to Germany (of which 7,500 were Jews), 90% of these died (see Rochat, 2005, p. 443).

The battlefront moved over time, but it remained stuck for several months near a defensive line prepared by the Germans in Central Italy, the so called "Gothic line". Fig. 1 illustrates the areas under German occupation, by number of days, as well as the Gothic line. Northern-Central Italy remained under German occupation for over two years, while the South for two to five months. As can be seen from Fig. 1, the Germans were able to stop the Allies for several months between Rome and Naples (along the so called "Gustav line", which was held by the Germans between December 1943 and May 1944). From there, the battlefront moved rapidly toward Northern-Central Italy, in the area between Florence and Bologna, where the Germans had prepared a strong and continuous line of defense. Preparation for the Gothic line had begun well in advance, while the Germans were still trying to defend the area south of Rome. This allowed them to prepare an effective defense system, which stopped the Allies between the Summer of 1944 and the Spring of 1945. The Gothic line was conceived as the last defense for the German retreat. The barrier extended from the western coast between *La Spezia* and *Massa* to the eastern coast between *Pesaro* and *Rimini*. Basically, the line consisted of defensive positions and bunkers, hundreds of thousands of mines and booby traps, and a continuous anti-tank ditch almost six miles long; "Allied aerial reconnaissance photographs showed a dense network of machine-gun posts, gun positions and ditches" (Holland, 2008, p. 301). It is estimated that over 50,000 Italian forced workers were involved in building the Gothic line (Ronchetti, 2009).

As can be seen from Fig. 1, during the Summer of 1944 the battlefront remained stuck in an area about 50 km south of the Gothic line. The continuous line in Fig. 1 is the Gothic, which was held by the Germans between November 1944 and April 1945. The line was finally overcome by the Allies in April 1945, and in May the Germans surrendered control of Italy. The battles around the Gothic line brought much destruction to the area, with heavy casualties amongst Germans (around 48,000), Allies (32,000), and Italian fascists, partisans and civilians (altogether 30,000–40,000), see Montemaggi (1980). As discussed below, the Allies were extremely close to overcoming the Gothic line before the Winter of 1944, but a combination of hard weather and divergences between the US



Fig. 2. Evolution of the Gothic line. Note: Evolution of the Gothic line over Fall 1944-Spring 1945. Observation not in our sample when missing prewar electoral outcomes.

and UK – with the former prioritizing the invasion of France and the latter paying more attention to the Mediterranean – froze the battlefront at the Gothic line for six months.

Fig. 2 zooms in the area around the Gothic line, illustrating how the battlefront moved during the summer of 1944. There are three demarcation lines. The line labeled "Allies" is where the Allies stopped between August and mid-September 1944. The line labeled "Fall 1944" is the original line set up by the Germans. Between late August and mid-September 1944, the Allies succeeded in breaching this line (so called operation "Olive"). The line labeled "Nov. 1944–Apr. 1945" is where the Germans managed to contain the US-British offensive. From the end of October onwards, the Allies and the Germans were fighting along this line. It was finally breached in April 1945. Our RDD is on the northern-most line "Nov. 1944–Apr. 1945," which was held for the longest period. We highlight the municipalities we include in our RDD analysis as described in Section 4 in Fig. 2.

For the sake of our empirical analysis, it is important to note that the position of the last line of defense was not only the outcome of a German decision. It was also largely due to random events, which forced the Allies to stop their offensive between late October 1944 and the Spring of 1945. In August 1944, the Allies withdrew several divisions from the Italian front to launch a new offensive in Southern France. This decision was highly controversial: it was supported by the Americans, who wanted to create a distraction for the Germans from the ongoing battles in the rest of France, but it was opposed by the British, who instead leaned toward a stronger offensive in Italy. The American point of view prevailed, and this weakened the efforts of the Allies in Italy at a critical point in time (see Churchill, 1959). A second important random event was the weather, which deteriorated harshly in late October. These are the words used by Churchill to describe those critical moments in October 1944: "The weather was appalling. Heavy rains had swollen the numberless rivers and irrigation channels [....]. Off the roads movement was often impossible. It was with the greatest difficulty that the troops toiled forward. [...] Not until the spring were the armies rewarded with the victory they had so well earned, and so nearly won, in the autumn" (see Churchill, 1959, p.839).

#### 2.2.2. Foreign occupation and resistance movement

In the North, Mussolini tried to revamp the fascist regime by claiming statehood for the areas under German occupation (with the exclusion of two territories directly annexed to the German Reich, close to the Alps and to the Northern Adriatic coastland) and by setting the new capital of his *Republica Sociale Italiana* (RSI) in the small town of *Salò*. But this experiment resulted in little more than a Nazi-backed puppet state, dependent entirely upon Germany and with no autonomous domestic or foreign policy of any sort. The Nazi occupation of Northern Italy is unanimously deemed as violent and extractive by the historical literature. As Rudolf Rahn, the German diplomat who was the plenipotentiary to the RSI, put it: "Everything in occupied Italy must be exploited by us for our war effort" (see Holland, 2008, p. 111). This meant coerced labor and deportations, handing over of all gold reserves, shutting down of factories to ship equipment to Germany, full control of the remaining factories for military purposes, and food reserves (if any) packed off to Germany.

In Allied-held Italy, all areas close to the battlefront were directly run by the Allied Military Government (AMG) and then, as the front advanced up toward the North, they were passed back to the authority of the Italian government, formally appointed by the King. At first, under Prime Minister Pietro Badoglio, the political legitimacy of the government was weak, since the monarchy was implicated with the fascist regime. But then the political parties outlawed by the fascist regime and active in the resistance movement (see below) gradually took responsibility and joined the governments lead by Ivanoe Bonomi from June 1944 until the end of WWII.

Although the autonomy of the government was severely limited by the Allied Control Commission, self-determination was much stronger south of the line and, most importantly, free speech was moving Italy closer to democracy. In particular, the Bonomi government started having greater responsibility after September 1944, when Churchill and Roosevelt made a joint declaration shaping the future path toward Italy's self-determination and economic recovery. The sharp divide between the political (and psychological) situation north vs south of the Gothic line is best described by Italian lieutenant Eugenio Corti (see Holland, 2008, p. 251, italics ours): "I wondered if the British and Americans realized that *behind their lines* one could feel a respect for men. It felt like this whenever one saw notices where occupation troops threatened fines and at most jail sentences that *on the other side* were invariably punished with death. We would no longer hear talk of executions, and this fear – which makes man nothing more than a beast – would no longer hang over us".

Throughout the civil war period, the resistance movement grew rapidly, from a few thousand fighters in the fall of 1943 to several tens of thousands one year later. In addition, it is estimated that around 20,000 civilians were directly connected to the resistance movement, even if only a few of them nested into political coordination (see Bocca, 2012, p. 265). Although the movement was spontaneous and did not have strong party affiliations, the leaders of the various groups were active members of political parties that the fascist regime had disbanded. Three main political affiliations can be identified: the left-wing groups, linked with the Communist and Socialist Parties; the Catholic groups, linked with the Christian Democratic Party; and other centrist groups, linked with liberals that had opposed Mussolini. In addition, there were several other small groups with no explicit political affiliation.<sup>10</sup> The left-wing brigades, and to a smaller extent the Catholics, were by far the largest and most active organizations. The political parties active in the resistance movement joined forces in the "National Liberation Committee," which gave crucial support to the Bonomi governments.

In the North, the civil-war nature of the conflict was reinforced by the decision of Mussolini to give birth to the "black brigades", paramilitary groups directly run by the Fascist Party, which also attracted tens of thousands of volunteers, although poorly trained and equipped.

According to historical accounts, the effects of German occupation and of the civil war on the civilian population were not evenly distributed in time and space. As stressed by Cavaglion (2015, p.96), the civil war was almost absent in most regions of the South as they were rapidly freed by the Allies, it was long and harsh in Piedmont, and it varied in Emilia-Romagna based on the duration of the Nazi occupation. Gentile (2015) stresses two stylized facts about the German occupation. First, combat troops near the front line were more ruthless and prone to hurt civilians than other troops in charge of logistics and administration. This reflected both the selection and composition of such troops, as well as the additional stress and danger that they faced. Second, following hierarchical orders, the German attitudes and tactics changed over time, and became particularly aggressive toward partisans and civilians alike from the summer of 1944 onwards, when the danger posed by the resistance movement became more apparent. On June 17, 1944 Field Marshal Albert Kesselring, the German commander in chief in the Mediterranean, issued an order promising indemnity to soldiers who should exceed "normal restraint" in the choice of repression methods.<sup>11</sup>

Our (local) source of exogenous variation – the Gothic line – captures a treatment made up of both (i) the extractive Nazi occupation that characterized the last period of WWII and (ii) the civil war between the fascist and partisan brigades. The compound nature of this treatment reinforces its occurrence, as both elements operate along the same spectrum of political alignment. The control group includes municipalities occupied by the Allies, where free speech was allowed and self-determination by Italian authorities gradually developed.

#### 2.3. Postwar period

The resistance movement and the political parties to which it was linked played a key role in the immediate aftermath of the war. Several leaders of the movement became prominent political figures and were elected in the postwar Parliament for several legislatures. The civil war contributed to shaping the political identity of these parties and gave them visibility and popularity that they had not enjoyed before, also due to the repression imposed by the fascist regime.

The first key decision of the new political leadership was to hold an election for a Constitutional Assembly. The election was held in 1946, simultaneously with a referendum on whether to abandon the monarchy. Monarchy lost and Italy became a Republic. With this election, suffrage became universal, thus women had the right to vote for the first time. The electoral rule for the Constitutional Assembly and for all subsequent elections until 1992 was proportional. All the main parties presented lists of candidates at the Constitutional Assembly, and the party system did not change significantly afterward. Hence, the election for the Constitutional Assembly is comparable to subsequent political elections. The first regular election was held in 1948. The only difference in party labels is that in 1948 the Communist and Socialist Parties ran together under the label of "Popular Front", whereas they had run

<sup>&</sup>lt;sup>10</sup> In our data set referring to the area around the Gothic line, we count 115 communist brigades (*Garibaldi*), 44 other left-wing brigades (*Matteotti* and *Giustizia e Libertà*), and 59 non-marxist brigades (*Fiamme Verdi* and others).

<sup>&</sup>lt;sup>11</sup> Nazi authorities also tried to make this clear to the Italian population. In the Summer of 1944, German planes dropped leaflets over Central Italy with the warning: "Whoever knows the place where a band of rebels is in hiding and does not immediately inform the German Army, will be shot. Whoever gives food or shelter to a band or to individual rebels, will be shot. Every house in which rebels are found or have stayed, will be blown up" (see Holland, 2008, p. 145).

separately in 1946 constitutional election. In 1953 and in subsequent elections they split again. Monarchist parties progressively disappeared from the political scene; the last election in which they ran was in 1968. On the extreme right, a party close to the fascists, *Movimento Sociale Italiano* (MSI), was founded on December 26, 1946 and appeared on the ballot in the 1948 election, but consolidated its vote share (around 5%–7%) only from the 1953 election onwards.

The political system that emerged in the late 1940s reflected the legacy of the civil war in several respects. First, as already noted, most political leaders had played an important role in the resistance movement, at least in the period 1943–45. Second, the party system was highly polarized. On the left the Communists were the largest party (the biggest Communist Party in Western countries), which at the time had strong ideological and financial links with the Soviet Union, while the extreme right remained loyal to the fascist regime.<sup>12</sup> The Italian Communist Party always maintained strong links with the Soviet regime; for instance, it supported the Soviet invasion of Hungary in 1956, most of its leaders received training in Moscow, and financial aid from the Soviet Union reached the Italian Communists as late as in the early 1980s (Cervetti, 1999). Also on economic policy, the Communist Party maintained an extremist stance until the early 1980s, for instance, opposing the Bill of Workers' Rights in 1970 (as it would have tempered and delayed the fall of capitalism) and the entry of Italy in the European monetary system in 1979. Third, and partly as a result of such ideological polarization, one of the main goals of the Constitutional Assembly was to create a very inclusive and consensual political system, to minimize the risk of violent conflict. This resulted in a strictly proportional system, perfect bicameralism, and several checks and balances that diluted executive powers.

The main features of the Italian postwar political system remained roughly unchanged until the early 1990s, when several things changed. First, with the collapse of the Soviet Union, the Italian Communist Party made a credible and pronounced shift toward social democracy. Second, the Christian Democrats and the Socialist Party collapsed under the weight of corruption scandals, leaving room for new moderate forces led by Silvio Berlusconi. Third, the electoral rule was changed to a mixed-member system. Our analysis ends just on the edge of this transition.

#### 3. Data

This section describes our variables. Appendix A provides more detail on the data. The unit of observation is the municipality.

## 3.1. Political outcomes

We measure political outcomes by the percentage of votes received by political parties at the 1946 election for the Constitutional Assembly, and in all subsequent 10 national elections for the Chamber of Deputies until 1987 included.

We consider three political groups. First, the radical left, measured by the votes given to the Communist Party. We call this variable *Communist*. Since in 1948 the Communists and the Socialists formed a single electoral list, we also consider the votes received by these two parties together, and we call it *Communist and Socialist*. The second group is the Christian Democratic Party, which we call *Catholic*. The third group, which we call *Right-Wing*, consists of the post-fascist party (MSI) and smaller parties that supported the monarchy. The source of the electoral data is the Italian Ministry of Interior.<sup>13</sup>

We also collected data on the last free elections held before the advent of fascism, namely in 1919, 1921, and 1924. The Communist Party was very small in the 1921 and 1924 elections (and did not exist in 1919), so we lump together the socialist and communist votes in the pre-fascist period to gain precision. The right-wing vote cannot be separately measured in 1921, since fascists were running together with the more traditional and moderate liberals in that election. Hence, for the pre-fascist, period we mainly use the *Catholic* and *Communist and Socialist* vote shares.

Since there are several missing observations in prewar data, in our baseline analysis we fill the missing observations in each election exploiting the remaining two elections plus additional observables. Our baseline sample consists of about 5,700 municipalities for which we have both postwar and prewar political outcomes. As shown below, the results are robust to only using available prewar data, with no imputation for missing observations.

Thanks to Acemoglu et al. (2022) we have also information on fascist presence at municipality level. They construct fascist vote share in 1921 and in 1924 elections combining Corbetta and Piretti (2009), 1200 local and national historical newspapers and local state archives.<sup>14</sup> Moreover they construct a measure of violence (number of violent episodes per 1000 inhabitants for the period 1920–1922) from Franzinelli (2003). Finally, they collect information on local branches of the Fascist Party in September 1921 from the prefect reports located in state archives throughout Italy from which a dummy for the presence of a Fascist branch is constructed.

Since no elections were held after 1924, we collected two variables that measure opposition to the regime in the municipality during the fascist period. Our first variable is the fraction of citizens under political surveillance (source: Casellario Politico

<sup>&</sup>lt;sup>12</sup> Until the early 1990s, the two biggest parties were the Christian Democrats, the ruling party over all of this period, with average vote shares of 35%–40%, and the Communist Party, whose vote share grew from 15%–20% right after the war to more than 30% in 1976. The vote share of the Socialist Party oscillated around 10%–15%.

<sup>&</sup>lt;sup>13</sup> From the same source, to evaluate the persistence hypothesis, we also collected the percentage of votes received by new political parties in the 7 national elections from 1992 to 2013 for the Chamber of Deputies. After the political corruption scandal "Mani Pulite", the Italian party system was completely changed. We consider five political groups: Extreme Left, Center-Left, Center-Right, and Right. From 1996 onwards, the two major coalitions were represented by the Center-Left and Center-Right.

<sup>&</sup>lt;sup>14</sup> As mentioned, in 1921, the moderate right and fascist parties were running together, Acemoglu et al. (2022)'s 1921 fascist vote shares and our *Catholic* 1921 vote shares would marginally differ, depending on which parties are included.

#### Table 1

Citizens under surveillance 1925-1942.

|                              | Dependent variable:                             |            |            |                 |                          |           |  |  |
|------------------------------|---|------------|------------|-----------------|--------------------------|-----------|--|--|
|                              | Left-wing citizens under surveillance 1925-1942 |            |            | Birthplace of a | Birthplace of a partisan |           |  |  |
|                              | (1)   | (2)        | (3)        | (4)             | (5)                      | (6)       |  |  |
| Socialist 1919               | 0.918   | 0.927      | 0.770      | 0.017           | 0.010                    | 0.077     |  |  |
|                              | (0.226)***                                      | (0.226)*** | (0.172)*** | (0.047)         | (0.046)                  | (0.039)** |  |  |
|                              | (0.212)***                                      | (0.228)*** | (0.227)*** | (0.062)         | (0.064)                  | (0.038)** |  |  |
| Catholic 1919                | -0.306  | -0.310     | -0.260     | -0.022          | -0.027                   | -0.009    |  |  |
|                              | (0.198)   | (0.199)    | (0.176)    | (0.043)         | (0.043)                  | (0.040)   |  |  |
|                              | (0.104)***                                      | (0.084)*** | (0.157)*   | (0.059)         | (0.056)                  | (0.035)   |  |  |
| Socialist and Communist 1921 | 0.382   | 0.317      | 0.051      | 0.158           | 0.147                    | 0.074     |  |  |
|                              | (0.247)   | (0.243)    | (0.210)    | (0.055)***      | (0.055)***               | (0.048)   |  |  |
|                              | (0.448)   | (0.363)    | (0.369)    | (0.071)**       | (0.064)**                | (0.056)   |  |  |
| Catholic 1921                | 0.157   | 0.203      | 0.285      | -0.058          | -0.033                   | -0.036    |  |  |
|                              | (0.196)   | (0.198)    | (0.191)    | (0.040)         | (0.040)                  | (0.039)   |  |  |
|                              | (0.192)   | (0.188)    | (0.204)    | (0.062)         | (0.059)                  | (0.062)   |  |  |
| Socialist and Communist 1924 | 1.610   | 1.528      | 1.072      | 0.191           | 0.156                    | 0.099     |  |  |
|                              | (0.310)***                                      | (0.320)*** | (0.262)*** | (0.055)***      | (0.056)***               | (0.049)** |  |  |
|                              | (0.318)***                                      | (0.330)*** | (0.244)*** | (0.027)***      | (0.027)***               | (0.064)   |  |  |
| Catholic 1924                | -0.138  | -0.172     | -0.270     | 0.050           | 0.044                    | 0.071     |  |  |
|                              | (0.247)   | (0.246)    | (0.220)    | (0.047)         | (0.046)                  | (0.044)   |  |  |
|                              | (0.243)   | (0.241)    | (0.185)    | (0.047)         | (0.050)                  | (0.053)   |  |  |
| Observations                 | 5490  | 5490       | 5490       | 5698            | 5698                     | 5698      |  |  |
| R-squared                    | 0.189   | 0.202      | 0.166      | 0.128           | 0.146                    | 0.116     |  |  |
| Controls                     | No  | Yes        | Yes        | No              | Yes                      | Yes       |  |  |
| Fixed Effect                 | Province  | Province   | Region     | Province        | Province                 | Region    |  |  |

Note: Robust standard errors are displayed in parentheses in each second row; standard errors corrected for spatial correlation are displayed in parentheses in each third row. *Left-wing citizens under surveillance*: Number of left-wing (communist, socialist and anti-fascist) citizens under surveillance over 1921 population (x1000). Parties in the pre-fascist period have been lumped using as Ref. Leoni (2001); in this table only the vote shares has not been multiplied by 100. See Appendix A for more details on these aggregations. Other regressors include: Share of illiterate 1921, population density 1921, latitude, longitude, maximum altitude in the municipality, elevation city hall, and Province or Region Fixed Effects.

\*\*\*Significance level: <0.01.

\*\*Significance level: <0.05.

\*Significance level: <0.1.

Centrale).<sup>15</sup> The original source reports the political affiliation, the municipality of residence and the year in which the citizen became under surveillance. We construct the share of left-wing citizens under surveillance as the sum of communist, socialist, or anti-fascism citizens under surveillance between 1925 and 1942 over the 1921 population ( $\times$ 1000). As shown in Table 1, this variable correlates positively with communist and socialist prewar vote shares while it is uncorrelated with the prewar Catholic vote.

Second, from ANPI (National Association of Italian Partisans) we collected a list of 3117 partisans with a short biography. This database is only a sample of all partisans, but it was built to represent the political diversity of the resistance movement and includes almost all of the national and local leaders of the movement. From this source, we create two dummy variables, for whether at least a partisan in our sample was born in the municipality, and for whether he/she was linked to a left-wing party in the postwar period. These variables thus capture the strength of local opposition to the fascist regime, rather than the presence of brigades in the area even if it is positively correlated with it. As shown in Table 1, also this measure of local opposition to fascism correlates positively with communist and socialist prewar vote shares while it does not correlate with the Catholic vote.

## 3.2. War-related variables

To explore the mechanisms that could affect political outcomes, we collected several variables related to the Nazi occupation and the civil war. First, using Baldissara (2000), we coded the presence of partisan brigades in the municipal area. We distinguish between left-wing brigades and other partisan brigades, but the results are robust to a finer disaggregation between different partisan groups.

Second, we code episodes of violence by the fascists or by the Germans. We define a dummy variable for municipalities with at least one episode of violence, and distinguish between episodes where the majority of victims were civilians or partisans. The source is the "Atlas of Nazi and fascist massacres" (ANPI-INSMLI, 2016).

Third, we code the location of two German divisions that were particularly violent and committed several crimes against civilians: the 16th SS-Panzer-Grenadier-Division "Reichsfuhrer-SS" and the "Hermann Goering" division (Gentile, 2015). Their exceptional violence can be seen in Appendix Figure C.1 in Appendix C. Based on the German archives consulted by Gentile (2015), we have

<sup>&</sup>lt;sup>15</sup> We thank Francesco Barilari for helping collect these data.

records on the precise location of these troops throughout the Italian civil war. We construct a dummy variable that equals 1 for municipalities within 15 km from the location of either one of these divisions.

Fourth, we collected data on deportations to Germany. During WWII, about 40,000 Italians were deported to Germany (about 7500 were Jewish). Thanks to Mantelli and Tranfaglia (2013), we have data on the number of political deportations by the municipality of capture (about 6500 individuals).

Finally, we code the duration of the German occupation in each province, from the detailed maps in Baldissara (2000). We were able to reconstruct the duration of the German occupation at the municipal level only near the Gothic and the Gustav lines, where the battlefront was more clearly defined. Throughout the rest of Italy, data on the duration of the German occupation are at the province level only.<sup>16</sup>

## 3.3. Other city characteristics

From the Census (ISTAT) we collected data on total resident population, population density, and literacy rates for the years 1911, 1921, and then 1951, 1961, 1971, 1981, and 1991. As an indicator of economic development, from the 1951 Census, we collected data on the number of industrial plants per capita in each municipality. We also collected data on the elevation at the city hall, and on maximum and minimum elevation in the municipality. Finally, to include appropriate fixed effects, we reconstructed provincial borders at different dates. As a default, we use provinces and regions as defined in 1921, but results are robust to use administrative boundaries defined on the basis of the boundaries at later dates. Thanks to Fontana et al. (2021) we also got data on the number of industrial plants and workers in 1927 (*Censimento Industriale 1927*), the number of agricultural firms and workers, the number of livestock, and surface devoted to agricultural production in 1929 (*Catasto Agrario 1929*). Appendix Table C.2 reports summary statistics for municipalities within a 50 km radius around the Gothic line.

## 4. Empirical strategy

#### 4.1. Prior hypotheses

Did the German occupation and the civil conflict leave a mark on the postwar Italian political system? In particular, did it affect the support enjoyed by extremist political parties? A priori, there are three main reasons to expect a lasting impact, the first two operating directly on citizens' attitudes, and the third one operating on political organizations.

First hypothesis (H1). In the areas under German occupation, the civil war between the fascists and their opponents was both longer and harsher. As suggested by the literature on social identity (Bonomi et al., 2021, Abrams and Hogg, 1998), this in turn could lead to more entrenched and radicalized positions on both sides, reinforcing opposite political identities and shaping attitudes in favor of both the Communists and the extreme Right-wing Parties at the expense of the moderate parties. Therefore, the legacy of political violence should be political polarization.

Second hypothesis (H2). The German occupation was actively opposed by the Italian resistance movement. To suppress it, Nazis often resorted to extreme forms of violence, not only against resistance fighters but also against civilians. Moreover, the extractive nature of the Nazi occupation, especially when contrasted with the Allies' behavior, could affect political attitudes directly. Victory against the foreign oppressor and liberation from the fascist regime could lead Italian voters to identify with the parties that contributed to these outcomes and enjoyed higher status for this reason (Shayo, 2020). This would favor the Communists, who were more involved in the resistance movement and stood up more forcefully against the Nazis. Indeed, the Italian Communist Party capitalized on this channel in the aftermath of WWII, by pitching itself as the true guardian of the legacy of the resistance movement. This effect is likely to be larger in the areas of more intense fighting and of harsher violence, where the memory of the war was accordingly stronger.<sup>17</sup>

Third hypothesis (H3). The German occupation could affect political organizations. Right-wing parties loyal to Mussolini were freer to self-organize in the areas under German occupation. But the presence of active partisan brigades could also matter, since the postwar party system grew out of the resistance movement, and partisan brigades could be exploited to build grassroots organizations, as stressed by Costalli and Ruggeri (2015). Through this channel, a longer German occupation could thus give an advantage to the Communist Party (since its partisan brigades were more active and better organized), as well as the right-wing parties linked to fascism.

<sup>&</sup>lt;sup>16</sup> Appendix Table C.1 reports the correlation matrix of the main variables of interest in the entire sample of the OLS regressions, showing that these variables are only weakly correlated.

<sup>&</sup>lt;sup>17</sup> Note two possible caveats to this argument, that we consider in our empirical analysis. First, despite a much less prominent role, the Catholic movement too participated in the resistance movement. Therefore, we could expect the Catholic Party to also gain votes where it was perceived to be belligerent against the German occupation. Second, some of the Nazi violence was in retaliation for partisan attacks, and the local population may have blamed the partisan movement for this. If so, we could expect a negative correlation between Nazi violence against civilians and the Communist vote in the areas where the left-wing brigades were active.

Our estimation strategy exploits geographic heterogeneity in the duration and nature of the Nazi occupation. We start by looking at the OLS correlations in all of Italy:

$$Y_i = \alpha_0 D U R_i + \alpha_1 V_i + \alpha_2 P B_i + x'_i \beta + \gamma_p + \varepsilon_i, \tag{1}$$

where  $Y_i$  is the vote share of the Communist Party in municipality *i* in the 1946 elections (or in later elections);  $DUR_i$  is the duration of the Nazi occupation (measured in years);  $V_i$  measures the occurrence of violence;  $PB_i$  measures the presence of partisan brigades in the area of the municipality;  $x_i$  is a vector of covariates including our measures of opposition to the fascist regime, electoral outcomes in 1919, 1921, and 1924, illiterate share and population density in 1921 and 1951, altitude, longitude, latitude, and a constant;  $\gamma_p$  are province fixed effects (as defined in 1921);  $\varepsilon_i$  is the random error term, capturing all omitted factors. The parameter  $\alpha_0$  captures the association between the treatment of interest and electoral outcomes. The parameters  $\alpha_1$  and  $\alpha_2$  shed light on possible mechanisms, operating on the supply or demand side respectively.

Despite the inclusion of all these covariates and province fixed effects, some of the omitted factors in  $\varepsilon_i$  might be correlated with both the treatment and political outcomes. This is why, to identify the causal effect of the Nazi occupation, we implement a geographic RDD and compare postwar political outcomes in municipalities just above vs below the Gothic line. As argued in Section 2.2.1, this defensive line can be seen both as continuous and as good as random. To avoid the risk of confounding the effect of the Gothic line with that of pre-existing administrative boundaries, we always control for region fixed effects - as shown in the appendices, results are similar when controlling for province fixed effects (as defined in 1921).<sup>18</sup> This implies that we draw inferences by comparing municipalities within the same region or province that are north vs south of the line. Our identifying assumption is that, after controlling for distance from the line (and for other covariates), being just north or just south of the Gothic line is a random event uncorrelated with other unobservable determinants of political outcomes. This assumption can be indirectly tested and cannot be rejected for several pre-treatment observables. Any difference in political outcomes between municipalities north vs south of the Gothic line can thus be attributed to the difference in the duration of the Nazi occupation. The treatment for being north of the line is a longer exposure to the Nazi occupation and a more intense civil war for about six more months.

Formally, let  $d_i$  be the distance (in km) from the Gothic line, with negative (positive) values identifying towns south (north) of the line, We estimate the following model in the interval  $d_i \in [-\Delta, +\Delta]$ :

$$Y_i^{post} = \sum_{k=0}^p (\delta_k d_i^k) + T_i \sum_{k=0}^p (\alpha_k d_i^k) + x_i' \beta + \eta_i,$$
(2)

where  $Y_i^{post}$  is any post-treatment outcome;  $T_i$  is a dummy identifying whether municipality *i* is north or south of the Gothic line;  $x_i$  is a vector of (time-invariant and pre-treatment) covariates that include prewar vote shares and region or province fixed effects; *p* captures the order of the (spline) polynomial control function;  $\eta_i$  is the error term. The bandwidth  $\Delta$  is either a discretionary threshold (50 or 100 km) or an optimal bandwidth as in Calonico et al. (2017). The parameter  $\alpha_0$  identifies the treatment effect of interest.<sup>19</sup> As suggested in Cattaneo and Titiunik (2022), we report MSE optimal conventional point estimates while inference considers robust-bias adjusted procedures. We report robust-bias adjusted 95% confidence intervals and p-values in Tables, while Figures report robust-bias adjusted 95% confidence intervals (note that confidence intervals are not necessarily symmetric around the point estimates). To avoid comparing municipalities close to the line but located far from each other along the east-west dimension, we perform robustness checks by including latitude and longitude or fixed effects for 25 km intervals of the Gothic line in the vector  $x_i$  (Dell 2010).

RDD allows us to estimate the causal effect of the Nazi occupation on postwar elections but does not uniquely identify a particular mechanism. To discriminate between alternative hypotheses, we need additional (and stricter) assumptions. First, note that if we replace the outcome variable in Eq. (2) with a set of pre-treatment variables  $Y_i^{pre}$ , we can run balance tests that should normally deliver zero effects for the RDD to be valid. If we instead replace the outcome variable with "contextual" factors that happen to be potentially present in the context of Nazi occupation, we can test for different potential mechanisms. Assume, for example, that we find a significant discontinuity in contextual factors that are likely to affect voters' attitudes, but not party organizations. To interpret this as evidence supporting H2, we also need to assume that there are no unobserved variables that impact voters' attitudes and have a discontinuity at the Gothic line. The same holds for contextual factors that are likely to affect party organizations, but not voters' attitudes. The variables  $V_i$  (occurrence of violence) and  $PB_i$  (presence of brigades) are interesting contextual factors, as the former is likely to impact collective memory and the latter to shape local organizations in the postwar period.

Given the number of hypotheses tested, as suggested in Eggers et al. (2015) and de la Cuesta and Imai (2016), we verify whether some rejections of the null hypothesis should be considered as false rejections. In Appendix B.1 we consider Westfall and Young (1993) technique.

<sup>&</sup>lt;sup>18</sup> In the 100 km neighborhood of the Gothic line there are 742 municipalities (in our sample), belonging to 5 regions and 25 provinces. Several of these provinces lie entirely north or south of the Gothic line, however. The Gothic line cuts through four provinces (Bologna, Firenze, Lucca and Ravenna) that belong to two different regions (Tuscany and Emilia-Romagna).

<sup>&</sup>lt;sup>19</sup> The estimated coefficient  $\hat{a}_0$  from Eq. (2) is not directly comparable with  $\hat{a}_0$  from Eq. (1), because they are measured in different metrics and because the former is a local effect. Indeed,  $a_0$  in (2) is the causal effect of six more months of Nazi occupation in a period associated with intense violence (experienced or threatened). For the sake of comparison between the OLS and RDD coefficients, one should keep in mind that, if we use  $DUR_i$  as the outcome variable of the RDD estimations defined in Eq. (2), we find point estimates in the range between 0.463 and 0.563 (depending on the estimation method; all statistically different from zero at the 1% significance level), corresponding to half a year as expected.

In principle, similar estimates could be done around the Gustav line, where the Germans also stood for several months. A number of reasons discouraged us from doing so, however. First, the battle for the Gustav line occurred much earlier in time, when the resistance movement was not yet organized (within 50 km there are only 24 municipalities with at least one partisan brigade, all north of the Gustav line). The civil war did not reach those areas, and the civilian population did not suffer as much damage and casualties as in Central Italy. This also reflected German orders, which became much more intolerant and aggressive against civilians only at a later stage (see Gentile, 2015). Furthermore, prewar voting outcomes are missing for a large number of municipalities around the Gustav line (56% of the municipalities within 50 km).

### 5. OLS estimates

In this section, we estimate Eq. (1) by OLS. In Table 2, the dependent variable is the Communist Party vote share in 1946. We report both robust standard errors (second row) and standard errors corrected for spatial correlation (third row) as in Conley (2008), following Hsiang (2010). All columns include province fixed effects. We first introduce, one by one, the proxies for  $DUR_i$ ,  $V_i$  and  $PB_i$  from Eq. (1). In column (1) the Communist vote share is positively associated with the duration of Nazi occupation (in years). In column (2) it is positively associated with the occurrence of violence during the war (measured both by having at least one episode of violence and being within 15 km from violent Nazi divisions). In column (3) we consider two indicators for the presence of partisan brigades (left-wing or any other brigade). The presence of partisan brigades is negatively correlated with the Communist vote share, but this result is not very robust to the inclusion of control variables in subsequent columns. Finally, in column (4) we include all the previous variables and the estimated coefficients remain quite stable.

These results remain stable when we control for a wide range of demographic and geographic characteristics of the municipalities (column 5). In column (6) we also control for the outcomes of prewar elections; some coefficients drop in magnitude, and interestingly the estimated coefficient on the presence of partisan brigades is no longer statistically significant. Finally, in column (7) we include our proxies for local opposition to the fascist regime, namely the dummy variables for the birthplace of a partisan (any partisan and a left-wing partisan) and the share of citizens under surveillance for political reasons (either because left-wing or any other political affiliation). All these variables, except the last one, are highly positively correlated with the postwar communist vote share, but the estimated coefficients on the variables of interest (the duration of the Nazi occupation, the indicators of violence and for the presence of partisan brigades) are similar and remain statistically significant with robust confidence intervals.

According to column (7), half a year of additional Nazi occupation is associated with an increase in the Communist vote share of about 1.7 percentage points (i.e., about 11.3% of the average vote share in the whole sample of 5559 municipalities with no missing values). The occurrence of at least one episode of violence is associated with an increase in the communist vote share of 0.7 percentage points (i.e., about 4.4%). Being close to the two violent Nazi divisions is associated with an increase in the communist vote share of 1.6 percentage points (i.e., about 10.9%).

The association between the communist votes and the presence of left-wing partisan brigades is not statistically different from zero, while the presence of other brigades is negatively associated with the communist votes.

Results in Appendix Table C.4, column (2), show that the correlation between the communist vote and days of occupation is non-linear. As the duration of the occupation increases, the positive relationship with the postwar electoral results is stronger. A municipality with 700 (or more) days of occupation has, on average, 11.2% higher vote share for the Communists in 1946 than one with roughly 150 days. Moreover, all results are qualitatively similar or stronger if we restrict the sample to regions where the occupation lasted more than one year for at least one municipality (column 3).

Overall, these correlations are suggestive that demand, rather than supply side factors, might explain the support for communism in the aftermath of the civil war. The Communist Party gained votes in municipalities where the Nazi occupation lasted longer and was more violent, and where citizens were more willing to embrace the cause of radical opposition to the fascist regime, as captured by the dummy variable for being the birthplace of a partisan or a left-wing partisan and by the share of left-wing citizens under surveillance. On the other hand, the actual presence of partisan brigades connected with the Communist Party is not robustly correlated with the communist vote share, as the estimated coefficient is no longer significant (and also falls close to zero in size) as soon as we introduce the 1919–1924 electoral results as additional control variables.

These estimates cannot be taken as entirely causal, however. Some (though not all) of the German violence was concentrated in areas where partisan troops or local hostility were stronger, so there could be some omitted variables. Although Holland (2008) and Gentile (2015) stress that the location of élite troops was generally driven by military or logistical concerns (the war against the Allies, or the need to rest and train new conscripts), we cannot rule out that they were sent to areas with stauncher Italian opposition. Moreover, in the more demanding specifications of columns (6) and (7), most or all variables of interest lose significance when standard errors are corrected for spatial correlation. This is not too surprising, given that we also control for province fixed effects besides many other regressors, but it indicates that these correlations are not precisely estimated.<sup>20</sup> That is why we now turn to a causal test of these findings through geographic RDD.

## 6. RDD causal effects

This section compares outcomes in municipalities just above and just below the Gothic line. Throughout we report five sets of RDD estimates. In the first four regressions, the control function in the running variable (distance from the line) is expressed as a

<sup>&</sup>lt;sup>20</sup> We have also estimated a more conservative specification with all variables aggregated at the province level (there are 70 provinces in our sample). The estimates and patterns of significance are not very different from those reported here with spatially adjusted standard errors and are available upon request.

#### Table 2

OLS estimates - baseline.

|                                  | Dependent variable: Communist 1946 |            |            |            |            |            |            |
|----------------------------------|------------------------------------|------------|------------|------------|------------|------------|------------|
|                                  | (1)                                | (2)        | (3)        | (4)        | (5)        | (6)        | (7)        |
| Years of occupation              | 4.574                              |            |            | 6.107      | 8.023      | 3.837      | 3.520      |
|                                  | (1.913)**                          |            |            | (1.962)*** | (1.967)*** | (1.770)**  | (1.752)**  |
|                                  | (3.448)                            |            |            | (3.513)*   | (3.720)**  | (3.168)    | (3.395)    |
| At least one episode of violence |                                    | 1.332      |            | 1.601      | 1.619      | 0.965      | 0.668      |
|                                  |                                    | (0.351)*** |            | (0.351)*** | (0.348)*** | (0.309)*** | (0.317)**  |
|                                  |                                    | (0.442)*** |            | (0.394)*** | (0.386)*** | (0.478)**  | (0.477)    |
| Within 15 km of violent Nazi     |                                    | 2.813      |            | 2.897      | 2.276      | 1.817      | 1.643      |
| division                         |                                    | (0.654)*** |            | (0.651)*** | (0.649)*** | (0.572)*** | (0.585)*** |
|                                  |                                    | (1.866)    |            | (1.929)    | (1.959)    | (1.462)    | (1.509)    |
| Presence of left-wing partisan   |                                    |            | -2.267     | -2.426     | -1.125     | -0.014     | -0.040     |
| brigades                         |                                    |            | (0.379)*** | (0.377)*** | (0.380)*** | (0.342)    | (0.347)    |
|                                  |                                    |            | (1.322)*   | (1.288)*   | (1.065)    | (0.676)    | (0.633)    |
| Presence of other brigades       |                                    |            | -3.380     | -3.427     | -2.048     | -0.666     | -0.899     |
| than left-wing                   |                                    |            | (0.466)*** | (0.465)*** | (0.462)*** | (0.422)    | (0.422)**  |
|                                  |                                    |            | (1.256)*** | (1.233)*** | (1.116)*   | (0.863)    | (0.797)    |
| Birthplace of a partisan         |                                    |            |            |            |            |            | 1.618      |
|                                  |                                    |            |            |            |            |            | (0.389)*** |
|                                  |                                    |            |            |            |            |            | (0.178)*** |
| Birthplace of a left-wing        |                                    |            |            |            |            |            | 2.282      |
| partisan                         |                                    |            |            |            |            |            | (0.909)**  |
|                                  |                                    |            |            |            |            |            | (0.939)**  |
| Left-wing citizens under         |                                    |            |            |            |            |            | 0.943      |
| surveillance 1925–1942           |                                    |            |            |            |            |            | (0.118)*** |
|                                  |                                    |            |            |            |            |            | (0.202)*** |
| Other citizens under             |                                    |            |            |            |            |            | 0.324      |
| surveillance 1925-1942           |                                    |            |            |            |            |            | (0.523)    |
|                                  |                                    |            |            |            |            |            | (0.489)    |
| Observations                     | 5550                               | 5550       | 5550       | 5550       | 5550       | 5550       | 5257       |
| R-squared                        | 0.512                              | 0.515      | 0.517      | 0 522      | 0 541      | 0.636      | 0.646      |
| Demo/Geo Controls                | No                                 | No.        | No         | No         | Vec        | Vec        | Vec        |
| 1010 1024 Elections              | No                                 | No         | No         | No         | No         | Voc        | Voc        |
| Fixed Effect                     | Browince                           | Browince   | Browince   | Drovince   | Province   | Province   | Province   |
| FIACU Effect                     | FIOVINCE                           | FIOVINCE   | FIOVINCE   | FIOVINCE   | FIOVINCE   | FIOVINCE   | riovince   |

Note: Robust standard errors are displayed in parentheses in each second row; standard errors corrected for spatial correlation are displayed in parentheses in each third row. *Communist 1946*: Vote share of the Italian Communist Party (PCI) in the 1946 election. *Years of occupation*: years of occupation measured at province level (see Appendix for exceptions). *At least one violence episode*: Dummy equal to 1 if records report at least one episode of violence in the period considered. *Within 15 km of violent Nazi divisions*: Dummy equal to 1 if the minimum distance of the municipality from one occupied by either RFSS or HG Division is less than 15 km (using city hall as reference point). *Presence of partisan brigades*: Dummy equal to 1 if the area of the municipality intersects the area of operation of the partisan brigade (left-wing or other). *Birthplace of a partisan*: Dummy equal to 1 if a partisan (or a left-wing partisan) is born in the municipality. *Citizens under surveillance*: Number of citizens (left-wing or other political affiliations) under surveillance over 1921 population (x1000). Other regressors include: Share of illiterate 1921 and 1951, population density 1921 and 1951, latitude, longitude, maximum altitude in the municipality, elevation city hall, vote shares of Communist-Socialist and Catholic in 1919, 1921, and 1924 and Province Fixed Effects.

\*\*\*Significance level: <0.01.

\*\*Significance level: <0.05.

\*Significance level: <0.1.

first and second-degree spline polynomial, and the sample is restricted to municipalities within 50 km and 100 km from the line.<sup>21</sup> Following Gelman and Imbens (2019), we do not report polynomial specifications of higher degrees. The fifth specification is a local linear regression with optimal bandwidth, estimated as in Calonico et al. (2017). As noted above, throughout we include region fixed effects and prewar vote shares, but results are very similar or stronger without these conditioning variables or considering a different set of fixed effects (province fixed effects or a 25 km grid).

### 6.1. Balance tests

We start by reporting balance tests for pre-treatment observables  $(Y_i^{pre})$ . Results are shown in Appendix Table C.5. Only one coefficient is statistically different from zero (population density in 1921, in only one specification and at the 10% significance level); therefore, no consistent pattern emerges. Note that almost all of these variables have highly significant estimated coefficients in the OLS regressions in Table 2 above, suggesting that they are relevant correlates of political outcomes.

Appendix Table C.6 considers prewar vote shares (Panel A), fascist presence variables (Panel B), and proxies of opposition to fascism after the last free elections and before the civil war (Panel C). Communist and socialist vote shares seem to be higher above

<sup>&</sup>lt;sup>21</sup> Results in the main text will always present all the specifications while results in Appendix will present only results within 50 km and local RDD. All the results are robust to also looking at 100 km and available upon request.

the line, but very few estimated coefficients are statistically significant. The most worrying coefficient may be the local RDD for Socialist 1919: however, the algorithm for optimal bandwidth selects a very wide interval (roughly 113 km), making comparisons with smaller bandwidths difficult.<sup>22</sup> Fascist presence looks balanced above and below the Gothic line. The few estimates statistically significant are sensitive to the specification and cutoffs considered both in terms of magnitude and sign. Given the large number of tests run, we could have some false rejections of the null that all prewar variables are balanced.

This conclusion is also suggested by the placebo tests discussed below, where no systematic unbalance in prewar vote shares is visible. In any case, in what follows when reporting RDD results on the postwar vote shares we always condition on prewar vote shares.

The estimates in Panel C are also reassuring on the balance of attitudes during the fascist period. Here the outcome variables are our proxies of opposition to the regime, namely the shares of citizens under surveillance for political reasons and the dummy variables for the birthplace of partisans. We can never reject that these two variables are balanced around the Gothic line. Note that partisans were disproportionately recruited from the left, and their birthplace is strongly correlated with the postwar communist vote share (see Table 2 above) and with prewar vote shares (Table 1). Likewise, the share of citizens under surveillance correlates positively with communist and socialist vote shares both in the postwar period (as shown in Table 2 above) and in the prewar period (as shown in Table 1).<sup>23</sup>

#### 6.2. Election outcomes and persistence

We start by illustrating graphically the difference between communist vs Catholic votes in 1946 around the Gothic line. In Appendix Figure C.2 we plot the difference between the communist and Catholic vote shares in 1946. Darker shades correspond to a larger communist vs Catholic vote (black indicates a missing observation). Overall, the figure suggests that a longer German occupation is associated with left-wing radicalism, compared to what happens below the line.

The formal RDD tests reported in Table 3 confirm this visual impression. Electoral outcomes refer to the 1946 election for the Constitutional Assembly and the 1948 national election. In 1946 the Communist Party ran alone, while in 1948 it merged with the Socialist Party. For the sake of comparison, we also report the sum of socialist and communist votes in 1946. As noted above, we always include region fixed effects and the vote shares of Communists and Socialists, and of the Catholics, in 1919, 1921 and 1924.

The results are very stark. For all estimation methods and for all indicators, the average vote share of the Communist Party (or of Communists and Socialists together) is significantly larger above the Gothic line. The size of the RDD coefficient is also large, generally 6–10 percentage points, depending on the estimation method and the outcome measure. Within 50 km of the Gothic line, the Communist Party obtained on average about 36.8% of the votes, thus the effect of being above the line corresponds to around 20% of the average vote share. Taking into account that being just north vs just south of the line corresponds to an additional half year of occupation, if the effect was linear in time, one more year of Nazi occupation would increase the vote share of the extreme left by 40%. This is approximately four times as much as the effect estimated in the above OLS regressions. Note that the effect of being north of the line is stronger on the communist votes alone than on the communist and socialist votes combined, suggesting that the effect is capturing a shift from the Socialist Party to the extreme left, consistently with the hypothesis that longer exposure to the Nazi occupation made some left-wing voters more extreme in their views.

The larger communist vote is also at the expense of the moderate Catholic Party. According to the estimates, the Catholic vote share is systematically lower above the Gothic line, particularly in the 1948 election when the effect of being north of the line varies between -4 and -8 percentage points (4 percentage points correspond to about 7% of the Catholic vote share within 50 km of the Gothic line). The vote share for the extreme right is balanced around the Gothic line in both 1946 and 1948. Note that the estimated gain in the communist vote is generally larger than the Catholic loss, implying that other parties (the Socialist Party or other centrist parties) lost votes to the Communists north of the line.<sup>24</sup> Thus, overall the longer Nazi occupation and civil war induced a shift from the center and from the moderate left to the extreme left in the immediate postwar elections, with no corresponding shift to the extreme right.

Replacing region with province fixed effects has negligible effects on the estimates (Appendix Table C.9). Estimates not conditional on postwar vote shares are qualitatively similar or have larger estimated coefficients (see Appendix Table C.10).<sup>25</sup> Appendix Figure C.3 illustrates graphically the main polynomial regressions reported in Table 3, using a second order polynomial to fit the data. Each dot represents the average vote share in municipalities within 10 km intervals north/south of the Gothic line. A discontinuity is visible, and it is particularly strong for the communist vote.

These political effects lasted until the end of the First Republic in the early 1990s. Fig. 3 illustrates the pattern of RDD coefficients and confidence intervals for all elections between 1946 and 1987, estimated by local linear regressions conditioning on prewar election outcomes and region fixed effects (the last column in Table 3). As shown in Appendix Figure C.4, results are very similar

 $<sup>^{22}</sup>$  Indeed, the stark difference in the point estimates of Socialist 1919 with the first-order or with the second-order polynomial already shows the sensitivity of the RDD results for this variable as we move away from the threshold, cautioning against giving too much emphasis to estimates in large geographic intervals.

<sup>&</sup>lt;sup>23</sup> As discussed below, we also do not find any significant unbalance in the presence of partisan brigades.

<sup>&</sup>lt;sup>24</sup> The vote share of the small (centrist) Republican Party is also lower by about 2–3 percentage points north of the line, while there is no significant discontinuity in voters' turnout (results available upon request).

<sup>&</sup>lt;sup>25</sup> Similarly, if we add as regressors all the control variables included in Table 2 (share of illiterate 1921 and 1951, population density 1921 and 1951, latitude, longitude, maximum altitude in the municipality, elevation city hall), in addition to region fixed effects and prewar vote shares, the estimates do not change (results available upon request).

| Table 3    |         |   |           |          |
|------------|---------|---|-----------|----------|
| RDD causal | effects | _ | electoral | outcomes |

|                              | Polynomial reg | Local RDD  |              |           |                     |
|------------------------------|----------------|------------|--------------|-----------|---------------------|
|                              | First order    |            | Second order |           |                     |
|                              | 50 km          | 100 km     | 50 km        | 100 km    |                     |
| Communist 1946               | 8.162          | 7.376      | 10.442       | 6.011     | 8.567               |
|                              | (2.328)***     | (2.021)*** | (2.894)***   | (2.612)** | [4.891;14.272]***   |
|                              | 275            | 742        | 275          | 742       | 264                 |
| Communist and Socialist 1946 | 6.367          | 10.965     | 5.698        | 6.680     | 5.309               |
|                              | (2.477)**      | (2.287)*** | (3.143)*     | (2.995)** | [0.622;10.142]**    |
|                              | 275            | 742        | 275          | 742       | 315                 |
| Communist and Socialist 1948 | 7.126          | 11.585     | 8.997        | 6.683     | 7.027               |
|                              | (2.609)***     | (2.274)*** | (3.276)***   | (2.962)** | [3.360;12.843]***   |
|                              | 275            | 742        | 275          | 742       | 220                 |
| Catholic 1946                | -0.610         | -1.548     | -3.999       | -0.601    | -0.848              |
|                              | (1.910)        | (1.557)    | (2.520)      | (2.085)   | [-5.097;2.863]      |
|                              | 275            | 742        | 275          | 742       | 382                 |
| Catholic 1948                | -3.840         | -7.152     | -8.178       | -3.392    | -5.870              |
|                              | (2.174)*       | (1.863)*** | (2.921)***   | (2.381)   | [-11.564;-2.600]*** |
|                              | 275            | 742        | 275          | 742       | 191                 |
| Right-Wing 1946              | -0.110         | -0.323     | 1.221        | 0.255     | 0.865               |
|                              | (0.788)        | (0.652)    | (1.277)      | (0.859)   | [0.010;2.033]**     |
|                              | 93             | 262        | 93           | 262       | 37                  |
| Right-Wing 1948              | -0.363         | -0.395     | -0.158       | -0.454    | -0.217              |
|                              | (0.248)        | (0.198)**  | (0.305)      | (0.265)*  | [-0.599;0.134]      |
|                              | 224            | 599        | 224          | 599       | 263                 |

Note: RDD coefficients of being (just) above vs being (just) below the Gothic line. Robust standard errors are displayed in parentheses for polynomial regressions. Robust-bias adjusted 95% confidence intervals are displayed in parentheses for local RDD. Number of observations reported in each third row. Regressions include Region Fixed Effects. *Communist* corresponds to the vote share of the Italian Communist Party (PCI); *Communist and Socialist* corresponds to the Popular Front (FP) in 1948, and for comparison we compute also *Communist and Socialist* in 1946 as Italian Communist Party (PCI) + Italian Socialist Party (PSI); *Catholic* corresponds to the Christian Democrats (DC); *Right-Wing* corresponds to Movimento Sociale Italiano (MSI) plus smaller parties supporting monarchy. Estimates are conditional on the 1919, 1921, and 1924 vote shares of *Catholic* and *Communist* and *Socialist*.

\*\*\*Significance level: <0.01.

\*\*Significance level: <0.05.

\*Significance level: <0.1.

when conditioning on province (rather than region) fixed effects. The left-wing parties retain a gain above the Gothic line, that shrinks from about 9 to 5 percentage points in the late 1980s and remains statistically different from zero for several decades. The Catholic Party bears a loss of votes of 4–5 percentage points, also declining slightly in absolute value and statistically significant throughout much of the period. The extreme right-wing parties also lose votes above the line, but only from the 1950s onward, and this effect too is quite persistent. Overall, the political effects of being exposed to a longer Nazi occupation north of the Gothic line are very large and persistent.

Additional robustness checks. In Appendix B we report various robustness checks. Voting outcomes exhibit some patterns in the east-west direction. We thus want to be sure that the RDD estimates only reflect the impact of being north vs south of the line, without being contaminated by other geographic patterns in the data. For this purpose, we perform a number of robustness checks. First, we estimate the same regressions with a first and second-degree spline polynomial in distance that also includes as regressors a first and second-degree polynomial in latitude and longitude, as well as the interaction of latitude and longitude and the same interaction squared. All results remain very similar, as shown in Appendix Table C.11. Second, we split the Gothic line in 25 km intervals and we test our hypothesis including fixed effects for each interval (here we omit the region fixed effects). Appendix Table C.12 displays the results. All estimates are robust in terms of significance and magnitude.

Appendix Figure C.5 reports placebo tests for the main variables of interest to test whether our results might be attributed to random chance rather than a true causal effect. We shifted the location of the Gothic line north or south of its true position. Estimation is by local linear regression as in the last column of Table 3. The results indicate a clear discontinuity in the estimated coefficient at the true location of the Gothic line, but not at the fake discontinuities. We also estimated the same placebo tests on prewar electoral outcomes. Here no clear pattern is evident, and the true location of the Gothic line generally does not stand out relative to the other position – see Appendix Figure C.6. This again corroborates the conclusion that no structural unbalance of pre-treatment political attitudes is evident.

The main results are also robust to the method of dealing with missing observations. Appendix Table C.13 restricts the sample by only including municipalities for which we have data on all three prewar elections (thus avoiding any imputation), and the results remain very similar.

Finally, there is generally no evidence of amplification effects, meaning that the treatment effect of being north of the line is homogeneous across municipalities, irrespective of their prewar vote share, whether there were more citizens under surveillance



Fig. 3. Long-Term Persistence - RDD - Electoral Outcomes.

Note: Coefficients and 95% robust-bias adjusted confidence intervals, estimated by local linear regressions as in the last column of Table 3, for all national elections from 1946 to 1987 and controlling for prewar electoral results and Region Fixed Effects. Data for the Communist Party are missing in 1948 as it ran with the Socialist Party.

or whether they gave birth to a partisan (results available upon request). This too supports our identification strategy, because it suggests that the results do not reflect pre-existing trends.

Overall, these robustness checks confirm that the positive effect on the communist vote share is very robust, while the inference that the increase in the communist vote is only at the expense of the Catholic vote (rather than also at the expense of the Socialists or of other moderate parties) is more sensitive to the sample and to the estimation method.

## 6.3. Mechanisms and contextual factors

How could the prolonged German occupation and associated civil war have such important political effects? We now address this question, reporting the RDD estimates for alternative contextual factors as outcomes.

*Partisan brigades.* As discussed above, partisan brigades were disproportionately associated with the Communist Party. This might give an advantage to the Communist Party, who could exploit their grassroots network to build local party organizations. The Nazi occupation might have enhanced this advantage because partisan brigades remained operative for longer north of the line.

We have already seen that the OLS regressions do not support this argument, since the presence of brigades is not correlated with election outcomes as soon as we control for past election results. More importantly, similar negative results hold when comparing outcomes above and below the Gothic line. Table 4 considers as a proxy of partisan activity around the Gothic line the presence of partisan brigades (left-wing or other).<sup>26</sup> All of these outcomes are balanced around the Gothic line, except for the presence of non left-wing brigades, which seems higher south of the line. Similarly, as shown in Appendix C, municipalities that were birthplaces of a partisan are balanced around the Gothic line. These results are also apparent from Appendix Figures C.7 and C.8.

Next, we ask whether the presence of active brigades amplified the effect of a longer Nazi occupation in favor of the Communist Party, distinguishing between left-wing and other (mainly Catholic) brigades. There are two reasons for asking this question. First, if the Nazi occupation strengthened grassroots organizations of the Communist Party through the resistance movement, this effect should be stronger where left-wing brigades were active. Second, whereas the Communist Party was generally associated with the resistance movement, this was not true for the Catholic Party, whose involvement with partisan activities was more haphazard. Where Catholic brigades were active, however, local residents more easily associated the resistance movement with the Catholic Party. If indeed the mechanism behind our findings is that longer exposure to conflict induces voters to identify with and reward

<sup>&</sup>lt;sup>26</sup> We obtain the same results (available upon request) using the closest distance to partisan brigades (left-wing or other).

#### Table 4

RDD contextual factors - presence of partisan brigades.

|                                | Polynomial r | Local RDD |              |           |                    |
|--------------------------------|--------------|-----------|--------------|-----------|--------------------|
|                                | First order  |           | Second order | 1         |                    |
|                                | 50 km        | 100 km    | 50 km        | 100 km    |                    |
| Presence of partisan brigades  | -0.147       | 0.103     | -0.311       | -0.120    | -0.220             |
|                                | (0.121)      | (0.096)   | (0.186)*     | (0.128)   | [-0.562;-0.008]**  |
|                                | 275          | 742       | 275          | 742       | 260                |
| Presence of left-wing partisan | 0.004        | 0.165     | -0.169       | 0.054     | -0.074             |
| brigades                       | (0.127)      | (0.098)*  | (0.188)      | (0.132)   | [-0.435;0.160]     |
|                                | 275          | 742       | 275          | 742       | 241                |
| Presence of other partisan     | -0.152       | -0.063    | -0.142       | -0.173    | -0.146             |
| brigades                       | (0.069)**    | (0.052)   | (0.067)**    | (0.070)** | [-0.293;-0.050]*** |
|                                | 275          | 742       | 275          | 742       | 378                |

Note: RDD coefficients of being (just) above vs being (just) below the Gothic line. Robust standard errors are displayed in parentheses for polynomial regressions. Robust-bias adjusted 95% confidence intervals are displayed in parentheses for local RDD. Number of observations reported in each third row. Regressions include Region Fixed Effects. *Presence of partisan brigades*: Dummy equal to 1 if the area of the municipality intersects the area of operation of the partisan brigade (left-wing or other). See Appendix A for a description of left-wing vs other partisan brigades, and for data sources.

\*\*\*Significance level: <0.01.

\*\*Significance level: <0.05.

\*Significance level: <0.1.

belligerent parties, we should observe the Catholic Party not lose votes (or gain votes) above the Gothic line if Catholic brigades were active in that area. This positive association between active brigades and vote shares above the line is not necessarily to be expected for the Communist Party, which was generally perceived to be the main force behind the resistance movement irrespective of where its brigades were present.<sup>27</sup>

This is indeed what we find in Table 5. First of all, the estimated coefficient of the interaction between the presence of a left-wing brigade and being north of the line is insignificant when the outcome is the communist vote share. Thus, the presence of left-wing partisan brigades had no impact on the effect of a longer Nazi occupation on the vote shares of the Communists. This finding is inconsistent with the idea that a longer Nazi occupation favored the Communist Party because it exploited the partisan brigades to build grassroots local organizations.

Second, the presence of other brigades (which for the most part were Catholic) is associated with a significantly greater vote share of the Catholic Party north of the line (and a lower but insignificant vote share of the Communist Party).<sup>28</sup> Given the small sample size of the areas with non left-wing brigades and the volatility of the heterogeneity results, we do not want to overemphasize these findings. Nevertheless, they are consistent with the idea that voters reward the winning factions when they are perceived as belligerent and contributing to the victory, irrespective of whether or not they are extremist. In practice, however, this mechanism benefits extremist parties on the winning side, because they have a comparative advantage in organizing conflict, compared to more moderate parties.

*Violence.* Finally, we ask whether Nazi violence was higher north of the line. The recorded episodes only capture some of the violence actually borne by civilians. In particular, forced labor, evacuations of villages, and deportations are not included in our classification of episodes of violence. These other forms of violence were probably more diffuse north of the line, where the occupation lasted longer. Even where the violence did not actually occur, the threat of being hurt and the stress of the foreign occupation lasted longer north of the line, and this too could be reflected in political attitudes.

To capture at least some of these other forms of violence, in Panel A of Table 6 the outcome refers to the number of deported individuals arrested in the municipality. The estimated coefficient is almost always positive and, even if not always significant, it suggests that there were more deportations north of the line.

Table 6 reports also RDD estimates for the occurrence of at least one episode of German or fascist violence in the municipality, disaggregated by whether they occurred before or after the end of October 1944, that is, the month when the Allies stopped south of the Gothic line. We get similar results when we distinguish episodes by whether a majority of the victims were partisans or civilians (results available upon request).

Episodes of violence dated after October 1944 are significantly more widespread above the line, as expected, but episodes dated October 1944 or earlier occur more frequently below the line (the Germans also committed several atrocities during their retreat

<sup>&</sup>lt;sup>27</sup> Our assumption here is that, given the collective prior that the Communist Party is more active in fighting the Nazis, a communist brigade does not update the beliefs of the local population about who is fighting, while a Catholic brigade does. Hence, the presence of a communist brigade can be interpreted solely as an organizational factor, but that is not the case for Catholic brigades which could be interpreted as factors affecting both organizations and political attitudes.

<sup>&</sup>lt;sup>28</sup> Results are similar when looking at 100 km from the Gothic line (available upon request). As explained in Appendix A.2, non-left-wing brigades mostly consisted of *Brigate Fiamme Verdi*, a Catholic organization, plus rarely some residual categories. Within 50 km of the Gothic line there are: 110 municipalities with at least one left-wing active brigade, 65 of these municipalities are north of the Gothic line; 20 municipalities with at least one non left-wing active brigade, 9 of these municipalities are north of the Gothic line. Non-left-wing brigades are not present in municipalities within 50 km north of the Gothic line where Right-wing Parties vote shares in 1946 and 1948 are not missing.

#### Journal of Comparative Economics 51 (2023) 723-743

#### Table 5

RDD causal effects by presence of partisan brigades - electoral outcomes.

| Polynomial re | gression - 50 km   |   |   |   |  |  |
|---------------|--|---|---|---|--|--|
| First order   |  |   | Second order  |   |  |  |
| up            | up*left brig.  | up*not left brig.   | up  | up*left brig.   | up*not left brig.  |  |
| 6.500         | 1.662  | 2.540   | 8.988   | 1.345   | 3.050  |  |
| (3.023)**     | (2.815)  | (4.675)   | (3.501)**   | (2.740)   | (4.892)  |  |
| 275           | 275  | 275   | 275   | 275   | 275  |  |
| 10.043        | -5.090   | -1.533  | 9.685   | -5.430  | -2.216   |  |
| (3.289)***    | (2.849)*   | (5.081)   | (3.816)**   | (2.800)*  | (5.159)  |  |
| 275           | 275  | 275   | 275   | 275   | 275  |  |
| 7.819         | -1.574   | 2.092   | 10.112  | -1.942  | 2.442  |  |
| (3.491)**     | (3.128)  | (4.922)   | (3.921)**   | (3.032)   | (5.096)  |  |
| 275           | 275  | 275   | 275   | 275   | 275  |  |
| -2.575        | 1.388  | 9.835   | -5.331  | 1.641   | 9.117  |  |
| (2.700)       | (2.287)  | (3.524)***  | (3.150)*  | (2.257)   | (3.674)**  |  |
| 275           | 275  | 275   | 275   | 275   | 275  |  |
| -3.799        | -0.094   | 3.324   | -7.960  | 0.326   | 2.297  |  |
| (3.024)       | (2.605)  | (4.372)   | (3.571)**   | (2.487)   | (4.551)  |  |
| 275           | 275  | 275   | 275   | 275   | 275  |  |
| -0.657        | 0.649  |   | 0.714   | 0.507   |  |  |
| (0.847)       | (0.269)**  |   | (1.376)   | (0.210)**   |  |  |
| 93            | 93   |   | 93  | 93  |  |  |
| -0.566        | 0.306  |   | -0.365  | 0.295   |  |  |
| (0.318)*      | (0.225)  |   | (0.360)   | (0.225)   |  |  |
| 224           | 224  |   | 224   | 224   |  |  |
|               | Polynomial re   First order   up   6.500   (3.023)**   275   10.043   (3.289)***   275   10.43   (3.491)**   275   -2.575   (2.700)   275   -3.799   (3.024)   275   -0.657   (0.847)   93   -0.566   (0.318)*   224 | Polynomial regression - 50 km   First order   up up*left brig.   6.500 1.662   (3.023)** (2.815)   275 275   10.043 -5.090   (3.289)*** (2.849)*   275 275   7.819 -1.574   (3.491)** (3.128)   275 275   -2.575 1.388   (2.700) (2.287)   275 275   -3.799 -0.094   (3.024) (2.605)   275 275   -0.657 0.649   (0.847) (0.269)**   93 93   -0.566 0.306   (0.318)* (0.225)   224 224 | Polynomial regression - 50 km   First order   up up*left brig. up*not left brig.   6.500 1.662 2.540   (3.023)** (2.815) (4.675)   275 275 275   10.043 -5.090 -1.533   (3.289)*** (2.849)* (5.081)   275 275 275   7.819 -1.574 2.092   (3.491)** (3.128) (4.922)   275 275 275   -2.575 1.388 9.835   (2.700) (2.287) (3.524)***   275 275 275   -3.799 -0.094 3.324   (3.024) (2.605) (4.372)   275 275 275   -0.657 0.649 (0.847)   (0.269)** 93 93   -0.566 0.306 (0.318)*   (0.225) 224 224 | Polynomial regression - 50 km Second order   First order up up*left brig. up*not left brig. up   6.500 1.662 2.540 8.988   (3.023)** (2.815) (4.675) (3.501)**   275 275 275 275   10.043 -5.090 -1.533 9.685   (3.289)*** (2.849)* (5.081) (3.816)**   275 275 275 275   7.819 -1.574 2.092 10.112   (3.491)** (3.128) (4.922) (3.921)**   275 275 275 275   -2.575 1.388 9.835 -5.331   (2.700) (2.287) (3.524)*** (3.150)*   275 275 275 275   -3.799 -0.094 3.324 -7.960   (3.024) (2.605) (4.372) (3.571)**   275 275 275 275   -0.657 0.649 0.714 | Polynomial regression - 50 km   First order Second order   up up*left brig. up not left brig. up up*left brig.   6.500 1.662 2.540 8.988 1.345   (3.023)** (2.815) (4.675) (3.501)** (2.740)   275 275 275 275 275   10.043 -5.090 -1.533 9.685 -5.430   (3.289)*** (2.849)* (5.081) (3.816)** (2.800)*   275 275 275 275 275   7.819 -1.574 2.092 10.112 -1.942   (3.491)** (3.128) (4.922) (3.921)** (3.032)   275 275 275 275 275   -2.575 1.388 9.835 -5.331 1.641   (2.700) (2.287) (3.524)*** (3.150)* (2.257)   275 275 275 275 275 3.24   (3.024) (2.605) (4 |  |

Note: RDD coefficients of being (just) above vs being (just) below the Gothic line (column up) and the interaction between a dummy for the presence of a left-wing/not left brigade and being north of the line. Robust standard errors are displayed in parentheses. Number of observations reported in each third row. Regressions include Region Fixed Effects. *Communist* corresponds to the vote share of the Italian Communist Party (PCI); *Communist and Socialist* corresponds to the Popular Front (FP) in 1948, and for comparison we compute also *Communist and Socialist* in 1946 as Italian Communist Party (PCI) + Italian Socialist Party (PSI); *Catholic* corresponds to the Christian Democrats (DC); *Right-Wing* corresponds to Movimento Social Italiano (MSI) plus smaller parties supporting monarchy. Estimates are conditional on the 1919, 1921, and 1924 vote shares of *Catholic* and *Communist and Socialist*. Not left-wing brigades not present in municipalities within 50 km north of the Gothic line where Right parties vote shares in 1946 and 1948 is not missing.

\*\*\*Significance level: <0.01.

\*\*Significance level: <0.05.

\*Significance level: <0.1.

#### Table 6

RDD contextual factors - episodes of violence.

|  | Polynomial reg     | Local RDD  |              |           |                   |
|--|--------------------|------------|--------------|-----------|-------------------|
|  | First order        |            | Second order |           |                   |
|  | 50 km              | 100 km     | 50 km        | 100 km    |                   |
| Panel A. Number of deported people ar  | rested in the muni | cipality   |              |           |                   |
| Entire period                          | 2.108              | 0.669      | -0.395       | 2.757     | 0.614             |
|  | (1.249)*           | (1.451)    | (2.357)      | (1.345)** | [-1.754;3.872]    |
|  | 275                | 742        | 275          | 742       | 254               |
| Panel B. At least one violence episode |                    |            |              |           |                   |
| Nov. 1944–Aug. 1945                    | 0.262              | 0.299      | 0.198        | 0.249     | 0.258             |
|  | (0.124)**          | (0.082)*** | (0.177)      | (0.125)** | [-0.018;0.461]*   |
|  | 275                | 742        | 275          | 742       | 587               |
| Jan. 1943–Oct. 1944                    | -0.230             | -0.035     | -0.274       | -0.185    | -0.219            |
|  | (0.103)**          | (0.080)    | (0.155)*     | (0.108)*  | [-0.453;-0.041]** |
|  | 275                | 742        | 275          | 742       | 408               |
| Entire period (Jan. 1943–Aug. 1945)    | -0.124             | 0.053      | -0.129       | -0.095    | -0.127            |
|  | (0.079)            | (0.072)    | (0.114)      | (0.085)   | [-0.339;0.043]    |
|  | 275                | 742        | 275          | 742       | 299               |

Note: RDD coefficients of being (just) above vs being (just) below the Gothic line. Robust standard errors are displayed in parentheses for polynomial regressions. Robust-bias adjusted 95% confidence intervals are displayed in parentheses for local RDD. Number of observations reported in each third row. Regressions include Region Fixed Effects. *At least one violence episode*: Dummy equal to 1 if records report at least one episode of violence. January 1943–August 1945 is the entire period for which we have episodes recorded. January 1943–October 1944 (November 1944–August 1945) is the period before (after) the battlefront moved to the Gothic line.

\*\*\*Significance level: <0.01.

\*\*Significance level: <0.05.

\*Significance level: <0.1.

in the summer of 1944). As a result, the overall occurrence of at least one episode is roughly balanced around the Gothic line. However, late-in-the-conflict violence was both more indiscriminate and more politically connotated, since it was associated with a more ruthless phase of the war and with the birth of the Italian fascist action squads. On the whole, the overall evidence on contextual factors seems to corroborate our hypothesis H2 above, rather than H3.

## 7. Survey data

To assess whether the legacy of the Nazi occupation is still detectable, in November–December 2015 we conducted a survey of residents near the Gothic line. Our goal is to explore whether left-wing respondents today have a stronger memory of the civil war, and whether this memory is stronger north of the line, where the civil war lasted longer and was more intense. We interviewed 2525 individuals, with at least 20 years of residence in their current municipality and above 40 years of age. The survey was conducted in 242 municipalities within 50 km from the Gothic line (137 above and 105 below the line). All municipalities had a population of less than 25,000 inhabitants in 2011, and at least 7 individuals were interviewed in each municipality. The telephone interview lasted on average about 10 min, and contained about 30 questions (see the Appendix Tables C.14 and C.15).

We start by exploring the correlations between individual political positions and the memory of the civil war in the whole sample of respondents. Results are shown in Appendix Table C.16. In columns (1) and (2), the dependent variable is a dummy variable that equals one if the individual political position is left or center-left, and estimation is by Probit. In columns (3) and (4) estimation is by ordered Probit, and the dependent variable equals 2 if the political position is left, 1 if center-left, and 0 otherwise. Throughout we control for gender, age, years of education, and dummy variables for homeownership, college education, having children, vital record, being north of the Gothic line and 1921 region fixed effects. As expected, individuals with a family member who took part in the civil war, or who suffered from WWII violence, or living in a municipality that commemorated the resistance are more likely to be on the left, irrespective of the specification. A left-wing position is also more likely if political attitudes when young were congruent with their father's position. Altogether these results suggest that a left-wing position is indeed more likely for individuals who retain a stronger memory of the civil war, and indirectly support the idea that longer exposure to the civil war left a persistent mark on political attitudes in favor of the Communist Party.

Next, we consider RDD estimates, comparing residents in municipalities above and below the Gothic line. Appendix Table C.17 reports balance tests around the Gothic for several socio-demographic variables and for political preferences. All variables are balanced, except perhaps a slight unbalance in sex, age and marital status, which anyway is not robust across estimation methods. There is also no evidence that today respondents north of the line are more likely to vote left, compared to those south of the line. This difference between our survey and the historical voting outcomes is likely to reflect the evolution of the Italian political system in the Second Republic (the Communist Party no longer exists, and its current re-incarnation, the Democratic Party, is a moderate party).

Consistently with these results, Figure C.9 shows that center-left and left-wing parties' vote shares are balanced north and south of the line for electoral results between 1992 and 2013. The same is true for center-right and right-wing parties. A slight imbalance is still present in centrist parties, mainly driven by *Democrazia Cristiana* in 1992, *Partito Popolare Italiano* and *Patto Segni* in 1994. These parties were close to what we define as *Catholics* in Table 3. This additional evidence suggests that the impact of violence on politics is highly persistent until a new major shock (such as the breakdown of the party system in 1992) kicks in.

Panel A of Appendix Table C.18 shows that the memory of the civil war is stronger north of the Gothic line. Although the memory of violence is balanced around the line, respondents north of the line are more likely to say that one of their family members took part in the civil war, in general, or as a partisan, and are more likely to have participated in an event commemorating the resistance. Recall that, by Table 4, left-wing partisan brigades were equally spread out above and below the Gothic line. Hence, the survey results suggest that the civil war is still more salient and more vivid in the memory of current residents north of the line.

In the same spirit, we attempted to elicit anti-German sentiments by asking questions on wedding preferences by nationality, and questions on the Euro. Panel B presents the RDD estimates, after recoding all the variables so that a positive coefficient indicates anti-German sentiment north of the line. All estimates have the expected positive sign, except for wedding preferences of French vs German. Only a few of them are statistically significant, however, suggesting only weak evidence of more anti-German sentiments.

## 8. Conclusion

The civil war and the Nazi occupation of Italy occurred at a critical historical juncture, just before the birth of a new democracy and the emergence of a new party system. For the first time in a generation, Italian citizens were choosing political affiliations and forming political identities. We exploit the geographic heterogeneity in the duration and occurrence of the Nazi occupation and of the civil war, to study how these traumatic events shaped the newly-born political system.

Our main finding is that, where the foreign occupation and the civil war lasted longer and were more intense, the radical left emerged as a much stronger political force. This effect was not just a temporary reaction to war traumas but persisted until the late 1980s.

What accounts for this large impact? And why is it so persistent? We discuss two alternative explanations. They both revolve around the fact that the Communist Party was more active in the resistance movement. The first explanation stresses individual political attitudes. In reaction to longer and more intense exposure to the violent Nazi occupation, voters identified with the radical political forces that stood up more forcefully against the enemy, and that in the end won the civil war. The second explanation emphasizes party organizations: the partisan brigades gave the Communists an advantage in building grassroots political organizations in the areas where the resistance movement was active for longer.

Although not conclusive, our evidence is more consistent with the first mechanism, operating through voters' attitudes and identities. First, there is no correlation between the presence of left-wing partisan brigades and voting outcomes; this is true both in the OLS regressions and in the RDD estimates. Second, the pro-Mussolini right-wing parties turned out to be slightly weaker, not stronger, in the areas under Nazi occupation. Furthermore, other pieces of evidence support a demand-side mechanism. First, in the sample of all Italian municipalities, the communist vote share is correlated with two indicators of Nazi violence (the occurrence of episodes of violence by Germans or fascists, and the location of two very violent elite German divisions). Violence episodes are also larger north of the line in the final phase of WWII when the civil war was harsher – although violence throughout all war years is balanced around the line. Second, a survey conducted in 2015 in municipalities around the Gothic line reveals that individuals with stronger memory of the civil war are more likely to lean to the left. Moreover, there is a stronger memory of the civil war in the municipalities above the line, which endured a longer Nazi occupation.

Overall, our results have several implications of general interest. First, civil war and widespread political violence reshape political identities in favor of the political groups that emerge as winners from the struggle and are perceived as having participated in the war. Since more extremist political forces have a comparative advantage in organizing violent conflict, they tend to benefit from these violent events. Second, these effects are very long-lasting and persist even when the cleavages that gave rise to the civil war have disappeared. Third, these findings indirectly support an approach to voters' behavior that has a well-established tradition in political science (e.g., Campbell et al., 1960 and Achen and Bartels, 2016), but is more at odds with conventional theories in political economics. Citizens vote for the parties with which they identify on cultural, moral, or social grounds. Political identification, in turn, is also shaped by intense and widely shared emotional experiences, and once formed it evolves slowly over time.

#### Supplementary data

Supplementary material related to this article can be found online at https://doi.org/10.1016/j.jce.2023.05.006.

#### References

Abrams, Dominic, Hogg, Michael A., 1998. Social Identifications: A Social Psychology of Intergroup Relations and Group Processes. Routledge.

- Acemoglu, Daron, De Feo, Giuseppe, De Luca, Giacomo, Russo, Gianluca, 2022. War, socialism, and the rise of fascism: An empirical exploration. Q. J. Econ. 137 (2), 1233–1296.
- Acharya, Avidit, Blackwell, Matthew, Sen, Maya, 2018. Explaining attitudes from behavior: A cognitive dissonance approach. J. Polit. 80 (2), 400-411.
- Achen, Christopher H., Bartels, Larry M., 2016. Democracy for Realists. Why Elections Do Not Produce Responsive Government. Princeton University Press. ANPI-INSMLI, 2016. Atlante delle stragi naziste e fasciste in Italia. www.straginazifasciste.it, visited on April 28, 2016.
- Avdeenko, Alexandra, Siedler, Thomas, 2017. Intergenerational correlations of extreme right-wing party preferences and attitudes toward immigration. Scand. J. Econ. 119 (3), 768–800.
- Balcells, Laia, 2011. Continuation of politics by two means: Direct and indirect violence in civil war. J. Confl. Resolut. 55 (3), 397-422.
- Baldissara, Luca, 2000. Atlante Storico Della Resistenza Italiana. B. Mondadori.
- Bauer, Michal, Blattman, Christopher, Chytilova, Julie, Henrich, Joseph, Miguel, Edward, Mitts, Tamar, 2016. Can war foster cooperation? J. Econ. Perspect. 30 (3), 249–274.
- Bellows, John, Miguel, Edward, 2009. War and local collective action in Sierra Leone. J. Public Econ. 93 (11), 1144–1157.
- Besley, Timothy, Reynal-Querol, Marta, 2014. The legacy of historical conflict: Evidence from Africa. Am. Political Sci. Rev. 108 (2), 319-336.
- Blattman, Christopher, 2009. From violence to voting: War and political participation in Uganda. Am. Political Sci. Rev. 103 (2), 231-247.
- Bocca, Giorgio, 2012. Storia Dell'ITalia Partigiana. Feltrinelli Editore.

Bonomi, Giampaolo, Gennaioli, Nicola, Tabellini, Guido, 2021. Identity, beliefs, and political conflict. Q. J. Econ. 136 (4), 2371-2411.

- Bordignon, Massimo, Nannicini, Tommaso, Tabellini, Guido, 2016. Moderating political extremism: Single round vs. Runoff elections under plurality rule. Amer. Econ. Rev. 106 (8), 2349–2370.
- Calonico, Sebastian, Cattaneo, Matias D., Farrell, Max H., Titiunik, Rocio, 2017. rdrobust: Software for regression discontinuity designs. Stata J. 17 (2), 372–404. Camarena, Kara Ross, Hagerdal, Nils, 2020. When do displaced persons return? Postwar migration among christians in Mount Lebanon. Am. J. Political Sci. 64 (2), 223–239.

Campbell, Angus, Converse, Philip E., Miller, Warren, Stoke, Donald E., 1960. The American Voter. The University of Chicago Press.

- Canetti, Daphna, Lindner, Miriam, 2015. In: Reynolds, Katherine, Branscombe, Nyla (Eds.), Psychology of Change. Taylor and Francis, pp. 77–94,
- Canetti-Nisim, Daphna, Halperin, Eran, Sharvit, Keren, Hobfoll, Stevan E, 2009. A new stress-based model of political extremism: Personal exposure to terrorism, psychological distress, and exclusionist political attitudes. J. Confl. Resolut. 53 (2), 363–389.
- Cannella, Mario, Makarin, Alexey, Pique Cebrecos, Ricardo Santiago, 2021. The political legacy of nazi annexation. SSRN.
- Cattaneo, Matias D., Titiunik, Rocio, 2022. Regression discontinuity designs. Annu. Rev. Econ. 14 (1), 821-851.
- Cavaglion, Alberto, 2015. La Resistenza Spiegata a Mia Figlia. Feltrinelli.
- Cervetti, Gianni, 1999. L'Oro Di Mosca. la Verità Sui Finanziamenti Sovietici Al PCI Raccontata Dal Diretto Protagonista. Baldini Castoldi Dalai Editore.
- Churchill, Winston, 1959. Memoirs of the Second World War: An Abridgement of the Six Volumes of the Second World War. Houghton Mifflin Co., Boston. Collotti, Enzo, Sandri, Renato, Sessi, Frediano, 2000. Dizionario Della Resistenza I. G. Einaudi.
- Collotti, Enzo, Sandri, Renato, Sessi, Frediano, 2006. Dizionario Della Resistenza II. G. Einaudi.
- Condra, Luke N., Shapiro, Jacob N., 2012. Who takes the blame? The strategic effects of collateral damage. Am. J. Political Sci. 56 (1), 167-187.
- Conley, Timothy G., 2008. Spatial econometrics. In: The New Palgrave Dictionary of Economics. Palgrave Macmillan UK, London.
- Corbetta, Piergiorgio, Piretti, Maria Serena, 2009. Atlante Storico-Elettorale D'Italia: 1861–2008. Zanichelli.
- Costalli, Stefano, Ruggeri, Andrea, 2015. Forging political entrepreneurs: Civil war effects on post-conflict politics in Italy. Political Geogr. 44, 40-49.
- Costalli, Stefano, Ruggeri, Andrea, 2019. The long-term electoral legacies of civil war in Young democracies: Italy, 1946–1968. Comparative Political Stud. 52 (6), 927–961.
- Daly, Sarah Zukerman, 2022. Violent Victors: Why BloodstainedParties Win Postwar Elections. Princeton University Press, Princeton.
- Davenport, Christian, Mokleiv Nygård, Håvard, Fjelde, Hanne, Armstrong, David, 2019. The consequences of contention: Understanding the aftereffects of political conflict and violence. Annu. Rev. Political Sci. 22 (1), 361–377.
- de la Cuesta, Brandon, Imai, Kosuke, 2016. Misunderstandings about the regression discontinuity design in the study of close elections. Annu. Rev. Political Sci. 19 (1), 375–396.

Dehdari, Sirus H., Gehring, Kai, 2022. The origins of common identity: Evidence from Alsace-Lorraine. Am. Econ. J.: Appl. Econ. 14 (1), 261–292.

Dell, Melissa, 2010. The persistent effects of peru's mining mita. Econometrica 78 (6), 1863-1903.

Dell, Melissa, Querubin, Pablo, 2018. Nation building through foreign intervention: Evidence from discontinuities in military strategies. Q. J. Econ. 133 (2), 701–764.

Eggers, Andrew C., Fowler, Anthony, Hainmueller, Jens, Hall, Andrew B., Snyder Jr., James M., 2015. On the validity of the regression discontinuity design for estimating electoral effects: New evidence from over 40,000 close races. Am. J. Political Sci. 59 (1), 259–274.

Ferwerda, Jeremy, Miller, Nicholas L., 2014. Political devolution and resistance to foreign rule: A natural experiment. Am. Political Sci. Rev. 108 (3), 642–660. Fontana, Nicola, Manacorda, Marco, Russo, Gianluca, Tabellini, Marco, 2021. Emigration and long-run economic development: the effects of the Italian mass migration.

Fouka, Vasiliki, Voth, Hans-Joachim, 2021. Collective remembrance and private choice: German-greek conflict and consumer behavior in times of crisis. Franzinelli, Mimmo, 2003. Squadristi: Protagonisti E Tecniche Della Violenza Fascista, 1919-1922.

Gallego, Jorge, 2018. Civil conflict and voting behavior: Evidence from Colombia. Confl. Manag. Peace Sci. 35 (6), 601–621.

Gelman, Andrew, Imbens, Guido, 2019. Why high-order polynomials should not be used in regression discontinuity designs. J. Bus. Econom. Statist. 37 (3), 447–456.

Gentile, Carlo, 2015. I Crimini Di Guerra Tedeschi in Italia (1943-1945). Einaudi.

Gilligan, Michael J., Pasquale, Benjamin J., Samii, Cyrus, 2014. Civil war and social cohesion: Lab-in-the-field evidence from Nepal. Am. J. Political Sci. 58 (3), 604–619.

Grosfeld, Irena, Zhuravskaya, Ekaterina, 2015. Cultural vs. Economic legacies of empires: Evidence from the partition of Poland. J. Comp. Econ. 43 (1), 55–75. Grosjean, Pauline, 2014. Conflict and social and political preferences: Evidence from world war II and civil conflict in 35 European countries. Comparative Econ. Stud. 56 (3), 424–451.

Holland, James, 2008. Italy's Sorrow. A Year of War, 1944-45. Harper Press.

Hsiang, Solomon M., 2010. Temperatures and cyclones strongly associated with economic production in the Caribbean and Central America. Proc. Natl. Acad. Sci. USA 107 (35), 15367–15372.

Iwanowsky, Mathias, Madestam, Andreas, 2019. State repression, exit, and voice: Living in the shadow of Cambodia's killing fields.

Kocher, Matthew A., Monteiro, Nuno P., 2016. Lines of demarcation: Causation, design-based inference, and historical research. Perspect. Politics 14 (4), 952–975. Leoni, Francesco, 2001. Storia Dei Partiti Politici Italiani. Guida editori.

Lupu, Noam, Peisakhin, Leonid, 2017. The legacy of political violence across generations. Am. J. Political Sci. 61 (4), 836-851.

Mantelli, Bruno, Tranfaglia, Nicola, 2013. Il Libro Dei Deportati, Vol. 3. Ugo Mursia Editore.

Matta, Tristano, 1996. Un Percorso Della Memoria: Guida Ai Luoghi Della Violenza Nazista E Fascista in Italia. Mondadori Electa.

Mayhew, David R., 2004. Electoral Realignments: A Critique of an American Genre. Yale University Press.

Miguel, Edward, Saiegh, Sebastián M., Satyanath, Shanker, 2011. Civil war exposure and violence. Econ. Politics 23 (1), 59–73.

Montemaggi, Amedeo, 1980. L'Offensiva Della Linea Gotica: Autunno 1944. Giudicini e Rosa.

Ochsner, Christian, Roesel, Felix, 2020. Migrating extremists. Econ. J. 130 (628), 1135–1172.

Pavone, Claudio, 1991. Una Guerra Civile. Saggio Storico Sulla Moralità Nella Resistenza. Bollati Boringhieri, Torino.

Rochat, Giorgio, 2005. Le guerre italiane 1935-1943: dall'impero d'Etiopia alla disfatta. G. Einaudi.

Romanelli, Raffaele, 1995. Storia dello Stato italiano dall'Unità a oggi. Donzelli Editore, Roma.

Ronchetti, Gabriele, 2009. La Linea Gotica: I Luoghi Dell'Ultimo Fronte Di Guerra in Italia. Mattioli 1885.

Rozenas, Arturas, Zhukov, Yuri M., 2019. Mass repression and political loyalty: Evidence from Stalin's terror by hunger. Am. Political Sci. Rev. 113, 569–583. Shayo, Moses, 2020. Social identity and economic policy. Annu. Rev. Econ. 12 (1), 355–398.

Sundquist, James L., 2011. Dynamics of the Party System: Alignment and Realignment of Political Parties in the United States. Brookings Institution Press. Tur-Prats, Ana, Valencia Caicedo, Felipe, 2023. The long shadow of the spanish civil war.

Voigtländer, Nico, Voth, Hans-Joachim, 2012. Persecution perpetuated: the medieval origins of anti-semitic violence in Nazi Germany. Quarterly Journal of Economics 127 (3), 1339–1392.

Walden, Jacob, Zhukov, Yuri M., 2020. Historical legacies of political violence. In: Oxford Research Encyclopedia of Politics. Oxford University Press. Walter, Barbara F., 2017. The extremists's advantage in civil wars. Int. Secur. 42 (2), 7–39.

Westfall, Peter H., Young, S. Stanley, 1993. Resampling-Based Multiple Testing: Examples and Methods for P-Value Adjustment. Wiley.