June 2018 No.379

From Italianization to Germanization: Division of Labor, Economic Rents, and Anti-German Attitudes in South Tyrol

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WORKING PAPER SERIES

Centre for Competitive Advantage in the Global Economy

Department of Economics

From Italianization to Germanization: Division of Labor, Economic Rents, and Anti-German Attitudes in South Tyrol*

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June 20, 2018

Abstract

Do frictions in the labour market prompt salience in the ethnic conflict and induce a shift in voting towards extremist political platforms in a privileged minority group? We address this question by exploiting a natural experiment of history that occurred in the late 1960s in South Tyrol, a northernmost and predominantly German-speaking region of Italy. During the 1930s, the region underwent a massive process of Italianization that strengthened markedly entry barriers into public offices for the German- relative to the Italian-speaking population. The resulting ethnic division of labour was brought back to question by a new reform package that aimed at redistributing jobs in the public administration sector proportionally to the numerosity of each language group. Following the announcement of the reform, we document: (*i*) a general increase in anti-German attitudes in the Italian group; (*ii*) an intensification of anti-German attitudes in municipalities where Italians were fewer; and (*iii*) where Italians were more specialized as public officers. We interpret this result as evidence of the salience of ethnic conflict when institutional changes induce competition between ethnic groups and put at risk historically-established economic rents of a privileged group.

*We are particularly grateful to Sascha Becker and James Fenske for extremely valuable comments. We also thank Vincenzo Bove, Helios Herrera, Clement Imbert, Armando Rungi, and Davide Ticchi as well as seminar participants at the University of Alicante, University of Warsaw, University of Warwick and IMT Lucca for helpful comments and discussions.

Keywords: Ethnic Conflict, Economic Rents, Ethno-Occupational Specialization, Political Extremism, South Tyrol History

JEL Classification: D72, D74, J15, N34, J45, J71, Z13

1 Introduction

For centuries, military conquests and population transfers have been shaping the geography of ethnic groups worldwide. Between 1492 and 1914, for example, as much as 84% of the globe was conquered or colonised by Europeans (Hoffman, 2015). Their rule, imposed at the expenses of pre-Columbian, African, and Asian populations, generated well documented long-lasting negative effects on their economic institutions, state capacity, and values (e.g., Dell, 2010; Naritomi, Soares, and Assuncão, 2012; Acemoglu, Reed, and Robinson, 2014; Michalopoulos and Papaioannou, 2016; Lowes and Montero, 2016). Yet, the distribution of ethnic groups across space and that of the power among such groups, resulting from events of conquests and colonisation, have been rather neglected in economics as a source of inter-ethnic tensions. Historians narrate that, as soon as the authority over a conquered territory was established, groups of White men colonists settled down in the "new land" to take the control over the majority of the population (e.g., Pagden, 2002). Their privileges survived to wars, revolutions, and institutional changes up to the present day[1] and any attempt to challenge them still sparks nefarious consequences.[2]

In this paper, we document a unique natural experiment of history to study how military occupations and transfers of privileged ethnic minorities may induce persistent inter-ethnic tensions and how these tensions may become particularly salient when such privileges are threatened by the majority. We study the Italianization of the South Tyrol, a northernmost and predominantly German-speaking region of Italy, its persistent effect on the labour market, and the panic that broke out in the Italian minority, highly specialized in the labour market, after the announcement of a reform that was likely to erode its hystorically-established economic rents.

The Italianization of South Tyrol was a massive program designed and put into effect by the fascist regime, immediately after the annexation of the region to Italy in 1919, with the aim of converting firmly the region to the customs and culture of Italy. Along with the destruction of Tyrolean collective memories, the program imposed a ban on the use of the German language and erected entry barriers into the labour market for public officers. Because of their comparative advantage in

[1] The Dutch colonisation of the South Africa is a remarkable, salient example. The Dutch moved into the heel of the African continent during the seventeenth century and imposed their rule in the country that survived *de facto* to the British colonisation, the move towards independence, and the ban of everything/everyone opposed to the *apartheid* policy (Russell and Russell, 1979). However, examples of privileged ethnic minorities are abundant around the world: the *Tutsi* in Rwanda, the *White Namibians* in Namibia, the *Serbians* in Kosovo, or the *Alawites* in Syria (e.g., Gibson, 1972).

[2] Middle East scholars, for instance, refer to the ongoing Syrian Civil War as an intensely sectarian conflict dominated by the clash between the ruling minority Alawite government and the country's Sunni Muslim majority (e.g., Potter, 2014).

speaking the official language, Italians, who had massively moved into the region, specialized as public servants and settled sparsely across Tyrolean municipalities to cover public posts. The resulting ethnic division of labour persisted after the fall of the fascist regime and was brought back to question in the late 1960s by the announcement of a new reform that was aimed at redistributing jobs in the public administration sector proportionally to the numerosity of each language group.

We empirically investigate how a sparse minority, highly specialized in the labour market, developed political attitudes against other ethnic groups after the announcement of a reform that put its historically-established privileges in danger. Following the announcement of the reform (but before its implementation), we document: (*i*) an increase in anti-Germans attitudes in the Italian group in municipalities where the reform was likely to redistribute public posts from Italians to Germans pursuant the principle of ethnic proportion; (*ii*) a further increase in municipalities where Italians were fewer and (*iii*) where Italians were more specialized as public officers.

To document these facts, we combine data on anti-Germans attitudes of the Italian group, linguistic composition of the population, and a wide set of information about the occupation in the labour market of each linguistic group. In our baseline analysis, we employ a standard difference-in-difference strategy and exploit two sources of variation. First, following the appointment in 1963 of a National government more open to the rights of minority groups, in 1966 the Italian government, led by Aldo Moro, resumed negotiations with Austria and proposed, to put an end to the South Tyrolean question, a reform, known as the "Package," that aimed at granting a large amount of autonomy to the region and more rights to the German group. Second, we exploit the difference in the population composition between South Tyrol and the region of Trent (Trentino). Despite being both part of the Austrian-Hungarian Empire prior to the annexation to Italy in 1919, Trentino was entirely populated by Italians. As soon as the two areas were added to Italy, they were merged onto forming the twentieth Italian region, named as *Trentino-Alto Adige*. While the "Package" also involved Trentino—it splits the region Trentino-Alto Adige into two autonomous provinces, the province of Trent and that of Bolzano—it was unlikely to redistribute established economic rents to members of other ethnic groups, as Germans were practically absent. In our baseline estimation, we thus compare the relative change in anti-Germans attitudes in the post-announcement period of the reform relative to the pre-announcement period between municipalities that were likely to be affected (i.e., those in South Tyrol) and those that were unlikely to be affected (i.e., those in Trentino).

An important feature of the South Tyrolean historical setting (as well as of the whole Italy) is the political polarization that emerged after the Second World

War. The two main parties that Italians supported were the Christian Democrats (*Democrazia Cristiana*) and the Communists (*Partito Comunista Italiano*). On the extreme right wing, a post-fascist political party, the *Movimento Sociale Italiano* (MSI), was founded in 1946 by former fascist hierarchies that obtained liberty from an amnesty bill enacted in the same year. While very small at the National level (its average vote share was 5-6%), the MSI was very active in South Tyrol (the average vote share in the region was about 18%) where it operated with the aim of defending the "*Italianness*" of the South Tyrol against the German invasions that had begun in the Middle Age.[3] The German-speaking population was frequently blamed and scapegoated in the speeches of the MSI representatives and during the MSI meetings for everything that occurred to the Italians.[4] To measure Italians' anti-Germans attitudes we therefore look at the vote share of the Italian population secured by the MSI in the General elections to the Lower Chamber of Deputies, i.e., the ratio between the number of votes for the MSI and the number of Italians.

Our baseline estimates show that, after the announcement of the "Package," Italians living in South Tyrol developed a 3.86% increase in the support for the MSI, relative to those living in Trentino—about 21% the average MSI vote share in South Tyrol. However, we argue and document that this result masks two sources of heterogeneity. First, as Figure 1 illustrates, by showing the spatial distribution of the share of Italians at municipal level, Italians' settlement across South Tyrolean municipalities was substantially various. We document that this spatial distribution was the result of the legal entry barriers to public offices imposed on the German-speaking population during the Italianization of the region and that motivated Italians to settle sparsely across the smallest Tyrolean municipalities. As the economic rents of smaller Italian communities were more likely to be undermined by a reform that was set to redistribute public posts according to the principle of ethnic proportion, we document that anti-Germans political attitudes increased more pronouncedly, after the announcement of the "Package," in municipalities where Italians were fewer. To establish causality, we exploit exogenous variation in the Italian settlement by collecting data from the Fascist epoch when the Italianization process of the South Tyrol had its start. First, we assemble archival data on the migration inflows from the neighbouring Italian provinces during the 1930s. Second, we use census information of the number of housing units built by the fascist regime

[3]Importantly, despite its strength in the region, no South Tyrolean municipality has ever had a major from the MSI party, and the province has been always led by the *Südtiroler Volkspartei* (SVP), a German-speaking group political party.

[4]In a book published in 1959, "*La verità sull'Alto Adige*," Giorgio Almirante, one of the founders of the MSI, openly denounced the situation of the Italian minority in South Tyrol, which he referred to as "apartheid."

for Italians' settlement purposes. Third, we complement this information with data on the route of the pre-existent Brenner railway, built at the end of the nineteenth century to connect Italy and Austria. The 2SLS estimations are negative, significant and larger than those obtained using OLS.

The second source of heterogeneity we use to uncover the effect of the panic that broke out after the announcement of the "Package" on the rise of anti-German attitudes is the spatial distribution in the share of public servants among Italians. As Figure 2 illustrates, Italians specialized as public servants in the smallest South Tyrolean municipalities, at the northern boundary of the region, where more than half of the Italians were employed in the public administration. We show that this variation in the specialization within the labour market explains the entire shift in anti-Germans attitudes that we obtained in the difference-in-difference estimation. This result is extremely robust and survives to the inclusion of a large number of controls as well as to the use of alternative measures of concentration in the labour market. Moreover, we provide evidence against a number of potential mechanisms, alternative to the above explanation. First, we document that prior exposure to terrorist attacks, carried out by the German-speaking population against Italian targets, cannot explain our estimates.[5] Second, we provide evidence against the fact that differential changes in relative income (as documented by Mitra and Ray (2014) in the Indu-Muslim context) explain the rise of anti-German attitudes after the announcement of the "Package." Finally, we document that the shift in anti-Germans attitudes is consistent with an emotional spike that Italians developed following the 1966 and not with a persistent rise in fascist political values. Immediately before the implementation of the "Package," in 1974, the Italian government successfully managed to block the reshuffle of public posts towards the Germans. As the fear vanished, we indeed observe a reversion of anti-German attitudes to the pre-announcement level.

To see why frictions in the labour market for public servants became salient in the late 1960s so as to induce an extremization of anti-German attitudes and an increase in the support for the MSI, Figure 3 scatters South Tyrolean municipalities according to the share of public servants among Italians (in y-axis) and the share of Italians (in the x-axis) as reported in the Census of 1961. The Italianization of the South Tyrol produced persistent distortions in the public servants labour

[5] Montalvo (2011), for example, used the terrorist attacks carried out in Madrid to explain a rightward shift in the 2004 Spanish elections. Our results do not support this causal channel for the South Tyrolean case. As some historians argued (e.g. Alcock, 1970), the South Tyrolean terrorism was successful in bringing visibility on the question and inducing the Italian government to make concessions to the German group — consistently with the findings that Gould and Klor (2010) documented the context of the Israeli-Palestinian conflict.

market in favour of Italians that were still at work after thirty years and after the dissolution of the Fascist regime and the birth of the Italian Republic. In municipalities where Italians made up only 20% of the total population, for instance, Italians were highly specialized in the labour market and, in some cases, more than 80% of them occupied a public post. The announcement of the "Package" in 1966 put at risk their historically established economic rents. By promoting a redistribution of posts in the public administration sector proportionally to the numerosity of each language group, it was indeed tantamount to move the distribution downward up to the 45-degree line which captures the principle of ethnic proportion, with a consequent, sizeable, expected economic loss for the Italian group. Our estimates imply that municipalities with a standard deviation above the mean in the share of public servants among Italians developed a 3.42% increase in the support for the MSI after the announcement of the "Package" (but before its implementation). We interpret this result as evidence of the salience of ethnic conflict when institutional changes may induce competition between ethnic groups and threaten historically-established economic rents of a privileged group.[6]

Our paper primarily connects with a young literature on division of labour and ethnic conflict.[7] Becker and Pascali (2016) and Grosfeld, Sakalli, and Zhuravskaya (2017) have documented the spark of violence between members of different ethnic groups when historically ethnic divisions in the labour market are subjected to variation at some point in time.[8] Both papers show a rise in pogroms and anti-Jews attitudes in Europe following the Protestant Reformation that induced frictions in the money-lending sector (Becker and Pascali, 2016) or in periods that combined economic shocks with political uncertainty (Grosfeld, Sakalli, and Zhuravskaya, 2017). Our analysis shows how inter-ethnic conflict and political extremism may break out after specific institutional changes even if economic resources are relatively abundant—South Tyrol is a rich and developed region and the climax of extremism occurred in a period of relative prosperity.

As we specifically look at the voting behavior of Italians, we also connect to a large literature on immigration, ethnic diversity, and voting (e.g., Becker and Fetzer,

[6] A recent paper by Passarelli and Tabellini (2017) provides a rich theoretical framework to interpret our findings by emphasising the role of emotional reactions and panic that a privileged minority may develop when their economic rents are put in danger by the announcement of a specific public policy.

[7] We also relate to a quite abundant economic literature that documented the economic losses, political distortion, weak institutions, and corruption resulting from inter-ethnic tensions (e.g., Easterly and Levine, 1997; Montalvo and Reynal-Querol, 2005; Blattman and Miguel, 2010).

[8] On a similar line, Jha (2013) and Jedwab, Johnson, and Koyama (2017) have shown how economic complementarity between ethnic groups may help sustaining a stable peaceful co-existence.

2016; Barone, De Blasio, and Naticchioni, 2016; Colussi, Isphording, and Pestel, 2016; Mayda, Peri, and Steingress, 2016; Halla, Wagner, and Zweimüller, 2017), though our analysis focuses on institutional changes rather than on demographic shocks.

Our work is also related to the literature on the long-run effect of forced or centrally planned migrations (e.g., Hornung, 2014) and especially to works that studied this effect in the aftermath of military conquests and wars (e.g., Bauer, Braun, and Kvasnicka, 2013; Braun and Mahmoud, 2014; Sarvimäki, Uusitalo, and Jäntti, 2016; Peters, 2017; Murard and Sakalli, 2018; Becker et al., 2018). We show how a centrally planned migration, in combination with a massive Italianization program, persistently changed the ethnic composition in South Tyrol and the balance between the ethnic groups in the labour markets, making inter-ethnic tensions particularly sensitive to institutional changes.

The remainder of the paper is organized as follows. In Section 2 we describe the major events that occurred in the region starting from the Italianization process, which produced distortions in the public administration segment of the labour market. Section 3 describes the data, while in Section 4 we discuss our empirical strategy and present the baseline results. In Section 5 we exploit heterogeneity in the Italian settlement. In Section 6 we document our main argument using data from the labour market. Section 7 tests for alternative mechanisms that might explain our results. In Section 8 we perform several robustness checks. Section 9 concludes.

2 Historical background

The history of South Tyrol is particularly rich of events and discontinuities. Because of the enviable geographical position, Germans and Italians contended very much for its possession. The land, in fact, was the door to the most strategic and commercial pass over the Alps, the Brenner pass, which is located at a considerably lower altitudes than alternative Swiss passes and, thus, is more accessible and a quicker transit route between Northern and Southern Europe than those. This position favoured its economic expansion as an important commercial region and caught the attention of the Habsburg dynasty that acquired it in 1363. Five centuries later, in 1805, the Austrian-Hungarian empire also annexed the bishopric of Trent to Tyrol. This status quo remained unchanged until the end of the WWI and the declaration of the Treaty of Saint-Germain-en-Laye in 1919 when South Tyrol

and Trentino passed to Italy.[9]

The remainder of this section summarizes the main political events following the annexation of the South Tyrol to Italy. We first provide an overview of the South Tyrol Italianization during the fascist regime. Then, since we compare the election results in the post World War II period with the period following the announcement of the "Package," we turn to the post World War II political scene in South Tyrol and to a detailed description of the "Package" and its implications for the labour market. A more detailed and comprehensive history of the South Tyrol is provided in Alcock (1970) and Steininger (2003).

2.1 The Italianization of the South Tyrol

With the conclusion of the WWI, the Habsburg-Hungarian Empire saw its dissolution. Following the adoption of the Woodrow Wilson's self-determination principle, Austria and Hungary were redefined as small landlocked states. The newly established Republic of Austria lost around 60% of the old Austrian Empire's territory, including South Tyrol and Trentino, both promised to Italy in the secret Treaty of London of 1915 as the prize to change side and go to war against Austria and Germany, which were former allies.

Despite the annexation of South Tyrol, Trento, and Trieste, resentments spread all over Italy for the unsatisfactory conditions that the country obtained in the Treaty of Saint-Germain-en-Laye of 1919.[10] Italians had sacrified countless lives during the WWI and there were concerns that awarding too much autonomy to the South Tyrol (and the Germans) might have collided with the mood of the Italians, who were conscious of the cost that had been spent for its attainment. All the good resolutions that the Italian government maintained in Saint-Germain-en-Laye were thus stopped in the Parliament, where the opposition of nazionalists prevailed. This nationalist wave was well interpreted and taken advantage of by Mussolini and its Fascist party (*Partito Nazionale Fascista*). In 1922 Mussolini's squads repeatedly invaded South Tyrol in order to defend its italianness against the *Pangermanism*. The climax of this dispute was the *March on Bolzano* organized the 1st of October, when over 700 fascists invaded the city and occupied the City Hall by force. Three

[9]Figure 4 illustrates the map of South Tyrol (in red) and Trentino (in white). Before being annexed to the Kingdom of Italy, the two regions formed, together with the North and East Tyrol (in yellow), the big region of Tyrol highlighted by the dot-dashed line. The new Italian boundary, marked by the crossed line, after the 1919, includes both South Tyrol and Trentino.

[10]Resentments were particularly targeted towards Fiume and Pola, annexed to the newly formed Yugoslavia despite being populated by an Italian majority. In the days that followed the ratification of the Treaty of Saint-Germain-en-Laye, Italian newspapers began referring to it as the "*mutilated victory*."

weeks later Mussolini was appointed as Prime Minister: the process of Italianization of the South Tyrol had its start.

The Italianization of the region pivoted around 3 pillars: (*i*) the destruction of Tyrolean collective memories; (*ii*) the ban of the German language; (*iii*) the immigration of Italians from neighbouring regions.

(*i*) **The destruction of Tyrolean collective memories.** At the heart of the Italianization program was the idea fascists held that the region was naturally part of the Italian peninsula, as below the Alpine arch, and that it had been invaded during the Middle Age by German populations. Any signs of that invasion were therefore removed or destroyed and new monuments were erected in Bolzano (the Victory Monument), in Brunick (to the Alpine soldiers) and in other South Tyrolean municipalities to celebrate the fascist power and South Tyrol's italian character and to construct a new collective memory in the region (see Figure A1 in the Online Appendix for some examples). On the same line, the main towns of the region were partly reshaped in the effort to turn the German, gothic appearance onto a more Mediterranean, Italian aspect (see Figure A2 in the Online Appendix that illustrates the example of the museum of Bozen that was reconverted as the Commission for the Italian Language and Culture).

(*ii*) **The ban of the German language.** The second pillar of the Italianization program was the establishment of Italian as the only official language and the ban of the German language.[11] This measure came with several implications. First, German schools were prohibited and, by the year 1929/30, Italian was the sole language of instruction in all elementary schools.[12] Second, German officials that did not know Italian were dismissed, while Italians were appointed as clerks to all municipal councils, schools, or post offices throughout the area.[13] This policy impacted severely the labour market: in 1939 more than 95% of all public posts were counted to be in the hands of Italians, despite the group weighted the 25% of

[11]The name itself, South Tyrol, was interdicted and replaced by the Italian *Alto Adige*, while the names of towns, municipalities, rivers, and mountains were substituted with their correspondent Italian or invented ex-novo when absent. Even the use of German inscriptions on gravestones was prohibited, with already existent ones often required to be italianized.

[12]In municipalities where the German-speaking group was by far the majority, supplementary classes taught in the mother language could be arranged if requested by parents, which however came at the cost of being labelled as "anti-national." According to the official reports, in 1928/29 there were 760 (30) classes with Italian (German) being the instruction language. The 30 classes disappeared at the beginning of the year 1929/30.

[13]A Royal Decree in 1925 stated that, to become a clerk to municipal councils, citizens had to provide a certificate from an Italian secondary school or proof of service carried out in the Italian administration for at least three years — requirements that German-speaking South Tyroleans could hardly been able to meet.

the total population.

(*iii*) **The immigration of Italians from neighbouring regions.** Massive movements (and subsequent settlement) of workers and their families from other Italian regions to (in) South Tyrol was an additional lever which the fascist regime heavily relied on to successfully implement its Italianization program. As Figure 5 illustrates, the number of Italians moving to South Tyrol, from neighbouring Italian provinces, increased steadily from 1932 onwards, reaching a peak of almost 25 thousands people in 1937.[14] Overall, as many as 1,657,422 Italians were transferred to the region between 1932 and 1939. This process markedly changed the evolution of the ethnic composition of the population. As Figure A3 in the Online Appendix shows, between 1910 and 1943 the share of the Italian group climbed from 9.4% to about 35%, whereas that of the German one plummeted to circa 65% from an initial share of 85%.[15]

This massive transfer of population was facilitated by the central coordination set up by the fascist regime, which heavily relied upon a central office, the Commission for the migrations and domestic colonisation (*Commissariato per le migrazioni e la colonizzazione interna*), for the selection of the colonists, the organization of the transfer through special train services, and the reception of the new arrivals. The regime initiated a vast program of public houses construction to support the arrival of the newcomers, and undertook a systematic harsh process of "soil conquest," at the German group expenses.[16] In Table A1 in the Online Appendix we report the number of house units classified by ethnic group of the occupants and relative to different time intervals: before 1919, 1919-1945, 1946-1960, and 1961-1970. The number of houses having Italian-speakers as occupants increased markedly after 1919, jumping from 4,517 units in the pre-1919 period to 7,066 between 1919 and 1945. Relative to the other ethnic groups, the share of house units occupied by Italians increased from 17% in the pre-1919 period to 56% of the total units during the Italianization of the region.

[14]The increasing trend sharply halted in 1938 when the regime shifted its attention towards the new African colonies.

[15]The third group in the region is the Ladin group. Ladins speak a language that combines old Ladin terms with German. This community inhabits seven municipalities in South Tyrol and, accounts for 3 to 5% of the total population.

[16]Figure A4 in the Online Appendix shows the picture of a new Italian quarter built by the regime during the 1930s to host the new arrivals.

2.2 The post-WWII period

After the end of the WWII, democracy was restored in Italy under a constitutional Republic and elections took place under a proportional rule that remained in force until 1992 (the so-called *prima Repubblica*). The political system that emerged was highly polarized. The two biggest parties were the Christian Democrats (*Democrazia Cristiana, DC*), a center party with strong ties with the Catholic Church, and the Communists (*Partito Comunista Italiano, PCI*) that maintained throughout this period strong connections with the Soviet Union hierarchies. On the extreme right, a post-fascist political party (*Movimento Sociale Italiano, MSI*) was founded in 1946. Despite the term fascism was forbidden and could not appear on the name of the MSI, values were common to that of the Italian fascist experience and, from there, all their hierarchies indeed converged.[17]

The South Tyrol question was settled down under the supervision of the WWII winners that led to the so-called Gruber-De Gasperi agreement of the 1946.[18] The agreement contained formulas that were to ensure more autonomy to Germans. The name of South Tyrol was restored (together with the Italianized *Alto Adige*) as well as the names of towns, rivers, mountains that were to be referred in Italian as well as in German. German-speaking students were allowed to attend school classes in which the instruction language was German. However, full equality among ethnic groups was far to be attained and the long shadow of the Italianization process was still visible decades after. In particular, public posts were still an Italian prerogative—95% of the total public servants were Italians, although Germans made up 65% of the total population; and the right of using German in relations with officials and organs of the public administration, introduced by the Gruber-De Gasperi agreement, had not been granted in practice since bilingual officials and employees were lacking.

2.3 The "Package" reform and its implications for the labour market

The increasing resentment among Germans due to the unsatisfactory consequences of the Gruber-De Gasperi agreement started to be taken into account when Austria became a *de jure* independent state, with proper representatives in the United Nations and at any international level.[19] Along with diplomacy, the South Tyrolean

[17] On a more detailed description of the post-WWII political system see Fontana, Nannicini, and Tabellini (2017).

[18] The agreement, also known as the Treaty of Paris, was signed by Karl Gruber, Austrian Foreign Minister, and Alcide De Gasperi, Italian Prime Minister.

[19] After the WWII, Austria was blamed of having been a tight collaborationist country of Nazism and was therefore split into four parts under control of the ally forces (France, Soviet Union, United

question gained visibility thanks to a massive terrorist wave that had its start in 1956, a year later Austria regained independence. This long parenthesis of terrorism produced 288 attacks and 19 dead men[20] and contributed to trigger a change in Italy's South Tyrol policy. With the election of a left-center wing government in 1963, which had a more open view as for the rights of the minorities, this pressure was conveyed towards finding a solution to the South Tyrolean question. In August 1966, the Italian Prime Minister Aldo Moro announced the reaching of an agreement that had to be translated into a reform. While the main principles of the reform were signed on the 30th of November 1969, the word "package" all of a sudden became one to which both Italians and Germans got very familiar with.

The reform was to endow the South Tyrol and the Trentino regions with an unprecedented degree of fiscal autonomy. While under the 1948 Autonomy Statute, the two provinces relied almost entirely on funding from the State or the Region, with the reform nine tenth of the tax revenues collected were to remain in the Province. This went along with a transfer of legislative power with respect to several subjects, ranging from agriculture and forestry, hunting and fishing, public welfare and charity.

However, what caught more attention among Italians in South Tyrol was the new principle of ethnic proportion underlying the awarding of the public posts, which were to be reserved to citizens of all language groups and proportionally to their numerosity. Specifically, the reform stated

> "*the application of ethnic proportions in the individual administrations effectively represented in the Province of Bolzano, and, within the administrations, in the individual permanent career posts, on the basis of the existing proportions between the Italian and German linguistic groups in the Province (approximately one-third and two-thirds)*" (Alcock, 1970).

The principle of proportionality was to entail a complex reshuffle of public posts to the detriment of the Italian minority group who had historically benefited from a privileged position within that activity sector of the labour market. In the remainder of the paper, we investigate whether the announcement of the reshuffle of public posts among linguistic groups triggered anti-Geman sentiments in the Italian group. We also test whether changes in other sectors affected by the "package" may alternatively explain the shift in the Italians' attitudes.

Kingdom, and United States). In 1955 it regained full independence.

[20] According to the official reports, terrorists were South Tyroleans (103), Austrian (40), and German citizens (of the Federal Republic of Germany, 14). See the *Elenco delle sentenze per fatti di terrorismo dal 1956 al 1988*, Procura della Repubblica presso il Tribunale di Bolzano. We will explore the impact of terrorism on the political attitudes of the Italians in Section 7.

3 Data description

We assemble a wealth of data from several different sources and from different periods to investigate whether privileged ethnic minorities develop extreme political attitudes when their privileges are put under threat. We start describing variables used in the main analysis observed in the post-WWII period. We then describe the variables we collected from the fascist epoch. Summary statistics are reported in Table 1.

3.1 Post-WWII data

Political attitudes. Our left hand side variable in the regression analysis is the anti-German attitude in the Italian group. We measure this attitude across space and time by looking at the vote share secured by the Movimento Sociale Italiano (MSI) normalized by the number of Italians, i.e.

$$y_{it} = \frac{\#\,\text{Votes for MSI}_{it}}{\#\,\text{Italians}_{it}},$$

where i indicates municipalities and t election years. Note that the normalization is key to elicit political attitudes in the smallest Italian communities that could be put out of sight by the presence of larger German communities.[21] We collect electoral data on the general Elections to the Lower Chamber of Deputies (the sole with a stable electoral rule for the period under our scrutiny) held in 1953, 1958, 1963, 1968 and 1972,[22] from the online Historical Election Archive published by the Italian Ministry of Interior.[23] In our richest sample, comprising both South Tyrolean as well as Trentino municipalities, the average normalized vote share secured by the MSI is 7.59%. In South Tyrol, where the Italian group was a minority, MSI was much stronger (the average normalized vote share is 18.26%) as one of the main goal of the MSI was the defence of the "*Italianess*" of the region.

From the same dataset we collect information on the number of blank and invalid paper ballots and on the number of eligible and registered voters. We use them to construct two additional variables that enter the regressions as controls: the share

[21] The obvious assumption behind it is that German-speaking population did not vote for the MSI — a circumstance particularly implausible according to historians (e.g., Steininger, 2003): during the fascist regime their life dramatically changed for the worst and the negative effects of the Italianization program were still visible to warn Germans against supporting Italian post-fascists parties. On top of that, German-speaking population massively supported the South Tyrolean People's Party (*Südtiroler Volkspartei, SVP*), a regional and ethnic catch-all political party.

[22] In the elections held in 1948, MSI did not compete in South Tyrol nor in Trentino.

[23] http://elezionistorico.interno.gov.it

of blank voters and the share of abstained voters.

Population and literacy of linguistic groups. The three language groups officially recognised in South Tyrol by the Gruber-De Gasperi agreement were the Italian, the German, and the Ladin one. We obtain information on their numerosity as well as on the percentage composition of the three official language groups by municipality in South Tyrol from the Population Censuses that were carried out (once in ten years) from 1961 to 1981.[24] Unfortunately, no information about the language composition of the municipalities was provided in the 1951 Census. We digitized the census volumes and impute missing data for the years 1953, 1958, 1963, 1968 and 1972 using linear interpolation i.e., using information on the linear trend observed between the two closest censuses. Between 1953 and 1972, Italians accounted for 13.5% of the total population in the sample with South Tyrolean municipalities only (see also Figure 1 where we map the spatial distribution of Italians across South Tyrolean municipalities). German-speakers and Ladins accounted for, respectively 80.5% and 6% of the total population.[25]

Following Easterly and Levine (1997) and Alesina et al. (2003), we construct an index of ethnolinguistic concentration across municipality $\times$ election year as the sum of the squared shares of each ethnic group in the total population (i.e., $\sum_{j=1}^{3} s_{ijt}^2$). Higher values indicate municipalities ethnically more concentrated. On average, the index is 0.937.

We also digitized information on the literacy rate of each linguistic group. We construct three variables by municipality $\times$ election year that are employed to control for the potential impact of education on voting behaviour: the number of illiterates among Italians, the number of Italians that held a high-school diploma as well as those that held a University degree.

Economic specialization of linguistic groups. From the same sources we gather information on the employment by occupation for each linguistic group. Occupations listed in the censuses include: public administration, services, industry, construction, agriculture, trade, and transports.[26] We use the total number of em-

[24] As said above, in Trentino, which make up our control group in the baseline analysis, all municipalities are populated by Italians and therefore no heterogeneity is reported in the censuses. However, few municipalities exhibit a substantial presence of the three historical linguistic minorities (Ladin, Mòcheno and Cimbrian) offically recognized by the Legislative Decree No. 592 of 16 December 1993 and the Provincial Law No. 4 of 30 August 1999. We exclude these municipalities from the final dataset.

[25] Looking at the full sample, that also comprises the municipalities in Trentino, Italians on average accounted for about 69%, the German-speakers for about 29%, and Ladins represented only the 2% of the total population.

[26] The *services* category aggregates the following occupations: credit and insurance, private and

ployees by sectors in each municipality × election year to control for specific sector trends.

For the 1961 Census (the last before the announcement of the reform in 1966), we collect data on the number of employees by occupations and by language group and construct the shares of employees by occupations over the total workforce, the share of employees in a language group by occupation, and the share of employees in an occupation by language group. Table A2 reports the number and share of the population by language group and by occupation. Most of the workforce in South Tyrol was employed in agriculture, 90% of which belonged to the German-speaking group, with a smaller percentage working in industry and trade (see Figure A5 that maps the share of employees by occupation). As for the public administrative sector, it employed 9.24% of the total workforce of the region. However, as the data show, this occupation was a prerogative of the Italian-speaking population: 11,148 out of 14,789 public posts were covered by Italians that highly specialized in this segment of the labour market. Relative to the total Italian workforce, the average share of employees in the public administration across municipalities is 41%. Data also show a substantial variation across municipalities as the standard deviation is 29%.[27]

Note that our measure of economic specialization of the Italian workforce in the public administration is computed as the ratio between the number of Italians employed in the public administration and the total Italian workforce. The higher is this ratio the more Italians workers are employed as public officers relative to other occupations. This measure is substantially different than what we can obtain by dividing the number of Italians employed in the public administration over the total workforce employed in the public administration.[28] To see that consider Figure 6 that scatters South Tyrolean municipalities according to the share of public servants among Italians (on the y-axis) and the share of Italians among public servants (on the x-axis). Each circle is a municipality of South Tyrol and their radius is proportional to the share of Italians. Not surprisingly, the size of the circles increases when we move from left (where few Italians are public servants) to right (where public servants are predominantly Italians). The share of Italians among public servants, in fact, just tells us how many Italians are employed in the public administration, relative to the other groups, *but not* whether they are specialized in that sector.

public services (other than public administration), and energy, water, and gas.

[27]Figure 9 illustrates the spatial distribution of the share of employees among Italians in different occupations, while Figure A6 shows the related histograms. Figure 11 scatters municipalities according to the share of employees among Italians (in the y-axis) and the share of Italians (in the x-axis).

[28]As we report in Table 1, the average share of Italian employees in the public administration (across municipalities), relative to total workforce employed in the public administration, is about 49%. In Figure A7, we also illustrate the spatial distribution of the shares of Italians by occupation.

On the contrary, when we move along the y-axis, from the bottom to the top of the graph, the share of public servants in the Italian group increases making the Italian workforce particularly specialized in the labour market of public officers.[29] We use variation in the share of public servants among Italians to capture differences across municipalities in the level of specialization of the Italian group in the public administration sector.

Relative income. To test whether changes in relative income between groups might explain the shift in political attitudes of the Italians we collect information from the census volumes of 1961 and 1971 on occupational ranks along the vertical line in each language group.[30] Specifically, for each linguistic group, $j = \{G, I\}$, and each census year, $\tau = \{1961, 1971\}$, we collect information on the number of businesspeople (i.e., $B_{j\tau}$), the number of managers (i.e., $M_{j\tau}$), and the number of normal employees (i.e., $E_{j\tau}$). We then compute, for each census year, τ, the ratio between workers that are employed on top of the vertical line and those employed at its bottom (i.e., $(B_{j\tau} + M_{j\tau})/E_{j\tau}$). In our analysis, we assemble two proxy variables: (i) the difference between 1971 and 1961 in the ratio of German managers and businesspeople to German employees; and (ii) the difference between the same two years in the ratio of German managers and businesspeople to German employees divided by the ratio of Italian managers and businesspeople to Italian employees. Both variables are higher when the economic situation of the Germans improved during the ten-year period across the announcement of the "Package." The second measure also informs us of the extent to which the economic situation of the Germans got better relative to that of the Italians.

Terrorist attacks. To test whether prior exposure to terrorism might explain our results, we collect from the Historical Archive of the Italian Senate several statistical volumes with detailed information regarding terrorist attacks carried out by the Germans against Italian targets in South Tyrol ("*Atti Terrorismo e stragi prodotti dalla Commissione per il filone Alto Adige durante la X legislatura*"). We digitized detailed information on the place and the date of each of the 288 attacks that occurred in the region.We then geo-referenced and matched each of them with municipal spatial boundaries. We illustrate the spatial distribution of all the terrorist attacks between 1956 and 1972 in the region in Figure A9. we use this information

[29]In the municipality of Bolzano, for example, Italians made up 78.6% of the total population and accounted for 89% of the total number of employees in the public administration; however, public servants represented only 17% of the total employees in the Italian group, meaning that 83% of Italians were employed in other occupations. We can therefore conclude that Bolzano was not a municipality where Italians where particularly specialized in the public administration sector.

[30]Unfortunately, census volumes do not provide information on income.

to construct three variables: (*i*) the total number of attacks that occurred in each municipality of the Province of Bolzano between 1956 and 1972, (*ii*) the number of attacks over the same period involving human targets, and (*iii*) the number of attacks over the same period with dead among Italians. Figure A8 in the Online Appendix provides a picture of the number of attacks executed between 1956 and 1972. Dynamitard attacks on high tension and rail lines, electricity pylons, public buildings and fascist monuments started after Austria became independent on 15 May 1955, reached a pick in 1961 in response to the failure of the negotiations between Italian and Austrian Governments on the application of the Gruber-De Gasperi Agreement, and diminished after the announcement of the "Package" reform in 1966.

3.2 Data from the fascist regime

To select exogenous variation in the Italian settlement in South Tyrol we assemble data from the fascist epoch.

Migration inflows. We collect municipal-level data from the Provincial Statistics Institute (ASTAT) for the period 1932-1939 on the number of: (1) persons registered for change of residence from another Italian municipality (registrations from other municipality); (2) persons registered for change of residence from abroad (registrations from abroad);[31] (3) persons cancelled for change of residence to another Italian municipality (cancellations to other municipality); and (4) persons cancelled for change of residence to abroad (cancellations to abroad). For each available year, we compute the difference between registrations and cancellations. The sum over the entire period gives us the total net number of people that moved into each municipality of the region during the 1930s.

Housing units. The immigration process of Italian workers and their families to South Tyrol in the 1930s was backed by the implementation of a rigorous program of public housing construction. We exploit this additional historical evidence to construct a second variable defined as the share of housing units occupied between 1919 and 1945 by families who belonged to the Italian linguistic group. Municipality-level data on the number of occupied housing units that were built between 1919 and 1945, by language group, are digitized from the 1981 Census of Population and Housing.

[31] Registrations from abroad are negligible relative to those from other part of Italy. The percentage of registrations from abroad, in fact, are 3.75% of the total registrations.

Austrian-Hungurian railways: Finally, we use historical information on the route covered by the Salorno-Brenner section of the Brenner railway, a line that was designed under the Habsburg-Hungarian Empire and constructed at the end of the nineteenth century to connect Austria with regions in the North of Italy, at the time occupied by the Empire. We construct a dummy variable that takes on value 1 for the municipalities that at the time of the Italianization were served by railway stations along the route and 0 for those who were not.[32]

4 Empirical strategy and results

4.1 Baseline estimation

We estimate the effect on the Italian group's political attitudes of the fear of losing historically established economic rents by employing a standard difference-in-differences technique. Specifically, we compare the relative change in the vote share of the Italians to the MSI in the post-announcement period of the "Package" relative to the pre-announcement period between municipalities that were likely to be affected (i.e., those in South Tyrol) and those that were unlikely to be affected by it. As the map in Figure 4 illustrates, Trentino, while formerly part of the Habsburg-Hungarian empire, was 100% populated by Italians; the "Package," which was to introduce a large amount of autonomy in this Province as well, was therefore unlikely to redistribute established economic rents to members of other ethnic groups. The municipalities of Trentino therefore make an appropriate control group to assess the relative change in the vote share of the Italians to the MSI in those in South Tyrol.

As we explained in Section 2.3, the "Package" was signed in 1969 and then implemented progressively starting from 1974. However, the interlude between 1966 and 1974 was a period of great uncertainty for the entire population with news beginning to circulate with its announcement in 1966, prompting fear among the Italian population. Thus, in our estimates, we use the 1966 as the cut-off year and, in the next section, we provide a flexible estimation that shows how the definition of this cut-off is consistent with the data.

Our baseline difference-in-difference regression is defined as follows:

$$y_{it} = \beta\big[I(SouthTyrol)_i \times post1966_t\big] + X_{it}\gamma' + \delta_i + \mu_t + \varepsilon_{it}, \tag{1}$$

where i indexes municipalities and t indexes election years, which are 1953, 1958,

[32] To be sure that we do not code railway stations built in subsequent periods, we use information contained in the historical study of Facchinelli (1995).

1963, 1968, and 1972. The unit of observation is municipality times election year. The variable $post1966_t$ is a dummy which takes on value 1 for the elections after the 1966 and 0 before. The variable $I(SouthTyrol)_i$ is a dummy which takes on value 1 for the municipalities of South Tyrol and 0 for those in the Province of Trent.The outcome of interest, y_{it}, is the number of votes that in the election t Italians cast in each municipality i. The equation also includes municipality and election year fixed effects, δ_i and μ_t, as well as time-variant control at municipal level, X_{it}. Finally, ε_{it} is the idiosyncratic error that we cluster at municipality level.

We present our baseline estimation results in columns 1 and 2 of Table 2, where column 2 differs from the former for including a set of time-variant controls (i.e., the number of inhabitants, the language group concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree, and the shares of blank ballot papers). In both columns, our estimated difference-in-difference coefficient $\hat{\beta}$ is positive and statistically different from zero at whatever level of significance we care to use. Following the announcement of the "Package" reform the support for the MSI party significantly increased in the South Tyrolean municipalities relative to those in Trentino.

In terms of magnitude the $\hat{\beta}$ drops from a point estimate of 4.451% to 3.861% when we move from column 1 to 2. To quantify the magnitude of $\hat{\beta}$, consider that the average vote share won by the MSI party in the period under scrutiny in South Tyrol is 18.265%. Therefore, our estimates predicts a sizeable increase of about 21% of the South Tyrolean sample average vote share obtained by the MSI in National elections after the announcement of the "Package" relative to the pre-announcement period in the municipalities of South Tyrol (relative to those located in the Province of Trent).

4.2 Flexible estimation

In columns 3 and 4 of Table 2 we test a fully fledged version of Equation (1), where the coefficients βs are now allowed to vary by election years:

$$y_{it} = \sum_{t=1953}^{1972} \beta_t \big[I(SouthTyrol)_i \times \mu_t \big] + X_{it}\gamma' + \delta_i + \mu_t + \varepsilon_{it}. \tag{2}$$

This exercise is relevant for at least two reasons. First, it allows us to test for the parallel trend assumption of the difference-in-difference strategy before the announcement of the "Package." Second, it helps us check whether the shift in anti-German attitudes, estimated using Equation (1), occurred immediately after the

announcement of the "Package" or it took time to unfold. This is critical as an immediate, genuine upward shift in the MSI vote share would lower our concerns that the change in the Italian group's attitudes is rather driven by other unobservables correlated with the vote share of the MSI, alternative to the announcement of the "Package."

Our flexible estimations are similar when we do not include time-variant controls in Equation (2), as in column 3, and when we do so, as in column 4. Estimations obtained in column 4 are also plotted in Figure 7. Relative to the vote share secured by the MSI in the 1953 election (the baseline category), we find no difference in the 1958 and 1963 elections between municipalities in South Tyrol and those in Trentino. The two coefficients are not statistically significant, have mixed signs and are not large in magnitude. This finding supports the hypothesis that the parallel trend assumption holds as no particular pattern emerges prior to the 1966. On the other hand, as Figure 7 illustrates, the coefficients suddenly turn into the positive side following the announcement of the "Package." Remarkably, while both positive, we obtain a larger coefficient for the 1972 election than for the 1968 election: the announcement of the "Package" instilled the fear in the Italian group; however, the climax of this fright was reached after the Italian government made a commitment on the "Package," signing it on the day of November 30, 1969.

In sum, the results documented in Table 2 and in Figure 7 brought evidence that policies enacted to redistribute economic power from a privileged ethnic minority to an unprivileged majority, as the "Package" in South Tyrol, lead to a worsening in the attitudes towards the majority of the threatened group, even if the policy is yet to be implemented. The change in anti-German attitudes we document in South Tyrol is not explained by pre-trends and is robust to the inclusion of a wide set of time-variant controls. In the next sections we will show that this result masks two sources of heterogeneity among South Tyrolean municipalities, both related to economic factors. In Section 5 we will document that the exacerbation of anti-German attitudes was more marked in municipalities where Italians were fewer, while in Section 6 we will bring robust and extensive evidence that these attitudes developed more intensively in municipalities where Italians were more specialized as public officers. From now onwards, we will only focus on a restricted sample of South Tyrolean municipalities for the sake of making inference based on a cleaner treatment at municipality level. For transparency we also report in Section B of the Online Appendix the same tables with estimates obtained using the full sample that also includes municipalities in the Province of Trento.

5 Concentration of economic rents

The spatial distribution of Italians across South Tyrol was overly concentrated in few municipalities and towns of the region in the 1960s. As illustrated in Figure 1, which maps the share of the Italian language group at municipal level using information from the 1961 census, in about 67% of the municipalities Italians accounted for no more than 10% of the population; in municipalities where Italians represented the majority group, they made up less than 7% of the population. In this section, we explore whether smaller Italian communities developed more intense anti-German attitudes following the announcement of the "Package" for fear of being deprived of more concentrated economic rents.

A quick look at the data reveals that municipalities colonised by smaller Italian communities indeed developed a sharp exacerbation of the anti-German attitudes. In Figure 8 we plot the (unconditional) differences in the vote share secured by the MSI in the post-announcement period and the pre-announcement period for different quartiles of the spatial distribution of Italians across South Tyrolean municipalities. The bar graph shows that only in the first quartile of the distribution, i.e. in municipalities where the Italian settlement was less intense, anti-German attitudes post-1966 are statistically different from those observed before 1966.

A more rigorous way to document this result is to estimate a difference-in-differences specification that assumes that the municipality's vote share obtained by the MSI is a function of the share of Italians settled in it. This is written as follows:

$$y_{it} = \theta(share_ita_{it} \times post1966_t) + X_{it}\gamma' + \delta_i + \mu_t + \varepsilon_{it}, \tag{3}$$

where $share_ita_{it}$ denotes the share of Italians in municipality i at time t. The rest of the ingredients in Equation (3) are the same of Equation (1). In columns 1 and 2 of Table 3 we report our estimates of $\hat{\theta}$; column 2 also includes the set of time-variant controls in the matrix X_{it}. In both specifications we obtain a negative and statistically significant coefficient. Focusing on the point estimation in column 2, we find that a one standard deviation below the mean in the percentage of Italians increases the vote share of the MSI of 2.69% after the announcement of the "Package"— i.e., about 15% of the average vote share secured by the MSI in our sample (18.265).

5.1 Instrumental variable approach: the Italianization of the South Tyrol

The coefficient we present in column 2 of Table 3 is robust to the inclusion of a wide set of controls, municipality fixed effects, and year fixed effects. Nonetheless,

we might still capture a lower bound of the impact of the announcement of the "Package" in municipalities with smaller Italian communities. It could indeed be that Italians less sensitive to the ethnic conflict might have consciously chosen to move to the smallest Tyrolean municipalities to cover public posts. Accordingly, their reaction to the "Package" could be arguably lower.

To solve this issue we need to isolate exogenous variation in the Italian settlement. We do so by collecting information from the fascist epoch when the Italianization of the South Tyrol had its start. As we explained in Section 2, the Italianization of the region was a centrally planned program, highly coordinated by the Fascist regime. Individual instances to move into the "new land" were submitted to a central office, the "Commission for the migration and the domestic colonisation," which decided on a case-by-case basis. Individual preferences were therefore arguably secondary. With this premise in mind, we collect data on (*i*) the total number of immigrants that have been registered in each South Tyrolean municipality from other part of Italy between 1932 and 1939; (*ii*) the share of houses built by the fascist regime for the Italian settlement purpose during the 1930s; (*iii*) the geolocation of railway stations along the pre-existent Austrian route. We use this last piece of information to construct a dummy variable equals to 1 if the municipality had a station along the pre-existent Austrian railway — by far the most important transportation means the colonists used reach the South Tyrol.

Figure 9 shows the relationship between the total number of immigrants in the 1930s (Panel (*a*)), the popular housing program implemented in the 1930s (Panel (*b*)), the pre-existent Austrian railway routes (Panel (*c*)) and the share of Italians in 1961. Taken together all these graphs document a strong, persistent relationship between the Italianization program of the 1930s and the spatial distribution of Italians in the 1961.

In column 3 of Table 3 we therefore use the total number of immigrants in the 1930s as an instrumental variable and estimate Equation (3) by 2SLS. As expected, we find a larger magnitude of the 2SLS estimates than in the OLS estimates (column 2). Specifically, in municipalities with fewer Italians (explained by migration inflow occurred in the 1930s) the impact of the announcement of the "Package" on the MSI vote share moves from -14.421 to -25.022 — an increase in magnitude of about 80%. Our IV estimation therefore suggests that a one standard deviation below the mean in the percentage of Italians increases the vote share of the MSI of 4.68% after the announcement of the "Package," a shift which accounts for the 25.6% of the average MSI vote share. Column 4 reports the first stage as well as the Kleibergen-Paap F-statistic, that we compute to take into account the clustering of the standard errors. The first stage estimate is, as expected, positive and statistically significant, and

the Kleibergen-Paap F-statistic is above the conventional level. This is supportive of the hypothesis that our IV estimation is not affected by the employment of weak instruments.

Finally, we obtain substantially similar estimates when we employ the number of housing units built in the 1919-1945 period (columns 5 and 6) or the indicator of the municipalities served by stations along the Brenner railway route (columns 7 and 8) are used as instruments. Table A3 in the Online Appendix also reports the estimates from an over-identified 2SLS model where we employ all the three instruments simultaneously.

6 Evidence from the labour market for public posts

The evidence presented so far shows that anti-German attitudes increased in South Tyrolean municipalities, where the "Package" was likely to erode the economic rents of the Italian group, and that the shift was higher in municipalities where rents were more concentrated, i.e. where Italians were fewer. In this section we extensively document that the development of anti-German attitudes was the result of the fear that mounted on the Italian group, a sparse, small-scale group, highly specialized as public servants in the labour market. We first describe the peculiar features of the labour market in the region, and its division among ethnic groups. We then use this variation to explain the shift in attitudes of the Italians.

6.1 The division of labour in South Tyrol and the Italian specialization

In 1961, before the announcement of the "Package," South Tyrol was predominantly a region specialized in the agricultural sector. As Figure A5 in the Online Appendix illustrates, in 48% of the region's municipalities, the majority of the workers was employed in the agriculture sector. This was not the case of the Italians though. Figure 9 illustrates the spatial distribution of the share of employees in different occupations among Italians. Occupations are those reported in the official census: public administration, services, industry, construction, agriculture, trade, and transport. In each panel, we draw four clusters of municipalities, each marked by a different color. The lighter group is composed by municipalities were at most 10% of the Italian workforce was employed in that occupation; the darker one gathers municipalities were more than 50% of the Italian workforce was employed in that occupation. Looking at Panel (e), agriculture, one can easily notice that almost all the municipalities are depicted in light, and so is for the other occupation, with

the exception of Panel (a) that illustrates the spatial distribution of the share of employees in the public administration among Italians. From the map a remarkable specialization of the Italian group as public servants emerges: in about 42% of the municipalities, the percentage of public servants among Italians is higher than 50%, while in the 4% Italians were exclusively occupied in the public administration.[33] Note that this implies that in the other occupations Italians were practically absent.

As we argued in Section 2, this ethnic division of labour was the result of the massive process of Italianization of the South Tyrol and, in particular, of the implementation of the law of 1923 that declared Italian as the only language in the public offices and of subsequent laws that had caused dismissal of numerous South Tyrolese German-speaking officials from their posts. The resulting distortion in the labour market can be more effectively appreciated analysing Figure 11, where we scatter each municipality according to the share of employees in a particular occupation among Italians (y-axis) and the share of Italians on the total population (x-axis). As above, Figure 11 hosts seven panels, one for each of the seven sectors in the census. In each panel, the 45-degree line represents the locus of points with no distortion among ethnic groups in that particular labour market. Municipalities above the 45-degree line are labour markets distorted in favour of the Italian group, municipalities below the 45-degree line are labour markets distorted in favour of the German and Ladin group. No distortion arises in the sector of services (Panel (b)), in industry (Panel (c)), in the costruction sector (Panel (d)), and in trade (Panel (f)). As expected, agriculture is dominated by Germans and Ladins (all the municipalities lies below the 45-degree line), while public administration and transport is dominated by Italians. As we pointed out above, the distortion is clear-cut in the public administration: in municipalities where Italians were less than 20% of the total population, they highly specialized — in some cases, more than 80% of them occupied a public post.

The announcement of the "Package" in 1966 put at risk the historically established economic rents of Italians in these municipalities. The "Package," in fact, by proposing a redistribution of posts in the public administration sector proportionally to the numerosity of each language group, was to move the distribution downward up to the 45-degree line where public post are proportional to the numerosity of each linguistic group with a consequent economic loss for the Italian group. In the next section we empirically test this mechanism.

[33]See also Figure A6 in the Online Appendix were we present the histograms of the shares of employees in different occupations among Italians.

6.2 Redistribution of public posts and anti-German attitudes

In Figure 12 we plot the (unconditional) differences in the vote share secured by the MSI in the post-announcement period and the pre-announcement period for different quartiles of the spatial distribution of the shares of public servants among Italians. The bar graph clearly shows a zero effect of the announcement of the "Package" in municipalities where Italians were barely specialized in the public administration (first quartile), a positive but not statistically significant effect in the second and third quartiles, and a sizeble positive effect in municipalities where Italians are predominantly public servants (fourth quartile).

Column 1 of Table 4 shows that this relationship is robust to using our continuous variable, municipality fixed effects, and year fixed effects. It also controls for the total number of employees in the public administration, in each election year, to make sure that the estimated effect is not confounded by a simultaneous decline of public posts. Column 2 additionally includes other time-variant controls. Using this last specification, we obtain a point estimation equals to 11.815. As the standard deviation of the shares of public servants among Italians is 0.29, it implies that a one standard deviation above the mean in the shares of public servants among Italians explains an increase of 3.42% in the MSI vote share after the announcement of the "Package" — about 19% of the sample average MSI vote share.

This result suggests that the increase in anti-German attitudes, after the announcement of the "Package," is more pronounced in municipalities where the Italian workforce was more specialized as public servants. In columns 3 and 4 we additionally show that it is not specialization in the labour market per se that drives the shift in anti-German attitudes. To this purpose, we construct an Herfindhal index over the shares of employees in different occupations in the Italian group. This occupation concentration index of the Italians is higher when Italian employees are specialized in one particular occupation (not necessarily the public administration). Column 3 shows that municipalities where Italians were more specialized in one particular occupation did not develop more intense anti-German attitudes following the announcement of the "Package." Moreover, column 4 compares the effect of the shares of public servants among Italians on the MSI vote share in municipalities with same level of labour market specialization. Note that this exercise is particularly meaningful as it has the advantage to avoid that the effect is confounded by unobservables in other labour markets. We find that the effect estimated in column 2 enlarges by a factor of about two third.[34]

[34] In Table A4 in the Online Appendix we also employ the share of Italians among public servants

In Table 5 we document that this result is robust to controlling for the specialization of Italians in specific, alternative occupations (construction, services, trade, transport, agriculture, or industry) that might have been affected by the "Package." Results are displayed in columns 2 to 7 of Table 5, while column 1 replicates the specification estimated in column 4 of Table 4 to facilitate comparisons. The estimated coefficient of the effect of Italian specialization in the public administration on anti-German attitudes remains always statistically significantly different from zero and the magnitude substantially unchanged.

Note that the exercise we carried out in column 5 of Table 5, where we control for the specialization of the Italian workforce in the transport sector, is particularly important. As we documented in Panel (g) of Figure 11, Italians also specialized in these occupations and distortions in favour of this group were severe. The Italianization of the region and the nationalization of the long-range transport services, such as bus services and train services (*Ferrovie dello Stato*), required Italian speaking personnel. However, unlike the public servants, their dominance was never put in discussion and it was not part of the deal promoted in the "Package." Consistently with our mechanism, we document a zero shift in anti-German attitudes in municipalities where Italians were more specialized in the transport sector. On top of that, we obtain a positive and statistically significant effect of the specialization of the Italian workforce in the public administration even controlling for the specialization in the transport sector.

Finally, in column 9 of Table 5, we combine all these shares and leave out the one that captures the share of employees in the industry sector among Italians, which is used as baseline category.[35] Again, the coefficient estimates that are not related to the public administration sector are all statistically indistinguishable from zero.

7 Potential alternative mechanisms

In Section 6 we showed that the shift of anti-German attitudes in the Italian group was the result of the fear of being deprived of historically-established privileges in the public administration sector that were put in danger by the announcement of the

and an index of ethnic concentration in the public administration (i.e., a Herfindhal index computed over the shares of ethnic groups in that sector). As these measures do not capture the economic specialization of the Italian group in the public administration, we do not find an increase in the MSI vote share after the announcement of the "Package" in municipalities with higher values of these two indexes. We also document that the effect going through the economic specialization in the public administration (i.e., the share of public servants among Italians) is robust to the inclusion of these two alternative measures.

[35] Note that the sum of the shares of employees among Italians is one.

"Package" reform. We also show that this relationship is robust to the inclusion of a wide set of controls and it is not confounded by unobservables in the labour markets. Still it could be that the mechanism linking the change in the Italian group's attitudes and the announcement of the "Package" might potentially be founded on alternative grounds and interpreted from different angles. In this section we address some of these concerns.

7.1 Terrorist attacks

The dynamitard activities carried out from mid-1950s onwards to draw attention of the international press on the South Tyrol question might provide a first possible alternative explanation to the move in Italians' anti-German attitudes. As Montalvo (2011) documented, terrorist attacks may trigger a shift in voting in the targeted constituency. Our results could therefore be picking up the effects of these attacks on the Italian group's anger.

In Table 6 we use data on (*i*) the total number of attacks that occurred in each municipality of the Province of Bolzano between 1956 and 1972, (*ii*) the number of attacks over the same period involving human targets, and (*iii*) the number of attacks over the same period with dead among Italians to test whether the shift in MSI vote share has been more pronounced in municipalities more exposed to the terror in the pre-announcement period. In column 1 we show that municipalities with more frequent terroristic attacks have not developed higher anti-German attitudes, even if these attacks where targeted against human beings and produced wounded and dead (column 3) or dead (column 5). Table 6 also shows that our mechanism grounded on the specialization of Italians in the public administration is robust to the inclusion of the total number of attacks (column 2), the number of attacks with human targets (column 4), and the number of attacks with dead (column 6).[36]

We therefore conclude that exposure to terror does not explain our results grounded on the economic specialization of the Italian workforce in the public administration.

[36]In Table A5 in the Online Appendix, we also show that these results hold even if we exploit the extensive margin of the terror. Columns 1 and 2 use a 0-1 variable (where 1 indicates whether the municipality has been exposed to at least one attack) in place of the counting variables employed in columns 1 and 2 of Table 6. Table A5 also shows that these results are not sensitive to different arch of time we consider. In columns 3 and 4 we employ the number of attacks over the 1961-1966 period, while in columns 5 and 6 we use the number of attacks in 1966 — the year when the "Package" was announced.

7.2 Relative income

Changes in the relative income of ethnic groups due to income shocks might have also driven our results. Exploring the origins of Hindu-Muslim violence in post-Independence India, Mitra and Ray (2014) find that an increase in per capita Muslim expenditures leads to a significant increase in short to medium run conflicts. Ethnic and religious violence might thus be brought about by changes in relative incomes of two competing ethnic groups.

Since data on income of Italian- and German-speaking groups are not available, to test this alternative mechanism we gather information from the 1961 and 1971 censuses on the resident population by occupational categories along vertical hierarchy. As we explained in Section 3, we use this information to construct two proxy variables that take on higher values when the economic situations of the Germans improved during the ten-year period across the announcement of the "Package" (*hierachy Germans*) and when it got better relative to that of Italians (*hierachy Germans/Italians*).

Results obtained by employing these two variables are displayed in Table 7. They are not supportive of the fact that the shift in anti-German attitudes was driven by a simultaneous shift in relative income. The coefficients capturing this effect are both statistically not significant (columns 1 and 3), whereas the coefficients on the effect of the share of public servants among Italians are both positive and statistically different from zero (columns 2 and 4).

7.3 Anti-German attitudes vs. Fascist political values

Our mechanism stresses the key role of sentiments and fear that a privileged ethnic minority developed in response of the announcement of a reform that was to put in danger its privileges. As studied in Passarelli and Tabellini (2017), these immaterial factors may give rise to outbreaks and protests; but their effect is only temporary. As the fear vanishes, attitudes revert to their steady-state level. Conversely, the development of political values commonly shows a persistent form (e.g., Ticchi, Verdier, and Vindigni, 2013; Besley and Persson, 2017).

As we explained in Section 2, the MSI actively operated in the region to defend its *Italianess* against the misappropriation of the German populations that were systematically targeted in their speeches. At the same time, MSI promoted fascist political values and all its hierarchies indeed came from the fascist regime. Disentangling the two mechanisms is therefore difficult.

The South Tyrolean setting also suits for testing whether the Italian group indeed developed a sentiments-driven anti-German attitudes or whether the shift in MSI

vote share was due to the development of fascist political values. Historians have in fact argued that the implementation of the "Package" in 1974 eventually turned to be a big feint (Alcock, 1970; Steininger, 2003): while more autonomy was given to the Province of Bolzano on several subjects, public posts were far from being redistributed to the other ethnic groups;[37] as a result, terrorism resumes starting from 1978. In this section, we exploit this second discontinuity occurred in 1974 to test whether after the implementation of the "Package," Italians decreased their support to the MSI as less concerned about the deprivation of their economic rents by the Germans.

In Table A6 in the Online Appendix we replicate the same difference-in-difference estimation we presented in Table 2 enlarging our sample so as to include the election results of 1976, the election round subsequent to the implementation of the "Package." In particular, column 4 reports the estimation from a fully flexible specification. Estimations are plotted in Figure 13, relative to the year 1953. As Figure 13 illustrate, as the fear of loosing their public posts faded away the support of the Italians for the MSI shifted downward by about 8% from the elections in 1972 to those held in 1976, reverting back to their pre-announcement period.

8 Sensitivity checks

8.1 Population size

Can the results documented in Tables 3 and 4 be driven by a specific group of municipalities? As we argued in Section 2, the specific ethnic distribution in the public administration labour market was a result of the migration of few Italians in small Tyrolean municipalities to cover vacant public posts. So it could be that our results are sensitive to the exclusion of the smallest municipalities. In this section we demonstrate that this is unlikely and that results hold even if we exclude either the lowest deciles of the municipalities distribution in terms of population or the highest ones.

In Table A7 in the Online Appendix we replicate the analysis presented in Table 3 on the link between the share of Italians in South Tyrolean municipalities and the development of anti-German attitudes. For easiness of comparison column 1 of

[37] Before the implementation of the "Package," the Italian government succeeded in adding the following second paragraph in the final version adopted in 1974 (nowadays displayed in the new autonomous statute of the Province of Bolzano, article #89): "*The awarding of the public posts reserved to citizens belonging to the German or Ladin language group will be implemented gradually with the replacement of the new vacancies.*" Redistribution of public posts was therefore postponed to the future generations.

Table A7 replicates column 2 of Table 3. In column 2 we employ weighted least squares, weighting municipalities according to the number of their inhabitants. We then exclude the first lowest decile of the municipalities distribution (column 3), and also the second lowest decile (column 4). In column 5 we exclude municipalities in the top two deciles, while in column 6 we only exclude the top first decile. In all these alternative specifications, the coefficient capturing the effect of Italian settlement on the shift in anti-German attitudes remains negative and statistically significant.

We run the same analysis in Table A8 in the Online Appendix, where we replicate column 4 of Table 4, obtaining qualitatively same result when we employ our measure of specialization of the Italian group as public servants. We can therefore conclude that our findings are not sensitive to extreme municipalities where the shift in anti-German attitudes could have been particularly marked than in the rest of the distribution.

8.2 Shares of Italians

Our mechanism emphasises the role of economic specialization of the Italian group in the public administration sector as a major determinant of the spike in the inter-ethnic tensions occurred in South Tyrol after the announcement of the "Package." However, as we illustrated in Figure 3, economic specialization of the Italians in this sector increases (albeit non linearly) with the share of Italians in the municipalities over the total population. Could then our results be sensitive to the exclusion of municipalities that hosted (relatively) very few or too many Italians?

To address this question, in Table A9 we replicate estimates presented in column 4 of Table 4 weighing municipalities according to their relative average share of Italians (column 2) or by excluding from the sample municipalities whose share of Italians falls below the 10th (column 3) and the 20th (column 4) percentiles or above the 80th (column 4) and the 90th percentiles (column 5). In Figure A10 we offer a graphical illustration of the variations made in the sample of municipalities by marking in red municipalities lying in the first decile of the distribution according to the share of Italians, in orange those belonging to the second decile, in light blue those in the top second decile, while in blue those belonging to the top decile.

Regardless of the variation made to the sample, coefficient estimates remain positive and statistically different from zero, which corroborates our argument that variations in anti-German attitudes are not driven by municipalities with shares of Italians located at the peak or at the bottom of the distribution.

9 Conclusions

In this paper we exploit a unique experiment of history that occurred in the 1960s in South Tyrol to investigate how and to what extent frictions in the labour market prompt salience in the ethnic conflict and induce a move in ethnic minorities' voting preferences towards more extremist political platforms. During the fascist epoch, South Tyrol experienced a complex process of Italianization that produced persistent distortions in the public administration sector of the labour market in favour of the Italian-speaking minority group. This well-rooted ethnic division of labour was, however, brought back to question by the 1966 announcement of the Package reform that aimed, among others, at awarding public posts to citizens of all language groups and proportionally to their numerosity.

Drawing upon a wealth of data on Italians' voting preferences, composition of the population by linguistic group, and detailed information on occupations in the labour market, we find that, following the announcement of the reform, the Italian group markedly developed anti-German attitudes in South Tyrolean municipalities relative to those in the province of Trento. The increase was higher in municipalities where Italians had specialized the most in the public administration — the sector that was targeted by the reform that aimed at redistributing public posts pursuant the principle of ethnic proportionality.

Our study therefore suggests (in line with Jha (2013), Becker and Pascali (2016), Grosfeld, Sakalli, and Zhuravskaya (2017)) that inter-ethnic tensions quickly respond to economic incentives in the labor market, even in countries were resources are relatively abundant; that ethnic minorities, endowed with historically-established economic privileges, are particularly sensitive to challenges to their status; and that fear and emotions are major determinants of changes in political attitudes. Taken together, these results can help in improving our understanding of current ethnic conflicts around the World.

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Figure 1: Spatial distribution of the Italian language group across South Tyrolean municipalities in 1961 (shares).

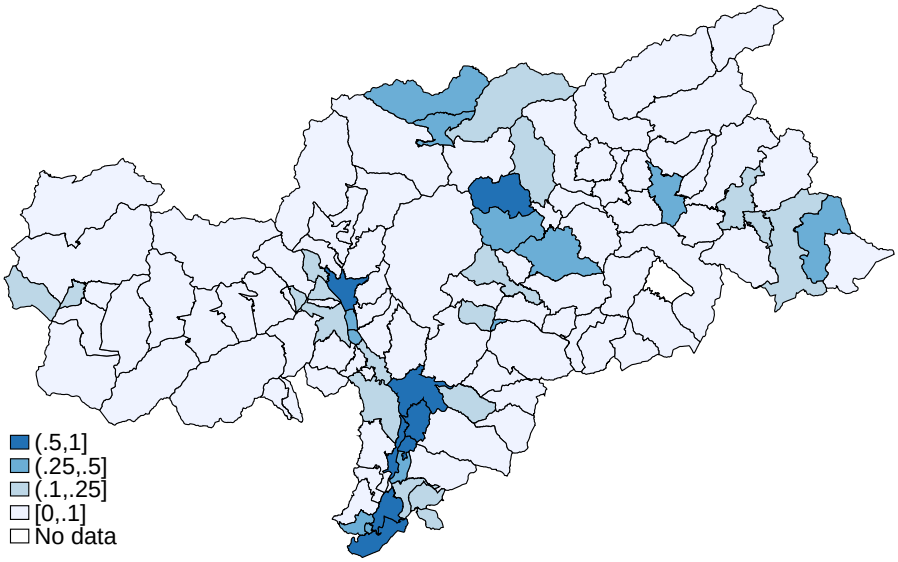


Figure 2: Spatial distribution of public servants among Italians across South Tyrolean municipalities in 1961 (shares).

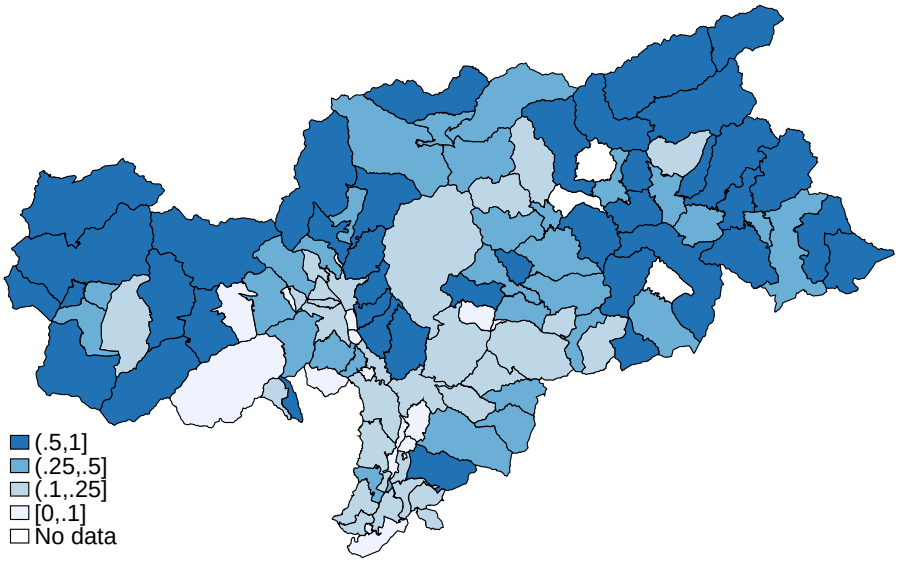


Figure 3: Shares of public servants among Italians and share of Italians in South Tyrolean municipalities in 1961.

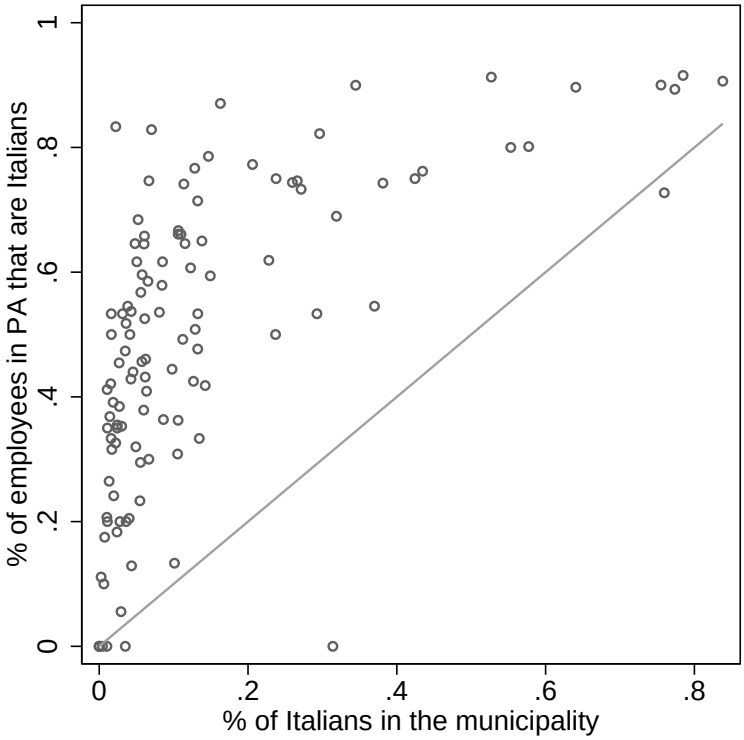


Figure 4: Map of the South Tyrol (in red) and its surrounded area before and after the Treaty of St. Germain of 1919 by linguistic groups (*source:* Fingeller, 1938).

Figure 5: Number of registrations at the Registry Office (Anagrafe) for change of residence from another Italian municipality

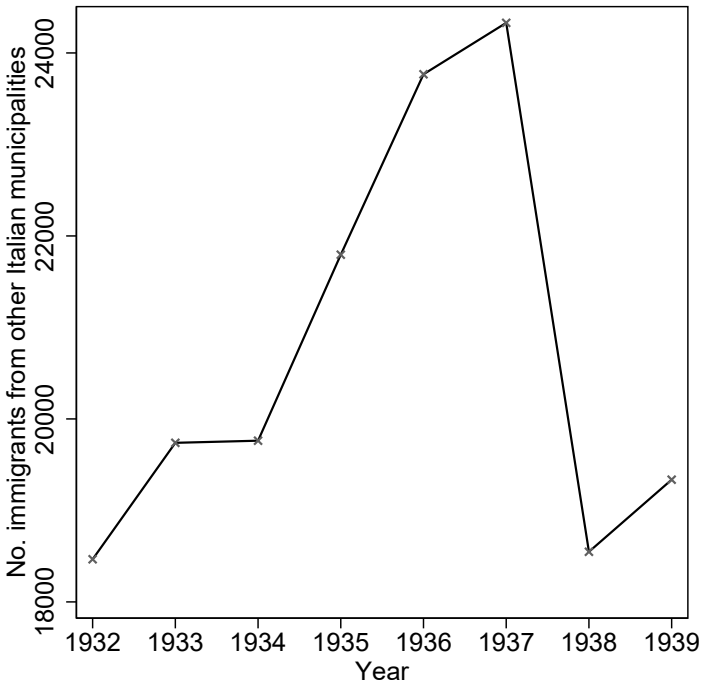


Table 1: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Panel A — observations: municipality × election year					
MSI vote share	7.590	12.98	0	95.52	1525
MSI vote share in South Tyrol	18.265	16.799	0	95.52	553
I(South Tyrol)	0.363	0.481	0	1	1525
Population	2541.0	7360.5	82.60	105699	1525
Ethnic Concentration Index	0.937	0.125	0.481	1	1525
Share of Ladins	0.0217	0.134	0	0.993	1525
Illiterate among Italians	8.821	38.85	0	815	1525
University degrees among Italians	19.99	147.1	0	2862	1525
High − school diplomas among Italians	86.21	540.3	0	9478	1525
Share of blank voters	0.0486	0.0268	0	0.238	1525
Workforce in Public Administration	84.38	421.4	0	5479	1512
Workforce in Construction	103.6	239.2	1	3339	1512
Workforce in Services	124.3	526.3	0	8630	1512
Workforce in Trade	160.8	621.5	1	9429	1512
Workforce in Transport	42.78	192.0	0	2959	1512
Workforce in Agriculture	262.5	281.1	2	3275	1512
Workforce in Industry	223.2	785.7	1	11144	1512
Panel B — observations: municipality (in South Tyrol)					
Share of Italians	0.132	0.187	0	0.820	115
Migrations 1930*s*	1441.2	4676.8	0	38622	115
Public housing 1930*s*	0.153	0.201	0	0.841	115
Railway routes	0.165	0.373	0	1	115
Share Publ. servants Italians 1960	0.411	0.290	0	1	115
Share Construction Italians 1960	0.0881	0.0951	0	0.745	115
Share Services Italians 1960	0.0832	0.0994	0	0.643	115
Share Trade Italians 1960	0.0922	0.0893	0	0.667	115
Share Transport Italians 1960	0.0940	0.0939	0	0.475	115
Share Agriculture Italians 1960	0.0730	0.133	0	0.658	115
Share Industry Italians 1960	0.132	0.141	0	1	115
Share Italians publ. servants 1960	0.492	0.246	0	0.915	115
Eth. concentr. publ. servants 1960	0.614	0.143	0.369	1	115
Occupations concentr. Italians 1960	0.385	0.235	0.157	1	112
Terrorist attacks	1.878	4.371	0	39	115
Terrorist attacks 1961 − 66	1.765	4.113	0	36	115
Terrorist attacks 1966	0.278	0.923	0	7	115
H/l hierarchy Germans	0.201	0.273	-0.250	2.250	115
H/l hierarchy Italians/Germans	1.275	17.17	-10.47	180.8	115

Figure 6: Share of public servants among Italians (y-axis) and share of Italians among public servants (x-axis) in 1961, all municipalities of South Tyrol. The radius of each circle is proportional to the share of Italians.

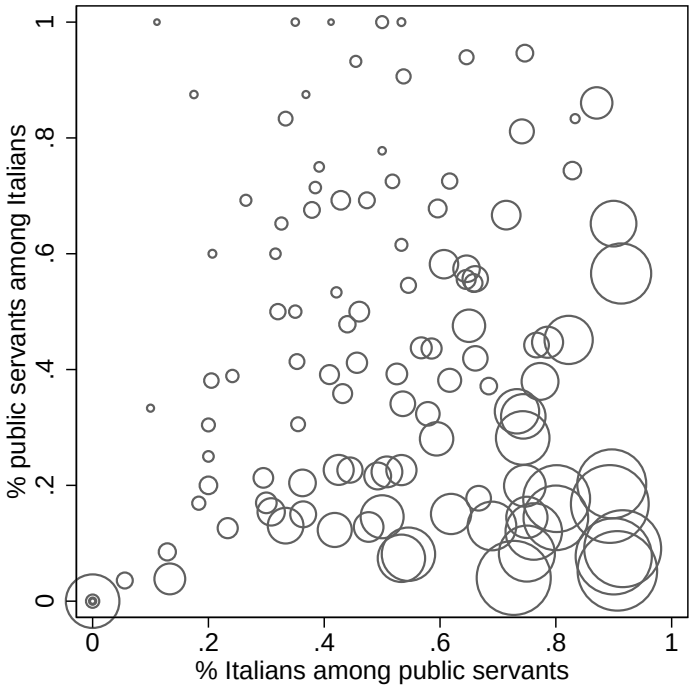


Table 2: MSI vote share before and after the announcement of the packages — Baseline and flexible estimates

	Dependent variable is: MSI vote share			
	(1)	(2)	(3)	(4)
$I(South\,Tyrol) \times post_{1966}$	4.196***	3.861***		
	(1.308)	(1.453)		
$I(South\,Tyrol) \times 1958$			1.121	0.624
			(1.684)	(1.699)
$I(South\,Tyrol) \times 1963$			-2.179	-2.597
			(1.824)	(1.949)
$I(South\,Tyrol) \times 1968$			2.417	1.186
			(1.825)	(1.933)
$I(South\,Tyrol) \times 1972$			4.971**	4.794*
			(2.130)	(2.554)
Controls	No	Yes	No	Yes
Year FE	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes
Observations	1525	1525	1525	1525
R^2	0.037	0.041	0.045	0.051

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Columns 2 and 4 include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those who hold a University degree. They also control for the share of blank voters. In columns 3 and 4 estimates are relative to the baseline category, year 1953. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 7: Coefficient estimates and confidential intervals (95%) from regression results displayed in Table 2, column 4.

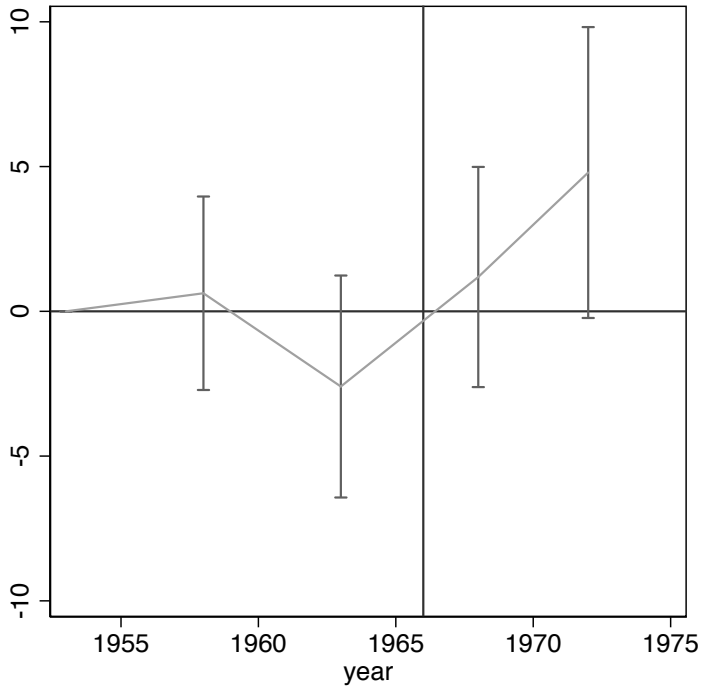


Figure 8: Percentage change in the MSI vote share before and after the announcement of the "Package" among quartiles of the shares of Italians

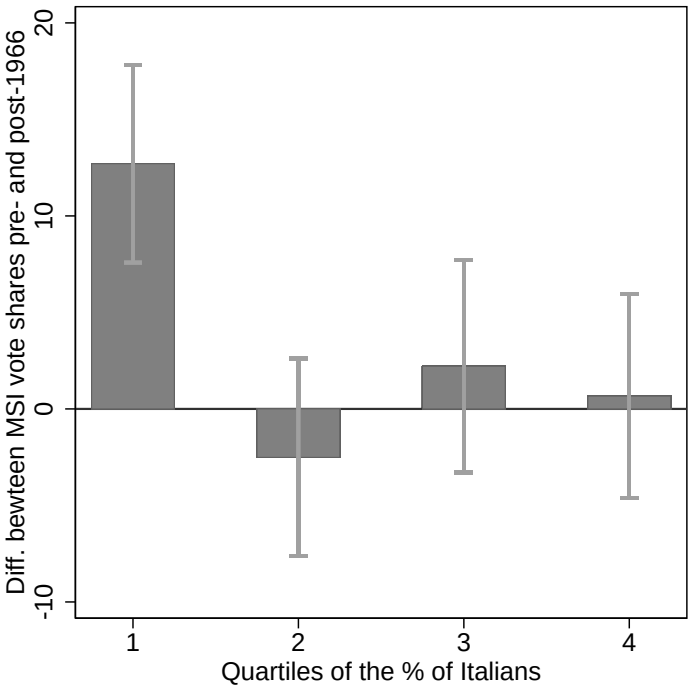
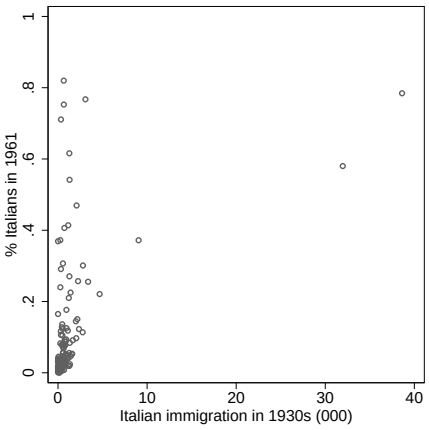
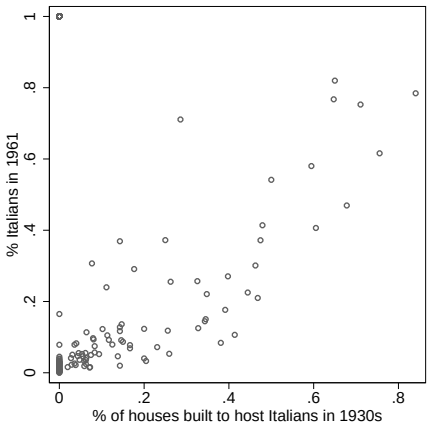


Figure 9: First stage (unconditional).

(a) Immigration



(b) Popular housing



(c) Railway

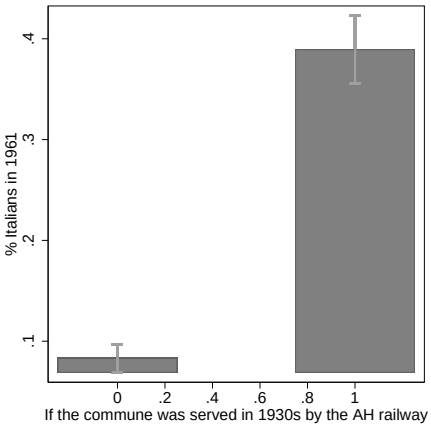


Table 3: The Italianization channel — 2SLS estimates

	Dependent variable is: MSI vote share							
	OLS estimates		2SLS estimates					
			second stage	first stage	second stage	first stage	second stage	first stage
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\%Italians \times post_{1966}$	-11.029**	-14.421**	-25.022**		-23.358***		-26.907**	
	(4.290)	(6.220)	(12.058)		(8.897)		(12.517)	
$migrations\,1930s \times post_{1966}$				0.000013***				
				(0.000)				
$publ.\,housing\,1930s \times post_{1966}$						0.660***		
						(0.054)		
$railway\,routes \times post_{1966}$								0.215***
								(0.045)
Kleibergen-Paap F statistic				10.799		149.408		23.054
Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	553	553	553	553	553	553	553	553
R^2	0.050	0.062	0.059	0.625	0.060	0.866	0.058	0.706

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Columns 2 to 8 include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 10: Spatial distribution of the shares of employees among Italians in different occupations in 1961, all municipalities of South Tyrol.

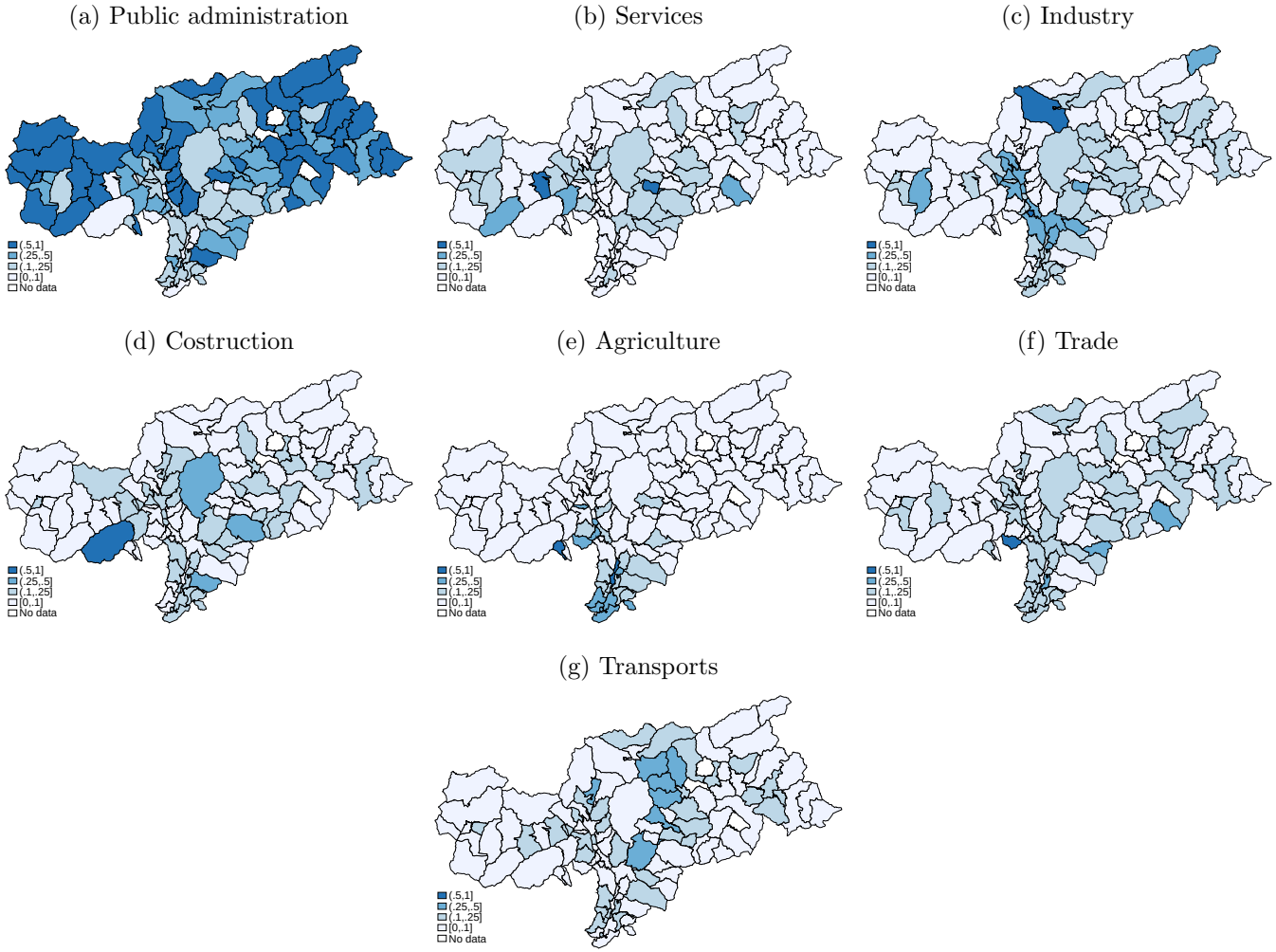
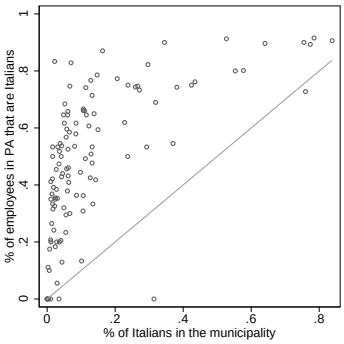
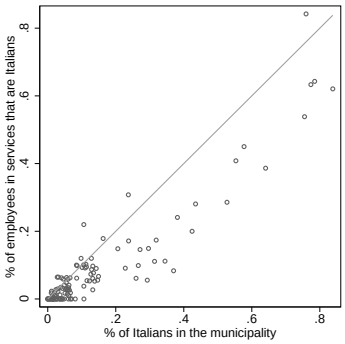


Figure 11: Share of employees among Italians in different occupations and the share of Italians in 1961, all municipalities of South Tyrol.

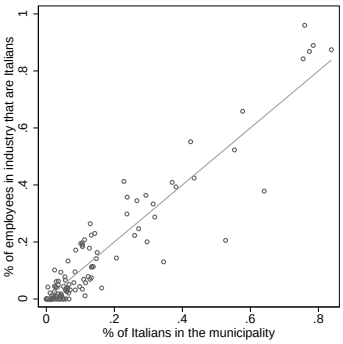
(a) Public administration



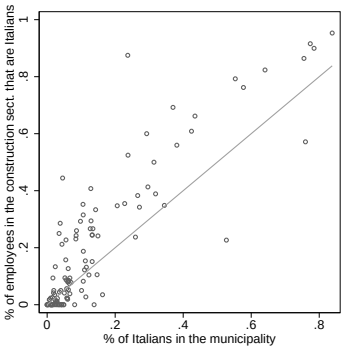
(b) Services



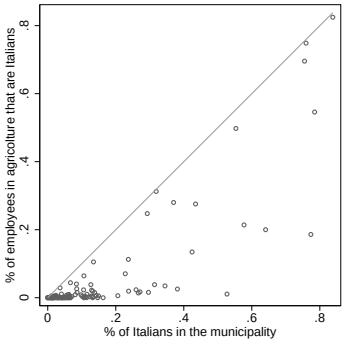
(c) Industry



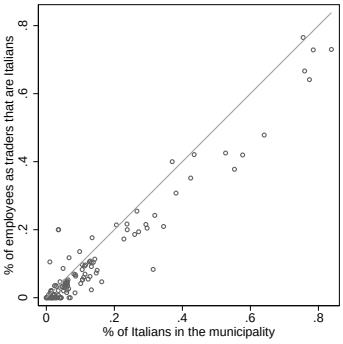
(d) Costruction



(e) Agriculture



(f) Trade



(g) Transports

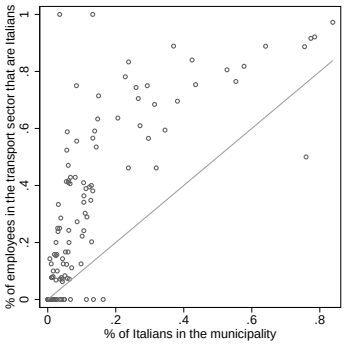


Figure 12: Percentage change in the MSI vote share after the announcement of the "Package" among quartiles of the shares of public servants among Italians

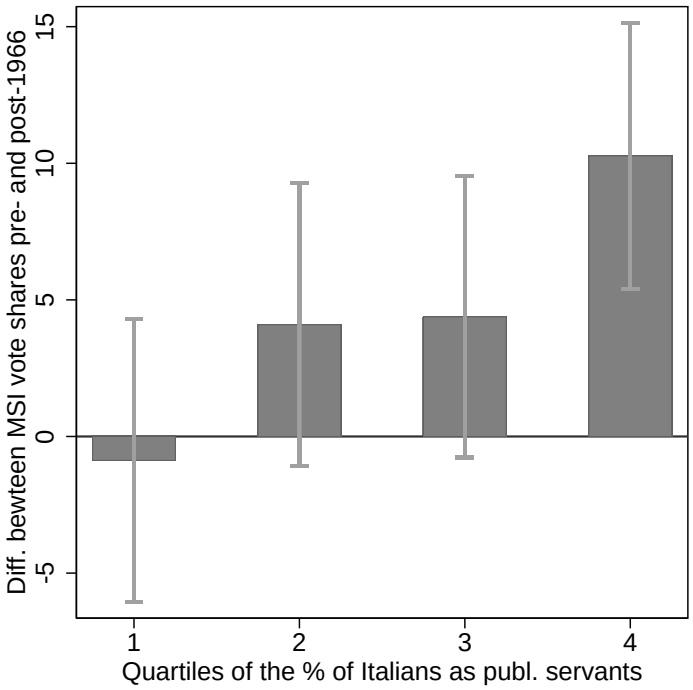


Table 4: Specialization of Italians in the public administration

	Dependent variable is: MSI vote share			
	(1)	(2)	(3)	(4)
$\%\, publ.\, servants\, Italians \times post_{1966}$	11.593**	11.815**		16.230***
	(5.611)	(5.676)		(5.127)
$occupations\, concentr.\, Italians \times post_{1966}$			9.639	-6.745
			(8.172)	(9.530)
Controls	No	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes
Observations	540	540	540	540
R^2	0.061	0.074	0.063	0.075

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Columns 2 to 4 include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters. Every column controls for the number of employees in the public administration. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Specialization of Italians in the public administration vs. other occupations

	Dependent variable is: MSI vote share							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\%\, publ.\, servants\, Italians \times post_{1966}$	16.230***	16.621***	16.500***	17.041***	15.785***	13.638**	14.704**	17.971**
	(5.127)	(5.654)	(5.475)	(5.752)	(5.255)	(6.067)	(6.209)	(8.694)
$\%\, construction\, Italians \times post_{1966}$		5.889						6.070
		(13.356)						(13.285)
$\%\, services\, Italians \times post_{1966}$			8.243					10.046
			(13.308)					(16.930)
$\%\, trade\, Italians \times post_{1966}$				6.184				14.048
				(15.642)				(18.525)
$\%\, transport\, Italians \times post_{1966}$					0.579			3.754
					(17.602)			(22.034)
$\%\, agriculture\, Italians \times post_{1966}$						-5.829		-2.423
						(8.774)		(12.850)
$\%\, industry\, Italians \times post_{1966}$							-4.041	
							(10.375)	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	540	540	540	540	540	540	540	540
R^2	0.075	0.076	0.076	0.077	0.076	0.078	0.075	0.083

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. All the columns include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the number of blank voters. Every column controls for the number of employees in the considered occupation. In column 8 estimates are relative to the baseline category, share of employees in the industry sectors among Italians. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Terrorist attacks and specialization of Italians in the public administration

	Dependent variable is: MSI vote share					
	(1)	(2)	(3)	(4)	(5)	(6)
$\%\, publ.\, servants\, Italians \times post_{1966}$		16.367***		16.685***		18.212***
		(5.110)		(5.260)		(5.287)
$terrorist\, attacks \times post_{1966}$	-0.240	-0.233				
	(0.301)	(0.301)				
$with\, human\, targets \times post_{1966}$			0.290	-0.664		
			(1.298)	(1.232)		
$with\, dead \times post_{1966}$					-5.406	-7.888*
					(3.850)	(4.231)
Observations	540	540	540	540	540	540
R^2	0.057	0.076	0.056	0.075	0.064	0.090
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	540	540	540	540	540	540
R^2	0.057	0.076	0.056	0.075	0.064	0.090

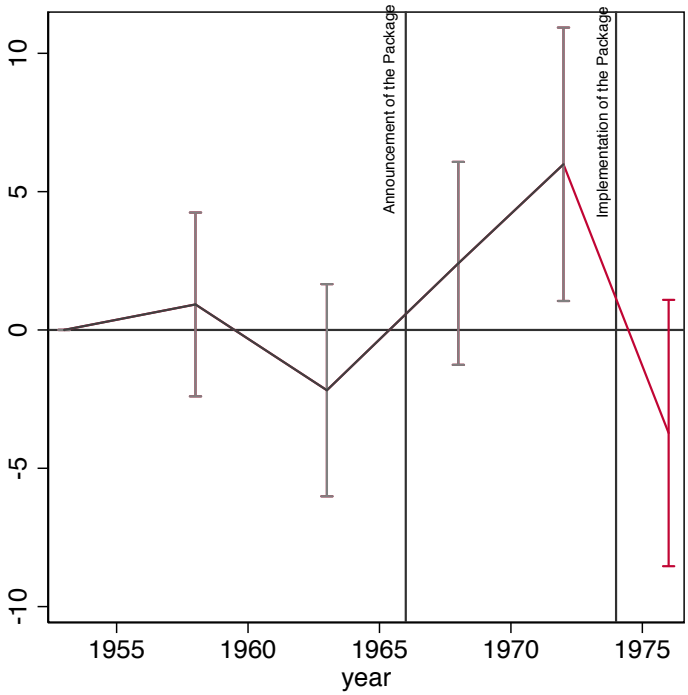
Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. All the columns include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Relative income and specialization of Italians in the public administration

	Dependent variable is: MSI vote share			
	(1)	(2)	(3)	(4)
$\%\, publ.\, servants\, Italians \times post_{1966}$		16.429***		16.184***
		(5.150)		(5.090)
$h/l\, hierarchy\, Germans \times post_{1966}$	-1.657	-2.427		
	(4.077)	(3.916)		
$h/l\, hierarchy\, Germans/Italians \times post_{1966}$			0.005	-0.016
			(0.023)	(0.035)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes
Observations	540	540	540	540
R^2	0.056	0.075	0.056	0.075

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Columns 2, 3, and 5 include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters and for the index of the occupations concentration in the Italian group. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 13: Coefficient estimates and confidential intervals (95%) from regression results displayed in Table A6, column 4.



Online Appendix

From Italianization to Germanization: Division of Labor, Economic Rents, and Anti-German Attitudes in South Tyrol

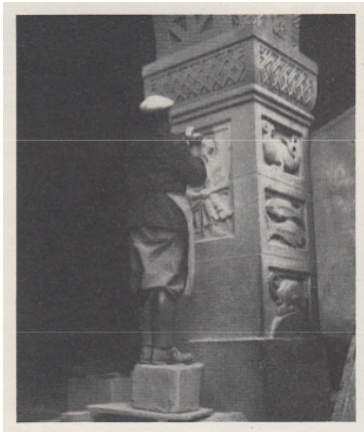
By Alessandro Belmonte and Armando Di Lillo

A Additional Figures and Tables

Figure A1: The Italianization of South Tyrol during the Fascist regime. (*source:* Fingeller, 1938).

(a) No German allowed on gravestones

(b) Scratching reliefs from Tyrolean monuments



(c) Erecting Italian monuments

Figure A2: The Italianization of South Tyrol during the Fascist regime. Reshaping of the museum building in Bolzano. (*source:* Fingeller, 1938).

(a) Before

(b) After

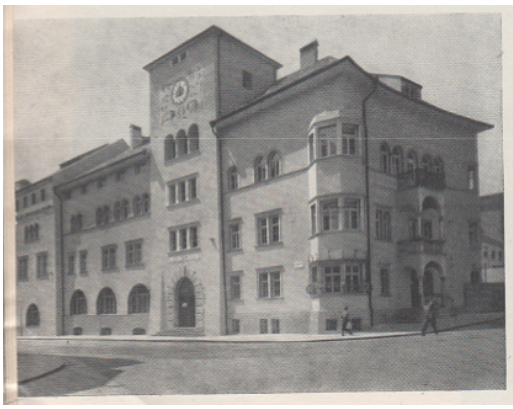


Figure A3: The evolution of ethnic proportion over the total population of South Tyrol. (*source:* Alcock, 1970).

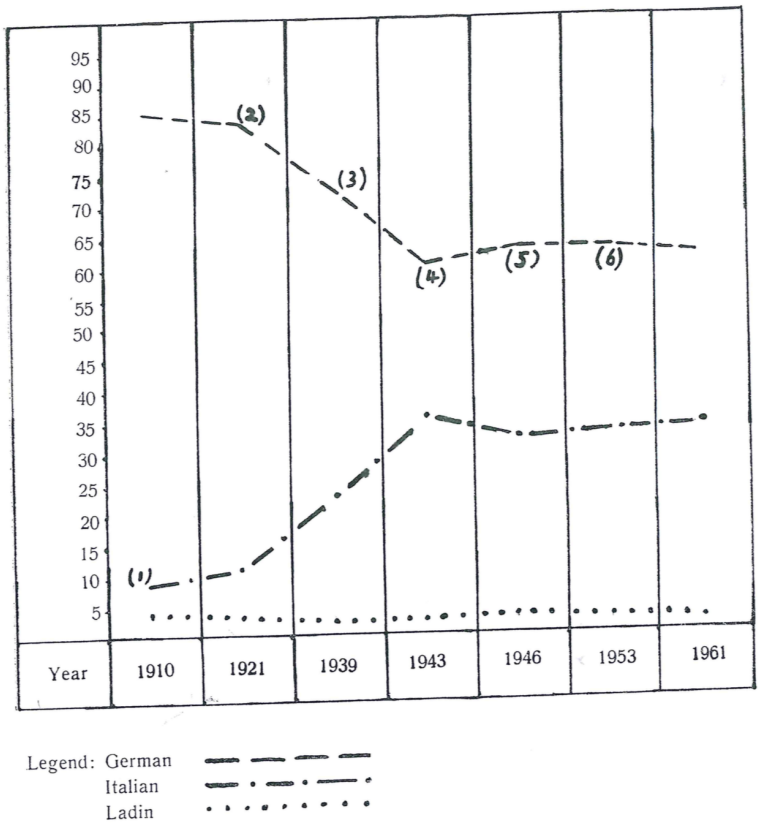


Figure A4: New Italian quarter built in Bolzano during the 1930s. (*source:* Fingeller, 1938).

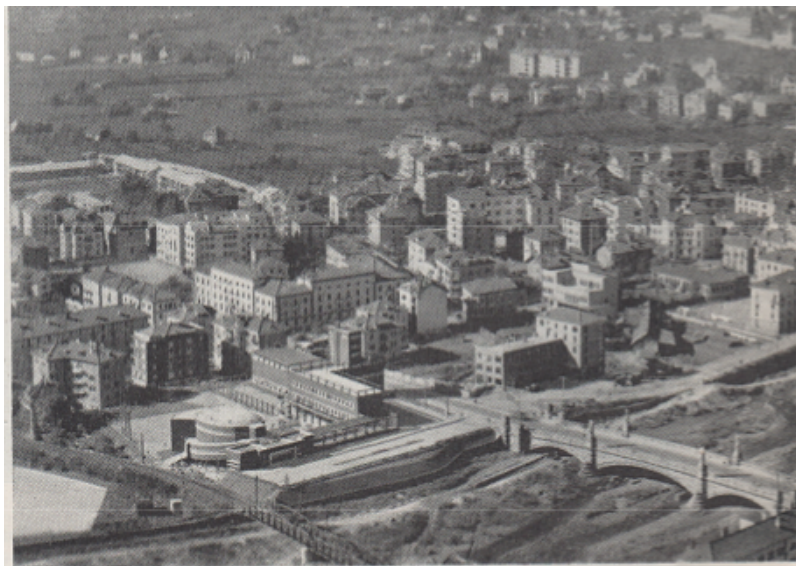


Table A1: Number of occupied housing units among members of the language groups.

	Total	Italian	German	Ladin
Pre-1919	27251	4517	21562	1172
		(0.166)	(0.791)	(0.043)
1919-1945	12631	7066	5141	424
		(0.559)	(0.407)	(0.033)
1946-1960	23439	10806	11731	902
		(0.461)	(0.500)	(0.038)
1961-1970	32133	13313	17545	1275
		(0.414)	(0.546)	(0.040)

Notes. Figures come from the 1981 Census of Population and Housing, pertain to all municipalities in the province of Bolzano and are split according to the linguistic group of the housing units' occupants. Shares at language group level are reported in parentheses for each period.

Table A2: Total (and shares) of population and linguistic groups by activity sectors in 1961

	Total population		Italians		Germans		Ladins	
Activity sector	No. people	Pop. share (%)	No. people	Share (%)	No. people	Share (%)	No. people	Share (%)
Total population	160011	100	54959	100	99626	100	5426	100
Agriculture	48996	30.6204	2326	4.2322	44614	44.7815	2056	37.8916
Building	11724	7.3270	5655	10.2895	5770	5.7917	299	5.5105
Industry	32007	20.0030	15693	28.5540	14803	14.8586	1511	27.8474
Public administration	14789	9.2425	11148	20.2842	3462	3.4750	179	3.2989
Services	18784	11.7392	6252	11.3758	11998	12.0430	534	9.8415
Trade	27024	16.8888	9222	16.7798	17053	17.1170	749	13.8039
Transp-communications	6687	4.1791	4663	8.4845	1926	1.9332	98	1.8061

Notes. Data are taken from the Census of Population, 15 October 1961, Volume III - Province of Bolzano.

Figure A5: Spatial distribution of the shares of different occupations in total employment in 1961, all municipalities of South Tyrol.

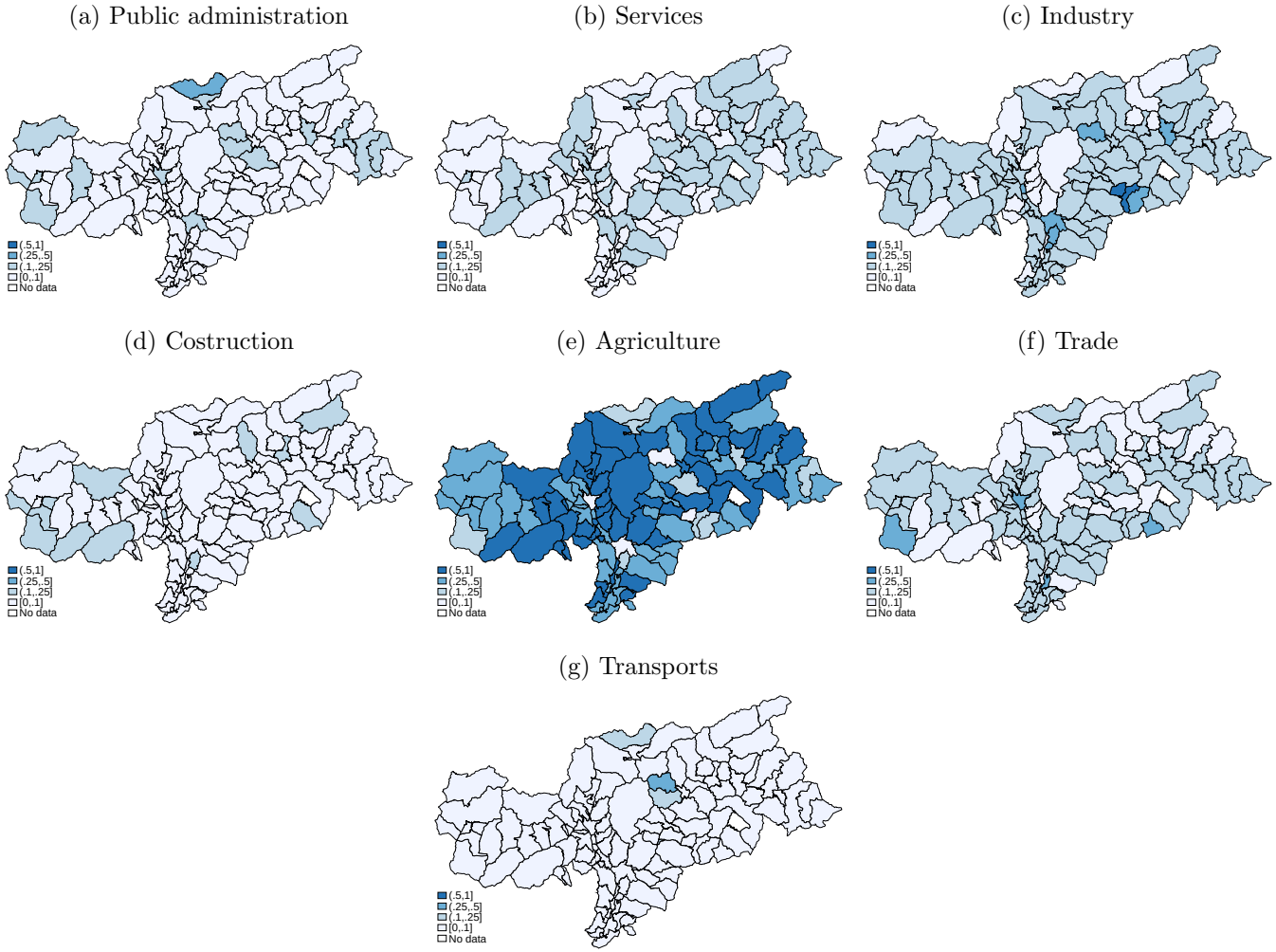


Table A3: The Italianization channel — overidentified 2SLS estimates

	Dependent variable is: MSI vote share		
	OLS estimates	2SLS estimates	
		second stage	first stage
	(1)	(2)	(3)
$\%\,Italians \times post_{1966}$	-14.421**	-23.855***	
	(6.220)	(8.732)	
$migrations\,1930s \times post_{1966}$			0.000004**
			(0.000)
$publ.\,housing\,1930s \times post_{1966}$			0.572***
			(0.065)
$railway\,routes \times post_{1966}$			0.063*
			(0.033)
Hansen J statistic		0.132	
Kleibergen-Paap F statistic			85.712
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Observations	553	553	553
R^2	0.062	0.060	0.875

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. All the columns include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

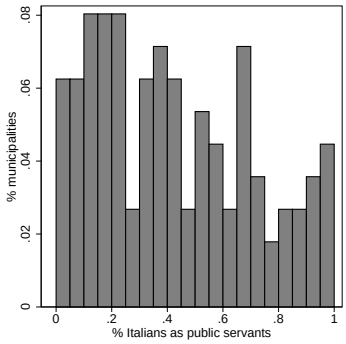
Table A4: Specialization of Italians in the public administration – Other measures of labor concentration

	Dependent variable is: MSI vote share					
	(1)	(2)	(3)	(4)	(5)	(6)
$\%\, publ.\, servants\, Italians \times post_{1966}$	11.815**		12.556**		14.702***	32.292***
	(5.676)		(5.752)		(5.510)	(8.774)
$\%\, Italians\, publ.\, servants \times post_{1966}$		-3.236	-5.852			-8.210
		(5.831)	(5.603)			(6.097)
$eth.\, concentr.\, publ.\, servants \times post_{1966}$				14.640	24.346***	33.536***
				(10.275)	(8.848)	(12.127)
$occupations\, concentr.\, Italians \times post_{1966}$						-23.619*
						(13.658)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	540	540	540	540	540	540
R^2	0.074	0.057	0.076	0.061	0.086	0.099

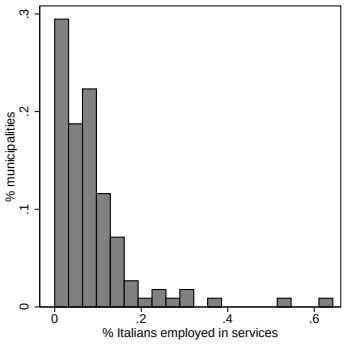
Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Columns 1 to 6 include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters. Every column controls for the number of employees in the public administration. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure A6: Histograms of the shares of employees among Italians in different occupations in 1961, all municipalities of South Tyrol.

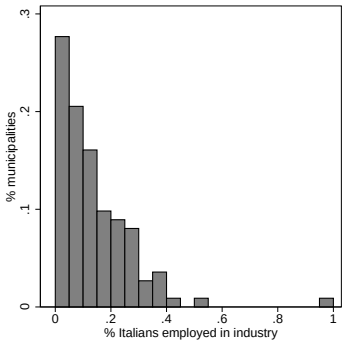
(a) Public administration



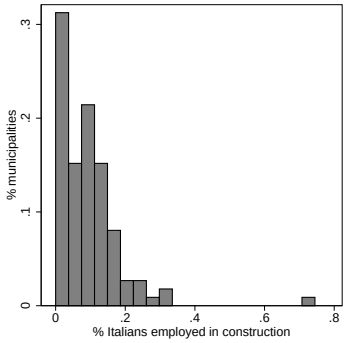
(b) Services



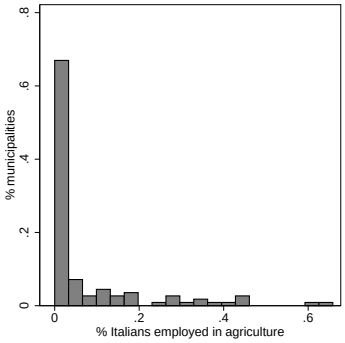
(c) Industry



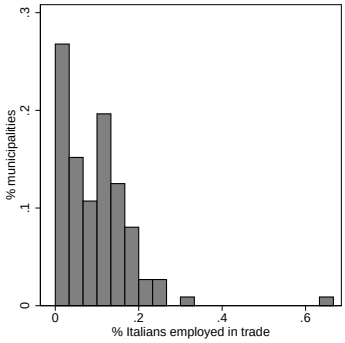
(d) Costruction



(e) Agriculture



(f) Trade



(g) Transports

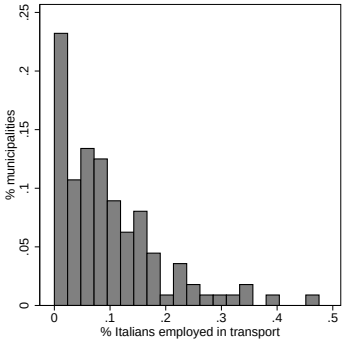
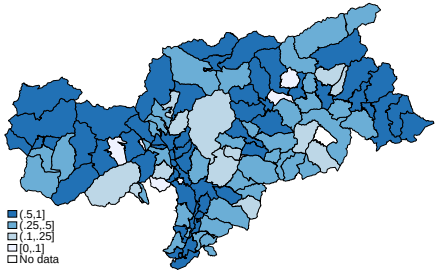
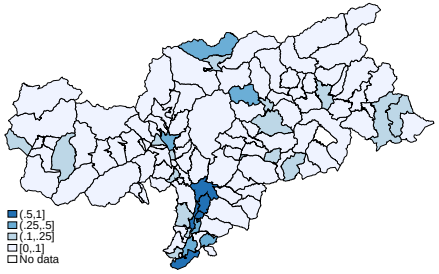


Figure A7: Spatial distribution of the shares of Italians among different occupations in 1961, all municipalities of South Tyrol.

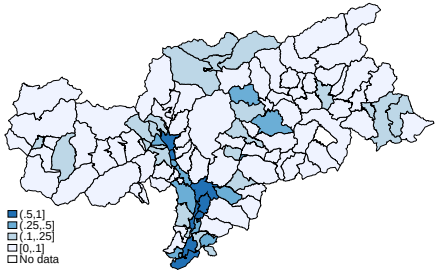
(a) Public administration



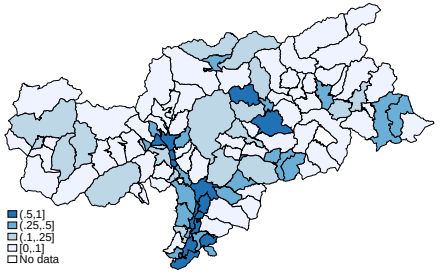
(b) Services



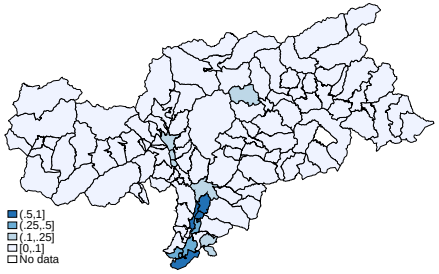
(c) Industry



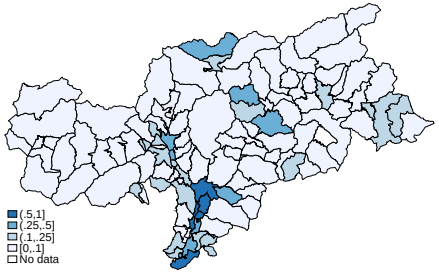
(d) Costruction



(e) Agriculture



(f) Trade



(g) Transports

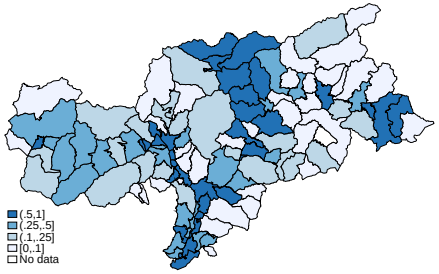


Figure A8: Number of terrorist attacks in South Tyrol between 1956 and 1972.

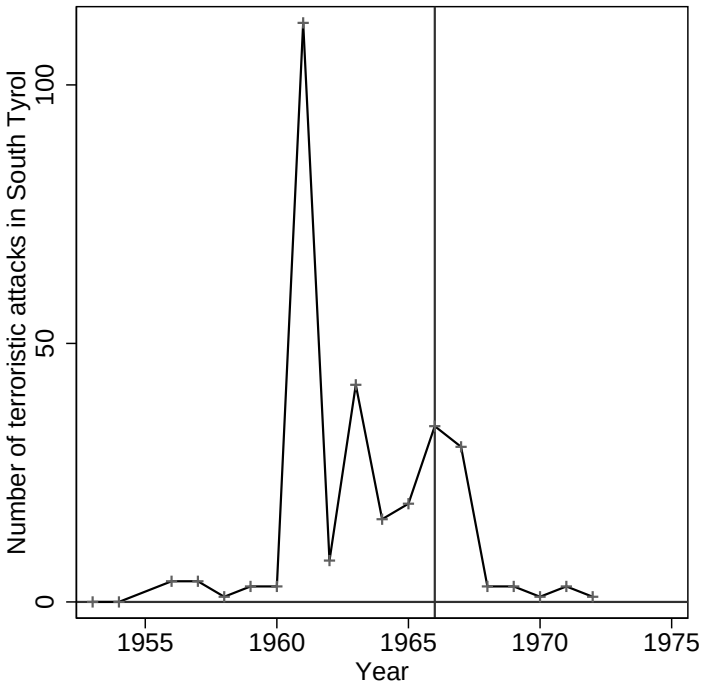


Figure A9: Spatial distribution of the terrorist attacks in South Tyrol between 1956 and 1972.

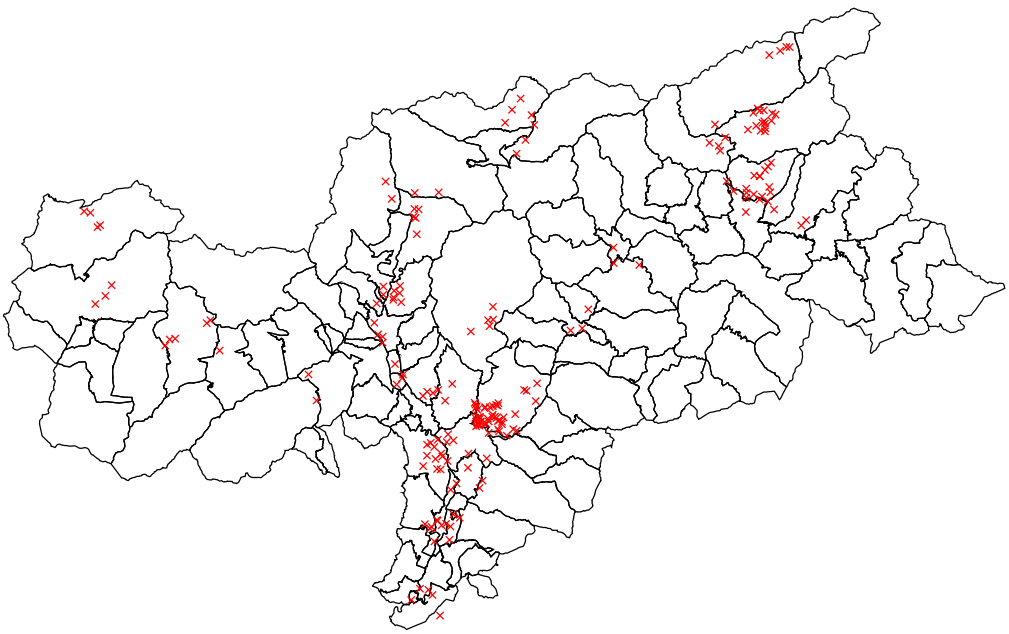


Table A5: Terrorist attacks and specialization of Italians in the public administration

	Dependent variable is: MSI vote share					
	(1)	(2)	(3)	(4)	(5)	(6)
$\%\, publ.\, servants\, Italians \times post_{1966}$		16.578***		16.442***		16.909***
		(5.053)		(5.138)		(5.284)
$terrorist\, attacks\ \times post_{1966}$	-1.320	-1.864				
	(2.874)	(2.783)				
$terrorist\, attacks\, 1961-66 \times post_{1966}$			-0.226	-0.241		
			(0.322)	(0.323)		
$terroristic\, attacks\, 1966 \times post_{1966}$					-0.535	-1.337
					(1.344)	(1.281)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	540	540	540	540	540	540
R^2	0.057	0.076	0.057	0.076	0.056	0.076

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. All the columns include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A6: MSI vote share before and after the announcement of the packages and its implementation — Baseline and flexible estimates

	Dependent variable is: MSI vote share			
	(1)	(2)	(3)	(4)
$I(South\,Tyrol) \times post_{1966}$	1.800	2.341*		
	(1.224)	(1.399)		
$I(South\,Tyrol) \times 1958$			1.151	0.949
			(1.685)	(1.685)
$I(South\,Tyrol) \times 1963$			-1.935	-1.892
			(1.801)	(1.888)
$I(South\,Tyrol) \times 1968$			2.661	2.327
			(1.842)	(1.878)
$I(South\,Tyrol) \times 1972$			5.177**	5.752**
			(2.138)	(2.494)
$I(South\,Tyrol) \times 1976$			-3.628*	-3.952
			(2.032)	(2.431)
Controls	No	Yes	No	Yes
Year FE	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes
Observations	1852	1852	1852	1852
R^2	0.026	0.028	0.058	0.061

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Columns 2 and 4 include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters. In columns 3 and 4 estimates are relative to the baseline category, year 1953. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A7: The Italianization channel — Sensitivity checks on the population of the municipalities

	Dependent variable is: MSI vote share					
	(1)	(2)	(3)	(4)	(5)	(6)
	baseline	weighted	$\geq$ 10th percentile	$\geq$ 20th percentile	$\leq$ 80th percentile	$\leq$ 90th percentile
$\%Italians \times post_{1966}$	-14.421**	-10.394***	-13.934**	-12.152*	-14.667*	-15.447**
	(6.220)	(3.812)	(6.903)	(7.122)	(7.832)	(7.230)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	553	553	495	437	443	498
R^2	0.062	0.091	0.066	0.079	0.067	0.063

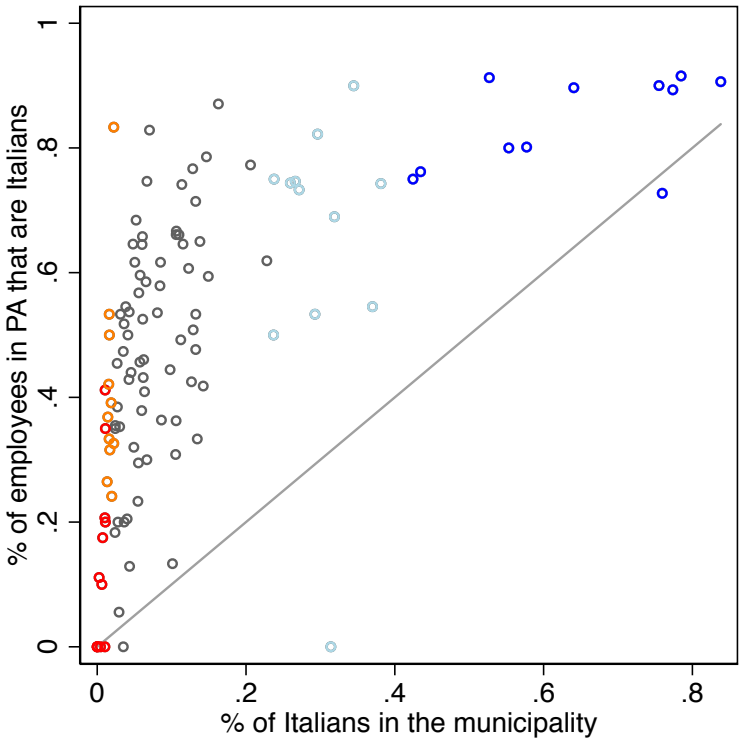
Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is comune $\times$ election year. Column 1 replicates the estimation in column 2 of Table 3. Column 2 weighs municipalities according to their population. Column 3 excludes the first decile of the municipalities distribution, while column 4 excludes the second decile. Column 5 excludes municipalities on the top two deciles, while column 6 only excludes the top first decile. All the columns include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, those that are graduate and those that hold an high school diploma. They also control for the share of blank voters. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A8: Specialization of Italians in the public administration — Sensitivity checks on the population of the municipalities

	Dependent variable is: MSI vote share					
	(1)	(2)	(3)	(4)	(5)	(6)
	baseline	weighted	$\geq$ 10th percentile	$\geq$ 20th percentile	$\leq$ 80th percentile	$\leq$ 90th percentile
$\%\, publ.\, servants\, Italians \times post_{1966}$	16.230***	20.418***	22.339***	27.370***	14.315**	15.827***
	(5.127)	(5.945)	(8.101)	(8.435)	(5.537)	(5.160)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	540	540	487	432	430	485
R^2	0.075	0.107	0.080	0.102	0.079	0.076

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality $\times$ election year. Column 1 replicates the estimation in column 4 of Table 4. Column 2 weights municipalities according to their population. Column 3 excludes the first decile of the municipalities distribution, while column 4 excludes the second decile. Column 5 excludes municipalities on the top two deciles, while column 6 only excludes the top first decile. All the columns include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, those that are graduate and those that hold an high school diploma. They also control for the share of blank voters and for the index of the occupations concentration in the Italian group. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure A10: Shares of public servants among Italians and share of Italians in South Tyrolean municipalities in 1961.



Notes. In red are the municipalities belonging to the first decile of the distribution according to the share of Italians. In orange are those belonging to the second decile. In light blue are the municipalities lying in the top second decile, while in blue are those belonging to the top decile.

Table A9: Specialization of Italians in the public administration — Sensitivity checks on the share of Italians

	Dependent variable is: MSI vote share					
	(1)	(2)	(3)	(4)	(5)	(6)
	baseline	weighted	$\geq$ 10th percentile	$\geq$ 20th percentile	$\leq$ 80th percentile	$\leq$ 90th percentile
$\%\,publ.\,servants\,Italians \times post_{1966}$	16.230***	10.418**	19.598***	13.370**	17.406***	16.851***
	(5.127)	(4.530)	(7.011)	(6.702)	(6.205)	(5.622)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	540	539	493	438	432	485
R^2	0.075	0.328	0.098	0.066	0.084	0.079

Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality $\times$ election year. Column 1 replicates the estimation in column 4 of Table 4. Column 2 weighs municipalities according to their average share of Italians in the population. Column 3 excludes the first decile of the municipalities distribution, while column 4 excludes the second decile. Column 5 excludes municipalities on the top two deciles, while column 6 only excludes the top first decile. All the columns include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, those that are graduate and those that hold an high school diploma. They also control for the number of blank voters and for the index of the occupations concentration in the Italian group. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B Sensitivity check: full sample with the region of Trent as control

To make inference be based on a cleaner treatment at the municipality level, the analysis performed in the main body of the paper has revolved around a restricted sample made up of South Tyrolean municipalities only. For the sake of completeness and transparency, we also report estimates obtained by using the full sample, which includes municipalities in the Province of Trento. That is, we investigate the degree of sensitivity of our main findings within an enlarged estimation sample.

We first re-check whether, following the 1966 announcement of the "Package" reform, municipalities that hosted a lower share of Italians experienced a strengthening in their anti-German attitudes. In columns 1 and 2 of Table B1, we report the OLS estimates of triple interaction terms that include a dummy variable, $I(SouthTyrol)$, equal to 1 for South Tyrolean municipalities and 0 for those in the Province of Trent. The estimates appear to resemble in sign, magnitude, and significance level those presented in Table 3. Similarly, when instrumenting for the share of Italians with the three variables related to the Italianization program implemented during the fascist epoch (i.e., number of immigrants between 1932 and 1939, share of houses built during the 1930s, and geolocation of railway stations along the pre-existent Austrian route), the 2SLS results in columns 3 to 8 of Table B1 do not differ much from those shown in the same columns of Table 3.

We then re-look into how the announcement of the "Package" reform in 1966, which re-shuffled the highly-fractionalized structure of the labour market by making the coverage of posts in the public administration no longer a prerogative of the Italian-speaking portion of the population, exacerbated the formation of anti-German attitudes among the Italian minority group. To check for the robustness of this channel, we present in Tables B2 and B3 a replication of the outputs in Tables 4 and A4. The coefficient of interest is the one on the triple interaction between the post-1966 dummy, the treatment dummy, and the share of public servants among Italians. In line with the findings documented in the main body of the paper, this coefficient maintains a positive sign regardless of whether the specification includes the occupation concentration index of the Italians (column 4) of Table B2, or, with reference to Table B3, the share of Italians among public servants (column 2), the ethnic concentration index in the public administration (column 4), or all of them (column 6).

We finally challenge the robustness of the public administration channel to the inclusion of alternative activity sectors (i.e., construction, services, trade, transport,

agriculture, and industry) as well as to the enlargement of the estimation sample. Results, reported in Table B4, are practically unchanged in both magnitude and significance with respect to the ones shown in Table 5. The positive sign of the triple interaction coefficient that includes the share of public servants among Italians confirms our finding that the announcement of the Package reform generated frictions in the labour market for public servants and a consequent extremization of anti-German attitudes, which was particularly pronounced in municipalities where Italians were more specialized as public officers.

Table B1: The Italianization channel — 2SLS estimates — full sample with the region of Trento as control

	Dependent variable is: MSI vote share							
	OLS estimates		2SLS estimates					
			second stage	first stage	second stage	first stage	second stage	first stage
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$I(South\,Tyrol) \times post_{1966}$	5.564***	5.626***	6.686***	0.119***	6.575***	0.023***	6.755***	0.092***
	(1.770)	(2.168)	(2.275)	(0.020)	(2.271)	(0.008)	(2.371)	(0.013)
$I(South\,Tyrol) \times post_{1966} \times \%Italians$	-11.364***	-12.973**	-20.766***		-19.953**		-21.278**	
	(4.311)	(5.749)	(7.998)		(7.797)		(9.899)	
$I(South\,Tyrol) \times post_{1966} \times migrations\,1930s$				0.000015***				
				(0.000)				
$I(South\,Tyrol) \times post_{1966} \times publ.\,housing\,1930s$						0.701***		
						(0.055)		
$I(South\,Tyrol) \times post_{1966} \times railway\,routes$								0.255***
								(0.047)
Kleibergen-Paap F statistic				49.908		160.651		28.798
Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1525	1525	1525	1525	1525	1525	1525	1525
R^2	0.044	0.048	0.046	0.539	0.046	0.855	0.045	0.668

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Columns 2 to 8 include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table B2: Specialization of Italians in the public administration — full sample with the region of Trento as control

	Dependent variable is: MSI vote share			
	(1)	(2)	(3)	(4)
$I(South\,Tyrol) \times post_{1966}$	-0.764	-1.307	-0.130	-0.319
	(1.932)	(1.918)	(2.820)	(2.836)
$I(South\,Tyrol) \times post_{1966} \times \%\,publ.\,servants\,Italians$	11.619**	11.755**		16.624***
	(5.591)	(5.617)		(5.174)
$I(South\,Tyrol) \times post_{1966} \times occupations\,concentr.\,Italians$			9.320	-7.427
			(8.040)	(9.450)
Controls	No	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes
Observations	1512	1512	1512	1512
R^2	0.054	0.058	0.048	0.060

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Columns 2 to 4 include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters. Every column controls for the number of employees in the public administration. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table B3: Specialization of Italians in the public administration — other measures of labour concentration — full sample with the region of Trento as control

	Dependent variable is: MSI vote share					
	(1)	(2)	(3)	(4)	(5)	(6)
$I(South\,Tyrol) \times post_{1966}$	-1.307	5.132	0.803	-3.943	-16.235***	-16.335**
	(1.918)	(3.624)	(3.569)	(6.359)	(5.518)	(6.768)
$I(South\,Tyrol) \times post_{1966} \times \%\,publ.\,servants\,Italians$	11.755**		12.194**		14.553***	32.167***
	(5.617)		(5.670)		(5.494)	(8.864)
$I(South\,Tyrol) \times post_{1966} \times \%Italians\,publ.\,servants$		-2.822	-4.606			-7.813
		(5.604)	(5.366)			(5.982)
$I(South\,Tyrol) \times post_{1966} \times eth.\,concentr.\,publ.\,servants$				12.387	22.185***	32.345***
				(9.800)	(8.416)	(11.839)
$I(South\,Tyrol) \times post_{1966} \times occupations\,concentr.\,Italians$						-23.774*
						(13.625)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1512	1512	1512	1512	1512	1512
R^2	0.058	0.041	0.060	0.044	0.069	0.082

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Columns 1 to 6 include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters. Every column controls for the number of employees in the public administration. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table B4: Specialization of Italians in the public amministration vs. other occupations — full sample with the region of Trento as control

	Dependent variable is: MSI vote share							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$I(South\,Tyrol) \times post_{1966}$	-0.319	-1.374	-1.124	-1.440	0.029	0.186	0.310	-3.916
	(2.836)	(3.148)	(3.399)	(3.482)	(3.873)	(3.302)	(3.884)	(8.650)
$I(South\,Tyrol) \times post_{1966} \times \%\,publ.\,servants\,Italians$	16.624***	17.463***	16.799***	17.610***	16.497***	14.068**	15.678***	17.730**
	(5.174)	(5.559)	(5.328)	(5.750)	(5.277)	(6.034)	(6.028)	(8.605)
$I(South\,Tyrol) \times post_{1966} \times \%\,construction\,Italians$		6.971						7.916
		(13.111)						(13.567)
$I(South\,Tyrol) \times post_{1966} \times \%\,services\,Italians$			6.104					6.805
			(12.980)					(16.212)
$I(South\,Tyrol) \times post_{1966} \times \%\,trade\,Italians$				6.731				12.256
				(15.463)				(18.226)
$I(South\,Tyrol) \times post_{1966} \times \%\,transport\,Italians$					-2.010			-0.763
					(17.151)			(20.608)
$I(South\,Tyrol) \times post_{1966} \times \%\,agriculture\,Italians$						-5.968		-3.903
						(8.396)		(12.178)
$I(South\,Tyrol) \times post_{1966} \times \%\,industry\,Italians$							-2.489	
							(10.103)	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Comune FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1512	1512	1512	1512	1512	1512	1512	1512
R^2	0.060	0.060	0.060	0.061	0.060	0.062	0.060	0.065

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Columns 1 to 8 include the number of inhabitants, the group language concentration index, the share of Ladins, the number of Italians that are illiterate, the number of Italians that hold a high-school diploma as well as those that hold a University degree. They also control for the share of blank voters and for the index of the occupations concentration in the Italian group. Every column controls for the number of employees in the considered occupation. In column 8 estimates are relative to the baseline category, share of employees in the industry sectors among Italians. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

C Sensitivity check: change in the municipalities border, mergers, and separations

Over the period under scrutiny some of the municipalities in the province of Bolzano undergone a number of administrative changes. To further corroborate the robustness of our findings, we test whether the mechanisms described in the main body of the paper are still at work after dropping from the estimation sample municipalities that experienced major changes, i.e., mergers and separations. For example, Senale and San Felice were two separate municipalities until their merge in 1974; La Valle was separated from San Martino in Badia and became an independent municipality in 1964; Velturno was part of Chiusa from 1929 to 1960. More detailed information about affected municipalities, including the relevant legislative provisions, are reported in Table C1; a list of unaffected municipalities is contained in Table C2.

The estimates are presented in column 2 of Tables C3 and C4, which replicate column 2 of Table 3 and column 4 of Table 4, respectively. The coefficients on the interaction terms are significantly different from zero and maintain the expected sign: following the announcement of the reform in 1966, there was an intensification of anti-German attitudes in municipalities where Italians constituted a lower share of the total population as well as in municipalities where a larger portion of Italians were covering posts in the public administration sector.

Besides controlling for the consequences of major administrative changes, we perform a final robustness check through exclusion from the sample of 15 municipality-year pairs, all exhibiting abnormal values on the Italians vote share for the MSI party.[38] The coefficient estimates, reported in column 3 of Table C3 and C4, are again all statistically significant and very close in magnitude to those described above.

[38]Specifically, we exclude municipality-year observations with a vote share greater 3.3 standard deviations (recall that the standard deviation is 16.79) than the average vote share secured in the entire period under scrutiny by the MSI in the municipality. Results do not change if we shift up the threshold above 3.3.

Table C1: Municipalities in the Province of Bolzano: administrative changes and relevant legislation

Municipality	Administrative changes	Relevant legislation
Andriano	Part of Nalles from 1929 to 1953	R.D. 18 November 1928 n.2740 R.L. 27 April 1953 n.4
Avelengo	Part of Merano from 1931 to 1957	R.D. 23 April 1931 n.550 R.L. 18 May 1957 n.7
Chiusa	Included Velturno until 1960	R.L. 5 November 1960 n.20
Cortina s.s.d.v.	Part of Magrè s.s.d.v. from 1928 to 1952	R.D. 6 May 1928 n.1173 R.L. 16 April 1952 n.10
	Name change in 1971 (previously Cortina all'Adige)	R.L. 30 August 1971 n.31
La Valle	Part of San Martino in Badia from 1928 to 1964	R.D. 26 April 1928 n.1081 R.L. 18 May 1964 n.19
Magrè s.s.d.v.	Included Cortina s.s.d.v. until 1952	R.L. 16 April 1952 n.10
	Name change in 1971 (previously Magrè all'Adige)	R.L. 30 August 1971 n.31
Merano	Included Avelengo until 1957	R.L. 18 May 1957 n.7
Nalles	Included Andriano until 1953	R.L. 27 April 1953 n.4
Prato Allo Stelvio	Included Stelvio until 1953	R.L. 27 April 1953 n.5
	Name change in 1954 (previously Prato Venosta)	R.L. 22 June 1954 n.13
Predoi	Part of Valle Aurina from 1929 to 1958	R.D. 10 January 1929 n.83 R.L. 8 August 1958 n.17
Rio Di Pusteria	Included Rodengo until 1956	R.L. 14 December 1955 n.26
Rodengo	Part of Rio di Pusteria from 1928 to 1956	R.D. 28 March 1929 n.699 R.L. 14 December 1955 n.26
San Leonardo in Passiria	Included San Martino in Passiria until 1953	R.L. 5 November 1953 n.16
San Martino in Badia	Included La Valle until 1964	R.L. 18 May 1964 n.19
San Martino in Passiria	Part of San Leonardo in Passiria from 1928 to 1953	R.D. 19 February 1928 n.477 R.L. 5 November 1953 n.16
San Pancrazio	Separated from Ultimo in 1960	R.L. 8 April 1960 n.7
Senale-San Felice	Created by merging Senale and San Felice in 1974	R.L. 2 September 1974 n.8
Stelvio	Part of Prato allo Stelvio from 1928 to 1953	R.D. 14 March 1929 n.564 R.L. 27 April 1953 n.5
Ultimo	Included San Pancrazio until 1960	R.L. 8 April 1960 n.7
Valle Aurina	Included Predoi until 1958	R.L. 8 August 1958 n.17
Velturno	Part of Chiusa from 1929 to 1960	R.D. 28 March 1929 n.735 R.L. 5 November 1960 n.20

Notes. The table lists only the municipalities in the province of Bolzano who were affected by name changes and/or boundary shifts over the period under scrutiny (including the fascist epoch). The acronyms R.D., R.L., C.L., P.L. stand for Royal Decree, Regional Law, Constitutional Law and Presidential Law, respectively. In 1948 the municipalities of Aldino, Anterivo, Cortaccia s.s.d.v., Cortina s.s.d.v., Lauregno, Magrè s.s.d.v., Proves and Termeno s.s.d.v. were separated from the province of Trento and became part of the province of Bolzano (C.L. 26 february 1948 n.5)

Table C2: Municipalities in the province of Bolzano unaffected by administrative changes

List of municipalities (BZ)						
Aldino	Anterivo	Appiano s.s.d.v.	Badia	Barbiano	Bolzano	Braies
Brennero	Bressanone	Bronzolo	Brunico	Caines	Caldaro s.s.d.v.	Campo di Trens
Campo Tures	Castelbello-Ciardes	Castelrotto	Cermes	Chienes	Cornedo all'Isarco	Cortaccia s.s.d.v.
Corvara in Badia	Curon Venosta	Dobbiaco	Egna	Falzes	Fiè allo Sciliar	Fortezza
Funes	Gais	Gargazzone	Glorenza	Laces	Lagundo	Laion
Laives	Lana	Lasa	Lauregno	Luson	Malles Venosta	Marebbe
Marlengo	Martello	Meltina	Monguelfo-Tesido	Moso in Passiria	Montagna	Naturno
Naz-Sciaves	Nova Levante	Nova Ponente	Ora	Ortisei	Parcines	Perca
Plaus	Ponte Gardena	Postal	Proves	Racines	Rasun Anterselva	Rasun Valdaora
Renon	Rifiano	S. Candido	S. Cristina Val Gardena	S. Genesio Atesino	S. Lorenzo di Sebato	Salorno
Sarentino	Scena	Selva dei Molini	Selva di Val Gardena	Senales	Sesto	Silandro
Sluderno	Termeno s.s.d.v.	Terento	Terlano	Tesimo	Tires	Tirolo
Trodena nel P.N.	Tubre	Vadena	Valdaora	Val di Vizze	Valle di Casies	Vandoies
Varna	Verano	Villabassa	Villandro	Vipiteno		

Notes. The table lists only the municipalities in the province of Bolzano who were not affected by administrative changes over the period under scrutiny (including the fascist epoch). In 1948 the municipalities of Bronzolo, Egna, Montagna, Ora, Salorno, and Trodena nel Parco naturale were separated from the province of Trento and became part of the province of Bolzano (Constitutional Law 26 february 1948 n.5)

Table C3: The Italianization channel - sensitivity checks on municipalities' border changes and outliers

	Dependent variable is: MSI vote share		
	(1)	(2)	(3)
	baseline	border changes	outliers
$\%Italians \times post_{1966}$	-14.421**	-13.985**	-15.474**
	(6.220)	(6.712)	(6.578)
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Observations	553	526	538
R^2	0.062	0.062	0.064

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Column 1 replicates the estimation in column 2 of Table 3. Column 2 excludes from the sample all the municipality-year pairs that were affected by administrative changes during the period under scrutiny, i.e., Chiusa (1953-58), Nalles (1953-58), Magrè s.s.d.v. (1953-58), Merano (1953-58), Prato allo Stelvio, Rio di Pusteria (1953-58), San Martino in Badia (1953-68), San Leonardo in Passiria (1953-58), Senale-San Felice (1953-72), Ultimo (1953-58), Valle Aurina (1953-58). Column 3 excludes anomalous municipality-year pairs: Andriano (1972); Braies (1953); Caines (1972); La Valle (1972); Perca (1953); Predoi (1972); Rodengo (1972); San Martino in Badia (1953); Selva dei Molini (1963-68); Senale-San Felice (1953-72); Villandro (1953). All the columns include the number of inhabitants, the group language fractionalization index, the share of Ladins, the number of Italians that are illiterate, those that are graduate and those that hold an high school diploma. They also control for the share of blank voters. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C4: Specialization of Italians in the public administration - sensitivity checks on municipalities' border changes and outliers

	Dependent variable is: MSI vote share		
	(1)	(2)	(3)
	baseline	border changes	outliers
$\%\, publ.\, servants\, Italians \times post_{1966}$	16.230***	17.440***	17.470***
	(5.127)	(6.150)	(6.039)
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Observations	540	513	527
R^2	0.075	0.075	0.076

Notes. Dependent variable is the vote share of the Movimento Sociale Italiano (MSI). The unit of observation is municipality × election year. Column 1 replicates the estimation in column 4 of Table 4. Column 2 excludes from the sample all the municipality-year pairs that were affected by administrative changes during the period under scrutiny, i.e., Chiusa (1953-58), Nalles (1953-58), Magrè s.s.d.v. (1953-58), Merano (1953-58), Prato allo Stelvio, Rio di Pusteria (1953-58), San Martino in Badia (1953-68), San Leonardo in Passiria (1953-58), Senale-San Felice (1953-72), Ultimo (1953-58), Valle Aurina (1953-58). Column 3 excludes anomalous municipality-year pairs: Andriano (1972); Braies (1953); Caines (1972); La Valle (1972); Perca (1953); Predoi (1972); Rodengo (1972); San Martino in Badia (1953); Selva dei Molini (1963-68); Senale-San Felice (1953-72); Villandro (1953). All the columns include the number of inhabitants, the group language fractionalization index, the share of Ladins, the number of Italians that are illiterate, those that are graduate and those that hold an high school diploma. They also control for the share of blank voters and for the index of the occupations concentration in the Italian group. Standard errors in parentheses are clustered at the municipal level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.