Refugee reception, extreme-right voting, and compositional amenities: evidence from Italian municipalities

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Abstract

We use data from Italy to study the political and social impact of a refugee reception policy (SPRAR) directly managed by local governments, whose features recall the conditions of the contact theory (Allport, 1954). Instrumental variables estimates indicate that municipalities that opened a refugee center between the 2013 and 2018 national elections experienced a change in the vote shares of extreme-right parties that is approximately 7 percentage points lower compared to municipalities that did not open a refugee center. We document that the positive impact of SPRARs on "compositional amenities" (i.e., local schools) and population growth allows explaining the negative impact on anti-immigrant prejudice. Finally, we provide evidence of spillovers in prejudice reduction in neighboring municipalities without a SPRAR.

Keywords: Refugee reception, far-right parties, compositional amenities, spillover effects
JEL Classifications: C36, D72, J15, P16, R23

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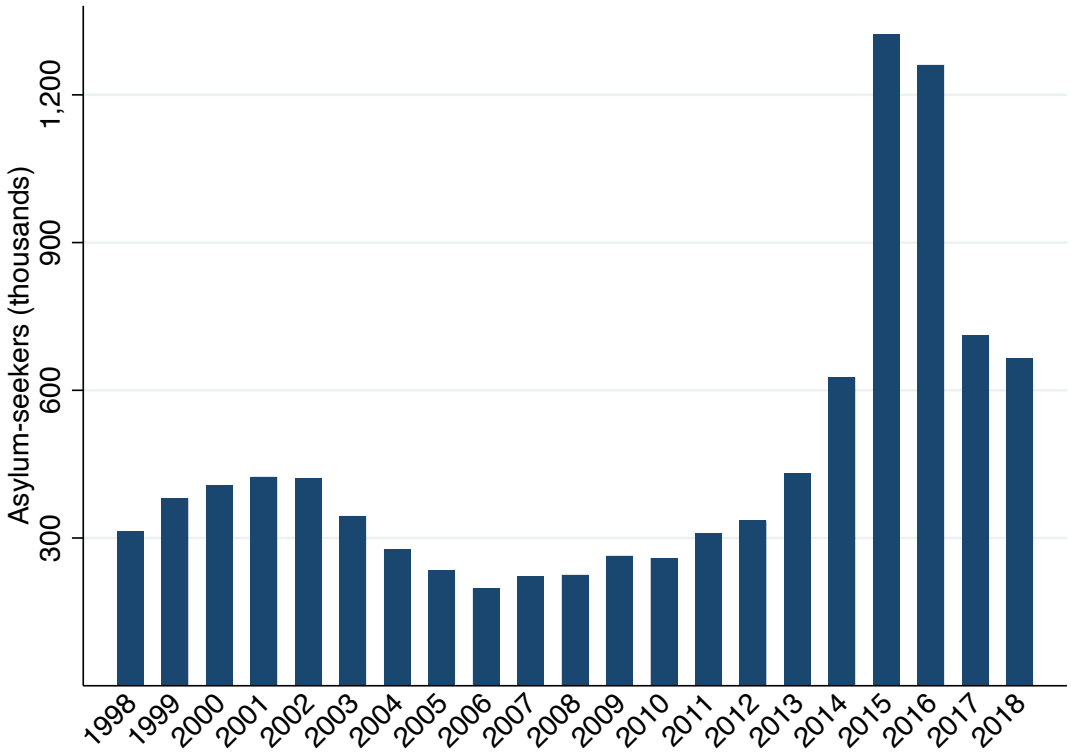
1 Introduction

Refugees and migration issues have been at the center of the global debate in the last few years. In Europe, the topic's salience has resulted from the increasing number of asylum applications received during the 2015 European migrant crisis (Figure 1). Thus, providing evidence about the electoral and social repercussions of refugees' relocation represent a helpful exercise that can inform and guide policymakers' decisions.

Figure 1: **Number asylum seekers in EU Countries**



Asylum-seekers in EU Countries (thousands). Source: Eurostat.

As described in section 2, recent literature has studied the effect of immigration and refugees' relocation on voters' behavior, especially focusing on the support for extreme parties. Some studies find that immigration increases the support for far-right parties[1] and anti-immigration attitudes (Barone et al., 2016; Dustmann et al., 2019). In contrast, others find opposite results (Steinmayr, 2021). This contradictory evidence calls for further research on the potential mechanisms explaining these divergent results.

This paper studies the political and social consequences of a reception program that relocates

[1]Throughout the paper, we use "far-right parties", "extreme right", "radical right", and "anti-immigrant parties" as synonyms.

refugees and asylum seekers across Italian municipalities. We contribute to the debate in the recent literature in three ways. First, we show that hosting refugees and asylum seekers through a reception system managed by local governments and that generates interactions between natives and immigrants *harms* the electoral performance of far-right and anti-immigrant parties. In line with the predictions of the contact theory (Allport, 1954), this evidence suggests that the involvement of local governments in the geographical redistribution of refugees and the development of a relocation system well integrated into the local context can lead to a reduction in anti-immigrants prejudice. The direction of these results contrasts with the evidence about reception systems managed by the central government and agents in the private sector, which appear to increase prejudice and support for far-right and anti-immigrant parties (Bratti et al., 2020; Campo et al., 2021).

Second, we provide new evidence on the effect of refugees on "compositional amenities". Differently from the existing evidence in the literature (Card et al., 2012; Halla et al., 2017), we show that managing migration inflows through a reception system that promotes synergies between local stakeholders can positively affect compositional amenities and make the local community more attractive for natives. We also document how this effect on compositional amenities can help to explain the negative impact on the electoral performance of anti-immigrant parties. Third, we show the existence of spillovers in prejudice reduction in neighboring municipalities that do not host refugees and asylum seekers through the same relocation system.

We implement the analysis using data from Italy and studying a program to relocate refugees and asylum seekers across Italian municipalities called "The Protection System for Asylum Seekers and Refugees" (SPRAR).[2] Although it is not the only system in place, SPRAR is one of the most important refugee reception programs in Italy.[3] We focus on refugee centers[4] related to this relocation policy for two reasons. The first is data availability. We develop the analysis exploiting a new and unique database (see Gamalerio and Negri (2022); Gamalerio et al. (2021) for more information), which contains precise information on the location of these refugee centers. The second and most important reason is the type of contact that SPRARs can potentially produce between natives and migrants. SPRAR centers have the peculiar characteristic of being opened and managed directly by municipal governments. Therefore, as described in more detail in Section 3, the interactions generated by SPRARs appear to fulfill the conditions of the contact theory (Allport, 1954), which can lead to a reduction in prejudice and anti-immigrant attitudes. In section 3, we also explain how the features and type of contact generated by SPRARs differ from those of other reception centers used in Italy, and especially the most diffuse type of reception centers, the so-called CAS (*"Centri di accoglienza straordinaria"* – i.e., Centers for extraordinary reception), which the Italian central government directly manages. CAS centers do not appear to be able to

[2]In 2018, Law n. 132/2018 changed the name of SPRAR to SIPROIMI ("Sistema di protezione per titolari di protezione internazionale e per i minori stranieri non accompagnati"). In 2020, Law 173/2020 renamed it SAI ("Sistema di accoglienza e integrazione"). However, this paper uses the denomination SPRAR, which is more well-known and used in the studied period.

[3]For more information on other types of refugee centers and reception programs, see section 3. See also the paper by Campo et al. (2021).

[4]From now on, defined as "SPRARs".

integrate refugees and asylum seekers and produce constructive contact with natives as SPRARs (Bratti et al., 2020; Campo et al., 2021). Therefore, we think that focusing the attention on SPRAR centers and showing how they can generate opposite electoral effects compared to different types of reception centers represents an exciting and direct way to test the contact theory hypothesis (Allport, 1954).

We study the effect of SPRARs on the change in support for far-right parties between the 2013 and 2018 national elections. We also look at the effect on the vote shares of other parties with different political orientations and on the electoral turnout. We estimate these outcomes through both ordinary least squares (OLS) and instrumental variables (IV). Specifically, we develop the IV analysis using pre-existing group accommodation buildings as an instrument for SPRARs. Examples of group accommodation buildings are homes for the disabled, elderly, orphans, and drug addicts. We exploit the fact that these buildings, while built in the past with different purposes, have been widely used to host asylum seekers in the years of the refugee crisis (Steinmayr, 2021). Crucially for our identification strategy, we show that the presence of these buildings does not correlate with voting behaviors between the 2008 and 2013 national elections. Conversely, they correlate with the vote shares between the 2013 and 2018 elections. This evidence suggests that our instrument started to correlate with our dependent variables only during the years of the refugee crisis, namely when the group accommodation buildings could host refugees and asylum seekers.

The main results show that hosting refugees in SPRARs negatively affects far-right parties' performance. At the same time, it benefits moderate political forces and reduces electoral turnout. The IV estimates indicate that the change in the vote shares of the extreme right in municipalities that opened a SPRAR center between the 2013 and 2018 elections was approximately 7 percentage points lower than the change experienced by municipalities that did not open SPRAR centers. These results are robust when controlling for municipalities' socio-economic features, the local politicians' characteristics, and the presence of other refugee centers opened through alternative channels different from the SPRAR program. The magnitude of the effect compared to the average growth in far-right vote shares over the period studied is similar to the magnitude estimated by Steinmayr (2021).

We then investigate the channels that might explain the main result on the decreasing support for far-right parties. It is easy to find in the media (see, for example, Linkiesta (2014)) articles that illustrate how local governments can use SPRARs to repopulate towns with a declining and everyday older population and, consequently, continue to provide local public services that otherwise they would have to suspend. Repopulating the town and keeping the local public services alive can also make the municipality more attractive for natives, who may decide to stay (if already residents) or move from other municipalities. Inspired by this anecdotal evidence, we thus study the effect of SPRARs on population dynamics and compositional amenities.

First, we estimate a positive impact of SPRARs on population growth. Specifically, applying the same IV strategy, we find a positive effect on the number of foreigners and natives in a context where the overall population of municipalities was declining. Interestingly, while the inflow of

newcomers drives a positive effect on the foreigners, both an increased inflow of new people and a reduced outflow of residents drive the effect on the native population. This evidence indicates that SPRARs allowed municipalities to counterbalance the decline in the population through the arrival of refugees and asylum seekers. Besides, this result shows that SPRARs convinced new natives to move to these municipalities and some of the old residents to remain, in contrast to what was found in recent literature in France (Batut and Schneider-Strawczynski, 2022).

Second, we document a positive effect of SPRARs on compositional amenities. Precisely, following both the existing literature (Halla et al., 2017) and the anecdotal evidence, we look at schools, which represent a local public good for which municipalities share responsibilities with other levels of government (and for which data are available). We collect data on the number of native and international students, classes, and schools at the municipal level. The IV estimates reveal a positive impact of SPRARs on all these outcomes. We also provide suggestive evidence that shows how the positive effect of SPRARs on population and compositional amenities can help to explain the negative effect of refugee centers on the vote shares of anti-immigrant parties.

Lastly, we explore the presence of potential spillover effects. As documented by recent literature (Steinmayr, 2021; Bratti et al., 2020), opening refugee centers can generate spillovers in close municipalities that did not host asylum seekers. Specifically, the positive effects found on population and compositional amenities could have benefited neighboring municipalities without a SPRAR, potentially reducing anti-immigrant prejudice also in these places. For example, the effect on schools could have benefited neighboring municipalities if children living in close towns could use the schools in treated municipalities. Besides, the repopulation of treated municipalities can generate positive economic and social effects for neighboring municipalities. In the final part of the empirical analysis, applying the identification strategy developed by Bratti et al. (2020), we confirm the presence of these spillovers. We estimate that decreasing by one standard deviation (approximately 11.39 km), the distance from the closest SPRAR led to a 2.5 percent (compared to the average growth) reduction in the change of far-right parties' vote shares in municipalities that did not open a SPRAR.

2 Related literature

This paper contributes to the recent literature that studies how immigration and the reception of refugees and asylum seekers affect the natives' electoral behavior and their support for radical parties. Some of the papers in this literature find that immigration flows and stocks positively affect the vote for far-right and populist parties (Otto and Steinhardt, 2014; Harmon, 2018; Hangartner et al., 2019a,b; Edo et al., 2019; Dustmann et al., 2019; Mayda et al., 2020; Bredtmann, 2022). One explanation provided by these studies is that migration can negatively affect the compositional amenities that natives can derive from their towns, neighborhoods, workplaces, and schools (Card et al., 2012; Halla et al., 2017; Ballatore et al., 2018). An exception in this literature is Geay et al. (2013), who find a zero effect of immigration on the educational outcomes of native children.

By contrast, other papers (Steinmayr, 2021; Lonsky, 2020; Schneider-Strawczynski, 2021) find the opposite result, namely that migration can mitigate the rise in support for far-right and populist parties, especially when the inflow is small (Vertier et al., 2022).

Precisely on refugees and asylum seekers, Steinmayr (2021), focusing on the Upper Austrian case, shows that municipalities that host refugees experience a reduction in the positive overall trend in support for the far-right Freedom Party. Besides, Vertier et al. (2022) demonstrate that the opening of refugee centers that follows the relocation of refugees from Calais to other French municipalities reduces the vote share increase of the far-right Front National. Our baseline results on voting for the radical right are in line and reinforce the results of these papers. However, our paper differs in that we provide new evidence on mechanisms. Specifically, we show that refugees' reception through a system that promotes the development of stable networks among local stakeholders can positively impact population and compositional amenities, leading to reduced support for the extreme right.

Our analysis is specifically related to the papers that study the impact of migration and refugee reception on electoral outcomes in Italy (Barone et al., 2016; Bratti et al., 2020; Bellucci et al., 2019; Campo et al., 2021). These papers examine migration from different angles and find positive effects on the support for extreme-right parties and anti-government votes. Among these papers, Bratti et al. (2020) and Campo et al. (2021) also study the reception of refugees, even though they focus on the other most common reception system developed in Italy other than SPRAR, i.e., the CAS centers. As described in section 3, this other system proved to be less successful than SPRAR in welcoming and eventually integrating refugees: this can explain the opposite results of these studies compared to ours. Indeed, our analysis shows that a reception system that fosters interactions between refugees and natives can reduce prejudice and hurt the electoral performance of anti-immigrant parties, including in neighboring municipalities that did not open SPRAR centers (Steinmayr, 2021; Bratti et al., 2020).

3 Institutional Setting: the allocation of refugees in Italy

Within the Italian system for refugees and asylum seekers' hosting policies, SPRARs represent the *second* reception level, usually receiving guests allocated in the *first* reception level centers. Specifically, in the period of our analysis, there were 3 first level centers: CPSA (*"Centri di primo soccorso e accoglienza"* – i.e., First aid and hospitality centers), CDA (*"Centri di accoglienza"* – i.e., Hospitality centers) and CARA (*"Centri di accoglienza per richiedenti asilo"* – i.e., Reception centers for asylum seekers). The main scope of these centers (managed by the central government) is to identify the migrants who have just arrived in Italy, provide the first assistance, and give them the possibility to apply for asylum. While waiting for the outcome of their application, asylum seekers are then usually redistributed in second-level centers – among which we find SPRARs. First-level centers are not very widespread on the territory: in the period studied, there were a total of 4 CPSA and 14 CDA/CARA. Besides, there were five identification and expulsion centers (CIE, *"Centri di identificazione ed espulsione"*) for migrants without a valid permit of stay or with

an expulsion order.[5]

Following the Arab Spring, in 2011-2013, the Italian central government opened temporary centers (ENA, Emergency North Africa) to host the increasing number of migrants from North Africa. Besides, mainly to deal with the refugee crisis and the associated dramatic rise of asylum seekers who have arrived in Italy (see Figure 1), the Italian government introduced (from 2014) another type of center, the CAS (*"Centri di accoglienza straordinaria"* – i.e., Centers for extraordinary reception). The provincial offices (*"Prefetture"*) of the Home Office manage CAS centers, and municipalities do not have any decisional powers.

Eventually, SPRAR and CAS centers have become the two main reception centers used in Italy in the last few years. Specifically, CAS centers have provided roughly 75-80 % of all places available in reception centers. SPRAR centers approximately 15-20 %.[6]

Our analysis is focused on SPRAR centers primarily for two reasons. The first is data-related, as we can exploit a detailed dataset on SPRARs' location and characteristics (See Section 4). The second is because SPRARs can potentially produce interactions between natives and immigrants that fulfill the conditions of the contact theory (Allport, 1954). According to this theory, direct contact between natives and immigrants can reduce prejudice and anti-immigrant attitudes under the following four conditions: equal status between the two groups, common goals, inter-group cooperation, and authority support.

We think that the contact generated by SPRARs meets these conditions for several reasons. First, SPRARs are medium-small centers directly opened and managed by municipal governments.[7] Hence, local authorities must agree with their opening and support the interaction between the native population and the asylum seekers. Second, municipalities often employ the migrants hosted in the centers and use them in public utility works. Examples of these public utility works are providing support to the local elderly population (e.g., buying medicines and food, throwing the rubbish, providing technological support, paying the bills) and kids (e.g., taking them to school), or helping in cleaning and re-qualifying public spaces such as parks and gardens.[8]. These kinds of activities likely generate inter-group cooperation. Third, SPRAR centers usually provide job market orientation services to refugees and asylum seekers, who may be then hired by local firms

[5]The 4 CPSA were: Lampedusa, Elmas, Otranto, and Pozzallo. The 14 CDA/CARA: Gradisca d'Isonzo, Arcevia, Castelnuovo di Porto, Borgo Mezzanone, Palese, Restinco, Otranto, Isola Capo Rizzuto, Mineo, Pozzallo, Contrada Pian del Lago, Lampedusa, Salina Grande, Elmas. The 5 CIE: Torino, Roma, Bari, Trapani, Caltanissetta.

[6]As an example, in April 2018, over a total of 173,150 refugees and asylum seekers, CAS centers were hosting 138,503 individuals and SPRAR centers 25,657 (sources: Openpolis and Documento di Economia e Finanza (DEF), 2018, Italian Ministry of Economy). Besides, as reported by the 2018 "Atlante SPRAR", in the same year, SPRAR centers have provided a total number of available places equal to 35,881, which have allowed SPRAR centers to host a total number of 41,113 immigrants.

[7]When the Italian Home Office wants to allocate refugees and asylum seekers through the SPRAR program, it issues a tender. Table A1 reports the timing of the tenders involved in our analysis. During this time span, local governments decide whether to submit a bid to open a SPRAR center on their territory. Winning municipalities are then allowed to open a SPRAR center and receive fiscal grants from the central government. These grants fund the SPRAR centers' activities, among which we find Italian language courses, health support, and job market orientation.

[8]For more information on the activities developed by SPRAR centers and the interaction between natives and refugees, see the various editions of the "Atlante SPRAR" published over the years on the SPRAR web page.

and become work colleagues of native people of the community.[9] Fourth, it is easy to find anecdotal evidence that describes how opening SPRAR centers has been crucial for many towns to keep providing public services like schools, especially in areas with a declining population (Linkiesta, 2014). This fact may have also fostered contact between natives and migrants, generating common goals (keeping the school open) and assigning them an equal status (their children go to the same schools).

Thus, SPRARs seem to fulfill the contact theory conditions that may reduce anti-immigrant attitudes. In contrast, the centers associated with the other most common hosting policy – i.e., CASs – are less likely to supply their guests with the activities and integration services provided by SPRARs. An explanation for this lower level of activity might be that CASs started as temporary and emergency hubs and were not intended to provide a structured system for migrants' integration. Besides, the management of these centers is entrusted by the central government directly to agents in the private sector (e.g., firms, cooperatives, NGOs) without the involvement of local governments. Contrary to local governments, agents in the private sector may be more interested in managing refugee centers for business reasons instead of humanitarian and social reasons. Thus, given the temporary and private nature of CASs, we can expect these centers to provide fewer integration services and to be less integrated into the local context than SPRARs (as also suggested by the anecdotal evidence: see, for instance, Internazionale (2014)). Hence, while we expect SPRARs to generate a type of contact that fulfills the conditions of the contact theory, we do not expect the same for CASs, a fact also corroborated by recent literature (Bratti et al., 2020; Campo et al., 2021).[10] For these reasons, we focus on SPRARs, which we think represent an exciting testing ground for the research questions investigated in this paper.[11]

As described by the yearly official report ("Atlante SPRAR"), municipalities locate SPRAR centers in two types of buildings. First, they may use flats available in the municipality, owned by private citizens or municipal administration. Second, municipalities may locate SPRARs in group accommodation buildings. These are constructions that can potentially accommodate groups of people, such as homes for the disabled, elderly, orphans, and drug addicts. As described below, we exploit the heterogeneous presence of group accommodation buildings at the municipal level to instrument the opening of SPRAR centers (Steinmayr, 2021). Table A2 describes the evolution over time of the share of SPRAR centers opened in the two different types of buildings.

Our analysis focuses on the centers opened in the years 2014-2018 – i.e., the period when the refugee crisis became more intense (Figure 1). In this time, the number of places available and the

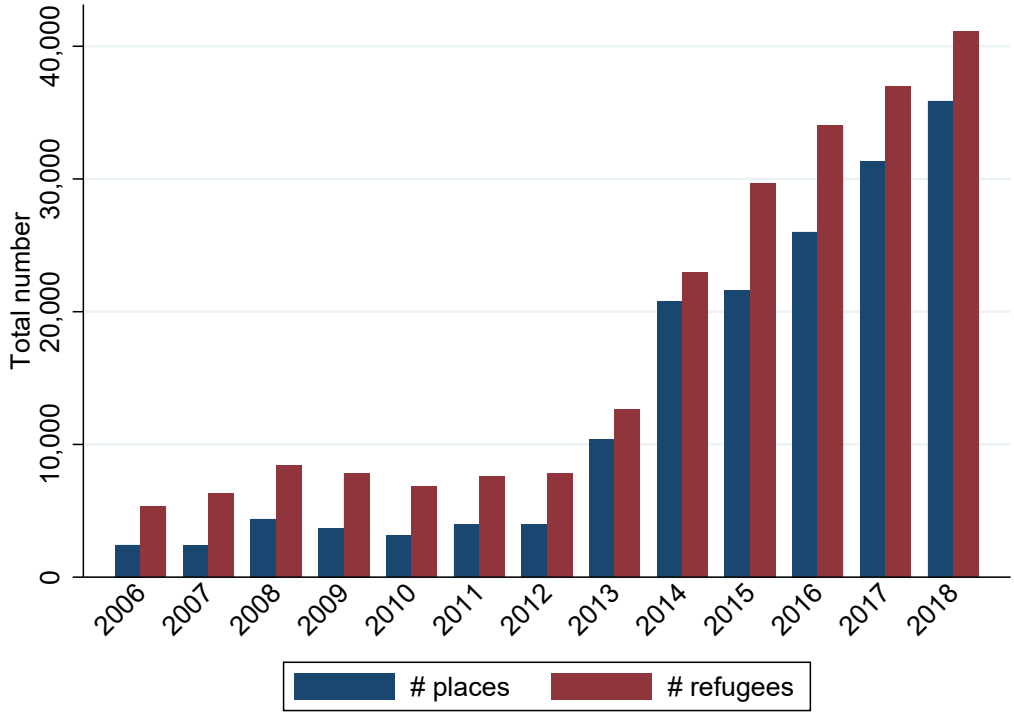
[9] The "Atlante SPRAR" reports that, in 2018, 9845 migrants hosted through the SPRAR program participated in a professional training course. In the same year, 5363 refugees and asylum seekers found a job. SPRAR refugees and asylum seekers' main employment sectors were industry, agriculture, and food services.

[10] Obviously, there are heterogeneities in SPRARs characteristics and the quality of the integration services offered to asylum seekers. Similarly, there are commendable examples of CASs where refugees enjoy integration opportunities similar (if not better) to those offered by SPRARs.

[11] As a robustness check, we show in section 5.4 that the main results do not change if we include a series of control variables that capture the presence of other types of reception centers in a municipality, including CASs. This allows us to deal with the fact that SPRARs do not represent Italy's only type of reception center.

refugees hosted in SPRARs grew considerably, as shown by Figure 2.

Figure 2: Number of places and refugees in SPRAR centers



Sources: Gamalerio and Negri (2022) and SPRAR report "Atlante Sprar", published on the SPRAR/SAI webpage (https://www.retesai.it/). The graph reports the number of places made available and the number of refugees and asylum seekers hosted every year from 2006 up to 2018.

4 Data

In our analysis, we use data coming from different sources. The first important dataset concerns the presence and characteristics of SPRARs. These pieces of information come from a detailed and rare dataset, recently used in the same Italian context (Gamalerio and Negri, 2022; Gamalerio et al., 2021). Precisely, we have information on the municipalities that bid for a SPRAR center, the winning municipalities (i.e., those that open the centers), the number of places available, and the fiscal grants received. This dataset covers the period of our analysis (i.e., 2014-2018) and also reports the few centers opened before 2014. The sources are the Italian Home Office, the official web page of the SPRAR program, and the "Briguglio archive", which reports different documents on migration.

The data source for the location of first-level reception centers (CPSA, CDA, CARA) is the Italian Home Office. Data on the presence of CASs at the municipal level comes from the Openpolis

Foundation. More specifically, the Openpolis Foundation has collected data on the presence of CASs in cooperation with ActionAid Italia and has made this data available on its webpage. As described in the webpage, over the years, Openpolis has collected information on the geographical location of CAS centers merging information from different sources, such as the National database of public contracts (*Banca dati nazionale dei contratti pubblici*) of the National Anti-Corruption Authority (ANAC), and the web pages of the Italian Home Office's provincial offices. However, as reported by Openpolis, given the difficulty in obtaining data from the Italian Home Office's provincial offices, it is unclear whether this dataset on CAS centers contains complete information on all these types of centers opened at the municipal level.

We use this data to identify municipalities with a first-level reception center or a CAS during the 2014-2018 period and to show that these reception centers do not affect nor drive the effect of SPRAR on electoral outcomes. A caveat on the data on CAS used in the analysis is that Openpolis provides information on the location of CAS at the end of 2018, after the political elections held in the March of 2018. Hence, the analysis below may erroneously codify some municipalities that opened a CAS after the 2018 elections as already having a CAS before the elections. At the same time, we may not codify as having a CAS during the 2014-2018 period some municipalities that closed the reception centers before the end of 2018. However, as described by Campo et al. (2021), most of the CAS centers were opened between 2014 and 2018, with the maximum number of municipalities hosting CAS reached in 2017. Hence, even though we may capture the presence of CAS centers with some measurement error, we are confident that the Openpolis dataset allows us to identify most of the cases of municipalities with a CAS in the 2014-2018 period.[12]

To construct the dependent variables, we download from the Italian Home Office website the electoral outcomes at the municipal level for the 2008, 2013, and 2018 national elections. We use these data to calculate the change between elections in the vote shares of far-right parties,[13] parties in the center of the Italian political spectrum,[14] the Five Stars Movement,[15] far-left parties,[16] and to calculate the change in the electoral turnout.[17]

Data on the group accommodation buildings come from the 2011 National Census, which reports detailed information on these buildings' presence at the municipal level. We use this data to construct our instrument, as described in Section 5. It is worth highlighting that, using the 2011

[12] Campo et al. (2021) collected a complete yearly dataset on CAS centers. It is worth noticing that we identified 2812 municipalities with a CAS using the dataset provided by Openpolis. This number is consistent with the statistics reported by Campo et al. (2021).

[13] We code as far-right the following political forces: Lega Nord, Fratelli d'Italia, Casa Pound, Italia agli Italiani, Fiamma Tricolore, La Destra, Forza Nuova, Rinfondazione Missina, Die Freiheitlichen.

[14] We define as centrist the Partito Democratico and Forza Italia (the party led by Silvio Berlusconi). These parties have been respectively the main center-left and center-right parties for most of the Second Italian Republic years.

[15] The Five Stars Movement is a relatively new political party and represents today one of the leading populist forces in Europe. The 5SM has never taken a clear line on immigration, so, a priori, we do not have particular expectations about the effect of SPRARs on the vote shares of 5SM.

[16] We code as far-left the following political forces: Partito Comunista, Sinista Rivoluzionaria, Potere al Popolo, Liberi e Uguali, Alternativa Comunista, Rivoluzione Civile, Sinistra Critica, Sinistra Arcobaleno.

[17] Since the presence of minimum age for voters to elect the Senate, we use data for the election to the Chamber of Deputies only, which the literature recognizes being a preferred measurement of citizens' political preferences.

Census, we use the information on group accommodation buildings that already existed before the years of the refugee crisis.

To study the effect of SPRARs on population patterns, we use data available from the Italian National Statistical Office (ISTAT). Specifically, we collect information on the number of residents (both foreigners and natives), the migration inflows and outflows, and the number of births and deaths at the municipal level for the years 2018, 2013, and 2008. Furthermore, to analyze the SPRARs' effect on schools, we collect data on the number of native and international students, the number of classes, and the number of schools at the municipal level for 2018, 2012, and 2008. These data come from ISTAT and the Italian Ministry of Education, University, and Research. Finally, to develop the exercise on spillover effects, we collect data on the distances in kilometers between all Italian municipalities. Specifically, for a pair of municipalities, we observe the geodesic distance between the centroids of the two municipalities. These data come from ISTAT, and it is calculated using the centroids of the municipalities observed in 2013. Lastly, in our regressions, we control for several characteristics of the municipalities and mayors (discussed in Subsection 5.1). We collect this information from ISTAT, the 2011 Population Census, and the Italian Home Office ("Anagrafe degli Amministratori Locali").

The final sample contains 7795 Italian municipalities (which corresponds to around 98 percent of all municipalities).[18] Table 1 reports the descriptive statistics of the variables of interest, while Table 2 displays the controls' summary statistics. Finally, Figure 3 provides a visual representation of the far-right parties' performance across Italian municipalities in the 2018 national election and their change in the vote shares between 2013 and 2018.

5 Empirical Analysis

5.1 Identification strategy

This paper aims to study the effect of the opening of refugee centers on natives' voting behavior. We implement the analysis comparing the outcomes of the national elections run in the years 2013 and 2018 and studying the effect of the SPRARs opened in the period 2014-2018. Focusing on this time span enables us to compare political preferences just before and just after the refugee crisis and grasp the growth of the SPRAR program, as evidenced by Figure 2.

We start the analysis by estimating the following OLS model:

$$Y_i = \alpha_0 + \alpha_1 OpenSPRAR_i + \alpha_k X_{k,i} + \phi_m + \epsilon_i \tag{1}$$

where Y_i captures a main dependent variable equal to $\Delta\%FarRight_{18-13} = (\%FarRight_{2018}) - (\%FarRight_{2013})$, which is the change in the vote shares for far-right parties between the 2018

[18] We do not have data on the Special Region Aosta Valley. In contrast, we have data on the other four Italian Special Regions: Sicily, Sardinia, Friuli-Venezia Giulia, and Trentino-Alto Adige/South Tyrol (composed by the autonomous Provinces of Trento and Bolzano/South Tyrol).

Table 1: **Outcome variables**

Dep. Variables - Vote change between 2013-18 elections:

	N	Mean	SD	Min	Max
Far-Right	7795	17.63	9.75	-31.71	58.26
FI + PD	7795	-14.08	6.98	-53.90	39.15
5SM	7795	5.94	10.67	-34.22	49.19
Turnout	7795	-1.31	4.35	-41.85	65.10

Variables of interest:

	N	Mean	SD	Min	Max
Open Sprar	7795	0.20	0.40	0.00	1.00
Dummy Accomodation (2011)	7795	0.40	0.49	0.00	1.00
Open Sprar if Accomodation=1	3142	0.26	0.44	0.00	1.00
Open Sprar if Accomodation=0	4653	0.16	0.37	0.00	1.00
Number of places in Sprar	7627	5.48	43.07	0.00	1,941.18

Sources: Gamalerio and Negri (2022), Gamalerio et al. (2021), Home Office and SPRAR. The dependent variables are equal to the change in the vote shares obtained between the 2013 and 2018 national elections. We are reporting the change in vote shares of Far-Right parties, moderate parties (FI + PD), Five Stars Movement (5SM), and the change in electoral turnout. The treatment variable Open Sprar is 1 for municipalities that opened a SPRAR center in the period considered. The dummy Accommodation (2011) is equal to 1 for municipalities with group accommodation buildings.

and 2013 national elections in municipality i. Additionally, we look at the effect on other electoral outcomes. Specifically, we investigate the change in the vote shares for moderate parties (FI + PD) between the 2018 and 2013 national elections. Besides, we look at the Five Stars Movement's vote shares, the far-left parties, and the electoral turnout. The treatment variable is $OpenSPRAR_i$, a dummy variable equal to 1 for the municipalities that opened SPRAR refugee centers in the years 2014-2018 (i.e., between 2013 and 2018 elections).

The vector $X_{k,i}$ contains municipal characteristics potentially correlated with both the dependent and the treatment variables. Precisely, we control for the municipal population, population squared, population density (number of inhabitants per squared kilometers), the unemployment rate, the share of homemakers (over the population with more than 15 years), the share of individuals who are inactive or unable to work (over the population with more than 15 years), the average income per capita, the share of small and empty buildings, the number of no-profit associations per capita, the share of elderly (i.e., older than 65 years), and children (i.e., younger than 15 years), the share of individuals with a university degree, and the share of immigrants legally resident in the municipality. The vector $X_{k,i}$ also includes time-invariant characteristics such as the area in squared kilometers, the altitude, the distance between the municipality and the provincial capital,

Table 2: **Control variables**

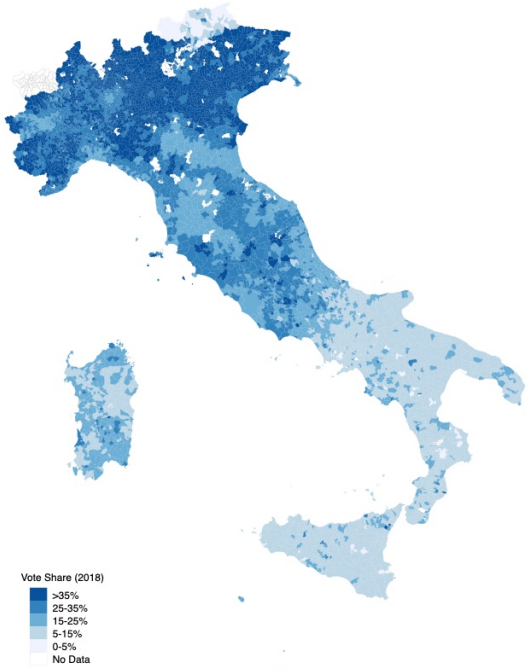
Controls:

	N	Mean	SD	Min	Max
Open Sprar before 2014	7795	0.03	0.16	0.00	1.00
% small buildings (2011)	7795	0.79	0.10	0.17	1.00
% not used buildings (2011)	7795	0.05	0.05	0.00	0.69
No profit organisations	7795	0.01	0.00	0.00	0.07
Population (2011)	7795	7,551.13	40,473.89	30.00	2,617,175.00
Population density (2011)	7795	303.43	640.98	0.92	12,224.41
Surface (kmq)	7795	37.63	50.53	0.12	1,287.36
Altitude	7795	348.94	289.40	0.00	2,035.00
Unemployment rate (2011)	7795	0.10	0.06	0.01	0.42
% homemakers	7795	0.10	0.04	0.01	0.27
% inactive / unable to work	7795	0.05	0.03	0.00	0.23
% of college graduated	7795	0.07	0.03	0.00	0.29
% foreign pop (2011)	7795	0.06	0.04	0.00	0.37
Income per capita	7795	11,938.23	3,192.73	3,267.98	34,320.68
% younger than 14 (2011)	7795	0.13	0.03	0.00	0.24
% older than 65 (2011)	7795	0.23	0.06	0.05	0.62
Distance to closest capital city	7795	23.53	13.41	0.00	209.80
Capital city	7795	0.01	0.12	0.00	1.00
Female mayor	7795	0.14	0.32	0.00	1.00
Age of mayor	7795	52.41	9.68	25.29	84.86
Mayor graduated at university	7795	0.47	0.45	0.00	1.00
Far right mayor	7795	0.03	0.16	0.00	1.00
Year term	7795	2.29	0.65	0.00	3.86

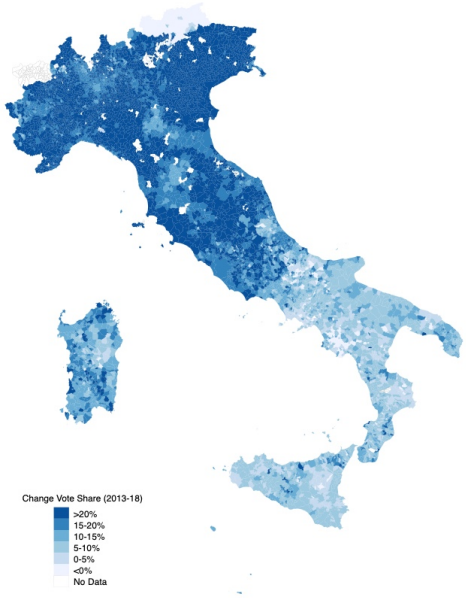
Sources: Istat, Home Office, SPRAR, Openpolis. Description variables: Open SPRAR before 2014 = 1 for municipalities with SPRAR center before 2014; % small buildings (2011) and % not used buildings (2011) = share of small and not used buildings over total number of buildings in the municipality; No profit organisations is the number of no profit organizations per capita in the municipality; Population (2011) = Census population; Population density (2011) = number of inhabitants per squared kilometers; Surface (kmq) = surface of the municipality; Altitude = altitude of the municipality in meters; Unemployment rate (2011) = share of unemployed individuals (i.e., looking for a job) over total individuals in the labor force; % homemakers = share of homemakers over the municipal population with more than 15 years; % inactive / unable to work = share of individuals not looking for a job or unable to work over the municipal population with more than 15 years; % of college gaduated = share of individuals with a university degree over total municipal population; % foreign pop (2011) = share of immigrants legally resident in the municipality over total municipal population; Income per capita = average income of the municipality; % younger than 14 (2011) and % older than 65 (2011) = share of the population with less than 14 years old or more than 65; Distance to closest capital city = distance in km from the closest provincial capital; Capital city = 1 if municipality is a provincial capital; Female mayor = 1 for female mayor; Age of Mayor = age of the Mayor; Mayor graduated at university = 1 for Mayor with a university degree; Far right Mayor = 1 for mayor from far-right party; Year term = year of municipal electoral term (i.e., average distance in years from last municipal election).

Figure 3: Far-right parties vote shares

Far-right vote shares 2018



Change in far-right vote shares 2013-2018



Sources: Italian Home Office. The top graph provides a visual representation of the vote shares of far-right parties in the 2018 national elections. The bottom graph provides evidence of the change in the far-right parties' vote shares between the 2013 and 2018 national elections. Municipalities in white not included in the analysis because of missing data.

and a dummy variable for municipalities that are provincial capitals.[19] We also control for a dummy

[19]In the analysis below, we keep the observations with missing values in these municipal characteristics, replacing

variable equal to one for municipalities that already hosted SPRAR centers before the 2014-2018 period.

In addition, we control for mayoral characteristics, including gender, age, level of education, a dummy variable for far-right mayors, and the year of the municipal electoral term (i.e., the average distance in years for the most recent municipal election) for the mayors of all municipalities in the dataset. To deal with the possible presence of different mayors across municipalities over the period studied, we calculate the average of all these variables in 2014-2018. Since these characteristics might be affected by the treatment, in a robustness check presented in section 5.4 we run the same analysis using the average mayors' characteristics for the years 1998-2012.

Lastly, we introduce macro area fixed effects (ϕ_m) to control for the difference in the electoral performance of far-right parties in the different macro-areas of Italy, as documented in Figure 3.[20] In addition, as described in section 4, our dataset includes data from the Autonomous Province of Bolzano/South Tyrol. This province represents an area of Italy in which 62.3% of the population uses German as their first language and 23.4% Italian. The political scenario in this province presents specific local parties, such as the centrist South Tyrolean People's Party and the far-right Die Freiheitlichen. To control for this different political scenario, we include a dummy variable for this province. We cluster the standard errors at the local labor market level.[21]

The decision to open a SPRAR center is endogenous. Thus, to deal with the biases in the OLS analysis, we turn to an instrumental variables (IV) approach. Similarly to Steinmayr (2021), we instrument the treatment variable $OpenSPRAR_i$ with the presence at the municipal level of pre-existing group accommodation. We consider buildings such as homes for the disabled, elderly, orphans, and drug addicts, i.e., structures that can potentially accommodate groups of people. The data source of our instrument is the 2011 Census, implying that we are catching buildings already present before the refugee crisis.

We start the IV analysis by running the following first-stage regression:

$$OpenSPRAR_i = \gamma_0 + \gamma_1 GroupAccommodation_i + \gamma_k X_{k,i} + \phi_m + u_i \tag{2}$$

where $GroupAccommodation_i$ is equal to 1 if municipality i was reported to have at least one group accommodation building in the 2011 Census.

the missing values with the mean and including a dummy variable for these observations. This procedure allows us to maximize the size of the sample. The results do not change if we exclude these observations with missing values.

[20] Specifically, we control for dummy variables equal to 1 for municipalities located in the North-East, North-West, South of the Country, and on the Islands. We use municipalities located in Central Italy as the default category. In a robustness check presented in section 5.4 we present the results using region instead of macro-area fixed effects.

[21] Labor market areas (LMAs) are 605 sub-regional geographical areas where the bulk of the labor force lives and works and where firms can find the most of the labor force necessary to occupy the offered jobs. Given their homogeneity in population characteristics, we believe that clustering the errors at this level is the most natural choice. However, the results are also robust if we cluster the errors at higher spatial units, such as at the provincial level.

Hence, we run the following second-stage regression:

$$Y_i = \beta_0 + \beta_1 Open\hat{SPRAR}_i + \beta_k X_{k,i} + \phi_m + \eta_i \tag{3}$$

where $Open\hat{SPRAR}_i$ is the predicted value of $OpenSPRAR_i$ obtained from equation 2. The IV approach needs two main assumptions to be verified. First, it needs a strong first-stage regression, such that $GroupAccommodation_i$ correlates strongly with $OpenSPRAR_i$. The maps in Figure 4 and A1 provide a preliminary visual representation of this assumption. In the analysis, we formally prove the existence of a strong first-stage regression.

Second, the exclusion restriction assumption requires an instrument that affects the dependent variable only through its effect on the endogenous treatment variable. In the context studied, one might be concerned that municipalities with and without group accommodations are different and follow different electoral trends over time. The extensive set of control variables we introduce into our regressions and the presence of macro-area fixed effects limit these concerns. More importantly, what is crucial for our identification strategy is that the instrument affects the change in vote shares over time only through SPRAR centers.

We check the credibility of this hypothesis in the reduced-form model described in Section 5.4. Reassuringly, we show that, after controlling for macro-area fixed effects and an extensive set of control variables, these buildings do not correlate with the change in vote shares between the 2008 and 2013 national elections. In contrast, their presence correlates with the vote shares between the 2013 and 2018 elections. This evidence suggests that our instrument only correlates with the dependent variables during the refugee crisis when the group accommodation buildings could host refugees and asylum seekers. Given these considerations, we are confident that the main parameter of interest β_1 can estimate the causal effect of opening a refugee center on natives' voting behavior.

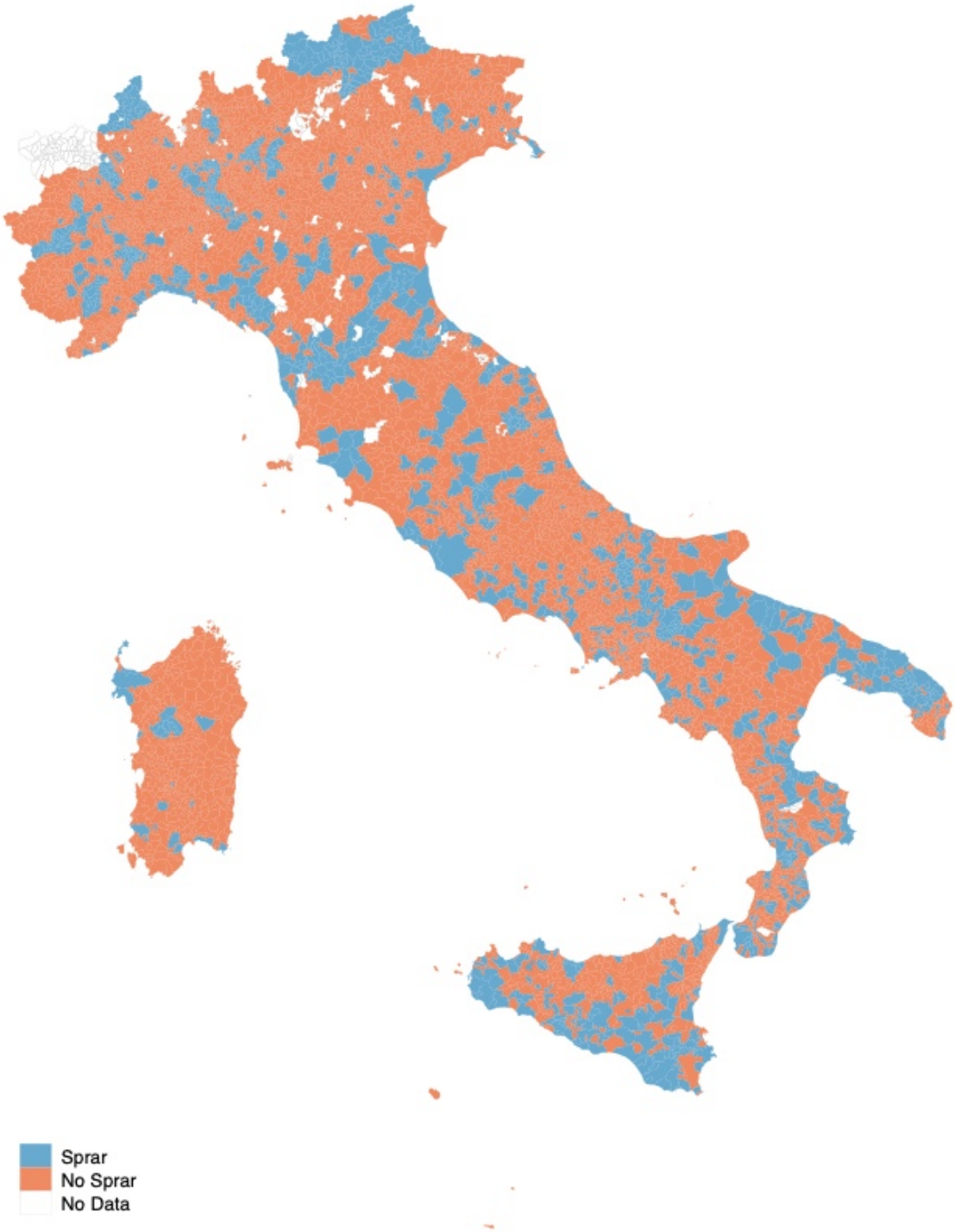
5.2 Main results

Tables 3 and 4 report the main results of the analysis, namely the effect of SPRARs on electoral outcomes. Table 3 focuses on the change in the vote shares of far-right parties. In column 1, we report the coefficient estimated by an OLS regression. In column 2, we display the reduced-form model's coefficient, which is obtained by regressing the dependent variable on our instrument. Columns 3 and 4 report the coefficients of the IV analysis implemented, respectively, without and with control variables. Finally, as described below in Subsection 5.4, columns 5-6 look at the pre-trends, providing evidence on the plausibility of the exclusion restriction assumption of our instrument. The bottom Panel of the table reports the coefficients and the F-statistics of the first stage.[22]

The coefficient in column 1 of Tables 3 shows that SPRARs' opening during the 2014-2018 period negatively correlates with the change in the vote shares of far-right parties between the 2013 and 2018 national elections. Precisely, a SPRAR center is associated with a change in the vote shares

[22]Table A3 shows the same results as Table 3, also displaying the coefficients of all the control variables.

Figure 4: **Location of SPRAR refugee centers**



Municipalities in white not included in the analysis because of missing data. Sources: Gamalerio and Negri (2022)

of extreme-right parties approximately 0.7 percentage points lower. However, opening a SPRAR is endogenous to the mayor. Hence, we run the IV model described by equation 3 to identify a causal

Table 3: **Refugees reception and voting for far-right parties**

Dep Var:	Δ % far-right 18-13				Δ % far-right 13-08	
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	-0.661**		-8.063***	-7.369**		0.479
	(0.303)		(2.137)	(3.005)		(2.504)
Accomodations		-0.449***			0.029	
		(0.155)			(0.154)	
Model:	OLS	Red. Form	IV	IV	Red. Form	IV
First Stage:			0.109***	0.061***		0.061***
F-stat.:			75.21	19.37		19.37
Mean dep. var.:	18.59				-5.19	
SD dep. var.:	8.96				8.04	
Controls:	Yes	Yes	No	Yes	Yes	Yes
Observations:	7795	7795	7795	7795	7795	7795

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

effect. As shown in the bottom panel of Table 3, the first stage is strong and, as expected, group accommodation buildings and SPRARs positively correlate.[23] The coefficients of the IV analysis reported in columns 3 and 4 go in the same direction as the result of column 1. Specifically, the coefficient in column 4 indicates that the municipalities that opened a SPRAR during the 2014-2018 period experienced a change in far-right parties' vote shares that is approximately 7 percentage points lower than municipalities that did not open a SPRAR in the same period. Given a baseline positive change in the far-right vote shares of 18.59 percentage points, the coefficient in column 4 of Table 3 indicates that treated municipalities experienced a change that was just 60 percent of

[23]Columns 1-3 of Table A4 reports the full first-stage regression estimates, showing how the relationship between the instrument and the treatment variable does not change much when progressively adding different sets of control variables.

the average change experienced by municipalities without a SPRAR.

When comparing IV and OLS coefficients, Table 3 suggests that IV coefficient in column 4 is around 11 times the OLS coefficient in column 1. This difference is very similar to the one observed by Steinmayr (2021) who, applying a similar empirical approach, found IV coefficients around 10-12 times bigger than the OLS coefficient. Finding a similar difference in terms of magnitude between OLS and IV coefficients is reassuring for the plausibility of our IV strategy. Looking at the magnitude of the coefficient on the variable of interest, we find a reduction in the vote shares of far-right parties equal to approximately 40 percent of an average positive change of around 18 percentage points. Also in this respect, the magnitude of our results are comparable to the one found by Steinmayr (2021), who observes a reduction in the vote shares for far-right parties of around 4 percentage points, which is 30 percent of an average change equal to approximately 14 percentage points. Hence, we estimate an effect with a similar magnitude compared to the average growth rate in far-right vote shares.

Table 3 indicates the presence of a positive bias in the OLS estimates, which can be due to a twofold explanation. First, even though the dataset on SPRARs is detailed, we cannot exclude measurement errors. As explained by Gamalerio et al. (2021), in some cases, municipalities open SPRAR centers together through municipalities' unions. These unions are local organizations introduced by groups of municipalities that aim to produce public goods together. In these cases, we coded all the union's municipalities as treated (i.e., as if all municipalities in the union opened the center). However, this is not always the case, and some municipalities may not have received the refugee hosted in the center opened by the union.[24] Thus, these situations may create a measurement error that might lead to an attenuation bias, which the IV estimates tend to correct. Second, as described by Gamalerio and Negri (2022), many municipal governments oppose opening refugee centers on their territory for electoral reasons. Hence, the mayors from centrist parties who do not open SPRARs may attract right-wing voters' votes, subtracting the votes from the radical right. This far-right voters' movement could lead to a negative correlation between the opening of SPRAR centers and the vote shares of centrist parties. Hence, the OLS coefficient would be negatively biased for centrist parties and positively biased for extreme right parties.

Table 3 indicates that SPRARs hurt the electoral performance of the extreme right. Hence, it is interesting to investigate if other political forces benefited from the opening of the refugee centers, absorbing the votes lost by the far-right parties. Table 4 provides evidence of the effect of SPRARs on the change in the vote shares of the other main Italian political parties. Specifically, we run the complete specification of Table 3 (Column 4, IV with controls), looking at the effect on the main center-right party (Forza Italia, FI) and on the main center-left Italian party (Partito Democratico, PD). We also look at the Five Stars Movement (5SM), a populist party that started to be electorally successful from the 2013 national election, and the far-left political parties. Finally, column 6 investigates the effect on electoral turnout.

[24] For some unions, we have verified which municipalities effectively opened the SPRAR center using web resources. In these cases, we coded the treatment variable accordingly.

As reported in Table 4, the two parties that appear to have benefited from the opening of SPRARs are the PD and FI, even though only the coefficient relative to the effect on the sum of the votes of both parties is statistically significant (i.e., the coefficient in column 1). The coefficients are positive and relevant in magnitude but not statistically significant when looking at the two parties separately (columns 2-3).[25] By contrast, the coefficients that capture the SPRARs' effect on the vote shares of 5SM and far-left parties (columns 4 and 5, respectively) are smaller and not statistically different from zero. Finally, the opening of SPRAR centers appears to have negatively affected the change in electoral turnout between the 2013 and 2018 national elections (column 6), indicating that municipalities with a SPRAR experienced a lower electoral turnout compared to municipalities without a SPRAR.

Therefore, the reduction in the support for the far-right due to SPRARs can be partly explained by voters switching their electoral preference from radical to more moderate parties, as suggested by the coefficient in column 1 of Table 4. On the other hand, the coefficient in column 6 of Table 4 indicates that the negative effect on the far-right can also be linked with fewer radical voters participating in the elections after the opening of reception centers. This last result on electoral turnout is consistent with the evidence provided by Bratti et al. (2020), who, differently from our paper, focus their analysis on other types of reception centers developed in Italy, like CAS centers. Specifically, Bratti et al. (2020) find that the positive effect of proximity to reception centers on the vote shares of populist parties can be explained by a higher electoral turnout, signaling the mobilization of populist voters. In the context of SPRAR, we find that the lower participation of far-right voters can partially explain the negative effect on the vote shares of far-right parties.

Overall, our results are consistent with the analysis based on data from Upper Austria by Steinmayr (2021), who also finds that the contact between natives and refugees hurt the far-right performance and benefited the conservative and center-right People's Party (VP) – i.e., leading to a shift of votes from the extremes of the political spectrum to more moderate positions.

5.3 Control for the presence of other reception centers (SPRARs vs. CASs)

One particular concern for our identification strategy is that, as described in section 3 and documented by Campo et al. (2021), since 2014, the Italian government introduced CAS centers to deal with the increasing number of asylum seekers who have arrived in Italy because of the refugee crisis. As described in section 3 and shown in Figure A2 in the Appendix, CAS centers are more diffused than SPRARs, and in various instances, a municipality hosted both types of reception centers.[26] In addition, Campo et al. (2021) provide evidence of the electoral impact of CASs. In

[25] Using the same structure as in Table 3, in Appendix Table A5, we provide more detailed evidence on the effect of SPRARs on the electoral performance of the moderate forces (i.e., PD plus FI). The IV coefficients are positive and significant, and estimates from column 4 show that the municipalities that opened a SPRAR during the 2013-2018 period experienced a change in the vote shares of the moderate parties approximately 5.9 percentage points higher compared to the change experienced by the municipalities that did not open a SPRAR.

[26] Specifically, in our data, we find that, in the period 2014-2018, 1554 municipalities participated in the SPRAR program, and 2812 hosted a CAS. The number of municipalities in the SPRAR program found in the data is consistent

Table 4: **Refugees reception and other politcal outcomes**

Dep Var:	FI + PD (1)	FI (2)	PD (3)	5SM (4)	Far-Left (5)	Turnout (6)
Open Sprar	5.937*	2.841	3.096	-1.899	1.060	-5.306***
	(3.114)	(2.054)	(2.457)	(2.780)	(1.071)	(1.999)
Model:	IV	IV	IV	IV	IV	IV
F-stat.:	19.37	19.37	19.37	19.37	19.37	19.37
Mean dep. var.:	-14.26	-7.39	-6.87	5.52	1.61	-1.04
SD dep. var.:	6.92	5.28	5.38	10.62	2.35	4.10
Controls:	Yes	Yes	Yes	Yes	Yes	Yes
Observations:	7795	7795	7795	7795	7795	7795

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

contrast with the effect of SPRARs estimated in this paper, they find that CAS centers have a positive effect on the vote shares of far-right parties. Given the results of Campo et al. (2021), it is crucial to check that our estimates are robust to the inclusion of variables capturing the presence of CASs at the municipal level. To control for the presence of these centers, we exploit the fact that, as explained by Campo et al. (2021), according to the dispersal policy applied in the case of CASs, the number of asylum seekers and refugees assigned to each Italian province was based on the size of the provincial population, but the distribution of CASs within provinces happened on a quasi-random basis through public procurement procedures managed by the provincial offices of Italian Home Office.

Hence, to rule out that the presence of CAS centers might impact our results, we exploit the quasi-random allocation of migrants through the CAS system, and we control for a variable mea-

with the aggregate number provided by the various editions of the Atlante SPRAR published over the years on the SPRAR webpage. Among the municipalities in the SPRAR program, 884 did not host a CAS, and 670 also hosted a CAS center.

suring the maximum potential capacity of the center divided by the municipal population.[27] In addition, we control for a dummy variable capturing the presence of first-level reception centers (CPSA, CDA, and CARA). We report the estimated coefficients obtained by adding these two additional control variables in Table 5: as is evident, adding these control variables to our analysis leaves the results unchanged. Interestingly, the coefficient estimated for the variable capturing the capacity per capita of the CAS centers (column 4) is positive and statistically significant, signaling a positive effect of CAS centers on the change in the vote shares for far-right parties. This result is consistent with the results provided by Campo et al. (2021).

Finally, to further confirm that the presence of CAS and first-level reception centers do not drive our results, we repeat the analysis excluding from the sample the municipalities with these centers. As reported in Appendix Table A6, our results are stable when dropping municipalities hosting either a CAS center or first-level reception centers. Reassuringly, all these robustness checks appear to rule out the possibility that our results could be due to other types of refugee centers.

5.4 Robustness checks

This section describes a series of additional tests we run to check the robustness of our main results. First, we provide evidence on the plausibility of the exclusion restriction assumption of our instrument. At the same time, we show that the main results are not due to differential pre-treatment trends in electoral outcomes between municipalities that opened a SPRAR and municipalities that did not. Second, we show that our results do not change if we add to the analysis control variables that identify municipalities that in the past had received more public spending and areas characterized by a stronger presence of the Catholic Church. Third, we show that our results do not change if we control for past mayors' characteristics rather than the characteristics of mayors elected between 2014 and 2018.

We report the results of the first robustness check for far-right parties in columns 5-6 of Table 3. Column 5 reports a reduced form regression in which we control for macro-area fixed effects and an extensive set of control variables. The coefficient is non-significant and very small, proving that our instrument does not correlate with the change in the vote shares of far-right parties between the 2008 and 2013 elections. This null result differs from the reduced form regression reported in column 2, which shows a negative and significant relationship between the instrument and the change in the far-right vote shares between the 2013 and 2018 elections. This evidence indicates that the availability of group accommodation buildings at the municipal level started to correlate with voting behavior only during the refugee crisis, namely when these buildings could host refugees and asylum seekers. By contrast, this correlation was not in place in the previous years when the magnitude of migration inflows was lower.[28] Besides, in column 6 of Table 3, we repeat the analysis

[27] Differently from Campo et al. (2021), we do not have data on the number of asylum seekers and refugees hosted in CAS in the period 2014-2018, which is the information that Campo et al. (2021) use to build their treatment in a fixed-effect model. However, the total number of municipalities we identify as having hosted a CAS in our data is consistent with the total number that Campo et al. (2021) report.

[28] In columns 4-6 of Appendix Table A4, we show how the coefficient of the relationship between the 2018-2013

Table 5: **Refugees reception and voting for far-right parties – Controlling for CAS and first-level reception centers**

Dep Var:	Δ % far-right 18-13				Δ % far-right 13-08	
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	-0.667**		-8.063***	-7.487**		0.415
	(0.302)		(2.137)	(3.023)		(2.504)
First-level center	-0.524	-0.491		-0.526	-0.454	-0.452
	(0.953)	(0.970)		(0.882)	(0.672)	(0.670)
Capacity CAS center	0.145	0.145		0.178*	0.100	0.098
	(0.089)	(0.088)		(0.102)	(0.077)	(0.078)
Accomodations		-0.455***			0.025	
		(0.155)			(0.153)	
Model:	OLS	Red. Form	IV	IV	Red. Form	IV
First Stage:			0.109***	0.061***		0.061***
F-stat.:			75.21	19.23		19.23
Mean dep. var.:	18.59				-5.19	
SD dep. var.:	8.96				8.04	
Controls:	Yes	Yes	No	Yes	Yes	Yes
Observations:	7795	7795	7795	7795	7795	7795

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Additional control variables reported in this table: First-level center = 1 if municipality hosts a first-level reception center; Capacity CAS center = maximum capacity of the CAS center over total municipal population. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

change in far-right vote shares and the instrument varies when progressively adding more control variables. The coefficient is positive and statistically insignificant if we do not control for any variable (column 4). However, when adding macro-areas fixed effects (column 5), the coefficient becomes negative and statistically different from zero. The coefficient remains highly significant when we add all the control variables (column 6). These results are consistent with the fact that the electoral performance of far-right parties is very different across different areas of Italy, given that, as shown in Figure 3, these parties are more successful in the Center-North rather than in the South. In addition,

of our most complete specification (column 4) using as a dependent variable the change in the vote shares of the far-right between the 2008 and the 2013 elections. Also in this case the coefficient is small and insignificant, confirming that the treatment in the IV regression does not correlate with past electoral outcomes. Thus, we can confidently exclude that differential pre-treatment trends in electoral outcomes drive the IV results.[29]

Tables A8 and A9 demonstrate that our results do not change if we add to the analysis control variables that identify municipalities that in the past had received more public spending and areas characterized by a deeper presence of the Catholic Church. Indeed, one potential threat to our identification strategy is that municipalities with group accommodation buildings may also be those that, in the past, could spend more public money. This higher level of public expenditures may explain and correlate with the presence of group accommodation buildings on their territory and affect electoral outcomes. Hence, controlling for the level of total municipal expenditures is crucial for ruling out this threat to the identification strategy. At the same time, municipalities with group accommodation buildings, such as homes for the disabled, elderly, orphans, and drug addicts, may also be characterized by a stronger presence of the Catholic Church. This more substantial presence of the Church could have impacted the electoral performance of the moderate parties analyzed in Table 4 (and Appendix Table A5). To reduce these concerns, in Tables A8 and A9, we add as additional control variables the average total municipal expenditures per capita in the period 2008-2012 and, as a proxy for the presence of the Catholic Church, the share of religious marriages over total marriages measured in 2012.[30] We think that the share of religious marriages represents a reasonable proxy for the strength of the Catholic Church at the municipal level, and it has already been interpreted in this way in both the economics and political science literature (Bozzano, 2017; Cartocci, 2011). As we can see from Tables A8 and A9, adding these control variables to our main regression leaves the results unchanged.

Finally, in our analysis, we control for the average personal characteristics of mayors in office in the period 2014-2018. However, one potential issue with these measures is that they could be endogenous to our treatment. To address this concern, we collect information on the gender, age, level of education, and political orientation of the mayors elected in the electoral years from 1998 and 2012. Then, we calculate the averages of all these variables and use them as a control in a robustness check presented in Table A10. As we can see, our main results do not change if we control for the average characteristics of past mayors.[31]

as shown in Appendix Table A7, it is less likely to find municipalities with group accommodation buildings in the South of Italy. Hence, controlling for macro-areas fixed effects is crucial in this context, as not doing it generates an upward-biased estimated coefficient in the reduced form regression. Finally, columns 7-9 of Appendix Table A4 show the importance of controlling for macro-areas fixed effects and municipal control variables even in the reduced form relationship between the 2013-2008 change in the vote shares of far-right parties and the instrument.

[29] Columns 5-6 of Appendix Table A5 repeat and confirm the same robustness checks for moderate parties.

[30] The data on municipal expenditures for 2008-2012 comes from the Aida PA database provided by the Bureau Van Dijk. The data on the share of religious marriages comes from ISTAT, measured in 2012. For this last variable, we replace the cases with no total marriages in the municipality with zero, and we add in the regressions a dummy variable equal to one for these cases.

[31] As an additional robustness check, in Table A11, we provide evidence that the main results of our paper do not

6 Mechanisms

This section explores potential mechanisms that help to explain the decrease in the support for the far-right parties pictured in Table 3. Specifically, inspired by anecdotal evidence from newspapers (Linkiesta (2014), Corriere della Sera (2011), L'Espresso (2018)), we focus on the effect of SPRARs on population growth and schools.

6.1 The effect on population growth

We start by looking at the effect of SPRARs on population growth. To develop this analysis, we use data on total, foreign, and native populations for 2018, 2013, and 2008. Specifically, we calculate the population differences between 2018 and 2013 and divide these changes by the total population in 2013. To exclude the presence of differences in pre-treatment trends, we replicate the same exercise using the change between 2013 and 2008. We focus on these two periods because they coincide with the abovementioned election years. We use these measures of population growth as dependent variables, and we run the IV model represented by equation 3. The results for 2018-2013 are reported in Table 6, while the robustness check for 2013-2008 is in Table A12.[32] As observable in Table 6, SPRARs positively impacted the growth rate of all the population-related variables. Municipalities with SPRARs experienced a change in the total municipal population as a ratio over the initial population that was almost 7 percentage points higher than municipalities that did not open SPRAR centers. At the same time, treated municipalities experienced a growth rate in foreign and native populations, respectively by 1.2 and 5.5 percentage points bigger than municipalities in the control group. The coefficients in Table A12 in the appendix confirm that these results are not due to differential trends in the pre-treatment period 2013-2008.

The interesting fact about these results is that the total and the native populations were declining in the control group during the period studied, as shown by the average growth rate measured for the control group and reported in Table 6. In terms of magnitude, the estimated effects appear moderately large, especially concerning the effects on the total and native populations. However, we should consider that in municipalities without a SPRAR, the total and the native populations were experiencing a negative growth rate of -3.3 and -3.1 percent, respectively. Given these negative growth rates, the estimated coefficients in Table 6 indicate a growth rate across municipalities with a SPRAR equal to 3.4 (i.e., -3.3 plus 6.7) for the total population and 2.3 percent (i.e., -3.2 plus 5.5) for the native population. These numbers, in terms of magnitude, suggest plausible growth rates and indicate that the opening of SPRAR centers helped the treated municipalities to counterbalance the decline in total and native populations.

In Table 7, we dig into the channels through which SPRARs led to a positive effect on population growth.[33] We analyze if this result is due to variations in migration flows or births and deaths.

change if we use regions FEs rather than macro-areas FEs. This implies controlling for 19 dummy variables, catching the 19 Italian regions reported in our dataset (we do not have data on the Special Region Valle d'Aosta).

[32] We also report OLS and reduced form estimates in Table A13.

[33] Table A14 reports the relative OLS and reduced form estimates.

Table 6: **Refugees reception and population growth (IV estimates)**

Dep Var:	Δ % Total Pop. 2018-2013 (1)	Δ % Foreign Pop. 2018-2013 (2)	Δ % Native Pop. 2018-2013 (3)
Open Sprar	0.067***	0.012*	0.055***
	(0.021)	(0.007)	(0.019)
First Stage:	0.061***	0.061***	0.061***
F-stat.:	18.22	18.22	18.22
Mean dep. var.:	-0.03	-0.00	-0.03
SD dep. var.:	0.04	0.02	0.04
Controls:	Yes	Yes	Yes
Observations:	7629	7629	7629

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. All the dependent variables are measured as the change between 2018 and 2013, divided by the total population in 2013. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Panel A shows the impact of SPRARs on the change in migration inflows and outflows for foreign and native populations. We measure all these changes between 2018 and 2013 as a ratio of the total municipal population in 2013. Panel B studies the relationship between SPRARs and births and deaths. We measure these changes as a ratio of the total municipal population in 2013. Panel A shows that SPRARs positively affected the inflows of both the foreign and native populations (columns 1 and 3). Interestingly, SPRARs also led to a decrease in the outflows of natives (column 4), suggesting that the opening of refugee centers convinced more natives to continue to live in treated municipalities. The results in Panel B display a positive but small relationship between SPRARs and the changes in births for both foreigners and natives and a stronger positive relationship with the percentage change in the deaths of natives. Overall, the magnitude, the sign, and the significance of the coefficients in Table 7 indicate a more relevant role of migratory changes in explaining the positive effect of SPRARs on population growth described in Table 6.

Table 7: **Refugees reception and population growth – Disentangle the effect (IV estimates)**

Panel A: migration inflows and outflows

Dep Var:	Δ % foreign inflow 18-13 (1)	Δ % foreign outflow 18-13 (2)	Δ % native inflow 18-13 (3)	Δ % native outflow 18-13 (4)
Open Sprar	0.019*	-0.008	0.033***	-0.039***
	(0.010)	(0.008)	(0.013)	(0.014)
F-stat.:	21.26	20.64	20.23	19.14
Mean dep. var.:	0.04	0.04	0.11	0.12
SD dep. var.:	0.03	0.03	0.05	0.04
Controls:	Yes	Yes	Yes	Yes
Observations:	7681	7681	7681	7681

Panel B: births and deaths

Dep Var:	Δ % foreign births 18-13 (1)	Δ % foreign deaths 18-13 (2)	Δ % native births 18-13 (3)	Δ % native deaths 18-13 (4)
Open Sprar	0.003***	-0.000	0.005*	0.051***
	(0.001)	(0.000)	(0.003)	(0.012)
F-stat.:	20.49	20.70	20.70	22.74
Mean dep. var.:	0.00	0.04	0.03	0.06
SD dep. var.:	0.00	0.03	0.01	0.02
Controls:	Yes	Yes	Yes	Yes
Observations:	7681	7681	7681	7681

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. All the dependent variables are measured as the change between 2018 and 2013, divided by the total population in 2013. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

In conclusion, the evidence in this section suggests that the opening of SPRARs, through an increase in foreign and native populations, helped municipalities counterbalance the general decline in municipal population. Besides, the positive effect on the native population suggests that the opening of SPRARs made treated municipalities more attractive for natives. In the next section, we provide additional evidence to explain why this has been the case.

6.2 The effect on schools

The second mechanism that we investigate is the effect of SPRARs on schools. To provide evidence of this effect, we collect data on the number of native and international students, the number of classes, and the number of schools at the municipal level for the years 2018, 2012, and 2008. We then exploit this data to calculate the percentage changes in all these variables between 2012 and 2018, which we use as the main dependent variables. We also calculate the percentage changes between 2008 and 2012, which, as usual, we use to exclude differential pre-treatment trends. We select these two periods because these are the ones that most closely resemble the schedule of national elections in the school data that are openly available. [34] We use all these schools' measures as outcomes in the IV model described by equation 3. We report the results for the 2018-2012 in Table 8, and the pre-treatment parallel trends check for the period 2012-2008 in Table A15. Table A16 reports OLS and reduced form estimates.

The results in Table 8 suggest a positive and significant impact of the opening of SPRARs on all the schools' measures considered.[35] Besides, it is worth noting how both foreigners and natives appear to drive the positive effect on the number of students, even though the result for foreigners is marginally not statistically significant. Interestingly, all the positive effects found in Table 8 counterbalance negative baseline average trends (reported in the bottom panel). As discussed in subsection 6.1 for the results on population growth, the estimated effects appear large in terms of magnitude. However, as for the results on population, also, in this case, we should consider that in municipalities without a SPRAR, the school's outcomes used were experiencing negative growth rates. For example, let us consider the effect on the percentage change in the total number of students (i.e., a coefficient equal to 0.629) and combine it with the average growth rate in the control group. We find that municipalities with a SPRAR experienced a growth rate of around 7 percent (i.e., -56 plus 62.9). This number appears to represent a reasonable growth rate in terms of magnitude.

In general, the magnitude of the effects observed for population growth and school measures appears to be large. As already discussed, this magnitude may be surprising, given the small scale of SPRAR centers (we estimate an average of 23 places made available by the municipalities in our sample and a standard deviation equal to 88). However, it is worth noticing how the median

[34] We collect this data from the Italian Ministry of Education and ISTAT. The open data from the Italian Ministry of Education goes from 2016 up to 2020. The data from ISTAT from 2004 to 2012. We could not find data for 2013. Hence, we decide to work on the intervals 2008-2012 and 2012-2018 instead.

[35] Table A15 confirms that this result is not due to differential pre-treatment trends.

Table 8: **Refugees reception and schools (IV estimates)**

Dep Var:	Δ % Students 18-12 (1)	Δ % Native students 18-12 (2)	Δ % Foreign students 18-12 (3)	Δ % Classes 18-12 (4)	Δ % Schools 18-12 (5)
Open Sprar	0.629***	0.604***	0.527	0.538***	0.880***
	(0.159)	(0.154)	(0.348)	(0.168)	(0.225)
First Stage:	0.059***	0.059***	0.055***	0.059***	0.059***
F-stat.:	17.611	17.611	14.736	17.611	17.611
Mean dep. var.:	-0.56	-0.57	-0.20	-0.25	0.09
SD dep. var.:	0.17	0.17	0.67	0.29	0.21
Controls:	Yes	Yes	Yes	Yes	Yes
Observations:	6607	6607	6172	6607	6607

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. All the dependent variables are measured as the percentage change between 2018 and 2012. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

population of the municipalities opening SPRAR centers in our data is 3612, suggesting that many hosting municipalities are tiny. The small size of these municipalities makes the magnitude of these effects more plausible. For example, the newspaper article by Corriere della Sera (2011) describes how, in 2011, in the municipality of Acquaformosa, which had approximately 1000 inhabitants, 13 migrant students represented 20 percent of the total student population.

As observed for the population, SPRARs seem to have helped municipalities respond to a generalized decline in the number of students and keep an essential local public service as schools alive. In turn, this positive effect of SPRAR on compositional amenities can help explain how these reception centers could have made the municipalities that hosted them more attractive for natives, who were convinced to stay or to move from other municipalities.[36] This evidence is again

[36]Another mechanism we do not investigate in this paper is that municipalities that opened SPRAR centers received financial grants from the central government. These grants are transferred to cover the management cost of the reception center. As explained by Gamalerio and Negri (2022); Gamalerio et al. (2021), these fiscal grants can potentially generate positive spillovers for the population of the hosting municipality. For example, these grants can represent a source of revenue for firms, health and social professionals, and cooperatives that provide services to the reception center. In addition, Law 225/2016 introduced an additional fiscal bonus of around 500-700 euros

consistent with the anecdotal evidence reported in the press.

6.3 SPRARs, compositional amenities, and voting behavior

In Tables 9 and 10, we provide suggestive evidence that the impacts of SPRARs on population and schools can explain the results found on extreme-right votes. In Table 9, we run simple OLS regressions in which the dependent variable is the usual change in the far-right vote shares. Instead, the main explanatory variables are equal to 1 for municipalities where the native population and the number of native students were experiencing positive growth. The results in Table 9 show that the change in the support for the far-right negatively correlates with these two dummy variables, suggesting that municipalities in which the native population and the number of students were growing experienced lower growth in the vote shares of far-right parties. Hence, this evidence also indicates that the positive impact of SPRARs on the population and schools could help explain SPRAR centers' negative effect on far-right electoral performance.

In Table 10, we implement a heterogeneity analysis in which we interact the instrumented SPRAR treatment with municipal characteristics that the literature (e.g., Barone et al. (2016); Dustmann et al. (2019)) has shown to be relevant in explaining the effect of immigration on voting behavior. Precisely, we focus on the following pre-treatment characteristics from the 2011 Population Census: the share of children (i.e., younger than 15 years) and elderly (i.e., older than 65 years), the unemployment rate, the share of individuals with a university degree, the share of immigrants legally resident in the municipality, and the average income per capita. We instrument these interaction terms using the interaction between our instrument and the pre-determined municipal characteristics. We then standardize these variables to take values between 0 and 1. Thus, every value indicates the percentile that a municipality represents in the distribution of the variable.

This analysis allows us to posit which municipal dimensions drive the main effect of SPRARs on far-right vote shares. However, as shown in Table 10, once we add these interaction terms, we get weaker first stages with small F-statistics. Hence, even though they are helpful, we must treat the results in Table 10 with caution (Mayda et al., 2020). The most interesting result is reported in column 1, which suggests how a growing share of children (i.e., the share of people younger than 15 years old) in a municipality leads to a more negative effect of SPRARs on far-right support. This result suggests that in municipalities where concerns about schools are significant, the effect of SPRARs on extreme-right votes becomes more negative. This result is also consistent with the positive effect of refugee centers on the schools' measures studied in Table 8.

Besides, three other interesting suggestive results emerge from Table 10. First, a higher unemployment rate appears to shrink the negative effect of SPRARs on far-right support, leading to a potentially positive effect for higher unemployment values. This result is consistent with the

per migrant hosted that municipalities could freely spend on other goods and services. These benefits could have also made the hosting municipalities more attractive for natives, explaining the effects on population growth. As suggested by the anecdotal evidence in the press (e.g., Corriere della Sera (2011)), these are all plausible mechanisms, which we think are complementary and not mutually exclusive of the compositional amenities mechanism described in this paper.

Table 9: **OLS correlation between far-right voting and population and school growth**

Dep Var:	Δ % Far-right 18-13	
	(1)	(2)
=1 if Δ % Native Population > 0	-0.826***	-0.519***
	(0.237)	(0.168)
=1 if Δ % Native Students > 0	-0.617	-1.400*
	(0.857)	(0.842)
Controls:	No	Yes
Observations:	6448	6448

OLS estimates. All regressions include macro-area fixed effects. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

theory and the empirical evidence developed by Gamalerio et al. (2021), who show how the fear of labor market competition can make natives less welcoming to migrants. It is also consistent with the evidence provided by Mayda et al. (2020), who shows how, in the U.S., the effect of migration on Republican electoral support is more substantial in places where concerns about labor market competition are significant. Second, in municipalities with higher pre-existing shares of migrants, the effect of SPRARs on far-right vote shares is even more negative. This evidence is consistent with the contact theory (Allport, 1954).

Third, a higher income per capita reinforces the negative effect of refugee centers on the vote shares of anti-immigrant political parties. This result contrasts the evidence provided by Dustmann et al. (2019), who finds that, in Denmark, the interaction between refugees and higher income levels reinforces the electoral support for extreme parties. They explain how this result could be due to the fear of rich people that hosting refugees and welfare-dependent migrants, in general, may potentially increase their fiscal burden. The result in column 6 of Table 10 suggests that these concerns do not seem to apply to the SPRAR program. One explanation for this divergent effect could be that the opening of SPRAR is associated with fiscal benefits (Gamalerio and Negri, 2022)

Table 10: **Heterogeneity analysis (IV estimates)**

Dep Var:	Δ % Far-Right 18-13					
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	3.579	-13.348**	-28.253**	-10.427**	1.408	3.465
	(4.196)	(6.731)	(11.557)	(4.744)	(3.223)	(3.346)
Sprar × % children	-0.264**					
	(0.120)					
Sprar × % elderly		0.100				
		(0.080)				
Sprar × % unempl.			0.324***			
			(0.121)			
Sprar × % graduate				0.051		
				(0.066)		
Sprar × % foreign					-0.338*	
					(0.179)	
Sprar × income						-0.291***
						(0.109)
Model:	IV	IV	IV	IV	IV	IV
F-stat.:	4.27	5.47	4.00	8.27	2.13	3.97
Controls:	Yes	Yes	Yes	Yes	Yes	Yes
Observations:	7795	7795	7795	7795	7795	7795

Instrumental variables: presence of group accommodation buildings, and interaction term between group accommodation buildings and the pre-treatment characteristics. All regressions include macro-area fixed effects. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

that could attenuate voters' welfare concerns. Besides, this result is consistent with Gamalerio

et al. (2021), who explain how more affluent and productive individuals that work in managerial and entrepreneurial positions may see the arrival of migrants as an increase in labor supply that they could potentially hire and thus benefit from it from an economic point of view.

In conclusion, the overall evidence in this section suggests that the positive impact of SPRARs on population and compositional amenities like schools can explain why these refugee centers negatively impacted the performance of extreme-right and anti-immigrant parties.

7 Spillover effects

This section investigates potential spillover effects based on the distance between municipalities that opened a SPRAR and municipalities that did not. To explore the presence of spillovers on the vote shares of far-right parties, we follow the identification strategy developed by Bratti et al. (2020). Specifically, we run an OLS regression using the change in support for far-right parties as the dependent variable and the distance in kilometers from the closest municipality with a SPRAR as the explanatory variable. In this analysis, we keep only municipalities that did not open a SPRAR in 2013-2018. More formally, we run the following fixed-effects model:

$$Y_{i,j} = \beta_0 + \beta_1 DistanceSPRAR_{i,j} + \alpha_k X_{k,i} + \delta_j + u_{i,j} \tag{4}$$

where i indicates a specific municipality and j is the subscript for the closest municipality to i that opened a SPRAR center. $Y_{i,j}$ is equal to $\Delta\%FarRight_{18-13} = (\%FarRight_{2018}) - (\%FarRight_{2013})$, which is the change in the vote shares for far-right parties between the 2018 and 2013 national elections in municipality i. The treatment variable $DistanceSPRAR_{i,j}$ is the distance in kilometers between i and j. The vector $X_{k,i}$ contains municipal and mayoral characteristics. We also control for fixed effects δ_j at the level of the closest municipality j hosting a SPRAR center. As explained by Bratti et al. (2020), the identification strategy behind model 4 relies on the assumption that the decision to open a SPRAR center by part of municipality j does not correlate with unobserved determinants of electoral outcomes in municipality i. If this assumption is valid, we can consider the treatment variable $DistanceSPRAR_{i,j}$ as good as random. We check the plausibility of this assumption by showing how $DistanceSPRAR_{i,j}$ does not correlate with the change in the vote shares for far-right parties between the 2013 and 2008, i.e., in the period in which the SPRAR centers were not opened yet.

Table 11 reports the results obtained estimating model 4.[37] As displayed in Columns 1-2, both the estimated coefficients confirm the presence of spillover effects in 2013-2018. Reassuringly, Columns 3-4 exclude that these effects were in place in the pre-treatment period, confirming the validity of the identification strategy used to estimate spillover effects. The estimated coefficient in column 2 indicates that a 1km increase in the distance from the closest SPRAR leads to an increase

[37] The lower number of observations in Table 11 is due to the fact that we excluded municipalities with a SPRAR from the analysis. In addition, to estimate model 4, we had to drop singletons in each group, defined by δ_j fixed effects.

in the change of far-right parties' vote shares equal to 0.041 percentage points. To give a sense of the magnitude of these spillover effects, a reduction in the distance from the closest SPRAR by one standard deviation (approximately 11.39 km) leads to a reduction in the change of far-right parties' vote shares equal to 0.47 percentage points. This change corresponds to a 2.5 percent reduction compared to the average change of the dependent variable reported in Table 11.

Table 11: **Refugees reception and spillover effects (OLS and IV estimates)**

Dep Var:	Δ % Far-Right 18-13		Δ % Far-Right 13-08	
	(1)	(2)	(3)	(4)
Distance Sprar (km)	0.045***	0.041***	0.013	0.000
	(0.012)	(0.012)	(0.010)	(0.000)
Mean dep. var.:	18.81	.	-5.34	.
SD dep. var.:	8.89	.	8.08	.
Controls:	No	Yes	No	Yes
Sprar FEs:	Yes	Yes	Yes	Yes
Observations:	5942	5942	5942	5942

OLS estimates in all columns. All regressions include δ_j fixed effects. In columns 1-2, we also control for the past value of the dependent variable measured in the period 2013-2008. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the level of the closest municipality j hosting a SPRAR center. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

In sum, the results in Table 11 indicate that proximity to SPRARs led to a reduction in extreme-right vote shares in municipalities that did not open a refugee center. This evidence suggests that the positive effect of SPRARs on compositional amenities and population growth likely created positive consequences for neighboring municipalities, leading to a reduction in prejudice in these places, even though they did not directly open a SPRAR center.

8 Conclusion

This paper shows that hosting refugees through a reception system managed by local politicians and well integrated into the local context can hurt the electoral performance of far-right and anti-immigration political parties and reduce prejudice. It also shows that hosting refugees can positively impact population growth and compositional amenities and generate spillovers for neighboring municipalities. The results of this paper call for future research.

Specifically, this paper focuses on one type of refugee center – i.e., SPRARs. SPRARs are medium-small refugee centers that aim to integrate the migrant population and foster interaction between migrants and natives based on anecdotal evidence. However, SPRARs do not represent the only model for the geographical redistribution of refugees and asylum seekers in Italy and across countries. For example, a recent paper by Campo et al. (2021) also focuses on Italian refugees' dispersal policies, looking at CAS refugee centers instead. They find that CASs' presence increases the political support for the extreme-right parties between the 2013 and 2018 national elections. An explanation for this divergent effect is that CASs are, on average, bigger than SPRARs and managed by the central government in cooperation with agents in the private sector (e.g., firms and cooperatives). Besides, according to the anecdotal evidence, CAS centers do not seem to work as well as SPRARs in integrating refugees and asylum seekers and producing constructive contact with natives. Hence, our results suggest that, conversely, a relocation system managed by local governments that involves local stakeholders can lead to different results in terms of integration and acceptance of migrants by part of natives. These contrasting results call for more future research on the geographical redistribution of migrants also in contexts different from the Italian one.

Finally, we develop the analysis using data aggregated at the municipal level. Future research could aim to collect data on the exact location of refugee centers within the municipal territory. This kind of data could allow the researchers to investigate further the mechanisms behind the impact of refugees' reception and on the attitudes of natives toward migrants and economic and social indicators, potentially shedding more light on spillover effects.

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Appendix: Additional Tables

Table A1: SPRAR tenders timing

Tender	Year	Date starts	Date ends	Date opens	Years active
1	2013	04/09/2013	19/10/2013	29/01/2014	2014-2016
2	2015	23/05/2015	22/07/2015	04/12/2015	2016
3	2015-2016	14/10/2015	14/02/2016	31/05/2016	2016-2017
4	2016	27/08/2016	30/10/2016	19/01/2017	2017-2019
5	2017	-	-	-	2017-2020

Sources: Gamalerio and Negri (2022), Gamalerio et al. (2021), Home Office and SPRAR. Description columns: 1) Column 1 indicates the number of the tender assigned for this paper; 2) Column 2 reports the year in which the tender is issued by the Home Office; 3) Column 3 indicates the starting date of the tender; 4) Column 4 reports the deadline for application to the tender; 5) In column 5, we find he date of opening of the refugee center; 6) The refugee center is active in the years in column 5. The last row (i.e., tender 5) refers to year 2017, during which the Italian Home Office accepted bids for SPRAR centers on a rolling basis (see Ministerial Decree 10 August 2016, n. 200).

Table A2: Types of structures used for SPRAR refugee centers (%)

Type	2013	2014	2015	2016	2017	2018
Flats	75	80	82	83.1	83.8	86.2
Group Accommodations	25	20	18	16.9	16.2	13.8

Sources: Atlante SPRAR

Table A3: **Refugees reception and voting for far-right parties – All controls**

Dep Var:	Δ % far-right 18-13				Δ % far-right 13-08	
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	-0.661**		-8.063***	-7.369**		0.479
	(0.303)		(2.137)	(3.005)		(2.504)
Macro Area: Islands	-7.858***	-7.799***	-9.954***	-8.168***	0.277	0.301
	(0.827)	(0.831)	(0.728)	(0.861)	(0.635)	(0.656)
Macro Area: North East	4.981***	5.059***	2.061*	4.278***	-11.663***	-11.613***
	(0.583)	(0.577)	(1.128)	(0.732)	(0.731)	(0.811)
Macro Area: North West	1.082**	1.091**	1.490**	1.030*	-8.538***	-8.534***
	(0.499)	(0.495)	(0.700)	(0.588)	(0.522)	(0.524)
Macro Area: South	-9.727***	-9.763***	-12.094***	-9.471***	2.309***	2.290***
	(0.919)	(0.921)	(0.722)	(0.924)	(0.699)	(0.701)
Bolzano Province	-39.085***	-39.602***		-33.491***	22.771***	22.374***
	(2.249)	(2.239)		(3.418)	(1.127)	(2.415)
Open Sprar before 2013	0.886	0.452		5.127**	0.030	-0.274
	(0.555)	(0.517)		(2.025)	(0.303)	(1.600)
% small buildings (2011)	2.638**	2.729**		1.284	-2.526**	-2.433**
	(1.306)	(1.313)		(1.567)	(1.087)	(1.171)
% not used buildings (2011)	8.128***	8.168***		6.361**	-3.064	-2.946
	(2.642)	(2.674)		(2.790)	(2.719)	(2.793)
No profit organisations	59.159	60.564		54.407	-38.336	-37.936
	(42.262)	(42.318)		(44.751)	(33.294)	(32.722)
Population (2011)	-0.000**	-0.000**		0.000	-0.000	-0.000
	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)
Population squared (2011)	0.000*	0.000*		-0.000	-0.000	0.000
	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)
Population density (2011)	-0.001***	-0.001***		-0.001***	-0.000	-0.000
	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)
Accomodations		-0.449***			0.029	
		(0.155)			(0.154)	
Model:	OLS	Red. Form	IV	IV	Red. Form	IV
F-stat.:			75.21	19.37		19.37
Observations:	7795	7795	7795	7795	7795	7795

Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Refugees reception and voting for far-right parties – All controls (Cont.)

Dep Var:	Δ % far-right 18-13			Δ % far-right 13-08		
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	-0.661**		-8.063***	-7.369**		0.479
	(0.303)		(2.137)	(3.005)		(2.504)
Surface (kmq)	0.001	0.002		0.006*	0.002	0.001
	(0.002)	(0.002)		(0.003)	(0.002)	(0.002)
Altitude	-0.001*	-0.001*		-0.001*	-0.001**	-0.001**
	(0.001)	(0.001)		(0.001)	(0.001)	(0.001)
Unemployment rate (2011)	-12.699***	-12.609***		-11.844***	7.199***	7.149***
	(3.149)	(3.152)		(3.317)	(2.635)	(2.648)
% homemakers	10.567**	10.595**		9.477*	-5.586	-5.513
	(4.464)	(4.463)		(5.111)	(3.975)	(3.934)
% inactive / unable to work	-16.598***	-16.362***		-15.389***	22.712***	22.649***
	(5.203)	(5.198)		(5.586)	(4.332)	(4.355)
% of college graduated	-38.282***	-37.949***		-35.509***	9.822**	9.663*
	(6.246)	(6.272)		(6.925)	(4.832)	(4.957)
% foreign pop (2011)	15.177***	15.873***		11.774***	1.762	2.028
	(3.852)	(3.882)		(4.189)	(3.046)	(3.350)
Income per capita	0.000	0.000*		0.000*	0.000	0.000
	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)
% younger than 14 (2011)	-47.802***	-47.505***		-39.412***	-14.307**	-14.833**
	(7.810)	(7.875)		(8.470)	(6.634)	(7.066)
% older than 65 (2011)	-11.132***	-10.790***		-7.816*	15.316***	15.123***
	(3.975)	(4.010)		(4.254)	(3.449)	(3.613)
Distance to closest capital city	-0.013	-0.013		-0.019	-0.009	-0.009
	(0.013)	(0.013)		(0.014)	(0.013)	(0.013)
Capital city	1.517**	1.364**		1.713**	-0.516	-0.539
	(0.647)	(0.644)		(0.731)	(0.555)	(0.574)
Accomodations		-0.449***			0.029	
		(0.155)			(0.154)	
Model:	OLS	Red. Form	IV	IV	Red. Form	IV
F-stat.:			75.21	19.37		19.37
Observations:	7795	7795	7795	7795	7795	7795

Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Refugees reception and voting for far-right parties – All controls (Cont.)

Dep Var:	Δ % far-right 18-13				Δ % far-right 13-08	
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	-0.661**		-8.063***	-7.369**		0.479
	(0.303)		(2.137)	(3.005)		(2.504)
Female mayor	-0.164	-0.163		-0.088	0.020	0.015
	(0.217)	(0.217)		(0.241)	(0.191)	(0.192)
Age of mayor	0.019***	0.019***		0.018**	-0.010*	-0.010*
	(0.007)	(0.007)		(0.008)	(0.006)	(0.006)
Mayor graduated at university	-0.253*	-0.239		-0.157	0.005	-0.001
	(0.148)	(0.149)		(0.169)	(0.137)	(0.141)
Far right mayor	-0.697*	-0.588		-1.128**	-2.129***	-2.094***
	(0.397)	(0.398)		(0.485)	(0.459)	(0.482)
Year term	-1.300*	-1.477*		-0.327	1.305*	1.230
	(0.774)	(0.778)		(0.916)	(0.740)	(0.764)
Year term squared	0.215	0.254		0.030	-0.337**	-0.322*
	(0.181)	(0.182)		(0.211)	(0.169)	(0.171)
Accomodations		-0.449***			0.029	
		(0.155)			(0.154)	
Model:	OLS	Red. Form	IV	IV	Red. Form	IV
F-stat.:			75.21	19.37		19.37
Observations:	7795	7795	7795	7795	7795	7795

Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A4: **First Stage and Reduced Form – All controls**

Dep Var:	Open Sprar			Δ % far-right 18-13			Δ % far-right 13-08		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Accomodations	0.100***	0.109***	0.061***	0.362	-0.876***	-0.449***	-0.812***	0.086	0.029
	(0.013)	(0.013)	(0.014)	(0.322)	(0.226)	(0.155)	(0.294)	(0.185)	(0.154)
Macro Area: Islands		-0.048	-0.050		-9.568***	-7.799***		0.699	0.277
		(0.039)	(0.041)		(0.685)	(0.831)		(0.425)	(0.635)
Macro Area: North East		-0.070*	-0.106***		2.626**	5.059***		-11.088***	-11.663***
		(0.041)	(0.038)		(1.233)	(0.577)		(0.905)	(0.731)
Macro Area: North West		-0.043	-0.008		1.835***	1.091**		-9.335***	-8.538***
		(0.044)	(0.040)		(0.587)	(0.495)		(0.494)	(0.522)
Macro Area: South		0.040	0.040		-12.414***	-9.763***		2.787***	2.309***
		(0.038)	(0.041)		(0.659)	(0.921)		(0.530)	(0.699)
Bolzano Province			0.829***			-39.602***			22.771***
			(0.057)			(2.239)			(1.127)
Open Sprar before 2013			0.634***			0.452			0.030
			(0.041)			(0.517)			(0.303)
% small buildings (2011)			-0.196*			2.729**			-2.526**
			(0.116)			(1.313)			(1.087)
% not used buildings (2011)			-0.245			8.168***			-3.064
			(0.168)			(2.674)			(2.719)
No profit organisations			-0.836			60.564			-38.336
			(1.581)			(42.318)			(33.294)
Population (2011)			0.000**			-0.000**			-0.000
			(0.000)			(0.000)			(0.000)
Population squared (2011)			-0.000***			0.000*			-0.000
			(0.000)			(0.000)			(0.000)
Population density (2011)			-0.000			-0.001***			-0.000
			(0.000)			(0.000)			(0.000)
Controls:	No	No	Yes	No	No	Yes	No	No	Yes
Observations:	7795	7795	7795	7795	7795	7795	7795	7795	7795

First Stage and Reduced Form – All controls (Cont.)

Dep Var:	Open Sprar			Δ % far-right 18-13			Δ % far-right 13-08		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Accomodations	0.100***	0.109***	0.061***	0.362	-0.876***	-0.449***	-0.812***	0.086	0.029
	(0.013)	(0.013)	(0.014)	(0.322)	(0.226)	(0.155)	(0.294)	(0.185)	(0.154)
Surface (kmq)			0.001***			0.002			0.002
			(0.000)			(0.002)			(0.002)
Altitude			-0.000			-0.001*			-0.001**
			(0.000)			(0.001)			(0.001)
Unemployment rate (2011)			0.104			-12.609***			7.199***
			(0.173)			(3.152)			(2.635)
% homemakers			-0.152			10.595**			-5.586
			(0.364)			(4.463)			(3.975)
% inactive / unable to work			0.132			-16.362***			22.712***
			(0.309)			(5.198)			(4.332)
% of college graduated			0.331			-37.949***			9.822**
			(0.405)			(6.272)			(4.832)
% foreign pop (2011)			-0.556**			15.873***			1.762
			(0.233)			(3.882)			(3.046)
Income per capita			0.000			0.000*			0.000
			(0.000)			(0.000)			(0.000)
% younger than 14 (2011)			1.098***			-47.505***			-14.307**
			(0.345)			(7.875)			(6.634)
% older than 65 (2011)			0.404**			-10.790***			15.316***
			(0.202)			(4.010)			(3.449)
Distance to closest capital city			-0.001			-0.013			-0.009
			(0.001)			(0.013)			(0.013)
Capital city			0.047			1.364**			-0.516
			(0.059)			(0.644)			(0.555)
Controls:	No	No	Yes	No	No	Yes	No	No	Yes
Observations:	7795	7795	7795	7795	7795	7795	7795	7795	7795

First Stage and Reduced Form – All controls (Cont.)

Dep Var:	Open Sprar			Δ % far-right 18-13			Δ % far-right 13-08		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Accomodations	0.100***	0.109***	0.061***	0.362	-0.876***	-0.449***	-0.812***	0.086	0.029
	(0.013)	(0.013)	(0.014)	(0.322)	(0.226)	(0.155)	(0.294)	(0.185)	(0.154)
Female mayor			0.010			-0.163			0.020
			(0.016)			(0.217)			(0.191)
Age of mayor			-0.000			0.019***			-0.010*
			(0.000)			(0.007)			(0.006)
Mayor graduated at university			0.011			-0.239			0.005
			(0.009)			(0.149)			(0.137)
Far right mayor			-0.073**			-0.588			-2.129***
			(0.031)			(0.398)			(0.459)
Year term			0.156***			-1.477*			1.305*
			(0.051)			(0.778)			(0.740)
Year term squared			-0.030**			0.254			-0.337**
			(0.012)			(0.182)			(0.169)
Controls:	No	No	Yes	No	No	Yes	No	No	Yes
Observations:	7795	7795	7795	7795	7795	7795	7795	7795	7795

Table A5: **Refugees reception and voting for moderate parties**

Dep Var:	Δ % FI + PD 18-13				Δ % FI + PD 13-08	
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	-0.102		3.191*	5.937*		-4.002
	(0.309)		(1.802)	(3.114)		(4.198)
Accomodations		0.362**			-0.244	
		(0.169)			(0.255)	
Model:	OLS	Red. Form	IV	IV	Red. Form	IV
First Stage:			0.109***	0.061***		0.061***
F-stat.:			75.21	19.37		19.37
Mean dep. var.:	-14.26				-19.92	
SD dep. var.:	6.92				9.62	
Controls:	Yes	Yes	No	Yes	Yes	Yes
Observations:	7795	7795	7795	7795	7795	7795

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A6: **Refugees reception and voting for far-right parties – Excluding municipalities with CAS reception centers**

Dep Var:	Δ % far-right 18-13				Δ % far-right 13-08	
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	-0.760**		-10.518***	-7.134*		1.957
	(0.345)		(3.292)	(3.919)		(3.246)
Accomodations		-0.375**			0.103	
		(0.189)			(0.171)	
First Stage:			0.087***	0.053***		0.053***
F-stat.:			34.62	12.63		12.63
Mean dep. var.:	17.68				-4.35	
SD dep. var.:	9.49				8.32	
Controls:	Yes	Yes	No	Yes	Yes	Yes
Observations:	4974	4974	4974	4974	4974	4974

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A7: **Correlation accommodations macro areas and reduced form in different macro areas**

	Accommodations (1)
Macro Area: Islands	-0.029
	(0.042)
Macro Area: North East	0.037
	(0.040)
Macro Area: North West	-0.066**
	(0.033)
Macro Area: South	-0.158***
	(0.032)
Controls:	
Sample:	
Observations:	7795

The default category in column 1 is the Macro area: Center. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A8: **Refugees reception and voting for far-right parties – Controlling for municipal expenditures and presence Catholic Church**

Dep Var:	Δ % far-right 18-13				Δ % far-right 13-08	
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	-0.598**		-8.063***	-7.373**		1.061
	(0.303)		(2.137)	(3.152)		(2.572)
Expenditures	-0.000	-0.000		-0.000	0.000**	0.000**
	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)
Religious weddings	-0.002	-0.002		-0.002	-0.013***	-0.012***
	(0.003)	(0.003)		(0.003)	(0.003)	(0.003)
Accomodations		-0.429***			0.062	
		(0.156)			(0.151)	
Model:	OLS	Red. Form	IV	IV	Red. Form	IV
First Stage:			0.109***	0.058***		0.058***
F-stat.:			75.21	18.03		18.03
Mean dep. var.:	18.59				-5.19	
SD dep. var.:	8.96				8.04	
Controls:	Yes	Yes	No	Yes	Yes	Yes
Observations:	7795	7795	7795	7795	7795	7795

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Additional control variables reported in this table: Expenditures = average total municipal expenditures per capita in the period 2008-2012; Religious weddings = share of religious weddings over total number of weddings in the municipality (measured in 2012). Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A9: **Refugees reception and voting for centrist parties – Controlling for municipal expenditures and presence Catholic Church**

Dep Var:	Δ % FI + PD 18-13			Δ % FI + PD 13-08		
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	-0.123		3.191*	6.047*		-4.427
	(0.306)		(1.802)	(3.301)		(4.428)
Expenditures	0.000	0.000		0.000	-0.000	-0.000
	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)
Religious weddings	0.008**	0.008**		0.008**	0.022***	0.022***
	(0.004)	(0.004)		(0.004)	(0.005)	(0.005)
Accomodations		0.352**			-0.258	
		(0.171)			(0.256)	
Model:	OLS	Red. Form	IV	IV	Red. Form	IV
First Stage:			0.109***	0.058***		0.058***
F-stat.:			75.21	18.03		18.03
Mean dep. var.:	-14.26				-19.92	
SD dep. var.:	6.92				9.62	
Controls:	Yes	Yes	No	Yes	Yes	Yes
Observations:	7795	7795	7795	7795	7795	7795

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Additional control variables reported in this table: Expenditures = average total municipal expenditures per capita in the period 2008-2012; Religious weddings = share of religious weddings over total number of weddings in the municipality (measured in 2012). Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A10: **Refugees reception and voting for far-right parties – Controlling for past mayors characteristics**

Dep Var:	Δ % far-right 18-13				Δ % far-right 13-08	
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	-0.678**		-8.063***	-7.564**		0.633
	(0.304)		(2.137)	(3.057)		(2.478)
Accomodations		-0.459***			0.038	
		(0.157)			(0.151)	
Model:	OLS	Red. Form	IV	IV	Red. Form	IV
First Stage:			0.109***	0.061***		0.061***
F-stat.:			75.21	19.36		19.36
Mean dep. var.:	18.59				-5.19	
SD dep. var.:	8.96				8.04	
Controls:	Yes	Yes	No	Yes	Yes	Yes
Observations:	7795	7795	7795	7795	7795	7795

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: year of the electoral term, year of the electoral term squared. Past Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A11: **Refugees reception and voting for far-right parties - Regions FEs**

Dep Var:	Δ % far-right 18-13				Δ % far-right 13-08	
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	-0.111		-11.271***	-6.420**		0.111
	(0.265)		(2.197)	(3.104)		(2.422)
Accomodations		-0.321**			0.006	
		(0.134)			(0.122)	
Model:	OLS	Red. Form	IV	IV	Red. Form	IV
First Stage:			0.098***	0.050***		0.050***
F-stat.:			69.83	16.51		16.51
Mean dep. var.:	18.59				-5.19	
SD dep. var.:	8.96				8.04	
Controls:	Yes	Yes	No	Yes	Yes	Yes
Observations:	7795	7795	7795	7795	7795	7795

Instrumental variable: presence of group accommodation buildings. All regressions include region fixed effects. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A12: **Refugees reception and population growth (IV estimates) – Pretrends**

Dep Var:	Δ % Total Pop. 2013-2008 (1)	Δ % Foreign Pop. 2013-2008 (2)	Δ % Native Pop. 2013-2008 (3)
Open Sprar	0.008	0.007	0.001
	(0.016)	(0.006)	(0.015)
First Stage:	0.062***	0.062***	0.062***
F-stat.:	20.91	20.91	20.91
Mean dep. var.:	-0.01	0.01	-0.02
SD dep. var.:	0.05	0.02	0.05
Controls:	Yes	Yes	Yes
Observations:	7681	7681	7681

Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. All the dependent variable as measured as the change between 2018 and 2013, divided by total population in 2013. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A13: **Refugees reception and population growth (OLS and Reduced Form estimates)**

Dep Var:	Δ % Total Pop. 2013-2008		Δ % Foreign Pop. 2013-2008		Δ % Native Pop. 2013-2008	
	(1)	(2)	(3)	(4)	(5)	(6)
Open Sprar	0.003**		0.004***		-0.001	
	(0.001)		(0.001)		(0.001)	
Accomodations		0.004***		0.001*		0.003***
		(0.001)		(0.000)		(0.001)
Model:	OLS	Red. Form	OLS	Red. Form	OLS	Red. Form
Mean dep. var.:	-0.03		-0.00		-0.03	
SD dep. var.:	0.04		0.02		0.04	
Controls:	Yes	Yes	Yes	Yes	Yes	Yes
Observations:	7629	7629	7629	7629	7629	7629

All regressions include macro-area fixed effects. All the dependent variable as measured as the change between 2018 and 2013, divided by total population in 2013. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A14: **Refugees reception and pop. growth - Disentangle the effect (OLS and Reduced Form estimates)**

Panel A: migration inflows and outflows

Dep Var:	Δ % foreign inflow 18-13		Δ % foreign outflow 18-13		Δ % native inflow 18-13		Δ % native outflow 18-13	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Open Sprar	0.008***		0.004***		-0.002		-0.002	
	(0.001)		(0.001)		(0.002)		(0.002)	
Accomodations		-0.000		-0.001***		0.000		-0.007***
		(0.001)		(0.000)		(0.001)		(0.001)
Model:	OLS	Red. Form	OLS	Red. Form	OLS	Red. Form	OLS	Red. Form
Mean dep. var.:	0.04		0.04		0.11		0.12	
SD dep. var.:	0.03		0.03		0.05		0.04	
Controls:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations:	7793	7793	7793	7793	7793	7793	7793	7793

Panel B: births and deaths

Dep Var:	Δ % foreign births 18-13		Δ % foreign deaths 18-13		Δ % native births 18-13		Δ % native deaths 18-13	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Open Sprar	0.000***		0.000		-0.000		-0.000	
	(0.000)		(0.000)		(0.000)		(0.000)	
Accomodations		0.000***		-0.000		0.000		0.005***
		(0.000)		(0.000)		(0.001)		(0.000)
Model:	OLS	Red. Form	OLS	Red. Form	OLS	Red. Form	OLS	Red. Form
Mean dep. var.:	0.00		0.00		0.11		0.06	
SD dep. var.:	0.00		0.00		0.05		0.02	
Controls:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations:	7793	7793	7793	7793	7793	7793	7793	7793

Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A15: **Refugees reception and schools (IV estimates) – Pre-Trends**

Dep Var:	Δ % Students 18-12 (1)	Δ % Native students 18-12 (2)	Δ % Foreign students 18-12 (3)	Δ % Classes 18-12 (4)	Δ % Schools 18-12 (5)
Open Sprar	-0.096	-0.095	-0.693	-0.003	0.094
	(0.086)	(0.087)	(0.529)	(0.091)	(0.073)
First Stage:	0.058***	0.058***	0.055***	0.058***	0.058***
F-stat.:	17.752	17.728	14.910	17.752	17.752
Mean dep. var.:	-0.00	-0.02	0.44	-0.04	-0.04
SD dep. var.:	0.25	0.25	1.27	0.26	0.19
Controls:	Yes	Yes	Yes	Yes	Yes
Observations:	7100	7099	6364	7100	7100

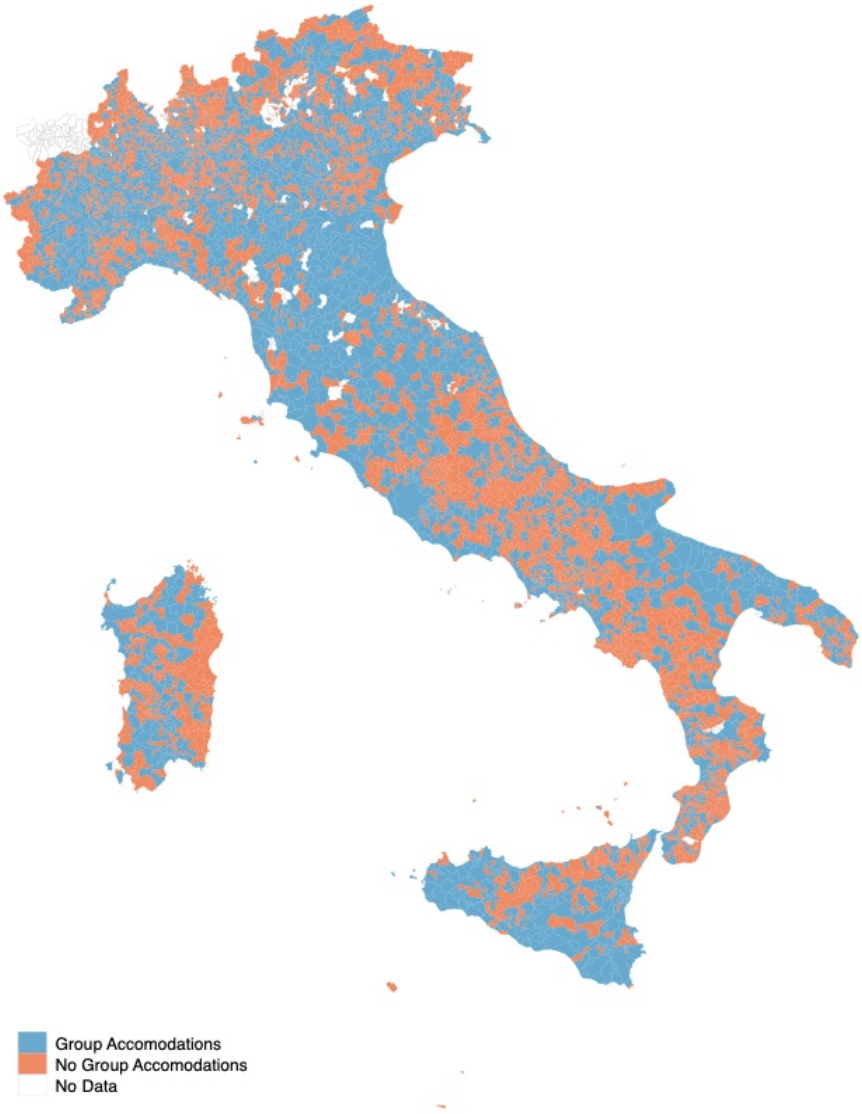
Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. All the dependent variables as measured as the percentage change between 2018 and 2012. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Table A16: **Refugees reception and school (OLS and Reduced Form estimates)**

Dep Var:	Δ % Students 18-12		Δ % Native students 18-12		Δ % Foreign students 18-12		Δ % Classes 18-12		Δ % Schools 18-12	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Open Sprar	0.009**		0.006		0.095***		0.024**		0.015**	
	(0.004)		(0.004)		(0.029)		(0.011)		(0.006)	
Accomodations		0.037***		0.036***		0.029		0.032***		0.052***
		(0.004)		(0.004)		(0.018)		(0.007)		(0.005)
Model:	OLS	Red. Form	OLS	Red. Form	OLS	Red. Form	OLS	Red. Form	OLS	Red. Form
Mean dep. var.:	-0.56		-0.57		-0.20		-0.25		0.09	
SD dep. var.:	0.17		0.17		0.67		0.29		0.21	
Controls:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations:	6607	6607	6607	6607	6172	6172	6607	6607	6607	6607

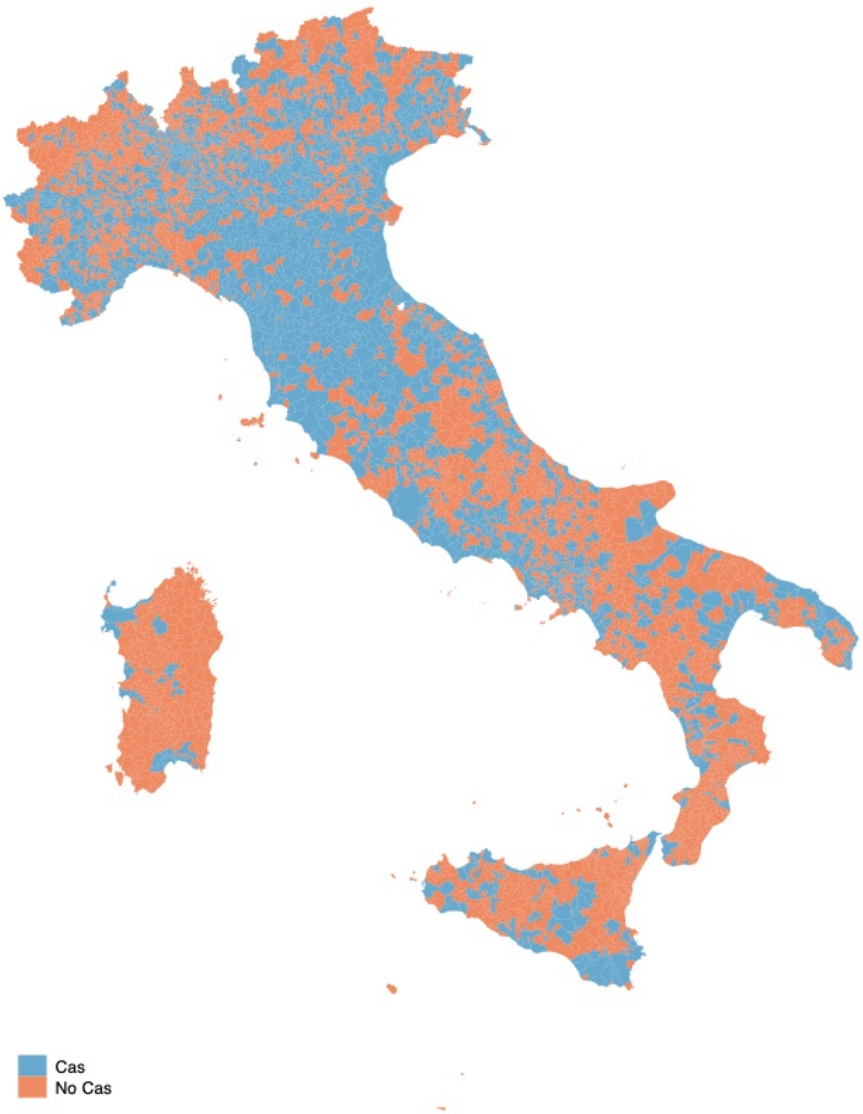
Instrumental variable: presence of group accommodation buildings. All regressions include macro-area fixed effects. All the dependent variables as measured as the percentage change between 2018 and 2012. Municipal controls: population, population squared, population density, % people aged >64, % people aged <15, % foreign population, surface of the municipality, altitude, unemployment rate, share of homeworkers, share of inactive individuals or unable to work, average income per capita, % of people with university degree, number of no profit association per capita, distance from provincial capital, dummy for provincial capital, dummy for the Bolzano/South Tyrol Province, % of small buildings, % of empty buildings, dummy for SPRAR already open before 2014. Mayors controls: gender, age, dummy equal to one if mayor has a university degree, dummy equal to one if mayor belongs to the far right, year of the electoral term, year of the electoral term squared. Standard errors clustered at the local labor market level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.10.

Figure A1: **Location of group accommodation buildings**



Municipalities in white not included in the analysis because of missing data. Sources: 2011 Census

Figure A2: **Location of CAS refugee centers**



Municipalities in white not included in the analysis because of missing data. Sources: Openpolis