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ABSTRACT

What Are You Voting For? Proximity to Refugee Reception Centres and Voting in the 2016 Italian Constitutional Referendum*

In December 2016, in the middle of the “European refugee crisis”, the Italian electorate voted for a referendum on crucial constitutional reform promoted by the governing party. The official aims of the reform were both to improve the country’s governability and stability and to simplify the institutional setup. Despite not strictly being a political vote, as in the case of Brexit, the referendum was largely perceived as an assessment of the Prime Minister’s work and the activity of his government. Using Italian municipality data, we provide novel empirical evidence on the impact of geographical proximity to refugee reception centres on voting behaviour. Our analysis demonstrates that being closer to refugee centres increased (1) the referendum turnout and (2) the proportion of anti-government votes. This evidence is consistent with the fact that the main opposition parties exploited the anti-immigration sentiments that were mounting in the population to influence people’s voting. It also casts doubts on the political choice to put key decisions, such as changes in the Constitution of the Italian Republic (or leaving the European Union, as in the case of Brexit), to the popular vote at times when there are significant political emergencies to be faced.

JEL Classification: P16, R23, D72

Keywords: refugee reception centres, voting, proximity, referendum, Constitution, Italy

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1 Introduction

The expression “European refugee crisis” began to be commonly used in the media in 2015, when increasing numbers of “unauthorised” foreign immigrants started to enter the European Union (EU) via the Mediterranean Sea and from Southeast Europe. The number of first-time asylum applicants in the EU-28 Member States rose from about 563,000 in 2014 to 1,257,000 in 2015 and 1,204,000 in 2016. The EU Member States were not equally hit by this crisis. Between 2015 and 2016, the number of asylum seekers reduced by more than half in Austria (from 85,500 to about 40,000) and the Netherlands (from 43,000 to 19,300) and reduced by a factor of three in Denmark (from 20,800 to 6,100). The situation remained unchanged in both France and Spain, while the number of refugees increased by more than 60% in Germany (from 441,800 to 722,300), by about 68% in Italy (from 83,200 to 121,200) and by more than four times in Greece (from 11,400 to 49,900).¹ The controversial EU-Turkey agreement has led to a sharp decrease in boat crossings over the Aegean Sea and in refugee flows through the Balkan route since coming into effect in March 2016.

Smugglers have instead begun using the more dangerous Central Mediterranean route from Libya towards Italy, which has now become the deadliest sea-crossing in the world. The number of dead or missing people reached more than 5,000 in 2016, increasing by 30% in comparison with the previous year, which itself was a record at the time. In addition, owing to the tightening of the reception policies of many EU countries, with countries refusing to meet EU refugee quotas, in 2016 Italy was soon ranked second among the EU Member States in terms of number of first-time asylum seekers, after Germany.²

It was in this context that, in December 2016, the ballot of the Italian constitutional reform referendum took place. The timing of the 2016 Italian referendum, in the middle of the “European refugee crisis”, provides a unique setting to assess the impact of refugees on voting behaviour. The referendum took place on December 4 December 2016, and it was unrelated to migration issues, except for being held in a period characterised by high refugee inflows. According to its proponents, the reform aimed to increase the governability of the country and reduce the costs of politics through a change in the Constitution of the Italian Republic. Nevertheless, because of the initial attempt of the Prime Minister, Matteo Renzi, to overly personalise the vote, the referendum was largely interpreted as an assessment of the work and actions of Mr Renzi’s government. In this

¹ Source: <http://ec.europa.eu/eurostat/statistics-explained/index.php/Asylumstatistics>

² European countries have accepted fewer than 10% of the total refugees they promised to move to safety from the camps in Italy and Greece. Only 13,546 relocations were carried out, namely 3,936 from Italy and 9,610 from Greece, amounting to just 8% of the total that the EU committed to relocate in 2015.

sense, the vote is particularly comparable to the Brexit referendum, the result of which led to the resignation of the UK Prime Minister, David Cameron.

In this paper, we contribute to the growing literature on the effect of immigrants and refugees on voting. First, unlike other studies that look at the impact of refugees on voting for populist or right-wing parties (see Section 2), our outcome of interest is the “anti-government” vote, as in the case of Brexit in the UK (Becker et al., 2016), for which evidence is more scant. Unlike with Brexit (where the anti-EU sentiment played a crucial role), migration issues were not at stake in the Italian ballot and this makes the analysis particularly interesting. Our paper shows that politically sensitive issues can influence voting behaviour even on a completely unrelated subject, as was true of the Italian constitutional referendum, when there are political emergencies to be faced during an electoral campaign. This is also related to recent evidence that voters may change their attitudes towards politicians on matters that are out of politicians’ direct control (fluctuating from believing that they should be rewarded to punished) depending on their current mood or level of happiness (Bagues and Esteve-Volart, 2016).

Furthermore, we collected novel and unique data on the Italian municipalities that host a refugee centre and on the number of refugees hosted in each centre. Unlike the very few existing contributions, these data allow us to investigate at a very disaggregated level the effect of exposure to the recent waves of refugees on voting. Finally, our paper makes a methodological contribution to the literature. Most papers focus on the effect of immigrants or refugees on voting outcomes in the same community (whether in a province or a municipality) and address the endogeneity problem of immigrants’ or refugees’ location choice via instrumental variables, using different sources of variation for the presence of immigrants. Sources of identification used in the literature include “immigrant enclaves” (Card, 2001) or slightly different versions of them (Altindag and Kaushal, 2017), the presence of buildings that are adapted to hosting refugees (Gehrsitz and Ungerer, 2017; Harmon, 2017) and, arguably, refugees’ random allocation policies (Dustmann, Vasiljeva, and Damm, 2016).

We propose a different identification strategy. Rather than focusing on the impact of the presence of refugees on voting outcomes in the municipality where those refugees are hosted, we look at the effect of the presence of refugees on voting outcomes in a non-hosting municipality, namely one that is very close to the hosting municipality in terms of geographical distance. The main idea behind our identification strategy is that by focusing on spillover effects i.e., exploiting the decision of another municipality of hosting refugees — which cannot be affected by voters —, we

circumvent the issue of endogeneity potentially affecting refugee centres’ locations.³ Our variable of interest is the distance in kilometres from the closest municipality that hosts a refugee centre.

Our empirical strategy (1) does not limit the effect of refugees to the administrative boundaries of a municipality, which is especially important when analysing national ballots such as the referendum, and (2) seeks to address potential endogeneity concerns related to the placement of refugee centres by using the hosting decision of a “close” municipality (“spillover effect”). Specifically, we employ a closest refugee-hosting municipality fixed effects strategy, where we use differences in distances across municipalities that have the same neighbouring municipality hosting refugees. Distance is computed as the geodesic distance between municipalities’ centroids.⁴

Our results show that a 1-km reduction in distance to the closest municipality hosting a refugee centre decreases the proportion of people who do not vote (i.e., “exit” strategy) by 0.15 percentage points (p.p.). Further, we find that it increases the proportion of people voting against the government, i.e., “No” and “Invalid” votes by 0.13 p.p. and 0.004 p.p., respectively. By contrast, we do not find any statistically significant effect for pro-government (i.e., “Yes”) votes. These results are robust to the inclusion of a large set of municipality-level controls, to weighting observations by the population eligible to vote, to including province or local labour market fixed effects — which are most often used in the literature — and to the re-inclusion of the municipalities hosting refugee centres in the estimation sample. When allowing the distance effect to depend on the size of the refugee population hosted by the closest municipality with a centre, we do not find any significant interaction effect, which we interpret as natives being averse to having refugee centres nearby, independent of the refugee population size. Finally, we investigate potential heterogeneous effects between several municipality characteristics, throwing light on the possible mediating factors of the estimated effect. We find larger effects in smaller or less populated municipalities, in places with a higher proportion of individuals with at least a high school degree and in poorer municipalities.

The paper is organised as follows. A brief review of the literature on immigrants, refugees and voting is reported in the next section. Section 3 provides a description of the Italian 2016 referendum

³ That is, unobservable characteristics of a municipality may affect both its likelihood of hosting refugees, and voting of its residents.

⁴ Distances are computed as if all reception centres were located in the municipality with refugee centres’ centroid and voters were entirely located in the centroid of the potentially affected municipality. This is just an approximation made to compute distances and may lead to a measurement error, which, however, should be uncorrelated with voting and only induce an attenuation bias. Moreover, considering very small geographical units, such as Italian municipalities that have a median surface of 21.9 km, should make measurement error a minor issue. Studies estimating the effect of hosting refugees in a municipality on voting in that municipality have a similar issue. Indeed, they do not use the exact location of refugees in the municipality, but implicitly assume that refugees and natives are uniformly distributed in its territory.

and the features of Italy’s refugee reception system. The empirical strategy is described in Section 4. The data used in the empirical analysis are briefly described in Section 5. Section 6 and 7 on the main results and on the heterogeneous effects. Section 8 summarises the main findings and gives conclusions.

2 Literature review

The literature on immigration and its impact on voting behaviour is relatively new, but it is rapidly growing and now covers a number of European countries.⁵ Previous studies can be divided into two groups: the first group investigates the impact of legal immigrants and the second, more recent, group explores the effect of refugees. Beginning with the former, the main problem when estimating the impact of immigrants on natives’ voting decisions is that immigrants do not randomly choose the country to which they migrate and, once in a country, they do not settle randomly across cities. They may, for example, decide to settle in municipalities where the local population is more tolerant towards immigrants and this may be associated with the political party supported by citizens (see, for instance, [Bracco et al., 2017](#)). To address this issue, most papers rely on instrumental variables and often on an instrument developed by [Card \(2001\)](#) based on the idea of immigrant enclaves, that is, “typical” immigrants tend to follow past immigrants’ choices when choosing a host country and city. This is consistent with the idea that immigrants from the same community provide each other with useful information and help each other find both accommodation and work. Studies for both Southern and Continental Europe using this identification strategy generally find positive effects of the number of immigrants on support for anti-immigration parties.

[Mendez and Cutillas \(2014\)](#) use data from the Spanish national elections in the 1996-2011 period and find that, while immigration per se had no impact on voting behaviour, a larger proportion of African immigrants increased the votes for anti-immigration coalitions. Similarly, [Barone et al. \(2016\)](#) use Italian municipality-level data on three national elections (2001, 2006 and 2008) to estimate the impact of immigration on votes for the centre-right coalition. They find sizeable effects, namely that a 1 p.p. increase in the proportion of immigrants in a municipality implied a 0.86 p.p. increase in the proportion of votes for the centre-right coalition. Evidence of a positive effect of the presence of immigrants on voting for the right-wing is not limited to Mediterranean countries but is also found in Continental Europe. [Halla et al. \(2017\)](#) investigate the effect of

⁵ In this section we focus on the European evidence. For recent evidence on the U.S. see, for instance, [Mayda et al. \(2016\)](#).

immigration on the votes for the Freedom Party of Austria (FPA) using a pooled sample of six national elections at the municipality level (from 1979 to 2002). They find that a 1 p.p. increase in the proportion of immigrants in a municipality increased the votes for the FPA by 0.35 p.p. Similarly, [Otto and Steinhardt \(2014\)](#) study the effect of immigration flows on voting behaviour in both federal state and national elections in districts of the city of Hamburg in 1987-1998. According to their results, a larger proportion of immigrants increased the proportion of extreme right-wing parties. A different identification strategy is adopted by [Harmon \(2017\)](#) who develops a novel instrumental variables strategy based on historical housing stock data. Focusing on the Danish elections between 1981 and 2001, he finds that a 1 p.p. increase in the proportion of immigrants increased the percentage of anti-immigrant nationalist seats on the municipal board by between 0.9 p.p. and 1.5 p.p.

Recent papers have started to look into the impact of refugees on voting. For many reasons, the effects of economic migrants and of refugees or asylum seekers differ.⁶ In addition to concerns related to housing prices and the labour market, which may be common to both categories of immigrants, refugees are often blamed by anti-immigration groups for absorbing public resources that might have been otherwise spent on citizens. [Gerdes and Wadensj \(2008\)](#) investigate how the influx of refugees affected votes for the main political parties at the municipality level in Denmark, covering the period between 1989 and 2001, which included four local government elections and four general elections. They use municipality fixed effects and find that the proportion of refugees was positively associated with voting for the two main anti-immigration parties. [Dustmann, Vasiljeva, and Damm \(2016\)](#), take advantage of a Danish policy that quasi-randomly allocated refugees across 275 provinces in Denmark over a 13-year period (1986-1998) to estimate the impact of refugee allocation on voting outcomes. They find that in all municipalities, except the very large ones, a 1 p.p. increase in the refugee proportion in the population between electoral cycles increased the proportion of votes for anti-immigration parties by 1.23 p.p. and 1.98 p.p. in parliamentary and municipal elections, respectively.

The literature on the current refugee crisis is rather scant, as this is quite a recent phenomenon. [Steinmayr \(2016\)](#) uses the local and state elections in an Austrian state to test whether or not micro-exposure to recent refugee waves changed the electoral support for the far right (FPA) in the period 2009-2015. To account for the endogeneity problem in the placement of refugees in communities,

⁶ See [Dustmann, Fasani, Frattini, Minale, and Schönberg \(2016\)](#) who describe the different issues related to the refugee migrations. They also contrast economic and refugee migrants and discuss the trade-off between long-term asylum and temporary protection.

the author uses information on pre-existing group accommodations such as homes for the elderly, for those with disabilities and for students. The main finding is that contact with refugees decreased the proportion of votes for the FPA, suggesting that the local population becomes more supportive towards the inflow of new refugees if there are refugees already present in a community.

[Gehrsitz and Ungerer \(2017\)](#) analyse the case in Germany and look at exogenous variation in the number of refugees per county within and across states. In particular, owing to the overwhelming volume of refugee inflows after 2014, state authorities allocated immigrants to counties that had some kind of accommodation facilities to spare, for example recently abandoned military barracks, sport halls that could be transformed into collective accommodation or recently closed hotels. As refugees are legally obliged to reside in their assigned accommodation until a decision has been made on their asylum request, the authors claim that the allocation of immigrants to given counties could be seen as a natural experiment. Their paper shows that refugee allocation was uncorrelated with counties' economic and social characteristics. They find no effect of refugee allocation on voting and native employment and find only a small effect on crime (in particular on drug offences and fare-dodging).

[Sekeris and Vasilakis \(2016\)](#) and [Dinas et al. \(2016\)](#) focus on the case of Greece, the other Mediterranean country that has a huge number of refugees arriving on its coasts. They consider two parliamentary elections held in Greece in January and September 2015 to study the effect of refugees on votes for the extreme right-wing party Golden Dawn, which is against austerity, the European Union and immigrants. They exploit the fact that municipalities close to the Turkish border had been exposed to significant increases in refugee presence in between the two elections. They find that an increase in the proportion of refugees led to a rise in the percentage of votes for Golden Dawn.

[Altindag and Kaushal \(2017\)](#) study the same phenomenon in Turkey, probably one of the non-EU countries most affected by the Syrian refugee crisis (together with Lebanon and Jordan). They use an instrumental variables strategy similar to the one most used in the literature and focus not directly on past settlements of Syrians, but on Arabic-speaking host populations across Turkish provinces. They do not find any significant effect of the massive inflow of refugees on the most recent electoral outcomes. As the authors stress, unlike in EU countries, this may be partly due to the strong cultural similarities between natives and Syrian refugees. Moreover, Turkey under Erdogan's government has been characterised by decreasing political rights and civil liberties scores, which limits the meaning of the elections.

Quite interestingly, while the literature on economic immigrants consistently finds a positive effect of the presence of immigrants on voting for anti-immigration parties, the results in the literature on refugees are mixed. While the papers focusing on refugees' effects on elections held between the 1990s and the early 2000s report findings much more in line with the literature on immigrants (Dustmann, Vasiljeva, and Damm, 2016; Gerdes and Wadensj, 2008), the ones using more recent data find quite mixed results: in Germany and Austria, they find no effect or even a negative effect on voting for right-wing parties (Gehrsitz and Ungerer, 2017; Steinmayr, 2016), while in Greece the effect is positive (Sekeris and Vasilakis, 2016).

In the light of this variety of results, it is important that further studies be conducted on the impact of the presence of refugees and asylum seekers on voting behaviour. In this paper, we do so by providing the first evidence from the “European refugee crisis” for Italy.

3 Institutional background

3.1 The Italian 2016 referendum

On Sunday 4 December 2016, a very important referendum was held in Italy. Voters were determining not only the referendum result, but also the political future of the Prime Minister, Matteo Renzi, leader of the centre-left Democratic Party.

Voters were asked to approve a reform of the Constitution of the Italian Republic that aimed to change the composition of the Italian Parliament and the division of powers between the State, the regions, and smaller administrative entities, namely the municipalities. The content of the reform mainly concerned the elimination of “perfect bicameralism”, the reduction of the number of Parliamentarians, the reduction of operating costs of other political institutions and the revision of the section of the law that governs the relationship between the central government and the regions (Title V of the Constitution).⁷

The reform was first discussed in the Italian Parliament in March 2014, upon the proposal of Mr Renzi and Ms Boschi, the Minister for Constitutional Reforms and Relations with the Parliament, whose responsibility it was to implement the government programme.⁸ It was finally approved by

⁷ The Italian Parliament is a perfectly symmetrical bicameral system composed of a lower house (the Chamber of Deputies) and an upper house (the Senate of the Republic) with the following characteristics: (1) the two houses are elected simultaneously and for the same five-year term; (2) the Government must have each house's approval, and is accountable to both of them; and (3) all legislative acts must be passed in the same text by both houses: whenever a bill is amended by either house, it must be sent to the other house in a potentially endless process known as the “parliamentary shuttle” (*“navetta parlamentare”*).

⁸ The last part of the Constitutional Law (Title V) deals with the distribution of power between the central

Parliament in April 2016. Just after its approval, a group of deputies from the opposition parties requested a confirmatory referendum by a popular vote (as happened for Brexit in the UK).⁹ Mr Renzi initially made an attempt to personalise the referendum, turning it almost into a plebiscite on his person and tying the fate of his government to the “Yes” victory. He was trying in this way to find legitimate support from the electorate, as his government was not the result of an election.¹⁰ During the election campaign, Mr Renzi described the reform as a battle between “nostalgia and the future, between those who want to change nothing and those who are looking ahead”.

Initially, the polls reported the majority being in favour of the reform, but over time support for the reform decreased and more citizens started to criticise it. Some observers interpreted the decline in popularity of the reform as mirroring a decline in the popularity of Renzi’s government. A survey by the Italian research institute Demopolis conducted in September 2016 reported that more than 40% of the sample declared that they interpreted the vote as a “Yes” or “No” to the actions of Renzi’s government rather than to the proposed reform. This proportion grew to almost 60% by the time of the referendum (Demopolis and Cise polls). The same polls highlighted that 61% of the population had a negative opinion of the government, while the opinion regarding the contents of the reform was positive. This suggests that the vote was against the Government rather than the actual content of the reform. Even a minority of the Democratic Party did not fully support the Prime Minister and lined up explicitly against the reform as a way to remove Mr Renzi from leadership.

The “Yes” campaign was primarily led by Mr Renzi and his supporters within the party. The “No” campaign was supported by almost all opposition parties, including the far right, the right, the 5-Star Movement (M5S) and part of the far left. In spite of these parties being very different, they were united by the common aspiration to bring Renzi’s government to an end. On 4 December 2016, 65.47% of the entitled population voted, of which 40.41% voted “Yes” and 58.42% voted “No”,

government and the regions. The legislative issues are grouped into three categories: matters dealt with by (1) the central government, (2) the regions and (3) both the central government and the regions. This final group creates a lot of misunderstanding on who should have the decision and legislative power on a series of topics. The 2016 reform would have eliminated this mixed group by explicitly listing the matters to be legislated by the regions and those to be legislated by the Government, bringing more power into the hands of the central government and reducing the autonomy of the regions.

⁹ David Cameron, the Prime Minister of the UK from 2010 to 2016, set a date for a referendum on whether or not the UK should remain a member of the EU, and announced that he would be campaigning for the UK to remain within a “reformed EU”. In the referendum, held on 23 June 2016, the UK electorate voted by 52% to 48% in favour of leaving the EU, an act known as Brexit.

¹⁰ On 14 February 2014 the President of the Italian Republic, Giorgio Napolitano, accepted Mr Letta’s resignation from the office of Prime Minister and Mr Renzi formally received the task of forming a new government on 17 February 2017.

while the remaining votes were invalid.

A formal argument made by the opposition relates to the fact that the constitutional changes would have removed the delicate balance of power that was designed after the Second World War by people who had witnessed the rise of fascism. In reality, Renzi's political opponents both on the far left and on the right were aligned against the constitutional reform largely because they wanted to force him to resign. Among his opponents, the most vocal critic was the M5S, led by Mr Beppe Grillo, who was arguing for the parliamentary structure to stay as it was. The opposition's motivation involved a general scepticism towards the EU and its institutions, which had strongly increased since the Brexit referendum in the UK. For instance, the Lega Nord party argued that the EU was inadequate to deal with the immigration emergency and the sharp increase in refugee flows. According to the leader of the party, Matteo Salvini, the "No" vote was also a "No" against the rules and the regulations of Europe, which, in his words, were disastrous for Italy, adding EU austerity measures to an already fragile economy.

Mr Salvini openly supported the Front National party in France, led by Marine Le Pen, as a model to follow, putting more emphasis on border controls, protectionism and the "Italians first" philosophy. Indeed, Renzi's left-wing government had weakened anti-migration policies in comparison with such policies of former governments, and some members of the opposition claimed that this had led to more and more migrants entering Italy. The public opinion gradually moved towards being increasingly against immigration, with many episodes of citizens protesting against the placement of immigrants in their municipalities.

In addition, the opposition parties contested the high economic costs of hosting migrants and conducted campaigns on the fact that public money was being spent on immigrants rather than on Italian citizens, leading to a populism feeling of hate towards immigrants. As shown by [Genovese et al. \(2016\)](#), people close to migrants in reception centres are less supportive of migration, especially if they live in small municipalities. The leader of Lega Nord argued that the reduction in power of local administrators that would result from the constitutional reform would lead to a reduction in the decision-making power of mayors regarding the issue of migration, stating that "*And with the referendum wanted by Mr. Renzi, who intends to further centralize the management of immigration in the hands of the government, they want to silence the many mayors and brave citizens who protest and fight the invasion to protect their communities*" (Matteo Salvini on Facebook, 24 November 2016).

It was clear from the high voter turnout — 65.5% of eligible voters cast ballots — that Italians

were indeed sending a message to the political establishment in Rome. Comparing the turnout of the 2016 referendum with those of 2001 and 2006 (the other two referendums dealing with a reform of the constitution), we see that the turnout of the 2016 referendum (65.5%) is much closer to the turnouts of the most recent (2013, 2008 and 2006) political elections (72% in 2013) than to the turnouts of the former two referendums (34% and 52%, respectively). This evidence suggests that the voters did not trust Renzi’s political project any more. In fact, Italy was facing a number of significant issues that were not technically on the ballot: a migration crisis in which the country felt abandoned by Europe, an unresolved banking crisis, high unemployment rates and a debt load of 132% of GDP.

3.2 The refugee reception system in Italy

Italy has a comprehensive legal framework dealing with asylum request pathways and mechanisms for border management and identification. The reception system is currently regulated by Legislative Decree (LD) 142/2015, which articulates the reception system in phases, distinguishing between “first aid and assistance”, “first reception” and “second reception”, summarised in Figure 1.

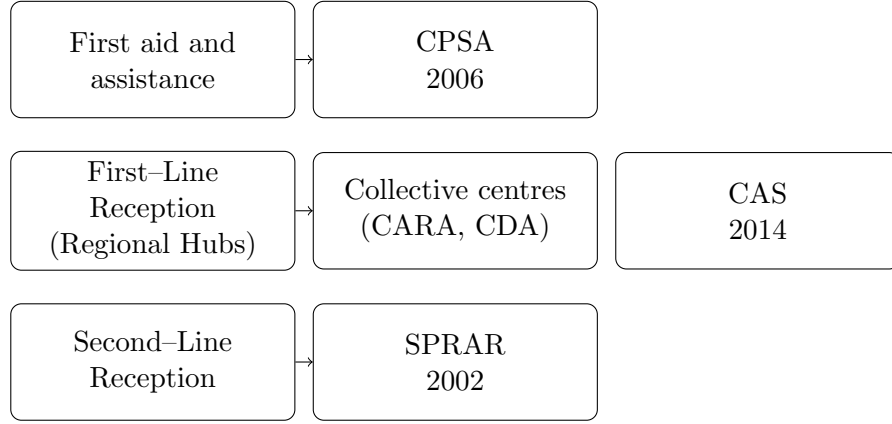
Upon arrival, asylum seekers and migrants may be placed in one of the following first reception centres: (1) First Aid and Reception Centres (CPSA), created in 2006 for the purposes of first aid and identification before individuals are transferred to other centres; (2) collective centres, including the existing governmental Centre for the Reception of Asylum Seekers (CARA) and Accommodation Centres for Migrants (CDA); or (3) Emergency Reception Centres (CAS), instituted by Prefectures,¹¹ in case there is a lack of places in the first- or second-line reception centres.

Second-line reception is provided under the System for the Protection of Asylum Seekers and Refugees (SPRAR), established in 2002 by Law 189/2002. The SPRAR is a system aimed at protecting asylum seekers and refugees in Italy. It was created in 2002 as a joint action of the Ministry of the Interior, the National Association of the Italian Municipalities (ANCI) and the United Nations High Commissioner for Refugees (UNHCR), with the aim of building the first national programme for asylum seekers, supported by shared responsibility between local and central public entities.¹²

¹¹ Prefectures are the local offices of the Ministry of the Interior established at the province level.

¹² Refugee status is granted only to those migrants who can prove that they risked persecution or death in their native country. In theory, EU law requires asylum seekers to seek asylum in whichever country they first land. Individuals classified as irregular migrants are placed in detention centres until an expulsion order comes through. These places, called centres of expulsion, are reserved for irregular migrants who do not request asylum

Figure 1: The Italian reception system



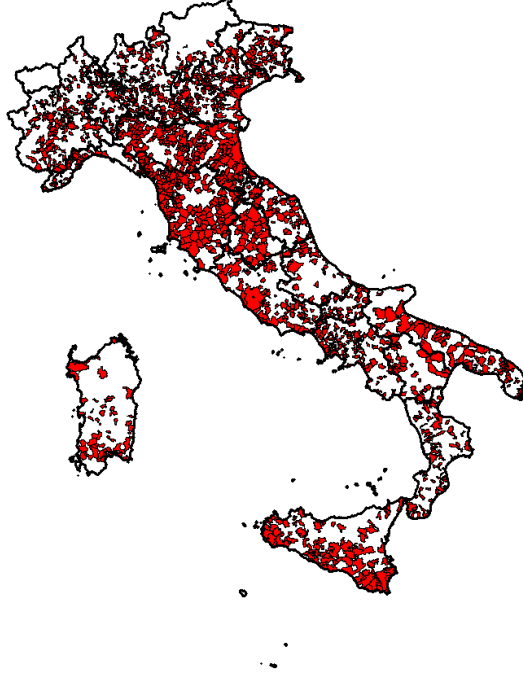
Source: <http://www.asylumineurope.org/reports/country/italy/reception-conditions/short-overview-italian-reception-system>.

While the CPSA, CARA, CDA and SPRAR have been present in the country since the early 2000s, the CAS were established in 2014 as a response to the huge increase in the number of asylum seekers in Italy. Indeed, the number of arrivals was much larger than the number of places available within the existing reception system. Unlike the SPRAR centres, which are managed by municipalities, the CAS are managed by the Italian Prefectures, which assign funds to non-governmental organisations (NGOs) — private stakeholders — in charge of assisting migrants and providing housing and food. The Italian government (Ministry of the Interior), assigns a given number of migrants — based on the resident population — to be reallocated within each province, and then the Prefectures are in charge of finding suitable NGOs to provide the services. For housing, NGOs often use private houses, which are adapted at their expenses to meet the legal requirements for hosting refugees. The decision to open a CAS is taken by the Prefectures, for which no consultation or permission from the municipalities affected is needed. The CPSA, the CARA and the CDA are 18 in total, distributed mostly in Southern Italy, where most of the migrants arriving by boat first land. On the other hand, the SPRAR centres and the CAS are widely dispersed across the whole country. At the end of 2016, more than 176,000 refugees were hosted in Italy, of which 78% were in the CAS, 8% were in the CPSA, CARA and CDA and 14% were in the SPRAR centres.

In this paper, we focus on all types of centres and our main independent variable of interest is

and international protection or do not have the right to request it. In Italy, there are five such centres located in the cities of Turin, Rome, Bari, Trapani and Caltanissetta.

Figure 2: The distribution of refugee centres across Italy (November 2016)



Note. This is our elaboration of the Ministry of the Interior’s data. The red areas depict municipalities with refugee centres.

the distance between a municipality’s centroid and the centroid of the closest municipality hosting at least one refugee centre. In Italy, there are roughly 8,000 municipalities, of which, in 2016, 2,160 were hosting a refugee centre, highlighted in red in Figure 2.

4 Empirical strategy

4.1 Fixed effects model

We use geographical data at the finest administrative level available — which comprises roughly 8,000 Italian municipalities — and the fact that only one quarter of them hosted refugees to identify the causal effect of proximity to refugee centres on voting in the 2016 referendum. Our baseline model aims to explain how proximity to refugee centres, measured by the distance to the closest municipality that hosts a refugee centre, affects voting behaviour. However, as the allocation of refugee centres is not random, unobserved factors (e.g., characteristics of the mayor in office and

the lobbying process between the local authorities and the central government) that are not fully controlled for by our covariates may jointly affect the decision of whether to open a refugee centre or not in a given municipality and the voting behaviour in that municipality.¹³ To address this self-selectivity issue, our baseline estimates are based on the sample of municipalities that did not host a refugee centre at the time of the referendum. In addition, we include fixed effects at the level of the closest municipality that hosts at least one refugee centre (j). The empirical model can be described as follows:

$$Y_{ij}^k = \beta_0 + \beta_1 D_{ij,c} + \beta_2^\top \mathbf{X}_{ij} + \delta_j + u_{ij} \quad (1)$$

where Y_{ij}^k is the share of votes within the eligible population (ranging from 0 to 1) in municipality i located close to municipality j , namely a municipality that hosts a refugee centre. The superscript k indicates the four voting outcomes of interest: (1) “No turnout”, namely the difference between the total eligible population and the number of people voting in the referendum, (2) “Yes” votes, (3) “No” votes and (4) “invalid” votes defined as the sum of blank, invalid and contested votes. D_{ij} is the distance in hundreds of kilometres between municipality i and the closest municipality with refugee centres j (i.e., the geodesic distance between the centroids of i and j). Our parameter of interest, β_1 , measures the effect of proximity to a refugee centre on voting behaviour.

In this setting, the main identification assumption is that, for municipality i , the presence of a refugee centre in another municipality (j) is uncorrelated with unobserved determinants of voting in municipality i . That is, if the mayor of another municipality decides to open a refugee centre in her municipality, this has a “spillover effect” on municipality i while citizens living in municipality i cannot do much about it, either at the time of opening (via means of protests), or later (e.g. by voting against that mayor in the next election).

To strengthen this identification assumption, we include in the X_{ij} a large set of covariates. First, geographical characteristics (total surface, degree of urbanisation, indicators for being in a mountainous area, hydrological situation and different indicators of seismicity) are included to capture territorial aspects; second, total population, population density, and income per capita are added to capture the differences in the size and wealth of municipalities, which may simultaneously affect both migration flows and political preferences; third, in line with previous literature, the educational levels of the resident population are included as a predictor of political attitudes and of attitudes towards migrants; fourth, the proportion of third-country nationals is used to control for

¹³ [Gamalerio \(2017\)](#), for instance, demonstrates that the probability of opening a SPRAR reception centre is 24% lower for mayors in the final year of the term (i.e., just before elections), no matter the political orientation.

the presence of legal migrants and attitudes towards them within a city. Controlling for the presence of registered immigrants is important as this variable may have a direct effect on people’s voting (see Barone et al., 2016). Finally, we control for the pre-referendum voting outcomes including the proportion of votes for the different political parties in the 2001 national election, i.e., before the large refugee influx.¹⁴

Fixed effects at the level of the closest municipality with a refugee centre (δ_j) account for other unobservable characteristics that are shared by geographically close municipalities. In doing this, our baseline model uses only residual within-‘closest municipality with a refugee centre’ variation for identification.¹⁵ Standard errors are clustered at the same level. Descriptive statistics for the set of controls are shown in Table B.1 in the Appendix.

5 Data

Our empirical analysis combines different data sources. First, we collected novel and unique data on the distribution of refugee centres across all Italian municipalities in November 2016 (about one month before the day of the referendum). The source is the Ministry of the Interior. This allows us to identify the municipalities hosting at least one refugee centre.¹⁶ Our variable of interest is the distance from the closest municipality with a refugee centre, which is computed as the geodesic distance using data on the latitude and the longitude of the centroids of each municipality provided by the Italian National Statistical Institute (ISTAT).

Second, we put together and use other sources of data maintained by ISTAT with information on Italian municipalities. Besides geographical characteristics such as total surface (which we use to calculate density), degree of urbanisation, indicators for being in a mountainous area, hydrological situation, altimetry and seismicity, we use data on the total (and foreign) resident population’s size and composition (by age group). These data refer to 2016. In addition, we include the proportion of individuals in each municipality by their highest level of qualification achieved, information which

¹⁴ In a further analysis, the results of which are available upon request, we also control for other past national elections (2013, 2008 and 2006) and the shares of votes for the Christian Democracy party and the turnout in the 1992 election to capture any historical trends in votes. The results of this analysis are equivalent to those presented here.

¹⁵ In alternative specifications, we include fixed effect at the local labour market level to capture residual heterogeneity related to the local economic structure, or province fixed effects, which mainly capture administrative effects. The results are presented in Table B.4.

¹⁶ Data on the second-reception refugee centres and the first aid centres are publicly available and can be downloaded from the official websites. For the SPRAR centres, see <http://www.sprar.it/progetti-territoriali>, and, for the CARA, CPSA and CDA, see <http://www.interno.gov.it/it/temi/immigrazione-e-asilo/sistema-accoglienza-sul-territorio/centri-limmigrazione>.

Table 1: Distance from refugee centres in kilometres — descriptive statistics by Italy’s macro-region

	Italy	North-West	North-East	Centre	South
5 th	1.868	1.549	2.416	2.723	2.054
25 th	3.688	2.868	4.022	4.906	4.779
50 th	5.859	4.320	6.084	7.284	7.623
Mean	7.913	5.495	10.798	8.362	9.181
75 th	9.594	6.719	10.890	10.393	11.716
95 th	19.927	13.481	40.879	17.342	20.301
Proportion of municipalities with centres	0.276	0.250	0.347	0.367	0.233

Note. Descriptive statistics for the distance in kilometres to the closest municipality with a refugee centre and the proportion of municipalities hosting centres.

is taken from the 2011 Population Census.

To account for the presence of immigrants in each municipality, we use information on the number of foreign-born residents and their nationality from 2015 (ISTAT). Note that this information refers to migrants who reside legally in Italy and are present in the municipality registers. In particular, we consider the proportion of registered immigrants coming from extra-EU countries.¹⁷ As a proxy for the income level of each municipality, we use data on the declared income for 2014 (which is available to us). As a proxy for the political orientation of municipalities, data from the Ministry of the Interior are used: we consider the results of the 2001 national election, including the proportion of votes for the right-wing, the centre-right, the centre, the centre-left, the left-wing, and for other parties.

5.1 Descriptive statistics on the anti-government vote

Table 1 presents the distribution of the distance from the closest municipalities with refugee centres, in the four Italian macro-regions, and the proportion of municipalities which host at least one refugee centre. Our working sample is composed of the 5,636 municipalities which do not host a refugee centre, covering the whole country.¹⁸

Interestingly enough, the average distance is highest in the North East, where relatively more municipalities are ruled by the Lega Nord party (10.8 km) and is lowest in the North West, where the average distance is about half than in the North East (5.5 km).

¹⁷ We estimate two additional regressions: first, we consider the proportion of registered immigrants from those countries where the majority of asylum seekers originate (Nigeria, Pakistan, Gambia, Senegal, Bangladesh, Mali, Ukraine and Afghanistan), as asylum seekers coming from those countries account for 75% of the total asylum requests; second, we consider the proportion of registered migrants coming from Africa. The results are robust to these two alternative specifications.

¹⁸ Aosta Valley is not in the sample due to missing values. Namely we lose 38 municipalities owing to missing values either in the voting outcomes or in the control variables.

As already mentioned, there were multiple reasons for the population to be against the Government. [Pritoni et al. \(2016\)](#), in their analysis of voting behaviour, show that “No” votes prevailed in the southern part of the country, an area which is characterised by worse economic conditions than other parts of the country. There is evidence that in the 100 municipalities with highest unemployment rates more than 65% of the population voted “No”, while in the 100 municipalities with the lowest unemployment rates almost 60% of the population voted “Yes”. Similarly, in large cities, the results show a higher proportion of “Yes” votes in the historical centres and a higher proportion of “No” votes in the suburbs. The “No” vote also prevailed among young voters, especially those aged between 25 and 34 years. According to the DEMOS & Pi data, 70% of this age group voted “No”. Interestingly, this is the age group affected by very high unemployment rates and very unstable working careers.¹⁹

Coming to our data, we present several maps plotting the distribution of “No” votes and the distribution of some relevant variables.²⁰ In particular, each variable is divided into four groups, corresponding to the 0-25, 25-50, 50-75 and 75-100 percentiles of the distribution. Figure [A.1](#) displays a negative association between the proportion of people in a municipality aged 18-30 years and “No” votes, especially in the South, confirming what was mentioned above about the negative votes of younger individuals. Figure [A.2](#) shows a negative correlation between the proportion of non-EU migrants in a municipality and anti-government votes, especially in the Centre-North, demonstrating that the higher the proportion of legal migrants in a municipality, the lower the proportion of “No” votes. This, however, may be a reflection of the fact that migrants tend to settle in municipalities that are more left-wing ([Bracco et al., 2017](#)).

Finally, Figures [A.3](#) and [A.4](#) show the correlation between the proportion of right or centre-right and left or centre-left voters in a municipality and anti-government votes in the referendum, respectively. As expected, there is a positive association between right-wing votes in the 2001 national election and “No” votes in the 2016 referendum, while the opposite holds true for left-wing votes.

5.2 Descriptive statistics on municipalities hosting refugees

As already mentioned, to determine the effect of proximity to refugee centres, we are using the geographical “spillover” produced by municipalities hosting refugees on the municipalities without

¹⁹ Demos & Pi is a well-known organisation in Italy that specialises in election polls. For more information on the data on the referendum see <http://www.demos.it/a01240.php>.

²⁰ In the maps we consider the whole sample of Italian municipalities.

refugee centres. For descriptive purposes, and to gain an idea of the characteristics associated with a municipality’s likelihood of having at least one reception centre, we estimated a linear probability model, whose results are reported in Table B.2 in the Appendix.

Table B.2 shows two sets of estimates: the first, in column (1), including province fixed effects and the second, in column (2), including local labour market (LLM) fixed effects. In general, very few covariates turn out to be statistically significant. Focusing on column (2), for instance, municipalities with refugee centres are relatively less likely to have an inland hill or plain surface, have a demographic structure with fewer adult working-age individuals (both native and foreign) than other age groups, are more likely to already have extra-EU regular migrants (a one-p.p. increase in the share of extra-EU migrants raises the probability of hosting refugees by about 1-p.p.) and are richer (increasing the average income tax declaration by one log-point increases the likelihood of having refugee centres by 0.12 p.p.).

Quite interestingly, the probability of hosting refugees is not significantly predicted by a municipality’s political orientation, using the outcomes of the 2001 national election as a proxy for this. We think that this lack of association is mainly driven by the CAS, which represent the lion’s share of the reception system, since their locations are autonomously decided by Prefectures (i.e., the government), presumably without taking into account any political consideration (see our discussion in Section 3.2). Although there is no strong evidence of political self-sorting of hosting refugees according to observable variables, we prefer to omit these municipalities from our baseline estimates, as we cannot completely discard selection on unobservables.

6 Results

Section 6.1 reports our baseline results of the effect of proximity to a refugee centre on voting behaviour, controlling for observables at the municipality level and closest municipality with a refugee centre fixed effects. We then checked the sensitivity of our main results with a number of robustness checks that we discuss in Section 6.2.

6.1 Baseline results

Table 2 shows our main results. Given the previously discussed implicit political nature of the 2016 referendum vote, and the fact that attitudes towards refugees are likely to be strongly affected by the electorate’s political orientation, we deem it crucial to include in the model the 2001 national election outcomes as control variables. Accordingly, the specification that considers only controls

for results of the 2001 election at the municipality level and closest municipality with a refugee centre fixed effects represents our starting model (Panel A). We then include geographical controls at the municipality level (Panel B) and finally we also include demographic and socio-economic characteristics of municipalities (Panel C).²¹

Table 2: Voting behaviour and proximity to refugee centres, 2016: baseline results

Share of:	No Turnout (1)	Yes (2)	No (3)	Invalid (4)
Panel A				
Distance	0.1652*** (0.0254)	-0.0235 (0.0272)	-0.1378*** (0.0207)	-0.0039*** (0.0014)
R-squared	0.1446	0.2564	0.3061	0.0196
National elections	X	X	X	X
Centre FE	X	X	X	X
Panel B				
Distance	0.1551*** (0.0253)	-0.0233 (0.0265)	-0.1279*** (0.0208)	-0.0039*** (0.0014)
R-squared	0.1572	0.2631	0.3163	0.0234
National elections	X	X	X	X
Geography Controls	X	X	X	X
Centre FE	X	X	X	X
Panel C				
Distance	0.1529*** (0.0252)	-0.0181 (0.0244)	-0.1310*** (0.0207)	-0.0038*** (0.0015)
R-squared	0.2619	0.3402	0.3800	0.0390
National elections	X	X	X	X
Geography Controls	X	X	X	X
Other Controls	X	X	X	X
Centre FE	X	X	X	X
Observations	5,636	5,636	5,636	5,636
Number of centres	1,546	1,546	1,546	1,546

Note. This table reports the estimates of the effect of distance (in hundreds of km) to the closest municipality with refugee centres on voting behaviour on the sample of municipalities which do not host a refugee centre as of November 2016. All regressions include fixed effects at the closest municipality with a refugee centre (Centre FE for brevity). In panel A we include controls for 2001 elections only; in panel B we add geographic controls; in panel C we add all other controls at the municipality level (see Section 6 for details). Standard errors are clustered at closest municipality with a refugee centre level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

In the regression, the outcome variables are expressed in proportions (ranging between 0 and 1), and the distance, which was measured in kilometres, is divided by 100. As mentioned in 4, our baseline working sample is composed of only those municipalities that do not host a refugee centre.

In Panel A, we observe a strong positive effect of proximity to refugee centres on “No turnout”, with a 1-km increase in distance reducing the referendum turnout by 1.6 p.p. However, negative effects emerge for the proportions of “No” and “invalid” votes, with a 1-km increase in distance

²¹ We include all the controls discussed in Section 5. Results reporting the coefficients of the control variables are available in Table B.3 in the Appendix.

decreasing them by 1.4 p.p. and 0.4 p.p., respectively.

When the geographical controls are added (in Panel B), there is virtually no effect on the estimates, presumably owing to their low explanatory power. The estimates in Panel C are somewhat more informative. Interestingly, in spite of the significant relevance of the demographic and socio-economic controls, which determine a sizeable increase in the R-squared of the regressions (i.e., 66%, 20% and 66% compared with the model in Panel B, in columns (1), (3) and (4), respectively), the coefficient of the distance remains very stable. The low sensitivity of our estimates to including relevant control variables is also quite reassuring as regards the potential biases in our estimates caused by the omission of unobservable variables correlated with demographic and socio-economic features of municipalities, as these are two important determinants of the location of refugee centres and presumably of voting, as we have seen in Section 5.2.

This first set of results suggests that being closer to a refugee centre results in more people going to vote and in more people voting against the government.

Table B.3 in the Appendix reports the coefficients of all of the control variables for our preferred specification of Panel C. Interestingly, geographical characteristics, the level of education in the population, the income level and the turnout in the 2001 national election significantly predict the level of referendum turnout (column 1). The results in column (3) confirm the political nature of the 2016 referendum vote: the proportion of votes for right-wing parties in the 2001 national election is positively associated with the proportion of “No” votes, votes for the centre being the omitted proportion. Quite interestingly, a similar association is observed for votes for centre-left parties, confirming that Mr Renzi also had some internal opposition from the Democratic party and other left-wing parties. The strongest positive association with the “No” vote is, however, observed for the “other parties”, which is probably a reflection of the vote of the electorate that did not feel represented by traditional parties and joined the M5S (established in 2009) later on. Municipalities that were more likely to vote “No” were also characterised by a medium level of urbanisation, by a high proportion in the population of adults of working-age (30-65 years), by a larger population, by fewer tertiary-educated residents and by a lower average income.

6.2 Robustness checks

In this section, we discuss the robustness checks carried out for the results in the previous section. First, we check if the results differ when we include the zero-distance municipalities, namely the municipalities that host refugee centres (2,151 in total). The results of our preferred model including

all of the controls shown in Table 3 are very similar to the baseline results.²² This is consistent with the lack of a strong self-selectivity of hosting refugee centres already observed in Section 5.2. The coefficients of “No turnout” and of “No” and “Invalid” votes are 0.117, 0.109 and 0.003, respectively. The lower magnitude of the effects than that in our baseline estimates is consistent with some of the refugee centres being located in pro-government municipalities. As already mentioned, we maintain that this is mainly likely to be driven by the SPRAR’s location, which required an agreement between the government and local administrations.

Table 3: Voting behaviour and proximity to refugee centres, 2016: all municipalities

Share of:	No Turnout (1)	Yes (2)	No (3)	Invalid (4)
Distance	0.1170*** (0.0238)	-0.0053 (0.0168)	-0.1090*** (0.0166)	-0.0027*** (0.0010)
Observations	7,782	7,782	7,782	7,782
R-squared	0.2504	0.3312	0.3636	0.0369
Number of centres	2,151	2,151	2,151	2,151
National elections	X	X	X	X
Geography Controls	X	X	X	X
Other Controls	X	X	X	X
Centre FE	X	X	X	X

Note. In the Table we report the estimates of the effect of distance (in hundreds of km) to the closest municipality hosting refugee centres on voting behaviour on all municipalities. All regressions include fixed effects at the closest municipality with a refugee centre (Centre FE for brevity), controls for 2001 elections and other controls at the municipality level. Standard errors are clustered at closest municipality with a refugee centre level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Second, we investigate whether our results are driven by economic factors that are not captured by the inclusion of the local level of income or education, or by closest municipality with a refugee centre fixed effects. To do this, and for the sake of comparability with previous research, we include LLM fixed effects to take potential unobserved heterogeneity at the local level into account.²³ We consider 653 LLMs that are characterised by the fact that (1) their boundaries are crossed by few journeys to work (i.e., they are relatively self-contained) and (2) a relatively high level of intra-market movement results from the LLMs being as integrated as possible. Similarly, we include province fixed effects, as the location of the CAS is chosen by the prefectures, entities which exist at the province level, and therefore controlling for province fixed effects could partially capture different choices of location adopted by different prefectures. Table 4 reports the results.

²²It is worth noting that we observe around 560 cases of municipalities hosting a refugee centre that are surrounded by other municipalities with refugee centres. These municipalities cannot be included in the estimation sample when including closest-municipality with refugee centres fixed effects (i.e., they are singletons).

²³ Local labour market fixed effects is the preferred specification adopted by other papers investigating the effect of migration on voting behaviour in Italy, see for example Barone et al. (2016).

Considering the within-province or within-LLM variation — in the even and odd columns of Table 4, respectively — does not qualitatively change our results. All point estimates are just a little smaller compared to our baseline results.

Table 4: Voting behaviour and minimum distance to refugee centres, 2016: local labour market and province FE

Share of:	No Turnout		Yes		No		Invalid	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Distance	0.1086*** (0.0201)	0.1007*** (0.0199)	-0.0119 (0.0130)	-0.0132 (0.0123)	-0.0917*** (0.0170)	-0.0831*** (0.0184)	-0.0050*** (0.0016)	-0.0044*** (0.0010)
Observations	5,636	5,636	5,636	5,636	5,636	5,636	5,636	5,636
R-squared	0.3121	0.3677	0.2896	0.3021	0.3040	0.3479	0.0361	0.0516
National elections	X	X	X	X	X	X	X	X
Geography Controls	X	X	X	X	X	X	X	X
Other Controls	X	X	X	X	X	X	X	X
LLM FE	X		X		X		X	
Number of LLM	653		653		653		653	
Province FE		X		X		X		X
Number of Province		109		109		109		109

Note. In the Table we report the estimates of the effect of distance (in hundreds of kilometres) to the closest municipality with refugee centres on voting behaviour on the sample of municipalities which do not host a refugee centre. All regressions include controls for 2001 elections and other controls at the municipality level. Odd columns include local labour market FE, and even columns province FE. Standard errors are clustered at corresponding level (LLM or province) *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

As a final robustness check, we re-estimated the regression of the observations weighted by the number of eligible voters in each municipality and again the results, reported in Table 5, are very similar to the baseline results.

To throw light on the actual mechanisms at work, we estimate a specification, including the interaction between distance and the number of refugees hosted in the closest municipality with a refugee centre (the non-interaction effect of the refugee population size is absorbed by the closest municipality with a refugee centre fixed effects). Table B.4 in the Appendix displays the empirical evidence. The main idea is that, while our baseline estimates do not take into account potential heterogeneous effects of distance by the size of the refugee population, proximity to municipalities with higher and lower numbers of refugees may have different effects on voting. The presence of such effects may depend on the main mechanism one has in mind. Indeed, if we believe that the effects are driven by contacts between refugees and natives, the size of the refugee population should make a difference, as natives may come into contact with refugees, especially when travelling (for work or other purposes) within the municipality hosting them, or refugees may enjoy some freedom of movement and spend time in municipalities not hosting them. In both cases, the frequency of contact between natives and refugees should depend positively on the number of

Table 5: Voting behaviour and proximity to refugee centres, 2016: weighted regressions

Share of:	No Turnout (1)	Yes (2)	No (3)	Invalid (4)
Distance	0.1215*** (0.0262)	-0.0129 (0.0297)	-0.1068*** (0.0207)	-0.0019* (0.0011)
Observations	5,636	5,636	5,636	5,636
R-squared	0.9421	0.9499	0.8751	0.5320
Number of centres	2,151	2,151	2,151	2,151
National elections	X	X	X	X
Geography Controls	X	X	X	X
Other Controls	X	X	X	X
Centre FE	X	X	X	X

Note. In the Table we report the estimates of the effect of distance (in hundreds of km) to the closest municipality with refugee centres on voting behaviour, weighting the regression by number of eligible voters in each municipality. All regressions include fixed effects at the closest municipality with a refugee centre (Centre FE for brevity), controls for 2001 elections and other controls at the municipality level. Standard errors are clustered at closest municipality with a refugee centre level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

refugees; accordingly, we should expect a statistically significant interaction term. If, by contrast, natives are simply averse to refugees in all circumstances and want to keep them away from their residences, the size of the refugee centres will probably not make much of a difference. Anecdotal evidence appearing in the media according to which residents in small municipalities often organised themselves and protested against the risk of their municipalities being allocated a handful of refugees by prefectures seems to suggest that the second explanation may be the more relevant one. Indeed, Table B.4 confirms the lack of a significant (at conventional level) interaction term. The results remain unchanged when the interaction is built using the ratio between the number of refugees and the hosting municipality’s population (Table B.5 in the Appendix).

7 Heterogeneous effects

In this section, we shed light on the potential channels and mediating factors at the heart of the relationship between proximity to refugee centres and voting. Previous studies on migrants and refugees report consistent results on the potential mechanisms. Barone et al. (2016) showed that cultural diversity (mainly religious diversity), competition in the labour market (using education as a proxy) and competition for public services (mainly schools, using the population aged 0-14 years as a proxy) were the main mediators of the impact of legal migration on voting for the centre-right coalitions in Italy. Similar factors appear to mediate the effect of legal migrants on voting for the far right in the study by Halla et al. (2017) in Austria. The effect of migration on voting outcomes has been found to be larger in municipalities characterised by high unemployment rates and where

there is a large overlap between the labour market skills of natives and migrants. Furthermore, communities with a high proportion of educated people are more likely to vote for the far right. The underlying explanation for this is that educated people are not directly affected by the labour market, where immigrants compete, but they are affected in terms of the provision of public goods and amenities in their municipality. The authors find, accordingly, that this effect tended to be stronger in communities with a higher ratio of migrant children to native children, suggesting that municipalities experiencing high immigration enjoy less provision of child care in infant and toddler institutions, as well as of after-school child care, than municipalities experiencing lower levels of immigration.

As regards refugees, in their study in the city of Hamburg, [Otto and Steinhardt \(2014\)](#) find that non-economic determinants and welfare state issues are important in shaping individual attitudes towards immigrants and asylum seekers. In addition to welfare concerns (using the proportion of migrants depending on welfare as a proxy), [Dustmann, Vasiljeva, and Damm \(2016\)](#), in their study in Denmark, find that the presence of refugees had stronger effects on anti-immigration votes in wealthier areas (which was coherent with the “self-interest hypothesis”), in municipalities with a higher incidence of crime and violent crime and in municipalities with more immigrants. The final result is at odds with the “contact theory” and the findings of [Steinmayr \(2016\)](#), but is more in line with a “saturation effect”. By contrast, the effect on anti-immigration votes is weaker in communities with a higher proportion of church tax payers, which is interpreted by the authors as a proxy of altruistic attitudes.

To date, there are no available data from opinion surveys that can be matched to municipality — or even province — level data on citizens’ opinions about migration in Italy. For this reason, we investigate potential heterogeneity in the effect of proximity to refugee centres on voting behaviour, based on some potential mediating factors.

We consider seven sources of heterogeneous effects, namely groups of potential mediating variables that are highlighted in the literature: (1) municipality size and population size, (2) level of unemployment, (3) presence of legal migrants (the “contact hypothesis” versus the “saturation hypothesis”, to test this hypothesis try with all non-EU migrants and migrants for main refugees origin countries), (4) educational level of the population, (5) income levels (“self-interest hypothesis”), (6) crime and (7) political orientation in previous elections (2001).

After having allocated each Italian municipality to a given quartile by the values of the seven groups of variables outlined above, we report the fixed effect (at the level of the closest municipality

with a refugee centre) estimates for each quartile and compare the magnitude of these effects.²⁴ Large effects for municipalities lying in the high quartiles of a given mediator means that this mediator contributes to explaining natives’ concerns about the closeness of refugees to the municipality in which they live or work. It must be kept in mind, however, that voting behaviour is affected by voters’ perceptions. In this regard, the strategy we propose to highlight the main causal pathways is based on the assumption that voters’ negative opinions about migrants are stronger in municipalities that have certain objective attributes that correlate with migration (e.g. high unemployment rates, crime rates, etc.).²⁵

Table B.6 and B.7 summarize our results. In Table B.6, we report the coefficients from our main specification separately for the quartiles of each plausible channel: the size of the municipality, population size, the proportion of registered migrants in a given municipality, the proportion of third-country nationals, the proportion of migrants from African countries and the proportion of the population that has at least a high school degree. The effect of proximity to refugee centres on “No turnout” (columns 1-4) and the proportion of “No” votes (columns 9-12) is smaller among larger municipalities (fourth quartile) and municipalities with a larger resident population (fourth quartile).

For the presence of regular migrants (all migrants, third-country nationals or African migrants), we find basically no difference between the different quartiles in the proportion of “No” votes. Thus, although it has an effect on voting outcomes (Barone et al., 2016), proximity to refugee centres does not seem to be the main driver. Moreover, these estimates do not lend particular support either to the “contact theory” or to the “saturation hypothesis”, under which the effect of refugees should be smaller or larger, respectively, depending on the size of the community of migrants already established in a municipality.

For education, we group municipalities by the proportion of the resident population that has at least a high school degree. Our results show that the effect of proximity to refugee centres is somewhat smaller for the municipalities in the first quartile (this effect increases from 0.07 p.p. in the first quartile to 0.14 p.p. in the fourth quartile for “No turnout”, and from 0.05 p.p. in the first quartile to 0.15 p.p. in the fourth quartile for the proportion of “No” votes). This final result is in line with the hypothesis that educated natives may be affected by the presence of migrants or refugees in a given municipality, as the latter may reduce the availability of amenities and other

²⁴ A similar strategy is followed by Halla et al. (2017). Barone et al. (2016) and Dustmann, Vasiljeva, and Damm (2016) follow an alternative estimation strategy using interaction terms.

²⁵ However, nothing excludes in principle that natives may vote for anti-immigration parties also in municipalities characterized by low unemployment rate, because they still believe that refugees negatively affect natives’ employment.

public goods (e.g. child care services). [Barone et al. \(2016\)](#) and [Halla et al. \(2017\)](#) report similar findings.

Besides demographic and geographical characteristics, we also investigate other channels related to the level of economic and social development of the municipality, such as the unemployment rate, the declared tax income in a given municipality (a proxy for wealth) and the presence of crime (larceny, robbery and all crimes).²⁶ The results are reported in Table [B.7](#). We do not find a clear pattern for unemployment rate. The effect on the proportion of “No” votes appears to be larger in the second quartile, but is similar in the first and fourth quartiles. Income, on the other hand, seems to play a more important role as a potential mediating factor for the association between proximity to refugee centres and voting outcomes, being the effect stronger among poorer municipalities (especially those lying in the first quartile of income level). For crime activity, we observe an inverse U-shaped pattern of effect on “No turnout”, while the effect on “No” votes does not exhibit any clear pattern. From these results, we conclude that crime-related concerns supported by objective data, as captured by crime statistics, do not seem to be the main mediating factor of natives aversion to having refugee centres close to them. Finally, the effect of distance to refugee centres does not substantially vary with the left-wing versus right-wing political orientation of municipalities.

8 Conclusion

The international refugee crisis has created a state of emergency in Europe. In 2016, the United Nations reported that there were 244 million migrants worldwide (76 million in Europe) in 2015, up from 173 million (56 million in Europe) in 2000, with the largest increase seen in high-income countries. Policy makers have to manage this crisis, considering that the current influx of refugees into Europe is not likely to stop any time soon. Particularly after Brexit in the UK, it became crucial to understand the political consequences of increased exposure to refugee inflows, and how this affects natives’ voting behaviour.

Immigration has always been a hot topic, generating strong emotional reactions in the populations of host countries. However, recent events have caused considerable concern among centrist politicians, who fear that such events may play into the hands of populist parties. Refugees and migrants were at the core of the widespread “anti-European” sentiments that led to the Brexit ref-

²⁶ Unemployment and crime are not available to us at the municipality level for 2016, so we use province-level data, divide the provinces in quartiles and assign to each municipality the quartile of its province.

erendum result in the UK, of the exceptional participation rate in the referendum in Hungary for deciding upon the admission of refugees (in which an exceptional 98% of participants – about half of the electorate – voted against their admission) and of the decision of the Austrian government to reinforce the control at the Austrian-Italian border a few months before the political election. In France, Italy and Germany, right-wing populist parties such as Front National, Lega Nord and Alternative für Deutschland, respectively, although not among the winning parties, are growing in popularity.

This paper provides new evidence on the effect on voting behaviour of natives’ exposure to recent refugee waves, by exploiting the unique timing of Italy’s 2016 constitutional referendum, which took place in the middle of the “European refugee crisis”. We investigate how proximity to municipalities hosting refugee reception centres influenced the referendum vote held in 2016. Although the referendum dealt with the approval of a constitutional reform, the vote was interpreted as an assessment of the actions of the government, led by Matteo Renzi, head of the left-centre Democratic Party. Mr Renzi himself tied his political destiny to the success or failure of the referendum, explicitly declaring that if the reform did not pass he would resign.

Our analysis demonstrates that, in municipalities located closer to refugee centres, the proportion of “No” votes (i.e., against the reform) and voter turnout increased. In other words, being located near a reception centre pushes more people to vote and increases the proportion of anti-government votes. These results demonstrate the opposition parties’ ability to mobilise against the government and use the anti-migration sentiment that is being fuelled by the current refugee crisis. The refugee crisis has been exploited to increase discontent with the government, which has been accused of having implemented policies that were too mild, of not being able to stop the arrival of increasing numbers of refugees, and of not being strong enough to influence the EU political agenda in terms of the management of refugee flows. The findings in this paper add to the existing literature, showing that migrant- and refugee-related issues not only are likely to increase votes for populist and right-wing parties, but could also affect important ballots where migration is not at stake, as was the case in the Italian constitutional referendum.

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Appendix A: Figure

Figure A.1: Voting Behaviour and Share of Aged 18-30

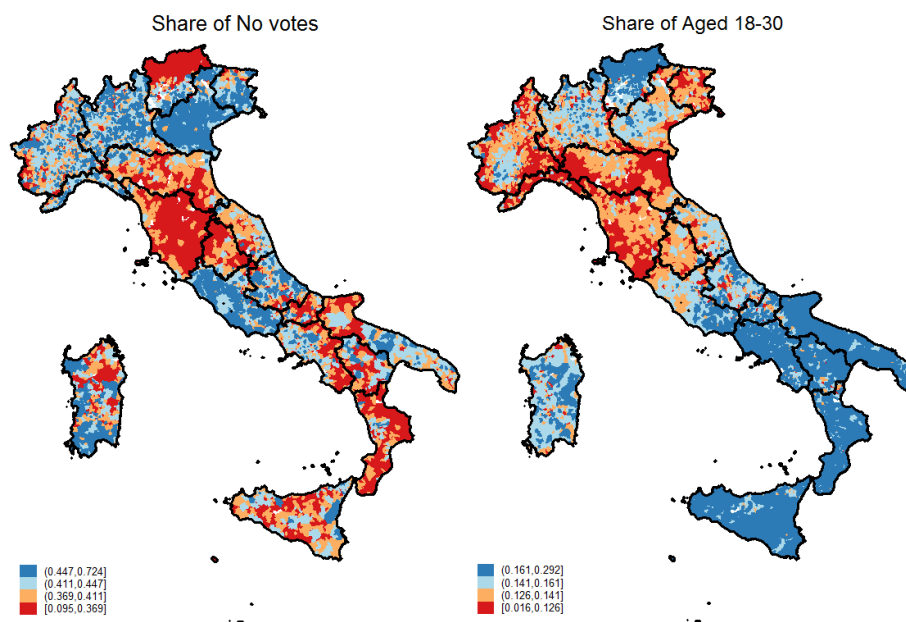


Figure A.2: Voting Behaviour and Share of No-Eu Migrants

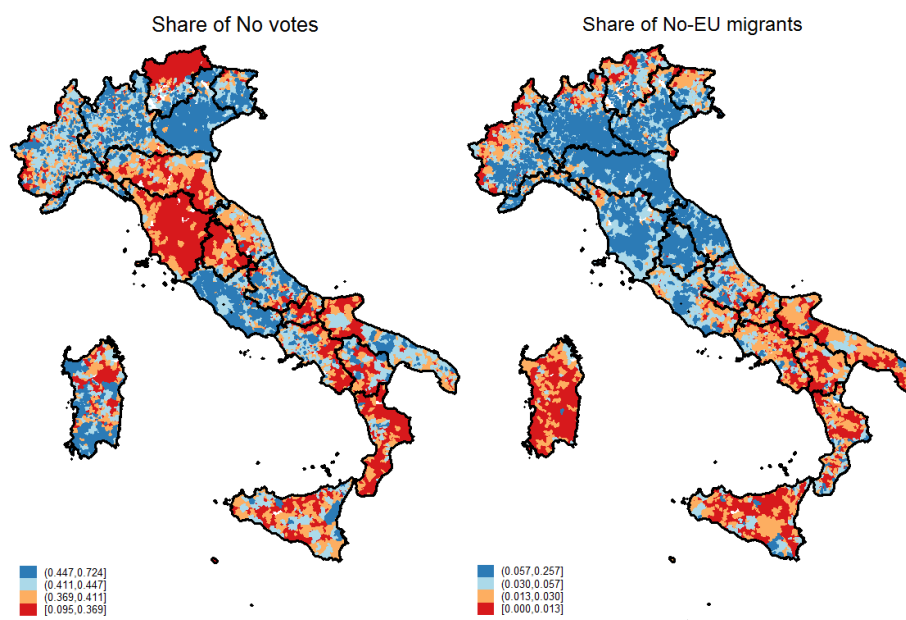


Figure A.3: Voting Behaviour and Share of Centre-Right and Right Votes 2001

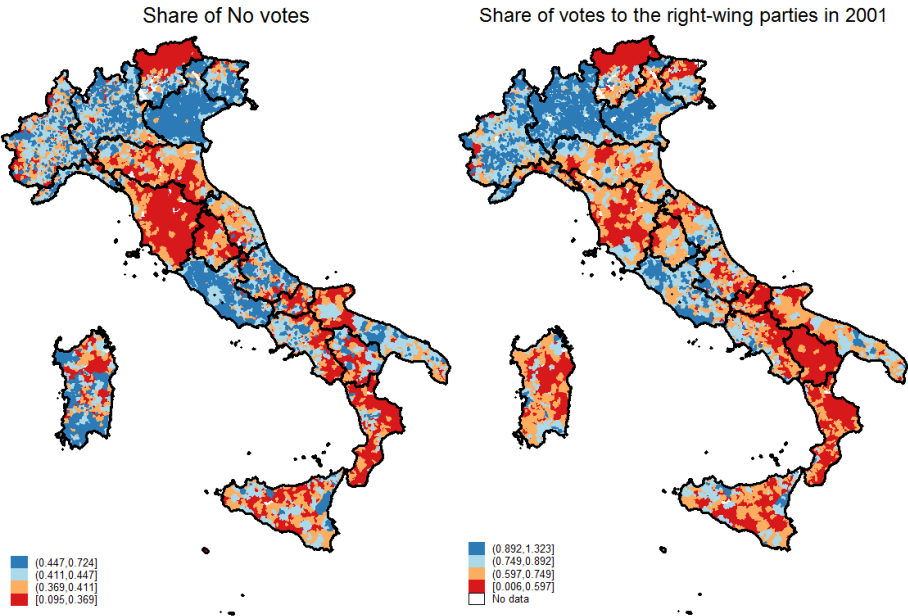
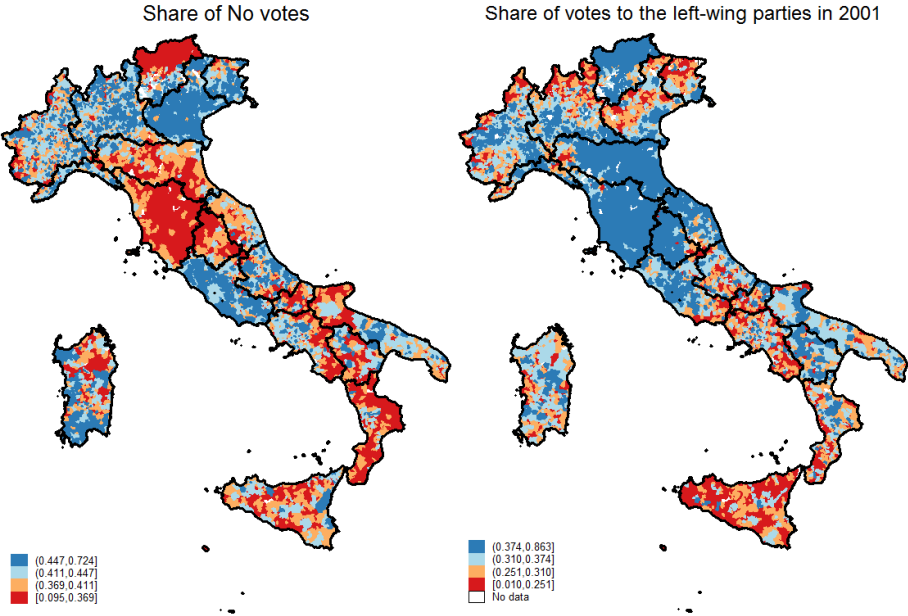


Figure A.4: Voting Behaviour and Centre-Left and Left Votes 2001



Appendix B: Additional tables

Table B.1: Descriptive of control variables

	Mean	St. dev.
<i>Geographical controls</i>		
Municipality's surface	31.466	37.543
Altimetry: coastal mountain	0.018	0.133
Altimetry: inland hill	0.325	0.468
Altimetry: coastal hill	0.100	0.299
Altimetry: plain	0.241	0.428
Urbanization degree: medium	0.352	0.478
Urbanization degree: high	0.088	0.284
Seismicity: medium - high	0.275	0.447
Seismicity: medium - low	0.326	0.469
Seismicity: low	0.307	0.461
Municipality located in the mountain: partially	0.073	0.261
Municipality located in the mountain: yes	0.469	0.499
Waste water purification: missing information	0.016	0.125
Waste water purification: yes	0.464	0.499
Waste water purification: partial	0.377	0.485
<i>Demographic and socio-economic controls</i>		
Share of population aged 30-65	0.547	0.041
Share of population aged more than 65	0.257	0.057
Share of foreign population aged 30-65	0.037	0.023
Share of foreign population aged more than 65	0.003	0.004
Population density	246.59	520.37
Population	3456.1	5615.7
Share of illiterates, no title	0.079	0.028
Shares of population with primary education	0.240	0.051
Shares of population with lower secondary education	0.316	0.043
Shares of population with upper secondary education	0.280	0.049
Share of population with post secondary non tertiary education	0.003	0.002
Shares of population with tertiary education	0.070	0.026
Shares of resident extra-EU migrant in the municipality	0.035	0.033
Municipality average (log) income	16.864	1.241
<i>Voting outcomes</i>		
Share of votes to other parties - 2001 national election	0.005	0.010
Share of votes to left parties - 2001 national election	0.004	0.006
Share of votes to centre-left parties - 2001 national election	0.365	0.115
Share of votes to centre-right parties - 2001 national election	0.252	0.103
Share of votes to right parties - 2001 national election	0.060	0.029
Share of invalid votes - 2001 national election	0.075	0.035
Share of population not voting - 2001 national election	0.210	0.112
Number of observations	5,636	

Table B.2: Linear probability model for the probability of having a refugee centre

	(1) Province FE	(2) LLM FE
Municipality's surface	0.000*** (0.000)	0.000 (0.000)
Altimetry: coastal mountain	-0.144*** (0.031)	-0.050 (0.046)
Altimetry: inland hill	-0.047** (0.018)	-0.064** (0.021)
Altimetry: coastal hill	-0.080** (0.027)	-0.073* (0.033)
Altimetry: plain	-0.088** (0.029)	-0.127*** (0.029)
Urbanization degree: medium	0.007 (0.017)	0.009 (0.018)
Urbanization degree: high	0.019 (0.030)	0.032 (0.040)
Seismicity: medium - high	-0.043 (0.026)	-0.066 (0.036)
Seismicity: medium - low	-0.040 (0.036)	-0.097* (0.048)
Seismicity: low	-0.045 (0.055)	-0.162* (0.065)
Municipality located in the mountain: partially	-0.009 (0.022)	0.014 (0.023)
Municipality located in the mountain: yes	0.009 (0.020)	0.031 (0.021)
Waste water purification: missing information	-0.048 (0.041)	-0.048 (0.043)
Waste water purification: yes	0.017 (0.016)	0.005 (0.015)
Waste water purification: partial	0.020 (0.015)	0.013 (0.016)
Share of population aged 30-65	-1.496*** (0.348)	-1.517*** (0.279)
Share of population aged more than 65	-0.843* (0.341)	-0.916*** (0.261)
Share of foreign population aged 30-65	-1.611* (0.636)	-1.439** (0.535)
Share of foreign population aged more than 65	-1.397 (1.028)	-0.389 (1.233)
Population density	0.000 (0.000)	0.000 (0.000)
Population	-0.000 (0.000)	-0.000 (0.000)
Share of illiterates, no title	-1.431* (0.687)	-0.397 (0.833)
Shares of population with primary education	-0.371 (0.595)	0.430 (0.700)
Shares of population with lower secondary education	-0.689 (0.649)	0.145 (0.748)
Shares of population with upper secondary education	-0.689 (0.623)	-0.013 (0.698)
Share of population with post secondary non tertiary education	-0.039 (2.140)	-0.431 (2.189)
Shares of population with tertiary education	0.444 (0.656)	1.377 (0.747)
Shares of resident extra-EU migrant in the municipality	1.033** (0.379)	1.081** (0.336)
Municipality average (log) income	0.115*** (0.008)	0.118*** (0.007)
Share of votes to other parties - 2001 national election	-0.967 (0.818)	-0.270 (0.840)
Share of votes to left parties - 2001 national election	2.143 (1.474)	1.023 (1.307)
Share of votes to centre-left parties - 2001 national election	-0.415 (0.234)	-0.412 (0.242)
Share of votes to centre-right parties - 2001 national election	0.000 (0.236)	-0.077 (0.245)
Share of votes to right parties - 2001 national election	0.073 (0.297)	-0.341 (0.336)
Share of invalid votes - 2001 national election	-0.017 (0.243)	-0.131 (0.290)
Share of population not voting - 2001 national election	-0.076 (0.234)	-0.061 (0.244)
Constant	0.147 (0.693)	-0.555 (0.794)
Observations	7782	7782

Note. In the Table we report the estimates of the linear probability model for the probability of having a centre. In column (1) we use province fixed effect, while in column (2) we use local labour market fixed effect. Standard errors are clustered at corresponding level. *** p<0.01, ** p<0.05, * p<0.1

Table B.3: Voting behaviour and proximity to refugee centres, 2016: baseline results

Share of:	No Turnout (1)	Yes (2)	No (3)	Invalid (4)
Distance	0.1529*** (0.0252)	-0.0181 (0.0244)	-0.1310*** (0.0207)	-0.0038*** (0.0015)
Share of votes to other parties - 2001 national election	-0.1787 (0.1666)	-0.2673* (0.1382)	0.4437*** (0.1500)	0.0024 (0.0169)
Share of votes to left parties - 2001 national election	0.1820 (0.1987)	-0.2658 (0.1981)	0.1049 (0.1760)	-0.0211 (0.0194)
Share of votes to centre-left parties - 2001 national election	0.0360 (0.0425)	-0.1454*** (0.0359)	0.1127** (0.0441)	-0.0034 (0.0038)
Share of votes to centre-right parties - 2001 national election	0.0466 (0.0510)	0.1823*** (0.0436)	-0.2324*** (0.0435)	0.0035 (0.0038)
Share of votes to right parties - 2001 national election	-0.0425 (0.0550)	-0.0848* (0.0492)	0.1303** (0.0611)	-0.0031 (0.0055)
Share of invalid votes - 2001 national election	0.1327** (0.0554)	-0.0537 (0.0488)	-0.0874 (0.0532)	0.0084 (0.0051)
Share of population not voting - 2001 national election	0.1756*** (0.0463)	-0.0681* (0.0383)	-0.1063** (0.0428)	-0.0012 (0.0040)
Municipality's surface	0.0000 (0.0000)	-0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)
Altimetry: coastal mountain	-0.0008 (0.0104)	-0.0014 (0.0069)	0.0028 (0.0085)	-0.0006 (0.0006)
Altimetry: inland hill	-0.0104*** (0.0035)	0.0064** (0.0028)	0.0037 (0.0033)	0.0003 (0.0003)
Altimetry: coastal hill	-0.0124*** (0.0046)	0.0052 (0.0036)	0.0070 (0.0048)	0.0002 (0.0004)
Altimetry: plain	-0.0138*** (0.0044)	0.0055 (0.0038)	0.0080* (0.0044)	0.0003 (0.0004)
Urbanization degree: medium	-0.0009 (0.0024)	-0.0055** (0.0024)	0.0064*** (0.0023)	-0.0000 (0.0002)
Urbanization degree: high	0.0008 (0.0036)	-0.0022 (0.0037)	0.0014 (0.0038)	0.0000 (0.0003)
Seismicity: medium - high	-0.0030 (0.0066)	0.0025 (0.0051)	0.0002 (0.0051)	0.0003 (0.0004)
Seismicity: medium - low	0.0023 (0.0077)	0.0004 (0.0065)	-0.0029 (0.0068)	0.0002 (0.0006)
Seismicity: low	-0.0005 (0.0089)	0.0151 (0.0094)	-0.0150* (0.0088)	0.0005 (0.0008)
Municipality located in the mountain: partially	-0.0011 (0.0029)	0.0011 (0.0026)	-0.0002 (0.0031)	0.0002 (0.0003)
Municipality located in the mountain: yes	0.0044* (0.0026)	0.0023 (0.0026)	-0.0069** (0.0028)	0.0003 (0.0003)
Waste water purification: missing information	-0.0014 (0.0058)	-0.0034 (0.0055)	0.0055 (0.0070)	-0.0007 (0.0005)
Waste water purification: yes	-0.0043** (0.0019)	0.0013 (0.0019)	0.0028 (0.0021)	0.0002 (0.0002)
Waste water purification: partial	-0.0006 (0.0020)	-0.0027 (0.0017)	0.0033 (0.0021)	0.0001 (0.0002)
Share of population aged 30-65	-0.0153 (0.0490)	-0.2760*** (0.0535)	0.2925*** (0.0589)	-0.0012 (0.0060)
Share of population aged more than 65	0.0207 (0.0466)	-0.0067 (0.0482)	-0.0138 (0.0578)	-0.0002 (0.0058)
Share of foreign population aged 30-65	0.2710*** (0.0863)	-0.2003** (0.0957)	-0.0602 (0.1006)	-0.0105 (0.0131)
Share of foreign population aged more than 65	-0.1939 (0.2789)	0.0377 (0.3215)	0.1840 (0.2502)	-0.0279 (0.0269)
Population density	0.0000** (0.0000)	-0.0000*** (0.0000)	0.0000 (0.0000)	-0.0000 (0.0000)
Population	0.0000 (0.0000)	-0.0000*** (0.0000)	0.0000*** (0.0000)	-0.0000 (0.0000)
Share of illiterates, no title	-0.5248*** (0.1760)	0.1228 (0.1318)	0.3990*** (0.1345)	0.0030 (0.0116)
Shares of population with primary education	-0.3466*** (0.1334)	-0.0608 (0.0924)	0.4036*** (0.1110)	0.0038 (0.0091)
Shares of population with lower secondary education	-0.4992*** (0.1349)	0.0063 (0.0970)	0.4937*** (0.1154)	-0.0008 (0.0101)
Shares of population with upper secondary education	-0.7209*** (0.1313)	0.1260 (0.0895)	0.5976*** (0.1117)	-0.0026 (0.0095)
Share of population with post secondary non tertiary education	-0.6825* (0.3911)	0.0504 (0.4223)	0.6832 (0.4152)	-0.0511 (0.0581)
Shares of population with tertiary education	-0.7174*** (0.1370)	0.4084*** (0.1092)	0.3133*** (0.1183)	-0.0042 (0.0107)
Shares of resident extra-EU migrant in the municipality	-0.0979** (0.0420)	-0.0029 (0.0583)	0.0898 (0.0585)	0.0110 (0.0068)
Municipality average (log) income	0.0063*** (0.0013)	-0.0006 (0.0016)	-0.0053*** (0.0016)	-0.0004** (0.0002)
Observations	5,636	5,636	5,636	5,636
R-squared	0.2619	0.3402	0.3800	0.0390
Number of Centres	1,546	1,546	1,546	1,546
Centre FE	X	X	X	X

Note. In the Table we report the estimates of the effect of distance to the closer refugee centres on voting behaviour. All regressions include municipality with closest centre fixed effects. The omitted categories/variables are: Altimetry: inland mountain; Seismicity: high; Municipality located in the mountain: no; Waste water purification: no; Share of population aged 18-30; Share of foreign population aged 18-30; Share of illiterates; Share of votes to centre in 2001. Standard errors are clustered at municipality with closest centre level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table B.4: Voting behaviour and proximity to refugee centres, 2016: interaction with number of refugees

Share of:	No Turnout (1)	Yes (2)	No (3)	Invalid (4)
Distance	0.1529*** (0.0251)	-0.0181 (0.0239)	-0.1310*** (0.0206)	-0.0038*** (0.0015)
Distance X Number of refugees	-0.0079 (0.0086)	0.0133** (0.0053)	-0.0049 (0.0103)	-0.0005 (0.0004)
Observations	5,636	5,636	5,636	5,636
R-squared	0.2620	0.3405	0.3800	0.0390
Number of Centre	1,546	1,546	1,546	1,546
National elections	X	X	X	X
Geography Controls	X	X	X	X
Other Controls	X	X	X	X
Centre FE	X	X	X	X

Note. In the Table we report the estimates of the effect of distance (in hundreds of km) to the closest municipality with refugee centres on voting behaviour, interacted with number of refugees of the hosting municipality. The number of refugees has been standardized with 0 mean and variance 1. All regressions include fixed effects at the closest municipality with a refugee centre (Centre FE for brevity), controls for 2001 elections and other controls at the municipality level. Standard errors are clustered at closest municipality with a refugee centre level. *** p<0.01, ** p<0.05, * <0.1

Table B.5: Voting behaviour and proximity to refugee centres, 2016: interaction with the share of refugees

Share of:	No Turnout (1)	Yes (2)	No (3)	Invalid (4)
Distance	0.1497*** (0.0245)	-0.0199 (0.0242)	-0.1254*** (0.0219)	-0.0044*** (0.0016)
Distance X Refugee per capita	-0.0223 (0.0259)	-0.0126 (0.0228)	0.0393* (0.0218)	-0.0044* (0.0024)
Observations	5,636	5,636	5,636	5,636
R-squared	0.2623	0.3404	0.3809	0.0408
Number of Centre	1,546	1,546	1,546	1,546
National elections	X	X	X	X
Geography Controls	X	X	X	X
Other Controls	X	X	X	X
Centre FE	X	X	X	X

Note. In the Table we report the estimates of the effect of distance (in hundreds of km) to the closest municipality with refugee centres on voting behaviour, interacted with the share of refugees on the total population of the hosting municipality. The share of refugees has been standardized with 0 mean and variance 1. All regressions include fixed effects at the closest municipality with a refugee centre (Centre FE for brevity), controls for 2001 elections and other controls at the municipality level. Standard errors are clustered at closest municipality with a refugee centre level. *** p<0.01, ** p<0.05, * p<0.1

Table B.6: Voting behaviour and proximity to refugees centres in 2016: effects' heterogeneity

Share of:	No Turnout				Yes				No				Invalid			
Quartiles:	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Size	0.1681*** (0.0428)	0.1256*** (0.0412)	0.1488*** (0.0320)	0.0756*** (0.0214)	-0.0424 (0.0327)	0.0226 (0.0356)	-0.0244 (0.0313)	-0.0120 (0.0218)	-0.1173*** (0.0453)	-0.1482*** (0.0348)	-0.1229*** (0.0263)	-0.0624*** (0.0208)	-0.0084** (0.0035)	0.0000 (0.0040)	-0.0015 (0.0025)	-0.0012 (0.0012)
Observations	2,001	1,981	1,870	1,930	2,001	1,981	1,870	1,930	2,001	1,981	1,870	1,930	2,001	1,981	1,870	1,930
R-squared	0.2832	0.2327	0.3234	0.3024	0.2774	0.3200	0.3414	0.5736	0.2392	0.3059	0.4590	0.5512	0.0639	0.0490	0.0889	0.1153
Number of Centre	835	1,022	1,029	1,031	835	1,022	1,029	1,031	835	1,022	1,029	1,031	835	1,022	1,029	1,031
Population	0.1692*** (0.0394)	0.1148*** (0.0373)	0.1148*** (0.0220)	0.0471* (0.0267)	-0.0087 (0.0366)	-0.0128 (0.0265)	-0.0176 (0.0301)	-0.0007 (0.0114)	-0.1521*** (0.0417)	-0.1009*** (0.0263)	-0.0938*** (0.0245)	-0.0454** (0.0182)	-0.0084** (0.0040)	-0.0011 (0.0016)	-0.0034** (0.0014)	-0.0010* (0.0005)
Observations	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945
R-squared	0.2453	0.2668	0.3507	0.3846	0.2484	0.4407	0.5570	0.5983	0.2387	0.5053	0.5278	0.5384	0.0366	0.0996	0.1113	0.1500
Number of Centre	668	940	1,102	1,248	668	940	1,102	1,248	668	940	1,102	1,248	668	940	1,102	1,248
All migrants	0.1227*** (0.0322)	0.0746* (0.0410)	0.1359*** (0.0241)	0.1120*** (0.0399)	-0.0046 (0.0220)	0.0211 (0.0187)	-0.0351 (0.0267)	-0.0135 (0.0342)	-0.1140*** (0.0258)	-0.0905** (0.0389)	-0.1003*** (0.0254)	-0.0992*** (0.0277)	-0.0040 (0.0024)	-0.0051** (0.0025)	-0.0005 (0.0019)	0.0006 (0.0020)
Observations	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945
R-squared	0.2693	0.3407	0.3053	0.1869	0.3523	0.3950	0.4202	0.3297	0.3195	0.4811	0.5050	0.3763	0.0588	0.0550	0.0585	0.1116
Number of Centre	685	998	1,089	963	685	998	1,089	963	685	998	1,089	963	685	998	1,089	963
TCN	0.1372*** (0.0302)	0.0896* (0.0461)	0.1172*** (0.0243)	0.1378*** (0.0368)	0.0038 (0.0203)	-0.0124 (0.0234)	0.0077 (0.0355)	-0.0388 (0.0288)	-0.1335*** (0.0273)	-0.0774** (0.0329)	-0.1225*** (0.0344)	-0.0997*** (0.0286)	-0.0074*** (0.0024)	0.0001 (0.0015)	-0.0024 (0.0021)	0.0007 (0.0022)
Observations	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945
R-squared	0.2925	0.2828	0.2703	0.2505	0.3288	0.3294	0.4350	0.3791	0.3503	0.3797	0.4987	0.4425	0.0567	0.0542	0.1014	0.1158
Number of Centre	676	950	1,097	1,004	676	950	1,097	1,004	676	950	1,097	1,004	676	950	1,097	1,004
Africa	0.1692*** (0.0299)	0.1284*** (0.0282)	0.1121*** (0.0316)	0.0838** (0.0405)	-0.0443* (0.0253)	-0.0006 (0.0258)	-0.0004 (0.0319)	0.0196 (0.0390)	-0.1194*** (0.0300)	-0.1276*** (0.0286)	-0.1076*** (0.0328)	-0.0997*** (0.0309)	-0.0056** (0.0027)	-0.0001 (0.0018)	-0.0040 (0.0029)	-0.0037 (0.0028)
Observations	1,947	1,944	1,946	1,945	1,947	1,944	1,946	1,945	1,947	1,944	1,946	1,945	1,947	1,944	1,946	1,945
R-squared	0.2618	0.3455	0.2667	0.2885	0.3457	0.4997	0.3739	0.3393	0.3631	0.5759	0.4146	0.4070	0.0540	0.0839	0.0901	0.0763
Number of Centre	745	1,034	1,190	1,037	745	1,034	1,190	1,037	745	1,034	1,190	1,037	745	1,034	1,190	1,037
High school or more	0.0741** (0.0344)	0.1191*** (0.0322)	0.1375*** (0.0276)	0.1308*** (0.0281)	0.0032 (0.0137)	-0.0144 (0.0229)	-0.0225 (0.0319)	-0.0210 (0.0271)	-0.0722** (0.0351)	-0.1021*** (0.0258)	-0.1168*** (0.0311)	-0.1062*** (0.0356)	-0.0051** (0.0024)	-0.0025 (0.0026)	0.0017 (0.0021)	-0.0036 (0.0023)
Observations	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945	1,946	1,945
R-squared	0.2104	0.1537	0.2222	0.3082	0.2474	0.2753	0.4677	0.5133	0.2158	0.3334	0.5522	0.6029	0.0511	0.0606	0.0922	0.0829
Number of Centre	771	1,066	1,100	1,008	771	1,066	1,100	1,008	771	1,066	1,100	1,008	771	1,066	1,100	1,008
All controls	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Centre FE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Note. We report the coefficients of “Distance to closest municipality hosting refugee centres” (in hundreds of km) separately by the quartiles of: size of the municipality, population, share of registered migrants in a given municipality, share of third country nationals (TCN), share of migrants from African countries, and the share of population having at least a high school degree. All regressions include municipality with closest centre fixed effects and controls at the municipality level. Standard errors are clustered at the same level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table B.7: Voting behaviour and proximity to refugee centres in 2016: effects' heterogeneity

Share of:	No Turnout				Yes				No				Invalid			
Quartiles:	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Unemployment	0.1434*** (0.0325)	0.1333*** (0.0398)	0.0178 (0.0262)	0.0880** (0.0381)	-0.0490* (0.0279)	0.0244 (0.0299)	0.0213 (0.0258)	-0.0023 (0.0128)	-0.0916*** (0.0330)	-0.1556*** (0.0305)	-0.0326 (0.0327)	-0.0812** (0.0348)	-0.0028 (0.0021)	-0.0021 (0.0031)	-0.0065*** (0.0024)	-0.0045** (0.0018)
Observations	2,507	1,599	2,045	1,631	2,507	1,599	2,045	1,631	2,507	1,599	2,045	1,631	2,507	1,599	2,045	1,631
R-squared	0.3492	0.2434	0.2648	0.2943	0.5310	0.3169	0.2079	0.2799	0.6170	0.3104	0.2275	0.3569	0.0545	0.0869	0.0635	0.0990
Number of Centre	778	623	530	437	778	623	530	437	778	623	530	437	778	623	530	437
Wealth	0.1562*** (0.0383)	0.1032*** (0.0299)	0.1241*** (0.0208)	0.1082*** (0.0247)	-0.0167 (0.0338)	0.0006 (0.0288)	-0.0176 (0.0291)	-0.0198 (0.0260)	-0.1304*** (0.0407)	-0.1035*** (0.0261)	-0.1038** (0.0404)	-0.0870*** (0.0200)	-0.0092** (0.0040)	-0.0002 (0.0017)	-0.0028* (0.0015)	-0.0014 (0.0010)
Observations	1,938	1,949	1,950	1,945	1,938	1,949	1,950	1,945	1,938	1,949	1,950	1,945	1,938	1,949	1,950	1,945
R-squared	0.2503	0.2580	0.3711	0.4424	0.2125	0.4381	0.6199	0.6244	0.2121	0.4804	0.6286	0.5960	0.0371	0.0808	0.0935	0.1331
Number of Centre	671	941	1,121	1,246	671	941	1,121	1,246	671	941	1,121	1,246	671	941	1,121	1,246
All crimes	0.0722** (0.0314)	0.1292*** (0.0292)	0.1205*** (0.0249)	0.0853*** (0.0302)	-0.0144 (0.0157)	-0.0377 (0.0270)	-0.0268 (0.0231)	-0.0175 (0.0349)	-0.0526** (0.0233)	-0.0877*** (0.0282)	-0.0913*** (0.0246)	-0.0615 (0.0429)	-0.0051** (0.0022)	-0.0039** (0.0016)	-0.0025 (0.0020)	-0.0063* (0.0034)
Observations	2,027	2,015	2,028	1,614	2,027	2,015	2,028	1,614	2,027	2,015	2,028	1,614	2,027	2,015	2,028	1,614
R-squared	0.2851	0.3369	0.2624	0.3439	0.2361	0.3650	0.3300	0.3400	0.2705	0.5451	0.3249	0.2722	0.0583	0.0524	0.0674	0.1194
Number of Centre	503	622	685	596	503	622	685	596	503	622	685	596	503	622	685	596
Robbery rate	0.0518* (0.0293)	0.1675*** (0.0319)	0.1075*** (0.0335)	0.0941*** (0.0204)	0.0108 (0.0145)	-0.0541** (0.0235)	-0.0408 (0.0259)	0.0103 (0.0242)	-0.0590** (0.0296)	-0.1106*** (0.0295)	-0.0583* (0.0305)	-0.0988*** (0.0314)	-0.0035* (0.0020)	-0.0028 (0.0019)	-0.0083*** (0.0032)	-0.0057** (0.0026)
Observations	1,762	2,089	1,700	2,133	1,762	2,089	1,700	2,133	1,762	2,089	1,700	2,133	1,762	2,089	1,700	2,133
R-squared	0.2318	0.3203	0.3469	0.2825	0.2454	0.3816	0.2830	0.2956	0.2727	0.5004	0.3253	0.2743	0.0518	0.0524	0.0657	0.0933
Number of Centre	509	638	613	667	509	638	613	667	509	638	613	667	509	638	613	667
Right votes	0.1002*** (0.0234)	0.0939*** (0.0246)	0.0978*** (0.0236)	0.0485 (0.0395)	-0.0101 (0.0198)	-0.0202 (0.0193)	0.0236 (0.0222)	0.0355 (0.0377)	-0.0853*** (0.0244)	-0.0707*** (0.0227)	-0.1205*** (0.0219)	-0.0760** (0.0376)	-0.0048** (0.0020)	-0.0029 (0.0019)	-0.0009 (0.0032)	-0.0080** (0.0037)
Observations	1,945	1,945	1,944	1,948	1,945	1,945	1,944	1,948	1,945	1,945	1,944	1,948	1,945	1,945	1,944	1,948
R-squared	0.3208	0.3036	0.2482	0.2376	0.2773	0.4331	0.3401	0.3272	0.3461	0.3769	0.3208	0.2697	0.0530	0.1098	0.0824	0.0563
Number of Centre	811	972	961	766	811	972	961	766	811	972	961	766	811	972	961	766
Left votes	0.1016** (0.0444)	0.0887*** (0.0300)	0.0664* (0.0343)	0.1352*** (0.0360)	-0.0012 (0.0176)	-0.0068 (0.0252)	-0.0029 (0.0276)	-0.0633*** (0.0239)	-0.0982** (0.0412)	-0.0786*** (0.0302)	-0.0593* (0.0360)	-0.0676** (0.0304)	-0.0022 (0.0020)	-0.0034 (0.0032)	-0.0042 (0.0026)	-0.0043*** (0.0016)
Observations	1,950	1,944	1,943	1,945	1,950	1,944	1,943	1,945	1,950	1,944	1,943	1,945	1,950	1,944	1,943	1,945
R-squared	0.2176	0.3224	0.3007	0.2758	0.2013	0.1701	0.1239	0.2394	0.2081	0.2814	0.2603	0.3910	0.0777	0.0633	0.0726	0.0872
All controls	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Centre FE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Note. We report the coefficients of “Distance to closest municipality hosting refugee centres” (in hundreds of km) separately by the quartiles of: unemployment, wealth, crimes and political orientation . All regressions include municipality with closest centre fixed effects and controls at the municipality level. Standard errors are clustered at same level. *** p<0.01, ** p<0.05, * p<0.1