Finding the Warmth of other Suns? Refugee Reception, Extreme Votes and Hate Crimes

Matteo Gamalerio*

Mario Luca†

Max Viskanic‡

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Abstract

Does refugee reception lead to more hate crimes against foreigners? What is the impact of refugee reception on extreme-right voting and which role does the media play in the transmission? Using data on Italian SPRAR refugee centres we show that the reception of refugees across Italian municipalities leads to a decrease in extreme-right voting and hate crimes against foreigners. We analyze which role media coverage can play in the transmission. Using an instrumental variables approach, we find that the for the average assignment of 15 refugees per municipality the growth in vote shares for the extreme-right parties is decreased by 12.5 percentage points, which amounts to 2.25 percentage points looking at differences in vote shares. We also find that the hosting of 50 refugees leads to a reduction of about one hate crime over the period between 2013 and 2017. The effect on extreme voting is mainly driven by municipalities where local newspapers are less biased against migrants, where sport newspapers distribution is lower and where the local population has lower misperceptions of the presence of migrants.

Keywords: Political Economy; Migration; Italy; Migrants

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*Institut d'Economia de Barcelona (IEB), University of Barcelona, m.gamalerio@ub.edu.

†Sciences Po, Economics Department, mario.luca@sciencespo.fr.

‡Sciences Po, Economics Department, LIEPP and IC Migrations, max.viskanic@sciencespo.fr.

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1 Introduction and Background

The refugee crisis has been at the centre of the global debate during the last years. In Europe, the salience of the topic has been a consequence of the wide political rhetoric and the increasing number of asylum applications of asylum status in recent years (Figure 1). The debate about the relocation of refugees across and within European countries has proven a politically strenuous exercise. As a result, evidence about the electoral and social repercussions of the redistribution of refugees can inform policy making in this regard. For this reason, a recent literature in Political Economy has studied the effect of immigration inflows on voters' behaviour and attitudes. However, the evidence produced is contradictory, with some studies that find that immigration increases the support for extreme-right parties and anti-immigrations attitudes (Otto and Steinhardt (2014); Barone et al. (2016); Harmon (forthcoming), Hangartner et al. (2017a), Hangartner et al. (2017b), Dustmann et al. (2018)) and others which find oppposite results (Steinmayr (2018), Vertier and Viskanic (2018)).

This paper aims to contribute to this recent literature in two ways. First, we study the effect of receiving refugees on voting for extreme-right parties and on hate crimes against foreigners. Second, we analyse the role of media in amplifying the effect of refugee reception on voters' behaviour and attitudes, which is a channel understudied in the literature given scarce data availability. We implement the analysis using data from Italian municipalities and exploiting specific features of a program for the relocation of refugees called "The Protection System for Asylum Seekers and Refugees" (SPRAR). The Italian Home Office manages the SPRAR program, whose main goal is the relocation of refugees and asylum seekers in small reception centres across Italian municipalities.

The empirical analysis studies the effect of the number of refugees and asylum seekers hosted in a specific SPRAR centre on the change in the support for extreme-right parties between the 2013 and the 2018 national elections. It also studies the effect of the number of refugees and asylum seekers hosted on the change in hate crimes against foreigners between 2013 and 2017. The results are obtained both through ordinary least squares (OLS) and instrumental variables (IV) estimates. The IV analysis is developed to deal with the endogeneity of the number of refugees and asylum seekers hosted in a specific SPRAR centre, given that municipal governments can decide whether to open or not refugee centres on the their territory. As explained in more detail in sections 2 and 4, the IV approach exploits a specific feature of the SPRAR program: while municipalities decide how many refugees to host in the SPRAR centre that they open, the Home Office establishes the maximum number which depends on specific population thresholds. Thus, as described below, we use this institutional feature and we instrument the number of

refugees and asylum seekers hosted with this theoretical maximum number imposed by the Home Office, which is heterogeneous across Italian municipalities depending on the size of the municipal population.

The main results of the empirical analysis show that hosting refugees has a negative effect on both voting for extreme-right parties and hate crimes against foreigners. More specifically, the IV estimates indicate that for the average assignment of 15 refugees and asylum seekers per SPRAR centre, the increase in the vote share of extreme-right parties is reduced by 12.5 percentage points, which amounts to 2.25 percentage points looking at differences in vote shares. IV estimates also show that hosting 50 refugees and asylum seekers leads to a reduction of about one hate crime during the years between 2013 and 2017. The heterogeneity analysis indicates that the effect on extreme-right voting is driven by municipalities where local newspapers are less biased against migrants, where sport newspapers' distribution is lower and where the local population has lower misperceptions of the presence of migrants. The results are robust controlling for municipal population, municipal socio-economic features, local politicians' characteristics and pre-trends in voting during the national elections run before 2013. Finally, in the near future, we plan to complement these main results by analysing the effect of the reception of refugees on municipal public services like schools, municipal population growth and the local economy.

This paper aims to contribute to two strands of literature. The first is the recent political economy literature, which studies mostly how large immigration inflows and the reception of many refugees and asylum seekers affect the electoral success of extreme-right and populist political parties. Some of the papers in this literature find that large flows of immigration have a positive effect on the vote share of extreme-right and populist political parties (Otto and Steinhardt (2014); Barone et al. (2016); Harmon (forthcoming), Hangartner et al. (2017a)). The evidence produced suggests that this positive effect is concentrated in small municipalities and rural areas (Dustmann et al. (2018)) and it is stronger for migrants with dissimilarities in terms of language, religion and race compared to natives (Mendez and Cutillas (2014)).

Conversely, other papers in the same literature find that migration can reduce the support for extreme-right and populist political parties especially when the inflow is small and of a short amount of time (Steinmayr (2018); Vertier and Viskanic (2018)). More specifically, Steinmayr (2018) uses data from Austria to show that municipalities that host refugees experience a reduction in the positive overall trend in support for the far-right Freedom Party. In addition, Vertier and Viskanic (2018) show that the opening of refugee centres, that follows the relocation of refugees from Calais to other French municipalities, reduces the vote share increase of the far-right Front National. Our baseline results on voting for extreme-right parties are in line with the results of these two papers. However,

differently from Steinmayr (2018) and Vertier and Viskanic (2018), we investigate the mechanism behind this baseline result, studying the interaction between the reception of refugees and hate crimes and analysing the role of media in amplifying the effect of refugee reception on voters' behaviour and attitudes.

The second strand of literature studies the potential determinants of hate crimes and the relationship between immigration and hate crimes. A first contribution to this literature is the paper by Glaeser (2005), who theoretically studies under which circumstances politicians have incentives to supply hate-creating stories to discredit opponents whose policies benefit minorities. The main prediction of the theoretical model is that hatred declines when voters have incentives to learn the truth and that interactions with minority groups may provide those incentives. Our paper can be seen as an empirical test of the theory developed by Glaeser (2005).

While both in the past and in recent years the literature has produced extensive empirical evidence about the relationship between immigration and crime (e.g. Bell et al. (2013); Pinotti (2017); Amuedo-Dorantes et al. (2018)), the empirical evidence on the potential determinants of hate crimes against foreigners is more recent. Among the potential determinants of hate crimes and negative attitudes against migrants we find terrorist attacks (Hanes and Machin (2014)), social media and internet (Chan et al. (2016); Mueller and Schwarz (2018a) and Mueller and Schwarz (2018b)), exposure to religious minorities (Colussi et al. (2017)) and large inflows of refugees and asylum seekers (Hangartner et al. (2017b); Sola (2018)). The evidence produced by this literature indicates that on average all the factors studied have a positive effect on hate crimes and negative attitude toward migrants. We contribute to this literature by showing that the exposure to a small amount of refugees has a negative effect on hate crimes against foreigners. Our results suggest that the contact between the native population and small inflows of refugees and asylum seekers can generate positive reactions by the local population and that some of it is also driven by the exposure of hate crimes against immigrants and and media coverage in general.

Three papers study the reception of refugees in Italy. Genovese et al. (2016) use survey data from Italian Regions to study how public feelings about non-EU immigration is influenced by the central government's distribution of refugees across different regions. Our paper differs in that they study the effect of the reception of refugees on attitudes using survey data, while we use data on hate crimes and on voting behaviour measured at municipal level. Bratti et al. (2017), using data on Italian municipalities and on the 2016 Italian Constitutional Referendum, show that the geographical proximity to refugee reception centres leads to an increase in turnout and in the share of anti-government votes, measured by the votes share of "no" to the Constitutional Reform. Our paper differs from

their in that we focus on the opening of a refugee centre within a municipality, rather than on the opening of refugee centres in neighboring municipalities. This different focus enable us to study the effect of a direct contact between the local population and the refugees hosted, rather than the indirect contact studied by Bratti et al. (2017), and it probably explain why we find results that go in a different direction. Finally, data on SPRAR refugee centres are provided by Gamalerio (2018), who uses data on Italian municipalities to study the effect of electoral incentives on the probability that a municipal government opens a SPRAR centre. The analysis Gamalerio (2018) suggests that the opening of refugee centres in Italian municipalities is endogenous to various observable and unobservable municipal characteristics. For this reason, in this paper we implement an instrumental variable strategy that enable us to deal with this potential endogeneity.

The structure of the paper is the following one. Section 2 describes the institutional background, while section 3 the data used. Section 4 explains the identification strategy, section 5 describes the results and section 7 concludes.

2 Institutional Setting

In the allowing sections we will first outline the way how devolution is organised in Italy, i.e. what are the differing spending and public policy realms of municipalities. Then we will outline the government policy of how the allocation of refugees works across Italian municipalities. Lastly we will briefly outline the functioning of Italian National elections.

2.1 Italian municipalities

In Italy, there are around 8000 municipalities, which represent the lower level of government.[1] Municipalities have an important role in the Italian institutional setting, given that they manage important public services like municipal police, transport, welfare, public utilities (e.g. water, waste collection) and environmental services (e.g. parks).

Before the 2008 financial crisis and the 2011 public debt crisis, municipal services were funded through a mix of local taxes and grants from higher levels of government. However, following the financial and public debt crisis, the central government has reduced many municipal grants. The main sources of municipal revenues today are fees on public services and taxes like the property tax and a surcharge on the national personal income tax ("Addizionale Irpef").[2] Municipal expenditures represent approximately 10 per cent

[1]The highest level of government in Italy is the national parliament, regions and provinces represent the second and third levels. The European parliament and European Commission represent the supranational level of government.

[2]Today, the property tax is called "IMU", while in the past was known as "ICI". The surcharge on the national personal income tax is called "Addizionale Irpef".

of total public expenditures.

Starting from 1993[3], Italian mayors are directly elected by the voters. Municipalities with more than 15,000 inhabitants use a dual ballot system, while those below the threshold use a plurality system. The coalition of the winning candidate receives 60 % of the seats of the municipal council in municipalities above 15,000 and 66.66 % below the threshold. The electoral term lasts five years, and second-term mayors cannot be immediately re-elected. Finally, Italian municipalities are governed by three possible types of coalitions: 1) centre-left; 2) centre-right; 3) "Civic Lists".[4]

2.2 The allocation system for refugees

This paper studies how the opening of refugee reception centres affect voting for extreme-right parties and hate crimes. We focus on a type of reception centres called "The Protection System for Asylum Seekers and Refugees" (SPRAR). SPRAR centres constitutes the second level of reception, which is meant to host refugees and asylum seekers coming from the first level of reception.[5] The goal of SPRAR centres is to teach the Italian language to refugees and asylum seekers, to help them to find a job and to integrate in the society.

When the Home Office wants to open new SPRAR centres, it issues a call for competition. The Home Office decides the timing of these calls, and this normally depends on the need to allocate refugees from the first to the second level of reception. While the timing of the calls is established by the Home Office, the decision of opening a refugee centre is taken by the municipal governments. Municipalities can open three types of centres: first, ordinary centres, for refugee without specific issues. Second, centres for unaccompanied minors. Third, refugee centres for disable refugees and asylum seekers. Municipalities can open only one type of centre, however, for some calls gave the opportunity to open one centre for minors or one centre for disable refugees in addition to one ordinary centre.

The Home Office establishes the maximum number of places for refugees that centres can provide. This number is established through the rules determined by the call for competition and it depends on population. Table 2 reports the minimum and the maximum number of places that a centre can provide by tender. As we can see. with the exception of the last two tenders studied, the maximum number depends on population. As described

[3]See Law 81 in 1993

[4]"Civic Lists" are local parties independent from national political parties.

[5]In Italy, the first level of reception is represented by the following types of centres: first, the "Centri di primo soccorso e accoglienza", i.e. First aid and hospitality centres (CPSA). CPSA host migrants just arrived in Italy. Second, we have the "Centri di accoglienza", i.e. Hospitality centres (CDA). CDA check the regularity of the presence of migrants in Italy. Third, we have the CARA ("Centri di accoglienza per richiedenti asilo", i.e. Reception centres for asylum seekers) centres, which receive migrants from CPSA who applied for asylum. Finally, we have the "Centri di accoglienza straordinaria", i.e. Centres for extraordinary reception (CAS), which have been introduced in 2014 to deal with the emergency created by the refugee crisis. See Gamalerio (2018) for more information.

in more details in section 4, in the empirical analysis we exploit this institutional set up to build our instrumental variables approach.

The central government transfers grants to the municipalities that open a SPRAR centre. These grants are meant to cover the costs of the centre and to pay firms and cooperatives that work with the centre, with potential benefits for the local economy in terms of employment. For example, the cooperative "In Migrazione" has estimated that approximately 8 professionals are hired every 20 refugees hosted.[6] In addition, Gamalerio (2018) shows that opening a SPRAR centres has fiscal benefits in terms of increased expenditures funded with grants coming from higher levels of government.

We focus our main analysis on the SPRAR centres opened in the period 2014-2017, which are the years during which the refugee crisis became more intense, as shown by the increasing number of asylum seekers who arrived to EU countries (Figure 1). In these years, also participation to the SPRAR program grew more. In fact, as shown by Table 3 and Figures 2 and 3, both the number of municipalities that entered the SPRAR program and the number of places made available and refugees hosted increased intensively starting from 2014.

3 Data

The main source for the data used is the paper by Gamalerio (2018), from which we extract data on all Italian municipalities for the years 2014-2017. The data comes from different sources. First, the data contains information about the SPRAR calls for competition issued in the period 2013-2017 (Table 1). The main sources are: 1) the Home Office;[7] 2) The SPRAR webpage;[8] 3) the "Briguglio archive",[9] which reports different documents about migration.

Second, data on hate crimes are provided by *Lunaria*, which is a non-profit association that promotes peace, social justice, equality and integration for minorities.[10] Since January 2007, *Lunaria* has been building a database ("Cronache di ordinario razzismo", see: Cronachediordinariorazzismo.org) on hate crimes against immigrants that occur in Italian municipalities. The database has been constructed collecting information about hate crimes from local and national newspapers. For every hate crime it is possible to know the exact date and the municipality. In addition, *Lunaria* provides a summary of

[6] See the document "Accoglienza rifugiati: un'ordinaria emergenza" (inmigrazione.it)

[7] The Home Office publishes on its webpage detailed information about all the calls for competition. See the link: http://www.interno.gov.it/it/amministrazione-trasparente/bandi-gara-e-contratti.

[8] SPRAR reports are published every year by the Home Office and the Association of Italian Municipalities (ANCI), and can be downloaded from http://sprar.it/.

[9] http://briguglio.asgi.it/immigrazione-e-asilo/index.html.

[10] See webpage: https://www.lunaria.org

the text of the newspapers' articles used to identify attacks against immigrants. *Lunaria* divides hate crimes in categories, and specifically it is possible to identify hate crimes committed on social media, by newspapers and local media, by single individuals, by organised groups, and by politicians, political parties and institutional actors.

Third, the data reports also information about municipalities' characteristics. The main sources are the Home Office and the Italian Statistical Office (ISTAT). The Home Office publishes electoral data from elections contested both at local and national level, and for this paper we collected data about Italian national elections contested in 2018, 2013 and 2008, 2006, and 2001 for the election to the chamber of Deputies only.[11] ISTAT provides data[12] on the total municipal population, the foreign population legally resident in Italy by municipality and year[13], the educational level of the municipal population, the percentage of children and elderly, and socio-economic variables like unemployment rate, number of firms and income. Finally, the Home Office publishes data on the characteristics of municipal politicians[14] like age, gender, past occupation, educational level and political experience.

As explained below, the final sample is contains 7639 Italian municipalities that did not open any refugee centre before 2014. Table 4 reports the descriptive statistics about this final sample, where the municipalities are split in the group of municipalities that did open at least a new refugee centre in the years 2014-2017 and those that did not open any centre in the same period. All the aforementioned variables are used as controls in our regressions.

4 Identification strategy and main Empirical Specification

The goal of this paper is to study the effect of the opening of refugee centres on voting for extreme-right political parties and on hate crimes against foreigners. The analysis is implemented analysing the effect of new SPRAR refugee centres opened in the years 2014-2017, which represent the period in which the European refugee crisis started and escalated, with the arrival of more than one million refugees and asylum seekers in 2015 alone. Focusing on this period enables us to study how voters' attitudes changed after the arrival of new refugees in a period in which migration became a salient topic in politics and in the media.

[11] This is due to the fact that there is a minimum age for voters to elect the Senate and thus votes for the Chamber of Deputies are are a preferred measurement of citizens' political preferences.

[12] Link: http://dati.istat.it/

[13] Link: http://demo.istat.it/.

[14] Link: http://amministratori.interno.it/.

The empirical analysis is developed using the sample of Italian municipalities that did not open any refugee centre before 2014. As we can see from Table 3, the majority of SPRAR centres has been opened starting from 2014, when the SPRAR program was enlarged to deal with the increasing number of refugees and asylum seekers who arrived to Italy. Dropping the small number of municipalities with SPRAR centres opened before the beginning of the refugee crisis enables us to focus on the effect of new centres only and to avoid the potential influence of existing centres, which could have affected voters' attitudes even before the starting of the refugee crisis.[15]

The main estimation we run in this paper is the following:

$$Y_{it} = \alpha_0 + \alpha_1 \#RefugeesHosted_{it} + \alpha_k X_{k,it} + \epsilon_{it} \tag{1}$$

where Y_{it} captures mainly two different dependent variables. The first dependent variable used is equal to $\Delta_{Right} \equiv log(extreme - right_{2018}) - log(extreme - right_{2013})$, which is the change of log voting shares for extreme-right parties between the 2018 and the 2013 national elections.[16] The second dependent variable is $\Delta Hate - Crime \equiv (Hate - crimes_{2017}) - (Hate_crime_{2013})$, which is the change in the number of hate crimes during the same period.[17] The vector $X_{k,it}$ contains municipal and mayoral characteristics that can be potentially correlated with both the dependent and the treatment variables and is outlined in the data dscription.

The main treatment is $\#RefugeesHosted_{it}$ which is our measure for the number of refugees and asylum seekers hosted in the new SPRAR centres opened during the years 2014-2017. The data collected about SPRAR centres does not contain the number of individuals effectively hosted in every single SPRAR centre. However, the Home Office gives information about the number of places made available for hosting in every SPRAR centre. Given that, as shown by Figure 2, the aggregate number of individuals and the number of places made available in SPRAR centres are highly positively correlated, we use the number of places made available by every SPRAR centre as a proxy for the number of refugees hosted.[18] More specifically, under the assumption that individuals hosted in a SPRAR centre remain approximately one year,[19] we calculate the total number of places

[15]Results are similar if we do not drop this small group of municipalities. These results can be made available by the authors upon request.

[16]We consider the following extreme-right political parties: Lega Nord, Fratelli d'Italia, Casa Pound, La Destra, Forza Nuova, Fiamma Tricolore, Rinfondazione Missina.

[17]We decided to use hate crimes until 2017, because 2017 is the last year for which hate crimes have been collected for the entire year.

[18]The yearly average ratio between number of individuals hosted and number of places made available is 1.80 for the years starting from 2006, and 1.26 for the years from 2014. The number of individuals hosted is bigger than the number of places because refugees may stay in a SPRAR centre for less than one year

[19]This assumption is justified by the fact that over the period studied the yearly average ratio between

made available per refugee centre over the entire period of opening, and then we calculate the average of the number obtained across the five tenders studied in our data (see Table 1).[20]

Given that the decision of opening a SPRAR centre with a specific number of places is clearly endogenous, to deal with the potential biases in the OLS analysis we turn to an instrumental variables (IV) approach. More specifically, we exploit an institutional feature of the SPRAR program, which is that the minumum and the maximum number of places that can be made available in a single SPRAR centre are decided by the Home Office through the rules established for every specific call for competition. More in detail, as indicated in Table 2, the minimum and maximum number of places imposed by the Home Office are different across the 5 tenders studied. Interestingly, for 3 of the 5 tenders studied, the maximum number of places depends on different population thresholds. This institutional arrangement creates an interesting variation across municipalities in the theoretical maximum number of places that the municipalities have been able to create.

As suggested by Figure 4 and columns 1-2 of Table 5, this theoretical maximum number of places imposed by the Home Office is highly correlated with the actual number of places made available by the municipalities, and it can thus be used as an instrument for our treatment variable in the following first stage regression:[21]

$$\#RefugeesHosted_{it} = \gamma_0 + \gamma_1 \#PredictedRefugees_{it} + \gamma_k X_{k,it} + u_{it} \tag{2}$$

where $\#PredictedRefugees_{it}$ is average number of theoretical maximum places that a municipality can made available across the 5 tenders.[22] To control for the fact that $\#PredictedRefugees_{it}$ is determined by population thresholds, in $X_{k,it}$, besides adding municipal and mayoral characteristics, we control for the log of the municipal population.

number of individuals hosted and number of places made available is 1.26.

[20] For example, SPRAR centres opened during tender 1 remained active for 3 years. Thus, in our calculations, for a centre with 10 places available every year we considered a total of 30 places for the entire period of opening. Calculating the number of places in this wat should enable us to better approximate the number of refugees hosted by the SPRAR centre.

[21] Some dots in Figure 4 are above the 45 degrees red line, suggesting that some municipalities made available a number of places bigger than the maximum allowed. This behaviour can be explained by the fact that, under some exceptional circumstances, the Home Office asked to some specific municipalities to concede extra-places to be used in case of emergency (i.e. in the case of big number of individuals to allocate).

[22] As done for the treartment $\#RefugeesHosted_{it}$, we first calculate the total number of theoretical maximum places that can be made available per refugee centre over the entire period of opening, and then we calculate the average of the number obtained across the five tenders studied in our data. So, for example, for a municipality with less than 5000 inhabitants that is considering to apply for a SPRAR centre during tender 1, the maximum number of places that can be made available over the 3 years of opening is 45 (i.e. 15 multiplied by 3). Implementing this calculation should enable us to better approximate tha maximum number of individuals that the municipality can potentially host during the opening period of the centre.

In this way, we can exclude that the effect of $\#PredictedRefugees_{it}$ on $\#RefugeesHosted_{it}$ is driven by the size of the municipal population.

Then, under the exclusion restriction assumption that $\#PredictedRefugees_{it}$ can affect voting and hate crimes only through $\#RefugeesHosted_{it}$, we run the following second stage regression:

$$Y_{it} = \beta_0 + \beta_1 \#\hat{RefugeesHosted}_{it} + \beta_k X_{k,it} + \eta_{it} \tag{3}$$

where $\#\hat{RefugeesHosted}_{it}$ is the predicted value of $\#RefugeesHosted_{it}$ obtained from equation 2. The exclusion restriction assumption seems reasonable in this context for three reasons. First, the maximum number of places that a municipality can made available in a SPRAR centre is decided by the Home Office through the rules established by the calls for competition, and the mayors do not have any negotiating power on this. Second, while the theoretical maximum number of places imposed by the Home Office depends on specific population thresholds, Figure 4 clearly suggests that there is not a regular pattern of self-selection into the SPRAR program by part of groups of municipalities with different population sizes. This evidence seems to exclude that the main results of the paper are driven by specific groups of municipalities characterized by a specific population size. Third, the first stage and the IV regressions results are obtained controlling for population and for other factors that may be correlated with population and with the different thresholds used to calculate $\#PredictedRefugees_{it}$. In conclusion, given the evidence from the first stage regression and given the plausibility of the exclusion restriction assumption, we are confident that the main parameter of interest β_1 can estimate the causal effect of an additional refugee hosted on voting for extreme-right parties and on hate crimes against migrants.

5 Main Results

In this section we will discuss our main results. In the first part we will present differing regressions showing the impact of hosting refugees on votes of Extreme Right. Then we will examine heterogenous effects of those refugees on said votes. Lastly we will look at the impacts of refugees on Hate Crimes as well as votes for the centre-left coalition.[23]

5.1 Refugees and Voting for the Extreme Right

In this section we discuss our main empirical results. As we can see in Table 5 the number of predicted refugees by the government is highly correlated with the number of actual

[23] In this setting the centre-left coalition will include votes from the Partito Democratico, Piu Europa and Centro Democratico.

refugees both with and without controls (column 1 and column 2). In this case if the government theoretically predicts the municipality to take 10 refugees, about 3 will be effectively hosted by said municipality.

Once we look at our main regression we find the OLS coefficient to be significant around 0.5 percentage points in difference in growth of shares for the Extreme Right (Column 4). This is similar in magnitude to the reduced form once we introduce the predicted number of refugees instead of the actual number of refugees hosted. Though once we instrument in the two-stage-least-squares setting we find that the hosting of one refugee in a municipality decreases the growth rate in vote shares for the extreme right parties by 1.3 percentage points. Given that the average number of refugees hosted in a municipality is 15, the effect is of 20 percentage points. Taking into account that that the Extreme Right wing parties in Italy gain about 160% between 2013 and 2018 this effect means that in those municipalities hosting refugees, the increase of the Extreme Right votes was reduced by 12.5 percentage points. This results amounts to a lower increase in vote share of 2.25 percentage points.[24] In terms of vote shares this effect is quantitatively similar to results found in Steinmayr (2018) and Vertier and Viskanic (2018).

[Table 5 about here]

5.2 Heterogenous effects of Refugee Reception on Voting for the Extreme Right

Our main result on heterogenous effects of hosting refugees on Extreme Right votes are exposed in Table 6. In this case we interact our variable of interest to be used in the heterogeneity analysis with our treatment. Therefore we interact this variable with the number of refugees hosted and instrument this with said variable interacted with the predicted number of refugees. Here, we maintain the number of refugees instrumented with the predicted number of refugees and include it in all regressions (line 1). In this case every regression has two instruments and two variables to be instrumented and thus the treatment and the interaction of the treatment with the covariate are exactly identified.

As we can see in the second column the interaction with the "Perception gap" is positive. "Perception Gap" is the difference between the share of immigrants in a given community subtracted from the share of immigrants people in a municipality thinks there

[24]This is the case as the average increase in Extreme right votes in Italy from 2018 to 2013 is of 18 percentage points.

are. The higher this number the more do people overestimate the share of immigrants in their community. As we can see effects are dampened in municipalities, where this overestimation of immigrants is higher. This can be interpreted as the fact that municipalities, which are inhabited by more prejudiced people, will find it more difficult to reverse their bias against immigrants and thus vote more in favour of the extreme right. Additionally effects are less strong in municipalities that have a greater share of sport newspaper coverage.[25] The rationale for this could be that there are fundamentally two ways through which people can learn about immigrants. The first one is through direct contact with them and the second one is through reading about them in newspapers. Here what seems to happen is that the higher distribution of sports newspapers, which would most likely not feature stories about refugees or migrants, crowds out information about those refugees and thus leads to less knowledge about refugees. This result is in line with Freddi (2017) that shows that in the wake of refugee crisis people avoided morally relevant information that explained how to help refugees by clicking much less on those articles. Related to this result is also the dampened effect in municipalities where refugees are discriminated against in the media. The higher the discrimination in the media about refugees the smaller the effect on vote share of extreme right parties. The interpretation could be that people in municipalities are both influenced by which media is consumed and also by how certain topics such as refugees are covered. Therefore the more the media discriminates against refugees, the harder will it be for people to experience their contribution and also have contact with them. Other interaction variables such as the share of foreigners, the size of a municipality and the number of non Profit organizations active in the municipality do not seem to play a role.

[Table 6 about here]

5.3 Refugees, Hate Crimes and Voting for the Centre-left

In this section we examine the impact of refugee reception on voting for the centre-left coalition as well as Hate Crimes. Regressing the number of refugees on the change in Hate Crimes in municipalities between 2017 and 2013 gives no significant point estimate (Column 1). Once we directly introduce the predicted number of refugees (our estimate for the reduced form) we find a slight negative effect on Hate crimes against immigrants.

[25] Here we take the distribution of Corriere dello Sport and Gazzetta dello Sport

Once we carry out our two-stage-least-squares regression we find that there is a significant and negative point estimate of 0.017. Given the average introduction of 15 refugees per host municipality, the effect amounts to 0.255. Since discriminations between 2013 and 2017 stay constant and assuming a linear effect, hate crimes decrease by on average one incident every 60 refugees hosted. This effect is quite small, but still significant, given the high amount of refugees hosted and the low amount of Hate Crimes that occur. Interestingly it seems that more refugees are needed to reduce hate crime, then there are needed to change peoples' voting attitudes.

Then we replace our outcome variable with the votes in favour of the Centre Left Coalition. Since Italy did not have any major Extreme Left wing party at the election we focus on the votes of the centre left, which groups together progressive social democratic parties as well as some centrist civic lists and liberal parties. In this case we see that there is no effect running a standard OLS regression (Column 4). Once we introduce the number of predicted refugees directly into our main regression, we find a significant effect, but especially running our two-stage-least squares estimation we find a significant increase for the the centre-left parties of 0.075 for the average hosting of 15 refugees. Since the centre-left coalition lost about 35% in vote shares between 2018 and 2013, this means that in places that hosted refugees this decline for centre-left votes is decreased by 20 percentage points (about 0.33 percentage points in vote share difference).

6 Falsification exercises

In this section we describe a set of Falsification exercises we carry out in order to show that the exclusion restriction on our instrument is most likely warranted. In the first case we take our main instrumented equation and lag the outcome variable by respectively one, two and three periods (Table 8). Since the elections before took place in the year 2013, 2008, 2006 and 2001 we use those respective differences in votes shares for the Northern Ligue and other Right wing parties in the same format as we look at our main outcome variable. As we can see in each of those cases the point estimate is rather small and not significant.

In order to make sure that we are not picking up a differential trend in municipalities for vote shares for the extreme right, we sequentially add to our main equation the lagged outcome fo extreme right votes (Columns 4, 5 and 6). Lagging the outcome for three different periods and sequentially adding it to our main estimation does not greatly affect the size nor the p-value of our main estimation coefficient.

7 Concluding Remarks

In this paper, we show that hosting refugees can causally decrease votes for the extreme-right parties as well as hate crimes against immigrants. The estimated effect on votes for extreme-right parties can mostly be attributed to municipalities where local newspapers are less biased against migrants and where sport newspapers' distribution is lower. This underlines that information about refugees is both important in its dissemination as well as in the way it is presented. The effect is also stronger in municipalities where the local population has lower misperceptions of the presence of migrants.

In the near future, we plan to complement the analysis by studying the effect of the reception of refugees on municipal public services like schools, municipal population growth and the local economy.

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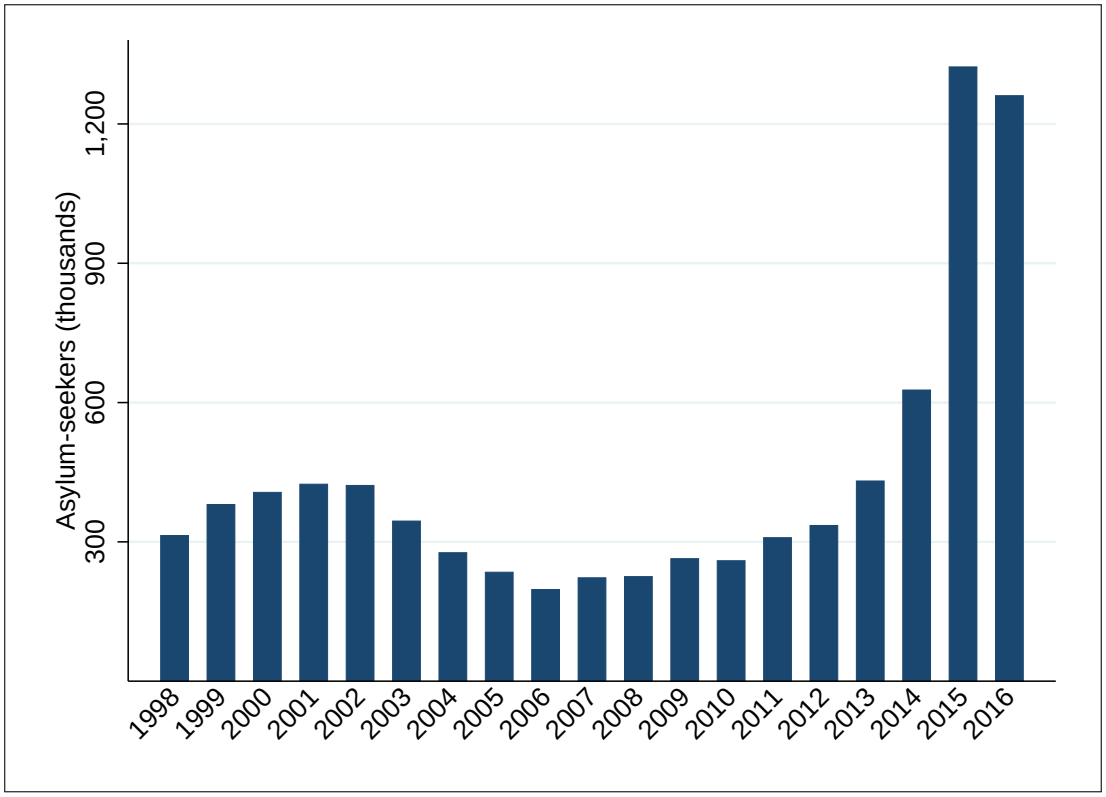
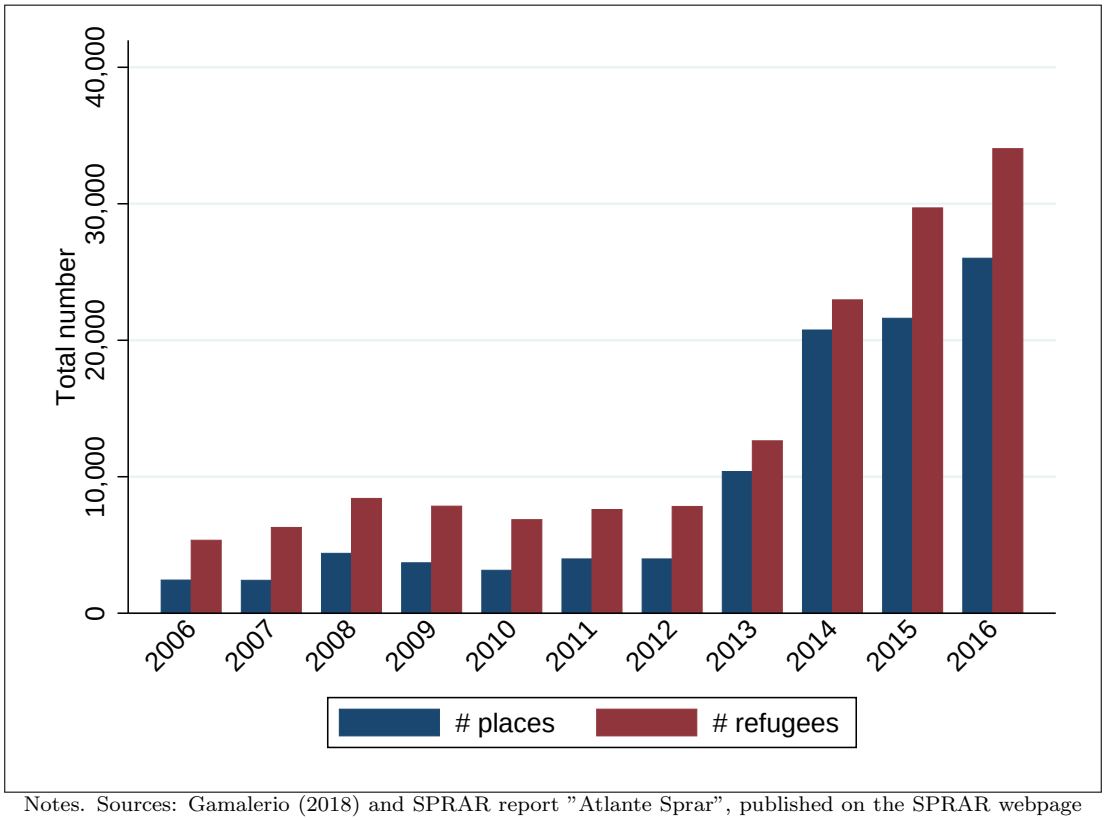
Figures and Tables

Figure 1: Number asylum seekers in EU Countries



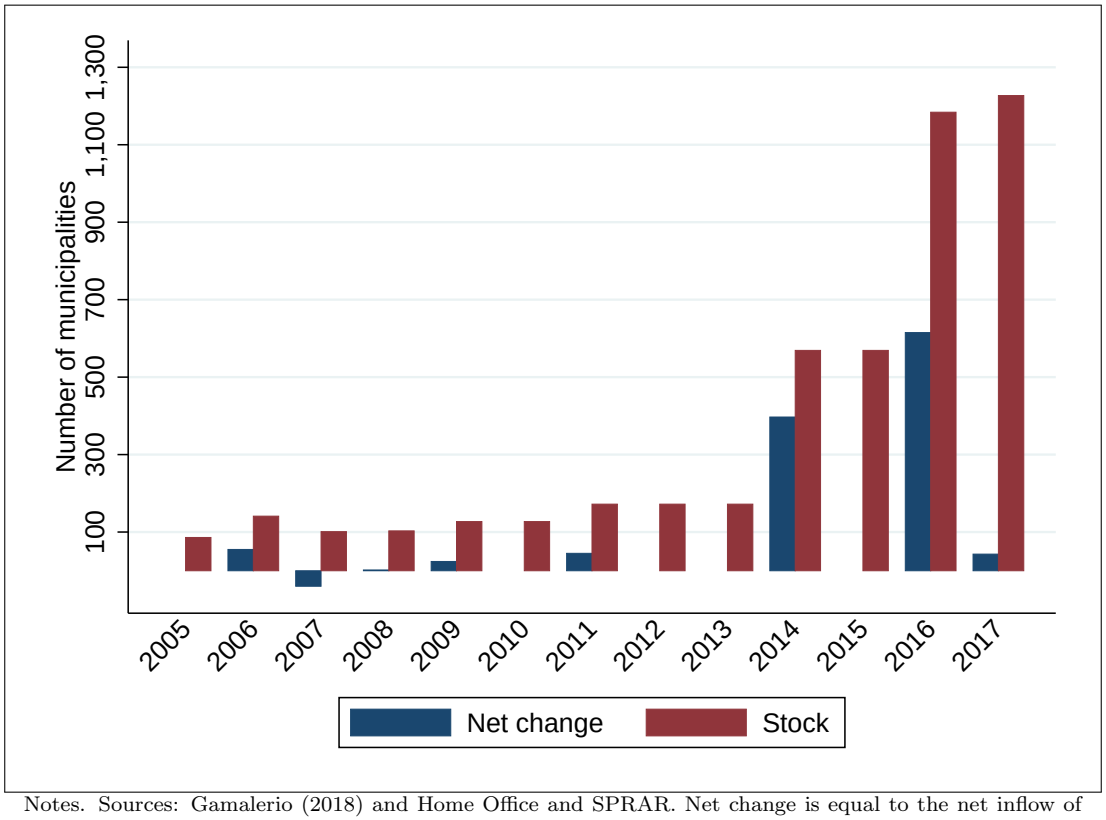
Notes. Asylum-seekers in EU Countries (thousands). Source: Gamalerio (2018) and Eurostat.

Figure 2: Number of places and refugees in SPRAR centres



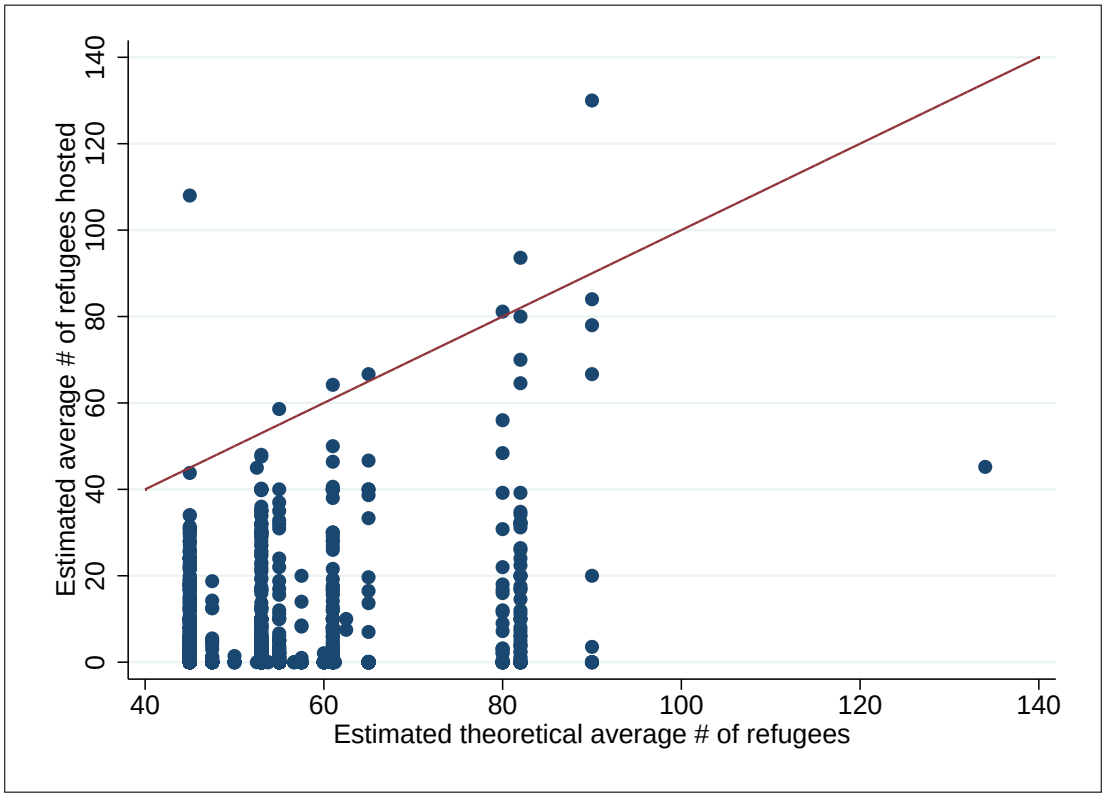
Notes. Sources: Gamalerio (2018) and SPRAR report "Atlante Sprar", published on the SPRAR webpage sprar.it. The graph reports the number of places made available and the number of refugees and asylum seekers hosted every year from 2006 up to 2016.

Figure 3: Number of SPRAR municipalities



Notes. Sources: Gamalerio (2018) and Home Office and SPRAR. Net change is equal to the net inflow of municipalities that enter the SPRAR program in a specific year (i.e. net change = entry - exit). Stock indicates the total number of municipalities that in a specific year have an active refugees' centre in their territory. See also Table 3.

Figure 4: First stage: number refugees vs theoretical maximun number of refugees



Notes. Sources: Home Office and SPRAR. The red line is 45 degree line.

Table 1: The timing of SPRAR tenders

(1)	(2)	(3)	(4)	(5)	(6)
Tender	Year	Date starts	Date ends	Date opens	Years active
1	2013	04/09/2013	19/10/2013	29/01/2014	2014-2016
2	2015	23/05/2015	22/07/2015	04/12/2015	2016
3	2015-2016	14/10/2015	14/02/2016	31/05/2016	2016-2017
4	2016	27/08/2016	30/10/2016	19/01/2017	2017-2019
5	2016-2017	31/10/2016	31/03/2017	01/07/2017	2017-2020

Notes. Sources: Gamalerio (2018), Home Office and SPRAR. Description columns: 1) In column 1, Tender is the number of the tender assigned for this paper; 2) In column 2, Year is the year in which the tender is issued by the Home Office; 3) The starting date of the tender is indicated in column 3 (Date starts); 4) The deadline for application to the tender is indicated in column 4 (Date ends); 5) The date of opening of the refugee centre is indicated in column 5 (Date opens); 6) If municipality i participates to the tender, then the refugee centre remains active for the years indicated in column 5 (Years active).

Table 2: Number of places in refugee centres by tender

(1)	(2)	(3)
Tender	Minimum number of places	Maximum number of places
1	15 for all municipalities	15 places until 5000 inhabitants 25 between 5001 and 40,000 50 between 40,001 and 200,000 100 between 200,001 and 1,000,000 150 between 1,000,001 and 2,000,000 250 from 2,000,001
2	6 for all municipalities	10 places until 5000 inhabitants 20 between 5001 and 15,000 30 between 15,001 and 50,000 40 between 50,001 and 200,000 50 between 200,001 and 500,000 70 from 500,001
3	10 for all municipalities	25 places until 20,000 inhabitants 40 between 20,001 and 40,000 50 between 40,001 and 200,000 100 between 200,001 and 1,000,000 150 between 1,000,001 and 2,000,000 250 from 2,000,001
4	10 for all municipalities	60 for all municipalities
5	10 for all municipalities	60 for all municipalities

Notes. Sources: Home Office and SPRAR. Description columns: 1) Tender is the number of the tender assigned for this paper; 2) Minimum number of places: minumum number of places for refugees and asylum seekers that needs to be guaranteed in the SPRAR centre; 3) Maximum number of places=maximum number of places for refugees and asylum seekers that can be provided in the refugee centre.

Table 3: Number of SPRAR municipalities

(1)	(2)	(3)	(4)	(5)
Year	Stock	Net change	Entry	Exit
2005	86	0	0	0
2006	141	55	60	5
2007	101	-40	8	48
2008	103	2	8	6
2009	127	24	33	9
2010	127	0	0	0
2011	172	45	51	6
2012	172	0	0	0
2013	172	0	0	0
2014	569	397	412	15
2015	569	0	0	0
2016	1184	615	615	0
2017	1227	43	154	111

Notes. Sources: Gamalerio (2018), Home Office and SPRAR. Year=calendar year. Stock (column 2) indicates the total number of municipalities that in a specific year have an active refugees' centre in their territory. Net change (column 3) is equal to the net inflow of municipalities that enter the SPRAR program in a specific year (i.e. net change=entry-exit). Entry (column 4) is the number of municipalities that enter the SPRAR program in a specific year (i.e. municipalities that open a refugees' centre), while exit (column 5) indicates the number of municipalities that leave the SPRAR program in a specific year (i.e. municipalities that close refugees' centre). See also Figures 3.

Table 4: Descriptive statistics:
Open a new centre vs. does not open a centre

	(1) Open new centre	(2) obs	(3) Does not open a centre	(4) obs	(5) p-value
Politicians characteristics					
Graduate mayor	0.508	1096	0.429	6543	0.000
Political experience	6.863	1096	6.365	6543	0.010
Unemployed	0.056	1096	0.061	6543	0.472
Age	51.851	1096	52.173	6543	0.302
Female	0.135	1096	0.136	6543	0.968
Independent	0.626	1096	0.690	6543	0.000
Left	0.181	1096	0.063	6543	0.000
Right	0.0465	1096	0.0382	6543	0.189
Early interruption mandate	0.0117	1096	0.008	6543	0.0464
Term limit	0.212	1096	0.198	6543	0.1740
Municipal characteristics					
Area	46.949	1096	33.626	6543	0.000
Longitude	12.234	1096	11.324	6543	0.000
Latitude	42.692	1096	43.572	6543	0.000
Altitude	320.184	1096	366.056	6543	0.000
Islands	0.093	1096	0.094	6543	0.909
South	0.314	1096	0.202	6543	0.000
Centre	0.154	1096	0.114	6543	0.000
North-East	0.078	1096	0.198	6543	0.000
North-West	0.359	1096	0.390	6543	0.054
Population	10858.580	1096	4692.597	6543	0.000
Population density	366.301	1096	251.738	6543	0.000
No-profit associations	0.004	1096	0.006	6543	0.000
Number of firms per capita	0.073	1096	0.077	6543	0.000
Unemployment	0.121	1096	0.096	6543	0.000
Income	13214.750	1096	13575.660	6543	0.000
% children	0.044	1096	0.042	6543	0.000
% elderly	0.200	1096	0.215	6543	0.000
% graduate	0.050	1096	0.045	6543	0.000

Notes. All Italian municipalities, excluding those that already opened a SPRAR centres before 2014. Years 20014-2017. *Open new centre* = 1 for municipalities that open at least a new refugee centre in the period studied. *Does not open a centre* = 1 for municipalities that did not open a centre in the period studied. Columns (1) and (3) report the mean values for the two samples; *obs* is the number of observations; *p-value* is the p-value of the difference between the means of the two samples.

Table 5: Refugee reception and voting for extreme-right parties

	(1) Refugees hosted	(2) Refugees hosted	(3) Δ_{Right}	(4) Δ_{Right}	(5) Δ_{Right}
Predicted Refugees	0.286***	0.308***		-0.004**	
	(0.032)	(0.045)		(0.002)	
Refugees hosted			-0.005***		-0.013**
			(0.002)		(0.006)
Regression	OLS	OLS	OLS	OLS	2SLS
Controls	No	Yes	Yes	Yes	Yes
Observations	7584	7584	7224	7224	7224
Adjusted R^2	0.096	0.149	0.444	0.443	0.441

* p<0.1, ** p<0.05, *** p<0.01

In the first two columns we run the first stage OLS regression first without then with controls with a dependent variable the number of refugees hosted. Columns 3 to 5 are our second stage specification, first run as OLS with our endogenous treatment, then the reduced form introducing our instrument instead of the endogenous regressor and lastly our 2-stage-least squares specification. The outcome here are votes for all Extreme Right wing parties most prominently the Lega Nord. All regressions include all the main controls outlined in the Data description (except for Column 1. Standard errors in parentheses are clustered at the local labour market level.

Table 6: Heterogenous effects of refugee reception

	(1) Δ_{Right}	(2) Δ_{Right}	(3) Δ_{Right}	(4) Δ_{Right}	(5) Δ_{Right}	(6) Δ_{Right}	(7) Δ_{Right}
Refugees	-0.013**	-0.016**	0.044	-0.017	-0.018	-0.012*	-0.012*
	(0.006)	(0.008)	(0.037)	(0.010)	(0.014)	(0.007)	(0.007)
$Refugees \times \frac{Foreigners}{Population}$	-0.080						
	(0.088)						
$Refugees \times PerceptionGap$		0.074*					
		(0.041)					
$Refugees \times \frac{Foreigners}{Population} 10$		0.000					
		(0.110)					
$Refugees \times LOGPOP$			-0.017				
			(0.013)				
$Refugees \times Non - Profit$				-2.357			
				(2.502)			
$Refugees \times Sport - newspapers - coverage$						0.003**	
						(0.001)	
$Refugees \times Media - discr$							0.006*
							(0.004)
Regression	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7224	7072	7224	7224	7187	7224	7224
Adjusted R^2	0.442	0.450	0.393	0.439	0.442	0.442	0.442

* p<0.1, ** p<0.05, *** p<0.01

All regressions are instrumental variables regressions instrumenting the number of refugees hosted by the number of predicted refugees. For the interaction variables listed from lines 2 onwards we instrument the interaction of refugees hosted and the variable with the interaction of predicted refugees and said variable. All regressions include all the main controls outlined in the Data description. Standard errors in parentheses are clustered at the local labour market level.Standard errors clustered at the local labour market level.

Table 7: Results on hate crimes and on left wing parties

	(1) $\Delta Hate-Crime$	(2) $\Delta Hate-Crime$	(3) $\Delta Hate-Crime$	(4) $\Delta_{Centre-Left}$	(5) $\Delta_{Centre-Left}$	(6) $\Delta_{Centre-Left}$
Refugees hosted	-0.001		-0.017*	-0.000		0.005**
	(0.002)		(0.010)	(0.001)		(0.002)
Predicted refugees		-0.005*			0.002**	
		(0.003)			(0.001)	
Regression	OLS	OLS	2SLS	OLS	OLS	2SLS
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7584	7584	7584	7271	7271	7271
Adjusted R^2	0.005	0.009	.	0.294	0.294	0.285

* p<0.1, ** p<0.05, *** p<0.01

In column 1 we regress using OLS the number of refugees hosted on hate crimes against immigrants. In column 2 we carry out the same regression, but include our instrument of predicted refugees instead of our main endogenous regressor. In Column 3 we estimate the impact of hosted refugees on Hate crimes using as an instrumented the number of predicted refugees. In Column 4 we run the OLS regression of Refugees hosted on votes for the Centre-Left and in column5 we run the same regression but introducing the instrument directly instead of the endogenous regressor. In Column 6 we run a 2SLS regression of the impact of refugees hosted on Centre-Left votes. All regressions include all the main controls outlined in the Data description. Standard errors in parentheses are clustered at the local labour market level.Standard errors clustered at the local labour market level.

Table 8: Effects on lagged outcomes and controlling for differential trends

	(1) $\Delta_{Right1308}$	(2) $\Delta_{Right0806}$	(3) $\Delta_{Right0601}$	(4) Δ_{Right}	(5) Δ_{Right}	(6) Δ_{Right}
Refugees hosted	0.001	0.006	-0.002	-0.013**	-0.010*	-0.012*
	(0.005)	(0.005)	(0.003)	(0.005)	(0.006)	(0.007)
Regressions	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Controls: $\Delta_{Right1308}$	No	No	No	Yes	No	No
Controls: $\Delta_{Right0806}$	No	No	No	No	Yes	No
Controls: $\Delta_{Right0601}$	No	No	No	No	No	Yes
Observations	7216	7257	7256	7216	7216	7209
Adjusted R^2	0.165	0.791	0.078	0.672	0.518	0.444

* p<0.1, ** p<0.05, *** p<0.01

Standard errors clustered by province in parentheses. Controls include socio-demographic and geographical characteristics of the municipalities as well political information on the mayor. In the first three columns the specificaiton is the main one just lagging the outcome variable once, twice and thrice respectively. In columns 4 to 6 we separately add the outcome variables in the first three columns in turn as controls.