The Political Effects of (Mis)Perceived Immigration

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Abstract

Several studies document that exposure to actual immigration affects political outcomes. This paper examines, instead, the influence of *expected* immigration, using data from local elections in Italy. We develop an index of potential exposure to pre-electoral sea arrivals that varies over time and space depending on immigrants' nationality. We find that such potential exposure causes a decrease in turnout and increases protest votes, shifting valid votes towards extreme-right parties. Support for populist and anti-immigration parties increased in highly exposed municipalities, where voters believed the new inflow of refugees would increase the local stock of immigrants. However, Twitter data show that these expectations do not reflect actual immigration trends; immigration salience rises mainly during the election period, while most arrivals occur months later. This suggests that, around elections, informal media can bias people's expectations and, consequently, influence voting behavior.

Keywords— Refugees; Immigration; Voting; Salience of immigration; Political Economy; Populism; Electoral campaigns; Media exposure; Twitter data.
JEL codes— D72; F22; D91; J15.

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1 Introduction

Recent national and European Parliament elections across European countries have shown increasing support for far-right and right-wing populist political parties, calling for a rise of nationalism in Europe (Guiso et al., 2017, 2019, Colantone and Stanig, 2019, Daniele et al., 2023). This political change has been exacerbated by the refugee crisis that peaked in 2016, as suggested by a growing number of studies examining, more in general, the influence of migration on political outcomes (Alesina and Tabellini, 2024). Most of these studies, however, focus chiefly on the political effects of *actual* immigration episodes, overlooking the role of voters' beliefs about prospective immigration. This study fills this gap analyzing how expectations of refugee arrivals affect political preferences. This question is crucial for countries as Italy, exposed to frequent episodes of refugee immigration, and where the mismatch between perceived and actual immigration, jointly with the upsurge of populist parties, has been extraordinarily high.[1]

Our main hypothesis is that the threat of (and anxiety about) refugee arrivals affected voting outcomes in Italian local elections. Voting preferences might be gradually shaped not much, or not only by past and present exposure to local immigrants (actual immigration) but also by expectations about future immigration (expected immigration). Arrival episodes usually gain importance in the media before the elections, thereby increasing the salience of immigration in political competitions and citizens' perceptions (Newman and Velez, 2014). Exposed to slanted media reports presenting the refugee arrivals as an "immigration crisis", voters may form biased expectations about prospective immigration, overestimating the magnitude of the phenomenon. Leaders of far-right political parties, in turn, fuel such expectations, showing that immigration can be a threat, aiming to influence voters' atti-

[1] Official statistics show that Italians over-estimate the share of immigrants living in their country by 18 percentage points; moreover, Italian populist parties increased their vote share by 42 percentage points from 2008 to 2018 (see Figure A1 in Appendix).

tudes towards immigration and their political preferences (Stantcheva et al., 2022, Barrera et al., 2020, Gentzkow et al., 2015, Allcott and Gentzkow, 2017, Couttenier et al., 2024). The combination of increased salience, biased expectations, and the heightened threat of immigration might lead unsatisfied supporters of traditional parties to either abstain from voting or express discontent through invalid/blank ballots or support for anti-establishment parties (Barone et al., 2016). Consequently, those parties proposing immigration restrictions can gain vote shares.

To assess the political impact of immigration expectations, we exploit variation in the time of refugee arrivals and the nationality composition of the boats landing at Italian ports, which, as we show, is exogenous to the local political cycle. We build an index of potential exposure to immigration that varies by municipality and over time, weighting the number of arriving nationalities by the share of incoming refugees' co-nationals residing in each municipality. Because, after disembarking, refugees cannot freely and immediately reach their desired destinations, our index captures the expected threat of refugee arrivals before the elections. More specifically, as migrants tend to settle where they have a sizeable pre-existing network of co-nationals (Altonji and Card, 1991, Barone et al., 2016), voters may form expectations about future immigration by combining information on pre-electoral refugee landings and the local stock of immigrants. Thus, immigration expectations can be higher (lower) where refugees are more (less) expected to go after landing, that is, in municipalities with a high (low) share of regular migrants that have the same nationality as that of the incoming refugees.

Relying on data from Italian municipal elections from 2010 to 2018, we perform first-differences regressions of political outcomes on the potential exposure to refugee arrivals, i.e. our empirical measure for *expected* immigration. Controlling also for the local share of migrants and the presence of refugee centers, which capture *actual* exposure to migration (Bratti et al., 2020, Vertier et al., 2020), our empirical strategy provides estimated impacts

of expected immigration on changes in political preferences.

We present two key findings. First, the potential exposure to new arrivals predicts the decline in voter turnout in Italian municipalities during the studied period and significantly contributes to the increase in protest votes. This result may be driven by pro-multicultural voters, including left-wing citizens, who are concerned about the evolving immigration crisis and dissatisfied with the current administration. Consequently, these voters may prefer to abstain from voting or invalidate their ballots rather than support an ideologically distant political force, such as a far-right party (Barone et al., 2016). Second, support for populist, anti-immigration, and extreme-right parties increases in municipalities with high exposure to potential immigrant inflows. Voters in these areas, anticipating significant immigration, tend to favor these parties. All these results, however, show nonlinear trends, supporting the established idea (Steinmayr, 2021, Gamalerio et al., 2023) that prolonged exposure to immigration may allow for the development of positive contact with immigrants, thereby fostering positive attitudes towards refugees upon their arrival.

Additional analyses shed light on the primary driving force behind our findings. We posit that the political effects of potential refugee exposure mainly stem from misperceptions and the perceived threat of future immigration. To support this hypothesis, we first document that immigration salience, proxied by immigration-related tweets, does not reflect the actual number of arrivals but rather follows the electoral cycle. Furthermore, while immigration salience and political preferences are influenced by refugee landings, actual local immigration levels are not. These findings suggest that heightened attention to immigration on social media may create false expectations about future immigration, which can consequently increase support for anti-immigration and populist parties. Additionally, we show that municipalities with better broadband coverage and provinces where immigration is a salient issue on social media drive the main findings, especially where sentiments of fear and anger dominate the discussion. Moreover, our results are particularly strong for municipalities

closer to disembarkation ports, emphasizing the significant role the perceived threat of future arrivals plays in voting behavior. Finally, a comprehensive set of robustness and heterogeneity tests confirms our results, highlighting the main mechanisms at work and ruling out endogeneity concerns.

This paper contributes to the previous literature in two ways. First, we assess how voters perceive and react to refugees' (prospective) arrival on the Italian coasts instead of estimating the impact of actual immigration (often measured as stock or flow of regular immigrants) on voting behavior. In other words, we test the role of potential rather than actual contact with immigrants, as real intergroup interactions do not enter our measure of immigration exposure (though we also control for it). Thus, conditional on the local share of regular migrants, our estimates identify the role of expected immigration on top of the political effects of regular migration. Second, we focus on the role of mass media in political attitudes and outcomes. Both the frequency and the tone of coverage of immigrants in the media influence the dynamics of anti-immigration attitudes (Boomgaarden and Vliegenthart, 2009). It has also been highlighted that the media coverage of migration boosts immigration worries (Benesch et al., 2019), and the spread of fake news may affect electoral outcomes (Barrera et al., 2020, Cantarella et al., 2023). By analyzing whether immigration salience is higher in municipalities mostly exposed to the media, we also test whether the importance of immigration-related issues followed the actual trend of refugee arrivals or, instead, the electoral cycle.

The paper is structured as follows: Section 2 discusses the institutional and political context. Section 3 outlines the variables and empirical strategy. Section 4 presents the baseline results, addresses endogeneity issues, and reports heterogeneity and robustness checks. Section 5 explores the main mechanisms. Section 6 concludes.

2 Background

2.1 Migrant landings in the media

Landing episodes were primarily discussed in the media before the elections. Google Trends statistics show that the frequency of searches for a migration-related topic in Italy follows the electoral cycle (Figure 1). Indeed, Google searches containing the Italian words "Sbarchi" (boat landings) or "Immigrati" (immigrants) tend to rise substantially in the month preceding or during the elections and decrease thereafter.[2] Moreover, considering the Italian words "Immigrati" (immigrants) or "Rifugiati" (refugees) contained in province-level tweets, the salience of immigration increased over time, reaching its peak in 2018. While the frequency of tweets generally follows the actual sea arrivals of refugees, we observe a mismatch between actual arrivals and migration-related tweets from 2017 onwards, when immigration-related tweets increase while boat landings decrease (Figure 2).

[Figure 1 and Figure 2 around here]

These dynamics suggest that, while voters are aware of and concerned about arrivals, their perceptions might not align with actual immigration patterns. Additional descriptive evidence highlights that national news outlets prioritize coverage of immigrants following arrivals, thereby increasing the topic's salience. We collect immigration-related tweets from prominent national news providers spanning from 2014 to 2018. Using an event study methodology, we compare the share of immigration-related tweets three months before and four months after a boat landing. Results indicate that media outlets' coverage of refugee landings increases following an arrival episode. This broader coverage coincides

[2]Figure A2 in Appendix shows a positive correlation between the standardized number of Google searches for the word "Immigrants" and the distance to the elections. Notably, immigration-related Google searches have an upward trend until local election month, yet go back to the pre-electoral level thereafter.

with heightened public demand for information, as evidenced by a rise in Google searches for both boat landings and immigrants in the months following a boat landing (Figure A3 in Appendix). We interpret this additional evidence as indicative of a pattern wherein national news outlets intensify coverage of boat arrivals, thereby informing citizens and eliciting increased public interest in the topic.

2.2 Institutional background

We use data from Italian municipal elections, which involve different municipalities in different years. Several elections occurred in the years considered in this paper, with only some of the municipalities voting in the same year and at the same time.[3] The municipal level in Italy includes over 8,000 government authorities. Elections (local council and mayor) occur every five years, with direct election of the mayor on a single or dual ballot, depending on population size. Cities with more than 15,000 inhabitants have a runoff stage among the two most-voted candidates if none collects more than 50% of the votes in the first stage. We use 2,877 municipalities regularly voting twice in 2010 and 2015, 2011 and 2016, 2012 and 2017, and 2013 and 2018 (91 out of 110 provinces). We drop from the sample municipalities that vote with a different schedule, e.g., when mayors, or at least half of the councilors, resign before the end of the term, dissolution of suspected mafia presence in the council, merging with other municipalities, and other law violations.

We describe the Italian migrants' reception system (as of the period considered in this study) in Section 2 of the Appendix. Here, we highlight a critical institutional feature of our identification strategy: refugees cannot choose which protection centers for asylum seekers and refugees (SPRAR) to settle in. Instead, they are assigned to a center based on the beds' availability. Additionally, refugees arriving at Italian ports immediately enter the reception

[3]The exact day of the election is chosen each year by decree of the Minister of Internal Affairs on all Sundays from 15 April to 15 June.

system, which in the initial phase severely restricts their freedom of movement.

Refugees can stay in a SPRAR for up to 12 months. During and after this period, local administrations implement initiatives to promote individual autonomy, including enhanced language training, vocational guidance, access to essential public services, and knowledge of fundamental constitutional rights and duties. Only after a considerable period of time are refugees eventually free to move to their desired destination. Thus, there is often a lag as refugees may take considerable time to achieve economic independence and relocate. While they can move earlier, this may involve illegal actions such as escaping from assistance and reception centers while awaiting asylum procedures or from repatriation centers if they do not qualify as refugees.

3 Data and empirical strategy

The primary dataset is a combination of different sources of data. Information on refugees' arrivals through boats at Italian ports from 2010 to 2018 comes from the Italian Minister of Interior. Data on electoral outcomes of all the Italian municipalities that voted twice from 2010 to 2018 are also available at the Italian Ministry of Interior's website (https://elezionistorico.interno.gov.it). We use municipality characteristics from the Italian Statistical Office (https://www.istat.it), the presence and capability of SPRAR centers from the Reception and Integration System (https://www.retesai.it), and the broadband availability in 2018 at the municipality level from the Authority for Communications Guarantees (https://www.agcom.it). We also rely on Twitter data to derive the frequency of messages containing immigration-related words from 2010 to 2018 at the province level. Further details on data sources are in Appendix, Section 3. Descriptive statistics and details on the construction of the main variables used in the empirical analysis are discussed in Appendix, Section 4 (Tables A1a-d and Figures A5-A10).

3.1 Exposure to refugee arrivals

Our primary source of exogenous variation relies on the random matching of nationalities on boats arriving at Italian ports before the elections (presumably exogenous to local political dynamics) with those residing in the voting municipalities. For each municipality, we constructed an index of exposure to refugees arrived at Italian ports, described in the following equation:

$$EXPIND_{i,y,t} = \sum_{j,k} (REF_{j,k,t,y} * IMM_{j,i,y}) \tag{1}$$

where $IMM_{j,i,y}$ is the ratio between the number of immigrants of nationality j residing in municipality i and the total number of immigrants of nationality j in Italy, at time y (year); $REF_{j,k,t,y}$ is the number of refugees of nationality j in boat landing k occurred t days before the election day in year y (year).

We leverage the temporal and spatial variations in exposure to arrivals, determined by the match between resident and landed nationalities of immigrants. We assume that refugees often settle in communities with existing clusters of co-nationals, as documented by numerous studies (Buggle et al., 2023) and tested in Section 4.3. Consequently, municipalities with a substantial (limited) pre-arrival proportion of regular immigrants, whose nationality coincidentally matches that of the incoming refugees, experience higher (lower) exposure — and thus greater sensitivity — to the new arrivals.

Hence, $EXPIND$ measures the intensity of exposure to refugee immigration at the municipal level, weighting the number of entrant refugees by the local share of migrants in the municipality whenever their nationality coincides. The index is our proxy of the number of incoming immigrants expected to arrive in the municipality because of pre-electoral boat landings.[4]

[4]The following example clarifies the procedure. Consider a country with two municipalities only, A and B. Municipality A has a share of immigrants of nationality x and y of 0,33, respectively, and

First, we consider t as the period between the 1st of January and the election day in year y. Then, we also compute the index by changing the time window such that t includes all landing episodes 30, 60, or 90 days before the election day.

Some concerns may arise from the potential endogeneity of the local share of immigrants (and of specific nationalities) to political preferences and electoral outcomes. Through a large set of additional estimates in Section 4.2, we offer reassuring evidence that these issues do not bias our results. In Section 4.3, we relax the implicit assumption that voters are perfectly informed about every nationality of the incoming refugees and of migrants residing in their municipality.[5] Finally, we prove that pre-determined municipal characteristics do not predict changes in the exposure index.[6]

Our index of expected immigration relies on the assumption that voters form their immigration expectations based on information about arrivals and the share of immigrants in their municipalities. Proving this assumption empirically is challenging due to the limited data on immigration expectations at the municipal or provincial level. However, we identify an alternative data source: ITANES, a large sample survey conducted after parliamentary and other elections in Italy, which in 2013 included a question on perceived immigration

1 of z. Municipality B has a share of immigrants of nationality x and y of 0,66, respectively, and 1 for nationality w. Suppose that, before election day, two ships are landing on the Italian coasts (1 and 2). Boat landing 1 counts 20 refugees of nationality x, 30 of y, and 30 of z. Boat landing 2 comprises 20 refugees of nationality x, 20 of y, and 20 of w. Then, municipality A has an index of exposure equal to 60, i.e. Boat 1 $(0,33*20+0,33*30+30)$+ Boat 2 $(0,33*20+0,33*20)$, while municipality B of 80.

[5]An additional possible concern is that this index does not directly consider the immigrant population's weight relative to the local population. Indeed, the same number of immigrants could be more salient and recognizable in a small town than in a large one. We also use an alternative version of the index to address this issue. We compute $IMM_{j,i,y}$ as the ratio between the number of immigrants of nationality j residing in municipality i and the total population in the municipality i, at time y (year). Results are robust to this alternative index formulation (available upon request). Consider also that another proxy for population size, i.e. the size of the electorate, is added as a control in all estimates.

[6]Controls in this regression include: Population (2004), Share of residents under age 6 (2001); Ageing index (2001), Share foreign residents (2001), different measures of income (2001), Ratio migrants-to-native in labor force (2001), Foreign-born school frequency (2001); different measures of education and labor market participation (2001). Results are available upon request.

reception capacity. We use this question to derive a province-level measure of immigration (mis)perception by comparing respondents' estimated hosting capacity for immigrants with the actual number of immigrants residing in their province (relative to the regional median). After residualizing this (mis)perception measure to account for individual-specific characteristics (e.g., political leaning), we correlate it with our key measure of immigration expectations (exposure index) and find a positive correlation (see Section 5 in the Appendix for further details). Although this evidence is just descriptive, it nonetheless supports our conjecture that the exposure index reflects individuals' beliefs about immigration.

3.2 Electoral outcomes

Turnout and distribution of votes are our main outcome variables. Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100%). The distribution of votes allows us to observe the political preferences of citizens. We group votes into four non-mutually exclusive categories and compute their relative share of votes.

First, we consider the protest vote, which groups null and white votes.

Secondly, we use anti-immigration votes, defined as the sum of preferences favoring right and extreme-right parties. To categorize anti-immigration parties, we group those characterized by strong rhetoric against immigrants and ethnic minorities, publicly referring to migration flows as a national security concern, advocating for national border closures, and prioritizing the domestic population over foreign citizens. This group includes Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano, and Alleanza Nazionale.

Third, we define populist votes as the sum of votes for parties classified as populist based on the seminal work by Kessel (2015). According to this classification, populist parties are characterized by political ideas that especially emphasize: i) the distinction between 'the people,' viewed as the inherently good segment of society, and 'the elite,' ii) the supremacy of 'the people' over 'the elite,' and iii) themes of national sovereignty. Populist parties

included in this category are Forza Italia, Il Popolo delle Libertà, Lega, and Movimento 5 Stelle.

Finally, we consider the Northern League coalition the sum of all the votes collected directly by 'Lega' and its closely related parties. The Lega list contains votes cast for Lega, Lega Nord, and Lega Padana.

Further details on the classification of parties are in the Appendix, Section 6.

3.3 The empirical model

We assess the political effects of potential exposure to refugee landings in all the voting municipalities by estimating the following equation:

$$\Delta Y_{i,y} = \beta_1 \Delta EXPIND_{i,y,t} + \beta_2 \Delta \Gamma_{i,y} + \beta_3 \Delta \Upsilon_{i,y} + \delta_y + \Delta \epsilon_{i,y} \tag{2}$$

where, for each municipality i, ΔY is the difference in turnout, protest votes, or vote shares for anti-immigrant, populist, and Northern League parties between the two municipal elections (occurred in year y and $y-5$). $\Delta EXPIND_{i,y,t}$ is the change between the two municipal elections in the exposure to migration (our treatment variable), which is defined in Eq. (1).

$\Delta \Gamma_{i,y}$ comprises two variables that capture how the presence of refugees or regular immigrants affects voting behaviour. The first variable, Δ*Share of Migrants*, measures the change in the population share of regular immigrants (excluding those with Italian citizenship) living in the municipality. This variable allows us to control for the exposure to actual immigration.[7] The second variable, Δ*Total SPRAR beds pc*, is the total number of

[7]The exposure index and share of migrants might be correlated. Indeed, if expected migration affects actual migration, e.g. because of pre-existing settlements of migrants, *Share of Migrants* can be a 'bad control' in our estimates. For this reason, we re-estimate eq. (2) controlling for the share of immigrants, not controlling for it, and instrumenting it with the historical distribution of migrants across municipalities as in Barone et al. (2016). Results are robust to these alternative specifications (Table A2 in Appendix), thereby suggesting that using the share of migrants as an

available beds in SPRAR centers per 1000 inhabitants at the province level. This variable is used as a proxy for the presence and size of refugee centers to control the effect of (present and past) contact with refugees and asylum seekers through refugee allocation on voting behavior.

$\Delta\Upsilon_{i,y}$ is a vector of municipality characteristics including, as first differences: the number of individuals entitled to vote at the municipality level, *Electorate*, which takes into account the changes in the size of the electorate due, for instance, to the historical variation in the dimension of the cohorts where voters enter for the first time;[8] the number of mayor candidates at the elections at municipality level, *Number of Mayors*, which allows controlling for political competition (higher values imply higher competition); the share of citizens with annual personal taxable income greater than 120,000€, *Share of taxable income* $\geq$ *120,000 euro*, since immigration policies and political outcomes may be sensitive to top-income voters;[9] the ratio between the share of elderly individuals over 65 years old and the share of children between 0 and 14 years old, *Ageing index*, to capture demographic dynamics. All these controls are included for each municipality i and year y.[10]

We also include time-fixed effects δ_y to control for common factors specific to each year, such as, for instance, the business cycle. Note that all municipality time-invariant characteristics are net out by the first-difference estimator.

In all specifications, standard errors are clustered at the province level to account for within-province error correlation that could derive, for instance, from geographical spillovers (e.g., voters' reactions to perceived immigration to neighboring cities). $\epsilon_{i,y}$ is the classic error

additional control, which allows us to compare municipalities with a similar potential capacity of attracting immigrants, is not a severe concern.

[8] This variable is also a proxy for municipality size.

[9] Anti-immigration response may vary among skill groups and income classes, to which the implied additional tax burdens following immigration may fall more heavily on the rich.

[10] Results are robust when excluding controls and winsorizing the exposure index (available upon request).

term. Eq. (2) is estimated considering exposure to migration in the period t ranging from January 1st and the election day in year y; in alternative estimates, we compute exposure to migration for $t = 30$, 60, or 90 days before the election day in year y.

The main parameter of interest in eq. (2) is β_1, which identifies the effect of the change in the potential exposure to migration across municipalities on changes in the electoral outcome.[11]

4 Results

4.1 Expected immigration, participation and preferences

Table 1 reports the estimates of the effect of the potential migration exposure considering all the arrivals occurring from the beginning of the year to the election day, as well as for one, two, or three months before the election day. The shorter period in the last check further excludes the possibility that refugees legally or illegally reach the municipality.

Results highlight that the increase in potential exposure causes a decrease in turnout (Table 1, Column 1), although this effect is marginally statistically significant. This result suggests that the recent trends in immigration may have mildly contributed to a surge of disaffection toward political participation. As suggested by Barone et al. (2016), some of the center and left-wing voters, who are ideologically more in favor of a multi-ethnic society but unhappy about the immigration trends and policy regulations, have decided not to vote instead of voting for the ideologically-distant center-right coalition (Dustmann et al., 2019, Steinmayr, 2021). This result is also confirmed by Edo et al. (2019), who find that higher immigration increases abstention rates.

Furthermore, if citizens are unsatisfied with existing political parties and immigration

[11] We report estimates only for the coefficients of interest; complete estimates are available on request.

policies, we should expect increased protest votes, too. Indeed, we find that exposure to arrivals has a positive effect on the share of blank/invalid votes (Table 1, Column 2),which is consistent with the idea that the prospect of incoming refugees contributed to an increase in dissatisfaction with how mainstream parties addressed the issue (see Barone et al. (2016) for a similar result).

Results show a positive effect of expected immigration on votes for center-right coalitions, which have a political platform less favorable to immigrants, suggesting that exposure to migration increases support for anti-immigration and populist parties, independently from the time window for refugee arrivals (Table 1, Columns 3 and 4). Finally, exposure to arrivals increases support for the Northern League party (Table 1, Column 5). In this case, the sample is restricted to municipalities in the North macro-area, where the party traditionally enjoys higher consensus.

[Table 1 around here]

Regarding effect size, we estimate that a one standard deviation increase in the exposure index reduces the turnout by 0.02 standard deviations. This implies that an increase in the exposure index by around 5-units (the average change in the exposure index between the two elections is 4.965) leads to a decrease in turnout of 0.032% with respect to the mean outcome. Additionally, a one standard deviation increase in the exposure index is estimated to increase protest votes by 0.137 standard deviations, implying that a 5-unit increase in the exposure index leads to a 1.15% increase in protest votes relative to the mean outcome. Furthermore, we estimate that a one standard deviation increase in the exposure index raises the share of votes for anti-immigration parties, populist parties, and the Northern League by 0.089, 0.169, and 0.041 standard deviations, respectively. This implies that a 5-unit increase in the exposure index leads to increases in those vote shares by 2.46%, 3.71%, and 0.79%, respectively, compared to their mean outcomes. These are non-negligible effects considering that in our sample, on average, turnout is around 67%, the share of protest votes

is about 3.9%, and the anti-immigration parties', populist parties', and Northern League overall vote shares are around 4.3%, 6.4% and 4.1%, respectively.[12]

Since our identification strategy relies on a continuous treatment (exposure index), establishing a clear benchmark can aid in interpreting our findings. Therefore, we divide our municipalities into two groups represented by a dummy variable: those with an exposure index below the 75th percentile at baseline (in the first year of observation) and those above this level. We then interact this dummy with our continuous and time-varying exposure index. This allows us to compare the effect of a marginal increase in exposure index on political outcomes between municipalities with a lower vs. high exposure index (at baseline). Municipalities with a lower exposure index should be the ones driving our results since voters residing in those municipalities are generally less exposed to immigrants and, hence, more likely to be 'shocked' by the migrant waves. We present this result in Table A4 in the Appendix, which provides empirical support for this hypothesis.[13]

Finally, we check for potential nonlinearities in the political effects of perceived immigration and re-estimate eq. (2) adding the quadratic term for the exposure index (Table A5 in Appendix).[14] We find an inverse u-shape effect of perceived immigration on voting for anti-immigration and populist parties (including voting for Lega). Consistent with previous studies (Steinmayr, 2021, Gamalerio et al., 2023), this nonlinearity can be explained

[12]We also repeat the estimates considering a different functional form for the main variables of interest when the dependent variables and the exposure index are expressed in logarithms, β_1 in eq. 2 can be interpreted in terms of elasticity, i.e., it measures the percentage variation in the electoral outcome induced by a 1% increase in the exposure index. Results, detailed in the Appendix, show that an increase in exposure by 1% decreases turnout by about 0.9% (Table A3, Column 1), while it increases protest votes by 0.5% (Table A3, Column 2) and votes for anti-immigration, populist, and League parties by 1.2%, 2.8% and 1.5%, respectively (Table A3, Columns 3, 4 and 5), when we use the index including the arrivals that occurred from the beginning of the year to the election day.

[13]These findings are also confirmed when using as a control group municipalities without a SPRAR or not neighboring municipalities that have a SPRAR. Results are completely driven by those municipalities that are less familiar to immigrants and, hence, more likely to be shocked by migrants' exposure (available upon request).

[14]Raw scatterplots of the exposure index and electoral outcomes suggest possible nonlinear relationships (available upon request).

through the lens of the contact and habituation hypotheses: municipalities with a large share of migrants of given nationalities are less politically responsive to the potential arrival of further migrants of those same nationalities since they might have developed a history of positive contact and everyday experience with those immigrants over time. Conversely, voters who are less experienced with migrants from given countries might perceive them as a threat upon arrival.

4.2 Addressing endogeneity

A possible threat to our identification strategy is the spatial sorting of immigrants into municipalities, which could be endogenous to the political process. Local political attitudes or unobserved characteristics might induce immigrants from a specific country of origin to settle in or move away from more or less favorable places (Fratesi et al., 2019). Location decisions might bias our index as the latter leverages the local distribution of immigrants by nationality. In other words, the estimated effect of expected immigration could reflect the endogenous sorting in nationality composition of local immigrants, which could stem from the political process or other unobserved factors affecting immigration decisions and voting behavior.

In theory, the endogenous sorting of immigrants should not represent a serious concern in our framework. In each landing episode preceding the election date – which has been exogenously determined – it is unlikely that the composition of the incoming nationalities is affected by the local political process. For this type of sorting to be a problem, refugees should be able to schedule the day and choose the destination city in response to the political process of that city. We can exclude this possibility because, at the departure, refugees do not enjoy the freedom of choice regarding the day of leaving and the day and place of arrival (see Section 2). Migrants could not exactly know when they would travel, when they will land, and whether and when they will eventually reach the municipality they intend to go

to.

We nonetheless empirically address this concern in five ways. First, we re-compute our exposure index by fixing either in the first election year or in 2004 the local share of immigrants whose nationality matches that of the incoming refugees. This allows us to exclude migrants' relocation decisions that may be affected by electoral outcomes that are favorable or unfavorable to them. We match the time-varying nationalities in the boat landing with the corresponding nationalities in each voting municipality measured in the first election wave. Therefore, the matching nationalities living in the Italian municipalities are treated as time-invariant. Results, reported in Tables A6A-B in the Appendix, are consistent with our baseline estimates.

Second, we implement an Instrumental Variable (IV) strategy similar to Card (2001) and instrument our index with the historical settlement patterns of immigrants. The latter would reasonably affect recent political outcomes only through the current spatial distribution of migrants; it is also expected to affect their present-time spatial distribution since immigrants tend to move to areas where their co-nationals have already settled in the past. We construct a historically lagged version of the exposure index, which we use as an instrument in the baseline estimates. More specifically, we replace the nationalities residing in each municipality in the two election years (matched with the landing nationalities) with those computed in 2004, the oldest official data we can get from the National Statistical Office (ISTAT) website. In an alternative computation of the index, we use the local share of immigrant nationalities in 1991, which we have constructed through the data and methods used by Barone et al. (2016). The identifying assumption is that immigrants' location decisions that occurred in the past (1991 or 2004) are uncorrelated with the recent changes in political preferences (2010-2018).[15] Note that this IV approach also mitigates measure-

[15]Two main facts corroborate this assumption: i) compared to more recent years, immigration in Italy – especially sea arrivals – was a minor phenomenon, especially in 1991; ii) the upsurge of the main anti-immigration parties (Lega Nord and Alleanza Nazionale) occurred after 1991, making the political strength of these parties exogenous to location choices of the immigrants that were officially

ment error issues, which could be induced by the presence of illegal immigrants not entering the official tracking or by misreporting or under-reporting of migrants' movements. The first and second-stage results are reported in Tables A7A-B in the Appendix. As expected, the historical version of the index positively predicts the index calculated at time t, and second-stage estimates are consistent with our main results.

Third, we also perform a falsification test by looking at municipalities for which electoral outcomes cannot be affected by the sea arrivals of refugees. We apply the same identification strategy as in Eq. (2) using, for each municipality, the electoral outcomes obtained ten years earlier (e.g. 2000-2008). The exposure effect in these 'placebo' estimates should not be significantly different from zero: political outcomes are unlikely to be affected by the boat arrivals that occurred ten years later. Results are reported in Table A8 in the Appendix and confirm that the effect of exposure is not significantly different from zero in 95% of the cases.

Fourth, we conduct an event study to check for significant pre- and post-electoral trends in the spatial distribution of immigrants by nationality of origin (further details are in Appendix, Section 7). Results (available on request) suggest that only for ten out of 92 nationalities, some pre-trends or post-trends are statistically significant at a 10% level. For only two, pre- or post-electoral trends are statistically significant at a 5% level. Therefore pre- or post-electoral trends of immigrant nationalities in response to the local political shocks do not represent a severe threat to our identification strategy.

Fifth, we compute an additional falsification exercise based on a 'placebo' index and perform a permutation test to check the validity of our results (Wing and Marier, 2014, Carrieri et al., 2019). We first compute a 'fake' exposure index using a random distribution of resident immigrants across Italian municipalities, which ranges from the minimum and maximum observed values each year and for each nationality. Table A9 in the Appendix

registered in 1991.

shows that the effect of this fake exposure index is never statistically significant. We then implement a permutation test using this index. This test is based on a Monte Carlo simulation, which allows us to simulate the effect of unreal immigration exposure (Robert and Casella, 2004). We performed 1000 simulations of all the models in Table 1 using the artificial exposure index and stored the estimated coefficients. Since the distribution of resident immigrants is randomly generated, the estimated effect of fake exposure should be, on average, equal to zero. Figure A12 in the Appendix shows the plot of the estimated coefficients for each outcome (and time window) of interest. In all cases, as expected, the distribution is centered around zero. At the same time, the coefficient of the 'true' exposure index always lies outside or at the very extreme tail of the distribution.

Another endogeneity concern arises from the positive correlation between the exposure index and a municipality's capacity to receive migrants from specific countries. A municipality's historical political leaning can likely influence this capacity, potentially leading to an upward bias in the main estimates, especially when focusing on municipalities with voters expected to exhibit stronger treatment effects (e.g., left-wing municipalities attracting migrants from specific ethnic groups).[16] To verify whether migrants of specific nationalities tend to cluster in municipalities with a larger capacity to attract them, we regress the share of immigrants for each nationality on the main political leaning of a municipality. Results show that being a municipality characterized by a specific political leaning ('leftwing' in our analysis) significantly predicts the presence of only seven out of ninety-one nationalities landed on Italian coasts.[17] Re-running the main regressions excluding those nationalities from the index computation produces similar results, thereby excluding this potential source of endogeneity (Table A10 in Appendix).[18]

[16] This endogeneity concern may apply only to the part of the index composed of the local share of immigrants from specific nationalities, which could be affected by the municipality's political leaning.

[17] Results are available upon request.

[18] As an additional robustness check, we re-estimate eq. (2) using only those municipalities that do not have a large capacity to receive migrants. We divide municipalities into four quartiles based

4.3 Heterogeneity, robustness checks and actual migration patterns

We perform a series of heterogeneity tests to provide further evidence on the main channels at work and run additional tests for the robustness of our results. We discuss them in Appendix, Section 8. To sum up, we find that the effect of exposure to arrivals is higher in municipalities: i) with high taxable income per capita (perhaps because individuals respond to immigration in light of their economic concerns; Section 8.1, Table A11 in Appendix); and ii) with a higher share of children, i.e. where competition for local welfare might be higher (Section 8.1, Table A12 in Appendix).

Results are also robust to different definitions of populist parties (Section 8.2, Table A13 in Appendix) and different aggregations of refugees' nationality to deal with the possibility that citizens do not have precise information on the nationality of the incoming refugees (Section 8.3, Tables A14 in Appendix). Note that the last check also allows for relaxing the implicit assumption of 'super-rational' voters, i.e., voters who perfectly understand that i) the local shares of migrants from a given country can increase when refugees from that country arrive at Italian ports and ii) the size of this increase depends on the number of local migrants from that country relative to migrants from other countries.

Regarding the role of mass media, we posit that the latter may have influenced expectations about immigration by representing refugee landings as a crisis. This portrayal might have led individuals to believe that new landings would eventually increase the local immigrant population. These expectations could be stronger in municipalities with a larger share of immigrants from the same nationality as the prospective incomers, due to the attractive

on the share of immigrants residing in each municipality in the baseline year (first year of each unit). We then estimate eq. (2) restricting the sample to municipalities with a lower share of migrants (first two quartiles) and get consistent results (available upon request). This additional piece of evidence reassures us that the main findings are robust to potential endogeneity arising from the municipality's capacity to attract any immigrant, regardless of his/her nationality.

power of local networks. However, refugees are not allowed to move to the municipalities where citizens mostly expect them to go upon arrival. Here, we offer suggestive evidence showing that immigrants tend to cluster in cities where they can rely on a pre-existing network. However, an increase in the local immigrant population is not associated with the arrival of new refugees (see Section 8.4 in Appendix). This evidence partially supports our main hypothesis: the political effects of immigration exposure stem from misperceptions about future immigration (i.e., incorrect beliefs that new refugee inflows will increase the local immigrant population) rather than actual future immigration. More formal tests for this hypothesis are provided in the next section.

5 Mechanisms

5.1 The role of media: misperceptions, salience, and perceived threat

Figure 2 describes the correlation between the occurrence of immigration-related tweets and refugee landings, particularly noticeable during election periods. Yet, trends diverged during the 2018 elections, suggesting that the perceived importance of immigration often does not align with actual inflows. In the following analysis, we examine econometrically whether the salience of immigration increases in proximity to elections and whether the expectation of refugee arrivals further amplifies the topic's relevance. More specifically, we carry out an event study to test for significant electoral trends in the frequency of tweets containing the words "refugee/s" or "immigrant/s" (and similar words referring to the topic).[19] We estimate the following model:

[19]Summary statistics for the variables used in the analyses of Twitter data are in Tables A15 in Appendix).

$$T_{p,m} = \alpha_p + \delta_y + \sum_d \theta_d E_{p,m+d} + \sum_g \beta_g X_{p,y} + \epsilon_{p,y} \tag{3}$$

where $T_{p,m} = \frac{ImmTweets_{p,m}}{Tweets_{p,m}}$ is the number of immigration-related tweets in province p and month m over the total number of tweets posted in province p and month m; α_p is a time-invariant province-specific effect capturing the socio-economic environment; δ_y is a set of year dummies capturing common macro-level trends; $\epsilon_{p,y}$ is an i.i.d. error term; the set of additional controls variables $X_{p,y}$ includes the yearly share of individuals aged 15-64 over the total population at the province level and the share of immigrants residing in the voting municipalities nested into our sample provinces; $E_{p,m+d}$ is a dummy variable equal to one if a local election is scheduled in province p at time $m \pm d$, with $d = -5, 5$, i.e., 5 months before and after the elections (the month before election is the omitted category; i.e. $t-1$ in the plot).[20] We are interested in θ_d, which captures significant pre- or post-election trends of immigration salience, i.e., whether the importance of immigration increases or decreases t periods before and after the elections. We estimate eq. (3) through OLS fixed-effects regression, clustering standard errors at the province level.

To understand whether changes in immigration salience mirror the actual arrivals of refugees, we carry out an event study similar to the previous one, but considering refugees landed in time m as the dependent variable. In other terms, we estimate the following model:

$$L_m = \delta_s + \sum_d \theta_d E_{p,m+d} + \epsilon_m \tag{4}$$

where the dependent variable is now $L_m = ihs(TotLandings_m)$, where $TotLandings$ is the inverse hyperbolic sine transformation of the total number of refugees landed in month m. Since landings are at the national level and vary only by month, we rely only on time variation; hence, we now estimate eq. (4) through OLS clustering by year and including

[20] We consider only the election date in which most municipalities within a province p are involved.

season-of-the-year fixed effects to net out seasonality effects of migrants' arrivals (δ_s).

Results show the share of tweets about immigrants increases significantly during the month of the election and remains consistently higher for the three subsequent months compared to the month before the election (Figure 3a). This increase seems to fade away after five months. Conversely, elections seem not to impact boat landings. Indeed, the number of boat landings does not change before and after the local elections, highlighting that boat landings do not follow the electoral dynamics at the municipal level (Figure 3b).

These results, jointly considered, suggest that the increased salience of immigration driven by the local elections does not mirror the actual dynamic of boat landings, further highlighting the mismatch between voters' perceptions and real statistics on immigration outlined above.

To assess whether the electoral increase in the salience of immigration is more significant in provinces where citizens are mostly exposed to the potential arrival of refugees, we compare pre- and post-electoral trends of immigration-related tweets by high vs. low values of the exposure index. We aggregate the exposure index by province and year and create a dummy variable equal to one if the exposure index value of a given province lies above the median exposure index of the relevant macro-area, and zero otherwise. We re-run the first event study and estimate eq. (3) interacting the trend dummies $E_{p,m+d}$ with an indicator equal to one if province p, each year, is above the median.[21]

Figure 3c reports the results and shows that provinces with a high exposure index produce a higher volume of tweets on immigration during the election month and immediately after, yet the effect fades away after five months. Overall, immigration salience in the electoral period is mainly driven by those provinces where the expected inflow of immigrants is

[21] In this estimate, we use as controls: i) the yearly share of individuals aged 15-64 over the total population at the province level; ii) the share of immigrants residing in the voting municipalities nested into our sample provinces. We also estimate this model allowing the exposure index's median to vary by year; results are robust and available upon request.

higher.[22]

[Figure 3 around here]

Since the exposure index increases for municipalities with a larger share of immigrants having the same nationalities as the incoming refugees, the estimated effects may capture actual future immigration (or a plausible guess given the available information) and (mis)perceived immigration. In other words, our results could suggest that voters are forward-looking or have biased perceptions of immigration.[23] Here, we run a test that could help to disentangle these two mechanisms, interacting the Twitter data on immigration salience with the exposure index. If the political effects of exposure were driven by provinces where most people (emotionally) reacted to it by tweeting more before the election, the perceived threat would most likely be the channel. In that case, keeping expectations of future arrivals (exposure) constant across municipalities, political outcomes should be most affected in municipalities where citizens were more emotionally sensitive to the arrivals (salience).

We re-estimate the baseline model of Table 1 by running a heterogeneity analysis to investigate whether provinces with a higher frequency of tweets about immigrants drive our results. We do so by interacting our exposure variable with a dummy variable, taking value one if, in a given province-year, the share of immigration-related tweets is higher than the national median. Figure 4a reports the results and highlights heterogeneous effects of exposure by immigration salience, with statistically significant effects only where

[22]This analysis, however, does not allow us to disentangle whether the increase in immigration-related tweets is generalized or driven by key media players (e.g., newspapers). In Figure A13 in the Appendix, we plot the number of immigration-related tweets produced by national media outlets against the total number of immigration-related tweets in our sample. Results highlight that media outlets are neither tweeting more nor less than the general public following a boat landing incident. This finding suggests that there is no significant difference between media outlets and the public in terms of tweet production after such an event.

[23]Voters are forward-looking in the sense that they may correctly expect that boat arrivals would increase immigration into their municipalities a couple of months later. Hence, they might react by protesting voting/abstention or voting for anti-immigration parties at local elections before the refugees could arrive.

immigration-related tweets are most frequent. Notwithstanding the Twitter data's caveats, this result suggests that, in the face of a similar (potential) inflow of refugees, support for populist and anti-immigration parties increased mainly where arrivals were perceived as a critical issue. In addition to the analysis of immigration salience, we conduct a more thorough examination of the sentiment expressed in our tweets by employing two distinct sentiment analysis techniques. Firstly, we classify tweets into positive, negative, or neutral categories. Secondly, we delve deeper into the specific emotions conveyed in the tweets. To this purpose, we use the "FEEL-IT: Emotion and Sentiment Classification for the Italian Language" model developed by Bianchi et al. (2021). This model assigns to each tweet one of the following emotions: anger, fear, joy, and sadness. By leveraging this dataset, we conduct both emotion and sentiment analyses on our corpus of tweets. We run a heterogeneity analysis comparing provinces that exhibit an above-average frequency of negative tweets. Finally, we disaggregate negative sentiment by emotion to discern whether our findings are influenced by provinces with a higher prevalence of anger, sadness, or fear in their tweets. Figure 4b and Figure 4c summarize the results and suggest that our main findings are primarily driven by those places that exhibit more negative sentiments towards immigrants (specifically, anger and fear). In these provinces, our exposure index increases the vote shares for anti-immigrant, populist, and Northern League parties more than in provinces where immigration is not discussed negatively. Conversely, we also observe a decrease in voter turnout in these areas, supporting our intuition that left-wing individuals "punish" left-wing parties by reducing their propensity to vote.

[Figure 4 around here]

To further explore the role of mass media in the relationship between expected immigration and electoral outcomes, we look at broadband diffusion, which is less subject to citizens' selection into social media. Suppose voters have broad access to information on landings (and the nationality distribution of incoming refugees) through social media. In that case,

broadband availability should amplify the exposure effect. To test this hypothesis, we use data on the share of households without broadband connection or with internet speeds in the range of 0-2 Mbps/second as provided by AGICOM. We leverage the cross-sectional variation in broadband diffusion, focusing on data available only for the year 2018. Results in Table 2 indicate that, in most cases, the political effects of exposure are primarily driven by municipalities with better access to the Internet. Specifically, these effects are more pronounced in municipalities where the share of households with slow or no broadband access falls below the sample median. In contrast, for municipalities where broadband access is more limited (i.e., with a share of households with slow or no broadband access above the median), the effects are either not statistically significant or weakly so, with smaller magnitude.

[Table 2 around here]

All these findings bolster our hypothesized mechanism. The arrival of refugees impacted voter behavior via media coverage, which intensified the salience of immigration issues. Consequently, voters formed biased judgments regarding the severity of immigration and developed negative sentiments, which, regardless of actual interactions with immigrants, influenced their voting behavior.

5.2 Spatial heterogeneity

The literature on immigration, political attitudes, and electoral outcomes suggests that municipality size matters and that the interaction between natives and immigrants may differ in small versus large cities. We employ the Department for Economic Development and Cohesion classification of the municipalities based on a combination of the presence of essential services such as education, health, and mobility that first identifies a network of municipalities or their aggregations as 'service supply centers' and, subsequently, around

them, the areas characterized by different levels of spatial peripherality. The first group of municipalities is defined *poles* if they offer at least one upper secondary school, one technical and vocational institute, one hospital, and a railway station. The other remaining municipalities are divided into four categories as *peri-urban areas*, *intermediate areas*, *peripheral areas*, and *ultra-peripheral areas*, based on travel distance from the poles (20, between 21 and 40, between 41 and 75 and more than 75 minutes away from the nearest pole, respectively). We use *poles* as a proxy of metropolitan municipalities and aggregate the other categories as peripheral areas. Figure 5a summarizes the results showing that the immigration inflows increase the votes obtained by far-right parties, especially in non-metropolitan municipalities, while leaving metropolitan cities mostly unaffected. This result is in line with Barone et al. (2016), Dustmann et al. (2019) suggesting that individuals who live in cities have more positive attitudes towards refugees and immigrants than those living in rural areas being contact a means of prejudice reduction.

The literature has also stressed that the native-immigrant contest for jobs should be tougher for unskilled native workers (Borjas, 2003, Mayda, 2006).[24] Relying on census data, we use the ratio of migrants to natives who are active in the labor force at the municipal level as a proxy for employment competition. We, therefore, split the sample below and above the median value of the aforementioned ratio and run a heterogeneity analysis based on the distribution of the respective variable observed in 2011. In line with the previous literature (Barone et al., 2016), Figure 5b suggests that our main findings are indeed driven by cities with higher employment competition.

As an additional spatial heterogeneity analysis, we compare the political effects of perceived migration exposure in cities hosting a migrant reception center (SPRAR) with those that do not have such a center. The results, detailed in Figure 5c, indicate that our main

[24]In this respect, Italy emerges as an interesting case since Italian immigrants are mostly unskilled; even the few ones who are medium or highly skilled are usually employed in unskilled occupations and have higher over-education rates (Dell'Aringa and Pagani, 2011).

findings are predominantly driven by places without reception centers. This further reinforces the habituation/contact hypothesis, suggesting that hosting refugees and asylum seekers through a reception system managed by local governments may foster positive interactions between natives and immigrants. These interactions, in turn, could undermine the electoral performance of far-right and anti-immigrant parties (Steinmayr, 2021, Gamalerio et al., 2023).

Finally, our main results may be influenced by two common factors: the expectation that new arrivals represent a threat and the increased salience of local foreign-born communities. Unfortunately, our data do not allow us to distinguish whether the effect of exposure to arrivals primarily stems from the perceived threat of new refugee inflows or the salience of resident immigrants. To partially disentangle these effects, we examine whether the impact of exposure decreases with distance from the main immigration ports, which could help us understand whether the 'threat-of-new-immigrants' mechanism is at play. For each boat landing to which a municipality is exposed, we calculate the distance in kilometers of that municipality from the ports of arrival. Then, we average this measure over all the landings experienced by the municipality and compute the median distance. Subsequently, we rerun our baseline estimates, splitting the sample into municipalities below and above the median distances from the ports. The results, summarized in Figure 5d, indicate that the effect is more pronounced in municipalities closer to the ports. Assuming that the salience of local immigrants with the same nationality as the incoming refugees does not vary by distance, these findings suggest, again, that the threat of future arrivals is likely the main mechanism behind our results.

[Figure 5 around here]

6 Conclusions

This paper explores the political effects of expected immigration in Italy. Our identification strategy rests on the exogenous variation in the nationality of refugees approaching the Italian ports from 2010 to 2018. We construct an index of exposure to arrivals that, each year, varies at the intensive margin across municipalities, with more (less) exposed cities having a larger (lower) cluster of regular immigrants with the same nationality of refugees approaching the Italian coasts before the elections. Since we also control for the local share of regular immigrants and the number of refugees in reception centers, our estimates capture the additional role that the arrival episodes, widely discussed in the media before the elections, played on voting behavior.

Our results show that potential exposure to arrivals mildly decreases turnout, while significantly increasing protest votes and support for extreme-right, populist, and anti-immigration parties. These findings are consistent with previous empirical evidence (Barone et al., 2016) showing that voters dissatisfied with mainstream party handling of immigration issues may abstain from voting or express discontent through protest or by supporting anti-establishment parties advocating immigration restrictions. We also find that the salience of immigration does not strictly mirror actual refugee arrivals but follows the electoral cycle. Finally, since the political effects of arrivals are larger where immigration salience is high, the upsurge of populist and anti-immigration parties can most likely be driven by voters perceiving future arrivals as a critical policy issue.

Further tests provide additional insights into the role played by the media in fuelling misperceptions. We find that the impact of expected immigration is driven by voters with access to fast internet connections and by provinces where immigration is perceived as a key issue and discussed with a negative tone. Moreover, the effects of exposure decrease with distance from the main immigration ports, suggesting that our findings could be driven

by the threat of new arrivals. Finally, while immigration salience and voting behavior are affected by refugee landings, local immigration is not. Thus, biased beliefs—rather than rational expectations—about future immigration may facilitate the upsurge of anti-immigration and populist parties.

Our findings suggest that as immigration becomes central in electoral disputes, expected immigration starts playing a key role in voting behavior, alongside heightened perceptions of insecurity and socio-economic costs associated with hosting refugees. Representation of immigration as a permanent crisis in the media, even though this is not always the case, influences beliefs about new inflows of immigrants and hence boosts voters' disappointment towards mainstream parties. By losing trust in the latter, citizens reduce political participation and increase protest or populist votes (Barone et al., 2016, Guiso et al., 2017, 2019, Algan et al., 2018). Hence, anti-immigration campaigns based on the severity of refugee arrivals and alternative policies against the alleged refugee crisis might effectively raise political consensus for far-right, populist parties, especially in the cities where refugees are more expected to arrive.

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Table 1: Exposure to arrivals, political participation and share of votes

	(1)	(2)	(3)	(4)	(5)
Dependent Variables:	Turnout	Share of protest votes	Share of votes for anti-immigration parties	Share of votes for populist parties	Share of votes for Northern League
Exposure index	-0.0044*	0.0001***	0.0002***	0.0005***	0.0001**
	(0.0026)	(0.0000)	(0.0001)	(0.0002)	(0.0000)
Exposure index (0-30 days before elections)	-0.0094	0.0002***	0.0004**	0.0009***	0.0001
	(0.0061)	(0.0001)	(0.0002)	(0.0003)	(0.0001)
Exposure index (0-60 days before elections)	-0.0052	0.0001***	0.0002***	0.0005***	0.0001*
	(0.0033)	(0.0000)	(0.0001)	(0.0002)	(0.0001)
Exposure index (0-90 days before elections)	-0.0045	0.0001***	0.0002***	0.0005***	0.0001**
	(0.0030)	(0.0000)	(0.0001)	(0.0002)	(0.0000)
Observations	5,718	5,718	5,718	5,718	2,287
Mean dependent variable	67.677	0.039	0.043	0.064	0.099
R-squared	0.555	0.046	0.037	0.061	0.077
Number of municipalities	2,877	2,877	2,877	2,877	1,151

Note: Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100%). Protest vote groups null and white votes. Anti-immigration votes is the sum of preferences favoring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano, and Alleanza Nazionale). Populist votes is the sum of votes favoring populist parties as defined by Kessel (2015), including Forza Italia, Il Popolo delle libertà, Lega, and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord, and Lega Padana. Robust standard errors in parentheses clustered at the province level. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share $\geq$ 120,000, Aging index, and year dummies; * p <0.10, ** p <0.05, *** p <0.01.

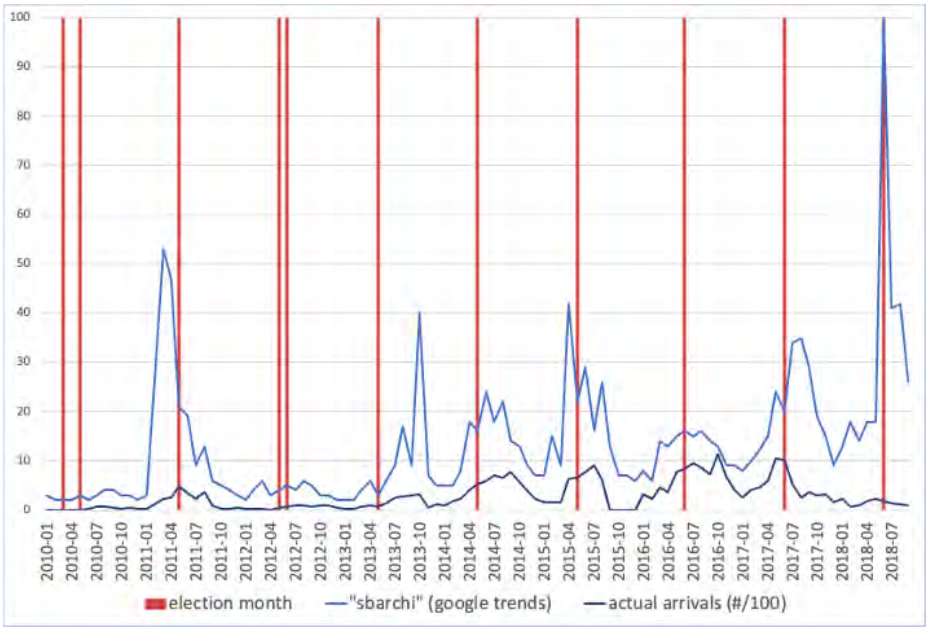
Table 2: Exposure to arrivals and electoral outcomes: the role of broadband access

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Turnout		Share of protest votes		Share of anti-immigrant votes		Share of populist votes		Share of Lega coalition votes	
VARIABLES	$\leq$ median	$>$ median	$\leq$ median	$>$ median	$\leq$ median	$>$ median	$\leq$ median	$>$ median	$\leq$ median	$>$ median
					Share of household not served by wireline network					
Exposure index	-0.36680***	-0.05857	0.00232***	0.00151**	0.00296**	0.00110	0.00842***	0.00377***	0.00422	0.00326
	(0.06581)	(0.06843)	(0.00084)	(0.00064)	(0.00132)	(0.00075)	(0.00272)	(0.00128)	(0.00292)	(0.00350)
Observations	2,863	2,841	2,863	2,841	2,863	2,841	2,863	2,841	1,361	925
Mean dependent variable	67.844	67.505	0.041	0.037	0.061	0.024	0.088	0.039	0.121	0.065
R-squared	0.576	0.549	0.086	0.042	0.051	0.034	0.094	0.054	0.087	0.093
Number of municipalities	1,443	1,434	1,443	1,434	1,443	1,434	1,443	1,434	683	468
					Share of household served with speed in range 0-2 Mbps or not served by wireline network					
Exposure index	-0.00323***	-0.10437	0.00221***	0.00161**	0.00234*	0.00185*	0.00808***	0.00388***	0.00339	0.00519
	(0.00061)	(0.07938)	(0.00083)	(0.00064)	(0.00120)	(0.00106)	(0.00263)	(0.00138)	(0.00301)	(0.00346)
Observations	2,863	2,841	2,863	2,841	2,863	2,841	2,863	2,841	1,220	1,066
Mean dependent variable	68.074	67.273	0.040	0.037	0.055	0.030	0.083	0.044	0.120	0.065
R-squared	0.579	0.545	0.084	0.048	0.053	0.033	0.095	0.054	0.105	0.074
Number of municipalities	1,442	1,435	1,442	1,435	1,442	1,435	1,442	1,435	612	539

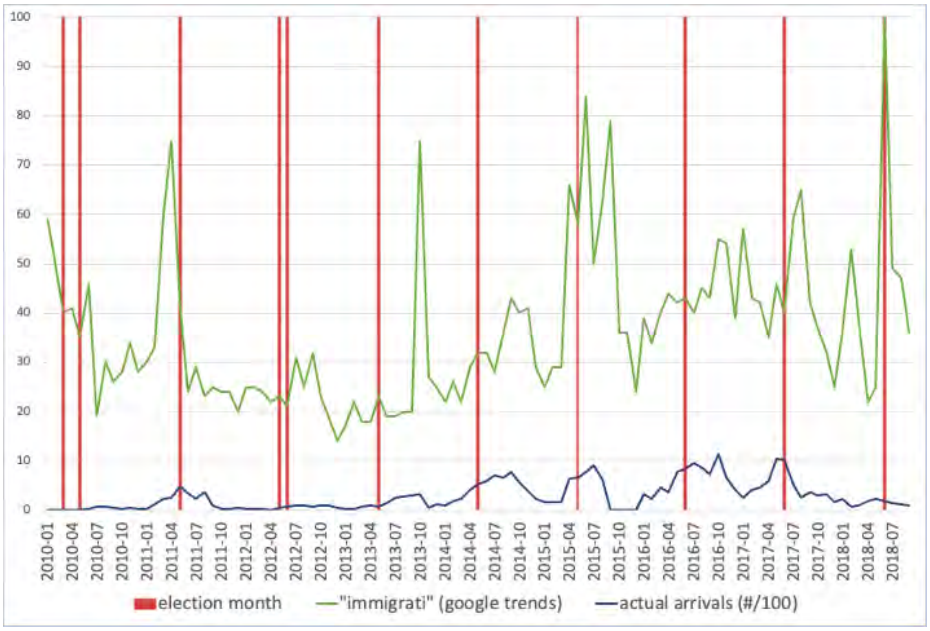
Note: Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100%). Protest vote groups null and white votes. Anti-immigration votes is the sum of preferences favoring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano, and Alleanza Nazionale). Populist votes is the sum of votes favoring populist parties as defined by Kessel (2015), including Forza Italia, Il Popolo delle libertà, Lega, and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord, and Lega Padana. Robust standard errors in parentheses clustered at the province level. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share $\geq$ 120,000, Aging index, and year dummies. * p <0.10, ** p <0.05, *** p <0.01. % households without broadband access at least at 2mb - median by macro area computed using data on the digital divide for 2018 provided by AGICOM.

Figure 1: Google Search of the words "Sbarchi" (boat landings), Panel A, and "Immigrati" (immigrants), Panel B, compared with actual arrivals.

(a) Panel A

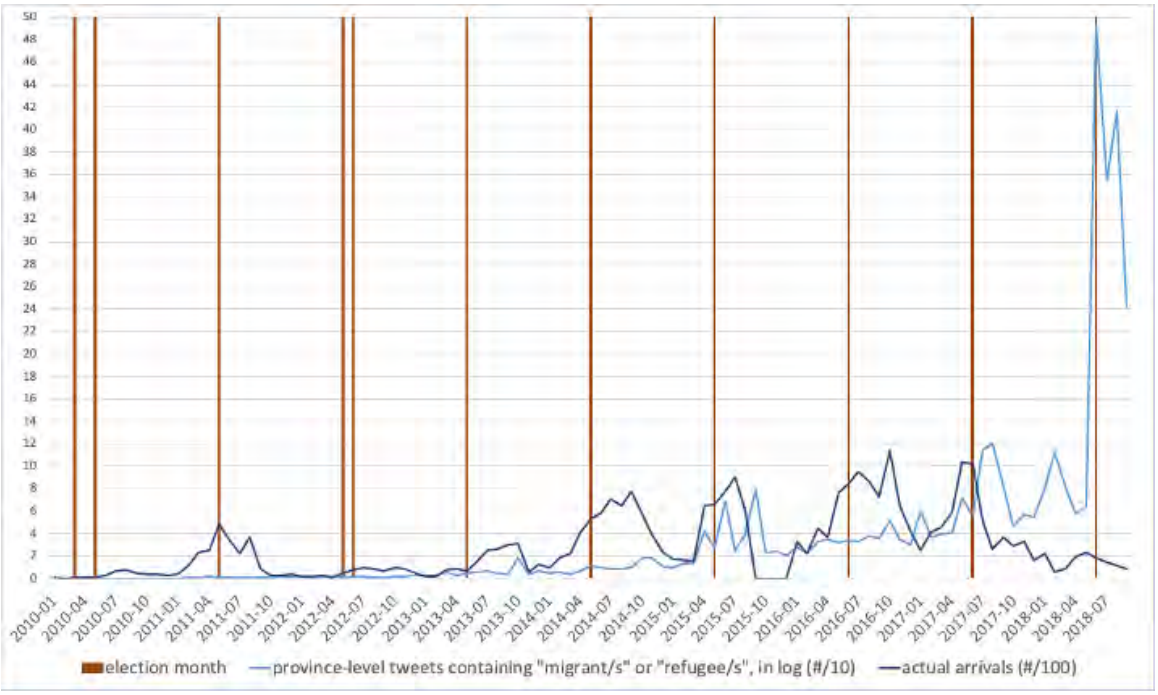


(b) Panel B



Note: The figure shows the frequency of Google searches of the words "Sbarchi" (boat landings), Panel A, and "Immigrati" (immigrants), Panel B, compared with actual arrivals for the years 2010-2018. Vertical red lines show the election months.

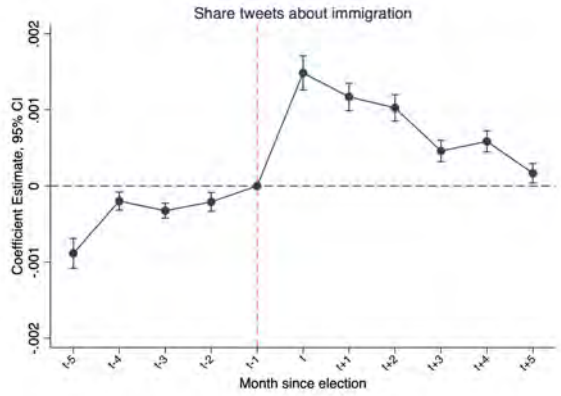
Figure 2: Province-level tweets containing the words "Immigrato/a/i/e" (immigrant/s) or "Rifugiato/a/i/e" (refugee/s), compared with actual arrivals.



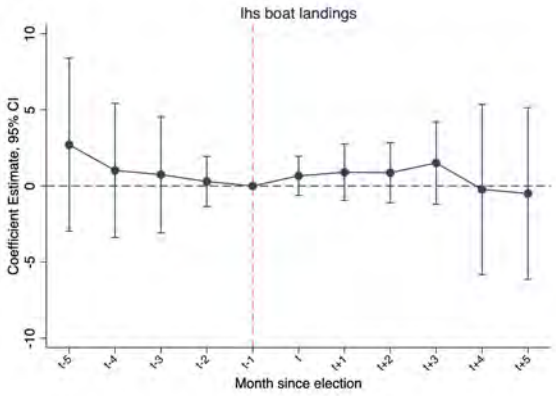
Note: The figure shows the trend of occurrences of province-level tweets containing the words "Immigrato/a/i/e" (immi-grant/s) or "Rifugiato/a/i/e" (refugee/s), compared with actual arrivals for the years 2010-2018. Vertical red lines show the election months.

Figure 3: Immigration salience in the media and local elections

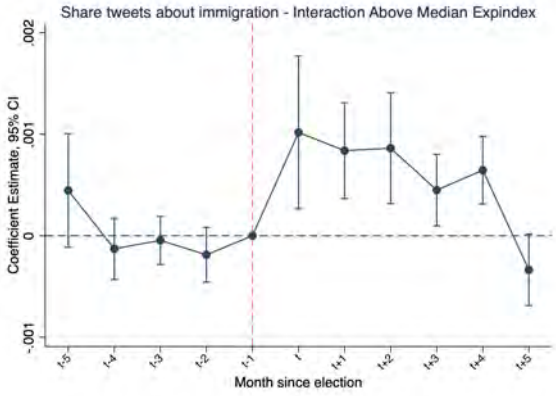
(a) Panel A



(b) Panel B



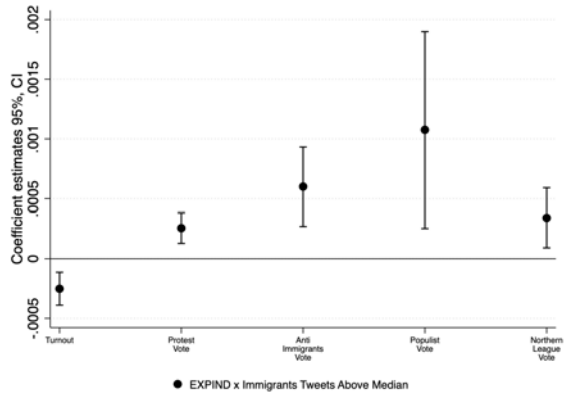
(c) Panel C



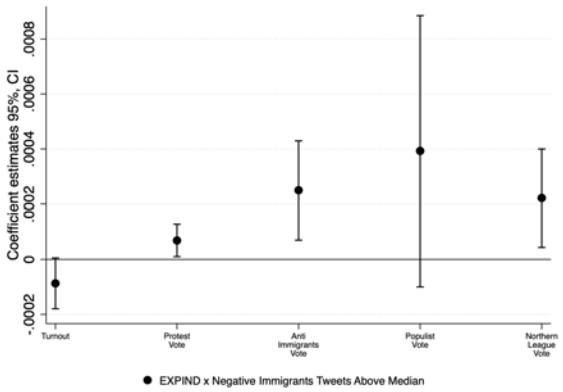
Note: In this figure, we show, in panel A, the changes in the share of tweets about immigrants; in panel B, the number of boat landings (transformed using the inverse hyperbolic sine transformation) during a period surrounding elections, computed as five months before and after local elections. In panel C, we compare pre- and post-electoral trends of immigration-related tweets by high vs low exposure index values. In panel A, the outcome of interest is the number of immigration-related tweets over the total number of tweets posted in a given province at a given moment in time. We include province and year fixed effects and a set of additional control variables (the yearly share of individuals aged 15-64 over the total population at the province level, the share of immigrants residing in the voting municipalities nested into our sample provinces). We focus on 5 months before and after the elections and use the month before the election as an omitted category. We only consider the election date when most municipalities within a province were involved. Standard errors are clustered at the province level. In Panel B, the outcome variable is the hyperbolic sine transformation of the total number of refugees landed in a given month. We include season-of-the-year fixed effects and cluster the standard error by year. Finally, in Panel C, we compare pre- and post-electoral trends of immigration-related tweets by high vs. low exposure index values. To do so, we aggregated the exposure index variable by province and year. We then identify the median value by macro-area and create a dummy variable taking value one if the exposure index of the province is above the median exposure index of the area. We re-run the event study presented in Panel A, interacting the trend dummies with an indicator equal to one if the province, each year, is above the median value of the exposure index as calculated on the entire sample. Also in this case we include province and year fixed effects and a set of additional control variables.

Figure 4: Expected immigration and sentiment towards immigrants

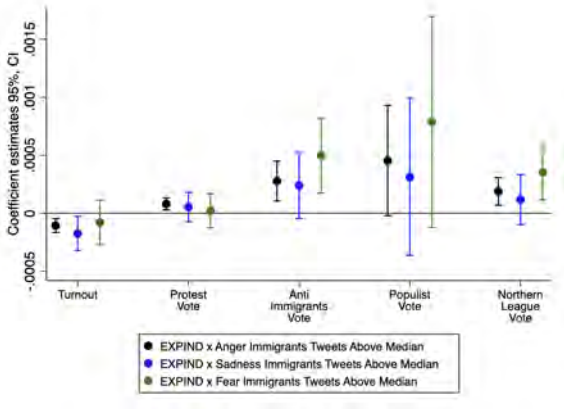
(a) Panel A



(b) Panel B



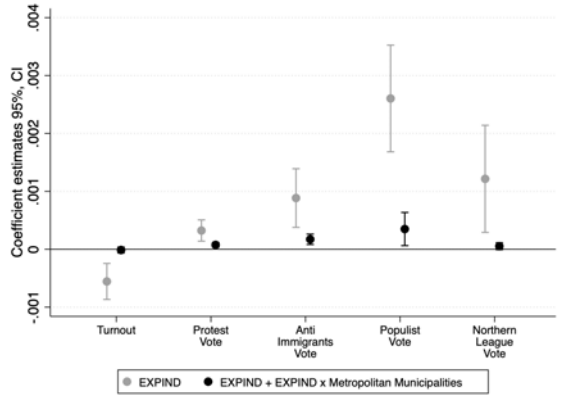
(c) Panel C



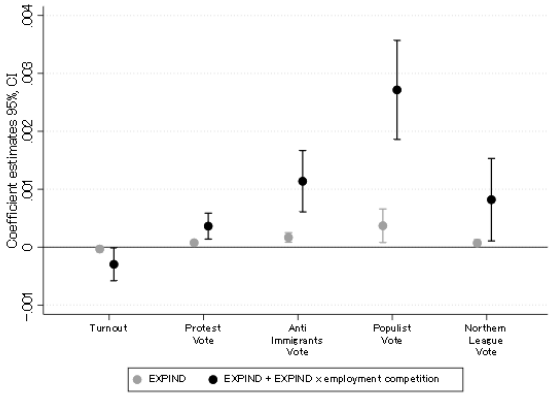
Note: In this figure, we run heterogeneity of our main results by interacting the exposure index variable for: a dummy taking value one if in a given province-year the share of immigration-related tweets is higher than the national median (panel A); a dummy taking value one if in a given province-year, the province exhibit an above-average frequency of negative tweets (panel B); and finally we disaggregate negative sentiment by emotion to discern whether our findings are influenced by provinces with a higher prevalence of anger, sadness, or fear in their tweets (panel C). We identify the sentiment and emotion of the tweets using the *FEEL-IT: Emotion and Sentiment Classification for the Italian Language"* model developed by Bianchi et al. (2021). We insert province and year fixed effects and we cluster standard errors at the province level. In each plot, we show interaction terms.

Figure 5: Spatial heterogeneity in the political effects of expected immigration

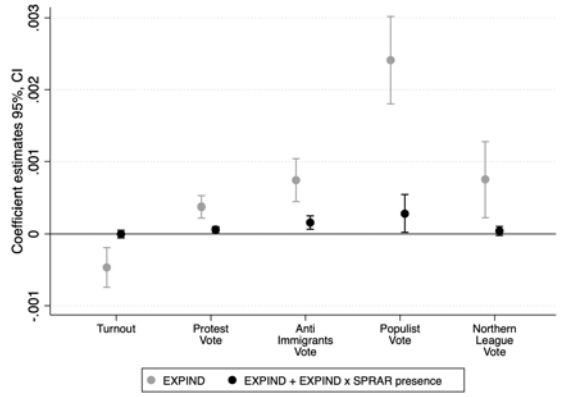
(a) Metropolitan municipalities



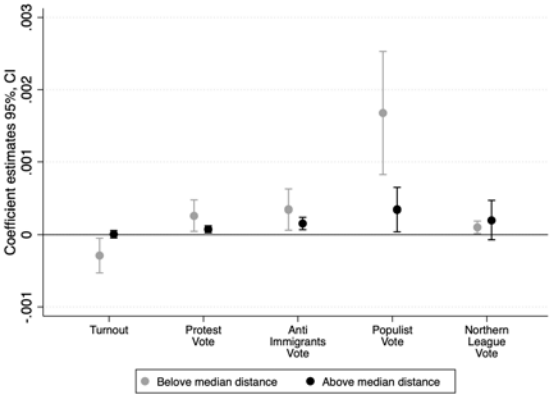
(b) Employment competition



(c) Presence of SPRAR



(d) Distance from the ports of arrival



Note: Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100%). Protest vote, which groups null and white votes. Anti-immigration votes are the sum of preferences favoring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano, and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. Robust standard errors in parentheses clustered at the province level. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share $\geq$ 120,000, Ageing index and year dummies. In panel a, we employ the Department for Economic Development and Cohesion classification to construct the metropolitan municipalities. The first group of municipalities is defined *poles* in case they offer at least one upper secondary school (either a scientific or classical high school), at least one technical and vocational institute, at least one hospital, and a railway station. The other remaining municipalities are divided into four categories as *peri-urban areas, intermediate areas, peripheral areas, and ultra-peripheral areas*, based on distances from the poles measured in travel times (20, between 21 and 40, between 41 and 75 and more than 75 minutes away from the nearest pole, respectively. We use poles as a proxy of metropolitan municipalities and then aggregate the other categories as peripheral areas. In panel b, employment competition takes the value one if the ratio of migrants to natives who are active in the labor force at the municipal level in 2011 is above the median value. In panel c, SPRAR presence takes the value one if the municipality hosts a SPRAR. In panel d, for each boat landing a municipality is exposed to, we calculate the distance in kilometers (log-transformed) from that municipality to the ports of arrival. We then average this measure over all the landings affecting the municipality and compute the median distance. We create a dummy variable that takes the value one if the municipality is further from a port of landing than the national median. For the Northern League, we compute a different dummy based on the distances of northern municipalities. We run two separate analyses based on this dummy variable by dividing the sample into municipalities located above and below the median distance.

ON LINE APPENDIX

1) LANDING EPISODES, ELECTIONS AND EXPECTED IMMIGRATION

We test for a positive relationship between Google searches and elections using an event study approach. Figure A2 shows a slightly positive correlation between the standardized number of Google searches for the word “Immigrants” and the distance to the elections. Indeed, searches for immigrants on Google have an upward trend till the month of the local election, and then go back to the previous level. It is important to notice two things: first, Google searches don’t have local variation, but only temporal variation (we can have just national level Google searches), while the elections we use are local elections which vary across time and municipalities; second we focus on a period of three months before and after the election to have a better understanding of the dynamics of the Google searches around the election period.

To underline that the measure of expected immigration is a reliable gauge of perceived migration, we show that, following arrivals, national news outlets prioritize coverage of immigrants. We focus on national rather than local news for two primary reasons: 1) data availability, and 2) in Italy, local news is typically encompassed within national coverage, as not all municipalities (or even provinces) have dedicated local newspapers. To support this claim, we collect tweets spanning from 2014 to 2018, coinciding with the period of Twitter's widespread adoption in Italy, from prominent national news providers including Corriere della Sera, La Repubblica, Il Sole24Ore, La Stampa, Il Fatto Quotidiano, Agenzia Ansa, SkyTG24, Il Messaggero, Il Giornale, and Il Resto del Carlino. We conduct searches within these tweets using terms related to an "immigration" dictionary. Subsequently, we calculat a share as the outcome variable, representing the proportion of tweets related to immigrants out of the total number of tweets in a given month. Employing an event study methodology, we compar the three months preceding and four months following a boat landing. The results of this analysis are presented in Figure A3.

We acknowledge that our focus on Twitter is deliberate, as we recognize that national news coverage on this social network often reflects coverage in traditional media formats such as television or newspapers, frequently linking directly to the latter. To further corroborate this, we investigate the trends in Google searches for boat landings and immigrants at the national level, observing increases in the months following a boat landing. These additional findings are depicted in Figure 1 as well. We interpret this empirical evidence as suggestive of a pattern wherein national news outlets intensify coverage of boat arrivals, informing citizens and eliciting increased public interest in the topic.

2) INSTITUTIONAL BACKGROUND: THE MIGRANTS' RECEPTION SYSTEM

The Italian migrants' reception system (in the period considered in this study), as clarified by the Legislative Decree (LD) 142/2015, operates at two levels, as summarized in Figure A4. Immediately after arrival, refugees receive first assistance in medical care, health screening, and identification in one of the four collection centers, called HOTSPOT, which is set up close to the main landing ports (Lampedusa, Trapani, Pozzallo, and Taranto). The Italian Prefectures coordinate these centers, and refugees can start the procedure to request international protection. Within 48 hours, refugees are transferred to CPA (Centri di Prima Accoglienza, or first reception centers). CPA is intended to be a temporary arrangement. In the meantime, they receive a response for international protection requests, with an average permanence period of 10 days. In case of acceptance, migrants become asylum seekers and can be directed to the second level of reception, where they wait for the final response to their international protection request. In case of a negative answer, they are transferred to CPR ('Centri di Permanenza e Rimpatrio') and CIE ('Centri di Espulsione'), waiting for repatriation.

The Ministry of the Interior coordinates the second-level reception system in collaboration with the National Association of Italian Municipalities through the SPRAR system ('Sistema di Protezione per Richiedenti Asilo e Rifugiati', e.g., protection system for asylum seekers and refugees). Participating in national public tenders for refugees' reception, each Italian municipality can set up reception centers (usually pre-existing residences, apartments, or hotels) collaborating with cooperatives and organizations. Winning participants then give their availability to host asylum seekers and refugees[1].

Although the Italian LD 142/2015 provided a time limit of six months of permanence in SPRAR centers, extendable to six additional months, we need more official data to have information on the actual average permanence in the second system reception centers. However, the average time

[1] Municipalities receive public funds (35,00€) for each asylum seeker and refugee they host; therefore, opening a reception centre may be an investment with benefits for the local economy (e.g., Gamalerio 2018). These funds must be used to provide hosts with integration, accommodation, education and health services, other than to secure basic needs, such as clothing and food. The number of hosted migrants in the SPRAR system has grown from 3,000 individuals in 2003 to more than 26,000 in 2016, spread across more than 1000 municipalities and 652 projects (http://www.sprar.it). SPRAR was created in 2002 to establish a network of local institutions that implement reception projects for displaced people. The primary objective of SPRAR is to provide support for each individual in the reception system and make interventions that go beyond the simple distribution of food and housing by providing complementary services such as legal and social guidance and support to promote socio-economic inclusion and integration. A fundamental element of those services is the temporary nature of reception, which is intended in all cases to ensure the independence and integration of recipients. The participation of local institutions in the network of reception projects is voluntary.

spent in Hotspots and CPAs is around 11 days and no less than three months if hosted in SPRAR[2]. In CPR, on average, immigrants remain for 25 days[3].

3) DATA SOURCES

The primary dataset results from a combination of different sources of data. Firstly, we use detailed information on refugees' arrivals through boats at Italian ports from 2010 to 2018. For each landing episode, we gather information on the day and place of arrival, the number of persons who landed, and its composition in terms of nationalities[4]. Secondly, we collected electoral outcomes of all the Italian municipalities that voted twice from 2010 to 2018[5] with information on the election day, electorate and electoral turnout, blank and null ballot papers, the number of candidate mayors, and the share of votes of all the parties[6]. Third, we merge this information with data on municipality characteristics such as total population, the percentage of regular immigrants, taxable income[7], the presence of SPRAR centers, and the number of available beds in each center. Although the number of available beds does not faithfully represent the actual presence of hosts (some of the centers might be under or overcrowded), this variable may proxy for hosted refugees' presence[8]. The final data source is related to the broadband availability as of 2018 at the municipality level, available on the AGCOM (Autorità per la Garanzia nelle Comunicazioni)'s website.

We also use data from Twitter to derive the frequency of tweets containing immigration-related words from 2010 to 2018 at the province level. First, we gather a list of users that tweet from the province of interest, e.g., where at least one voting municipality is in the year of interest. We operate using the Twitter Streaming API, which returns a (supposedly) random sample of approximately 1% of the tweets produced at download[9]. We then implement the first filter on the tweets by identifying "Italian" tweets (and retaining only those), performing a keyword matching on the text of the tweets returned by the streaming API. We selected a list of 155 words commonly

[2] More details on the following website: https://openmigration.org/analisi/migranti-cresce-lutilizzo-della-privazione-delle-liberta/.
[3] More details on the following website: https://www.camera.it/leg17/561?appro=accoglienza_richiedenti_asilo.
[4] Data have been kindly provided by Statistical Office of the Ministry of Interior - Dipartimento Libertà Civili e Immigrazione.
[5] In Italy, the electoral schedule across the country is staggered and several elections occurred in the years considered in this paper, with not all the municipalities voting in the same year and at the same time; usually, municipal elections are held every five years to replace the mayor, the municipal government and the council (see Section 1 of Appendix for further details).
[6] The dataset is available from the Italian Ministry of Interior at the website: https://elezionistorico.interno.gov.it
[7] Obtained from the Italian National Statistical Institute (ISTAT)'s website.
[8] This information is publicly accessible consulting the annual reports and documents published on the SPRAR website (www.sprar.it/pubblicazioni)
[9] The Streaming API only returns at most 1% of the tweets on Twitter at a given moment. Once the volume of the query is above 1% of all of the tweets on Twitter, the response is sampled. Unfortunately, the way in which Twitter samples the data is unpublished. Recent research has shown that there is evidence of bias in this sampling mechanism under certain condition (see for instance Morstatter et al. 2013 and 2014).

occurring in the Italian language to do so. Users whose tweets contain words that also belong to this list were stored. Second, once we have collected the first users' list, we apply a further, stricter filter. We retain only the data of users whose position (publicly available from their profile) is attributable to an Italian city. The additional benefit of this filter is reducing the number of false positives from the previous step. This second step is a list of users whose city of residence can be inferred from the individual description on their account. Third, we use the Twitter REST API to download all these users' tweets in a pre-established period (2010 – 2018)[10]. Fourth, the text of those tweets is analyzed through keyword matching to detect whether the user has actively discussed migrants. The analysis is performed by detecting the presence of the following keywords in the content of the tweets: "migrant*", "rifugiat*", and "immigrant*" (migrant/s, refugee/s, immigrant/s). Aggregating the results by province and time (month-year), we measure the pervasiveness of the topic over time and across provinces.

4) DESCRIPTIVE STATISTICS

Table A1a details the construction of the key variables used in the paper.

From 1st of January 2010 to 31st December 2018, more than 725,000 immigrants (110,000 under 18 years old) arrived in Italy, distributed across 7,000 illegal boat landings (Figure A5 in Appendix). Most of them arrived between 2014 and 2017 (Figure 2 in the paper) and occurred in Sicily (4,909) (Table A1b). Our sample contains 92 nationalities from four continents (Africa, Asia, Latin America, and Europe). Although nationality is usually self-declared and cannot be checked through official records, many refugees arrive from Africa (more than 77% of the total, especially from the Western countries, 38%, and Eastern, 25%), followed by Asia (around 23%, of which 15% are from Western Asian countries) and Europe (less than 1%, mainly from Ukraine and Albany) (see Table A1c). Eritrea and Nigeria are the most represented nationalities from Africa (14 and 12% of the total, respectively). Syrians represent 9% of the arrivals.

Regarding the exposure index, Figure A6 shows its distribution across Italian municipalities in the first election round (2010 – 2013, Panel A) and the second election round (2015 – 2018, Panel B). More specifically, our exposure index averages 1.4 and varies from a minimum value of 0, due either to the absence of regular immigrants within the municipality or the lack of matches between nationalities of arrived and resident migrants, to a maximum of 32.15. Reflecting arrivals on Italian coasts, our exposure index grew steadily across all macro-area from 2012 to 2017, to a sharp decline in 2018 (Figure A7, Panel A). As illustrated in Figure A7, Panel B, on average northern Italy is the area mainly exposed to the arrivals as measured by our index.

[10] Tweets that were deleted, either by the user or by Twitter, during our analysis are not collected.

On average, roughly 2 out of 3 citizens voted in the municipal elections (67.6%). As reported in Figure A8, Panel A, average turnout has steadily declined since 2010. The decline in voters' turnout, coupled with an increase in the share of protest votes, has grown sensibly since 2011, reaching the peak in the 2017 elections (Figure A8, Panel B). On average, the share of votes in favor of anti-immigration parties is 4.4%, while the percentage of populist votes is, on average, 5.9%. However, as shown in Figure A9, Panel A, votes favor extreme-right and populist parties have grown dramatically since 2015 in Italy. The most pronounced increase has been registered in northern and central Italy. At the same time, islands are less inclined to vote for extreme-right and populist parties over the period considered (Figure A9, Panel B).

The number of available beds in SPRAR centers averages around 340 units per municipality, while the share of resident migrants averages 6%. The aging index, calculated as the ratio between the percentage of elderly (e.g., over 65 years) and the share of pupils and children (e.g., from 0 to 14 years), is a compact index informing about the age structure of the municipality. It ranges from 0.24 to 56.

In Figure A10, we show the distribution of immigration-related tweets across Italian provinces, including all municipalities for which we collected Twitter data (Panel A) or only those that voted at least once in 2010-2018 (Panel B). Finally, we use the data on the digital divide from 2012 to 2015 as a proxy for access to political information through (social) media. Data from AGICOM highlight that, between 2010 and 2018, roughly 15% of municipalities in our sample are not served by at least a 2Mbps broadband connection.

5) EXPECTATIONS ABOUT FUTURE IMMIGRATION PATTERNS

It could be argued that showing that voters use information on arrivals and the share of immigrants in their municipalities to form immigration expectations is difficult.

We use a survey performed by the Italian National Election Studies (ITANES---a large nationally representative survey conducted after parliamentary and other elections in Italy) containing a question on a perceived number of immigrant residents for 2013. This survey is representative at the national level and includes respondents' residential information (i.e., municipality). More specifically, our focus is on a specific question from this survey: "Some people say that we host too many migrants. Others say this statement is not true and that we could host more migrants. What's your opinion on this? Answer on a scale from 1 to 7, where 1 means that we host too many migrants, while 7 means that we could easily host more". We build on this question to derive a measure of immigration (mis)perception based on the gap between the respondent's estimated hosting capacity

of immigrants and the real number of immigrants residing in the respondent's province. Then, we connect this (mis)perception measure to our measure of immigration expectations (exposure index).

Our procedure is based on the following steps. First, we calculate the average (real) share of migrants and the exposure index at the provincial level, considering data from 2010 to 2013 (the ITANES survey was conducted in 2013). We then merge this information with the ITANES survey data. We create a dummy variable that equals one if the respondent answered 1, 2, or 3 to the question above and is from a province with a migrant share below the median value for his/her region. We interpret this dummy as a proxy for the misperception of immigration exposure.

To net out this measure from individual characteristics, including political leaning, we conduct a regression using this dummy variable as an outcome variable and including various personal and political characteristics of the respondents, such as: i) a dummy variable indicating if the respondent is female; ii) a dummy variable indicating if the respondent is between 18 and 60 years old; iii) a dummy variable indicating if the respondent is self-employed; iv) a dummy variable indicating if the respondent has a university degree; and v) a dummy variable identifying rightwing respondents. We also include region-fixed effects and apply the sample weights provided by ITANES. Standard errors are clustered at the provincial level. Finally, we predict the residuals from this regression and correlate them with our measure of perceived immigration, i.e., exposure index, at the provincial level.

The resulting scatterplot is presented in Figure A11. The Y-axis reports the aforementioned residuals of immigration misperception, with higher values implying higher immigration misperception (unexplained by personal characteristics, including political leaning). The X-axis reports our key measure in the paper exposure index, which captures perceived immigration. The scatterplot documents a positive correlation, suggesting that our index captures how individuals form (biased) beliefs about immigration. Of course, this evidence is just descriptive, yet we believe it can back our claim that the exposure index captures individuals' beliefs on immigration.

6) CLASSIFICATION OF PARTIES

We use as anti-immigration votes the sum of preferences favouring right and extreme-right parties: Casapound, Forza Nuova, Movimento Sociale Italiano and Alleanza Nazionale.[11]

To categorise anti-immigration parties, we group all those parties characterised by strong rhetoric against immigrants and ethnic minorities, that publicly refer to migration flows as a concern

[11] Voting data for municipalities located in regions with special autonomy (Sicily, Trentino- Alto Adige, Friuli-Venezia Giulia, Valle d'Aosta) are unavailable. In our opinion, this type of selection does not bias the parameters. Excluding islands and border regions can reinforce our results, which could be interpreted as a lower bound, given that in those regions, the salience of immigration (and therefore the sensitivity to news of arrivals) is even stronger.

for national security, that aim at national borders closure, and that place the domestic population in a position of primacy against foreign citizens. This group includes Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale.

We consider populist votes as the sum of votes favouring populist parties, relying on the seminal work by Van Kessel (2015). The author classifies as populist those parties holding political ideas that hinge especially i) on the distinction between *'*the people', referred to as the unique good part of the society, and *'*the elite*'*, ii) on the supremacy of the former over the latter, and iii) on motives of national sovereignty. Populist parties in this category are Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle.

We also consider the Northern League coalition, e.g., the sum of all the votes collected directly by 'Lega' and strictly related parties. Lega list contains votes expressed for Lega, Lega Nord and Lega Padana.

In some cases, mayor candidates and council lists do not have an official political affiliation, identifiable by voters through the political party's symbol and name; in such cases, candidates belong to the so-called 'civic lists'. For this reason, we exclude cases where retrieving a clear-cut party affiliation from official electoral data is impossible.

7) EVENT STUDY ON THE SPATIAL SORTING OF IMMIGRANTS (METHODS)

We carry out an event study to check for significant pre-and post-electoral trends in the spatial distribution of immigrants by nationality of origin. More specifically, we estimate the following model:

$$M_{j,i,y} = \gamma_i + \delta_y + \sum_d \beta_d E_{i,y+d} + \varepsilon_{i,y} \qquad (3)$$

where $M_{j,i,y}$ is the share of immigrants of nationality j living in municipality i in year y, γ_i is a time-invariant municipality-specific effect reflecting the social and economic environment (e.g. the quality of institutions) in which elections take place, δ_y is a year effect that is common to all municipalities, and $\varepsilon_{i,y}$ is an i.i.d. error term. $E_{i,y+d}$ is a dummy variable equal to 1 if an election is scheduled in municipality *i* at time $y + d$, with *d* = {-1, -2, +1, +2}, e.g., one and two years before and after the election year (omitted). The vector of coefficients of interest from eq. 5 is β_d, which measures the impact of the distance in years of a given year y from the year of the election on the share of immigrants *M.* When *d* = -2 and -1, β_d captures pre-electoral trends of a given nationality one and

two years *before* the election year, whereas when d= +1 and +2, β_d captures post-electoral trends of a given nationality one and two years *after* the election year. We estimate with OLS j regression models, e.g. for all 92 nationalities represented in the boat landings. Results are available on request and show that pre- or post-electoral trends of immigrant nationalities in response to the local political shocks do not represent a severe threat to our identification strategy.

8) OTHER MECHANISMS, HETEROGENEITY AND ROBUSTNESS CHECKS

8.1. GROSS INCOME PER CAPITA & COMPETITION FOR PUBLIC SERVICES

The literature on immigration, political attitudes, and electoral outcomes suggests that gross income per capita matters. Immigration inflows significantly increase votes obtained by far-right parties, especially in towns with higher income per capita (Dustmann et al. 2018). We, therefore, split the sample below and above the median according to the values of the municipality's taxable income per capita, according to the distribution of the respective variable observed in 2010. Results in Table A11 show that the main effect of exposure to arrivals is significant only in the cities with a high taxable income per capita. This result aligns with the economic hypothesis of self-interest, such that individuals respond to the threat of immigration according to their financial concerns (Dustmann et al. 2018).

Furthermore, immigration also impacts public finance and policies (Halla et al. 2017). Indeed, the expected financial burden associated with low-skilled immigrants, who are more likely to be net recipients of welfare (Otto and Steinhardt, 2014), would also increase electoral support for anti-immigration parties. A higher degree of a perceived threat from immigration inflows negatively impacts tax morale and the willingness to pay taxes (Nemore and Morone, 2019). Increased immigration negatively affects natives' attitudes towards redistribution, driven by voters supporting center- and right-wing parties (Dahlberg et al. 2012). If more immigrants are expected to arrive, natives might face fiercer competition for public services, such as compositional amenities from neighborhoods, schools, and workplaces, thereby increasing anti-immigration sentiments (Edo et al. 2019). Natives could associate the future increase in immigration rates with a consequent rise in the share of immigrants relative to native children. This could turn into further competition for local childcare services. For instance, areas with a high percentage of the population in early schooling may be more sensitive to the arrival of migrants if natives believe that immigrants will get priority school admissions. To assess the role of competition in public services, we split the sample using the number of children aged 0-4 according to the distribution of the respective variables observed in 2010

(for a similar analysis, see Barone et al. 2016). The intuition is that the higher the number of native children, the higher the expectation that immigrants might 'steal' school admissions from the natives' citizenship rights. Hence, we divide municipalities below and above the median according to the number of children aged 0-4. Results reported in Table A12 support the hypothesis above. Perceived immigration decreases turnout (Table A12, Panel A), increases protest votes (Table A12, Panel B), and increases votes for the anti-immigration and populist parties (Table A12, Panel C and D) in municipalities with a higher number of children. This suggests that the perception that immigration can threaten local welfare also influences voting behavior.

8.2. ALTERNATIVE DEFINITIONS OF POPULISM

One limit to Van Kessel's strategy to group populist parties is that it focuses exclusively on parties with political representation in the national parliament[12]. Therefore, strictly relying on Van Kessel's classification would imply considering as non-populists a set of minor parties that instead fit the criteria well. To address this issue, we re-estimate our model by applying another widely used benchmark to identify populist parties, the Chapel Hill Expert Survey (CHES)[13]. The 2017 survey scores 132 political parties in 11 European countries over a long list of dimensions through questionnaires conducted with experts about European political parties. The survey uses experts' opinions to estimate each representative party's ideological and political positions. Aassve et al. (2018), for example, consider populists, those parties with an average score higher than 6, over a maximum value of 10, on the question "the people, not politicians, should make the most important decisions". However, also CHES only focuses on political parties that are represented at the national level. To overcome this limit, as in Aassve et al. (2018), we construct a different set of populist parties[14]. We look at parties' political programs and include in the list of populist parties as defined by CHES also several other minor parties that: i) concurred in municipal elections, ii), according to our judgement, satisfy Van Kessels' conditions, and iii) score higher than six on the previous CHES question. The parties we include are: Casa Pound, Il Popolo della Famiglia (both right-wing parties), and Potere al Popolo (left-wing). Although often present in media, considered together, these parties collected less than 3% of preferences in the last Italian elections (March 2018). Using this alternative definition of populism, our main results do not change substantially (Table A13).

It could be argued that the selection of populist parties included in our analysis (Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle) is too broad. Indeed, although Forza Italia and Il

[12] Van Kessel lists as populist parties Lega Nord, Movimento 5 Stelle, Fratelli d'Italia and Popolo delle Libertà.
[13] The unique difference between Van Kessel and Chapel Hill Expert Survey (CHES), is that the latter consider as populist only Lega Nord, Movimento 5 Stelle and Fratelli d'Italia.
[14] Using the CHES categorisation without the correction suggested by Aassve et al. (2018) produce very similar results (available upon request).

Popolo della Libertà have had populist tones in their electoral campaigns, deeming them populist parties and Lega and Movimento 5 Stelle might be simplistic. They can also be considered, in a sense, as traditional parties. Hence, we separate those parties and re-estimate our model using a refined set of populist parties, including Lega and Movimento 5 Stelle. Results using this more restrictive definition of populism do not change, thereby providing additional evidence that the uprise of populism is driven by the other 'strictly populist' forces left in the group[15].

8.3. DIFFERENT AGGREGATIONS OF REFUGEE NATIONALITIES

Our identification strategy rests on the assumption that citizens know (or can get precise information) about the nationalities of the incoming refugees and the nationalities of local regular migrants. It is possible that this knowledge is limited or the information at their disposal is biased. It might be more accessible for people to identify refugees from a larger area than their specific nationality. Therefore, we first implement a robustness check using a broader nationalities classification. We reconstruct the exposure index by grouping residents and incoming refugees by macro-area of origin, according to 12 different areas as classified by the United Nations. Although this strategy reduces the variation of the exposure index across municipalities and boat landings, most of our main findings, summarised in Table A14, are confirmed.

8.4. SALIENCE OF LOCAL IMMIGRANTS, PERCEIVED AND ACTUAL IMMIGRATION

We run two sets of regressions[16]. First, for each nationality *j*, we regress the number of immigrants of nationality *j*, year *y* (i.e. 2010-2018) in municipality *i* on the total number of resident immigrants of the same nationality at the country level at time *y-1* (5 years before), net of the municipal contribution to the country total as in Cortes and Pan (2015) and Barone et al. (2016)[17]. Results, available on request, suggest that immigrants of a specific nationality tend to cluster in a municipality over time, thereby supporting the network hypothesis. Second, for each nationality *j*, we regress the number of resident immigrants of nationality *j*, year *y* (2015-2018) in municipality *i* on the number of refugees of the same nationality *j* landed at time *y-1* (5 years before). Available on request, results show that the (nationality-specific) local stock of immigrants is not increased by landing episodes, even if these occurred in the past and refugees could have been eventually allowed

[15] Results (available upon request) are very similar to those summarized in Tables A13.
[16] Regressions, using area and time fixed effects, include share of migrants and electorate as controls. Standard errors are clustered at province level.
[17] The variable constructed in this way varies only depending on the number of immigrants that were present in the municipality at time *t-1*. In particular, the lower the number of residing immigrants, the higher the variable.

to circulate freely (or did it illegally)[18]. Jointly considered, these results show that immigrants tend to cluster in cities where they can rely on a pre-existing network. However, an increase in the local stock of immigrants is not associated with the refugee landings. Importantly, this evidence further suggests that the estimated political effects of immigration exposure are driven by *misperceptions* about future immigration (i.e., incorrect beliefs that the new inflow of refugees will increase the local stock of immigrants), rather than future *actual* immigration.

[18] This is not surprising. As discussed in Section 2, upon arrival refugees are not free to settle wherever they prefer and reach their network. Moreover, for many of them Italy represents a temporary location while waiting for the permit to reach their desired destination, which is often another country of the European Union. And finally, the national hosting system requires several years to release the permit, which eventually is often rejected.

APPENDIX

Table A1a – Variable legend

Variable	Description
Exposure index	Index of exposure to immigrants' arrivals. Captures the perception of new entrant immigrants at the municipality level
Exposure index 0-30 days before elections	Index of exposure to immigrants' arrivals calculated in the 30 days preceding the election
Exposure index 0-60 days before elections	Index of exposure to immigrants' arrivals calculated between the election day and 60 days preceding the elections
Exposure index 0-90 days before elections	Index of exposure to immigrants' arrivals calculated between the election day and 90 days preceding the election
Turnout	Reports the share of individuals entitled to vote at the municipality level who went voting at the election, net of the null and void ballot papers
Share of anti-immigrant votes	Share of votes expressed in favour of Casa Pound, Forza Nuova, Movimento Sociale Italiano and Alleanza Nazionale
Share of populist votes	Share of votes expressed in favour of Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle
Share of populist votes (including minor parties)	Share of votes expressed in favour of Forza Italia, Il Popolo delle libertà, Lega, Movimento 5Stelle, Casa Pound, Il Popolo della Famiglia and Potere al Popolo.
Total population per 1,000 inhabitants	The total resident population
Total population 2010 per 1,000 inhabitants	The total resident population in 2010
Total SPRAR beds, per capita (per 1000 individuals)	Total number of available beds in SPRAR centres at the province level
Share migrants	Share of non-native population with respect to the total resident population at the municipality level
Electorate per 1,000 inhabitants	Number of individuals entitled to vote at the municipality level
Number of mayors	Number of mayor candidates at the elections
Share of household with annual income > 120k	Share of citizens with annual personal income greater than 120 thousand at the municipal level
Ageing index	Index of age structure at the municipal level, calculated as the ratio between the share of elder individuals (i.e. over 65 years) and the share of pupils and children (i.e. from 0 to 14 years)
Refugees landed	Number of refugees landed in Italian ports in each boat
Left leaning	Indicator that reflects the historical political left-leaning of the municipality
Metropolitan areas	Indicator that identifies poles area. An area is a pole if it has at least one upper secondary school, one technical and vocational institute, one hospital, and a railway station
Ratio foreign employment 2011	Ratio of the foreign and native employment rate

Table A1b – Boat landings and refugee arrivals. Breakdown by year and region of landing

Years and regions	Boat-landing	Nr of immigrants	Average nr of immigrants
		By year	
2010	159	4406	28
2011	760	62692	82
2012	298	13267	45
2013	483	42925	89
2014	1111	170100	153
2015	742	110696	149
2016	1580	181436	115
2017	1451	119369	82
2018	489	21024	43
		By region	
Calabria	911	108792	119
Campania	158	23731	150
Friuli V. Giulia	1	35	35
Lazio	1	31	31
Liguria	3	605	202
Puglia	603	53714	89
Sardegna	487	19582	40
Sicilia	4909	519425	106

Note: authors' elaboration.

Table A1c – Refugee arrivals. Breakdown by macro-region of origin

Macro Region	Nr of immigrants
Northern Africa	88609
Central Africa	14708
Eastern Africa	180949
Western Africa	275309
Southern Africa	20
Central Asia	8
Eastern Asia	7
Western Asia	109571
South-Eastern Asia	65
Southern Asia	55012
Europe	338
Caribbean	4
Central America	2
Not declared	1313

Note: authors' elaboration.

Table A1d – Descriptive statistics

Variable	N	Mean	SD	Min	Max
Exposure index	5,788	4.460	49.770	0	2,618.640
Exposure index 0-30 days before elections	5,788	1.510	22.110	0	1,347.520
Exposure index 0-60 days before elections	5,788	2.810	35.450	0	2,063.180
Exposure index 0-90 days before elections	5,788	3.560	43.250	0	2,393.020
Turnout	5,788	67.720	11.170	1.810	100
Share of anti-immigrant votes	5,788	0.040	0.120	0	1.000
Share of populist votes	5,788	0.060	0.140	0	1.000
Share of populist votes (including minor parties)	5,788	0.060	0.130	0	1.000
Share of populist votes (including minor parties)	5,788	0.040	0.120	0	1.000
Total population per 1,000 inhabitants	5,767	8.338	32.115	0.360	1,345.851
Total population 2010 per 1,000 inhabitants	5,788	6.328	32.115	0.000	1,343.841
Total SPRAR beds, per capita (per 1000 individuals)	5,788	0.000	0	0	0.110
Share migrants	5,734	0.120	1.810	0	88.590
Electorate per 1,000 inhabitants	5,788	7.760	31.90	0.030	1,006.700
Number of mayors	5,774	4.210	4.800	1	41
Share of household with annual income > 120k	5,783	0.030	0.040	0	0.420
Ageing index	5,767	2.730	13.030	0.230	469.400
Refugees landed	5,788	78.350	126.900	6	360
Left leaning	5,788	0.070	0.250	0	1
Metropolitan areas	5,788	0.040	0.210	0	1
Ratio foreign employment 2011	5,218	80.710	21.260	25.990	365.700

Note: authors' elaboration.

Table A2 – Exposure to arrivals, political participation and share of votes – Alternative specifications

Outcome	(1) Controlling for *share of immigrants*	(2) Not controlling for *share of immigrants*	(3) Instrumenting *share of immigrants* as in Barone et al (2014)
Turnout	-0.0000*	-0.0000*	-0.0000*
	(0.0000)	(0.0000)	(0.0000)
Protest vote share	0.0001***	0.0001***	0.0001***
	(0.0000)	(0.0000)	(0.0000)
Share of vote for anti-immigration parties	0.0002***	0.0001**	0.0002***
	(0.0001)	(0.0001)	(0.0001)
Share of vote for populist parties	0.0005***	0.0003***	0.0005***
	(0.0002)	(0.0001)	(0.0002)
Share of vote for Northern League	0.0001**	0.0000	0.0001***
	(0.0000)	(0.0000)	(0.0000)

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. All models include Total SPRAR beds, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. The model in Column (1) controls for Share of Migrants. The model is column (2) does not control for Share of Migrants. The model in column (3) instruments the share of migrants with an instrumental variable constructed as in Barone et al. (2014) by fixing the share of local migrants by nationality at the year 1991 and considering the actual country level stock of immigrants, net of the municipality contribution. Robust standard errors in parentheses clustered at the province level. *** p<0.01, ** p<0.05, * p<0.1

Table A3 – Exposure to arrivals and electoral outcomes – Elasticities

	(1)	(2)	(3)	(4)	(5)
Dependent Variables:	Turnout	Protest votes	Share of vote for anti-immigration parties	Share of vote for populist parties	Share of vote for Northern League
Exposure index	-0.0092***	0.0051***	0.0112***	0.0285***	0.0157***
	(0.0028)	(0.0008)	(0.0022)	(0.0036)	(0.0050)
Observations	5,718	5,718	5,718	5,718	2,287
Mean dependent variable	-0.406	0.037	0.037	0.055	0.084
R-squared	0.459	0.057	0.049	0.099	0.094
Number of municipalities	2,877	2,877	2,877	2,877	1,151

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. Dependent variables such as turnout, protest votes or vote shares for anti-immigrant, populist parties and Northern League are taken in logs. The key explanatory variable, such as the change in the exposure to migration at the municipality level, taking into account all the arrivals occurring from the beginning of the year to the election day is taken in log. Robust standard errors in parentheses clustered at the province level. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. *** p<0.01, ** p<0.05, * p<0.1.

Table A4 – Political effects of expected immigration, using as benchmark municipalities with a low exposure index at baseline

	(1)	(2)	(3)	(4)	(5)
Dependent Variables:	Turnout	Protest votes	Share of vote for anti-immigration parties	Share of vote for populist parties	Share of vote for Northern League
Exposure index	-0.0010***	0.0005***	0.0005**	0.0021***	0.0008**
	(0.0001)	(0.0001)	(0.0003)	(0.0004)	(0.0004)
Exposure index* Exposure index baseline above 75th percentile	0.0010***	-0.0004***	-0.0003	-0.0017***	-0.0008*
	(0.0001)	(0.0001)	(0.0003)	(0.0004)	(0.0004)
Observations	5,718	5,718	5,718	5,718	2,287
Mean dependent variable	67.677	0.039	0.041	0.037	0.061
R-squared	0.560	0.050	0.038	0.067	0.078
Number of municipalities	2,877	2,877	2,877	2,877	1,151

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. Robust standard errors in parentheses clustered at the province level. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. *** p<0.01, ** p<0.05, * p<0.1.

Table A5 – Political effects of expected immigration: nonlinear effects

	(1)	(2)	(3)	(4)	(5)
Dependent Variables:	Turnout	Protest votes	Share of vote for anti-immigration parties	Share of vote for populist parties	Share of vote for Northern League
Exposure index	-0.0001***	0.0002***	0.0005***	0.0010**	0.0003**
	(0.0001)	(0.0000)	(0.0001)	(0.0004)	(0.0001)
Exposure index squared	0.0000***	-0.0000***	-0.0000***	-0.0000***	-0.0000***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	5,718	5,718	5,718	5,718	2,287
Mean dependent variable	67.677	0.039	0.041	0.037	0.061
R-squared	0.556	0.049	0.042	0.072	0.079
Number of municipalities	2,877	2,877	2,877	2,877	1,151

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. Robust standard errors in parentheses clustered at the province level. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. *** p<0.01, ** p<0.05, * p<0.1

Table A6 A –Exposure index constructed by fixing at the first election year the local share of immigrants

	(1)	(2)	(3)	(4)	(5)
Dependent Variables:	Turnout	Protest votes	Share of vote for anti-immigration parties	Share of vote for populist parties	Share of vote for Northern League
Exposure index	-0.003	0.0001***	0.0001**	0.0002***	0.0000
	(0.003)	(0.0000)	(0.0000)	(0.0001)	(0.0000)
Observations	5,718	5,718	5,718	5,718	2,287
Mean dependent variable	67.677	0.039	0.041	0.037	0.061
R-squared	0.555	0.045	0.035	0.055	0.076
Number of municipalities	2,877	2,877	2,877	2,877	1,151

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. Robust standard errors in parentheses clustered at the province level. *** p<0.01, ** p<0.05, * p<0.1.

Table A6 B –Exposure index constructed by fixing at year 2004 the local share of immigrants

	(1)	(2)	(3)	(4)	(5)
Dependent Variables:	Turnout	Protest votes	Share of vote for anti-immigration parties	Share of vote for populist parties	Share of vote for Northern League
Exposure index	-0.0022	0.0000***	0.0001**	0.0002***	0.0000
	(0.0014)	(0.0000)	(0.0000)	(0.0001)	(0.0000)
Observations	5,718	5,718	5,718	5,718	2,287
Mean dependent variable	67.677	0.039	0.041	0.037	0.061
R-squared	0.555	0.045	0.035	0.055	0.076
Number of municipalities	2,877	2,877	2,877	2,877	1,151

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. Robust standard errors in parentheses clustered at the province level. *** p<0.01, ** p<0.05, * p<0.1.

Table A7 A – Instrumental variable strategy using the historical settlement patterns of immigrants (2004)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent Variables:	Exposure index	Turnout	Protest votes	Share of vote for anti-immigration parties	Share of vote for populist parties	Exposure index	Share of vote for Northern League
	First-stage	Second-stage	Second-stage	Second-stage	Second-stage	First-stage	Second -stage
Exposure index$_{2004}$	0.519***					0.532***	
	(0.006)					(0.009)	
Exposure index		-0.004	0.00006***	0.0001***	0.0003***		0.00005
		(0.00)	(0.00002)	(0.00004)	(0.0001)		(0.00003)
Observations	5,718	5,682	5,682	5,682	5,682	2,287	2,272
Mean dependent variable		67.677	0.039	0.041	0.037		0.061
R-squared	0.893	0.555	0.046	0.037	0.060	0.915	0.077
F-test	2143.22					1099.06	
Observations	2,877	2,841	2,841	2,841	2,841	1,151	1,136

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. Robust standard errors in parentheses clustered at the province level. Columns (1) through (7) are based on 2SLS estimations. In Columns (2), (3), (4, (5) and (7), the dependent variable is the difference in turnout, protest votes or vote shares for anti-immigrant, populist parties and Northern League between two elections at the municipal level and the key explanatory variable is the change in the exposure to migration at municipality level taking into account all the arrivals occurring from the beginning of the year to the election day instrumented by the equivalent variable in 2004. Column (1) reports the first-stage coefficient for the exposure index in the case of 2SLS estimations reported in Columns (2), (3), (4), and (5). Column (6) reports the first-stage coefficient for the exposure index in the case of 2SLS estimation reported in Columns (7). Regarding effect size, we estimate that a one standard deviation increase in the exposure index reduces the turnout by 0.02 standard deviations. This implies that an increase in the exposure index by around 5 units (the average change in the exposure index between the two elections is 4.965) leads to a decrease in turnout of 0.031% with respect to the mean outcome value. Moreover, we estimate that a one standard deviation increase in the exposure index increases protest votes by 0.099 standard deviations. This implies that an increase in the exposure index by around 5 units leads to a decrease in turnout of 0.830% with respect to the mean outcome value. Finally, we estimate that a one standard deviation increase in the exposure index increases the share of votes for anti-immigration parties, populist parties, and Northern League by 0.052, 0.10 and 0.015 standard deviations, respectively. This implies that an increase in the exposure index by around 5 units leads to an increase in turnout of 1.44%, 2.33% and 0.25%, respectively, with respect to the mean outcome values. *** p<0.01, ** p<0.05, * p<0.1.

Table A7 B – Instrumental variable strategy using the historical settlement patterns of immigrants (1991)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent Variables:	Exposure index	Turnout	Protest votes	Share of vote for anti-immigration parties	Share of vote for populist parties	Exposure index	Share of vote for Northern League
	First-stage	Second-stage	Second-stage	Second-stage	Second-stage	First-stage	Second -stage
Exposure index$_{1991}$	0.574***					0.670***	
	(0.0103)					(0.015)	
Exposure index		-0.003	0.00007***	0.00019***	0.0005***		0.00004
		(0.003)	(0.00002)	(0.00007)	(0.0001)		(0.00004)
Observations	5,718	5,682	5,682	5,682	5,682	2,287	2,272
Mean dependent variable		67.677	0.039	0.041	0.037		0.061
R-squared	0.840	0.555	0.046	0.037	0.061	0.882	0.077
F-test	1350.56					766.34	
Number of municipalities	2,877	2,841	2,841	2,841	2,841	1,151	1,136

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. Robust standard errors in parentheses clustered at the province level. Columns (1) through (7) are based on 2SLS estimations. In Columns (2), (3), (4, (5) and (7), the dependent variable is the difference in turnout, protest votes or vote shares for anti-immigrant, populist parties and Northern League between two elections at the municipal level and the key explanatory variable is the change in the exposure to migration at municipality level taking into account all the arrivals occurring from the beginning of the year to the election day instrumented by the equivalent variable in 1991 (data and methods from Barone et al. 2016). Column (1) reports the first-stage coefficient for the exposure index in the case of 2SLS estimations reported in Columns (2), (3), (4), and (5). Column (6) reports the first-stage coefficient for the exposure index in the case of 2SLS estimation reported in Columns (7). Regarding effect size, we estimate that a one standard deviation increase in the exposure index reduces the turnout by 0.013 standard deviations. This implies that an increase in the exposure index by around 5 units (the average change in the exposure index between the two elections is 4.965) leads to a decrease in turnout of 0.022% with respect to the mean outcome value. Moreover, we estimate that a one standard deviation increase in the exposure index increases protest votes by 0.107 standard deviations. This implies that an increase in the exposure index by around 5 units leads to a decrease in turnout of 0.898% with respect to the mean outcome value. Finally, we estimate that a one standard deviation increase in the exposure index increases the share of votes for anti-immigration parties, populist parties, and Northern League by 0.079, 0.17 and 0.011 standard deviations, respectively. This implies that an increase in the exposure index by around 5 units leads to an increase in turnout of 2.203%, 3.886% and 0.34%, respectively, with respect to the mean outcome values. *** p<0.01, ** p<0.05, * p<0.1.

Table A8 – Placebo tests using electoral outcomes obtained ten years earlier (period 2000-2008)

	(1)	(2)	(3)	(4)	(5)
Dependent Variables:	Turnout	Protest votes	Share of vote for anti-immigration parties	Share of vote for populist parties	Share of vote for Northern League
Exposure index	0.0044	0.0000	-0.0000	-0.0001	0.0000
	(0.0043)	(0.0000)	(0.0000)	(0.0001)	(0.0000)
Observations	5,718	5,718	5,718	5,718	2,287
Mean dependent variable	77.185	0.041	0.028	0.044	0.040
R-squared	0.301	0.100	0.005	0.010	0.018
Number of municipalities	2,877	2,877	2,877	2,877	1,151

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. Robust standard errors in parentheses clustered at province level. *** p<0.01, ** p<0.05, * p<0.1

Table A9 – Placebo estimates of the effects of 'fake' exposure to arrivals on turnout, protest votes, vote shares for anti-immigrant, populist and Northern League parties

	(1)	(2)	(3)	(4)	(5)
Dependent Variables:	Turnout	Protest votes	Share of vote for anti-immigration parties	Share of vote for populist parties	Share of vote for Northern League
Exposure index	0.0000	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	5,718	5,718	5,718	5,718	2,287
Mean dependent variable	67.677	0.039	0.043	0.064	0.099
R-squared	0.555	0.043	0.034	0.051	0.076
Number of municipalities	2,877	2,877	2,877	2,877	1,151

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. Robust standard errors in parentheses clustered at the province level. *** p<0.01, ** p<0.05, * p<0.1

Table A10 - Political effects of expected immigration, excluding nationalities subject to 'political sorting'

	(1)	(2)	(3)	(4)	(5)
	Political participation:		Share of votes for:		
	Turnout	Protest votes	Anti-immigration parties	Populist parties	Northern League
Exposure index	-0.0045*	0.0001***	0.0002***	0.0005***	0.0001**
	(0.0025)	(0.0000)	(0.0000)	(0.0002)	(0.0000)
Observations	5,718	5,718	5,718	5,718	2,287
Mean dependent variable	67.677	0.039	0.043	0.064	0.099
R-squared	0.555	0.046	0.037	0.061	0.077
Number of codiceistat	2,877	2,877	2,877	2,877	1,151

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. Exposure index constructed eliminating from the computation nationalities which local shares are significantly affected by political left-wing leaning. Robust standard errors in parentheses clustered at the province level. *** p<0.01, ** p<0.05, * p<0.1

Table A11 – Exposure to arrivals and votes for extreme-right parties: gross income per capita

	(1)	(2)
	Gross income per capita	
	≤ median	> median
	Panel A: Turnout	
Exposure index	-0.0130	-0.0010
	(0.0276)	(0.0022)
Observations	2,835	2,869
Mean dependent variables	67.294	68.056
R-squared	0.453	0.670
Number of municipalities	1,437	1,440
	Panel B: Protest votes	
Exposure index	0.0004	0.0001***
	(0.0003)	(0.0000)
Observations	2,835	2,869
Mean dependent variables	0.036	0.041
R-squared	0.039	0.096
Number of municipalities	1,437	1,440
	Panel C: Anti-immigration votes	
Exposure index	0.0003	0.0002***
	(0.0002)	(0.0000)
Observations	2,835	2,869
Mean dependent variables	0.011	0.074
R-squared	0.011	0.066
Number of municipalities	1,437	1,440
	Panel D: Populist votes	
Exposure index	0.0011*	0.0004**
	(0.0006)	(0.0002)
Observations	2,835	2,869
Mean dependent variables	0.020	0.107
R-squared	0.040	0.091
Number of municipalities	1,437	1,440
	Panel E: Northern-league votes	
Exposure index	0.0014	0.0000
	(0.0019)	(0.0000)
Observations	1,140	1,147
Mean dependent variables	0.071	0.126
R-squared	0.078	0.119
Number of municipalities	576	575

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. The sample is split below and above the median using the values of the municipality's taxable income per capita observed in 2010. Robust standard errors in parentheses clustered at the province level. *** p<0.01, ** p<0.05, * p<0.1.

Table A12 – Exposure to arrivals and votes for extreme-right parties: competition for public services

	(1)	(2)
	# of children aged 0-4	
	≤ median	> median
	Panel A: Turnout	
Exposure index	-0.0013	-0.0000*
	(0.0012)	(0.0000)
Observations	2,832	2,872
R-squared	0.497	0.707
Number of municipalities	1,437	1,440
	Panel B: Protest votes	
Exposure index	0.0011	0.0001***
	(0.0007)	(0.0000)
Observations	2,832	2,872
R-squared	0.136	0.125
Number of municipalities	1,437	1,440
	Panel C: Anti-immigration votes	
Exposure index	0.0006	0.0002***
	(0.0005)	(0.0000)
Observations	2,832	2,872
R-squared	0.014	0.084
Number of municipalities	1,437	1,440
	Panel D: Populist votes	
Exposure index	0.0007	0.0004**
	(0.0005)	(0.0002)
Observations	2,832	2,872
R-squared	0.014	0.117
Number of municipalities	1,437	1,440
	Panel E: Northern-league votes	
Exposure index	0.0044	0.0000
	(0.0033)	(0.0000)
Observations	1,139	1,147
R-squared	0.041	0.162
Number of municipalities	577	574

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. The sample is split below and above the median using the number of children aged 0-4 in 2010. Robust standard errors in parentheses clustered at the province level. *** p<0.01, ** p<0.05, * p<0.1.

Table A13 – Exposure to arrivals and share of populist votes – Alternative definition

	(1)
	Dependent Variable: *Share of votes for populist parties*
Exposure index	0.0002**
	(0.0001)
Observations	5,718
Mean dependent variable	67.677
R-squared	0.057
Number of municipalities	2,877

Populist votes are the sum of votes favouring populist parties including Casa Pound, Il Popolo della Famiglia (both right-wing parties), and Potere al Popolo (left-wing). The model includes Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. Robust standard errors in parentheses clustered at the province level. *** p<0.01, ** p<0.05, * p<0.1

Table A14 – Exposure to arrivals and electoral outcomes – Broader definition of nationalities

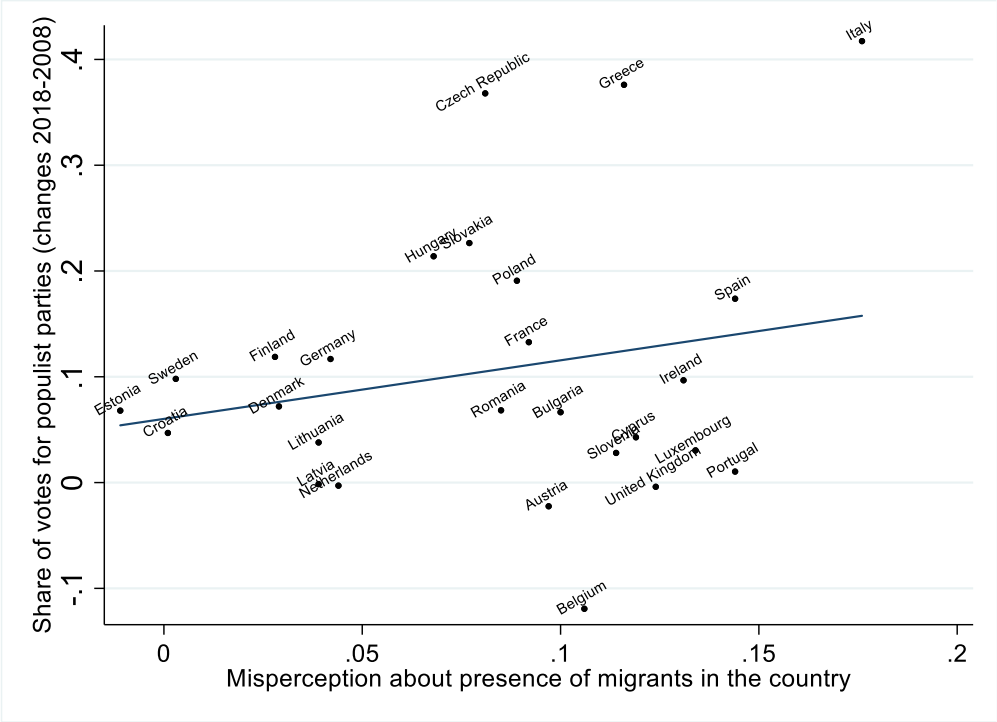
	(1)	(2)	(3)	(4)	(5)
Dependent Variables:	Turnout	Protest votes	Share of vote for anti-immigration parties	Share of vote for populist parties	Share of vote for Northern League
Exposure index	-0.0001**	0.0001***	0.0004***	0.0007**	0.0002**
	(0.0000)	(0.0000)	(0.0001)	(0.0003)	(0.0001)
Observations	5,718	5,718	5,718	5,718	2,313
Number of municipalities	2,891	2,891	2,891	2,891	2,891

Turnout is the ratio between the number of votes and individuals entitled to vote (rescaled to be 0-100\%). Protest votes groups null and white votes. Anti-immigration votes are the sum of preferences favouring right and extreme-right parties, including Lega, Forza Nuova, Casa Pound, Movimento Sociale Italiano and Alleanza Nazionale). Populist votes are the sum of votes favouring populist parties as defined by Kessel (2015) including Forza Italia, Il Popolo delle libertà, Lega and Movimento 5 Stelle. Northern League coalition is the sum of all the votes collected directly by 'Lega' and strictly related parties containing votes expressed for Lega, Lega Nord and Lega Padana. All models include Total SPRAR beds, Share of Migrants, Electorate, Number of Mayors, Taxable income share > 120,000, Ageing index and year dummies. We reconstruct the exposure index by grouping residents and incoming refugees by macro-area of origin, according to 12 different areas as classified by the United Nations. Robust standard errors in parentheses clustered at the province level. *** p<0.01, ** p<0.05, * p<0.1.

Table A15 – Summary statistics of Twitter data used in the analyses.

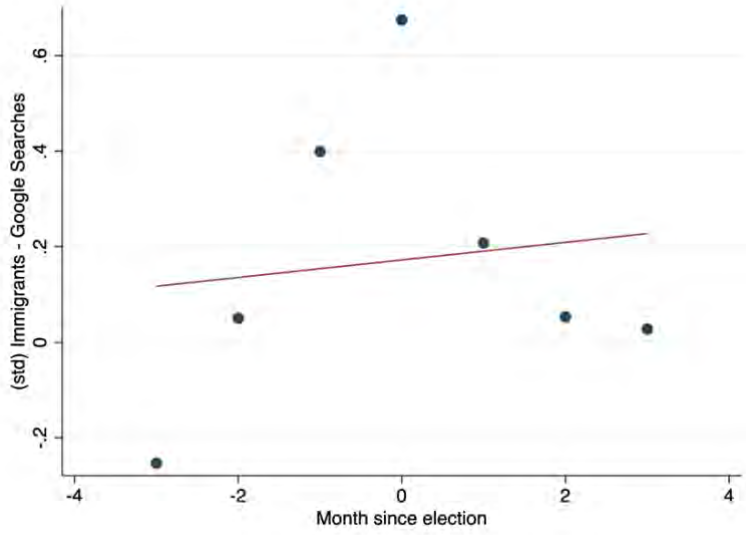
VARIABLE	Obs	Mean	Min	Maxi
Immigration tweets (tot)	70,308	5.6893	1	1101
Positive tweets	70,308	0.1125	0	92
Negative tweets	70,308	0.8475	0	215
Neutral tweets	70,308	4.7291	0	856
Joy tweets	70,308	0.4842	0	127
Fear tweets	70,308	0.3011	0	100
Sadness tweets	70,308	0.9248	0	209
Anger tweets	70,308	3.9792	0	826
Fear and negative tweets	70,308	0.0491	0	91
Sadness and negative tweets	70,308	0.0774	0	72
Anger and negative tweets	70,308	0.7085	0	202

Figure A1 – Growth of populist parties share and misperception of immigration, 2008-2018



Sources: https://www.euronews.com/2018/03/15/explained-the-rise-and-rise-of-populism-in-europe; Integration of immigrants in the European Union – Eurobarometer (2018)

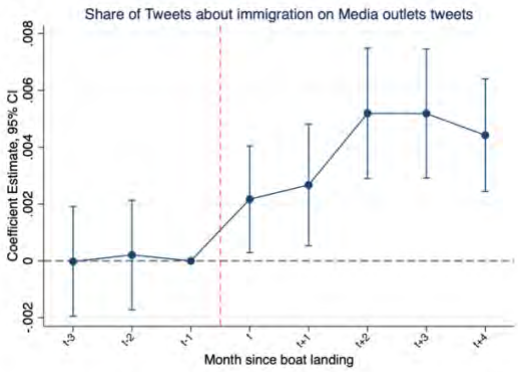
Figure A2 – Google searches for “immigrants” and distance to elections



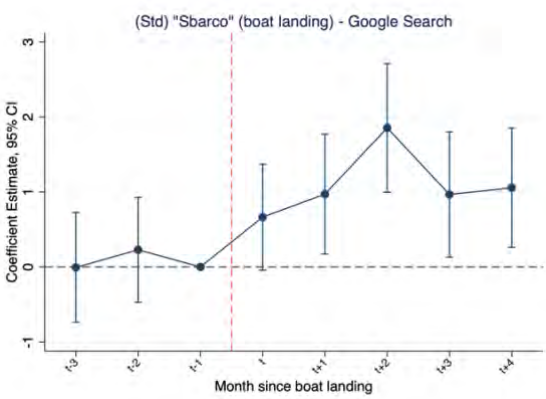
Notes: This figure shows the correlation between the standardized number of Google searches for immigrant-related terms and the proximity to an election. In the y-axis we have standardised national-level Google search data, while in the x-axis we have a variable identify distance (period going from 3 months before to 3 months after the election) to each local electoral period within our sample. The data reveals that as the election month approaches, the volume of Google searches about immigrants increases, peaking during the election month (time 0), and subsequently returning to pre-election levels.

Figure A3 – Demand and supply of immigration-related information

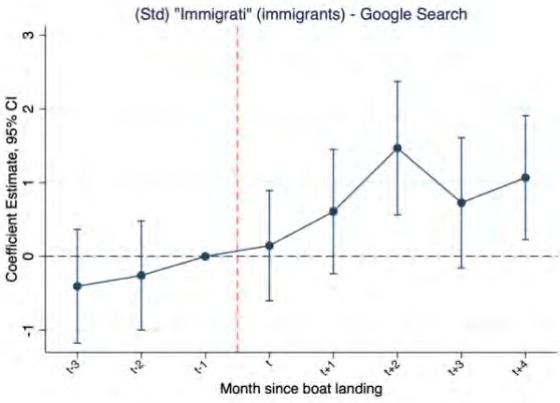
Panel A



Panel B



Panel C



Notes: This figure shows how the share of tweets about immigration by national media outlets, as well as the standardized number of Google searches for immigrant and boat landing-related terms, respond to boat landings. We create a series of month dummies representing the 3 months before and 4 months after a boat landing. Panel A includes both Twitter account and year fixed effects, while Panels B and C include only year fixed effects.

Figure A4 – Levels of the Italian migrants' reception system

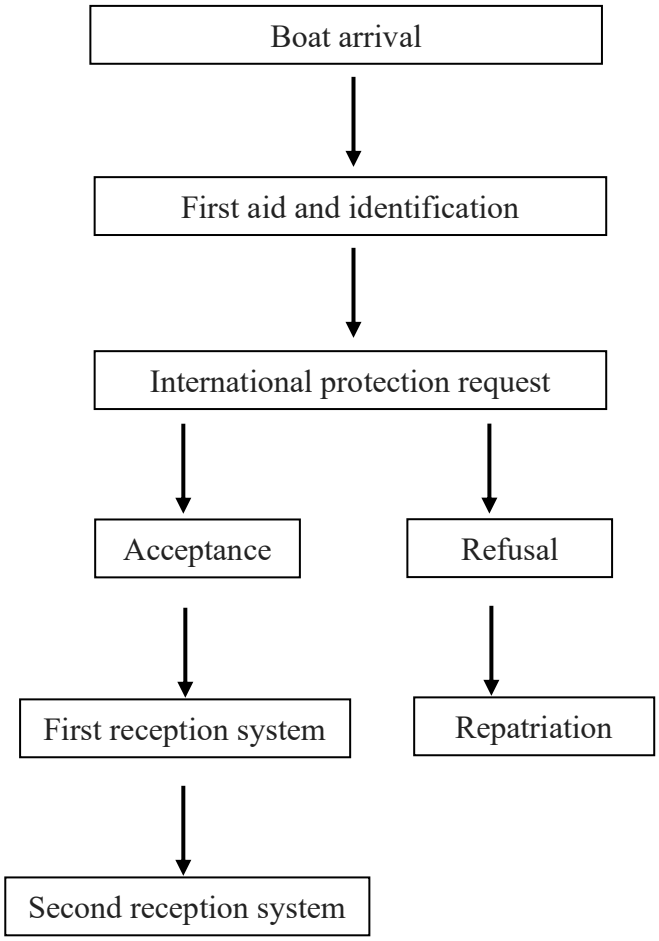
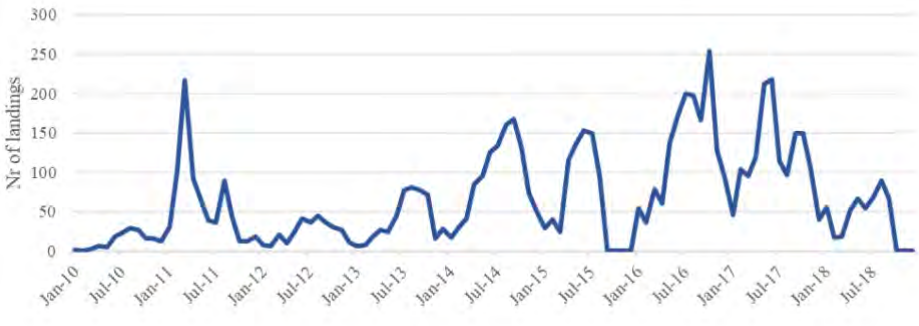


Figure A5 – Illegal boat landings from 1st January 2010 to 31st December 2018

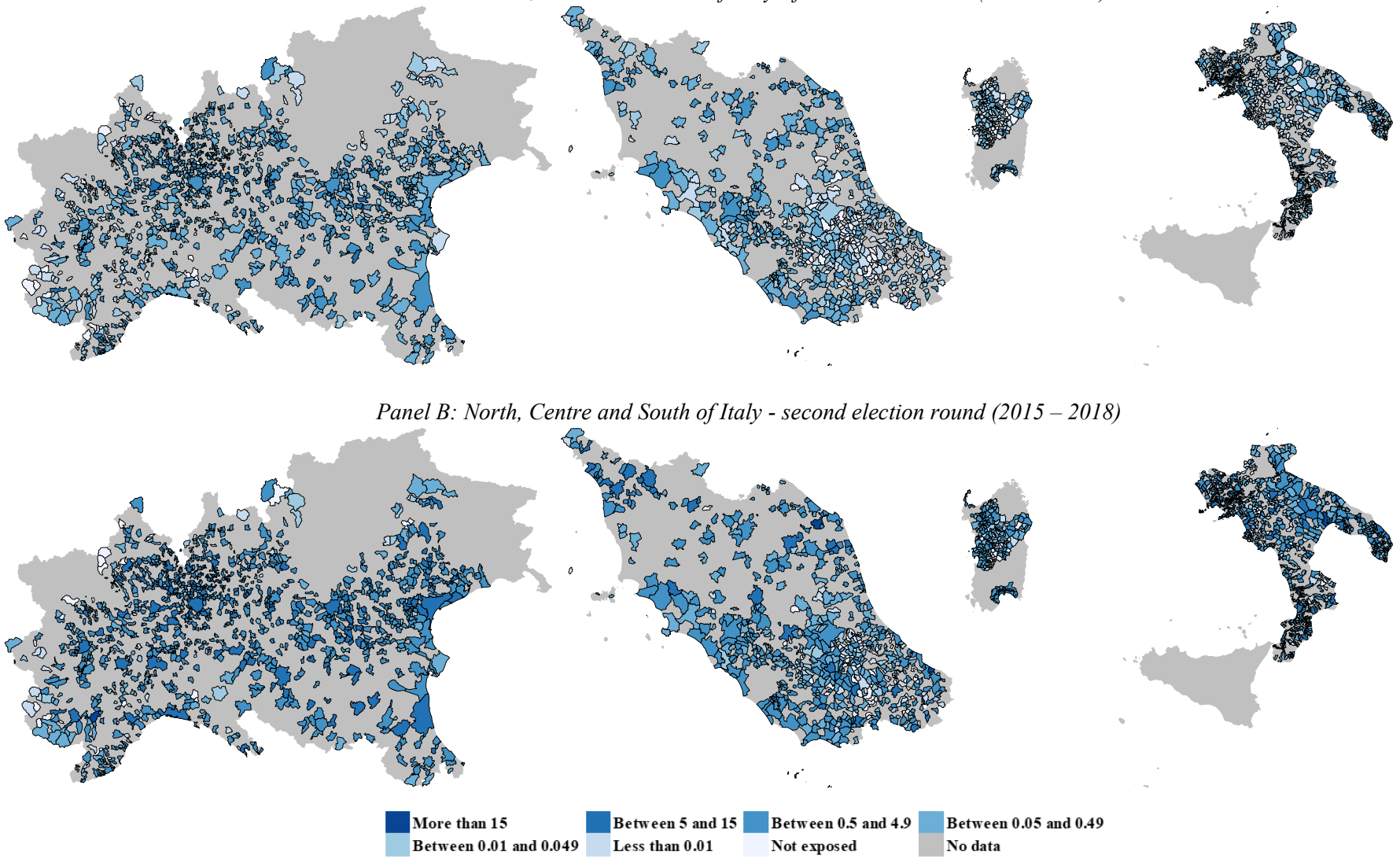


Note: Our elaboration based on Ministry of Interior data. Number of illegal boat landings in Italy from 1st January 2010 to 31st December 2018

Figure A6 - Distribution of the exposure index across Italian municipalities in the first and the second election round

Panel A: North, Centre and South of Italy - first election round (2010 – 2013)

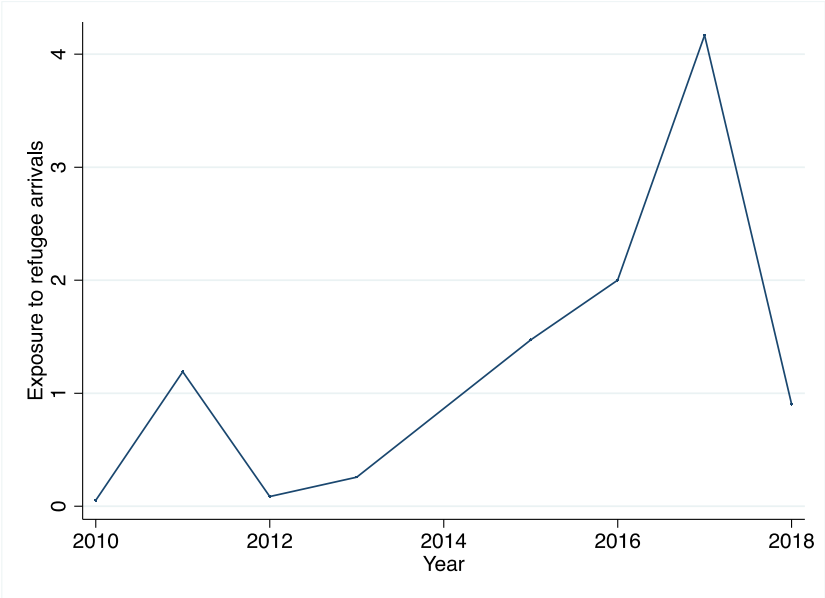
Panel B: North, Centre and South of Italy - second election round (2015 – 2018)



Source: Our elaboration, based on population composition per nationality at municipal level and boat landing data

Figure A7– Evolution of exposure to arrivals

Panel A



Panel B

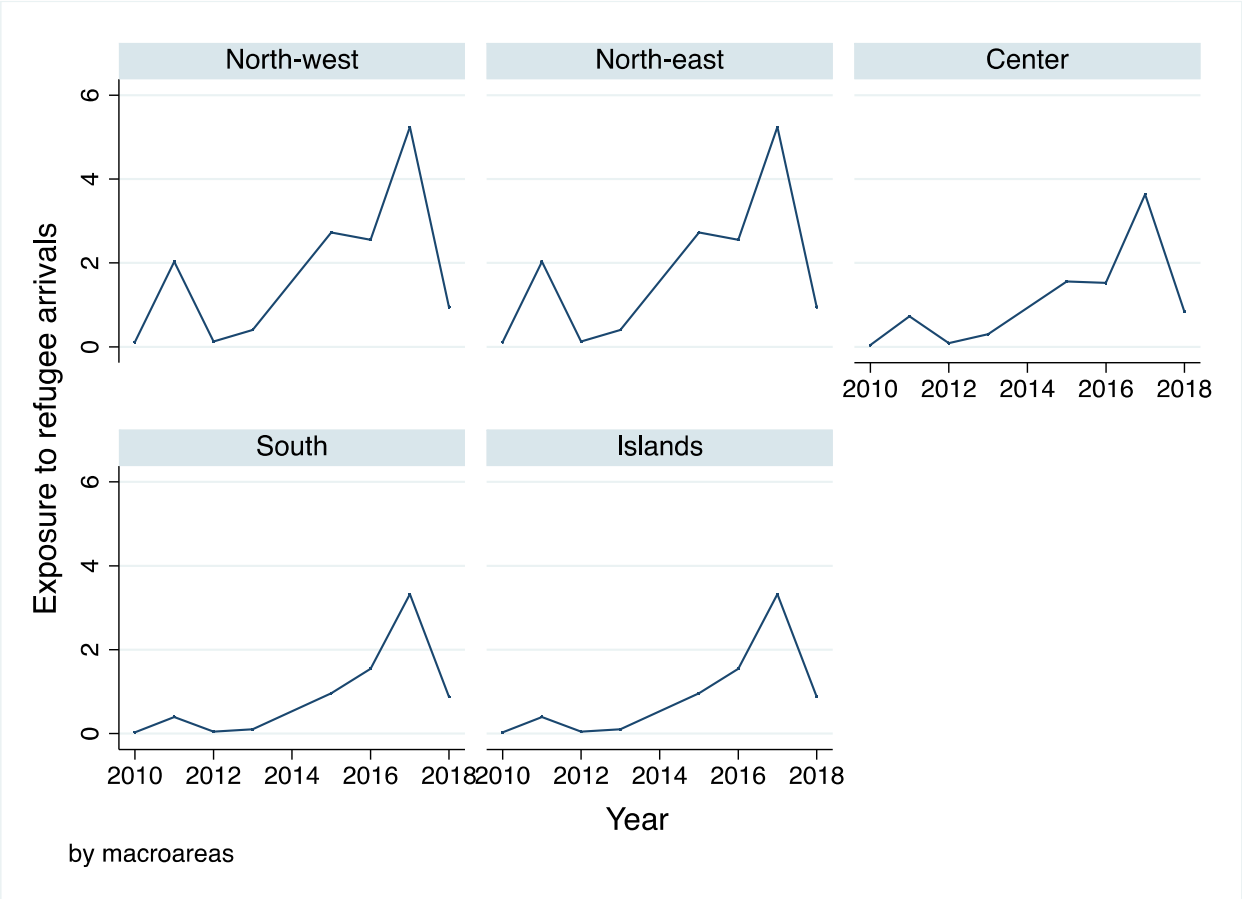
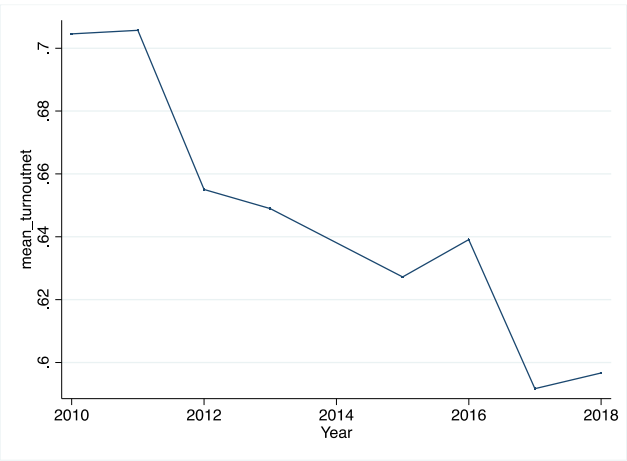


Figure A8 – Turnout and protest votes

Panel A



Panel B

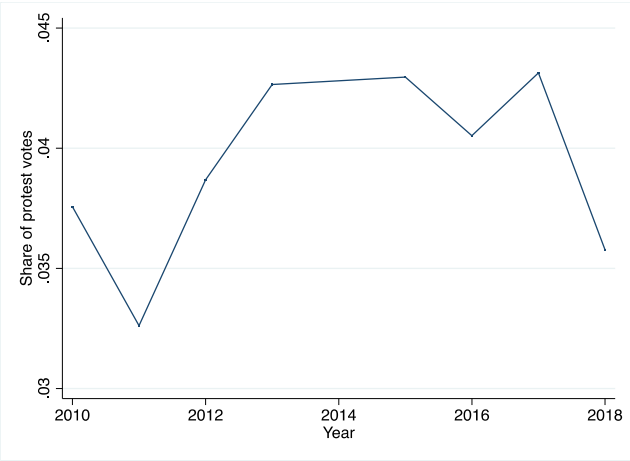
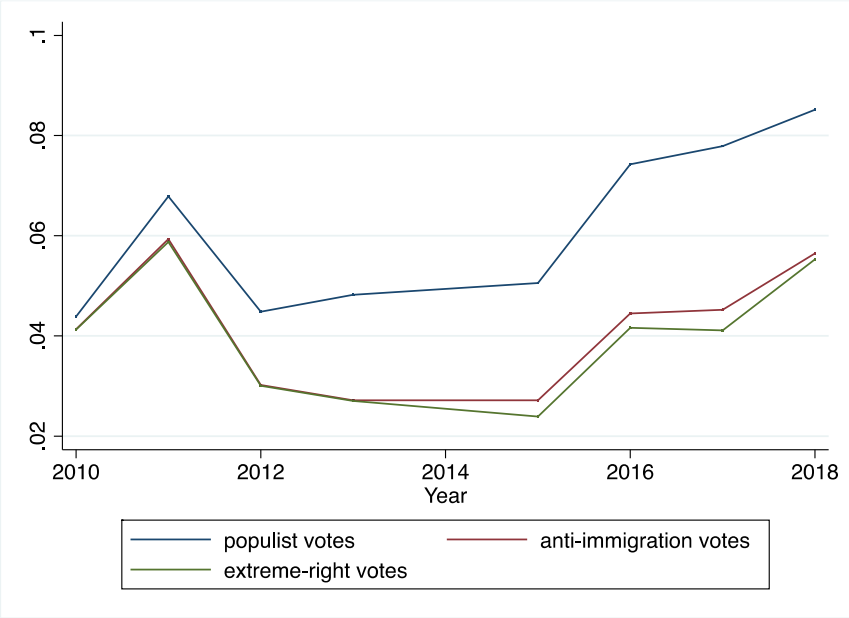


Figure A9 – Populist, extreme-right and anti-immigration votes

Panel A



Panel B

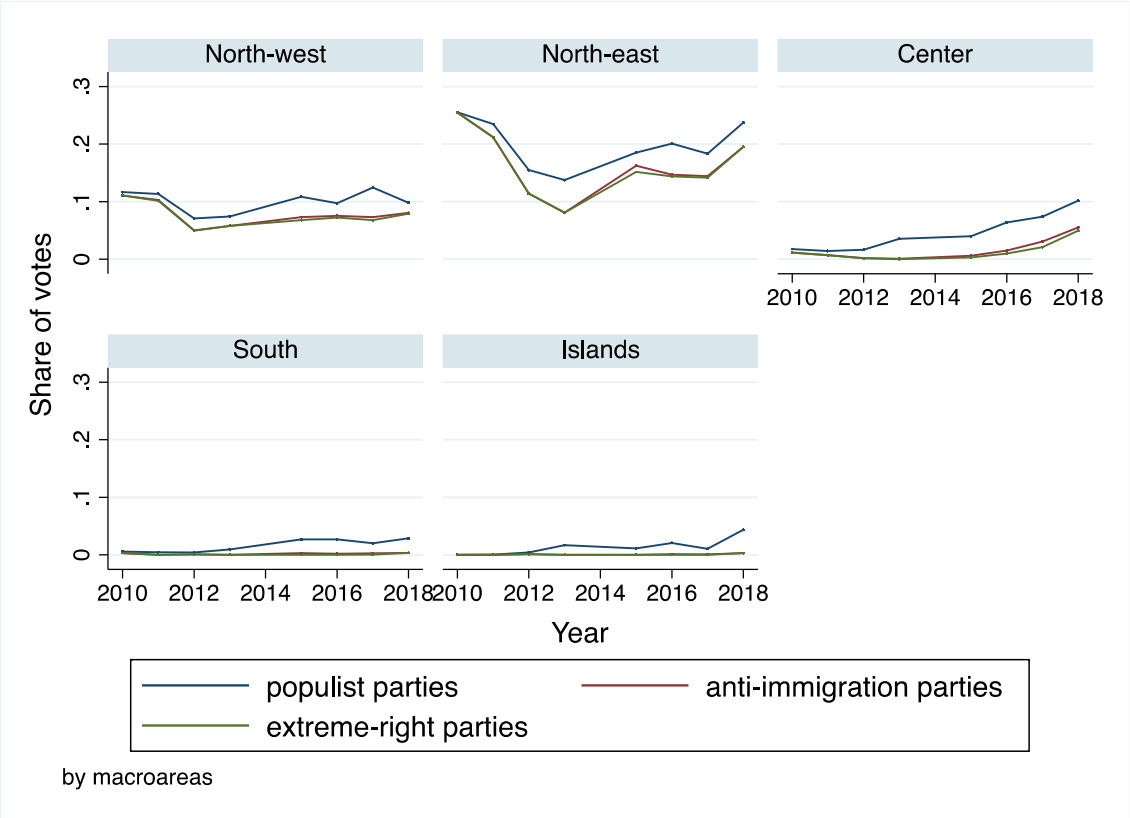
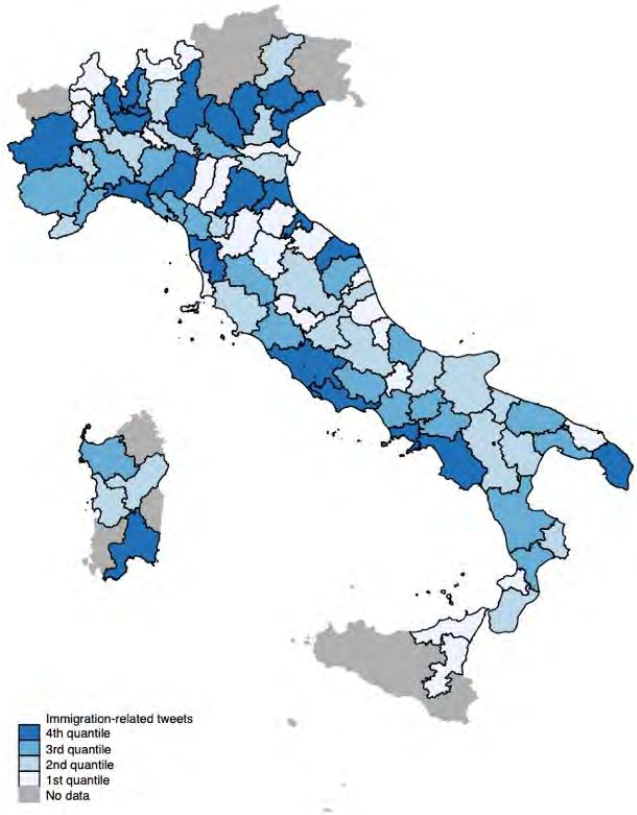


Figure A10 – Immigration-related tweets across Italian provinces (average 2010-2018)

Panel A – All provinces



Panel B – Provinces with municipalities that voted at least once in the period 2010-2018

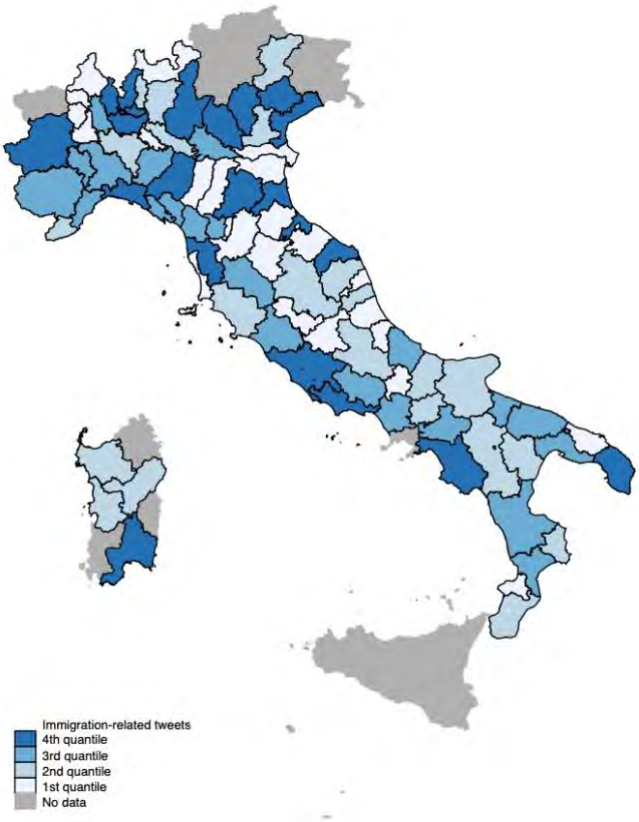
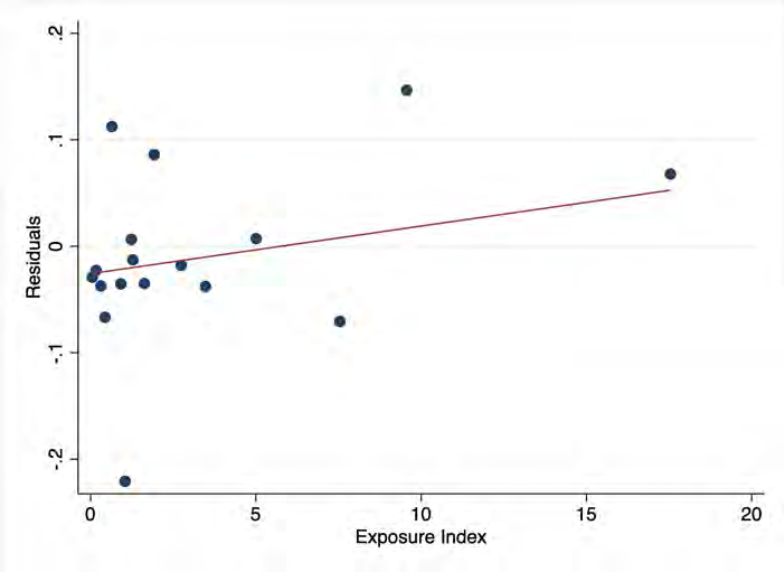
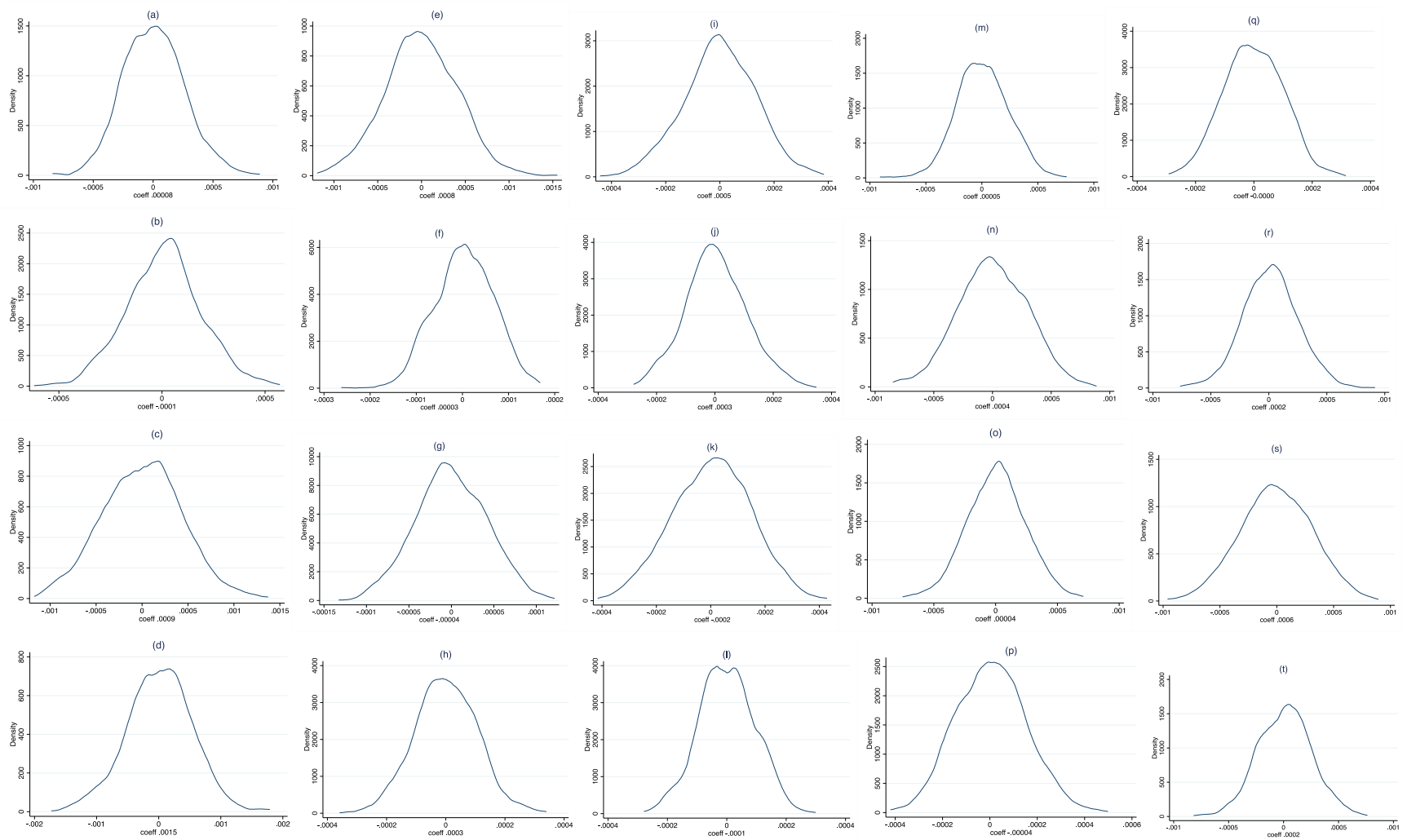


Figure A11 - Unexplained variation in overestimating immigration-reception capacity (external survey data) and immigration exposure index (our data).



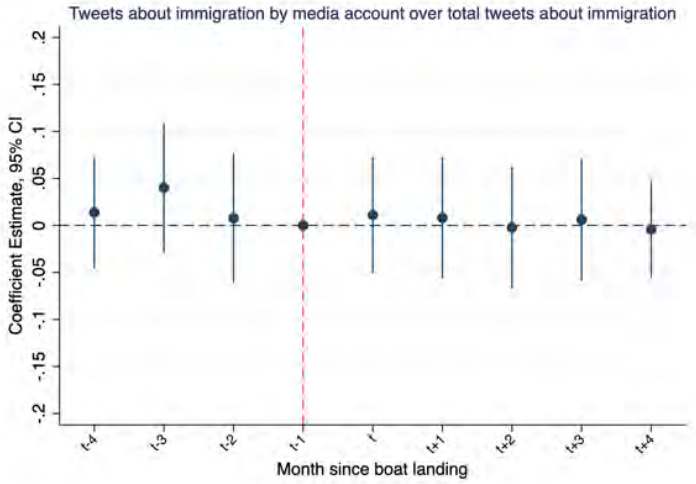
Notes: This figure presents descriptive evidence on how our exposure index reflects individuals' beliefs about immigration. Using ITANES survey data, we derive a measure of immigration (mis)perception, defined as the gap between a respondent's estimated hosting capacity of immigrants and the actual number of immigrants residing in the respondent's province. We then regress this measure against several individual-specific characteristics: a dummy variable for female respondents, a dummy variable for respondents aged 18 to 60, dummy variables for self-employed respondents, those with a university degree, and those identifying as right-wing. Additionally, we include region fixed effects and apply weights provided by ITANES, clustering standard errors at the province level. After running this regression, we compute the residuals and plot them alongside our exposure index.

Figure A12. Kernel density distributions from 1000 simulated coefficients of 'fake' exposure to arrivals on turnout, protest votes, vote shares for anti-immigrant, populist and Northern League parties



Figures (a), (b), (c) and (d): dep. var. turnout; Figures (e), (f), (g) and (h): dep. var. protest votes; Figures (i), (l), (m) and (n): dep. var. vote share for anti-immigrant parties; Figures (o), (p), (q) and (r): dep. var. vote share for populist parties; Figures (s), (t), (u) and (v): dep. var. vote share for Northern-League parties. Figures (a), (e), (i), (o) and (s) include all landing episodes occurred before the day of elections; Figures (b), (f), (l), (p) and (t) include all landing episodes occurred 30 days the day of elections; Figures (c), (g), (m), (q) and (u) include all landing episodes occurred 60 days the day of elections; Figures (d), (h), (n), (r) and (v) include all landing episodes occurred 90 days the day of elections. The estimated coefficient of the main parameter of interest (shown below each graph) identifies the effect of the change in *real* exposure to migration on changes in electoral outcomes as reported in Tables 4 and 5.

Figure A13 – Immigration-related tweets produced by national media outlets.



This figure shows the evolution number of immigration related tweets produced by national media outlets relative to total immigration related tweets after a boat landing. We include a set of dummy variables identifying 4 months before and after a boat landing and using the month before the landing as omitted category. We include year fixed effects in the specification to net out the effects of other year specific events.