

# **Mr. Rossi, Mr. Hu and the politics. The role of immigration in shaping natives' political preferences\***

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## *Abstract*

The paper analyses the impact of immigration on the political preferences of natives. We study the Italian case that is particularly interesting because the country has experimented a recent, fast and large migration inflows as well as a domination in the last decades of the right-wing coalition, headed by Mr. Berlusconi. We investigate the outcomes of national elections using municipalities as units of analysis. After controlling for municipality unobserved heterogeneity and endogeneity, we find that immigration generates a sizable causal increase in votes for the centre-right coalition, which has a political platform less favorable to immigrants. Additional findings are derived in the paper. First, big cities behave differently, with no impact of immigration on electoral outcomes. Second, the gain of votes for the centre-right coalition comes hand in hands with a loss of votes for the centre-left parties, a decrease in voter turnout, and a raise of protest votes, i.e. blank and invalid ballots. Third, we shed light on the channels at work behind our results, showing that competition in the labour market, competition for public services and the perception of immigrants as potential criminals have all played an important role.

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## 1. Introduction

International migration is a global phenomenon. According to the United Nations, in 2013 there were 136 million international migrants in developed countries with a sizeable increase between 2000 and 2010 (UN, 2013). The effects of immigration for the receiving countries have been extensively investigated. Among other issues, the literature has focused on labor market aspects (see for instance Friedberg and Hunt, 1995, Card, 2001, Ottaviano and Peri, 2008), the cultural environment (Ottaviano and Peri, 2006), the extent of crime (Moehling and Piehl, 2007, Bianchi et al, 2012). However, only few papers deal with the role of immigration for the political preferences of the natives (Mendez and Cutillas, 2014, Alkis and Steinhardt, 2014, Halla et al, 2012 and Gerdes and Wadensjö, 2008). This lack of attention is quite surprising given that immigration is often related with strong views and prejudices held by the native population. It seems therefore reasonable to believe that political choices of residents will incorporate their opinions with regard to immigration. At the European institutional level this issue is even more important, since the immigration policy is at the core of the debate on the future of the European Union. Interestingly, parties that are against the Euro area and that are proposing an exit strategy for their countries are often associated to a protectionist view about immigrations. The Front National in France, the Dutch Freedom Party and the Lega Nord League are just examples of these joint political positions.

This paper focuses on the Italian case, which is interesting for three main reasons. First, immigration has been a recent and quickly growing phenomenon and this assures that the power of the empirical test we carry out is very high. Still in 1998 the share of immigrants over natives, according to the Eurostat data, was as low as 1.7% (it was 9% in Germany, 5.6% in France). Starting from 1998, however, the country experienced consistent inflows, reaching 8% in 2012, while in Germany and France, for instance, the shares of immigrants has remained pretty constant. As reported by a national newspaper,<sup>1</sup> among the first ten family names registered in 2012 at the birth office of Milan, three of them are originally from China, the second most recorded being the Chinese Hu. The most recorded name remains Rossi, a typical native surname. Twenty-five years ago no foreign last name (among the first ten) was recorded at the same office. Second, in the last 20 years the Italian political scene has been dominated by Mr. Silvio Berlusconi and his centre-right coalition: this has given rise to a large international debate about the 'anomaly' in Italian politics, given Mr. Berlusconi's media control (Durante and Knight, 2012) and his ambiguous adherence to the rule of law (Ginsborg, 2005; Lane, 2005; The Economist<sup>2</sup>). Third, the Berlusconi's party has also played an influential role at the European level, since it belongs to the European People's Party (PPE) that is one of the leading party in the European Parliament.

This paper analyses the role of immigration for the Italian parliamentary elections of 2001, 2006, and 2008. Two of them (2001 and 2008) were won by the centre-right coalition, headed by

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<sup>1</sup> See: [http://milano.repubblica.it/cronaca/2012/04/15/news/fra\\_i\\_cognomi\\_pi\\_diffusi\\_a\\_milano\\_il\\_cinese\\_hu\\_scalza\\_sciur\\_brambilla-33351789/](http://milano.repubblica.it/cronaca/2012/04/15/news/fra_i_cognomi_pi_diffusi_a_milano_il_cinese_hu_scalza_sciur_brambilla-33351789/)

<sup>2</sup> <http://www.economist.com/topics/silvio-berlusconi>.

Mr. Silvio Berlusconi. The election of 2006 was instead won by the centre-left coalition, captained by Mr. Romano Prodi. With respect to immigration, the political platforms of the two coalitions were, consistently over the three elections, very different. In short, the centre-left alliance had a more open stance, stressing the importance of the immigrants for the prospect of the domestic economy, the duty of solidarity for a high-income country, and the benefits of a multi-ethnic society. On the other hand, the political program of the centre-right coalition had a less liberal stance: immigration was considered to be beneficial only if strictly regulated. The emphasis was more on the social problems (say, crime and lack of jobs) related with immigration and the threat that people with different background could pose for the domestic way of life. Moreover, in all elections the centre-right coalition included the Lega Nord party, whose political stance was not immune from racial prejudices (Passarelli, 2013), and Alleanza Nazionale, the more moderate successor of the Movimento Sociale Italiano (MSI) - the neo-fascist party in post-WWII Italy.

We investigate the impact of immigrants on the political choices of natives at the national political elections, by comparing the voting pattern in about 8,000 municipalities differently exposed to migration flows. Focusing on small territorial units delivers substantial benefits in the empirical strategy, as the attitudes toward migration is likely to depend on the proximity between natives and immigrants, for instance because there could be competition for the public services provided locally and for jobs in the local labour market.

To deal with endogeneity issues we use the well-known instrument proposed by Card (2001), which exploits the fact that immigrants tend to move to area where it is already present a group of immigrants with the same ethnicity. The identifying assumption is that local economic shocks that attracted immigrants in the past are uncorrelated with current political preferences, conditional on the full set of controls.

Our results are as follows. In our preferred specification, i.e. controlling for endogeneity and municipality unobserved heterogeneity, we find that a 1% increase in the share of immigrants in a municipality entails a 1.26% increase in the share of voting going to the centre-right coalition. As interesting additional finding, we find no impact for big cities, suggesting that they behave differently. We also carry out two main robustness checks. The first one concerns the use of local labour market data, instead of municipality data, in order to reduce possible spillover effects due to the fact that immigration flows in a single municipality might affect also the surrounding municipalities, through the mobility decisions of native workers. The second robustness check regards the change in the national electoral rule in 2005, as in principle the impact of immigration on electoral outcomes might be affected by how votes are translated into seats. In both cases, we find that our main results remain basically unaffected.

We also show that the gain of votes for the centre-right coalition is associated to a loss of votes for all the other coalition of centre and centre-right, with the strongest fall for the main coalition of centre-left. Furthermore, the increase in immigration causes a decrease in voter turnout, even if not statistically significant, and a raise of protest votes, i.e. blank and invalid ballots.

The last original contribution of the paper concerns the channels through which the impact of immigration on votes for the centre-right coalition takes place. Using a sample split analysis, we successfully test that competition in the labour market, competition for public services and the perception of immigrants as potential criminals all play an important role.

The paper is structured as follows. Section 2 briefly summarizes the scant literature on the subject. Section 3 illustrates for Italy the trends for immigration and its regulation and the political platforms of the two main coalitions. Section 4 offers qualitative insights on our research question using an Italian survey from Istituto Cattaneo. Section 5 introduces the data while section 6 focuses on the empirical strategy. In section 7 we present our baseline results, highlighting also the peculiar role of big cities, and the robustness checks. Section 8 provides evidence on some potential channels through which the effect of immigration on voting patterns percolates. Section 9 concludes.

## **2. Literature review**

The literature on the impact of immigration on political outcomes is scant and very recent.

Mendez and Cutillas (2014) investigate whether the immigration to Spain affected the outcome of the presidential elections held in the 1996-2011 period, when the immigrant share raised quickly. They use 48 provinces observed in five years as units of analysis. Using province-level fixed effects and instrumental variable analysis (following Card, 2001) they find that immigration inflow has no robust effect on the relative support for the major leftist party (with respect to the major conservative party) or on the relative support for anti-immigration coalitions. When they split the immigrant incidence according to nationality, it turns out that African immigration has a positive impact on the latter outcome variable.

Another very recent contribution is Alkis and Steinhardt (2014), who analyze immigration inflows in 103 districts within the city of Hamburg in the 1987-1998 period. Their OLS fixed-effects estimates document that a one percentage-point increase in the share of immigrants entails a 0.225 percentage-point increase in the share of xenophobic, extreme right-wing parties in federal state and national elections (and a specular decrease for the left-wing Greens). In a robustness check, these findings are qualitatively confirmed when they instrument the current share of immigrants with its 10-year lagged value.

Two additional (so far unpublished) papers deal with the impact of immigration on political preferences of the natives. Halla et al. (2012) analyze whether immigration dynamics positively affect the votes for the Freedom Party of Austria (FPO), a party with a clear anti-immigration stance. They make use of historical settlement patterns of immigrants as a source of exogenous variation for the recent spatial distribution of immigrants. Their baseline 2SLS-estimate suggests that a one-percentage-point (one standard deviation) increase in the share of immigrants in a municipality increases the percentage of FPO votes in general elections by about 0.4 percentage point. Their analysis is mainly in cross section, exploiting a pooled sample of six national elections at the municipality levels (from 1979 to 2002), using a time invariant instrument.

Gerdes and Wadensjo (2010) investigate how the unprecedented influx of refugees has affected votes for the main political parties at the municipality levels in Denmark. Their analysis covers a period that includes four local government elections and four general elections between 1989 and 2001. According to their OLS and fixed-effects estimates, the shares of refugees is positively associated with the two main anti-immigration parties while they find mixed evidence for the other political parties: for instance they show that even a party with a pro-immigration stance, the Socialist People's Party, gains from immigration, while the Liberal party, more on the centre, loses.

Another interesting and related paper is Mayda (2006), which analyzes economic and noneconomic determinants of individual attitudes toward immigrants, within and across countries. This paper find that opinions about immigration policy are significantly correlated with individual skill in the host country. Skilled individuals are more (less) likely to be pro-immigration in countries where the relative skill composition of natives to immigrants is high (low). Mayda (2006) also shows that find that individual skill is positively correlated with pro-immigration preferences in countries with high per capita GDP, and negatively correlated with pro-immigration preferences in those with low per capita GDP.

Compared to the existing literature, the novelty of our paper rests on three main aspects. First, we focus on Italy that is a large and influential European country that experienced a huge and recent inflow of immigrants (like the Spain; Mendez and Cutillas, 2014). Second, we highlight the special role of big cities. Third, our paper includes an extensive analysis on the channels behind the impact of immigration, using both municipality data and suggestive microdata evidence.

Our paper also overcomes some drawbacks of the comparison-group contributions. Mendez and Cutillas (2014) focus on Spanish provinces that are arguably too large geographical units to capture the interactions between natives and immigrants. Moreover, they can not neatly isolate natives' voting behavior since many immigrants acquired the Spanish nationality before the period of analysis. Alkis and Steinhardt (2014) use districts of Hamburg as units of analysis so their evidence might suffer from limited external validity. Small geographical units might also call the stable unit treatment value assumption (SUTVA) into question. They also propose the IV analysis as a simple robustness check while the exogeneity of their instrument (the lagged endogenous variable) might be questioned. Differently from Gerdes and Wadensjo (2010), we explicitly take endogeneity issues into account. In contrast with Halla et al. (2012), we evaluate the effects of immigration on the votes for a wide sample of political parties, on turnout and on protest votes. We also make use of a time-variant instrument that should better provide a source of exogenous variation for our endogenous variable, which is the municipality-level overtime variation in migration.

### 3. Immigration trends, regulations and political platforms in Italy

#### 3.1 Immigration trends in Italy

Immigration is a phenomenon whose importance is growing in many countries, and particularly in Europe. According to Eurostat (2013), at the end of 2011 in the EU-27 resident immigrants amounted to about 4,1 % (20,7 million) of the population. In Italy, where foreign born population amounts to about 4,8 million, the share has reached 8,1%, slightly below that of Germany and above that of France (see figure 1).

[Figure 1]

Differently from other large European economies, in Italy immigration has been a recent phenomenon. Still in 1998 the share of immigrants over Italian natives, according to the Eurostat data, was as low as 1.7%; it was 9% in Germany and 5.6% in France. Starting from 1998, the country experienced consistent inflows, reaching 8% in 2012, while in Germany and France the shares of immigrants has remained pretty constant. Figure 2 documents the impressive increase in immigrations in Italy from 1998 to 2010.

[Figure 2]

#### 3.2 Immigration regulations and political platforms in Italy

This Section documents that the two main political coalitions, that competed to run the country in 2001, 2006 and 2008, had two very different platforms as regard to immigration. The two different standpoints remain unchanged over the decade.

The anti-immigration stance of the Berlusconi coalition has been one of the constant argument in the campaign for political elections, also because of the presence in the coalition, apart from the Berlusconi's party Forza Italia, of both Alleanza Nazionale (National Alliance), headed by Gianfranco Fini, which was the successor of the Movimento Sociale Italiano (MSI - Italian Social Movement) - the neo-fascist party in post-WWII Italy, and Lega Nord (Northern League), headed by Umberto Bossi, which has also taken the role of a nationalistic party against immigration. The election posters illustrated in Figure 3, which refers to the campaign of Mr. Fini, seems quite evocative: the sentence highlighted in yellow says: "never again illegal immigrants around the corner." The election posters of the Lega Nord, reproduced in Figure 4, seem to be even more unambiguous (the poster on the LHS says "We stopped the invasion"; that on the RHS says "Protect your future: get rid of the illegal immigrants").

On the other hand, the centre-left coalition had a more open stance with respect to immigration. First, it was underscored the importance of the immigrants for the prospect of the domestic economy. Second, tracing back to the tradition of internationalism of the leftist parties (and that of hospitality of the catholic parties belonging to the centre-left alliance), it was highlighted the

importance of a duty of solidarity for a high-income country. Finally, on a more cultural ground, the leading spokespersons of the centre-left coalition frequently presaged the benefits of a multi-ethnic society.

[Figure 3]

[Figure 4]

The diverging electoral platforms corresponded to very different legislative and administrative activities of the two coalitions, once in power. In 1998, the centre-left government headed by Romano Prodi issued the Law 40/98 (the so-called 'Turco-Napolitano law') which was mainly an attempt to regularize the position of non-EU immigrants and improve their integration, introducing regulations in the areas of fundamental rights, such as employment, health and education. The three main goals of the Turco-Napolitano were to implement more effective planning to deal with persons entering for employment reasons, preventing illegal immigration, and integrating foreign citizens who had legal residence permits. The Turco-Napolitano was considered a liberal, and even pro-immigrant, law, compared with the closed-door policies of other European countries at that time.

In 2001, centre-right coalition, just after having won the election, passed the Law No. 189/2002, known as the 'Bossi-Fini law', the leaders of the two parties with a more accentuated anti-immigration stance within the coalition. This law amended the 1998 immigration law and introduced some new stringent clauses. According to the Bossi-Fini law, each year the Prime Minister have to lay down the number of non-EU workers who can be admitted in the country in the next calendar year. The law states that in order to require a residence permit, an immigrant needs a 'residence contract' (*contratto di soggiorno*) - i.e. a contract of dependent employment. When the contract expires, the immigrant worker must either renew it or return to the country of origin. Residence permits issued for employment reasons can last for a maximum of two years, even if the worker has an open-ended contract of employment.<sup>3</sup> After six years of regular residence in Italy, non-EU citizens will be able to ask for a form of permanent permit. Furthermore, with this law Italy has been one of the first European country to require immigrants asking for residence permit to provide their fingerprints, an issue with very important symbolic content. Another important difference with the Turco-Napolitano is that, in case of deportation, it will be immediate and will not be suspended even if the immigrant appeals to the courts (as stated by the 1998 law). Further, if illegal immigrants return to Italy, they will be arrested and tried by the courts.<sup>4</sup>

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<sup>3</sup> The new law also states that only non-EU immigrants with a regular residence permit can be entitled to ask for family reunification.

<sup>4</sup> The anti-immigration stance of the centre-right coalition can be detected also from public statements. For instance, in 2007 the would-be Prime Minister Silvio Berlusconi menaced to ban Romanian workers from Italy (*The International Herald Tribune*, November 4, 2007) and then, once in power, called for the expulsion of groups of migrants (*The Economist*, January 29, 2009), which gained the Italian government a reprimand from the EU.

The “Fondazione Rodolfo De Benedetti” calculates an aggregate index for the strictness of migration policies (see appendix 1 for the related details). Table 1 compares the strictness of migration policies for a number of EU countries over the 1994-2006 period. Italy scores high in the ranking, even though the level of its anti-immigration policy features seem to be quite in line with other European countries (except France). Very interestingly, the value of the index during the years (1996-2001) in which the centre-left coalition has been in office (Figure 5) is remarkably lower than the those referring to the two periods (1994-96 and 2001-06) in which there was a centre-right government.

[Table 1]

[Figure 5]

Finally, the number of the expulsion orders can be taken as an additional proxy for the effectiveness of the anti-immigration stance of the two coalitions. Over the period 1998-2008, for which we have data, the Italian judiciary prescribed over 300,000 expulsions. Splitting the time-span according to the type of ruling coalition, we find that under a centre-left government yearly on average slightly above 20,000 immigrants were forced to abandon the country. Under a centre-right government this figure raised up to slightly above 35,000.

#### **4. Insights on our research question: survey evidence**

In this Section we show some descriptive evidence to shed light on the transmission mechanism going from inflow of immigrants and natives’ voting behavior. We exploit the Itanes microdata taken from the Istituto Cattaneo, a leading Italian research foundation dealing mainly with electoral studies. In particular, we use responses from more than 6,000 voters who have been interviewed just after the 2001, 2006 and 2008 general elections. These data are very suitable to our aims since they include information on both voting and attitudes towards immigrants, as well as the usual socio-demographic variables. Although Itanes data can not be used for a rigorous causal analysis,<sup>5</sup> they offer interesting insights on the mechanism that underlies the relationship between immigration and political preferences of natives.

We start by examining whether (the fear of) immigration and voting are actually correlated. Table 2 reports the results of the OLS regression where the dependent variable is a dummy variable equal to 1 if the respondent voted for the centre-right coalition, and the main covariate of interest is a dummy variable that equals to one if the voter thinks that immigration is a problem. We also control for a standard set of covariates (age, age squared, gender, years of schooling, occupational status). In all the elections, those who perceive immigrants as a

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<sup>5</sup> The sample is not representative for the whole country, since it over represents medium-big cities; moreover, although the waves of the Itanes survey are available for general elections held in 2001, 2006 and 2008, the type and the wording of questions change across waves.



problem are much more likely to vote for the centre-right coalition and this correlation does not depend on a composition effect related to age, gender, schooling, and occupational status.<sup>6</sup>

[Table 2]

A second piece of evidence is about *why* some natives think that immigration is a very important (and alarming) issue. We focus on the 2001 survey that is the richer as to attitudes towards immigrants are concerned. In the first column of Table 3, we regress the dummy variable “immigration is a very important issue” on a dummy equal to 1 if the respondent agrees with the sentence “immigrants are a threat to our culture” (again controlling for age, gender, years of schooling, and occupational status). Unsurprisingly, the two variables are strongly correlated. Analogously, those who state that “immigrants are a threat to our job” are also more likely to think that “immigration is a very important issue” (columns (2)), and this is consistent with the literature (Borjas, 2003). The same applies for those who think that “immigrants are a threat to crime” (column (3)). In column (4) we also show that having at least a child is positively associated to the dependent variable. This result is not unexpected since in Italy immigrants have a higher birth rate than natives, and this might generate two main effects: (i) immigrants’ children compete with natives’ ones on the access to the pre-school and school services; (ii) in the school age immigrants may negatively affect the performance of native children (Ballatore et al., 2013). In the last column we show that all the factors that correlate to the dependent variable continue to be statistically significant when they are included simultaneously, except for the parental status, that remain in any case positive.

All in all, this explorative analysis shows that the centre-right voting behavior is associated with a negative attitude towards immigrants and that, in turn, this attitude has something to do with natives’ perceptions referring to the fear of multi-culturalism, the availability of jobs, the intensity of crime and having children. In what follows we keep such a descriptive evidence as a background, and turn to a more rigorous causal analysis.

[Table 3]

## 5. Data

Our empirical exercises benefits from a panel of all Italian municipalities for which we observe the outcomes of national political elections that took place in 2001, 2006 and 2008, the trend of immigration, as well as other relevant demographic and economic features. It is worth noting that immigrants can not vote in these elections, and hence our analysis is focused on natives. Further, since immigration was very low until the nineties and since it takes a lot of time asking

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<sup>6</sup> The jump in coefficients between 2008 and the other elections is due to the fact the X variable is defined in a different way. In 2001 and 2008 the X variable is equal to one if the voter thinks that immigration is a problem, while in 2008 is equal to one if the voter thinks that immigration is one of the main important problem of the country.

and receiving the Italian citizenship, we can disregard the issue of naturalization, which actually in Italy is still a negligible phenomenon.

Data on election outcomes are taken from the dataset “Atlante storico elettorale Zanichelli” (Corbetta and Piretti, 2009), providing for each municipality detailed information on votes for all parties in the political elections that took place over the 2000s. Political parties were grouped according to their political platforms (right, centre-right, centre, centre-left, left) and then the share of votes was computed.<sup>7</sup> The advantage of focusing on a national voting context is that the political platforms of the two competing coalitions with respect to immigration are clearly identifiable. Moreover, they do not reflect local circumstances as it might happen for local elections. Finally, the electoral rule at the nation-wide level are the same all over the country.

Concerning immigration, we exploit a detailed dataset maintained by the National Institute of Statistics (Istat), providing for each of the 8,000 Italian municipalities the number of foreign born residents from 2002.<sup>8</sup>

As for control variables, the time-variant variables used in our baseline OLS specification were drawn from Istat territorial statistics while the time-invariant covariates come from the Istat Censuses that took place in 1991 and 2001 (Istat, 1991, 2001).

The descriptive statistics of all the variables of the analysis are included in Table 4.

[Table 4]

Before turning to the econometric analysis we illustrate two maps -figures 6 for the region of Lazio, and figure 7 for the region of Sicily- on the descriptive relation between the overtime changes in immigration and the corresponding variations in votes for the centre-right coalition, at the municipality level. The maps provide the flavor of the identification strategy we exploit in the econometric analysis. The darker the area for each municipality, the higher the change in immigration (left side) and the higher the change in votes for the centre-right coalition (right side). For both regions, it emerges clearly a positive visual correlation between the maps, although far from being a perfect correlation. Note that these two regions are very important from an electoral point of view, since they account for more than 10 million inhabitants, out of a total population in Italy of around 59 millions (in 2013).

[Figure 6]

[Figure 7]

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<sup>7</sup> See Appendix 1 for a detailed definition for the coalitions.

<sup>8</sup> Note that since these data starts in 2002, we use the 2002 wave for the 2001 election. Moreover, data on immigrants by municipality and country of origin in 1991, that we used to construct our instrumental variable, have been estimated combining information on immigrants by municipality and area of the world (taken from Istat) and data on residence permits by province and country of origin (taken from the Italian Ministry of the Interior).

## 6. Empirical strategy

We estimate the following regression model:

$$y_{mt} = \beta_0 + \beta_1 IMM_{mt} + X'_{at}\beta_2 + \lambda_m + \mu_t + \varepsilon_{mt} \quad (1)$$

where the dependent variable  $y_{mt}$  is the share of valid votes for the centre-right alliance,<sup>9</sup> defined at the municipality level  $m$  for each of the three elections ( $t = 2001, 2006, 2008$ ).<sup>10</sup> Our variable of interest is  $IMM_{mt} = \left(\frac{Immigrants}{Population}\right)_{mt}$ , i.e., the share of immigrants over population in the municipality.  $\lambda_m$  is a set of municipality fixed effects that controls for any time-invariant unobserved variable, while year dummies  $\mu_t$  control for changes in political preferences at the national level;  $\varepsilon_{mt}$  represents the regression error.  $X_{at}$  is a matrix that includes time variant covariates: population density to capture urban effects; population to capture demographic dynamics; GDP growth rate at NUTS2-year level to take into account local business cycle that may simultaneously affect both immigrants settlement and political preferences. Note also that in the specifications without municipality fixed effects we use the following time-invariant covariates computed in 2001, to control for observed differences across municipalities: a proxy for social capital (the share of blood donors); the aging index (ratio between population over 65 and population below 15); the share of graduates; the employment rate. Table 4 reports the descriptive statistics for the covariates.

Observations are weighted by the log of municipality voters. This choice trades-off two competing needs: (i) giving larger weight to larger municipalities and (ii) not making results entirely driven by very few municipalities, given the high positive skewness of the distribution of population across Italian municipalities. In Section 7.2 we tackle the issues related to the role of the size of a city for our findings. Finally, standard errors are clustered at the municipality level.

The OLS estimates, even when including municipality fixed effects, can not be intended in a causal way. They might be flawed by the usual drawbacks. First, an omitted variables bias may be at work. For instance, an unobserved positive productivity shock affecting firms located in the municipality could lead to an increase of both labor demand for immigrants and political preferences for the centre-right alliance. This would entail an upward bias. Second, our results might reflect reverse causation, as the immigrants might refrain to go in places where a bulk of people with views against multiculturalism live. This would imply a downward bias. Finally, there could be also measurement error in the independent variables, as the tracking of the non-natives on the national territory is admittedly imperfect, both because of illegal immigrants and

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<sup>9</sup> Note that the extreme right parties are included in the centre-right alliance; these parties, however, are negligible in terms of votes. Our results do not change when excluding the extreme right parties, as shown in table 9.

<sup>10</sup> Note that in the 2001 there was a mixed electoral system (25% of members under a proportional rule and 75% under a majoritarian rule). We consider as dependent variable the coalition vote shares under the proportional system. In 2006 and 2008 elections the system become basically proportional with a winning bonus, and hence our dependent variable is the coalition share.

because those who leave a municipality may omit to signal their departure. In this case the estimates would be biased downward.

To address all these issues, we adopt an instrumental variable approach. Following Card (2001), we exploit the fact immigrants tend to move to areas where a group of immigrants with the same ethnicity has already settled in the past. The identifying assumption is that local economic shocks that attracted immigrants in the past are uncorrelated with present political preferences conditional on the full set of controls included in the equation (1). In detail, we construct our instrument as:

$$\frac{\sum_{c=1}^N \delta_{mc} \text{Immigrants}_{ct}}{\text{Population}_{mt}}$$

where  $\delta_{mc} = \frac{\text{Immigrants}_{mc}}{\sum_c \text{Immigrants}_{mc}}$  is the share of immigrants from country  $c$  in municipality  $m$  in 1991,  $\text{Immigrants}_{ct}$  is the country-level number of immigrants from country  $c$  in year  $t$  ( $t = 2001, 2006, 2008$ ), and  $N$  stands for the number of top foreign nationality in the host country in 1991.<sup>11</sup>

## 7. The econometric results using municipality data

### 7.1 Baseline Results

Table 5 displays the baseline estimates. In column (1) we start by showing the OLS results, with a specification without municipality fixed effects that anyway includes both the time-variant and time-invariant controls described above, and year dummies. Since our dataset is a panel of roughly 7,850 municipality observed over the three election years (2001, 2006, 2008), OLS estimates in column (1) exploit both cross-section and time variability. Estimates suggest a positive (and statistically significant) correlation between the share of immigrants and the percentage of voting for the centre-right coalition. The magnitude of the effect is not negligible: a 1% increase in the share of immigrants is associated with an increase of 0.389% at the polls. In column (2) we introduce municipality fixed effects, in order to deal with unobserved municipality heterogeneity (dropping from the specification the time-invariant covariates). The estimated coefficient slightly reduces (0.284) while remaining highly significant.

[Table 5]

Column (3) documents the result derived using IV estimates with municipality fixed effects. The impact of local immigration on the share of preferences for the centre-right alliance is now much larger and highly significant, suggesting an important overall downward bias in the FE estimates. This finding highlights that among the sources of bias those delivering attenuation,

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<sup>11</sup> We set  $N$  equal to 15 nationalities in 1991, which are the following: Albania, Romania, Morocco, China, Philippines, Tunisia, Serbia and Montenegro, Macedonia, Poland, India, Peru, Senegal, Egypt, Sri Lanka, Ecuador.

such as measurement error and/or reverse causality, are likely to play a major role. In the specification an increase in 1% of the immigrant shares entails an increase in votes for the center-right party of 1.26 percentage point. Note that the instrument fits well the actual distribution of immigrants across Italy's municipalities: it enters in the first stage regression with the expected sign, it is equal to 0.08 and it is highly significant (t-stat equals to 5.3). Furthermore, the F-statistics is higher than 10, meaning that our estimates do not suffer from issues of weak instruments. From now on, the specification of column (3) is taken to be our preferred specification, since it allows controlling for both unobserved municipality heterogeneity and endogeneity.

It is also worth interesting to compare the magnitude of the impact detected in this paper for the Italian case with the other papers in the literature. Actually, the only comparable paper is Halla et al (2013) which use comparable data and methodology. It emerges that the coefficient for Italy is bigger than the one for the Austrian case. This can be easily due to the fact that while in Italy the dependent variable refers to a leading coalition, with shares at elections around 40-50% on valid votes, for the Austrian case the Freedom Party of Austria has been able to capture a much lower shares, even lower than half of the centre-right in Italy. In such a framework, the differences in the two impacts (0.4 vs 1.26) are less striking. Furthermore, differences in coefficients might be related to the fact that in Italy immigration is a much more recent phenomenon.

Another related issue concerns the possibility to test whether, according to our results, immigration has been a crucial factor in determining the electoral victories of the centre-right coalitions headed by Mr. Berlusconi. We claim that our findings cannot be used in such a way, since we use an IV approach. The pros of this approach is that it is possible to derive a causal impact of immigration on electoral outcomes. The cons is that the impact is identified on the group of compliers, and not on the whole population. For this reason we cannot argue that immigrations has been a decisive factor for the victories of the centre-right coalition in 2001 and 2008.

## 7.2 An interesting finding: the role of big cities

Our findings do not hold for big cities. In Table 6, columns (1), (2), (3) we replicate the specifications of table 5 weighting the observations by voters instead of log voters. This amounts to leave the very few large municipalities to have a large stake for the results. The estimated effects drastically decrease. The OLS and Fixed effects estimates are lower than those in table 5, and when using IV the coefficient gets very close to zero (and even negative) and no longer statistically significant. On the other hand, our results are fully confirmed when using the number of voters as weights but trimming the sample at the 99th percentile of the municipality distribution of voters (Table 6, columns (4), (5), (6)). The city size seems to be crucial in understanding the impact of immigrants on electoral outcomes.

To explain why big cities behave differently, we propose three tentative and (possibly) complementary explanations. First, in big cities it is easier to have segmented neighbourhoods, i.e., natives and immigrants are far away from each other. Therefore, natives may have a lower

perception of some possible negative sides of immigrations (such as crime, competition of local public services, etc.), while having anyway the chance to exploit the positive sides of immigration (such as cheap maids and nannies, etc.). A bunch of papers studied the residential segregation of migrants (e.g. Cutler et al., 1999, for the US; Boeri et al., 2012, for the Italian case). Interestingly to our aims, these papers focused on medium-large size cities, implicitly signaling that segregation is clearly a phenomenon that can arise only above a certain population threshold (as expected). Second, people living in big cities are on average more skilled: the share of graduates in big cities (municipality at the top 1% percentile of the population distribution) is more than twice than the one in the rest of the population distribution. As we show in Section 8, skilled workers might be more shielded from the increased competition in the labor market due to immigration. This explanation is consistent with Mayda (2006), which stresses that attitudes towards immigrations strongly depend on education levels. Third, immigration in big cities might have started before than in smaller municipalities. This might imply that having had the immigrants around for a while might have induced an adaptive response in the natives' attitudes, diminishing the initial fear of the immigrants. This explanation can be easily tested in our data. In big cities, the share of immigrants was equal to almost 2% in 1991 in big cities (top percentile) while being 0.8% in the remaining percentiles. In 2002 the shares were equal to 3.6% vs 2.3% respectively. One might also argue that the share of immigrants in big cities might be underestimated since a not negligible share of migrants work in the city while living in surrounding municipalities. In a similar way, it is reasonable to assume that illegal immigrants are more concentrated in big cities. This descriptive evidence confirms our intuition: immigration started before in big cities, suggesting that natives in big cities might have had an adaptive response, entailing a different effects on electoral outcomes.

[Table 6]

### 7.3. Robustness checks

We carry out two main robustness checks: 1) the use of a more aggregate data to deal with spillover effects on natives due to immigration; 2) the change in the electoral rule in 2005.

#### *Spillover effects due to immigration*

A possible critique to our identification strategy concerns the fact that immigration flows in a single municipality might affect also the surrounding municipalities, through the mobility decisions of agents (workers and firms). In the case of native flights (Betts and Fairlie, 2003, Card and Di Nardo, 2000, among others), the arrival of immigrants triggers an outflow of natives towards borderline cities. In such a case, our estimates might suffer from a bias either positive or negative. For instance, if the residents that move away are those who suffer more intensively from immigration (for instance, the low skilled: see Section 8) our estimates are likely to be downwardly biased: we would fail in capturing a rise in votes for the anti-immigration coalition in that municipality (since movers vote in the destination city). On the

other hand, if the moving natives are those that mostly benefit from immigration (say, the high skilled) our estimates are likely to be upwardly biased. On more technical grounds, when spillover effects materialize the stable unit treatment value assumption (SUTVA) would not hold. The SUTVA, which is a crucial assumption in order to identify correctly a causal effect in the IV framework, states that the treatment status of any unit does not have to affect the potential outcomes of the other units.

To take the issue of possible spillovers into account we test whether our results hold using a more aggregate spatial units. In particular, we move from (8,000) municipalities to (650) local labour markets ('Sistemi locali del lavoro'), which are self-contained areas since they are defined with respect to daily commuting costs. We then aggregate all variables of interest at the local labour market level, and perform the same estimates as in equation (1), using as weights the log voters at the local labour market level.

As shown in Table 7, our results do not change much with respect to the analysis at the municipality level, suggesting that spillover effects across surrounding municipalities play a negligible role. In particular, in the IV specification with local labour market fixed effects, a 1% increase in the share of immigrants entails an increase in the votes for the centre-right coalition equal to 1.01%, which is just slightly lower than the one computed in Table 5. This slight fall in the coefficient suggests that in the Italian case the mobility of natives mainly concerns skilled workers (upward bias).

[Table 7]

#### *Change in the electoral rules*

The second robustness check takes into account the fact that in 2005 Italy's experienced a change in the electoral rules at the national elections (legge n. 270 - 2005, also named legge Calderoli). The new rules were approved by the coalition of centre-right, while the centre-left coalition and the other small parties strongly opposed to them. In 2001 the electoral rule concerned in a mixed system (75% of seats elected with majoritarian elections, while 25% with proportional elections). The new electoral rule introduced a substantial winning bonus (the party/coalition with the highest number of votes could be overwhelmingly represented in the Parliament); a threshold (4% of the votes) for the smaller political entities in order to get seats, and the abolishment of the possibility to pick the candidate (voters were only allowed to choose the party/coalition). The change in the electoral rule provides us with the lucky opportunity to test whether the impact of immigration on electoral outcomes is specific to a given set of rules. For instance, the literature of political economy suggests that some electoral mechanisms, for instance the adoption of a majoritarian electoral rule, might be more sensitive to the role of particularistic issues (such as the regulation of immigration in specific municipalities) vis a vis the generalistic ones, i.e. a high-profile and credible government (Gagliarducci et al., 2011, Milesi-Ferretti et al., 2002).

In table 8 we illustrate the results obtained by considering each election separately. Even though the rules for the 2006 (won by the centre-left) and 2008 (won by the centre-right)

elections were different from those of 2001, the impact of immigration on the voting for the centre-right coalition is quite similar (Table 8). Note also that in the specifications of table 8 we cannot introduce municipality fixed effects, since there is no time variation in the data. To control for spatial unobserved heterogeneity we make use for each election year of two different specifications, in which we make use of regional (NUTS-1) fixed effects and provincial (NUTS-2) fixed effects.

[Table 8]

#### 7.4 Who win and who loose from immigrants inflows?

So far we have investigated the impact of immigration on the votes for the centre-right coalition, which is our main dependent variable. However, it is interesting to shed light on the impact of immigrations of additional electoral outcomes.

First, we focus on the impact on the votes for other political coalitions. We compute the vote shares for the centre, the centre-left, and the extreme left coalitions. The centre-left is the most important one, i.e. winner of the election in 2006, headed by Romano Prodi. We also disentangle the centre-right coalition into the extreme-right party and the more moderate component (centre-right). We then replicated our preferred specification, IV estimates with municipality fixed effects, for this full-fledged set of coalitions' electoral outcomes. Column (1) of Table 9 refers to votes for the extreme-right party, that were included in the centre-right coalition in previous estimates. Interestingly, we find that the coefficients is much smaller, i.e. 0.228, suggesting that in the Italian case immigration has boosted in a limited way the extreme right-wig party. Note however that the share of the extreme right party is much smaller than the one of the moderate party, and hence in relative terms the impact is even greater, even if with little importance for the election outcome. When considering the centre-right moderate coalition, the impact is still very strong (1.024), confirming that the impact of immigration electoral outcomes in Italy has taken place through the moderate voters. Furthermore, the higher share for centre-right coalitions comes at the expense of votes for the Centre, the Centre-left and the extreme left, as expected. However, only for the Centre-left party the coefficient is significant (-0.673), the coalition that competed closely with the centre-right to win the election.

[Table 9]

A second set of outcomes that it is worth investigating concerns the fact that an increase of immigrants might have not only shifted votes across parties, but it might have affected also the turnout at the elections and some form of political protests, such as the use of blank and invalid ballots. Also for these outcomes we illustrates the results from our preferred specification, the IV approach with municipality fixed effects. Results are depicted in Table 10. It emerges that the increase in immigration has a negative impact on voter turnout. Even if the coefficient is not



statistically significant, it might suggest that left-wing voters, that are ideologically in favour of a multi-ethnic society but that are not pleased by immigrations trends and regulations, might have decided not to vote instead of directly voting for the centre-right coalition. A similar interpretation can be applied to the findings related to blank and invalid ballots, which strongly increase with the share of immigrants, with coefficients higher than one and largely significant: individuals are not satisfied with any of the existing political parties and the related immigration platforms, and prefer to signal their disappointment using this form of protest.

[Table 10]

## 8. Possible channels behind our findings

In Section 4 we have used the Itanes individual data to gain some insights about the channels that may lie behind the causal impact of immigration on votes for the centre-right coalition. Apart from the cultural dimension, which can be hardly identified in our data, the evidence of Section 4 underline the importance of three main channels.

The first channel refers to the competition of immigrants in the labour market. The literature has stressed that in a developed country the native-immigrant fight for jobs should be higher for unskilled native workers (Borjas, 2003, Mayda, 2006). This intuition strongly applies to the Italian case, where immigrants are for the greatest part unskilled, and even the few that are medium or high skilled are usually employed in unskilled occupations REFERENCE?.

The second channel concerns the competition on public services. As well-known, the children and the elderly are those who mostly make use of Italy's public services. Since immigrations in Italy is a very recent phenomenon, the share of immigrant elderly individuals is negligible. On the contrary, immigrants have a very high fertility rate, especially when compared to the very low rate for Italians. As matter of fact, the increase in immigration rates since the beginning of the nineties has determined a huge rise in the share of immigrant children over native children. This has generate a strong competition between immigrants and natives for public services for children, especially admissions to public schools REFERENCE?.

The third channel refers to the perception by natives that immigration can boost criminal activities. This is a standard claim in the political campaign, and it has been traditionally used by the centre-right coalition. Note that what matters is not whether immigration has actually a causal impact on crime. In this regard, the paper by Bianchi et al (2012) suggests that, when controlling for endogeneity, immigration does not cause crime in Italy. What really matters is the perception of natives, which can be affected by political campaign.

To test the validity of these three explanations, we provide sample-split estimates. In particular, we split the whole sample of municipalities by using thresholds computed with 1991 data, to make them as exogenous as possible with respect to migration trends in our analysis, referred to the period 2001-2008. For the sake of brevity, we only show the results from our preferred specification, the IV with municipality fixed effects.

As for the first channel, competition in the labour market, we divide the whole sample with respect to the median of the share of graduates at the municipality level. Columns (1) of Table 11 illustrates the estimates for the group of municipalities that lie below the median; columns (2) refers to the group above the median. Interestingly, the impact of immigrations is driven by the group of relatively ‘unskilled’ municipalities, with a coefficient equal to 2.8. The effect is significantly lower for the group of relatively “skilled” cities. This evidence supports the idea that the switch of votes to the centre-right coalition driven by immigration has something to do with the rise of competition in the unskilled labor market.

For the second channel, the competition for the public services, we split the sample according to the share of native children, i.e. native population in the class of age 0-14, computed in 1991. The intuition is that the higher is the share of children by natives, the higher may be the perception that immigrants can ‘steal’ admissions to school at the place of natives. We consider the distribution of natives in 1991, since the distribution of children by immigrants might be considered as endogenous. Further, the distribution of immigrants by age is not available in 1991, and hence taking that distribution in recent years would exacerbate the endogeneity issues. Column (3) in Table 11 refers to the groups of municipalities below the median of the distribution, while column (5) to the above median group. It emerges that the impact of immigration is driven by the group above the median, where there is high incidence of children by natives. This suggests that the perception that immigration can be a treat for benefiting from public services might also play a role.

The last channel is crime, i.e. the perception that immigration is a driver of crime. To deal with this issue, we identify the five nationalities associated to the highest rate of criminal activity, which are the following: Egyptian, Moroccan, Rumanian, Serbian, Tunisian.<sup>12</sup> We then compute the share of immigrants belonging to these five nationality for all municipalities, using 1991 data. The idea is that the perception of a relation between immigration and crime is more accentuated in municipalities characterized by high presence of nationality of immigrants with higher crime rates (computed at the national level). Column (5) of Table 11 refers to the group of municipalities below the median, column (6) above the median. The impact of immigration is stronger (2.628) in municipalities characterized by a higher incidence of nationality of immigrants associated with higher criminal rates (however, the p-value for this coefficient is 0.13, and hence the coefficient is not statistically significant at 10% level). It seems that the perception that immigrants bring crime might explain partially explain the increase in voting for anti-immigrants parties.

[Table 11]

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<sup>12</sup> These nationalities have been identified using the first available data on crime activity by nationality, in 2008. Using this data it is possible to compute the crime rate for each nationality, i.e. criminal acts by individual belonging to that specific nationality out of the total number of immigrants of that nationality.

## 9. Conclusions

The paper analyses the impact of immigration on the political preferences of natives. We focus on the Italian case that is particularly interesting because the country has experimented a fast and large migration inflows as well as a right-wing domination for the last 15-20 years. We use municipality data that allows controlling for unobserved municipality heterogeneity and endogeneity. We find that in municipalities that experienced relatively larger arrivals of immigrants, the electorate has been more willing to vote for the coalition of centre-right, which had a political platform less favorable to the immigrants. The size of the city matters: big cities behave differently from the others, since no effect of immigration on electoral outcomes is detected. We also point out that the gain of votes for the centre-right coalition went hand in hands with a loss of votes for the centre-left parties (and the smaller parties, except those at the extreme right), with a decrease in voter turnout and with an increase of votes of protest. Our findings seem to be explained by multiple channels, which refer to the native-immigrants competition in the labor market and in the access to public services, and to the native perception that immigrants cause crime.

Our results refer to a country that has recently experienced a surge in immigrant inflows. To the extent that the aversion to immigration decreases over time (because people feel less threatened or start to appreciate the benefits of immigration that might take time to materialize) the impact of immigration on political outcomes might reduce over time.

A final remark concerns a possible time-consistency issue for the anti-immigrants political parties. On the one hand, these parties should have a political platform against immigration to attract votes; at the same time they should refrain from taking actions that strongly discourage immigration, if they want to keep the electoral benefits documented in this paper.

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## Figures

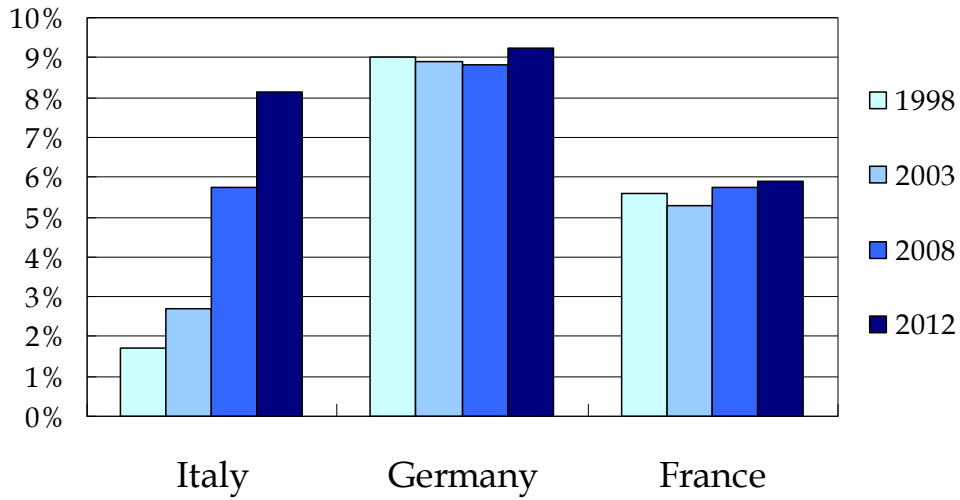


Figure 1: Resident Immigrants trends in Italy, Germany, France.

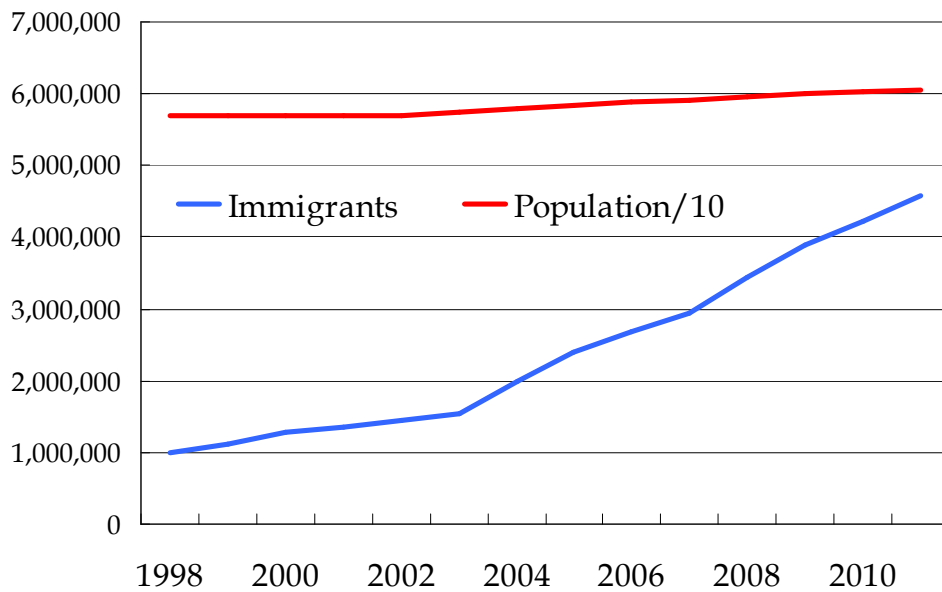


Figure 2: Immigration trends in Italy (residents), from 1998 to 2011.



Figure 3: Electoral poster for the Centre-Right Coalition



Figure 4: Electoral poster of the Lega Nord (Northern League), belonging to the centre right coalition

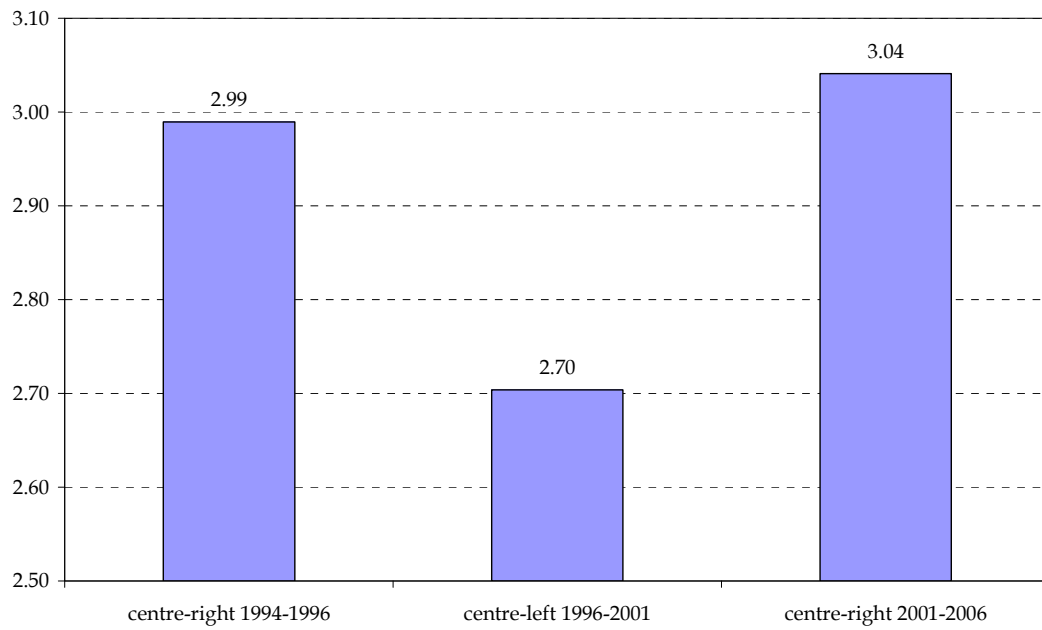


Figure 5. Strictness of the anti-immigration policy in Italy, by type of ruling government



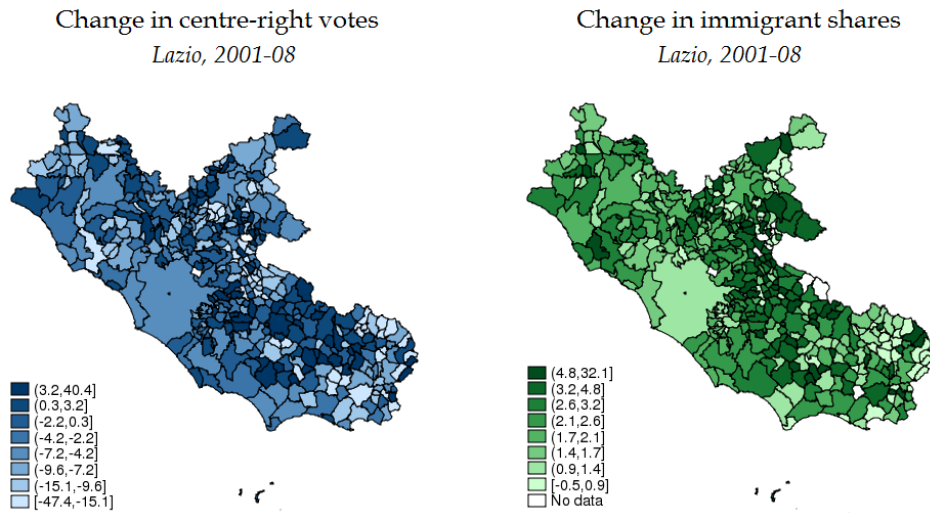


Figure 6: descriptive correlation in Lazio between changes in immigration and changes in votes for the centre-right coalition.

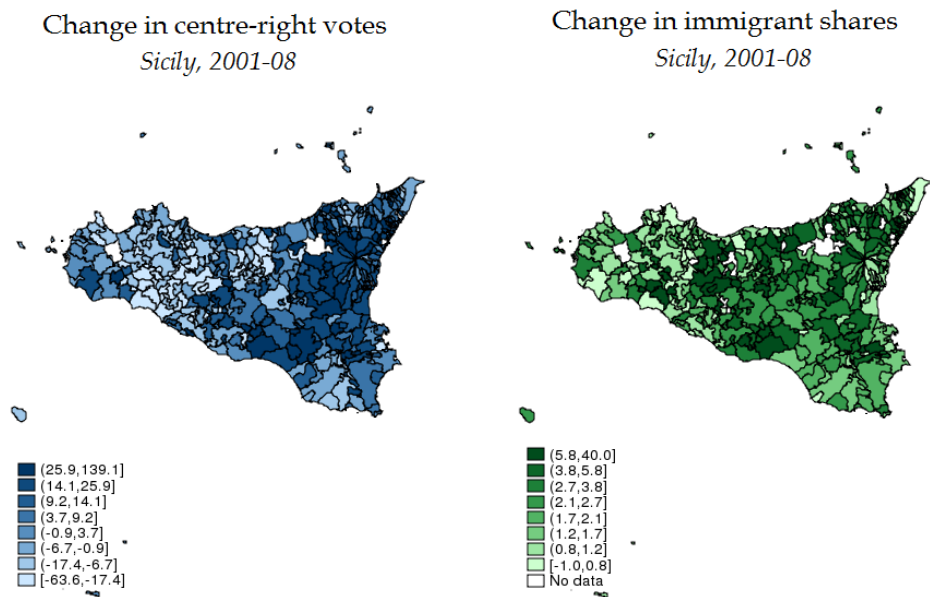


Figure 7: descriptive correlation in Sicily between changes in immigration and changes in votes for the centre-right coalition.

## Tables

**Table 1: Strictness of immigration policy in 12 European Countries (Fondazione De Benedetti)**

Country	# admission req.	# residence req.	# years to obtain perma residence	# admin. involved	Length of the first stay	Existence of a quota system	Asylum legislation	OVERALL INDEX
Austria	0	4.5	1	4	2	4	4	<b>2.8</b>
Denmark	0	6	2	4	4	2	4.5	<b>3.2</b>
Finland	4	3	1	2	4	2	3.5	<b>2.8</b>
France	0	0	1	2	2	2	3.5	<b>1.5</b>
Germany	0	6	1	2	2	2	5	<b>2.6</b>
Greece	0	3	4	4	2	2	4	<b>2.7</b>
Ireland	2	4.5	4	4	2	2	2	<b>2.9</b>
<b>Italy</b>	4	4.5	2	2	2	4	3.5	<b>3.1</b>
Netherlands	4	1.5	1	4	4	2	4.5	<b>3</b>
Portugal	4	3	3	2	2	4	3.5	<b>3.1</b>
Spain	6	1.5	1	4	2	4	4	<b>3.2</b>
UK	2	1.5	4	4	2	2	4.9	<b>2.9</b>

**Table 2. Voting for the centre-right and perception of immigrations as a problem**

OLS	2001	2006	2008
Immigrants as a problem	0.0795*** (0.0180)	0.0637** (0.0286)	0.195*** (0.0432)
Controls	YES	YES	YES
Observations	3,187	1,376	2,964

\*,\*\*,\*\*\* stands for statistical significance at 10, 5, and 1 percent level, respectively. Controls: age, age square, years of schoolig, occupation. Itanes data.

**Table 3. Reasons behind the correlation between immigration and voting for the centre-right**

	(1)	(2)	(3)	(4)	(5)
Culture	0.162*** (0.0173)				0.0605*** (0.0212)
Job		0.155*** (0.0173)			0.0639*** (0.0210)
Crime			0.198*** (0.0180)		0.146*** (0.0216)
Children				0.0559** (0.0221)	0.0295 (0.0221)
Controls	YES	YES	YES	YES	YES
Observations	3,115	3,131	3,099	3,187	3,038

\*,\*\*,\*\*\* stands for statistical significance at 10, 5, and 1 percent level, respectively. Controls: age, age square, years of schoolig, occupation. Itanes data.

**Table 4. Descriptive statistics**

Time-variant Variables	Mean	Std. Dev.	Min	Max
Centre-right coalition share	0.49	0.13	0.00	0.89
Share of immigrants	0.04	0.04	0.00	0.29
Population density	0.29	0.63	0.00	13.09
GDP growth rate	0.00	0.02	-0.04	0.04
Population	7350	40834	32	2724347
Time-invariant Variables				
Social Capital	0.02	0.04	0.00	0.94
Aging index	1.84	1.57	0.22	41.50
Share of graduates	0.04	0.02	0.00	0.37
Employment rate	0.37	0.08	0.13	0.61

**Table 5. Immigration and voting for the centre-right**

	(1)	(2)	(3)
	OLS	FE	FE-IV
Immigrant share	0.389*** (0.045)	0.284*** (0.033)	1.260** (0.562)
Density	0.019*** (0.003)	0.094*** (0.014)	0.011 (0.050)
GDP growth NUTS-2	0.034 (0.066)	0.669*** (0.035)	0.595*** (0.056)
Population/1000	-0.000* (0.000)	-0.000* (0.000)	-0.001 (0.001)
Social Capital	0.020 (0.027)		
Aging index	-0.003** (0.001)		
Share of graduates	-0.650*** (0.065)		
Employment rate	0.220*** (0.021)		
Constant	0.441*** (0.008)	0.459*** (0.004)	
Observations	23,774	23,780	23,780
Municipality FE	NO	YES	YES
F-stat Excl.instruments			27.20
R-squared	0.153	0.528	0.490

\*, \*\*, \*\*\* stands for statistical significance at 10, 5, and 1 percent level, respectively.  
Instrument used in the IV estimates: share of immigrants by municipality in 1991.

**Table 6. The role of big cities. IV estimates. Population as weight.**

	Up to the 99 percentile			All municipalities		
	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	FE	FE-IV	OLS	FE	FE-IV
Immigrant share	0.589*** (0.061)	0.302*** (0.049)	1.184* (0.670)	0.482*** (0.096)	0.188*** (0.052)	-0.272 (0.548)
Density	0.007** (0.003)	0.047*** (0.012)	0.042*** (0.014)	0.002 (0.003)	0.018 (0.013)	0.048 (0.036)
GDP growth NUTS-2	-0.459*** (0.093)	0.427*** (0.046)	0.277** (0.122)	-0.271** (0.138)	0.321*** (0.084)	0.392*** (0.095)
Population/1000	-0.000** (0.000)	-0.002*** (0.001)	-0.006* (0.003)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)
Social Capital	0.063 (0.047)			0.068 (0.054)		
Aging index	-0.031*** (0.003)			-0.037*** (0.003)		
Share of graduates	-0.386*** (0.088)			-0.376*** (0.097)		
Employment rate	-0.061** (0.028)			-0.067** (0.032)		
Constant	0.581*** (0.011)	0.492*** (0.012)		0.588*** (0.014)	0.490*** (0.017)	
Observations	23,535	23,535	23,535	23,780	23,780	23,780
Municipality FE	NO	YES	YES	NO	YES	YES
F-stat Excl.instruments			10.68			23.17
R-squared	0.182	0.626	0.597	0.208	0.655	0.646

\*\*\*, \*\*, \* stands for statistical significance at 10, 5, and 1 percent level, respectively. Instrument used in the IV estimates: share of immigrants by municipality in 1991.

**Table 7. Immigration and voting for the centre-right coalition using LLM data**

	FE	FE-IV
Immigrant share	0.177* (0.107)	1.010* (0.609)
Density	0.000*** (0.000)	0.000 (0.000)
GDP growth NUTS-2	0.694*** (0.102)	0.581*** (0.134)
Population/1000	-0.000** (0.000)	-0.000* (0.000)
Constant	0.416*** (0.018)	
Observations	2,049	2,049
LLM FE	YES	YES
F-stat Excl.instruments		12.86
R-squared	0.661	0.643

\*\*\*, \*\*, \* stands for statistical significance at 10, 5, and 1 percent level, respectively. Instrument used in the IV estimates: share of immigrants by municipality in 1991.

**Table 8. Change in the electoral rule: single election estimates**

	2001		2006		2008	
	FE Reg.	FE Prov.	FE Reg.	FE Prov.	FE Reg.	FE Prov.
Immigrant share	0.821*** (0.279)	0.617** (0.258)	0.631** (0.246)	0.654** (0.256)	0.941*** (0.325)	0.893** (0.348)
Density	0.002 (0.002)	-0.010*** (0.002)	-0.002 (0.002)	-0.009*** (0.002)	0.000 (0.002)	-0.008*** (0.002)
GDP growth NUTS-2	-4.224*** (0.504)	-1.549 (2.654)	-21.827*** (1.819)	-4.128*** (1.494)	-3.421*** (0.304)	0.579 (2.711)
Population/1000	-0.000* (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)
Social Capital	-0.018 (0.026)	-0.037* (0.022)	-0.023 (0.022)	-0.041** (0.020)	-0.025 (0.025)	-0.045** (0.022)
Aging index	-0.005*** (0.001)	-0.002* (0.001)	-0.005*** (0.001)	-0.004*** (0.001)	-0.008*** (0.002)	-0.006*** (0.002)
Share of graduates	-0.270*** (0.057)	-0.179*** (0.053)	-0.254*** (0.054)	-0.186*** (0.054)	-0.597*** (0.066)	-0.508*** (0.067)
Employment rate	-0.272*** (0.040)	0.079** (0.036)	-0.099** (0.042)	0.122*** (0.040)	-0.178*** (0.054)	0.062 (0.052)
Constant	0.682*** (0.019)	0.540*** (0.089)	0.863*** (0.042)	0.360*** (0.016)	0.499*** (0.017)	0.460*** (0.073)
Observations	7,925	7,925	7,925	7,925	7,924	7,924
Regional FE	YES	NO	YES	NO	YES	NO
Provincial FE	NO	YES	NO	YES	NO	YES
F-stat Excl.instruments	4.51	4.44	7.67	7.39	14.61	14.15
R-squared	0.323	0.577	0.412	0.584	0.398	0.563

\*, \*\*, \*\*\* stands for statistical significance at 10, 5, and 1 percent level, respectively. Instrument used in the IV estimates: share of immigrants by municipality in 1991.

**Table 9: Winners and loser from immigration. IV estimates.**

	(1)	(2)	(3)	(4)	(5)
	Right	Centre-right	Centre	Centre-left	Left
Immigrant share	0.236** (0.098)	1.024* -0.584	-0.689 (0.499)	-0.673* (0.378)	-0.158 (0.168)
Density	-0.022** (0.009)	0.032 (0.053)	0.042 (0.045)	-0.034 (0.034)	-0.002 (0.015)
GDP growth NUTS-2	-0.057*** (0.014)	0.652*** (0.057)	0.187*** (0.050)	-0.442*** (0.042)	-0.099*** (0.019)
Population/1000	0.000 (0.000)	-0.001 (0.001)	0.001 (0.000)	0.000 (0.000)	0.000 (0.000)
Observations	23,780	23,780	23,780	23,780	23,780
Municipality FE	YES	YES	YES	YES	YES
F-stat Excl.instruments	27.2	27.2	27.2	27.2	27.2
R-squared	0.384	0.484	0.109	0.313	0.593

\*, \*\*, \*\*\* stands for statistical significance at 10, 5, and 1 percent level, respectively. Instrument used in the IV estimates: share of immigrants by municipality in 1991.

	<b>Turnout</b>	<b>Blank</b>	<b>Invalid</b>
	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>
Immigrant share	-0.694 (0.445)	1.175*** (0.205)	1.532*** (0.232)
Density	-0.162*** (0.048)	-0.032 (0.020)	-0.057** (0.022)
GDP growth NUTS-2	-0.285*** (0.051)	-0.004 (0.024)	-0.038 (0.027)
Population/1000	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Observations	23,780	23,780	23,780
Municipality FE	YES	YES	YES
F-stat Excl.instruments	27.2	27.2	27.2
R-squared	0.188	0.435	0.461

\*,\*\*,\*\*\* stands for statistical significance at 10, 5, and 1 percent level, respectively.  
Instrument used in the IV estimates: share of immigrants by municipality in 1991.

	<b>Skills</b>		<b>Children</b>		<b>Crime</b>	
	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
	<b>below</b>	<b>above</b>	<b>below</b>	<b>above</b>	<b>below</b>	<b>above</b>
Immigrant share	2.830* -1.737	0.878* (0.469)	-0.197 (0.611)	2.114** (0.832)	-0.088 (0.794)	2.628 (1.738)
Density	-0.006 (0.130)	0.023 (0.033)	0.152* (0.081)	-0.040 (0.066)	0.310*** (0.085)	-0.085 (0.102)
GDP growth NUTS-2	0.612*** (0.088)	0.547*** (0.076)	0.412*** (0.068)	0.690*** (0.073)	0.823*** (0.061)	0.193 (0.248)
Population/1000	-0.020 (0.014)	-0.000 (0.000)	-0.000** (0.000)	-0.004 (0.002)	0.026 (0.023)	-0.001 (0.001)
Observations	11,904	11,876	11,891	11,889	11,895	11,885
Municipality FE	YES	YES	YES	YES	YES	YES
F-stat Excl.instruments	7.58	29.7	13.36	13.72	15.58	7.59
R-squared	0.274	0.542	0.509	0.460	0.453	0.352

\*,\*\*,\*\*\* stands for statistical significance at 10, 5, and 1 percent level, respectively. Instrument used in the IV estimates: share of immigrants by municipality in 1991.

## APPENDIX – NOT INTENDED FOR PUBLICATION

In the 2001 elections we classify the following coalitions:

- right wing: Fiamma tricolore, Forza nuova, Fronte nazionale, Lega d'azione meridionale;
- centre-right wing: Abolizione scorporo (lista civetta); Alleanza nazionale, CCD-CDU, Forza italia, Lega nord;
- centre: Democrazia europea, Liberaldemocratici basta; Liberi e forti, Lista Amadu, Nuovo PSI, Repubblicani europei, Socialisti autonomisti, Terzo polo;
- centre-left: Democratici sinistra, Il girasole; La margherita, Lista Di Pietro, Paese nuovo (lista civetta), Svp, Verdi;
- left: Comunismo, Comunisti italiani, Pannella-Bonino, Rifondazione comunista;
- cross-parties: Liga fronte veneto, Movimento delle libertà, Noi siciliani, Partito pensionati, Partito sardo d'azione.

In the 2006 elections we classify the following coalitions:

- right wing: Alternativa sociale, Destra nazionale, Die freiheitlichen, Fiamma tricolore;
- centre-right wing: Alleanza nazionale, Forza italia, Lega nord, Lega sud, Sos italia;
- centre: DC - nuovo PSI, Dimensione cristiana, Movimento triveneto, Partito liberale italiano, Progetto nordest, Terzo polo, UDC;
- centre-left: IdV, Federazione dei Verdi, I socialisti, L'Ulivo, La rosa nel pugno, Lista consumatori, Svp, UDEUR;
- left: Comunisti italiani, Rifondazione comunista;
- cross-parties: Alleanza lombarda autonomia, Ambiente lista, Indipendenza repubblica de sardigna, Liga fronte veneto, Movimento democratico siciliano, No euro, Partito pensionati, Pensionati uniti, Per il sud, Sardigna nazione, Solidarietà.

In the 2008 elections we classify the following coalitions:

- as right wing: Die freiheitlichen, Forza nuova, La destra - Fiamma tricolore, Union fur sudtirol; centre-right wing: Aborto no grazie, Azione sociale, Lega nord, Lega sud, MpA, Partito sardo d'azione, PdL;
- centre: Movimento politico pensiero e azione, Partito liberale italiano, Unione di centro;
- centre-left: Autonomie liberté démocratie, IdV, Lega per l'autonomia alleanza lombarda, Partito democratico, Partito socialista, Svp;
- left: Alternativa comunista, Partito comunista dei lavoratori, Sinistra arcobaleno, Sinistra critica;
- cross-parties: Il loto, Intesa veneta, Liga veneta repubblica, Lista dei grilli parlanti, Movimento europeo diversamente abili, Per il bene comune, Sardigna nazione, Unione democratica per i consumatori, Valle d'Aosta.



## **Fondazione De Benedetti Index**

The Index for the strictness of migration policies “Fondazione Rodolfo De Benedetti” calculates an aggregate index which includes the following seven items:

- (i) the number of certificates and/or procedures needed to be admitted in a country;
- (ii) the number of certificates and/or procedures required to legally reside in the territory;
- (iii) the number of years needed to obtain a permanent residence permit;
- (iv) the number of administrations involved in the authorization procedures;
- (v) the number of years of stay required to obtain a first residence permit;
- (vi) the existence of a quota system;
- (vii) the severity of the asylum legislation.

For more information see:

[http://www.frdb.org/language/eng/topic/data-sources/doc\\_pk/11028](http://www.frdb.org/language/eng/topic/data-sources/doc_pk/11028)