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"The Effect of Immigration on Voting Behavior: Evidence from Italy"

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Firma dello studente

A handwritten signature in black ink, appearing to read "Edoardo Corbelli", written over a horizontal line.

Acknowledgments

I would like to thank my supervisor Professor Rocco, for the constant guidance in the development of this thesis, for the passion in research and for the valuable advices.

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Introduction

The history of humankind is a history of migrations. People's tendency to move into new, more favourable areas has been a driver of the development of our societies for centuries. However, in the recent years, immigration has emerged as one of the most discussed topics in the global political debate. This is mainly due to the fact that most developed countries experienced a considerable growth of migratory inflows especially from developing countries. Data from Eurostat suggest that immigrant population from outside EU-27 to EU-27 significantly increased from about 1.5 billion in 2013 to 2.4 billion in 2018¹. Economists have widely studied the effect that the increasing rate of migration have on the receiving countries. In particular, a lot of work has been done on the effect that immigration has on the labour market, (among others Card, 2001, Borjas, 2003, Peri, 2016) but also on crime (Bianchi et al., 2012) and educational outcomes (Brunello and Rocco, 2013, Ballatore et al., 2015). More recently, a branch of Political Economy started to pay attention to the consequences that migration inflows have on natives' voting behavior. This issue is particularly relevant because in the last years we have assisted to an extraordinary rise in the support of nationalistic parties characterized by a strong anti-immigration stance across Europe. Studying how the natives' preferences - as revealed through the votes - may be influenced by immigration is interesting from an economic point of view because, most of the time, they are driven by economic concerns. Moreover, natives' voting preferences, by supporting a particular political party, have relevant consequences in terms of policy decisions.

The objective of this work is to investigate if the increasing immigrant rates have an impact on the natives' voting preferences. In this regard, the underlying assumption is that votes reflect citizens' attitude towards the foreign population. This may be shaped by several factors, both of economic and non-economic nature. Among the first, natives are documented to be concerned about the negative effect that new migration inflows may have on the labour market and on the welfare state (Mayda, 2006, Facchini and Mayda, 2009). Also, another channel shaping individual attitudes towards immigrants may involve social and cultural factors. For example, natives may be concerned about the compositional amenities in their neighbour or

¹ <https://ec.europa.eu/eurostat/statistics-explained/pdfscache/1275.pdf>

they may perceive the foreign presence as a threat on their system of values and culture (Card et al., 2012). To better capture the natives' reaction to immigrants' exposure, I conduct the analysis at the municipality level, where the interactions between the two groups are likely to occur more often. For example, as suggested by Halla et al. (2017), a sort of competition may arise in the fruition of public services of the same municipality, like in the children admission to public schools. In the following analysis, I exploit the variability of immigration rate and the different voting outcomes in slightly less than 8000 Italian municipalities in the 2008, 2013 and 2018 national elections. Focusing on national elections instead of more local ones allows to better capture natives' attitudes towards new migration inflows, as the regulation of this phenomenon is established at the national level. I consider two main outcomes. First, following the existing literature (Otto and Steinhardt, 2014, Barone et al., 2016, Halla et al., 2017, Edo et al., 2019), I study if the increase of immigration rate shifts individuals' vote towards party supporting anti-immigration policies. Second, I try to assess if the growing immigration influences the natives' preferences towards redistribution. This latter approach slightly differentiates from the existing literature on preferences for redistributions, which mainly focuses on survey data (among others, Munard, 2017, Alesina et al., 2018, Alesina et al., 2019). Looking directly at the voting outcomes allows to investigate the impact that immigration has on policies. In this case, following the procedure of Moriconi et al. (2019) I construct an index on the level of redistribution preferences for each municipality, by linking each political party to an indicator on its position on redistribution, obtained by the Chapel Hill Expert Survey dataset. The higher the index, the higher is the support for those parties opposing redistribution. Subsequently in the analysis, I examine if the effect on anti-immigration parties is different with respect to immigrants' nationalities of origin. As Brunner and Kuhn (2018) prove, the natives' aversion towards foreign population may be driven by a xenophobic sentiment instead of by actual negative economic impacts, and it is likely to increase the higher the cultural distance. Eventually, I test if the effect is heterogenous with respect to some municipalities' characteristics. In this setting, establishing a causal relationship between immigrant share and voting outcomes is not immediate. Their allocation across municipalities is not random, and some unobserved characteristics may affect both the dependent variable and the endogenous regressor, leading to non-valid estimates. To overcome this issue, I employ an IV approach in which the past immigrant settlement estimated with data in 1991 is used as instrument for the present share of immigrants. This approach, proposed by Card (2001), is widely used in the literature of migration and it relies on the absence of correlation between immigrants' location choice in 1991 and the present political preferences. As Barone et al. (2016) point out, the choice of this instrument is particularly convincing in the Italian setting because of the rupture

in the Italian political scene with the scandal “Mani Pulite”, occurred between 1992 and 1994, which brought to the disappearance of the two main political parties at the time. The baseline results of the analysis show that 1 p.p. increase in immigrant share causes an increase of the support for anti-immigration parties of 0.620 p.p., while it increases the redistribution index of about 3 point in absolute terms, corresponding to an increase of 0.869 p.p. These results highlight a general negative reaction of citizens towards new migration inflows. Moreover, even if the effect on anti-immigration parties is expected to be stronger in case of exposure to culturally distant immigrants, the estimates reveal a positive and significant impact only when considering the communities from South America. The effect is not significant in the case of immigrants from Africa and Eastern-Central Europe, while it has opposite sign when considering population from Asiatic regions. A possible explanation behind these results may be due to the different integration processes of the second generations of immigrants along the language dimension. In particular, as estimated by Bisin and Tura (2019), a higher acceptance of minority cultures – characterizing citizens from South America - allows immigrants to better maintain their distinctive cultural traits, thus slowing their integration process in the society. When conducting the heterogeneity analysis with respect to the size of the municipalities, it emerges that the effect is driven by middle-size municipalities, while the result does not hold in case of big cities. Also, results suggest that the effect increases with the taxable income per capita and with the share of children, while it is stronger in municipalities with a very low level of social capital. Eventually, it is driven by municipalities in the middle of the distribution of the unemployment rate. A detailed explanation for these results will be given in the text. The work is structured as follow: Chapter 1 briefly presents the immigration trends in Italy and the political and institutional background; Chapter 2 reviews the main literature of the subject; Chapter 3 discusses the data and the main empirical strategy; Chapter 4 describes the main results and adds additional findings with respect to the immigrants’ nationality and the municipality heterogeneity; eventually the main conclusions of this work are provided.

Chapter 1

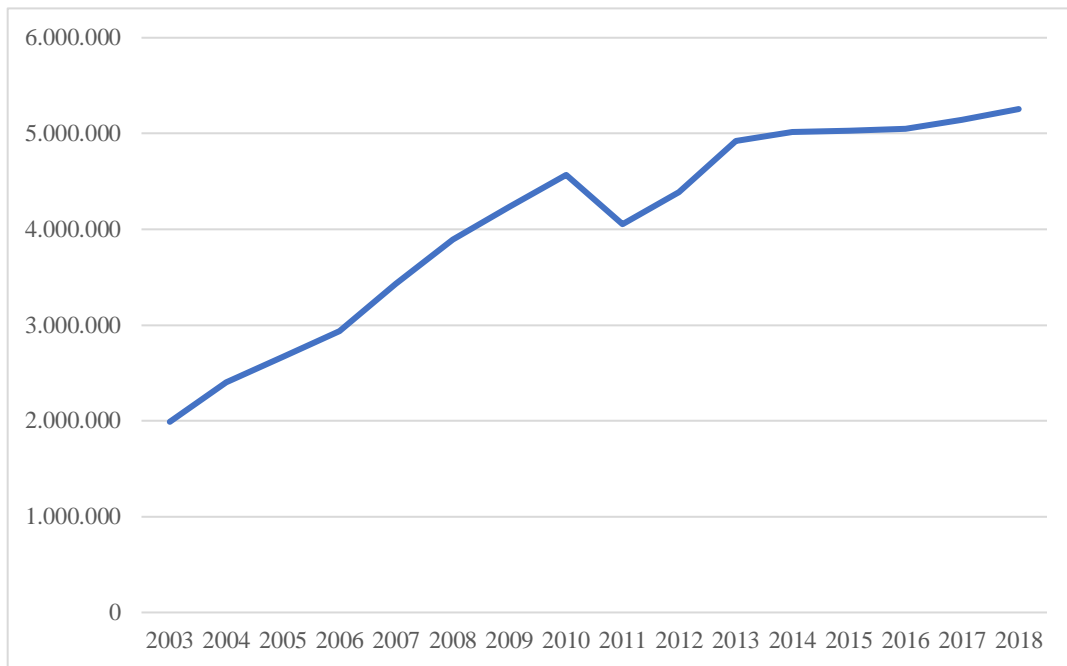
Background Setting

1.1 Immigration trends

In the last few decades, the foreign presence in Italy has significantly increased. According to Eurostat, in 1998 the immigrants' share over the population was equal to the 1.7%, while today is it estimated to be more than the 8%. In particular, a significant growth in the immigration rate occurred at the beginning of the 2000. As Figure 1 shows, foreign citizens were about 2 billion in 2003 and overcame the 5 billion in 2018. For the purpose of the following analysis, it is relevant to discuss the main countries of origin characterizing migration inflows in Italy. In 2008 the foreign citizens were 3.891.295, equal to the 6,5% of the overall population. Among them, a significant fraction was represented by immigrants from Romania (20,5%), Albania (11,3%) and Morocco (10,4%). The first 10 immigrants' nationalities present in the Italian territory also included China, Ukraine, Philippine, Tunisia, Polonia, India and Moldavia. In 2013, the total immigrants registered were 4.922.085, representing the 8,2% of the overall population. In this period, Peru and Bangladesh replaced Tunisia and Polonia in the rank of the top 10 nationalities. In 2018, the foreign-born citizens slightly grew up to 5.255.503, reaching to the 8,7% of the resident population. Among the most represented nationalities, Egypt took the place of Peru. In the Table 1 below, data on the main immigrants' nationality for 2008, 2013 and 2018 are displayed. It is interesting to notice how the Romanian population peaks over the others and how it has substantially increased: In ten years, it almost doubled from about 600.000 in 2008 to slightly less than 1.200.000 in 2018. This depends in large part by the entrance of Romania in the European Union in 2007, making the migration flows across countries easier.

Important in this context, in 2015 Europe experienced an extraordinary increase of asylum seekers coming from areas of conflicts like Syria, Afghanistan and Iraq. Many refugees arrived in Europe overseas through the Mediterranean, landing in the ports of Italy, Greece and Spain. The total arrivals in 2015 was estimated to be 1,032,408, reaching the peak of refugees' inflows in October 2015, to rapidly decline after to 373,652 in 2016² (UNHCR data, 2018).

Figure 1: Trend of foreign citizenship population in Italy



Data source: ISTAT. Total foreign population on the 1st of January.

² <https://data2.unhcr.org/en/situations/mediterranean>

Table 1: Main foreign nationalities in Italy

Country	Year		
	2008	2013	2018
Romania	625 278	933 354	1 190 091
Albania	401 949	464 962	440 465
Morocco	365 908	426 791	416 531
China	156 519	223 367	290 681
Ukraine	132 718	191 725	237 047
Philippine	105 675	139 835	167 859
India	77 432	128 903	151 791
Bangladesh	55 242	92 695	131 967
Moldova	68 591	139 734	131 814
Egypt	69 572	76 691	119 513
Pakistan	49 344	80 658	114 198
Sri Lanka	61 064	79 530	107 967
Nigeria	40 641	56 476	106 069
Peru	70 755	99173	97 379
Poland	90 218	88 839	95 727
Tunisia	93 601	88 291	93 795
Ecuador	73235	82 791	80 377
Macedonia	78090	76 608	65 347
Ghana	38 400	48 575	49 940
Serbia and Montenegro	68 542	46 755	41 734

Data source: ISTAT. Foreign population on the 1st of January, by nationality of origin.

For what concerns the labour market, immigration is a rooted phenomenon, accounting for almost 11% of the total labour force, among which the 7,4% is made by non-EU citizens³ (Ministry of Labour data, 2018). Data in 2018 suggest that the employment rate for immigrants from outside the EU is equal to the 60,1%, compared with the 58,2% that characterizes the

³ Yearly Report on the immigrants' communities in Italy, 2019: <https://www.lavoro.gov.it/temi-e-priorita/immigrazione/Pagine/Studi-e-statistiche.aspx>

Italian natives. This is due to a sort of complementarity in the labour market: immigrant population is typically employed in low skills jobs, characterized by low salaries. The unemployment rate for immigrants from outside the EU equals 14,3%, while it is 10,2% of the native population. Also, the inactive rate accounts for the 29,8%, compared to the 35% of the Italian citizens. Importantly, data are very heterogeneous with respect to the immigrants' nationality of origin. The highest employment rate characterizes the Philippine group (82,2%), while the lowest concerns the Moroccan communities (45,2%). The unemployment rate is higher among immigrants from Nigeria (30,7%) to reach the lowest level among the Chinese (3,5%). Differences with respect to the nationality are also common among the types of job in which the immigrants are employed. Specifically, the ethnic specialization takes place: there are some communities that tend to specialize in one specific sector, due to relationships with individuals of the same nationality and words of mouth. In this regard, 36,5% of Indians work in the agricultural sector, 40,5% of Senegalese in the industry, 27,4% of Albanian in the construction sector, 36,9% Chinese in trade. Eventually a consistent fraction of immigrants from Philippine (59,5%) and Ukraine (60,8%) are employed in social and personal services.

However, it is important to stress that data on immigrants rely on official registrations in the Population Registry Offices of the Italian municipalities. Fondazione ISMU, based on data from ISTAT, estimates that in 2018 there were 431.000 citizens that, even if legally present in the Italian territory, were not yet officially registered, and about 533.000 immigrants in an irregular position, as they lack a valid permit to stay⁴. The immigrant shares by municipalities I am going to use in the following are therefore likely to underestimate the actual immigrant presence.

1.2 Political context

Since this work relies on data on Italian national elections occurred in 2008, 2013 and 2018, this section provides a brief description of the main political forces acting in those years. The 2008 national elections were won by the centre-right coalition, traditionally associated to an anti-immigration stance and promoting tough policies regulating new migration inflows. On the contrary, in the 2013, the most voted political party was the Centre-Left Democratic, typically characterized by a more open position with respect to immigration, highlighting the

⁴ Fondazione ISMU XXIV Report on migration, available at: <https://www.ismu.org/wp-content/uploads/2018/10/XXIV-Report-on-migrations-2018.pdf>

positive impacts it has in the domestic economy, especially in terms of welfare. It is important to stress that the 2013 national elections were marked by the participation of a new political force: the Five Star Movement Party, characterized by a strong anti-establishment, populist rhetoric and which gained the 25% of the whole votes⁵ (Ministry of the Interior data). The rise of the Five Star Movement represents a rupture with the traditional Italian political system, departing from the typical political dichotomy which divides the political spectrum between right- and left-wing parties. The 2018 national election saw the triumph of the populist forces in Italy. Most of the votes were directed to the Five Star Movement, while the most voted coalition was the centre-right alliance, dominated by the Northern League. This is a nationalistic party, born in the 90s' campaigning for the independence on the Northern regions of Italy, and that in the last years has significantly gained support. In 2013 it accounted for about 4 % of votes, jumping to more than 17% in 2018 (Ministry of the Interior data). The rise of the Northern League is part of a wider wave of nationalistic parties that interested the whole Europe and that in the recent years has gained incredibly support from the electorate. Among them, we find National Rally in France, the Freedom Party of Austria in Austria, Alternative for Germany in Germany, the UK Independent Party in the United Kingdom, True Finns in Finland and Law and Justice in Poland. These parties typically share the same anti-euro stance and strongly campaign for the necessity to implement tough policies regulating the immigration flows. For the purpose of this analysis it is important to stress that the migration has been a highly debated issue in the considering elections, especially in the 2018. Given this premises, a party position regarding immigration was known by the electorate.

⁵ <https://elezionistorico.interno.gov.it/>

Chapter 2

Literature Review

A growing number of papers in the literature explores the relationship between immigration and election outcomes, often emphasizing the effect on the support of those political parties typically associated with anti-immigration policies. One of the first studies demonstrating a causal effect between these two variables is given by Otto and Steinhardt (2014), that focuses on the federal and national elections in 103 districts in the city of Hamburg in the period between 1987 and 1998. They found that a 1 percentage-point increase in the share of foreign citizens at the district level led to a 0.225 percentage-point increase in the share of votes for the far right-wing parties. At the same time, this caused a decrease in the votes for the Green Party, the major political group that at the time promoted favourable policies towards immigrants. The empirical analysis consists in a fixed effect model which allows controlling for the unobserved heterogeneity between districts that is constant over time. Barone et al. (2016) provided evidence for Italy, which experienced a considerable growth of the immigration flows in the last two decades. Focusing on the municipality level, the authors found that 1 p.p. increase in the share of immigrants is associated to a 0.86 p.p. increase in the share of votes for the centre-right coalition during the national elections. To establish a causal relationship, they employed an IV approach based on the exogenous variation given by the historical immigrants' settlement. Interestingly, the authors found that the support for the right-wing parties is mainly driven by municipalities in the middle of the size distribution, specifically the result does not apply to big cities. Similarly, Halla et al. (2017) studied the effect of the local presence of

immigrants on the votes for the Freedom Party of Austria (FPÖ), which supports nationalistic and anti-immigration policies and that in the last years became one of the main Austrian political force. Controlling for several community factors like labour market conditions, socio-economic and demographic characteristics, both a fixed effect estimate and an instrumental variable approach reveal that an increase of the local share of immigrants is associated with an increase in the FPÖ votes' share. Following a similar methodology, other papers focusing on different countries documented a surge in the votes for the right parties as a consequence of the increase in migration inflows. Among others, Becker and Fetzer (2018) found that in the UK parliamentary election an increase in the share of Eastern Europe immigrants brought a rise in the votes for the UK Independence Party. Edo et al. (2019) show that in France a growth of immigration rates leads to a growing support of the far-right candidates while reducing the support for the far-left. Peri et al. (2020) documented that in the US natives are more likely to vote for the Republican Party subsequently to an increase in low skilled migration inflows.

One common methodology employed in this literature is given by an IV in which the past immigrant settlement pattern is used as an instrument for the present immigrant share. This strategy was proposed by Card (2001) and it is widely used in the literature of migration. Indeed, one of the main issues in this setting is that immigrants are not randomly distributed across municipalities because there could be some local unobserved characteristics affecting both the immigrant location decision and the output variable. For what concerns the correlation to the voting behavior, immigrants may decide to settle in more liberal areas where it is more likely that the population is less averse to migration. On the other hand, they may be forced to locate in poor districts where the negative economic conditions may foster a xenophobic sentiment. The immigrant location decision is therefore endogenous. In this regard, an instrument based on the past settlement patterns allows to establish a causality by exploiting the fact that immigrants tend to move to an area where a group of immigrants of the same ethnicity is already present. 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. A novel IV strategy was proposed by Harmon (2017), that constructed an instrument based on historical housing stock data. Specifically, he employed the share of the 1970 high-rises stocks as an instrument for later immigration flows, exploiting the fact that high-rises are much more likely to be rented and that the composition of the housing stock is very persistent over time. In this case, the underlying identifying assumption is that the characteristics of the 1970 housing stock have no direct effect on changes in election outcomes between 1981 and 2001, conditional on appropriate controls. An interesting study by Dustmann et al. (2018),

instead of the IV approach used in the above-mentioned works, tackled the endogeneity problem of immigrants' location by exploiting a policy that distributes refugees to the municipalities in Denmark on a quasi-random basis. Specifically, refugees are distributed proportionally to the pre-existing municipal populations and, importantly, municipalities cannot interfere with the allocation process selecting the number of refugees or their socio-economic backgrounds. Consequently, the refugees' allocation is not correlated with past election outcomes. This setting allows the authors to find a positive and significant causal relationship between refugees' allocation and the votes for right-wing parties supporting anti-immigration policies in the 1989–98 period.

The relationship between immigration and far-right success is undeniably tied to the underlying attitudes of natives towards immigrants and immigration policies. However, even if the average effect of migration on the election outcomes seems to reveal an anti-immigrant sentiment spread among the European and US population, it is important to stress that this effect is very heterogeneous with respect to the characteristics of both the migration flows and the natives. In this regard, it is fundamental to discuss those factors that drive the latter to vote towards more anti-immigration positions and therefore what characteristics matter in determining their attitudes. In general, the literature suggests that natives' attitude towards migration can be determined by several factors, both of economic and non-economic nature.

Among the firsts, natives are concerned about the impact that immigration has on the labour market conditions (Mayda, 2006). If natives experience a relationship of substitutability with immigrants, they are likely to expect a negative effect in terms of wages and employability and therefore will tend to oppose new inflows. On the other hand, if there is a complementary relationship, the potential benefits due to immigration will lead natives to support favourable migration policies. Specifically, natives with the same skills as the immigrants are expected to lose from new immigration inflows, while those with different skills are expected to gain (Borjas, 2003). However, Peri (2016) suggests that high skilled immigration has an overall positive impact on the labour market conditions because it increases productivity and wages of all workers by boosting the human capital formation and innovation. In line with this latter result, Mayda (2006) documented a positive relationship between immigrants' skills and pro-immigration preferences in high per capita GDP countries. Consequently, natives are likely to oppose low skilled inflows of migrants because of the perception of a stronger competition in the labour market. In this regard, several pieces of evidence are consistent with these predictions, revealing that the votes for anti-immigration parties are positively associated with

low skilled migration, while, considering only high skilled migration, the effect has an opposite sign. In particular, Peri et al. (2020) found that an increase in high-skilled immigrants as a share of the local population is associated with a strong and significant decrease in the votes for the Republican Party. On the contrary, an increase in the low-skilled immigrants is associated with a surge in Republican votes. The estimates show that the pro-Republican effect of low-skilled immigrants was particularly strong in counties where the share of unskilled natives was higher, pointing out that the perception of the labour market competition is crucial in determining the attitude towards immigration. Similarly, Halla and al. (2017) found that the effect of immigration on the votes for the far-right parties is stronger in those areas where the unemployment rate is higher.

Another important economic factor relevant in shaping the attitude towards new migration inflows is the consequences on welfare (Facchini and Mayda, 2009). The way immigrants affect the welfare state strongly depends on whether they are net recipients or net contributors. In this regard, unskilled migrants may be viewed as a net fiscal burden because they consume more in social benefits than they pay in taxes. On the opposite, skilled migrants may be perceived as net fiscal contributors, as they typically have a higher taxable income and depend less on social assistance. Therefore, it is reasonable to think that in case of low skilled migration inflows, natives are worried about the potential financial burden they represent and are likely to support those parties promoting tough policies towards migrants. Otto and Steinhardt (2014), provide evidence in this direction, showing that only when considering the sub-groups of refugees among the immigrants - a category perceived to be highly dependent on welfare - the effect on the right-wing parties is positive and significant. Moreover, when the number of immigrants increase, natives may perceive a competition in the fruition of the local public goods. For example, if the number of immigrant children grows, the demand for schooling in a certain neighbourhood increases as well, inducing a perceived competition between natives and immigrant children and worries for insufficient child-support (Halla et. al., 2017). Importantly, the ways in which migration inflows may affect natives' attitudes do not necessarily reflect their actual impact on the economy but rather natives' perceptions on these potential impacts on the welfare system. Alesina et al. (2018), for example, showed that natives have strong misperception on the education and reliance on welfare state.

A third channel shaping individual attitudes towards immigrants involves social and cultural factors. In this sense, an increase in the number of immigrants in a specific area may act in two different directions: on one hand it can incentivize the cultural exchange between natives and

foreigners, helping reducing prejudices - contact hypothesis (Allport, 1954) - on the other hand natives may perceive ethnic diversity as a threat for the national culture, identity and traditions - group conflict theory (Pettigrew, 1998). In relation to the latter argument, Card et al (2012), by using the 2002 European Social Survey (ESS) found that the reaction to immigration is driven by concerns over compositional amenities, meaning that natives are worried about the changes in the composition of schools, neighbourhoods and workplaces. Compositional concerns are estimated to be highly relevant, explaining from 2 to 5 times as much of the changes in answers to the question of whether more immigrants should be allowed to access the host country with respect to concerns on the labour market conditions or on the welfare. As stressed before, natives perceive a competition in the fruition of local public schools (Otto and Steinhard, 2016, Barone et al., 2016, Halla et al., 2017) or perceive a negative impact that immigrant children may have on the school performance of their own children (Brunello and Rocco., 2013, Ballatore et al., 2015). Another important factor shaping natives' political preferences towards immigrants involve securities concerns. Natives may have the perception that the growing presence of immigrants in the neighbour is related to an increase of criminal activities. In this regard, Bianchi et al. (2012) suggest that immigration does not significantly raise the crime rate in Italy. Precisely, immigration increases only the incidence of robberies, representing a very minor fraction of all criminal offenses, leading an effect on the overall crime rate not significantly different from zero. However, as already mentioned, it is important to stress that what really matters in determining the natives' behavior and therefore their voting preferences is the perception of the impact rather than the impact itself. Sometimes the natives' reactions are not justified but an actual economic or social consequence, but they may be driven by a xenophobic sentiment. Dustmann and Preston (2007) found that not only cultural and racial concerns are determinants of natives' attitude towards further immigration, but if the migrants are ethnically distant from the natives, this is the most relevant channel shaping preferences. In this sense, the ethnic composition of migration may play a role as it can be a source of prejudices. The immigrant presence may be seen as a threat because the natives' system of cultural values and beliefs have to co-exist with a foreign system that could contrast with the existing traditional values, possibly generating a negative attitude towards foreign citizens. This mechanism is likely to be strengthened the stronger the cultural distance between immigrants and natives. In line with these predictions, Brunner and Kuhn (2018), proved that the presence of immigrants with a distant cultural background determines an anti-immigration attitude among natives, while the preferences are not affected when the immigrants are more culturally close. The authors, exploiting Switzerland's system of direct democracy to asses natives' attitude, distinguish between immigrants sharing a value system close to the one of Swiss

natives - groups from past protestant and catholic non ex-Communist countries and from the English-speaking OECD countries - and those immigrants with a different value system according to the cultural heritage of the country of origin – groups from former Communist countries and from Asia, Africa and South America.. Another example of how the presence of a culturally different minority could represent a threat for the native communities is provided by Colussi et al., (2016). They exploit the exogenous variation in the distance of the election date to the month of Ramadan, a period in which Muslim communities become more visible to the public. The results indicate that both far-right and far-left parties gain substantial support if a vote has been cast shortly after Ramadan.

In contrast with the previous results, strengthening the validity of the threat group theory, there is evidence that seems to be consistent with the contact theory, which predicts positive externalities in the contact between natives and immigrants (Alport 1956). In particular, this is verified under certain conditions: The equality of status of the different groups in contact; their cooperative interdependence in the pursuit of common goals; the presence of social norms supporting intergroup contact theory. In this regard, Gamaleiro et al., (2020) show that the presence of refugee centres in Italian municipalities promoting the immigrant integration (SPRAR) has a negative impact on the far-right and anti-immigration parties. Specifically, the effect is stronger in the case of small centres while it changes sign when they are bigger, pointing out that the cultural assimilation between natives and refugees may be compromised if the number of refugees and asylum seekers hosted becomes too high. Similarly, Steinmayr (2020) investigates how different forms of exposure to refugees affect natives' support for the far-right in Austria. In those municipalities experiencing a sustained interaction with refugees and asylum seekers, the support for the far-right fell by 3.86 p.p. in the national elections. This may be due to the fact that local authorities and NGOs operating in these municipalities to foster the immigrant assistantship and integration create a favourable environment which fulfilled the above conditions. On the other hand, in municipalities where the contact with refugees was transitory, the author documented an increase in the far-right vote share by 1.47 p.p.

As previously stressed, what matters in determining the individuals' response towards migration is the perception of the phenomena, and not its actual effect. Following Bellucci et al. (2019), although the real local presence of foreign citizens reveals to be a driver determining the natives' behavior, its perception is confirmed to play a role as well. Perceptions are driven by media exposure that, in the pre-electoral period, tend to emphasize the issue creating a political debate around this topic. To assess the impact of perceived immigration on electoral

outcomes, the authors constructed an index capturing the increased salience and perceived threat of immigration associated with the refugee arrivals before the elections, finding that is positively associated with support for extreme-right, populist and anti-immigration parties.

A more recent branch of literature complements the discussed relationship between migration and natives' voting behavior directly investigating the preferences in terms of policies. One central issue in this context concerns the impact of the increase in immigration presence on the support for redistribution. More specifically, attitudes towards redistribution depend on how natives perceive the impact of immigration on their position with respect to the welfare state. In this regard, Edo et al., (2019) argue that individuals' response can act in two opposite directions. From one side, the increase in immigration leads to lower support to redistribution and welfare policies, aimed to provide public services both to natives and immigrants. On the other hand, the increased exposure to risk given from the labour market competition and the consequent demand for insurance may favour redistributive policies. In this context, Murard (2017), using the European Social Survey (ESS), estimated that the effects of immigrant inflows on natives' attitudes towards redistribution policies are different depending on the skill level of both migrants and natives. The respondents show that when unskilled immigration increases, low-skilled natives oppose more immigration while high-skilled natives tend to oppose less. On the other hand, when skilled immigration increases, high-skilled natives resist more immigration while low-skilled natives' resistance remains the same or even declines. Further analysis also indicate that native workers seem to support more redistribution and less immigration when the number of foreign workers in the same occupation increases. Taken together, these results provide strong evidence supporting the role of both welfare concerns and labour market concerns in determining individuals' attitudes towards redistribution.

A study conducted by Alesina et al. (2019), focusing in 16 European countries and employing the data on the EES, reveal that natives display lower support for redistribution when the share of immigrants in their residence region is higher. It interesting to stress that the attitudinal effect of immigration strongly depends on immigrants' countries of origin and skills. First, immigrants from the Middle-East cause a more significant anti-redistribution effect than immigrants of other nationalities. Second, a higher presence of skilled immigrants tends to significantly attenuate the anti-redistribution effect of immigration. The authors also point out that the effect is stronger in countries with more generous welfare states (Nordic countries and France) relative to countries with smaller welfare states (the UK or Ireland). Similarly, Fouka et al., (2020) look at the Great Migration in the US in the first part of the last century and shows

that natives became less favourable to social policies in cities which received more immigrants. In addition, the effect is proved to be more accentuate when immigrants were culturally or religiously further away from the natives. Following the same direction, Alesina et al. (2018) perform an original survey on six countries (the US, UK, Sweden, Germany, Italy and France). They found out that natives are vastly misinformed about immigrants, regarding their number, country of origin, education level and reliance on the welfare state. Moreover, there is a strong correlation between natives' beliefs about immigrants and their preferences for redistribution. In the literature of migration and preferences for redistribution, Moriconi et al. (2019) were the first that studied the preferences for redistribution by directly looking at the voting behavior, instead of using survey data. Specifically, they focus on European elections between 2007 and 2016, matching information of the votes of 126 parties with their political agenda classification in matter of redistribution, obtained by the Manifesto Project Database. They found that larger inflows of highly educated immigrants are associated to votes towards parties supporting welfare state expansion, while less educated migrants lead natives to vote towards parties less favourable to welfare state expansion.

Chapter 3

Empirical Strategy

3.1 Data and descriptive statistics

The dataset employed in the analysis consists of a panel of slightly less than 8000 Italian municipalities observed in 2008, 2013 and 2018 for which I combined information on the share of foreign citizens with the national election outcomes.

Data on Italian municipalities come from the Italian Statistical Office (ISTAT). In particular, for the years of interest, I collected data on the population, the number of foreign-born citizens and their country of origin on the 1st of January. The ISTAT also provided information on other territorial characteristics like the municipality area in squared kilometres, the GDP growth at the regional level (NUTS-2) and the 2011 classification on the Local Labour Systems (Sistemi Locali del Lavoro). Moreover, information used to compute municipality time-invariant covariates like the share of graduates, the employment rate, the taxable income pre capita, the aging index and the social capital index - proxied as the number of active non-profit units per 1000 habitants - has been extracted from the ISTAT Census held in 2011. The dataset, however, does not provide data on the exact number of immigrants by municipality and country of origin in 1991, information that would be essential to construct the instrument required for the identification. To recover this problem, I combined data from two different sources. Specifically, I followed the procedure used by Barone et al. (2016) to impute the number of

immigrants by municipality and nationality in 1991 by using the residence permits by province and country of origin (coming from the Italian Ministry of Interior) and the municipalities' data on the macro-area of origin of the immigrants citizens in 1991 (coming from ISTAT). A more detailed explanation of the construction of the instrument will be done in the following chapter.

Data on municipalities were then merged to national election outcomes for 2008, 2013, and 2018, which have been drawn from the Italian Ministry of Interior. Specifically, I used the data for the elections of the Chamber of Deputy, as there is not a minimum age required to vote - on the contrary to the Senate, in which the minimum age is 25 years old - and therefore it better captures the overall citizens' political preferences. Each party has then been linked to an indicator of its position with respect to migration and redistribution policies, obtained from the Chapel Hill dataset. In the Chapel Hill Expert Survey (CHES), two hundred political experts classify European political parties according to their viewpoint in matter of European integration, policy issues and, more in general, their underlying ideology. I used two different waves of surveys, specifically the 1994-2014 Chapel Hill Expert Survey, for which I could extract the Italian party classification for the year 2008 and 2013, and the 2019 Chapel Hill Expert Survey, for which I could recover information for the parties in 2018.

3.1.1 Output variables

The first aim of this study is to investigate if an increase of the share of immigrant citizens leads natives to vote for political parties supporting anti-immigration policies. The underlying assumption is that the voting preferences reflect individuals' attitudes towards migration. As previously discussed, the natives' behavior is shaped by several factors, involving both economic and non-economic concerns. Therefore, once we are able to establish a causal relationship, we can interpret the increase in the support for the anti-immigration parties as a general discontent of natives perceiving a negative impact of migration inflows. This approach quietly follows the existing literature on migration and voting, which mainly uses the share of votes for the right-wing or far-right parties as dependent variable to evaluate the individuals' reaction to an increase in immigration (Otto and Steinhardt, 2014, Barone et al., 2016, Halla et al., 2017). However, to avoid the risk of an inaccurate generalization in associating right-wing parties and anti-immigration policies support, in computing the dependent variable I include only those parties with a strong anti-immigrant stance as classified by the CHES dataset.

Specifically, I considered the votes of those parties that are in the 75th percentile of the distribution on the “IMMIGRATE_POLICY” indicator in the CHES classification for every election year⁶. In the survey, experts are asked to assign a value to the party’s “position on migration policy”, ranged from 0 (the party strongly opposes tough migration policy) to 10 (the party strongly favours tough migration policy). The denominator of our share is computed as the difference between the turnout and the invalid votes, involving both null and non-valid votes.

The second objective of the analysis consists in testing whether the increase in immigration and the consequent change in voting behavior can be interpreted as a change in preferences towards redistribution policies. Differently from most of the existing literature on the topic, which assesses the population preferences for redistribution through survey data (Alesina et al., 2018, Alesina et al., 2019), I focus on the redistribution preferences as revealed by the votes. This approach allows to analyse more directly the implication that an increase of immigration has on policies. Natives’ attitudes towards redistribution depend on how they perceive the impact of immigration on their position with respect to the welfare state. In this regard, Edo et al. (2019) argue that individuals’ response can act in two opposite directions. From one side, the increase in immigration leads to decrease the redistribution support, because of the net social cost it is perceived to represent. On the other hand, the increased exposure to risk given from the labour market competition and the consequent demand for insurance may favour the support for redistributive policies. In this case, I construct the dependent variable as an index reflecting the citizens’ preferences in matter of redistribution based on the overall municipality’s election outcomes. Following a procedure similar to the one employed by Moriconi et al., (2019), which associated to each European party an indicator on its position on welfare state expansion, I linked every Italian party to the correspondent indicator on redistribution, obtained from the CHES dataset⁷. Specifically, experts are asked to assign a value on the “position on redistribution of wealth from the rich to the poor”, ranged from 0 (the party strongly favours redistribution) to 10 (the party strongly opposes redistribution). As the level of redistribution may slightly varies in different years, I associated the policy indicators for each party at the beginning of the period of the analysis. In this way, variation in local preferences are a consequence of the shift to one party to another and not of the change of the indicator’s value.

⁶ For 2008 the anti-immigration parties are People of Freedom and Northern League; for the 2013 and 2018 Forward Italia, Northern League and Brothers of Italy.

⁷ The main parties in the 2008, 2013 and 2018 election as classified by the CHES dataset are: People of Freedom, Democratic Party, Union of the Centre, Forward Italy, Italy of Values, Northern League, Brothers of Italy, Südtiroler Volkspartei, Five Star Movement, Left Ecology and Freedom, Democratic Centre, Italian Socialist Party.

The index is constructed as an average of all the parties vote share weighted by the associated redistribution index. Therefore, the higher the index, the stronger a party opposes to redistribution policies. As it emerges from Table 1 below, the computed index for Italian parties ranges from a minimum of 0.218 to a maximum of 7.130. Table 2 summarizes the main descriptive statistics used in the analysis.

Table 2

Main descriptive statistics

	Mean	Std. dev.	Min.	Max.
<i>Time-variant variables</i>				
Anti-immigration parties share	0.389	0.141	0.004	0.870
Redistribution index	4.656	0.744	0.218	7.130
Share of immigrants	0.060	0.042	0	0.382
Population	7632	42958	29	2872800
Population density	300.19	648.99	0.766	12380.3
GDP growth NUTS-2	0.008	0.0175	-0.070	0.040
<i>Time-invariant variables</i>				
Aging index	1.823	1.085	0.348	18
Employment rate	0.444	0.078	0.18	0.74
Social Capital Index	6.470	4.762	0	88.235
Share of graduates	0.086	0.032	0.006	0.345

3.2 Identification strategy

The aim of this study is to investigate the effect of immigration on the voting behavior of natives. Specifically, I try to understand if the latter, in response to an increase of the immigration share, change their voting behavior towards anti-immigration parties and their preferences towards redistribution policies. To achieve this objective, I exploit the variation in immigrants shares and the variation in the national election voting outcomes in slightly less than 8000 Italian municipalities in 2008, 2013 and 2018. This setting allows to capture natives' reaction to immigration and how it affects policies, since foreign citizens are not comprised in the electorate. If that had been the case, the voting outcome would have also included immigrants' political preferences, reasonably supporting those parties with a more open stance towards immigration. Moreover, it is possible to rule out the problem of naturalization, as applying and obtaining the Italian citizenship is a long process that takes several years. Also, focusing on the national elections, instead on the local ones, better reflects citizens' attitudes towards issues like migration or redistribution, as they are often regulated by national laws.

Ideally, the estimated regression would be:

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

where y_{mt} is the dependent variable expressed as the share of valid votes for anti-immigration parties in the municipality m and in the election year t ($t = 2008, 2013, 2018$) or, similarly, as the redistribution index in the municipality m and the election year t . $\text{immigrantshare}_{mt}$ is my regressor of interest, namely the share of foreign citizens over the total population in municipality m and in year t . X'_{mt} is a vector including time-variant variables like the total population to capture demographic dynamics; the GDP growth at regional level (NUTS-2) to control for local business cycle that may play a role in affecting both the population political preferences and the migrants decision to settle in a certain geographic area; the population density to control for non-linear urban effect. λ_m represents the municipality fixed-effect, capturing the unobserved time-invariant characteristics in a municipality m , μ_t is the time fixed effect, and ε_{mt} is the error term. Standard errors are clustered at the municipality level. Moreover, X'_{mt} include some time-invariant covariates computed from the 2011 Population Census (ISTAT) like the share of graduates, the employment rate, a proxy for social capital

expressed as the number of active non-profit units every 1000 inhabitants, an aging index computed as the ratio of population over 60 and population below 20 years old. The main descriptive statistics for these variables are described in the Table 2 above.

Implementing the municipality fixed effect allows to control for omitted variable bias due to unobserved heterogeneity across municipalities that is constant over time. However, by exploiting only the within-municipality variability, the estimates result weak and non-significant. To overcome this problem, one possible solution consists to substitute the municipality fixed effect with the Local Labour System fixed effect (LLS). These are defined as a total of 669 territorial units where population live and work and where most of their social and economic interaction occur. Specifically, they are classified by the ISTAT based on the daily individuals transfer from home to work, as revealed during the 2011 population Census. The motivation of a territorial classification beyond the usual administrative division depends on the necessity to identify and analyse the economic and social characteristics of an area where citizens tend to organise economic and social activities. Implementing the LLS fixed effect in the estimation strategy allows to control for time-invariant unobserved characteristic at the LLS level, allowing higher variability with respect to the municipality level and therefore producing significant estimates. Even if the municipality fixed effect would theoretically lead to more precise estimates, implementing the LLS fixed effect is a valid alternative solution. In fact, the source of bias from unobserved factors is likely to be similar in spatial unit where people tend to experience economic and social relations rather than limit the analysis in mere administrative borders. However, to further control for the municipality variability within a certain Local Labour System, I keep in the regression time-invariant covariates at the municipality level. Given these considerations, λ_m in eq. 1 indicates the LLS fixed effect. Consequently, errors are clustered at the LLS level.

3.2.1 Instrumental variable approach

Even when introducing the LLS fixed effects, the impact of immigration on voting cannot be interpreted in a causal way: an explanatory variable may correlate with the error term, violating the OLS assumptions for consistent estimates. In fact, as widely confirmed by the existing literature, the immigrant share is likely to suffer of endogeneity issues. First, this can be due to an omitted variable problem. There can be some unobserved characteristics affecting both the immigrants' location decision in a certain area and the political outcome. For example, as

Barone et al. (2016) point out, a positive productivity shock may positively affect both the labour demand for immigrants of the local firms, leading to an higher concentration, and the votes in favours of the right-wing parties, as they have typically a favourable stance towards firm policies. Moreover, the regression is likely to suffer of reverse causality issues. In this case, immigrants may tend to locate in more liberal and immigrant-welcome areas, while they may try to avoid those municipalities hostiles to foreign population and where nationalistic parties already have a considerable support. To address this issue, the literature proposes an instrumental variable strategy based on the immigrants' past settlement pattern. Specifically, Card (2001) proposed an instrument that predicts the number the actual presence of foreign citizens by exploiting the immigrants' tendency to settle in areas where individuals of the same country of origin had already settled. The motivation behind this idea is that when an individual decides to move in a foreign country it is easier to interact to and find support from people of the same culture and language.

For the purpose of my analysis, I construct the instrument based on the immigrants' lagged settlement pattern by exploiting their location in 1991. As I will discuss later, choosing a base year far from the beginning of period of the analysis is fundamental to obtain reliable and consistent estimates. However, given the lack in the data on the exact number of immigrants by country of origin settled in a certain municipality, I could construct the instrument by following the imputation procedure used by Barone et al. (2016). Specifically I could recover the number of immigrants in the Italian municipalities from a certain nationality in 1991 by dividing the number of residence permits of that nationality by the number of residence permits by macro-area of origin at the province level and multiplying this ratio by the number of the immigrants from a specific area of the world in the municipalities. The underlying assumption in this procedure is that the immigrants from a certain nationality are equally distributed across the municipalities in the same province. Calling Z_{mt} the instrument for the share of immigrants in the municipality m in year t , I obtained:

$$Z_{mt} = \frac{\sum_{c=1}^N \delta_{mc1991} * Immigrants_{ct}}{Population_{mt}} \quad (2)$$

Where δ_{mc1991} is the imputed share of immigrants of nationality c in municipality m in 1991, $Immigrants_{ct}$ is the number of immigrants from country c at the national level in year t ,

$Population_{mt}$ is the total population in municipality m in year t . N is the number of top foreign nationalities of immigrants in 1991.⁸

The following first stage regression is:

$$immigrantshare_{mt} = \alpha_0 + \alpha_1 Z_{mt} + \alpha_2 X'_{mt} + \lambda_m + \mu_t + u_{mt} \quad (3)$$

Hence, the resulting second stage regression is:

$$y_{mt} = \gamma_0 + \gamma_1 \widehat{immigrantshare}_{mt} + \gamma_2 X'_{mt} + \lambda_m + \mu_t + \eta_{mt} \quad (4)$$

Where $\widehat{immigrantshare}_{mt}$ is the predicted value of $immigrantshare_{mt}$, obtained by running the first stage regression. The parameter of interest, γ_1 , corresponds to the ratio between the coefficients obtained by regressing y_{mt} on \widetilde{Z}_{mt} and the coefficients obtained by regressing $immigrantshare_{mt}$ on \widetilde{Z}_{mt} , where \widetilde{Z}_{mt} is the residual obtained in the regression of Z_{mt} on X'_{mt} . The IV estimation needs two assumptions to be verified: the relevance and the exogeneity of the employed instrument. The first requires that the correlation between the endogenous variable and the instrument is different from zero. As Table 3 shows, the estimated coefficients are strong and significant both with an OLS model and with a fixed-effect model including time- invariant and time-variant covariates. By focusing on the specifications with the fixed effect, which controls for time invariant heterogeneity, the coefficient of the instrument is 0.185 and statistically significant at the 1% level. Also, the F-test is 96,72, way higher than 10, the cut-off used as a rule-of-thumb to determine if an instrument is strong (Stock, Wright and Yogo, 2002). These considerations assure that the relevance condition is satisfied. In addition, the exogeneity assumption relies on the fact that the correlation between the instrument and the error term must be zero. In this case the instrument affects the dependent variable only through the effect on the endogenous regressor, meaning that the immigrants' decision to settle in 1991 does not affect natives' political preferences in the 2008, 2013 and 2018 and it is not affected by other omitted variables. Even if we cannot check formally if this assumption holds, we can rely on intuition. As pointed out in Barone et al. (2016) the exogeneity of the instrument can be justify by the political scandal occurred in Italy in the 1992, the so called "Mani Pulite". This brought to the disappearance of the two main political parties: Christian Democracy and the

⁸ These are Albania, Bangladesh, China, Ecuador, Egitto, Jugoslavia, Filippine, Ghana, India, Marocco, Nigeria, Pakistan, Perù, Polonia, Romania, Senegal, Sri Lanka, Tunisia

Italian Socialist Party. Importantly for the identification, given that in the first years of the 90's immigration was a rather sporadic phenomenon, none of these parties showed a particular anti-immigrant stance. Moreover, most of the parties included in the analysis appeared in the Italian political scene after 1991-1992. In particular, Forward Italia was founded in 1994 and Northern League participated in the national political election the first time after the 1991. Also, the rise of Five Star Movement Party occurred in 2011 represents a break in the traditional Italian political spectrum. These considerations allow to state that the immigrant's location decision in 1991 is very unlikely to be correlated with political preferences of the following years, and that the exogeneity of the instrument is satisfied. Given that both the relevance and exogeneity assumptions are fulfilled, I can argue that an instrumental variable approach allows to determine a causal relationship between the immigrant share and the voting outcomes. Specifically, the estimation of γ_1 quantifies the natives' response in voting behaviors due to an increase in immigration.

Table 3

First Stage

	(1)	(2)
	OLS	FE
	Share of immigrants	
Shift Share Instrument	0.329***	0.185***
	(0.0296)	(0.0188)
Time-variant controls	YES	YES
Time-invariant controls	YES	YES
F-Test	123.58	96.72
Observations	22,054	22,054
R-squared	0.2822	0.0288

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Column 2 includes Local Labour Market fixed effects. Time-invariant and time-variant control at the municipality level, yearly GDP at the regional level and year dummies are include. Standard errors are clustered at the Local Labour Market level.

Chapter 4

Results

In this section, the main results of the analysis are presented. First, I provide evidence of the impact of immigration on the votes for anti-immigration parties. Then I test if the change in voting behaviors is associated to a shift in natives' preferences towards redistribution policies. Eventually, I show how the effect on voting is heterogeneous with respect to the immigrants' ethnic composition and other municipalities' characteristics.

4.1 Voting for anti-immigration parties

The first part of the analysis consists in finding a causal relationship between the share of immigrants and the share of votes for anti-immigration parties. This approach quietly follows the existing literature on migration and voting, which mainly uses the share of votes for the right wing or far-right parties as dependent variable. As stated before, to obtain a more precise classification to those Italian parties that promote tough policies towards migrants, I exploit the CHES dataset.

I started the analysis with the OLS specification without the Local Labour System fixed effects and including the time-invariant covariates by municipality. The estimated coefficient in Column 1 (Table 4) shows a positive and statistically significant correlation between the immigrant share and the votes for anti-immigration parties. Specifically, a 1 p.p. increase in the share of immigrant correlates with a 0.208 p.p. increase in the share of votes for anti-immigrant parties. The result significantly decreases in magnitude when I introduce the Local Labour

market fixed effects, keeping the time-invariants control to better control for the heterogeneity across municipalities within the same LLS. In Column 3 I employ the IV estimator to tackle the endogeneity of the independent variable, bringing the coefficient on votes to be higher and more statistically significant. Precisely, the results suggest that a 1 p.p. increase in the share of immigrants leads to a 0.62 p.p. increase in the votes share for anti-immigration parties, proving that the OLS estimates were downward biased. It is interesting to compare this result with the one found in the study by Barone and al. (2016), which focuses as well on the Italian context, and in which the estimated coefficient is larger (0.89). There could be two possible explanations behind the difference in the estimates with the previous work. The first is that two different outcomes are considered. While Barone et al. (2016) use the share of votes for the centre-right coalition as the dependent variable, I use the votes for anti-immigration parties, as classified by the CHES dataset. The second reason is that the years of the analysis are different. The panel data used in this work follows the same municipality in 2008, 2013 and 2018 while Barone et al. (2016) focus on 2002, 2006 and 2008. This is reasonably a fundamental difference, as the Italian political scene completely changed after the 2011 with the appearance of the Five Star Movement and its initial significant support. Declared to be free to any traditional classification between right- or left-wing party, a consistent fraction of the electorate of both the wings of the political spectrum shifts their votes to this novel party. In general, the baseline results suggest that, on average, natives perceive the increase to immigrants' exposure in a negative way. As briefly discussed, this may be due to the negative impact immigration is perceived to have in the labour market competition or in the welfare state. Also, it may derive from non-economic reasons, like from a xenophobic sentiment. In the following, some evidence in this direction is provided.

Table 4

Immigration and voting for anti-immigration parties

	(1)	(2)	(3)
	OLS	OLS-FE	IV-FE
Immigrant share	0.208*** (0.0350)	0.053* (0.0319)	0.620*** (0.1863)
Population	-4.11e-08 (2.84e-08)	3.90e-08** (1.88e-08)	2.50e-08 (1.39e-08)
Population density	.000016*** (1.99e-06)	-9.31e-06*** (2.81e-06)	-0.000012*** (3.43e-06)
GDP growth NUTS-2	-0.4185*** (0.0478)	-0.573*** (0.1037)	-0.575*** (0.1067)
Social capital index	-0.002*** (0.0004)	-0.00078** (0.00034)	-0.00065** (0.00033)
Share of graduates	-0.913*** (0.0413)	-0.403*** (0.0426)	-0.434*** (0.0441)
Employment rate	0.557*** (0.0213)	0.180*** (0.0381)	0.207*** (0.039)
Aging index	0.009*** (0.0015)	-0.0011 (0.0018)	0.002 (0.0021)
LLS FE	NO	YES	YES
Year FE	YES	YES	YES
Observations	22,054	22,054	22,054
R-squared	0.3959	0.3305	0.3471

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Column 2 and 3 include Local Labour Market fixed effects. Time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level and year dummies are included in all the specifications. Standard errors are clustered at the municipality level in column 1 and at the Local Labour Market level in column 2 and 3.

4.2 Preferences towards redistribution policies

The second objective of this study investigates if an increase in the immigrant share leads to a shift of natives' preferences towards redistribution policies. Differently from most of the existing literature on the topic, which is based on survey data, I focus on natives' opinion in matter of redistribution as revealed by the votes. The dependent variable is an index of redistribution preferences by municipality constructed by linking to each political party an indicator of its level of support to redistribution policies, obtained by the CHES dataset. The higher the index, the higher the support for parties that more oppose redistribution. Both column 1 and 2 of Table 5, which use OLS respectively without and with LLS fixed effect, show a positive relationship between the growth in immigrant share and support for those parties less favourable to redistribution. In particular, when the LLS fixed effects are included, the coefficient substantially drops. By focusing on the preferred specification, which includes both the LLS and the IV estimator (column 3), it highlights that 1 p.p. increase in the share of immigrants causes the redistribution index to increase by 3.115 in absolute terms, meaning that when the presence of foreign citizens rises, natives tend to vote parties more reluctant to promote redistribution policies. These results are in line with Alesina et al. (2018) and Alesina et al. (2019). Specifically, in the latter, when individuals have a strong misperception about the size of the immigration phenomena and its characteristics, tend to oppose redistribution policies. A negative relationship between immigration and preferences to redistribution is also in line with Moriconi et al. (2019), which provide evidence from the European elections. They find that a larger inflow of highly educated migrants leads to more votes towards parties supporting the welfare expansion, while, if considering only low educated immigrants, the voters tend to switch towards parties less favourable to welfare expansion. As the immigration flows in Italy are mainly made by low educated individuals, the results fit together. These findings may be motivated by several reasons. First, if the immigrants are perceived to be highly dependent to the welfare state, natives may believe that they are bearing their financing cost, therefore being less favourable to redistribution policies. Also, natives may perceive a competition in the fruition of public services, for example, in the admission to local public schools (Halla et al., 2017), generating reluctance to extend welfare benefits to the foreign population.

Table 5

Immigration and preferences for redistribution

	(1)	(2)	(3)
	OLS	OLS-FE	IV-FE
Immigrant share	1.439*** (0.2311)	0.541*** (0.2069)	3.115*** (1.0616)
Population	-3.40e-0 (1.77e-07)	1.29e-07 (9.57e-08)	6.48e-08 (8.84e-08)
Population density	0.000083*** (0.000011)	-0.00004*** (0.000013)	-0.000052*** (0.000016)
GDP growth NUTS-2	-0.937*** (0.3030)	-0.513 (0.4366)	-0.5236 (0.4468)
Social capital index	-0.026*** (0.0031)	-0.009*** (0.0031)	-0.009*** (0.0030)
Share of graduates	-3.640*** (0.2484)	-1.860*** (0.2576)	-2.002*** (0.2593)
Employment rate	1.509*** (0.1500)	0.847*** (0.2351)	0.966*** (0.2370)
Aging index	0.036*** (0.0101)	-0.011 (0.0115)	0.004 (0.0128)
LLS FE	NO	YES	YES
Year FE	YES	YES	YES
Observations	22,054	22,054	22,054
R-squared	0.2525	0.2277	0.2248

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Column 2 and 3 include Local Labour Market fixed effects. Time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level and year dummies are included in all the specifications. Standard errors are clustered at the municipality level in column 1 and at the Local Labour Market level in column 2 and 3.

4.3 The role of immigrants' nationality

In the introduction I pointed out that the factors driving natives' reaction towards migration inflows can have both an economic and a non-economic nature. Among the latter, the natives' negative attitudes towards foreign born citizens may be triggered by a xenophobic sentiment. Specifically, natives may perceive the foreign presence as a threat to their established culture and system of values. Votes for anti-immigrant parties may in part reflect this. As proved by Brunner and Kuhn (2018), in accordance to the group conflict theory, the presence of immigrants with a distant cultural background determines an anti-immigration attitude among natives, while the preferences are not affected when the immigrants are more culturally close.

4.3.1 Empirical Strategy

To investigate the role of immigrants' nationality, I include in the model the interaction between the explanatory variable and a dummy variable pointing out that in a certain municipality the share of immigrant from a specific area of the world in 1991 was very high. Precisely, the dummy variable equals 1 if the share of immigrant from a certain area of the world is higher than the 80th percentile of the distribution. To provide a more precise analysis, I used data on immigrant ethnicity by considering the area of origin in 1991 instead of the imputed quantities used to construct the instrument. The following groups of macro-area of origin are considered: North Africa, Sub-Saharan Africa, Eastern-Central Europe, South America and Asia. Therefore, the model to be estimated is the following:

$$y_{mtc} = \beta_0 + \beta_1 immshare_{mt} + \beta_2 immshare_{mt} * d91_{mc} + \beta_3 X'_{mt} + \lambda_m + \mu_t + \varepsilon_{mt}$$

Where $d91_{mc}$ is a dummy equal to 1 if the municipality m in 1991 presented a high share of immigrant from country c (higher than the 80th percentile of the distribution). The resulting regression has two endogenous variables, namely $immshare_{mt}$ and $immshare_{mt} * d91_{mc}$, instrumented respectively by the usual prediction of the actual share of immigrant based on its historical pattern and its interaction with the dummy indicating a strong presence of immigrants of country of origin c .

The first-stage regressions for the two endogenous variables are:

$$immshare_{mt} = \alpha_0 + \alpha_1 Z_{mt} + \alpha_2 Z_{mt} * d91_c + \alpha_3 X'_{mt} + \lambda_m + \mu_t + u_{mt}$$

$$immshare_{mt} * d91_c = \beta_0 + \beta_1 Z_{mt} + \beta_2 Z_{mt} * d91_c + \beta_3 X'_{mt} + \lambda_m + \mu_t + \delta_{mt}$$

Hence, the resulting second stage regression is:

$$y_{mt} = \gamma_0 + \gamma_1 \widehat{immshare}_{mt} + \gamma_2 \widehat{immshare}_{mt} * d91_{mc} + \gamma_3 X'_{mt} + \lambda_m + \mu_t + \eta_{mt}$$

In this case, the parameter of interest is γ_2 . If the causal relationship is established, it captures the change in natives' voting behavior when the immigrant share from a certain area of the world increases. As stressed in the case of the main regression, the two conditions for the IV approach to recover causal estimates are the relevance and exogeneity of the instrument. However, with multiple endogenous variables, the conventional F-statistic used to evaluate whether the instrument is weak or not is no longer appropriate. In fact, it can be the case that, even if the instruments' F statistics are high, the model is still weakly identified. In the case of under identification - less instruments than endogenous variables - the model cannot be estimated. In this context, the Kleibergen-Paap rk LM statistics allows to test whether the equation is identified, meaning that the excluded instruments are correlated with the endogenous regressions. The test consists essentially in the test of the rank of a matrix: under the null hypothesis of under-identification, the matrix of reduced form coefficients on the L1 excluded instruments has rank equals to $K1-1$, where $K1$ is the number of endogenous regressors. From the Table 6, we notice that the value of the test is high, therefore rejecting the null hypothesis of under identification, meaning that the instruments are relevant and the model can be estimated. Moreover, the F-statistics are well above the critical values, suggesting that our estimates do not suffer of weak instruments. The exogeneity conditions of the instruments is further guaranteed by the rupture in the Italian political system occurred in 1992-1994, after the "Mani Pulite" scandal, as I explained in the previous section. In the following I will present only the results with respect to anti-immigration votes, as the preferences for redistribution basically reflects the same tendency (see Appendix).

4.3.2 Results and interpretation

The results in Table 4 suggest that immigrants' nationality plays a role in determining the effect on the votes for anti-immigration parties only in the case South America. Precisely, in those municipalities where presence of immigrants from South America is high, a 1 p.p. increase in the share of immigrants leads to a 0.14 p.p. increase in the share of votes for anti-immigration parties. The effect in the case of North Africa, Sub-Saharan Africa and Eastern-Central Europe is positive but not statistically significant while, in the case of immigrant from Asia, the coefficient has an opposite sign. Different results with respect to the exposure to different ethnic groups may be due to dissimilar integration processes with the Italian culture. According to the conflict group theory, in fact, natives may perceive the presence of foreign population as a threat that positively correlates with its cultural distance.

In this regard, Bisin and Tura (2019) studied the cultural integration process of the ethnic minorities in the Italian context focusing on the role of the family dimension. This is interpreted as an equilibrium phenomenon between the immigrant' demand for integration and the natives' supply in terms of cultural acceptance. Briefly, the authors estimate a structural model of marital matching along cultural characteristics and intra-household decisions, investigating the roles of fertility, divorce and cultural socialisation to their children. Specifically, the propensity to integrate of one culture depends on the persistency of cultural ethnic transmission, proxied as the language spoken by children at home with the family. Focusing on language socialization allows to study the level of cultural integration of immigrants into the socio-economic environment: evidence prove a positive relationship between proficiency in the destination language and the immigrant socio-economic integration, for example by strengthening employment opportunities (Dustmann and Fabbri, 2003).

By exploiting the variability in the cultural identity across immigrants in the Italian marriage market, the authors estimate the cultural intolerance parameters associated to the different groups, expressed as the psychological value that parents obtain by transmitting to their child their own ethnic identity, compared to having a child with a different cultural identity. As Figure 2 shows, a certain degree of cultural intolerance of migrants towards natives is common across all the groups, especially in the case of immigrants from North Africa-Middle East. Similarly, the highest cultural intolerance of the Italian is directed towards immigrants originating from sub-Saharan Africa and North Africa-Middle East.

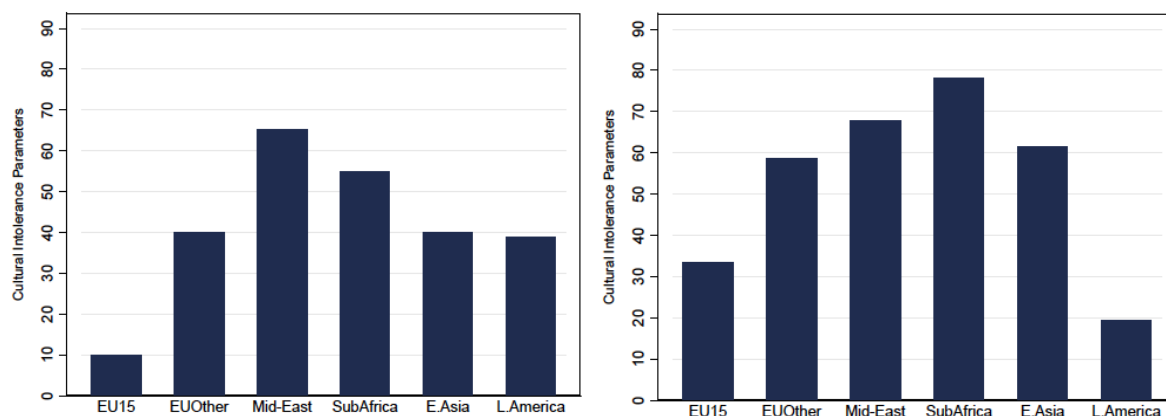
Table 6

Immigrants' ethnicity composition and voting for anti-immigration parties

	(1)	(2)	(3)	(4)	(5)
	North Africa	Central Europe	South America	Sub-Saharan Africa	Asia
Share of immigrants*d91	0.040 (0.0474)	0.019 (0.06056)	0.140*** (0.05741)	0.004 (0.0596)	-0.080* (0.0435)
Share of immigrants	0.569*** (0.1857)	0.597*** (0.1747)	0.622*** (0.18716)	0.618*** (0.1941)	0.660*** (0.1882)
GDP growth NUTS-2	-0.575*** (0.106316)	-0.575*** (0.1064)	-0.576*** (0.1065)	-0.575*** (0.1065)	-0.578*** (0.1064)
Population	2.61e-08* (1.41e-08)	2.56e-08*** (1.40e-08)	2.60e-08 (1.39e-08)	2.51e-08 (1.39e-08)	2.64e-08 (1.40e-08)
Population density	-0.000012*** (3.32e-06)	-0.000012*** (3.31e-06)	-0.000012 (3.39e-06)	-0.000012 (3.41e-06)	-0.000012 (3.41e-06)
K-P- rk LM stat	66.239	67.532	67.920	66.123	66.552
K-P- rk Wald F-stat	47.874	52.774	48.392	45.974	47.689
Observations	22,054	22,054	22,054	22,054	22,054
R-squared	0.5085	0.5067	0.5027	0.5050	0.5023

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level.

Figure 2: Cultural Intolerance Parameters

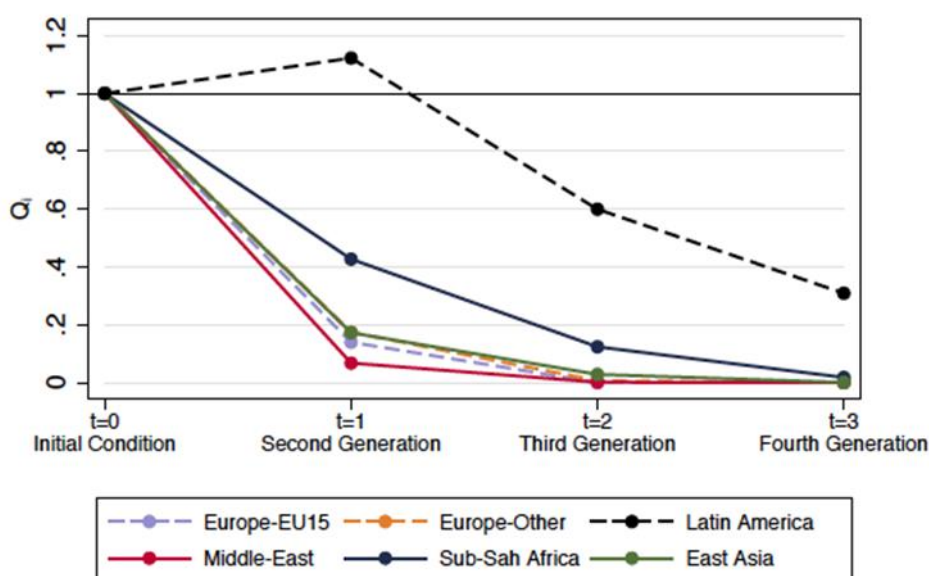


Notes: This figure reports parameter estimates for the cultural intolerance of migrants versus natives (Panel A) and natives versus migrants (Panel B) for all cultural-ethnic minorities from Europe-EU15, Other Europe, North Africa/Middle East, Sub-Saharan Africa, East Asia, Latin America. Source: Bisin and Tura (2019)

In a second step, by simulating the model over successive generations, the authors estimate the evolution of the distribution of the population by cultural traits, hence being able to study the long-run integration patterns of the different ethnic groups in the Italian context. Although the immigrants display strong preferences to maintain their own cultural identity, the 75% integrate to the Italian culture after the first generation, meaning that 75% of the second-generation immigrants speaks Italian at home with their children. However, it is relevant to stress that the pace of convergence is heterogeneous across ethnic groups (Figure 3). Immigrants from EU-15 and Other European countries, but also – in a lesser extent - immigrants from North Africa-Middle-East converge almost completely to the Italian culture in a single generation, while a slower path characterizes the groups from the East Asia and Sub-Saharan Africa. For what concerns the group from South America, the integration process is hampered in the first generation and it starts to converge to the Italian culture only after the second generation, leading only the 70% of immigrants to be integrated along the language dimension after four generations. These different paths in the integration process depend on several factors. The faster integration patterns in case of EU-15 and Other European countries strongly depends on the low cultural intolerance parameters. On the opposite, higher intolerance parameters justify slower integration of the East Asia and Sub-Saharan Africa minorities. But intolerance parameters are not the only drivers of the integration dynamics of different cultural-ethnic groups. Homogamous marriage rates, fertility rates, and other demographic characteristics play

a relevant role in the simulations. For example, a strong estimated selection into homogamous marriages for Sub-Saharan Africa migrants allows them to sustain their cultural heterogeneity. Also, the high estimated fertility rate drives the relatively fast integration process of the East Asia minorities. Finally, immigrants from South America are able to keep their distinctiveness over time given their ability to socialize children also in heterogamous marriages with natives. The fact that Latin America group is characterized by very low intolerance parameters and a very slow integration path is somewhat counterintuitive. However, the authors point out that a native population more prone to accept cultural traits of immigrants might be a double-edged sword. If from one side it could make their cultural integration easier and faster, in this case, by fostering heterogamous marriages, from the other it allows immigrants to better maintain their distinctive cultural traits. Even if the authors focus on a familiar context, the proficiency of the language has consequences in other social contexts, impacting the integration between groups.

Figure 3: Long-run Dynamics of Cultural Traits



This figure shows the long-run dynamics of the distribution of cultural traits in the population for minority groups over successive generations. The share of each cultural-ethnic group over the total population is indexed to 1 in $t=0$. Source: Bisin and Tura (2019).

It is therefore possible to interpret the results in Table 6 making the following considerations. First, the language dimension seems to be fundamental in determining the integration process of immigrants. An anti-immigration sentiment is triggered not so much by a mere initial cultural diversity, but by the perception that one group is more integrated in the social and cultural

environment with respect to the other, fact often allowed by the proficiency of the natives' language (Dustman and Fabbri, 2003). In this regard, the second generations of immigrants from of North African, sub Saharan African and Eastern-Central European seem to be well integrated in the municipality texture, attenuating the xenophobic sentiment that it would have been expected. Eventually, the negative attitudes towards South American citizens may be driven by their slow convergence path to the Italian culture. If from one side the high acceptance that characterize this group may be positive within the familiar context, it may be an obstacle in other social situations.

It has also to be stressed that the presence of Asian immigrants is negatively associated to anti-immigration parties support, although the effect is quite small. Asian immigrants involve a wide range of ethnicities that may be very different to each other as well as the European one, leading difficulties to assess if there is one specific cultural feature driving the effect. One of the possible explanations justifying this alternative trend may be the substantial presence of the Philippine immigrants in the Asian group. They have been present in the Italian territory and integrated into the working environment since the 80's, substantially being employed in the domestic housework⁹. In particular, in 2018, the 59,5% was estimated to work in social and personal services, which is characterized by a strong female component. Given the sustained proximity in the household dimension and the essentiality of the services provided, it is likely that a positive relationship between the Italian and the Philippine culture has been established, driving natives to be favourable to new migration inflows. Eventually, it is relevant to stress that the magnitude of the coefficients of the share of immigrants are very close to the one found in the baseline regression (0.6), strengthening the validity of the results in the previous section.

⁹ Yearly Report on the immigrants' communities in Italy, 2019: <https://www.lavoro.gov.it/temi-e-priorita/immigrazione/Pagine/Studi-e-statistiche.aspx>

4.4 Heterogeneous effects

Although the average effect of immigration on voting is positively associated to an increase of votes towards anti-immigration parties, it is interesting to stress which features matter in degerming this tendency. In the first part, I explore if the size of the effect changes with respect to municipality size. Then, I investigate if there is a heterogeneous effect according to the level of unemployment, taxable income, social capital and share of children. In this way, some underlying mechanism shaping natives' attitude towards new migration inflows may emerge. In this regard, I split the sample according to the distribution of the variables of interest observed in 2011 by Local Labour System.

4.4.1 The role of municipality size

Previous studies (Barone et al., 2016, Dustmann et al., 2018) documented that the effect of immigration varies with the municipality size, possibly as a result of a different exposure of native residents to those of different background. Specifically, the kind of relationships between natives and immigrants may be very different in an urban environment with respect to a rural one. In the following analysis, I split the sample of Italian municipalities according to the population: below 500 inhabitants, between 500 and 5000 inhabitants, between 5000 and 25000 inhabitants, more than 25000 inhabitants. The Italian municipalities are, on average, very small, with a higher concentration of municipalities with a population ranged between 500 and 5000 inhabitants. The positive and significant coefficients of column 2 and column 3 of Table 6 below show that the effect on anti-immigration parties is driven by middle-size municipalities. The impact is significantly higher in column 3, pointing out that 1 p.p. increase in the share of immigrants leads to an increase in support for anti-immigration parties of 0.801 p.p. in those municipalities with a population ranged between 5000 and 25000 inhabitants. In very small municipalities (column 1) the regression suffers of weak instrument issues ($F\text{-Test} < 10$) and therefore the model does not provide consistent estimates. Also, it interesting to notice that the result, even if positive, is not significant in the case of big municipalities (more than 25000 inhabitants). A valid explanation behind the difference in results could be found by looking at the Alport's contact theory (Alport, 1954). This states that personal contact between the members of different ethnic groups leads to a reduction of prejudices and discriminatory behavior, improving the relationships between groups and making people more willing to deal with each

other as equals. Even if the results of this work seems to reveal the opposite - an increase to immigrants exposure is, on average, negatively perceived by natives - there are certain conditions under which the contact theory is supported: The equality of status of the different groups in contact; their cooperative interdependence in the pursuit of common goals; the presence of social norms supporting intergroup contact. In this regard, individuals living in big cities are more likely to experience a positive relationship with immigrants, thus living in an environment where the above conditions are fulfilled, with respect to citizens living in a rural context. For example, Dustmann et al. (2018), by using the EES, found that it is considerably more likely that they have an immigrant friend or work colleague. On the other hand, it is also possible that in big cities the lack of the effect is due to the segmentation of immigrants living quarters, lowering their actual perception among the native population. In this sense, Dustmann et al. (2018) found a strong association between exposure to immigrants in one's immediate neighbourhood and a hostile behavior towards them. Therefore, in line with group threat theories, a different exposure to immigrants in one's neighbourhood may lead to different levels of prejudices and therefore explain the different voting behavior in big cities.

Table 6

Municipalities' size and voting for anti-immigration parties

	<i>Municipality's inhabitants</i>			
	(1) < 500	(2) 500-5000	(3) 5000-25000	(4) >25000
Immigrant share	-0.024 (1.0017)	0.433* (0.2236)	0.801*** (0.2701)	0.684 (1.1922)
Population	-4.72e-06 (0.000038)	-1.57e-06 (9.71e-07)	-7.50e-07** (3.01e-07)	-5.41e-09 (1.86e-08)
Population density	0.00007*** (0.00002)	-0.00002*** (7.34e-06)	-0.00001*** (3.43e-06)	-6.49e-06 (6.31e-06)
GDP growth NUTS-2	-1.20*** (0.2135)	-0.602*** (0.1053)	-0.261* (0.1411)	0.212 (0.2067)
Observations	2,269	13,065	5,637	1,081
LLS FE	YES	YES	YES	YES
Time FE	YES	YES	YES	YES
Time-invariant covariates	YES	YES	YES	YES
F-Test	4.41	66.51	36.04	2.78
R-squared	0.3017	0.3436	0.3629	0.4491

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level.

4.4.2 Additional findings

As previously stressed, economic theory suggests that the change in natives' attitudes towards migration inflows is shaped by the perceived labour market competition. Specifically, if they experience a substitutability relationship, they expect to be penalized by new migration inflows. As already proved by Halla et al (2017), we would expect a higher support for anti-immigrant parties in those areas where the unemployment rate is higher, hence where the competition in the labour market is stronger. Table 7 shows that the effect for anti-immigration parties' votes is driven by municipalities in the middle of distribution, while the effect is not significant in those municipalities with a very low unemployment rate. In line with the expectations, individuals do not perceive a competition in the labour market when the unemployment rate is low. However, natives experiencing very high levels of unemployment seem not to be concerned about the competition caused by immigrants. Given the non-significant effect (column 3), natives are likely to perceive a sort complementarity in the labour market with immigrants, for example because the latter are employed in very low-paid jobs. In this context, a further analysis which uses data on immigrants and natives 'skills would be useful to provide more precise conclusions.

A further analysis consists in testing if the effect on anti-immigration parties varies with the level of social capital, expressed as the number of no-profits units per 1000 inhabitants. Herreros and Criado (2009) proved that societies with a high level of social capital, proxied by the level of social trust, has a positive impact on their members' attitudes towards immigrants. According to Putnam (2000), citizens tend to be more cooperative and more engaged in the community life when the level of social trust is higher. For example, being involved in no-profit or voluntary organizations may help to strengthen social cohesion and the relationship with the other citizens, developing an altruistic behavior and departing from the economic hypothesis of self-interest. Also, social trust is proved to reduce the perceived threat of immigration in terms, for example, on the labour market competition (Herreros and Criado, 2009). Whether the welcoming country presents an integrated society is therefore relevant to determine natives' reaction. Therefore, it is more likely that natives perceive the foreign presence in a negative way when the level of social capital is lower. In line with the expectations, Table 8 shows that the effect on anti-immigration parties is significantly stronger in municipalities on the first tercile of the social capital index distribution, while it loses significance considering the middle of the distribution. However, it has to be notice that the coefficient became slightly significant,

even if lower in magnitude with respect to the first tercile, when the municipalities present a very high presence of no-profit units operating in the territory. These results stress the fact that the positive relationship between social capital and positive attitude towards migration is not always trivial. A possibility is that social trust is limited to immigrants with a cultural background relatively closer to the natives' one. In the US, for example, the high levels of social capital characterizing the Putnam "civic generation" in the 1940s and 1950s coexisted with a high level of racism toward minorities (Hero, 2003). In conclusion, from the analysis it emerges that when society has a low level of social capital, the support to anti-immigration parties is stronger. However, it is not always true that, when the level of social capital increases, the positive effect of a major social cohesion is addressed towards the immigrants' population.

Another interesting question investigates if the effect on voting is heterogeneous with respect to the citizens taxable income. As previously discussed, natives are concerned of the effect that immigration has on the welfare state (Facchini and Mayda, 2009). In particular, the perception that low skilled immigrants represent a burden on the public finance, may lead natives to vote for anti-immigration parties. As Dustmann et al. (2018) point out, the high welfare dependency of immigrants may lead the more affluent to believe that they are bearing a significant fraction of their financing. These findings are in line with the economic hypothesis of self-interest, which states that individuals respond to immigration based on their own economic concerns. Table 9 shows that the positive effect on anti-immigration parties is significant only in municipalities in a Local labour System characterized by a high taxable income per-capita, while the effect is not significant in the first tercile of the distribution. Specifically, the magnitude and the significance are very strong in the 3rd tercile of the distribution, confirming the previous hypothesis.

The following section provides additional support to the fact that natives are concerned on the effect that immigration has on the welfare state. The results in Table 5 above show that natives respond to an increase in immigration rate by lowering the support for redistribution policies. In this sense, this can be motivated by the fact that when the foreign presence increases, the natives may perceive a stronger competition in the fruition of public services. For example, due to an increase of immigrants' children, native parents may perceive a competition in the admission to public school (Halla et. al., 2017) or they may think they may negatively influence school quality. To test this hypothesis, I split the sample of municipalities according to the distribution of the share of children from 0 to 9 years old. In line of what previously stressed, I expect that in municipalities with a higher concentration of children, the dissent towards migration is stronger. Results in Table 10 confirms this intuition. Precisely, the strongest and

most significant effect on anti-immigrant parties is on the 2nd and more significant on the 3rd tercile of distribution of the share of children, while the effect is not significant when it is lower. These results suggest that the perception that immigration negatively impacts the local welfare is a determinant in shaping the voting behavior.

Table 7

Immigration and voting for anti-immigration parties, the role of unemployment rate

	(1)	(2)	(3)
	1 st tercile	2 nd tercile	3 rd tercile
	<i>Unemployment rate</i>		
Immigrant share	0.141 (0.2298)	1.321*** (0.3865)	0.324 (0.4702)
Population	1.19e-07** (5.57e-08)	8.80e-09 (9.93e-09)	7.49e-08 (7.02e-08)
Population density	-0.000016** 6.45e-06	-0.000025*** 6.66e-06	-4.48e-06** 2.24e-06
GDP growth NUTS-2	-0.499*** (0.1532)	-0.275 (0.2008)	-0.090 (0.1285)
LLS FE	YES	YES	YES
Time-invariant cov.	YES	YES	YES
Year FE	YES	YES	YES
Observations	7,750	7,112	7,183
R-squared	0.3519	0.3120	0.3505

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level.

Table 8

Immigration and voting for anti-immigration parties, the role of social capital

	(1)	(2)	(3)
	1 st tercile	2 nd tercile	3 rd tercile
<i>Social Capital Index</i>			
Immigrant share	1.124 *** (0.4011)	0.287 (0.2611)	0.570* (0.3162)
Population	5.56e-09 (1.21e-08)	1.62e-07* (9.76e-08)	7.68e-08 (1.28e-07)
Population density	-0.000011*** (3.86e-06)	-0.000025*** (8.19e-06)	-0.000029* (0.000014)
GDP growth NUTS-2	-0.512*** (0.1862)	-0.4522*** (0.1607)	-0.993*** (0.2135)
LLS FE	YES	YES	YES
Time-invariant cov.	YES	YES	YES
Year FE	YES	YES	YES
Observations	7,356	7,400	7,289
R-squared	0.3697	0.3584	0.3200

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level

Table 9

Immigration and voting for anti-immigration parties, the role of taxable income per-capita

	(1)	(2)	(3)
	1 st tercile	2 nd tercile	3 rd tercile
<i>Taxable Income per-capita</i>			
Immigrant share	0.124 (0.4078)	0.473* (0.2861)	0.901*** (0.2986)
Population	6.72e-08 (6.61e-08)	3.68e-07*** (1.05e-07)	1.67e-08 (1.34e-08)
Population density	-3.97e-06* (2.13e-06)	-0.0000165* (8.83e-06)	-0.000025*** (7.31e-06)
GDP growth NUTS-2	-0.074 (0.1285)	-0.624*** (0.1823)	-0.088 (0.1509)
LLS FE	YES	YES	YES
Time-invariant cov.	YES	YES	YES
Year FE	YES	YES	YES
Observations	7,354	7,382	7,309
R-squared	0.3056	0.3605	0.3395

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level

Table 10

Immigration and voting for anti-immigration parties, the role of the share of children.

	(1)	(2)	(3)
	1 st tercile	2 nd tercile	3 rd tercile
<i>Share of children aged 0-9</i>			
Immigrant share	0.438 (0.4091)	0.783** (0.3071)	0.632** (0.2672)
Population	2.98e-08 (1.01e-07)	5.16e-08 (5.63e-08)	2.58e-08** (1.19e-08)
Population density	-7.40e-07 (0.000012)	-0.000015* (8.38e-06)	-0.000012*** (3.71e-06)
GDP growth NUTS-2	-0.809*** (0.1529)	-0.566*** (0.1805)	-0.535*** (0.1604)
LLS FE	YES	YES	YES
Time-invariant cov.	YES	YES	YES
Year FE	YES	YES	YES
Observations	7,426	7,280	7,339
R-squared	0.3608	0.3578	0.3524

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level.

4.5 Robustness check

This section describes a series of tests to check the primary results of this work. First, for what concerns the specification estimating the impact on the vote share for anti-immigrant parties, I change the dependent variable as the vote share for parties promoting pro-immigrant policies. The classification of these parties follows the same procedure described above. Precisely, I considered the votes of those parties that are in the lower part of the distribution on the “IMMIGRATE_POLICY” indicator in the CHES classification for every election year¹⁰. Given that the main results proved that, on average, natives tend to be averse to new migration inflows, it is reasonable to expect that the votes for parties supporting favourable migration policies decrease. Even if the OLS estimates, controlling for municipalities time invariant characteristics, point out a positive coefficient, when I introduce the LLS fixed effect and the IV estimator, the coefficient turns negative and statistically significant. In fact, from Column 3 of Table 11, it emerges that 1 p.p. increase in the share of migrants causes a 0.298 p.p. decrease in the vote share for pro-immigration parties.

For what concerns the specification estimating the impact on the preference for redistribution, I conducted the analysis keeping the indicator of a party with respect to its position on redistribution as constant for the whole period of the analysis. This allows to consider a change in redistribution index in a municipality as a shift in citizens vote and not to the change in the indicator. As a check, I use the average of indicators over the 2008, 2013 and 2018. The result in column 3 (Table 12) is in line – slightly higher – than the previous estimate, meaning that the hypothesis of keeping the indicator constant is valid. Also, I repeat the estimates considering a different functional form for the dependent variable. When expressing the redistribution index in log, the estimated coefficient γ_1 in eq. 4 can be interpreted in terms of elasticity, representing the percentage variation in the index due to an increase of 1 p.p. in the immigration share. The results in table show that 1 p.p. in the increase in immigrants share increase the redistribution index of 0.869% the redistribution index.

It is important to remark that in the regressions conducted in this analysis I employed the Local Labour System fixed effects because, as previously discussed, the municipalities fixed effects would have absorbed all the variability across observations, producing not significant estimates. Local Labour System fixed effects allow to control for time-invariant characteristics that are constant within the same LLS. To better control for the heterogeneity between municipality in

¹⁰ Democratic Party, Italy of Values, Left Ecology Freedom, Italian Socialist Party, Party of Italian Communists

the same LLS I employed time invariants-covariates at municipality level computed in 2011. In order to check if the LLS fixed effects can be regarded a valid alternative to the more precise municipality fixed effect, I repeat the estimates without the municipalities time-invariants covariates. Form Table 13 below, it emerges that the coefficients are slightly less, but consistent with those in the baseline estimation, strengthening the validity of the assumptions.

Table 11

Immigration and voting for pro-immigration parties

	(1)	(2)	(3)
	OLS	OLS-FE	IV-FE
Immigrant share	0.208*** (0.0252)	-0.053** (0.0258)	-0.298** (0.1488)
Population	4.34e-07*** (4.28e-08)	4.04e-07*** (6.01e-08)	4.10e-07*** (5.58e-08)
Population density	-0.000012*** (1.65e-06)	2.69e-06 (2.36e-06)	3.87e-06 (2.47e-06)
GDP growth NUTS-2	-0.330*** (0.0423)	-0.550*** (0.1111)	-0.550*** (0.1111)
Social capital index	-0.0011*** (0.0002)	-0.00024 (0.00026)	-0.00031 (0.00027)
Share of graduates	0.659*** (0.0305)	0.389*** (0.0338)	0.403*** (0.0369)
Employment rate	-0.151*** (0.0155)	-0.293*** (0.0286)	-0.304*** (0.0300)
Aging index	0.0150*** (0.0015)	0.0026** (0.0013)	0.00056 (0.0015)
LLS FE	NO	YES	YES
Year FE	YES	YES	YES
Observations	22,054	22,054	22,054
R-squared	0.3265	0.2953	0.2948

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level.

Table 12

Immigration and preferences for redistribution

	(1)	(2)	(3)
	OLS	OLS-FE	IV-FE
<i>Semi- elasticities</i>			
Immigrant share	0.662*** (0.0943)	0.205*** (0.0718)	0.869*** (0.3172)
LLS FE	NO	YES	YES
Time-invariant controls	YES	YES	YES
Time-variant controls	YES	YES	YES
Year FE	YES	YES	YES
Observations	22,054	22,054	22,054
R-squared	0.1431	0.1154	0.1180
<i>Average index</i>			
Immigrant share	0.345* (0.2012)	2.482** (0.9840)	3.564*** (1.1001)
LLS FE	NO	YES	YES
Time-invariant controls	YES	YES	YES
Time-variant controls	YES	YES	YES
Year FE	YES	YES	YES
Observations	22,054	22,054	22,054
R-squared	0.4412	0.4133	0.4394

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level.

Table 13

Immigration and preferences for redistribution

	(3)	(3)
	IV-FE	IV-FE
	Anti-immigration parties vote share	Preferences for redistribution
Immigrant share	0.449** (0.1802)	2.354 ** (0.9950)
Population	1.56e-08 (1.74e-08)	-1.47e-07 (1.22e-07)
Population density	-0.000017*** (4.25e-06)	-0.000073*** (0.000018)
GDP growth NUTS-2	-0.576*** (0.1051)	-0.5479 (0.4457)
LLS fixed effect	YES	YES
Time-invariant cov.	NO	NO
Year fixed effect	YES	YES
Observations	22,054	22,054
R-squared	0.2847	0.1939

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level.

Conclusions

This paper aims at analysing the effect of immigration on natives' political preferences. By focusing on a panel of Italian municipalities during the 2008, 2013 and 2018 national elections, it provides evidence on the causality between these two variables. Specifically, an increase in foreign presence leads natives to support anti-immigration parties and to decrease the support for parties promoting redistribution policies. This reveals a general negative attitude towards new migration inflows. Specifically, natives' reaction may be driven by economic concerns, like the perceived negative effect on labour market or on the welfare state, or by the threat of the cultural diversity. In this regard, it emerges that the support for anti-immigration parties is triggered in the case of immigrants from South America, while the effect is not significant in the case of African and Eastern-Central European immigrants, and it has opposite sign when considering immigrants from Asia. Different attitudes towards different ethnic groups are likely to derive by their ability to integrate to the Italian culture. In this context, the language dimension seems to be fundamental in determining the integration process of immigrants, as it influences also other social and working relationships. It is estimated that second generations of immigrants from North Africa, sub Saharan Africa and Central Europe converge almost completely to the Italian culture, attenuating the xenophobic sentiment that it would have been expected. On the opposite, the negative attitudes towards South American citizens may be driven by a slower convergence path. As Bisin and Tura (2019) point out, if from one side the cultural acceptance that characterizes this group is positive within a familiar context, at the same time it allows immigrants to better maintain their distinctive cultural traits, slowing their integration process in the society. For what concern the heterogeneity analysis, in line with the findings of Barone et al. (2016) and Dustmann et al. (2018), the effect on anti-immigration parties is absent in case of big cities, where the population overcomes the 25000 inhabitants. In this regard, individuals living in cities are more likely to experience a positive relationship with immigrants – for example, having an immigrants as a friend or colleague - and thus living in an environment where the Alport's contact theory conditions are fulfilled. Also, it is proved that natives are concerned about the implications of immigration on the welfare state. The effect on anti-immigration parties is stronger in those municipalities with a higher taxable income per capita, in line with the idea that richer individuals are worried they have to bear all the cost financing immigration expenditure, and in those municipalities where the share of children is higher, pointing out that natives are likely to perceive a competition in the public schools

admission. The role of social capital is ambiguous. The effect on votes is strongly driven by municipalities with a lower level of social capital, where the sense of community and altruistic behavior is likely to be scarce. However, the fact that an anti-immigration sentiment is spread also in municipalities where the level of social capital is high, may lead to the conclusion that the social trust is limited to population with a cultural background close to the natives' one. Eventually, the impact on votes for anti-immigration parties is significant only in municipalities in the middle of the distribution of the unemployment rate. Citizens living in areas where the level of unemployment is higher seem not to perceive the immigrant presence as a threat generating competition in the labour market, perhaps because of a perceived (or actual) complementarity. In this case, a further analysis exploiting immigrants' and natives' skills would be appropriate to provide more precise conclusions.

Overall, the findings show that immigration matters in determining citizens' political preferences. Policy makers should take into account the increasing size of this phenomenon, especially focusing on the drivers shaping natives' attitudes. However, a deeper analysis would require an investigation on the validity of the labour market or welfare concerns, trying to assess if the natives' behavior is justified by a real economic impact. Bellucci et al. (2020) move in this direction by assessing the effect of the perceived size of the migratory phenomenon in Italy. It would be interesting to explore to what extent the perception on the labour market and welfare differs from the actual impact, and if it consequently affects the political preferences.

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Appendix

Table A.1: Immigrants' ethnicity composition and voting for anti-immigration parties, OLS.

	(1)	(2)	(3)	(4)	(5)
	North Africa	Central Europe	South America	Sub-Saharan Africa	Asia
Share of immigrants* _{d91}	0.07** (0.027)	0.065 (0.0422)	0.040 (0.0280)	0.047 (0.0370)	-0.040 (0.0284)
Share of immigrants	0.04 (0.0328)	0.05 (0.0318)	0.05 (0.0318)	0.05 (0.0318)	0.06* (0.0323)
GDP growth	-0.572*** (0.1037)	-0.573*** (0.1037)	-0.573*** (0.1037)	-0.572*** (0.1038)	-0.574*** (0.1034)
NUTS-2					
Population	3.92e-08** (1.89e-08)	3.91e-08** (1.87e-08)	3.95e-08** (1.89e-08)	3.92e-08** (1.89e-08)	4.02e-08** (1.88e-08)
Population density	-9.14e-06*** (2.74e-06)	-9.27e-06 (2.79e-06)	-9.28e-06 (2.80e-06)	-9.36e-06 (2.82e-06)	-9.22e-06 (2.82e-06)
Observations	22,054	22,054	22,054	22,054	22,054
R-squared	0.3304	0.3302	0.3304	0.3317	0.3301

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level.

Table A.2: Immigrants' ethnicity composition and preference for redistribution, OLS.

	(1)	(2)	(3)	(4)	(5)
	North Africa	Central Europe	South America	Sub-Saharan Africa	Asia
Share of immigrants* δ 91	0.489** (0.1412)	-0.120 (0.1857)	0.113 (0.1530)	0.214 (0.1766)	-0.193 (0.1559)
Share of immigrants	0.417*** (0.2113)	0.549*** (0.2080)	0.526*** (0.2063)	0.516*** (0.2086)	0.563*** (0.2107)
GDP growth NUTS-2	-0.512 (0.4360)	-0.513 (0.4367)	-0.514 (0.4365)	-0.511 (0.4364)	-0.518 (0.4365)
Population	1.29e-07 (9.59e-08)	1.28e-07 (9.56e-08)	1.30e-07 (9.60e-08)	1.30e-07 (9.62e-08)	1.34e-07 (9.56e-08)
Population density	-0.000039*** (0.000013)	-0.000040*** (0.000013)	-0.000040*** (0.000013)	-0.000040*** (0.000013)	-0.000039*** (0.000013)
Observations	22,054	22,054	22,054	22,054	22,054
R-squared	0.2285	0.2277	0.2278	0.2285	0.2275

*, ** and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level.

Table A.3: Immigrants' ethnicity composition and preference for redistribution, IV.

	(1)	(2)	(3)	(4)	(5)
	North Africa	Central Europe	South America	Sub-Saharan Africa	Asia
Share of immigrants*d91	0.284 (0.2539)	0.054 (0.3626)	0.555* (0.3022)	-0.0416 (0.3021)	-0.500* (0.2556)
Share of immigrants	2.757*** (1.0494)	3.050*** (0.9952)	3.123*** (1.0637)	3.131*** (1.1122)	3.357*** (1.0789)
GDP growth NUTS-2	-0.521 (0.4445)	-0.523 (0.4460)	-0.525 (0.4462)	-0.524 (0.4468)	-0.537 (0.4468)
Population	7.24e-08 (8.77e-08)	6.65e-08 (8.96e-08)	6.87e-08 (8.85e-08)	6.44e-08 (8.86e-08)	7.40e-08 (8.97e-08)
Population density	-0.0000501*** (0.0000151)	-0.000052*** (0.0000152)	-0.000052*** (0.0000156)	-0.000052*** (0.0000157)	-0.000052*** (0.0000158)
K-P- rk LM stat	66.239	67.520	66.341	66.123	67.308
K-P- rk Wald F-stat	47.874	52.774	45.977	45.974	47.907
Observations	22,054	22,054	22,054	22,054	22,054
R-squared	0.3767	0.3732	0.3709	0.3722	0.3696

*, **, and *** stand for statistical significance at 10, 5 and 1%, respectively. Local Labour Market fixed effects, time-invariant and time-variant controls at the municipality level, yearly GDP at the regional level, year dummies are included in all the specifications. Standard errors are clustered at the Local Labour Market level.