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# Skill of the Immigrants and Vote of the Natives: Immigration and Nationalism in European Elections 2007-2016 \*

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## Abstract

In this paper we document the impact of immigration at the regional level on Europeans' political preferences as expressed by voting behavior in parliamentary or presidential elections between 2007 and 2016. We combine individual data on party voting with a classification of each party's political agenda on a scale of their "nationalistic" attitudes over 28 elections across 126 parties in 12 countries. To reduce immigrant selection and omitted variable bias, we use immigrant settlements in 2005 and the skill composition of recent immigrant flows as instruments. OLS and IV estimates show that larger inflows of *highly educated* immigrants were associated with a change in the vote of citizens *away from nationalism*. However the inflow of *less educated* immigrants was positively associated with a vote shift towards nationalist positions. These effects were stronger for non-tertiary educated voters and in response to non-European immigrants. We also show that they are consistent with the impact of immigration on individual political preferences, which we estimate using longitudinal data, and on opinions about immigrants. Conversely, immigration did not affect electoral turnout. Simulations based on the estimated coefficients show that immigration policies balancing the number of high-skilled and low-skilled immigrants from outside the EU would be associated with a shift in votes away from nationalist parties in almost all European regions.

**Keywords:** Immigration, Nationalism, Elections, Europe

**JEL codes:** D72, I28, J61

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# 1 Introduction

Recent Elections in several European Countries (UK in 2016, France and Germany in 2017, Italy in 2018) and in the US (in 2016) have shown a common trend: populist parties, with a strong anti-immigration component, have grown power. They have received more votes and have often been elected to office. The common narrative is that these parties have expressed the fear, resentment and sometimes anger of citizens in response to the increased number of immigrants in their communities. The perception of immigrants as outsiders who compete for jobs, drain public finances and constitute a threat to national values, especially if they are from different cultures, seems to be the main reason for this sentiment.

Politicians from populist parties have played into these fears by focusing on immigrants' economic cost and their supposed legal violations. They usually portray immigrants as impoverished, unskilled, unproductive, and hence a drain on the economy. Examining data from recent decades of immigration, however, tells a different story. They show that there is a large percentage of highly educated and skilled immigrants in Europe and in the US. Often, the immigrant population contains a higher share of college educated than the native population (see Docquier *et al.*, 2014). Overall, economists find that immigrants, especially highly educated immigrants, contribute to the performance and growth of the receiving economy. Immigrants have enhanced technological and scientific innovation (Kerr and Lincoln, 2010), boosted productivity (Peri, 2012) and produced, on average, a fiscal surplus (Orrenius, 2017). In general, immigrants are a combination of more and less educated people, and have a positive effect on a country's aggregate economic growth and fiscal balance. The effect of immigrants in specific cases, however, depends on their characteristics and on the features of the receiving economy.

European voters likely misperceive the average contribution of immigrants (as shown in Alesina *et al.*, 2018). But does the exposure to immigrants elicit an electoral response? Does the inflow of different types of immigrants solicit different electoral responses? What characteristics of citizens affect the voting response to immigration? In this paper, we address these questions using a sample of elections in 12 European countries, over the period 2007-2016, when several populist parties in Europe rose to political prominence. We exploit the large variation of immigrants' population share in regions within those countries and the differential flows of more and less educated immigrants by country of origin.

The question asked in this paper, and in a series of recent papers which we will review below, is about how immigration has affected the political vote of natives, either by changing their attitudes or their willingness to vote. A previous branch of the research in economics and political science has focused on a related question, namely: what determines individual attitudes and policy preferences towards immigrants and immigration? And do these differ in response to high and less skilled immigrants? Several of these papers looked whether theories of labor market competition (Mayda, 2006; Scheve and Slaughter, 2001; Hainmueller and Hiscox, 2007) or fiscal effects of immigrants (Facchini and Mayda, 2009; Hanson *et al.*, 2007) could explain the individual attitudes towards immigrants. The labor market competition theory predicts stronger opposition from natives with skills similar to that of the majority of immigrants. The fiscal theory predicts stronger opposition from richer people who will pay the redistributive costs. These studies find at best mixed support for both explanations.

In general one robust finding of these studies is that the schooling level of the voters is a very strong predictor of the attitudes towards immigration. College education is associated with positive attitudes towards immigrants and approval for open immigration policies. Hainmueller and Hiscox (2010) is a relevant paper

tackling the question of what determines natives' attitudes towards high/low-skilled immigrants and how this depends on their education level. Their findings, based on data from a survey of 2,285 people, show that neither labor market competition nor fiscal competition explains those attitudes well. In fact, more educated natives have more positive attitudes towards both types of immigrants, relative to less educated natives. This is at odds with the idea that individuals are more opposed to immigrants with similar labor market skills. Moreover they find that richer people are more in favor of immigrants than poorer people, and this is even stronger if they live in states with more redistribution. Hainmueller and Hiscox (2010) argue that economic self-interest does not motivate the vote, rather the perception of what is good for society does. This would explain the more favorable opinion for high-skilled immigrants who, arguably, have a larger positive effect on the overall economy and society. An alternative "cultural" explanation, in which tolerance and preference for cultural diversity is associated with more education, is also consistent with those findings. Card *et al.* (2012) show that the individual "cultural" assessment of immigrants drives overall opinion towards immigration policies while the economic evaluations of their contribution is less relevant. Poutvaara and Steinhardt (2018) show that the individual perception of not having what one deserves in life is strongly associated with worries about immigration, particularly among the low-skilled.

A more recent strand of the literature has directly tested the link between immigration and the electoral vote. The specific question asked in several papers is whether an increased inflow of immigrants affected the vote of natives and in what direction. The common observation of higher immigration flows and growing electoral consensus for anti-immigration parties has driven scholars to ask to what extent does the first determines the second. This effect requires that changes in the local presence of immigrants either change attitudes for (at least) some part of the native population or change their willingness to vote. Whatever is their initial attitude towards immigrants, natives either become more concerned with this issue and more aware that this is relevant to them (i.e., the issue gains salience) or they change their opinion of immigrants in response to their inflow. In line with the literature on "political persuasion" (e.g. Della Vigna and Gentzkow, 2009), some groups may revise their view of immigrants in a Bayesian updating (contact theory, prevalence of personal experience). In this process, individuals acquire "new information" from meeting or interacting with immigrants or being exposed to news related to them in their local community. This may change their vote, and the platform of elected parties in terms of immigration policies would reflect such a shift. In this perspective, the key question is not what characteristics of people affect their view of immigrants, but what characteristics of people are associated with larger or smaller revisions of their preferences for immigrants, as a consequence of immigration. Similarly, it is interesting to know what characteristics of immigrants produce a positive or negative revision of such preferences.

A series of recent studies has taken this approach focusing on how immigration has changed the political landscape in individual countries, especially in terms of votes to populist/nationalistic parties.<sup>1</sup> These studies considered individual countries and asked whether an increase in immigrant share at the local level was associated with an increase in the vote for specific anti-immigration parties<sup>2</sup>. Each of these papers is focused

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<sup>1</sup>A recent literature looks at other economic determinants of the increase in the share of populist vote in many European countries. Algan *et al.* (2017), for instance analyzes how the intensity of the Great Recession has affected such votes.

<sup>2</sup>Specifically, Otto and Steinhardt (2014) analyze the effect of immigration on the vote for the German People Union in Hamburg. Barone *et al.* (2016) look at immigration and vote to the center-right/northern league coalition in Italy. Halla *et al.* (2017) look at votes to the Freedom Party of Austria. Harmon (2017) look at cultural distance of immigrants and vote for the Danish People Party in Denmark. Brunner and Kuhn (2018) analyze the vote to the Swiss People Party in Switzerland. Edo *et al.* (2017) look at the French vote for the "Front National" in France. Finally Mayda *et al.* (2018) show that in the US high-skilled immigration has been strongly associated with a higher share of Democratic vote and low-skilled immigration with a higher share of Republican vote.

on a specific country or city, and they use historical location of immigrants and a shift-share instrumental-variable approach to identify the effect of immigrants on the vote. The specific national context is a limitation of these papers as the generalization of the findings can be problematic. However, taken together, these studies present rather robust evidence of different voting responses to high-skilled and low-skilled immigrants. An increase in the immigrant population share in a region/municipality is associated with a shift of the vote towards right-wing nationalist parties. Instead, focusing on the effect of highly skilled immigrants only (those with some tertiary education), one finds a shift of native votes *away* from right-wing nationalistic parties. This second finding seems as strong as the first on low-skilled immigrants, although not as much emphasized.

This observation is the point of departure of our present paper which generalizes the analysis of immigration and voting behavior by homogenizing data for all parties and all elections in 12 European countries. In order to address more directly the connection between the votes to a party and its policy platform, we introduce an innovation in this literature. We classify each party on a common scale in terms of the intensity of their "nationalism". We quantify nationalism using a textual analysis of their political agenda as stated in their Manifesto (using data from the Manifesto Project Database). We merge this measure of the average nationalism of parties to the information about what party an individual voted in the previous election, from the European Social Survey, for a large and representative sample of EU citizens in 12 countries. We use this information to construct a panel of votes in 28 European elections, and we merge it (using the *European Labor Force Survey*) with the change in high and low-skilled immigrants as share of adult population measured for each European region. Our main specification analyzes how the change in local immigrants was associated to the revealed "nationalism" of voters in EU regions.

In order to go beyond correlations we use the shift-share instrument (Card, 2001) to predict, separately, high-skilled and low-skilled immigration based on the location of immigrants by area of birth in 2005 and the growth of each national group by skill level. The differentiation in country of origin and skill intensities of groups allows us to estimate two separate effects for skilled and unskilled immigrants. While the variation in the inflow of high and low-skilled immigrants is not random across counties, the use of our instrument and the inclusion of a rich set of fixed effects and controls should reduce concerns about omitted variable bias. We base our instrument on the immigrant distribution in 2005 and test that the instrument is not correlated to previous changes in demographic and economic variables in the period 2000-05. This mitigates potential bias from correlations between pre-trends of the shift-share instrument and existing trends (e.g. Jaeger *et al.*, 2018).

An additional contribution of our paper is that by combining datasets, we can analyze different outcomes: the impact of immigration on votes as captured by elections, on individual party preferences as revealed in surveys and on individual attitudes towards immigrants (also obtained from the European Social Survey). This analysis, therefore, connects the studies that analyze immigration and individual attitudes (such as Hanson *et al.*, 2007 or Hatton, 2016, on refugees and asylum policies) with those analyzing immigration and voting behavior (e.g. Halla *et al.*, 2017; Barone *et al.*, 2016). Moreover, by looking at the impact of immigrants on vote turnout, we can discuss whether a change in individual attitudes or a change in voting participation is the more likely channel for the aggregate effect of immigration on the political success of "nationalistic" parties.

Our main findings are three. First, we find a strong negative correlation of highly educated immigrants as share of the population and intensity of nationalist preferences in the parties voted by citizens. We also find an opposite and similar positive association of the population share of less skilled immigrants and voted parties'

nationalist preferences. Second, we find that the change in preferences in response to high and low-skilled immigrant share is stronger for less educated citizen voters than for highly educated citizen voters. It is also stronger for older voters than younger voters. This is consistent with the idea that people with less previous exposure to immigrants respond more significantly to their presence, both in positive and negative terms. Third, we find that average changes in voting behavior do not derive from changes in participation rates of different groups but are instead consistent with changes in individual opinion, both in vote preferences and in the attitudes towards immigrants. In particular, an increase in low-skilled immigrants moves individual's vote and attitudes towards opinions and parties that are more "nationalistic".

A possible interpretation of these results is that individuals have only weak preferences on immigration policies, or weak priors on the desirability of immigrants, and when they interact with them at the local level they revise these preferences, in the light of their local experience. If this is the case, the results seem to indicate that interactions with highly educated immigrants bring individual to revise their preferences in favor of them. However, interactions with less educated immigrants may produce the opposite effect. This revision of priors or updating of preferences implies that changes in individual preferences affect political opinions. A recent paper by Alesina *et al.* (2018) analyzes how individual views about immigration affect the preference of citizens for redistribution. The paper shows, interestingly, that less educated people in sectors with high immigrant competition tend to overestimate the presence and the cost of immigrants. This effect is also associated with higher demand for redistribution. That paper shows a larger mis-perception of less educated citizens about the cost and salience of immigrants. This could be a reason for the larger pro-nationalist effect of low-skilled immigration on this group that we find in our analysis.<sup>3</sup>

The rest of the paper is organized as follows. In Section 2 we discuss the data and specifically we document the intensity of nationalistic preferences in recent elections and the increase in immigrants as share of resident population. In Section 3 we present the empirical strategy first and then a simple decomposition that allows us to analyze the impact of immigration on individual opinions and turnout. In Section 4 we discuss the baseline results on immigration and nationalist voting. In Section 5 we present our results by exploiting individual level heterogeneity. In Section 6 we decompose the channels of nationalist voting behavior focusing on individual opinion and turnout. In Section 7, we present some scenarios that simulate the potential effect on vote of different immigration flows. Section 8 concludes the paper.

## 2 Data and Summary Statistics

An important innovation of this paper is the construction of an index of political nationalism based on each party's ideology and agenda. We built on four different datasets. Our primary data source is the European Social Survey (ESS). This is a multi-country survey, which was administered in 8 waves (one every two years) in 36 countries between 2002 and 2016. The ESS selects a random sample of individuals that is representative of the population over 18 in each country. On average, each wave contains around 1500 individuals for each country. The data include detailed information on personal and family characteristics such as age, gender, education, marital status, number of children in the family, place of birth and labor market characteristics

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<sup>3</sup>Alternative explanation would be that people's opinion on immigrants (either positive or negative) do not change much, but the presence of immigrants makes the issue more salient for some groups of natives and pushes them to vote in response to such an issue. In this case high-skilled immigration may encourage the more pro-immigrant groups to vote, while low-skilled immigrants may push to vote the more nationalist. In our analysis however we find that differential change in participation to the vote by different groups does not seem to be a relevant channel for the aggregate effects.

such as employment status and work characteristics. It also includes detailed information on the parental background, such as parents' education, employment status, occupation when the respondent was 14 years old and their country of birth.

ESS data report also two specific questions on voting and political preferences of individuals: (i) “*which party did you vote in the last national election?*”, and (ii) “*which party do you feel close to?*”. The answers to those questions are the actual names of the parties in each surveyed country, which we link to information on the political agenda of these parties, available from the *Manifesto Project Database (MPD)*. This dataset describes the political manifesto of 1093 parties over 715 parliamentary elections.<sup>4</sup> Each party's political agenda is studied through a content analysis of its political manifesto: the share of quasi-sentences related to a topic as a fraction of all sentences in the whole political manifesto is taken as a measure of the relevance of that topic for that party. For each topic the MPD identifies two measures: one of favorable/positive mentions of the topic, and the other of unfavorable/negative mentions. This prompts the construction of two measures. The first one is a measure of *salience* of the topic in the political agenda of the party. This is computed as the sum of the mentions (both positive and negative) related to the topic relative to total quasi-sentences. The second one is a measure of *party preferences* on the topic, computed as the difference between positive and negative mentions relative to total quasi-sentences. Several topics are analyzed, such as protectionism, the role of traditional morality, civic mindedness, multiculturalism and several others. In our analysis we focus on parties' political preferences on: (i) European Community/Union and (ii) National way of life. The former takes into account all mentions on the EU like the desirability/opposition of expanding the EU or increasing EU competences. The latter contains all mentions of nationalism, patriotism, pride of citizenship, etc. We compute the average over time of those indicators for each party,<sup>5</sup> and we consider those averages as the measures of "salience" and "intensity" for that party on each specific issue. We then combine the two topics (EU and national way of life) using a Principal Component Analysis (PCA) summarizing the *Salience* and the *Intensity* of political parties on what we call "nationalism", which correlates negatively with favorable mentions of EU variable and positively with favorable mentions of the national way of life. Results of the PCA are available in the on-line Appendix II. Finally, we harmonize and link this index with the voting/political preferences of individual from ESS. In the main part of the analysis, we exploit within region variation over time in voting behaviors between consecutive elections.

ESS data report information on regional location of respondents within a country at NUTS2 level for all EU countries with few exceptions (e.g. Austria, Germany, UK) where it is at NUTS1 level.<sup>6</sup> We use this information to attach to each ESS respondent the number of migrants in the region of residence in a given year. We retrieve this information by aggregating individual data from the *European Labor Force Survey (EULFS)* that reports individual information on age, employment status and education, representative of the population above 15. Starting from 2005, EULFS also reports for each individual the birthplace, distinguishing fifteen different regions of origin.<sup>7</sup> We use this variable to compute the share of immigrants in the total population

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<sup>4</sup>The MPD includes all parties that participated to national elections, and obtained at least one seat in the parliament over the 1945-2017 period, covering all democratic countries in the OECD and Eastern Europe.

<sup>5</sup>While the majority of parties we observe in ESS data appear in the political arena by the end of the 1990s, for the oldest parties we drop all years before the 1990. In this way we focus on a period in which the European integration process becomes more explicit in the parties policy agenda. The MPD tracks changes in parties' denomination, as well as parties' fusions and splits. The list of the parties included in the analysis is available in Table A9 in the on-line appendix Appendix III.

<sup>6</sup>The "Nomenclature for Territorial Units for Statistics", "NUTS" system, partitions EU countries into Macro-Regions, Regions and Provinces which are called NUTS1, NUTS2 and NUTS3 levels. We use the intermediate, NUTS2, level commonly indicated as "regions" in our analysis.

<sup>7</sup>These are the residence country, a foreign EU15 country, a foreign EU member state entered in the EU on 2004, a foreign

in 2005 at regional level as follow:

$$m_{r,s,t}^O = \frac{M_{r,s,t}^O}{Pop_{r,2005}}, \quad (1)$$

where  $m_{r,s,t}^O$  is the share of migrants and  $M_{r,s,t}^O$  is the total stock of migrants in NUTS2 region  $r$  born in the group of origin countries  $O \in \{All, Non\ EU28, EU28\}$ , with skills  $s \in \{All, HS, LS\}$  at time  $t$ .

Combining individual ESS country samples with EULFS migration data and MPD data on political agenda of parties, we obtain information on 12 European countries for the 2007-2016 period. The countries in our final sample are Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Portugal, Spain, Switzerland, Sweden and United Kingdom. For these countries, we build origin-skill specific shares of migrants at the regional level.<sup>8</sup> The sample covers 114 regions; for these regions we also extract from Eurostat and OECD sources regional data on GDP per capita, population density, unemployment rate, percentage of tertiary educated individuals, value of social benefits other than social transfer in kind per capita, the ratio 0-14 over 15-65 years old population and a measure of total number of crimes.<sup>9</sup>

[INSERT TABLE 1 HERE]

Our final sample includes countries for which ESS data cover at least two national elections. The main identifying variation in our empirical analysis is the within region changes in voting behaviors over different elections.<sup>10</sup> Table 1 reports the number and year of elections covered by ESS questions for each country in columns (1) and (2) and the number and years of the surveys in columns (3) and (4). In our main dataset we focus on individual votes at the latest elections, and hence we only use variation between elections, even if the ESS was conducted more than once between elections. For instance, in the case of France, we exploit variation in voting behaviors between French national election years in 2007 and 2012 (see column (2) in Table 1), even if the ESS survey was conducted in years 2010, 2012, 2014 and 2016 (see column (4)). In this specification we pool the individual data in repeated representative cross sections. By including a region fixed effect, we treat them as a region-level pseudo panel.

Alternatively, we use the data to construct a genuine longitudinal dataset at the individual level. For each individual we consider as one data point the party preference expressed at the time of the survey which is available each survey year. We then consider as another data point the party she/he voted for at the last election. Hence, we have two observations for each individual, over time, and we can use these data to analyze the individual evolution of party preference in a longitudinal approach and controlling for individual fixed effects. Table A2 in the on-line appendix provides descriptive statistics for the sample of individuals who reveals their current party preference. Table A3 provides a measure of differences in terms of political preferences between the party voted at the last national elections and the currently preferred party. On average 16% of the sampled individuals changed party preference between the last national election and the year of the survey. While the database using repeated cross-section of electoral votes will be used to perform

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EU Accession country in 2007/2013, EFTA, Other Europe, North Africa, Other Africa, Near and Middle East, East Asia, South and South East Asia, North America, Central America and Caribbean, South America and Australia and Oceania.

<sup>8</sup>Germany provides information on the total stock of the foreign born population, but not on their birthplace. We use information on the nationality of immigrants instead to impute the birthplace of the foreign born population.

<sup>9</sup>An extended data section is available in the on-line Appendix I and Table A1.

<sup>10</sup>We excluded Italy and Greece from the analysis, as the ESS data during 2005-2016 only cover one election in each of these countries (2013 in Italy, and 2009 in Greece).



the analysis of the vote across regions over time, the longitudinal dataset allows a more careful analysis of the change in individual political preferences over time.

[INSERT TABLE 2 HERE]

Table 2 describes the final sample. This includes 48767 individuals between 18 and 90 years old. The sample is balanced between males and females. Overall, 35% of the respondents have tertiary education, and 19% of respondents have a father with tertiary education. On average, the party for which these individuals voted included 3.2% of their sentences mentioning the EU and 1.5% mentioning issues related to the national way. These measures reveal how salient these issues were for the electorate. On average, the mention about the EU were positive (1.6% is the positive minus negative incidence) and also about national way of life (1.2% is the net average positive incidence of mentions of national way of life). We construct the indicators of party preferences for the EU and a national way of life to obtain synthetic indicators of nationalism and its salience. These are obtained from principal component analyses performed on the indicators of preferences for EU and nationalism, and the salience of these two, respectively. There is a very strong negative correlation between EU preferences and national way of life preferences, so the first principal component of the two captures a very large fraction of common variance. This is what we call "nationalism" and we standardize the index so that a one-unit change corresponds to one standard deviation. Then, the lower part of Table 2 shows some summary statistics of variables measured at the regional (NUTS2) level. Focusing on the presence of immigrants, the average share (2007-2016) of extra-EU immigrants in the considered sample was equal to 7.1% of the population and it was larger than the population share of EU immigrants (5.9% of the population). low-skilled immigrants account for about three fourths of total migrant population (9.7% vs. 3.3% of total population in the region). The significant inflow of low-skilled immigrants and their recent presence are considered by some an important element in the rise of the nationalistic parties in Europe.

[INSERT Figure 1 HERE]

Our electoral data originate from the ESS and we use them to evaluate individual voting. Hence, we check whether the aggregate vote shares for the most important parties at the national level, calculated using our dataset, correspond to the official figures reported in the elections. We use the European Election Database (EED), which is the most reliable source for this type of information, to measure the party vote shares at elections. Figure 1, panel (a) plots the total share of votes to the top three parties for each national election obtained using ESS data (vertical axis) against the same share obtained from the EED (horizontal axis). Panel (b) performs the same exercise, focusing on share of votes received in each election-country by the top five parties.<sup>11</sup> As there may be measurement error in the ESS, we would like to check if there is systematic under or over measurement of votes going to the top parties in the analyzed election. Figure 1 shows that country-election observations are close to the 45 degree line, which would imply exact same measure from the two sources. The departures are relatively small, sometimes positive and sometimes negative, and they show no specific pattern. This reassures us that the distribution of votes recorded in the ESS is close to the

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<sup>11</sup>Table A4 in the on-line appendix shows the results in terms of differences between ESS and EED for each election for the top 5 parties. Considering the whole set of elections, the average difference between the two datasets is small (about 0.63% on average).

officially recorded one and does not seem to exhibit systematic deviations from it.

[INSERT Figure 2 HERE]

Figure 2 describes the range of variation in the nationalism index, across parties. The figure shows that some parties have a very strongly nationalistic platform and focus. Panel (a) of Figure 2 shows the value of the nationalism index for the top and bottom ten European parties according to that index.<sup>12</sup> Parties with the most nationalist policy agenda are EU skeptical, anti-immigrants and occupy the right-wing of the spectrum. The top one, UK independent Party, was one of the more aggressive campaigner for Brexit. The second one, the Danish People Party, has brought an extreme nationalistic view in a country usually considered very tolerant. The fourth, the Front National in France, had significant electoral success at the recent French presidential elections, with a very strong anti-immigrants message. Many of these parties are also in the top ten in terms nationalism's salience (see panel (b)), namely how much of their manifesto they devote to issues of nationality and EU relative to all other issues. At the other end of the spectrum, parties with the less nationalist agendas support a more active role for European institutions and take a more open view of immigrants. They are usually left-wing parties (e.g., Nouveau Centre, Parti Radical de Gauche, Les Verts), center-left parties as the Moderate Coalition Party (MSP), as well as regional minority parties that support a European policy agenda to escape national centralism (e.g., "We Ourselves" in Northern Ireland; the Basque Nationalist Party in Spain).

[INSERT Figure 3 HERE]

Figure 3 presents average levels of nationalism when we aggregate parties into broad "political families" according to the *Chapel Hill Dataset*. This picture provides an idea of where nationalism resides in European parties. We assign parties in the ESS to political families using parties' membership or affiliation with international EU parties and self-identification defined by the Chapel Hill Dataset. Unsurprisingly, nationalism is very high among parties belonging to the "radical right" group and among those with high attachment to local territory and culture (e.g. Agrarian/Center and Confessional families). Nationalism is relatively low among parties belonging to the liberal and socialist tradition.

[INSERT Figure 4 HERE]

Figure 4 shows the average nationalism of individuals based upon their self-positioning on a political scale that ranges from 0 (extreme left) to 10 (extreme right). Moving from left to right across the political spectrum, the intensity of individual preferences for nationalism increases almost monotonically with the political scale. Individuals who self-identify as "left leaning" tend to vote anti-nationalist policy agendas. To the contrary right leaning individuals vote parties with a more pro-nationalist agenda.

[INSERT Figure 5 HERE]

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<sup>12</sup>The level and salience of nationalism of each party in our sample is available in the on-line appendix in Table A9 and Figure A1.

Figure 5 shows the range of variation in the nationalism index considering the vote across European regions. We only report the top and the bottom twenty European regions in terms of average nationalism. Regions where people voted for the least nationalist political agenda are Spain, France, Belgium and, to a lesser extent, Sweden. Moreover, the more nationalist voting comes from regions in countries that are less engaged into European economic and political integration such as Switzerland, UK, and Denmark. Voters in these regions privilege a nationalist policy agenda. This figure shows average levels of the nationalism index, while in our empirical analysis changes in the index within regions over time represent the relevant identifying variation.

[INSERT Figure 6 HERE]

Providing a sense of how the nationalism index has evolved over time in the sample, Figure 6 plots nationalism levels across countries as produced by different elections. We see a clear upward trend in average nationalism over time during the ten years considered. Even when looking at individual countries, both with initially high (e.g. Switzerland and Great Britain) and low (Spain and Sweden) level of nationalism we observe widespread increase in the index.

[INSERT Figure 7 HERE]

Figure 7 shows the evolution of the share of high (panel (a)) and low (panel (b)) educated migrants over the total population, following the same timing of the available elections. Overall, we notice a positive upward trend, which is steeper for highly educated immigrants. Notice, however that low educated immigrant share of the population is almost double than the high educated immigrants population. Comparing Figure 6 and Figure 7 we can intuitively point out a common trend, which is interesting but far from proving any causation.

### 3 Empirical Specification and Identification

In this section we present our basic empirical approach to investigate the impact of immigration on nationalism of EU citizens as revealed by their vote. As key explanatory variable we include, in the basic specification, the adult population share of more and less educated immigrants. As our goal is to focus on how immigrants may change the vote of EU citizens, we only include natives' voting as outcome. This eliminates the direct effect of naturalized immigrants on voting. We define as  $Nation_{i,r,e}$  the normalized value of nationalism index (first principal component of favorable mentions towards EU and national way of life) voted by native citizen  $i$  in region  $r$  (NUTS2) in election  $e$ . In our basic specification, we allow additional individual and regional characteristics to affect individual preferences, in addition to our main variables of interest. The basic specification is as follows:

$$Nation_{i,r,e} = \alpha + \beta_H m_{r,e}^H + \beta_L m_{r,e}^L + \zeta \mathbf{X}_{i,r,e} + \gamma \mathbf{\Gamma}_{r,e} + \theta_e + \eta_r + \epsilon_{i,r,e}. \quad (2)$$

The two variables of interest are  $m_{r,e}^H$  and  $m_{r,e}^L$ . They represent migrant with tertiary ( $H$ ) schooling<sup>13</sup>

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<sup>13</sup>Specifically, we define highly educated immigrants as those who have completed at least one year of tertiary education

and secondary or less ( $L$ ) schooling, respectively, as share of the total 2005 population in region  $r$  in election  $e$ .<sup>14</sup> The vector  $\mathbf{X}_{i,r,e}$  contains a set of individual characteristics of voter  $i$  including age, gender and whether the individual is tertiary educated. The vector  $\mathbf{\Gamma}_{r,e}$  contains a set of NUTS2 regional characteristics of region  $r$  including the level of GDP per capita, population density, unemployment rate and percentage of tertiary educated individuals. We also capture fixed regional factors, such as institutions and local culture, with regional fixed effects  $\eta_r$ , while aggregate trends through elections can be captured by the election fixed effects  $\theta_e$ .

Estimating equation (2) using OLS produces a measure of the partial correlation between the high and low-skilled immigration share and natives' voting preferences. The estimates of coefficients  $\beta_H$  and  $\beta_L$  will capture such correlations. However, it is likely that individual and regional unobserved characteristics captured by  $\epsilon_{i,r,e}$  may be correlated with natives' voting preferences and may also affect new immigrants location decision. If this is case, the OLS estimation will be a biased estimate of the causal effect of immigration on votes. To mitigate this potential bias, we use an instrumental variable approach based on a variation of the widely used shift-share methodology (see Card, 2001, Mayda *et al.*, 2018). The intuition of this instrumental variable approach is to use past location of immigrants by country of origin as predictor of subsequent inflow of immigrants, as uncorrelated (or less correlated) with current factors affecting vote and political preferences of individuals. The changes in aggregate flows of immigrants across countries of origin, likely driven by aggregate push factors, are allocated to EU regions according to the early distribution of immigrants. Hence such a shift-share or "enclave" instrument generates variation of regional migration over time due to the interaction between previously established immigrants settlement and aggregate national flows. Both those components are likely to be less correlated with economic and political region-specific changes than the actual migrant flows and this should reduce the severity of the omitted variable bias. We will also test the correlation of such an instrument with the pre-period (2000-2005) economic and demographic regional trends. This will reduce worries of pre-trend correlations, and hence of potential endogeneity and omitted variables bias, if persistent trends are correlated with immigration. These checks would significantly reduce the worries raised in recent criticism of this kind of IV strategy (see Jaeger *et al.*, 2018 and Goldsmith-Pinkham *et al.*, 2018).

A novel aspect of our analysis, as we want to capture skill-specific effects of immigration, is the construction of two different instrumental variables taking into account the aggregate variation of immigrant flows by skill, and applying it to the same pre-period distribution of immigrants, by origin, across regions.<sup>15</sup> Namely we define the initial presence of immigrants from origin country  $c$  in year 2005 in each NUTS2 region  $r$  as share of their total population in 12 European countries in 2005 as follow:

$$sh_{c,r,2005} = \frac{M_{c,r,2005}}{\sum_{r \in EU_{12}} M_{c,r,2005}}, \quad (3)$$

where  $M_{c,r,2005}$  is the stock of immigrants born in country  $c$  and residing in region  $r$  in year 2005, while the denominator is the total stock of immigrants residing as of 2005 in countries of our sample who are born in country  $c$ . Year 2005 is the earliest year to construct such regional distribution from the EULFS. The EULFS, in its harmonized codification scheme, grouped the origin countries in 15 groups that we use as "countries" of origin.<sup>16</sup> Then, we compute the total stocks of migrants resident in the EU 12 countries, born

which corresponds to level 5 or above of the ISCED classification.

<sup>14</sup>In the empirical analysis we will consider those shares as well as separate shares for immigrants from EU28, and from outside of EU28.

<sup>15</sup>This is also done in Mayda *et al.*, 2018.

<sup>16</sup>The fifteen birthplace regions recognized by the EULFS are the following: natives, EU15, New European member state

in countries of origin  $c$  in each year  $t \in \{2007, 2008, \dots, 2016\}$  separately for two skill levels  $s$  equal to  $H$ , for college educated and to  $L$ . Namely we compute:

$$TM_{c,t}^s = \sum_{r \in EU_{12}} M_{c,r,t}^s \text{ for } s = H, L. \quad (4)$$

We can then predict the total number (stock) of immigrants of skill  $s$ , origin  $c$  in region  $r$  and year  $t$  as the interaction (product) of those two values, as follows:

$$\widehat{M}_{c,r,t}^s = sh_{c,r,2005} * TM_{c,t}^s.$$

We sum across all countries of origin and standardize for the initial total population in region  $r$  to have the predicted skilled and unskilled immigrant as share of the population in region  $r$  and year  $y$  as follows:

$$\widehat{m}_{r,t}^s = \frac{\sum_c \widehat{M}_{c,r,t}^s}{Pop_{r,2005}}.$$

We will use these imputed shares as instrumental variables for each skill level  $H$  and  $L$ . The prediction power of our IVs for each skill will depend on the tendency of that group to locate where previous immigrants from the same origin did. The pre-period distribution across regions by country of origin is not skill specific, as to avoid correlation with regional features that would select high or low-skilled workers. In this way, the independent variation of the two instrument is only generated by the differential aggregate flows of immigrants by skill from the same country of origin.

Instrumental variables based on the shift-share methodology have been used before to explore the relation between immigration and voting (see e.g. Otto and Steinhardt, 2014; Mendez and Cutillas, 2014; Brunner and Kuhn, 2018; Halla *et al.*, 2017; Barone *et al.*, 2016). They have also been subject to a fair amount of discussion and criticism (e.g. Jaeger *et al.*, 2018 and Goldsmith-Pinkham *et al.*, 2018). Persistent local conditions that influence immigrants location decision and natives voting preferences can threaten the identification of our instrumental variables. To reduce those concerns we will check the correlation between the instrument and pre-2005 economic and demographic trends. Moreover in our case two sources of variation in the flows of immigrants in the EU post 2007 were important and orthogonal to cross-regional presence of previous immigrants and to the local political sentiment. First, the access to the EU and the implementation of the Schengen Agreement between 2004 and 2006 for 9 new EU member states<sup>17</sup> produced an increased inflow of immigrants from these new EU countries to the countries of Western Europe. Second, the widespread economic and financial crisis of 2007-2009, increased emigration especially of highly skilled from countries of Southern and Eastern Europe generating important exogenous variation of these flows in receiving countries. Both shocks were large and independent of previous regional conditions, hence uncorrelated with past shocks. Hence, these large aggregate shocks may have reduced the correlation of the instruments and unobserved regional factors. Table 3 shows the coefficients of regressing the IV at the regional level on pre-2005 growth of GDP per capita, employment rate, population and share of tertiary educated. Specifically the dependent

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from 2004, new European member state of 2007/2013, EFTA, Other Europe, North Africa, Other Africa, Near and Middle East, East Asia, South and South East Asia, North America, Central America and Caribbean, South America and Australia and Oceania. Additional information on data and more details on the construction of the IV is available in Appendix I.

<sup>17</sup>Signed on the 16th of April 2003 by Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia, the Schengen Agreement became operative for those countries on December 2007.

variable is the imputed growth of immigrants 2007-2012 either for all immigrants (column 1) or for high and less educated (2 and 3) and then separating non-EU immigrants (columns 4-6) and EU immigrants (columns 7-9). The independent variable is the 2000-2005 growth of GDP per capita (row 1), employment rate (row 2) population (row 3) and share of tertiary educated (row 4). Most of the correlations are non significant. The only significant coefficient, which drives a few correlations, is the negative correlation between predicted growth of non EU high-skilled 2007-2012 and employment rate growth 2000-2005. This would suggest that regions whose employment growth was slow in 2000-2005 are associated with larger share of non EU immigrants whose inflow of high-skilled increased. While this correlation may add a caveat to the regression results, this is not the correlation that would generate positive association between skilled immigrants and anti-nationalist attitudes of voters.

### 3.1 Allowing heterogeneity across individuals and regions

We explore two important sources of heterogeneity in the effects of immigrants on native vote. First, different types of citizens, especially in terms of education levels, may respond differently to the inflow of immigrants. As we discuss below, if immigration is an "event" that reveals information and may change the attitudes or the beliefs of citizens towards immigrants, it may have a different effect across groups of voters depending on their perceptions and priors. Pursuing this line of analysis, we split the native population by education (not tertiary and tertiary), age groups (18-37, 38-57 and 58+), location (rural, small town and cities) and gender.<sup>18</sup> We estimated equation (2) across different subsamples through the 2SLS estimation presented above. Investigating the heterogeneous effects of immigrants on natives' voting behavior is one of the contributions of this paper.

Second, it is also interesting to analyze whether effects of immigration vary depending on region specific socio-economic characteristics. For instance, natives from regions with strong redistributive policies may perceive more competition on the welfare system from low educated immigrants and shift their vote towards nationalist platforms. At the regional level we focus on the importance of the welfare system (see Otto and Steinhardt, 2014 and Becker and Fetzner, 2017), children education (see Halla *et al.*, 2017) and the local crime rate (see Mendez and Cutillas, 2014). These specific features affect local public goods (local government, schooling, policing) that could be crowded or depleted, in the view of natives, by less educated immigrants or, possibly, helped by highly educated immigrants. Defining  $\bar{\phi}_{2010}$  the median value of the regional characteristic in 2010, we estimate with 2SLS the following equation:

$$\begin{aligned} Nation_{i,r,e} = & \alpha + \beta_1^H m_{r,e}^H \mathbf{1}(\phi_{r,2010} > \bar{\phi}_{2010}) + \beta_2^H m_{r,e}^H \mathbf{1}(\phi_{r,2010} < \bar{\phi}_{2010}) + \beta_1^L m_{r,e}^L \mathbf{1}(\phi_{r,2010} > \bar{\phi}_{2010}) \\ & + \beta_2^L m_{r,e}^L \mathbf{1}(\phi_{r,2010} < \bar{\phi}_{2010}) + \zeta \mathbf{X}_{i,r,e} + \gamma \Gamma_{r,e} + \theta_e + \eta_r + \epsilon_{i,r,e}. \end{aligned} \quad (5)$$

The estimated parameters  $\hat{\beta}_1^s$  and  $\hat{\beta}_2^s$  are respectively the impact of the share of  $s \in \{H, L\}$  skilled immigrants in region  $r$  at election  $e$  on individual voting preferences in the regions above and below the median of the regional characteristic considered indicated as  $\phi$ . To test the effect across different levels of welfare system, we compute as a proxy the social benefits other than social transfer in kind per capita. Halla

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<sup>18</sup>Barone *et al.* (2016) show that the presence of immigrants increase the votes for center-right parties in Italy, and that the results are heterogeneous across municipality size: the results are significant only in middle sized municipalities and not significant in big cities, due to segmented neighborhoods, earlier immigration settlement and higher education level of natives.

*et al.* (2017) show that the presence of immigrants could affect the quality of local neighborhoods and schools and that could influence voting preferences of parents who are worried about the education of their children. We test this second channel by looking at the ratio of children to adults at the regional level. Finally, the crime level across regions is computed as the total number of crimes, including robberies, homicides, burglaries and thefts.

### 3.2 Decomposing the effect: turnout and voting preferences

The reduced form structure of equation (2) does not allow us to identify the channels that connect migration with natives' voting behavior. To examine potential mechanisms, we think of the inflow of immigrants as an "event" that takes place in a local area. We can think of it as providing exposure of local voters to immigrants. This "event" may produce a change in vote by affecting individual attitudes towards immigrants. The interaction with migrants and/or getting local news about them produces a negative/positive revision of the degree of individual nationalism. An "event" that implies contact with (or coverage of) immigrants perceived as enriching and helping the area would likely generate a reduction in nationalism. An event which implies contact/interactions with immigrants perceived as not contributing positively to the local area, may result in an increase in nationalism.

In addition, an increase in immigrants may contribute to make "immigration" a more salient issue in the voting decisions of some groups. In this sense, immigrants' presence may not only affect the nationalistic view of a person but also make it more likely that those views are turned into vote. If people reinforce their nationalist views, they may act upon it and vote for parties whose agenda is more nationalist (anti-immigrants) and for which this dimension is more salient. This channel has been emphasized by studies that show that attitudes are not easy to change but events, information and news may change the willingness to act upon these attitudes with one's vote (see Barone *et al.*, 2015).

Let's define two groups  $s$  and  $u$  with different average preferences for the intensity of "nationalism" of their elected officials. These groups can be thought as the group of skilled and unskilled citizens, but they may also be sub-groups of those. Standardizing  $n$ , an indicator of nationalist intensity, to be between 0 and 1, we label the two groups so that  $u$  has "initial" or "basic" preferences that are more nationalistic than group  $s$ . This implies at period  $t=0$ :  $0 \leq n_s^0 < 0.5 < n_u^0 \leq 1$ .

Next, we define a revision of average preferences for each group as a function of the local change in high and low-skilled immigrants as shares of the population. This variable proxies the change in likelihood/frequency of interactions of the local population with immigrants and/or the change in intensity of local news related to them. Hence, the preferences of natives in period  $t=1$  may change as a result of immigrants' flow to a region. This is captured by the following relation:

$$n_j^1 = n_j^0 + f_j \left( \frac{\Delta s_m}{Pop}, \frac{\Delta u_m}{Pop} \right), \quad \text{for } j = s, u. \quad (6)$$

In equation (6), the function  $f_j(.,.)$  captures the extent to which the average person of group  $j$  revised her position in terms of nationalism, as a consequence of being exposed to a change in skilled ( $s_m$ ) and unskilled ( $u_m$ ) immigrants.

It is plausible to think that an increased probability of interaction with skilled immigrants would allow citizens to revise their priors towards less nationalism. Contact theory predicts that people fear less what they know (see e.g. McLaren, 2003) and highly skilled immigrants are likely to be perceived as contributing

citizens. They are likely to work and unlikely to be involved in "negative news stories" about crime or cultural differences. In that case, the derivative of the function with respect to skilled immigrant change would be negative i.e.  $f'_{j,s_m} < 0$ . Instead, stereotypical thinking may induce natives to attribute local social cohesion or economic problems to the presence of low-skilled immigrants. These immigrants may be perceived to be less likely to work, thus net receivers from local economy and welfare. They may also be more likely to be in local negative news stories, even if it is only a very small percentage of them. In this case, a larger inflow of low-skilled may produce a revision in favor of nationalistic views ( $f'_{j,u_m} > 0$ ). A recent paper by Alesina *et al.* (2018) shows that people in many countries tend to exaggerate the share of immigrants and the share of non-educated ones in the population. They also show that for some groups, such as less educated exposed to large immigration in their occupations, this distortion in perception is even stronger.

The extent of the revisions in nationalistic opinions may vary from group to group depending on several features of the groups. If the reason for the revision is a *Bayesian updating* of the assessment of immigrants and their contributions, then groups who are initially less informed and aware of immigrants and their role would have larger revisions. Existing literature (e.g. Della Vigna and Gentzkow, 2009) suggests that this can be the case for less educated people. These individuals might respond to the immigration "event" and adjust their nationalism level, both in positive or in negative, more than educated citizens. Alternatively, if the revision is driven by *confirmation bias* (so that signal confirming our beliefs have a stronger effect), groups who are more nationalistic to begin with will respond to immigrants' inflow, especially low-skilled one, increasing their nationalism. These groups will not reduce their nationalism much in response to high-skilled immigration instead.

The preferences of individuals are not the only relevant component when we consider the vote. The other crucial factor is the probability of actually going to vote, measured by the turnout. This can also be affected by the change in skilled or unskilled immigrants, which affects the "salience" of the immigration topic on deciding whether voting or not. So calling  $\delta_j \left( \frac{\Delta s_m}{Pop}, \frac{\Delta u_m}{Pop} \right)$  for  $j = s, u$  the probability of voting of individuals of group  $j$ , we can analyze the impact of immigration on the probability of voting. This is an important measure of whether being reminded of the presence of immigrants by more frequent interactions affects the probability of translating one's preference into vote.

The synthetic index of political nationalism is produced by aggregating the voting behavior and turnout of the two groups of individuals, weighted by their relative population. We standardize the index to one and denote by  $S$  and  $1 - S$  for skilled and unskilled, respectively:

$$\begin{aligned} \overline{n^1} = & S \delta_s \left( \frac{\Delta s_m}{Pop}, \frac{\Delta u_m}{Pop} \right) \left[ n_s^0 + f_s \left( \frac{\Delta s_m}{Pop}, \frac{\Delta u_m}{Pop} \right) \right] + \\ & (1 - S) \delta_u \left( \frac{\Delta s_m}{Pop}, \frac{\Delta u_m}{Pop} \right) \left[ n_u^0 + f_u \left( \frac{\Delta s_m}{Pop}, \frac{\Delta u_m}{Pop} \right) \right]. \end{aligned} \quad (7)$$

Immigration affects the index through the turnout channel and through the individual preference channel, and each channel can be specific to a group. Using our data we will be able to investigate these channels by estimating separately how the turnout of each individual group (high and low-skilled) is affected by nationalism, and how their preferences are affected too.

In terms of turnout channel we can estimate the following:



$$Turnout_{i,r,e} = \alpha + \beta_H m_{r,e}^H + \beta_L m_{r,e}^L + \zeta \mathbf{X}_{i,r,e} + \gamma \mathbf{\Gamma}_{r,e} + \theta_e + \eta_r + \epsilon_{i,r,e}. \quad (8)$$

The main regressors in equation (8) is analogous to equation (2) above. These are the shares of skilled and unskilled migrants over the regional population in 2005 in region  $r$ , with skill  $s = H, S$ . The outcome of interest is the probability that individual  $i$ , resident in region  $r$  votes at national elections  $e$ . The explanatory variable of interest are the changes of  $m_{r,e}^s$  determined by shift-share-driven changes in  $\frac{\Delta s_m}{Pop}$  and  $\frac{\Delta u_m}{Pop}$ . These changes allow to estimate coefficients  $\hat{\beta}_s$  for  $s = H, L$ .

The second channel discussed in equation (7) is the change in individual preferences. The information available from the ESS allows to gain some insight over this channel too, by looking also at longitudinal changes in party preferences.<sup>19</sup> Defining  $Nation_{i,r,t}^{\pi^c}$  the normalized level of nationalism of the party  $\pi^c$  preferred by voter  $i$  in region  $r$  at year  $t$  and  $Nation_{i,r,t-1}^{\pi}$  the normalized level of nationalism of the party  $\pi$  voted in election year  $t-1$ , we can then compute:

$$\Delta Nation_{i,r,t} = Nation_{i,r,t}^{\pi^c} - Nation_{i,r,t-1}^{\pi}, \quad (9)$$

that is the variation of the level of nationalism for individual  $i$  capturing preference shift, independent from participation to vote. Using equation (9) as our dependent variable we can perform an individual panel analysis (both with Least Squares and 2SLS) with the following equation:

$$\Delta Nation_{i,r,t} = \alpha + \beta_H \Delta m_{r,t}^H + \beta_L \Delta m_{r,t}^L + \gamma \Delta \mathbf{\Gamma}_{r,t} + \eta \Delta Year_{i,r,t} + \theta_t + \Delta \epsilon_{i,r,t}, \quad (10)$$

where  $\Delta m_{r,t}^s$  and  $\Delta \mathbf{\Gamma}_{r,t}$  are respectively the variation of the migration share and regional characteristics of region  $r$  between the year  $t$  and the year of the last election  $t-1$ . The variable  $\Delta Year_{i,r,t}$  captures the number of years between the year of last election ( $t-1$ ) and the year ( $t$ ) when the individual reveals his preferred party. This should correspond to a linearization of function  $f_j$  in equation (7). Let us emphasize that the individual panel analysis fully controls for individual characteristics, avoiding the potential omitted variable bias at the individual level and bypassing the issue of change/selection into vote participation because it includes all people who voted in the early election independently of their later participation. Poutvaara and Steinhardt (2018) is the only paper that we know of that exploits variation in individual preferences over time. However, that study looks at the effect of "bitterness" on attitudes towards migration in Germany, while we analyze the effect of local migration on individual voting across the Europe.

## 4 Main Results

Table 4 presents our baseline results. The reported coefficients capture the impact of immigrants as share of the population on the intensity of nationalism in local electoral outcomes. We report a first set of estimates for all migrants in the sample (top panel), and two additional sets of results where we focus on migrants from non-EU origins (middle panel) and migrants from EU origins (bottom panel). For each set of estimates, we run different specifications by OLS and IV. In columns (1) and (2), the share of total immigrants relative to the total population of residents in 2005 is the main regressor. Then, we focus on the immigrant share of

<sup>19</sup>The question in the ESS is defined as follow: "Which party feel closer to?". As it is shown in Table A3 in the on-line appendix, the percentage of "don't know" answers is not surprisingly high (on average 34%).

high-skilled (columns (3) and (4)) and on the immigrant share of low-skilled (columns (5) and (6)), respectively. In columns (7) and (8), we include both shares of high-skilled and low-skilled in the same regression. All specifications include NUTS2 regional dummies, election year fixed effects, plus regional and individual controls.

[INSERT Table 4 HERE]

The F-stat of the first stage (reported in the table for all IV estimates) shows that the shift share instrument has significant power. However, when the two shares (high and low-skilled) are included together as explanatory variables and instrumented, the F-stat deteriorates significantly and drops below 10. This is likely an effect of the high correlation between the IV for high and low skills. The OLS and IV estimated coefficients are qualitatively consistent with each other in all specifications. Baseline estimates in the top panel of Table 4 suggest that, on average, a higher share of immigrants among residents encourages citizens to vote for more nationalistic policy agendas in the elections.<sup>20</sup> However, when separating the effect of the shares of low- and high-skilled immigrants, we see a clear and significant difference. A higher share of low-skilled immigrants is associated with votes for more intense nationalistic agendas. Conversely, a higher share of high-skilled migrants is associated with vote for less nationalistic agendas<sup>21</sup>. The coefficients are more precisely estimated for the low-skilled than the high-skilled migrant shares, particularly when it comes to IV estimates. The size of the coefficients is larger under IV compared with OLS estimations. This suggests IV corrects for omitted factors that produce an attenuation bias in OLS estimates.<sup>22</sup> Estimates in the middle and bottom panel of Table 4 show that not only skills, but also migrants' origins matter. The positive effect of low-skilled migrant shares on nationalist voting seems mostly driven by migrants from extra EU countries (see IV estimates in columns 6 and 8). The anti-nationalist voting effect of skilled migration is similar for migrants coming from EU and non-EU countries, but more precisely estimated for the former compared to the latter group.

We can evaluate the economic magnitude of these effects by using the estimated marginal effect of migration shares, together with the corresponding standard deviations reported in Table 2. Taken at their face value, IV estimates in column (8) top panel of Table 4 indicate that one standard deviation increase in the share of low-skilled migrants (6.1 percentage points) shifts voting of individuals towards a more nationalist agenda by  $0.73 (= 6.1 * 0.12)$  standard deviation of the nationalism indicator. This is a sizable effect, almost equivalent to the distance in the nationalist policy pursued by a party belonging to the Socialist family ( $-0.29$ ) and a Confessional ( $0.55$ ) family. The magnitude of the negative effect of one standard deviation increase of the share of high-skilled migrants on nationalist voting is smaller. This is due to the fact that skilled immigration and its variation was small across European regions, so that a similar coefficient multiplies a smaller standard deviation. The effect is equal to  $-0.34 (= 3.1 * (-0.11))$  standard deviations. This anti-nationalist effect slightly increases, and is more precisely estimated, when we focus on EU skilled migration only. It

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<sup>20</sup>Our population of voters includes individuals that were born in the country of destination; i.e., also second and higher generation of migrants.

<sup>21</sup>This result is consistent with the main finding of Mayda et al (2018) on US election. They find that an increase in skilled immigrants in the US reduces the percentage of votes to Republicans, while an increase in low skilled immigrants increases the Republican share of votes.

<sup>22</sup>e.g. Low-skilled immigrants may decide not to go to European regions characterized by a high intensity of nationalist voting. Similarly, omitted economic or social factors at the regional level may determine both low immigration rates and pro-nationalist voting. We discuss the role of local regional conditions more in detail in Table 7 below.

is roughly equivalent to shifting voting of individuals from the agenda of a Radical Left party, guided by economic concerns regarding the European integration process, to the open views of most Socialist parties in Europe.

[INSERT Table 5 HERE]

Table 5 analyzes whether the electoral vote response to immigrants also reveals a change in salience of nationalism in the party agenda. The estimates suggest that the effect of immigration on the index of salience of nationalism in voted parties is similar to the effect on intensity of nationalism itself. Low and high-skilled migration have opposite effects on salience, both when indicators are entered individually (in columns from (3) to (6)), and when the shares of low/high-skilled migrants are included together (in columns (7) and (8)). A higher share of low-skilled migrants makes nationalism a more salient topic among voted parties. Conversely, a higher share of high-skilled migrants reduces the salience of nationalism among voted parties. Signs of the coefficients are stable across specifications. As in the previous results, coefficients are larger in IV relative to OLS estimates. Estimates in the middle and bottom panel of Table 5 show that the negative effect of high-skilled migration is significant for both EU and non EU migrants, while the positive effect of low-skilled immigrants is more precisely estimated and somewhat larger for extra EU immigrants.

[INSERT Table 6 HERE]

Table 6 shows robustness of the main coefficients as estimated in Table 4, column (8), top panel, to the inclusion/exclusion of individual and regional controls, using the IV estimation strategy. In column (1), we drop from the specification the set of individual and regional controls and we keep the regional and election fixed effects. Results are very similar both in terms of size and significance to those in Table 4, column (8), top panel. In column (2), we include migration flows, measured as the change in migrants stocks between the most recent consecutive election years, as a control. The reason for including these controls is to check whether, recent acceleration of immigrant flows, besides their level, matters to Voters' preferences. These variables are not significant, and their inclusion does not make any difference in our results. In column (3), we include a baseline set of individual characteristics i.e. a dummy for female/male, a dummy for tertiary education and linear age. In column (4), we include the set of regional controls i.e. per capita GDP, population density, regional unemployment rate, and share of residents with tertiary education, without individual controls. Finally, in column (5) we include the complete set of individual and regional controls, so as to obtain our baseline specification.

Our main results remain stable across all the specifications. Among individual controls, being female, and having tertiary education are associated with voting for parties with a significantly less nationalistic agenda compared to being male or less educated, respectively. Age does not have any significant correlation with the intensity of nationalist vote. Among regional controls, the negative significant coefficient of unemployment and the positive significant coefficient of the share of residents with tertiary education signal that residents in better off regions, surprisingly, vote for more nationalist and Eurosceptic policy agenda. However, the effect of immigration on voting preferences is not related to regional level of unemployment/economic performance. This is shown in Tables A11 and A12 in the on-line appendix, where we test the effect of immigration on voting by subgroups on regional unemployment rate quartiles and variations. The negative and marginally

significant coefficient of population density suggests that residents in more dense/urban regions in Europe have less nationalistic views.

[INSERT Table 7 HERE]

In Table 7 we discuss the interaction between the possible relevance of regional public goods and the pro-nationalist voting behavior of individuals in a framework as described in equation (5). We look at three indicators of regional economic and social conditions: the value of per capita social benefits as a measure of welfare generosity; the ratio of children to adults as a proxy for the importance of schooling; and the total number of crimes in the region as a proxy for the value of public safety.<sup>23</sup> For each variable, we construct a dummy for regions above the median, and a dummy for regions below the median. In columns (1) and (4), we show the interactions with social transfer below/above the sample median. In columns (2) and (5) we show those with children-to-adult ratios below/above the sample median. Finally, in columns (3) and (6) we show the interactions with crime rates below/above the sample median. The first finding is that the point estimates of the high-skilled immigrants share is always negative and the effect of low-skilled immigrants share always positive on nationalism, in any set of regions. For social transfers and crime rates, the estimates are noisy and we cannot reject that the effect of high-skilled and low-skilled immigrants is the same for regions above and below the mean. However regions with high children-to-adult ratio show a stronger pro-nationalist shift in response to low-skilled immigrants and a weaker anti-nationalistic shift in presence of high-skilled immigrants. This suggests that in places where school crowding may be an important issue, citizens are more likely to be driven to nationalistic platforms in response to immigration. Those results seem to confirm the suggestion of Halla *et al.* (2017), where the votes of Austrian citizens for their populist party are higher for municipalities where the concerns about the education of children was higher. Differences in level of crime do not seem a strong driver of different responses, confirming the results of Mendez and Cutillas (2014).<sup>24</sup>

## 5 Heterogeneity in Individuals' Voting Response

The baseline results implicitly assume that the effect of high and low-skilled immigration on citizens' voting is homogeneous across individuals. To allow for heterogeneous effects of migration across voters' individual characteristics, we run regressions on separate subsamples of citizens by their education level, separating tertiary and non tertiary educated, by age (grouping 18-37, 38-57, and 58+ together), by gender (male and female) and by place of residence, separating rural areas, cities, or small towns. We summarize these coefficients in figures rather than tables. Figure 8 plots the estimated effect of high-skilled migration (Mig HS, blue line), and low-skilled migration (Mig LS, green line) for each of these subgroups. Shaded areas denote the 95% confidence intervals around the estimated value.

[INSERT Figure 8 HERE]

Panel (a) reports results by education level and shows a remarkable difference in the response of more and less educated natives to high and low educated immigrants. Interestingly, less educated citizens are pushed

<sup>23</sup>See the on-line Appendix I for details on source and construction of these variables.

<sup>24</sup>Results with origin specific share of immigrants are available in Table A10 in the on-line appendix.

towards nationalism significantly more than more educated citizens, in response to less skilled immigration (top green line). At the same time, they are *also* pushed away from nationalism more intensely than highly educated citizens in response to high-skilled immigrants. One standard deviation increase in the share of low-skilled migrants raises nationalist voting by individuals without tertiary education by  $1.04 (= 6.1 * 0.17)$  standard deviations of the nationalism indicator. This is a very large effect, comparable almost to the distance in policy preferences between voters of a Liberal party (-0.55) and a Confessional party (0.55), on average. Symmetrically, less educated natives are also rather responsive to high-skilled migration. One standard deviation increase in high-skilled migration reduces nationalist voting by  $-0.74 (= 3.1 * (-0.24))$  standard deviations of the nationalism indicator. Education of citizens seems to reduce the responsiveness of voting behavior to the migration phenomenon. Highly educated citizens respond little to skilled/unskilled immigrants in their preference for nationalism (which we have seen are already smaller than for low-skilled). This may be a story consistent with Bayesian updating of beliefs: individuals with vague and less formed priors revise their preference more in either direction. Highly educated people are likely to have travelled and have been exposed to immigrants and foreigners in college, hence larger local immigration does not change much their view, which is already a more positive one on immigration. To the contrary, less educated people may know less about immigrants and they use local experience/contact to revise their preferences.

Age seems a somewhat relevant dimension too in affecting citizens' response (see Panel (b)). Size and statistical significance of the marginal effect of low-skilled migration on nationalist voting increase somewhat with age. The response to high-skilled immigration does not seem to change monotonically with age and is stronger for the age group 38-57. This probably reflects a higher frequency of migrant-native interactions in this age category (e.g. for work reasons). Panel (c) displays the gender heterogeneity. Low-skilled immigration increases nationalist voting both among males and females, while high-skilled migration encourages anti nationalist voting only among males. Females show less sensitivity to immigration on the content of their vote, just as more highly educated did, and they also are on average less likely to vote for nationalistic agendas. Finally, Panel (d) reports results by voters' place of residence. The strongest response in either direction belongs to individuals living in mid-size towns rather than in cities.<sup>25</sup> This probably reflects the fact that an increase in the number of migrants in a city, where exposure is already high, does not add much to the information set of local voters. Nationalist voting behavior of individuals living in towns is instead affected positively by low-skilled migration and negatively by high-skilled migration. This suggests that frequency of interactions or change in intensity in local news may play a bigger role in small towns. Voters in rural areas respond to low-skilled migration by voting for more nationalist parties, while they do not seem to respond to high-skilled migration.<sup>26</sup>

In modern parliamentary democracies, individuals reveal their political preferences for policy platforms only indirectly, by voting for parties whose political agenda cover multiple issues. For this reason we investigate to what extent the mechanisms highlighted into our baseline analysis and captured there by a constructed index, translate into actual voting for specific party groups. Figure 3 shows that Liberal and Radical Right party families stand at opposite sides of the nationalist political spectrum. The former group presents a policy agenda, which favors immigration, being open to economic, political and cultural Euro-

<sup>25</sup>Similar results were found by Barone *et al.* (2016), where the effect of immigration on voting shares for right parties in Italy are mainly driven by middle sized municipalities.

<sup>26</sup>In the appendix we report the full set of results, also by migrants' origins. Estimates in the middle and bottom panels of Tables A-1 to A-4 confirm the effect of low-skilled migrants is generally related to extra-European migration, while the anti-nationalist, pro-European voting effects of skilled migration is driven by intra-European migrants.

pean integration. The latter group has often strong anti-immigration views, and rejects EU integration on the basis of sovereignty arguments and cultural claims. We thus estimate a linear probability model to analyze how migration affects voting shares to parties belonging to both groups. Results in Table 8 suggest that low-skilled immigration encourages voting for radical right parties, having no effect on voting for liberal parties. Symmetrically, high-skilled immigration encourages voting for liberal parties, while having no effect on voting for radical right parties. These effects are consistent with previous results and describe shifts towards the two opposite sides of the political spectrum in response to high and low-skilled immigrants.

[INSERT Table 8 HERE]

In Table A-5 in the appendix, we disentangle this effect further, and distinguish the voting behavior of tertiary and non-tertiary educated individuals. Results show that the effects of migration on the propensity to vote for radical right and liberal parties regards both tertiary and non-tertiary educated individuals in a rather similar manner.<sup>27</sup>

## 6 Effects on Turnout and on Longitudinal Individual Preferences

Baseline results in Table 4 suggest that low and high-skilled migration have opposite effects on voting for nationalistic political agendas. The repeated cross-sectional structure of ESS data that we used so far implies that these effects may be driven by two channels. The first one is *voting turnout*. Individuals with nationalist political views may respond to immigration by voting in larger proportions when more immigrants flow in. The second one is *change in individual preferences*: if individuals change their views on nationalism over time, in response to migration, independently of their propensity to vote.

Table 9 presents the estimated coefficients on the share of high and low-skilled immigrants on voters' turnout, defined as the probability of voting for individuals 18 years or older. The specification is similar to the one for nationalism, except that a dummy "voting at last election" is used as outcome instead of the nationalism index. Neither low-skilled nor high-skilled migration seem to be correlated with the propensity to vote at the elections. This is also true when we consider separate subsamples by individual education (tertiary and non tertiary) and age (18-37, 38-57, over 58+).<sup>28</sup>

As we discussed in the data section, information in ESS data also allows an investigation of the effects of migration on the change in individual preferences, by exploiting a longitudinal component of the data. There are two specific questions on voting preferences of individuals i.e. "*which party did you vote in the last national election?*", and "*which party do you (currently) feel close to?*". Answers to those questions refer to different moments in time i.e. the year of last national elections, and the year of the survey interviews. This allows us to estimate equation (9) and exploit variation over time in the voting preferences of the ESS respondent between the current year and the last national elections. Let us emphasize that we can collect the information on current political preferences for all people who voted at the last elections, independently if they would vote or not today. Hence, not only we control de facto for all individual characteristics by taking

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<sup>27</sup>In on-line Appendix VI we further explore the effect of voting for radical right and liberal parties by migrants countries of origin (Tables A13 and A15 ) and voters education (Tables A14 and A16) .

<sup>28</sup>Additional results are available in the on-line Appendix VII, where we explore the effects by migrants origin (Table A17), voters education (Table A18), age (Table A19) and political self-orientation (Table A20). On average we do not find any significant results.

a within-individual difference, but, conditional on voting in the past elections, we also abstract from changes in the voting probability in the more recent period. Hence this exercise selects only changes in individual party preferences. The results shown in Table 10 confirm a positive and significant effect of the change in the low-skilled migrant share on change of individual preferences towards nationalist parties. This effect is more precisely estimated for less educated individuals, and driven by not European migrants. Both features are consistent with the estimates of repeated cross section. Moreover the estimated coefficients are not far from those in Table 4.<sup>29</sup> Results also confirm the negative effect of high-skilled migration on nationalism, although this effect is not statistically significant. Caution is needed when interpreting these results. In general, a statement of current party preference may not be as strong as a measure of party voting at the last elections. The way political preferences change since an election depends on the program implemented by the newly elected government. More importantly, individuals are better informed and more involved into party policy platforms when national elections are close. Their interests may be reduced in non-electoral times. This may generate a larger measurement error of preferences in the more recent period, which could result in an attenuation of the effects. The subsample we use for estimates in Table 10 is also smaller than our baseline sample, as only the 60% of individuals that voted at national elections, also responded to the question about party closeness.<sup>30</sup> With these caveats in mind, we can still say that results in Tables 9 and 10 are consistent with the view that the effect of migration on nationalist voting is mainly due to an individual preferences' shift rather than a change in voting turnout of specific groups of voters.

Finally, to further document the plausibility of the preference shift in response to immigrants, we analyze the change in individual attitudes towards migration, reported in the ESS. In Table 11 we present results for the effect of skilled and unskilled immigrant shares on individual attitudes towards immigration. Specifically we consider some questions in the survey and we follow the existing literature (see e.g. Card *et al.* 2012) distinguishing assessments about the economic and the cultural desirability of immigrants. We also consider an overall assessment revealing the general view on the role of migration in a country. In columns (1)-(3), we analyze the effect of migrants' shares on individual evaluation whether *migrants are good for the country's economy*. In columns (4)-(6), we look at the effect on their assessment whether *migrants enrich a country's culture*. In columns (7)-(9), we analyze the effect on individuals' opinion whether *migrants make a country a better place to live*. We normalize each variable so that each one takes value between 0 (negative evaluation) and 1 (positive evaluation). The negative coefficients of migration shares suggest that higher migration is associated with more negative evaluations of immigration by natives. In particular, low-skilled immigration has negative and significant impact on the cultural and overall assessment while high-skilled immigration has generally non significant effects. The stronger effects on cultural rather than economic variables are consistent with a view in which "national values" come into play in affecting natives assessment more than economic effects. Results from individual panel analysis in Table 10 are consistent with the significant negative effects of less skilled immigrants on natives attitudes. Taken with the rest of the evidence, it appears that individuals are pushed to more nationalistic views by low-skilled immigration, while high-skilled immigration has the

<sup>29</sup>The coefficient of the low-skilled migrants' share in column (1) indicates that one standard deviation increase in the variation of low-skilled migration (0.97) increases the variation of individual nationalism by 0.068(= 0.97 \* 0.07), that is almost 10% a standard deviation of the variation of nationalism indicator (0.628).

<sup>30</sup>In Figure A2 in the on-line appendix we show that the nationalism distribution of individuals in the subsample is the same as in the main sample. Moreover estimating equation (2) using the subsample of people that express the party voted during the last national election and the party they actually feel close to, we obtain the same results as in Table 4. This reassures us that the results in Table 10 are not driven by selective attrition into non-response in the current period. In Tables A21 and A22 available in the on-line appendix we perform the same analysis by country of origin and on subsamples of individual level of education. The results are similar to our baseline.

opposite effect. Additional results are available in the on-line Appendix IX, where we decompose the results by immigrants country of origin.

## 7 Simulations of Nationalist Voting Scenarios

Our results provide a new understanding of how local inflows of low and high-skilled immigrants interact with characteristics of local residents and affect their intensity of nationalist voting behavior. In particular the education level of European citizens turns out to be a very important factor in their vote response to immigrants. This is interesting and relevant from a policy perspective, as education policies and achievements will affect the politics of regions vis-a-vis immigration (see e.g. Braga *et al.*, 2013). In this section, we produce some simulation exercises based on our estimates. These simulations offer scenarios on the possible response of nationalism levels across European regions under alternative hypotheses regarding potential inflows of immigrants and potential education level of the local population.

We use as a benchmark the regional change in levels of nationalism (of voted parties) predicted by the coefficients on the skill specific migration shares estimated separately by education category (as in Figure 8, panel (a)). We first feed into this prediction the observed changes in the stock of low-skilled and high-skilled migrants during the last ten sample years (i.e. over the period 2007-2016). In practice, we predict the regional response of nationalism to immigration 2007-2016 using the following equation:

$$\begin{aligned} \Delta \widehat{Nation}_r = & \hat{\beta}_{NT}^{HS}(1 - Tert_{r,16}) \frac{\Delta M_{r,16-07}^{HS}}{Pop_{r,05}} + \hat{\beta}_T^{HS}(Tert_{r,16}) \frac{\Delta M_{r,16-07}^{HS}}{Pop_{r,05}} + \\ & \hat{\beta}_{NT}^{LS}(1 - Tert_{r,16}) \frac{\Delta M_{r,16-07}^{LS}}{Pop_{r,05}} + \hat{\beta}_T^{LS}(Tert_{r,16}) \frac{\Delta M_{r,16-07}^{LS}}{Pop_{r,05}}. \end{aligned} \quad (11)$$

In equation (11),  $\hat{\beta}_E^s$  is the estimated coefficient of the share of migrants with skill  $s = HS, LS$  (high-skilled, low-skilled) for natives of education  $E = T, NT$  (tertiary, non tertiary educated). Each coefficient is weighted by the corresponding share of natives with and without tertiary education ( $Tert_{r,16}$ ) and multiplied by the observed change in the stock of migrants in the corresponding skill group, (normalized by population size in 2005 i.e.  $\frac{\Delta M_{r,16-07}^s}{Pop_{r,05}}$ ). Even though we could not include Italy and Greece in our estimations due to a lack of voting data, we include them in our simulations. By so doing, we assume that the response of their citizens is similar to that of other EU countries, and we can predict their simulated response as they are important immigration-recipient countries in the EU context.

[INSERT Table 12 HERE]

In Table 12, we report results from this simulation at country level. Results in column (3) show that, on average, the combination of natives' education and skill composition of migration flows in the last ten years increased nationalism levels in the EU. However there is a lot of cross-country heterogeneity. Column (2) shows country-specific average predicted effects, using the regional population as weights. The model predicts an increase in nationalism in countries characterized by relatively low share of people with tertiary education (e.g. Italy) and/or a prevalence of low-skilled migration (as in Belgium, Denmark, Italy). On the contrary, predicted nationalism decreases in countries such as Austria, Sweden and Switzerland, as these are



characterized by high shares of tertiary educated individuals (more than 30%) and more balanced inflows of low and high-skilled immigrants in the considered period. The share of tertiary educated people in the country is reported in column (4), and the 2007-2016 inflow of high-skilled and low-skilled as percent of the group is reported in columns (5) and (6) of Table 12. Notice that immigration-predicted changes in nationalism in each country have quite different magnitudes and sometimes opposite signs compared to the actual changes presented in column (1) of Table 12. This makes clear that several other factors have affected nationalist voting behavior, besides the actual inflow of immigrants (e.g. economic conditions, the increased inequality, frustration with EU bureaucracy and so on. See Algan *et al.*, 2017).

[INSERT Figure 9 HERE]

Figure 9 displays the predicted changes of nationalism at the NUTS2 regional level for all countries of Western and Northern Europe. In several regions, the skill composition and the migration inflows during 2007-2016 predict a reduction of nationalism levels (areas in light and dark blue). This is the case of regions such as Madrid (-0.202) in Spain or Thuringia (-0.09) in Germany. These places are characterized by low levels of low-skilled immigration and large net flows of highly educated immigrants, combined with a significant share of tertiary educated natives. Nationalism decreases even more in regions such as Provence-Alpes-Côte d’Azur (-0.498) in France, Zurich (-0.960) in Switzerland and Great London (-0.500) in the UK, where growing economies and high prices attracted large shares of high-skilled migrants relative to low-skilled migrants.<sup>31</sup> On the opposite side of the spectrum, we find areas that attracted many low-skilled migrants compared to high-skilled migrants. The rise in low-skilled immigration compared to high-skilled immigration increased the level of nationalism in regions as Basilicata (0.385) in Italy, West Midlands (0.614) in UK, and Syddanmark (0.470) in Denmark, where the rise of low-skilled immigration was more than 10 times higher than the rise of high-skilled immigration and the level of tertiary educated natives is not particularly high.

In Figure 10 we use our estimated model to simulate four alternative scenarios of nationalist responses to different migration outcomes. The first scenario hypothesizes a *skill selective migration* that allows high-skilled immigrants and deters low-skilled immigrants altogether. This scenario is depicted in panel (a), and is obtained by setting  $\Delta M^{LS} = 0$  in equation (11) while leaving  $\Delta M^{HS}$  as on 2007-2016. Country-specific results are available in column (7) of Table 12. Compared to the benchmark in Figure 9, this selective policy induces a decline of nationalism almost everywhere in Europe. Such fall is significant and produces a different effect compared to the benchmark in regions of Italy, North of France and UK, where natives experienced a high presence of low-skilled migrants. This scenario is discriminatory, and explicitly violates Schengen rules of free circulation of European citizens. In panel (b) we present a second scenario: a skill selective policy that allows low-skilled migration from EU countries only but prevents unskilled non-Europeans from entering. This is obtained by setting  $\Delta M_{nonEU}^{LS} = 0$  for all regions in equation (11). This policy would be less effective in preventing nationalism in regions in Italy, Spain and UK, as it would not prevent low-skilled migration from Central European EU countries. The two scenarios above impose full restrictions to low-skilled migration and their effects are not surprising: they reduce the nationalistic drift, since low-skilled immigration enhances nationalistic positions. The next two scenarios allow low-skilled migration as long as it is balanced by high-skilled migration. These are in line with more open policies towards immigrants, but balanced ones that allow skilled and unskilled immigrants. In panel (c) we consider a *skill balanced migration*

<sup>31</sup>In some cases the variation of low-skilled immigrants is negative, like in Provence-Alpes-Côte d’Azur.

*policy* obtained by setting  $\Delta M^{LS} = \Delta M^{HS}$  in equation (11) so that immigration would not alter the skill ratio of a region. Interestingly enough, this policy<sup>32</sup> induces a decline of nationalist voting, which is quite sizable, although not as strong as the first policy (panel (a)). The effects of this policy are also shown in column (8) of Table 12 for each country. In panel (d) we consider a balanced skilled migration from non-EU countries only, i.e.  $\Delta M_{nonEU}^{LS} = \Delta M_{nonEU}^{HS}$ . Again, we see anti-nationalistic shifts in most regions by balancing the skilled-unskilled inflow from extra EU.

Figure 11 presents, instead, four alternative predictions based on alternative education achievements in EU regions. In panel (a), we present a scenario that shows only the direct effect of a higher share of tertiary educated individuals on nationalism. In practice, we add the term  $\hat{\beta}_T Tert_{r,16}$  to the predictive equation (11). The coefficient  $\hat{\beta}_T$  measures the direct effect of a higher share of tertiary educated individuals in the region on the change in nationalism, as we estimated in individual regressions. This simulation scenario is not too different from the benchmark in Figure 9. It shows somewhat lower nationalist voting in Northern regions of Spain, Continental and Northern European regions in Germany, Sweden, and Finland as the generalized increase in college educated produced such direct attenuation. Education is an effective means to contrast nationalist attitudes in most of these regions. In panel (b), we then hypothesize a European education policy that raises the share of tertiary educated individuals by 20% in all regions, and we keep the immigration flows as they were in 2007-2016. Results are available in column (9) of Table 12. This policy reduces voting for nationalistic parties in the same set of places: the Northern regions of Spain and the Continental and Northern European regions. It is much less effective in the UK and Southern European regions (e.g. in Italy, Spain and Greece), where nationalistic views are mostly driven by the presence of low-skilled migration. In panel (c), we present the effects of an alternative education policy that increases in each country the share of tertiary educated individuals up to the best region in the country. Results from this policy are qualitatively similar to the previous one. There are fewer votes for nationalist parties in the usual set of Continental and Northern European regions and Northern Spanish regions. Relative to simulation in panel (b), nationalism decreases also in Northern Greek regions. The scenario does not reduce nationalism levels in the UK, Italy and the South of Spain. Finally, in panel (d) we simulate the effects of a similar education policy that increases everywhere the share of tertiary educated individuals up to 57%, which is the highest regional share in our sample (that we observe in Great London). Results are available in column (10) of Table 12. Compared to simulation in panel (c), this policy somewhat moderates nationalism voting in some Italian regions and produces a significant reduction of nationalism in response to immigration in almost any place in Europe. However, nationalism still increases in this scenario in some Italian regions such as Lombardy, Latium, Umbria and Emilia Romagna.<sup>33</sup> Overall, a more balanced immigration seems a good antidote away from nationalism vote. If politicians had the intelligence of promoting and encouraging high-skilled immigration in Europe they would have political support, likely, also for a certain amount of less skilled one.

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<sup>32</sup>For each region we do not change the size of the immigrants population, but we equally split between high and low-skilled migrants.

<sup>33</sup>Country specific results not available in Table 12 are then available in Table A25 in the on-line appendix. Moreover, in the online Appendix X we perform other simulations and robustness checks. First, using only the statistically significant coefficients from our estimations, (i.e. keeping in equation (11) only not tertiary natives) we plot the results in Figure A3 Panel(a). Second, in Figure A3 Panel (b) we plot the results using origin specific coefficients and migrants variation. Results are similar to our baseline. Finally, in Table A26 and Figure A4 we show the level of nationalism after our predicted variation. Interestingly, several regions that experienced a strong variation towards nationalism were originally less nationalistic.

## 8 Conclusions

In this paper we investigated the effects of different types of immigrant inflows on voters' political preferences and the effects of individual and regional (social and economic) characteristics on voting for nationalist parties.

We addressed these questions using a sample of elections in 12 European Countries, over the period 2007-2016 and measuring the change in high and less skilled immigrants as shares of adult population in regions within those countries. In order to address more directly the connection between party-vote and nationalism, we classified each party on a common scale in terms of the intensity of their "nationalism", based on their political Manifesto. We linked this information to the current political preferences (in terms of party) and the vote in the last election, for a large sample of citizens in 12 EU countries. A skill-specific shift share based on the location of immigrants by country of origin in 2005 provides the IV to proxy exogenous changes in immigrants population. The significant differentiation in country of origin and skill intensities of groups of immigrants allowed us to estimate two separate effects for skilled and unskilled immigrants on residents' voting preferences.

We found a robust negative effect of high-skilled immigration, measured as share of the population, on the intensity of nationalist preferences in the vote of citizens. We also found an opposite and positive association of approximately the same magnitude between low-skilled immigration growth and citizen's nationalist preferences. We also uncovered that the change in preferences driven by immigrants is stronger for less educated citizen voters than for highly educated. While the main results are obtained using a repeated cross section of voting citizens, we found the same effects in longitudinal individual data on preferences for political parties. We finally found that those results are mainly driven by a shift of voting preferences and not by an increasing vote participation of nationalist segments of the population in the national elections.

We also present a number of simulations regarding potential scenarios changing the educational attainment and migration flows in European regions. These simulations point to three main facts. Immigration policies producing more balanced inflows of low and high-skilled migrants would shift political preferences away from nationalist voting. These policies would not reduce immigration but re-balance it, allowing the pro-growth impact of immigrants. Second, closing borders to non EU migrants would also be associated, in most cases, with lower nationalist voting. However, it will forsake the benefits of immigration for the economy and the demographic decline of European regions. Finally, policies increasing the share of tertiary educated individuals may reduce nationalist voting in some countries, particularly Northern European countries. This is because college educated people tend to cast fewer votes for nationalistic parties, and their voting behavior responds less to changes in immigration. We hope these intriguing ideas will stimulate further research in this area.

Table 1: Elections and ESS rounds by country and year

| Country        | (1)<br># Elections | (2)<br>Years     | (3)<br># Rounds | (4)<br>Years           |
|----------------|--------------------|------------------|-----------------|------------------------|
| Austria        | 2                  | 2008, 2013       | 3               | 2010, 2014, 2016       |
| Belgium        | 2                  | 2010, 2014       | 4               | 2010, 2012, 2014, 2016 |
| Denmark        | 2                  | 2007, 2011       | 3               | 2010, 2012, 2014       |
| Finland        | 3                  | 2007, 2011, 2015 | 4               | 2010, 2012, 2014, 2016 |
| France         | 2                  | 2007, 2012       | 4               | 2010, 2012, 2014, 2016 |
| Germany        | 2                  | 2009, 2013       | 4               | 2010, 2012, 2014, 2016 |
| Ireland        | 2                  | 2011, 2016       | 4               | 2010, 2012, 2014, 2016 |
| Portugal       | 3                  | 2009, 2011, 2015 | 4               | 2010, 2012, 2014, 2016 |
| Spain          | 3                  | 2008, 2011, 2016 | 4               | 2010, 2012, 2014, 2016 |
| Sweden         | 2                  | 2010, 2014       | 4               | 2010, 2012, 2014, 2016 |
| Switzerland    | 3                  | 2007, 2011, 2015 | 4               | 2010, 2012, 2014, 2016 |
| United Kingdom | 2                  | 2010, 2015       | 4               | 2010, 2012, 2014, 2016 |

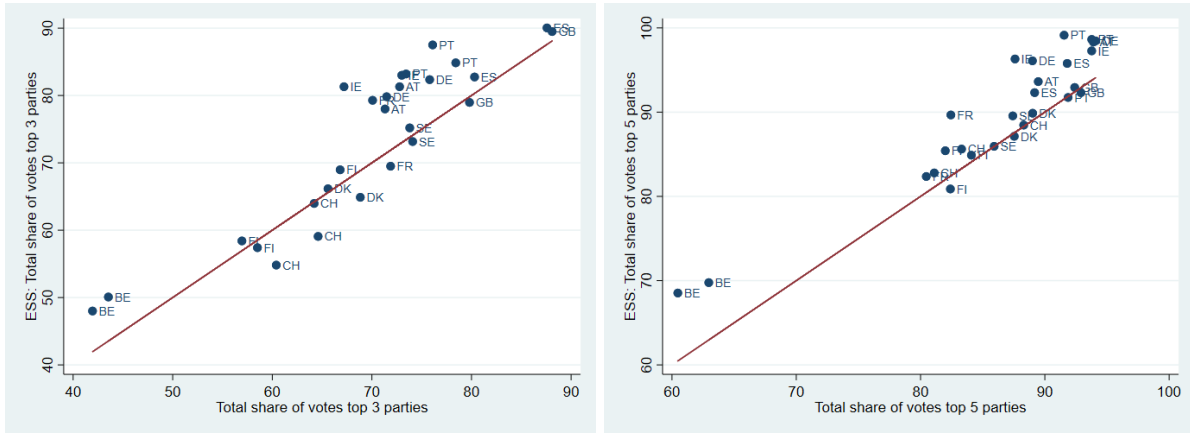
Note: Column (1) shows the number of elections available from ESS and column (2) the year of each elections. Column (3) shows the number of ESS rounds after 2010 by country and column (4) the year of each round. Source: ESS.

Table 2: Summary statistics

| Voting Data                       |                               | Obs.  | Mean    | Std. Dev. | Min    | Max    |
|-----------------------------------|-------------------------------|-------|---------|-----------|--------|--------|
| <i>Individual Characteristics</i> | Age                           | 48767 | 52.264  | 16.899    | 18     | 90     |
|                                   | Female                        | 48767 | 0.502   | 0.500     | 0      | 1      |
|                                   | Tertiary                      | 48767 | 0.356   | 0.478     | 0      | 1      |
|                                   | Tertiary (father)             | 40916 | 0.194   | 0.395     | 0      | 1      |
|                                   | Preferences Pro EU            | 48319 | 0.016   | 0.028     | -0.242 | 0.080  |
|                                   | Salience EU                   | 48319 | 0.032   | 0.019     | 0      | 0.262  |
|                                   | Preferences Pro National way  | 48319 | 0.012   | 0.018     | -0.061 | 0.116  |
|                                   | Salience National way         | 48319 | 0.015   | 0.018     | 0      | 0.117  |
|                                   | Nationalism (PCA, std)        | 48319 | 0       | 1         | -1.607 | 8.113  |
|                                   | Salience Nationalism (PCA)    | 48319 | 0.023   | 0.015     | 0      | 0.174  |
| <i>Regional Characteristics</i>   | GDP per capita                | 261   | 31.644  | 11.749    | 13.267 | 69.901 |
|                                   | Pop density                   | 261   | 420.592 | 1040.895  | 3.3    | 7393.4 |
|                                   | Unemployment rate (%)         | 261   | 9.632   | 5.491     | 0      | 30.1   |
|                                   | Tertiary rate (%)             | 261   | 30.69   | 8.038     | 11.2   | 55.1   |
|                                   | Share of Mig (%)              | 261   | 13.08   | 8.75      | 1.24   | 48.9   |
|                                   | Share of Mig (HS) (%)         | 261   | 3.31    | 3.1       | 0      | 19.1   |
|                                   | Share of Mig (LS) (%)         | 261   | 9.68    | 6.13      | 0.9    | 33.9   |
|                                   | Share of Mig (not EU) (%)     | 261   | 7.11    | 5.02      | 0.2    | 30.6   |
|                                   | Share of Mig (not EU, HS) (%) | 261   | 1.69    | 1.62      | 0      | 13.4   |
|                                   | Share of Mig (not EU, LS) (%) | 261   | 5.42    | 3.79      | 0      | 22.6   |
|                                   | Share of Mig (EU) (%)         | 261   | 5.88    | 5.52      | 0      | 34.4   |
|                                   | Share of Mig (EU, HS) (%)     | 261   | 1.62    | 1.86      | 0      | 11.7   |
|                                   | Share of Mig (EU, LS) (%)     | 261   | 4.26    | 3.88      | 0      | 24.5   |

Note: authors' calculations on ESS and ELFS data.

Figure 1: ESS data and actual voting

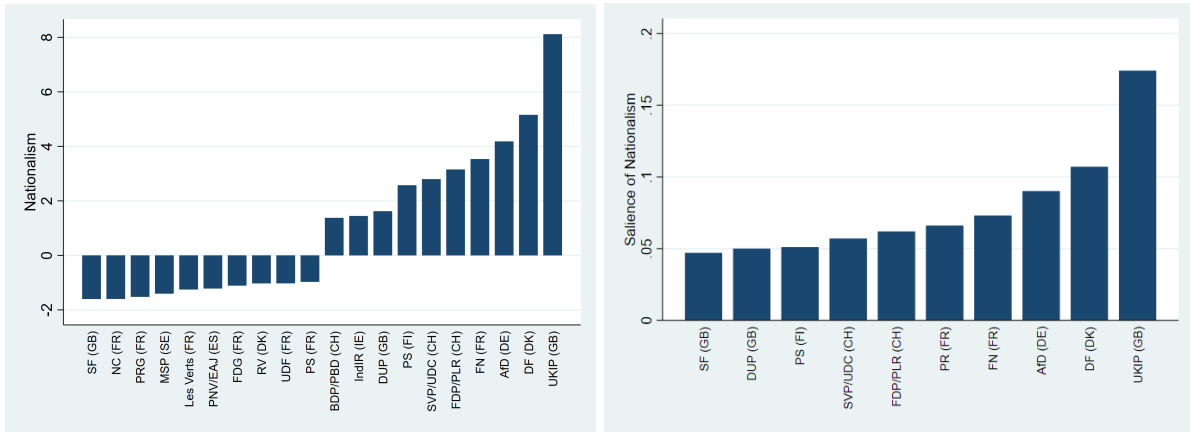


(a) ESS and actual votes - Top 3 parties

(b) ESS and actual votes - Top 5 parties

Note: authors' calculation on ESS and European Election Database (EDD). The figure plots the share of votes of top 3 parties (panel (a)) and top 5 parties (panel (b)) in terms of votes in each election available computed with the EDD (x-axis) and ESS (y-axis).

Figure 2: Salience and Preference for Nationalism across Parties

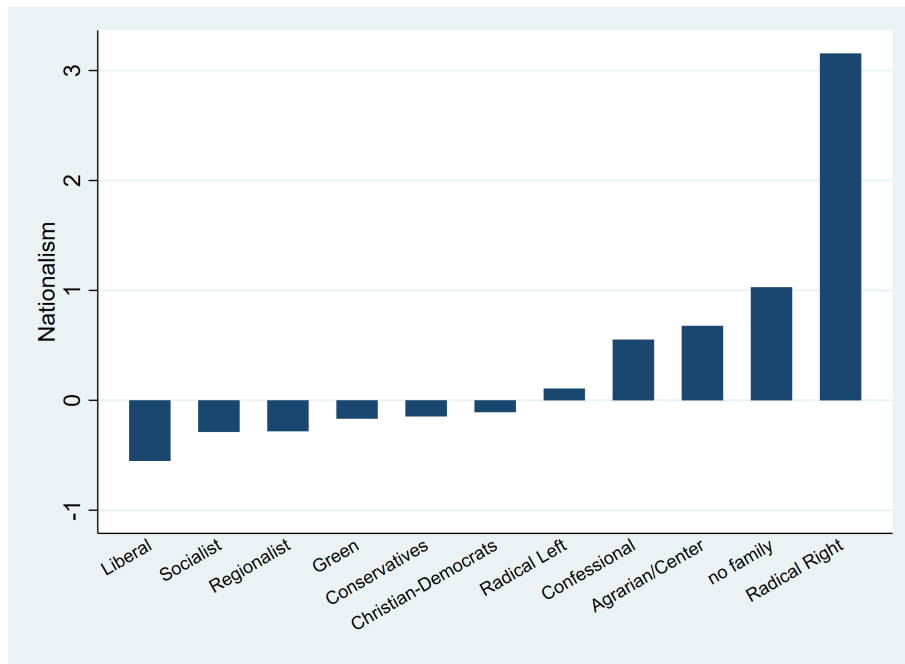


(a) Nationalism (top/bottom 10 parties)

(b) Salience of Nationalism (top 10 parties)

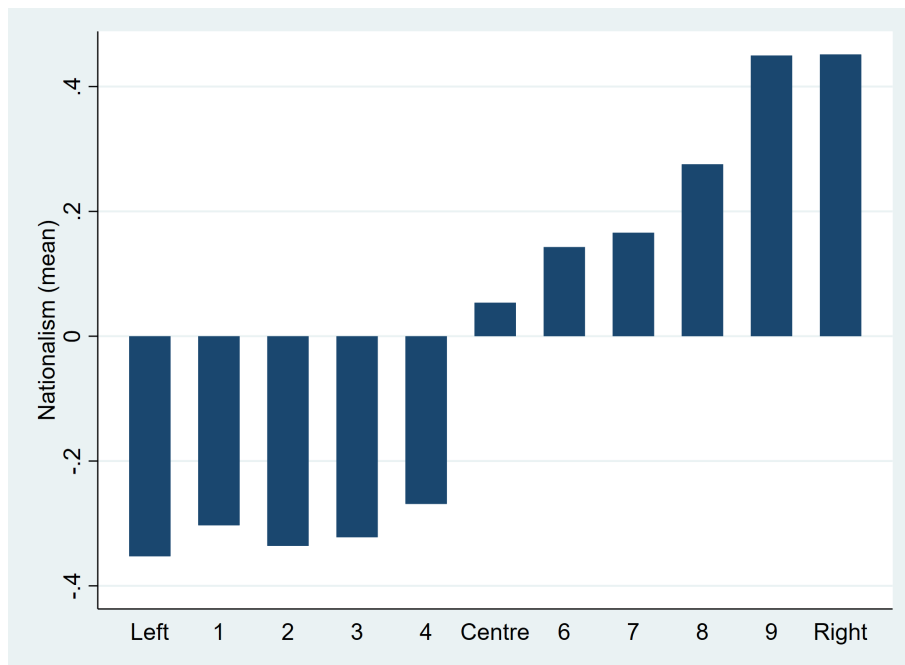
Note: authors' calculations on Manifesto Project Database. The figure plots parties with the highest and lowest level of nationalism index (panel (a)) and parties with highest salience of nationalism (panel (b)) in their political manifesto.

Figure 3: Nationalism by Party Family



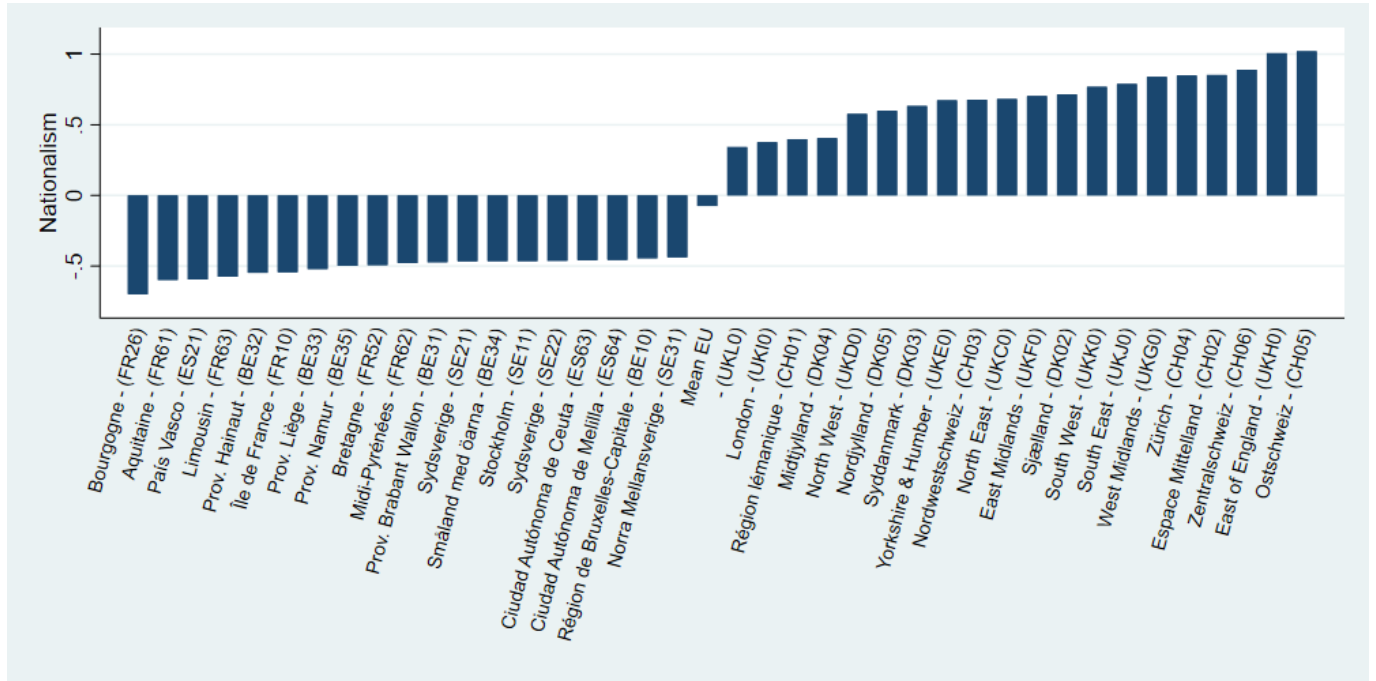
Note: authors' calculation on Manifesto Project Database and Chapell Hill Database. The figure plots the average level of nationalism index by parties' political families. Political families are identified by the Chapell Hill Database, using parties self-identification and belonging in the Europeans parties group.

Figure 4: Nationalism by Left-Right Political position



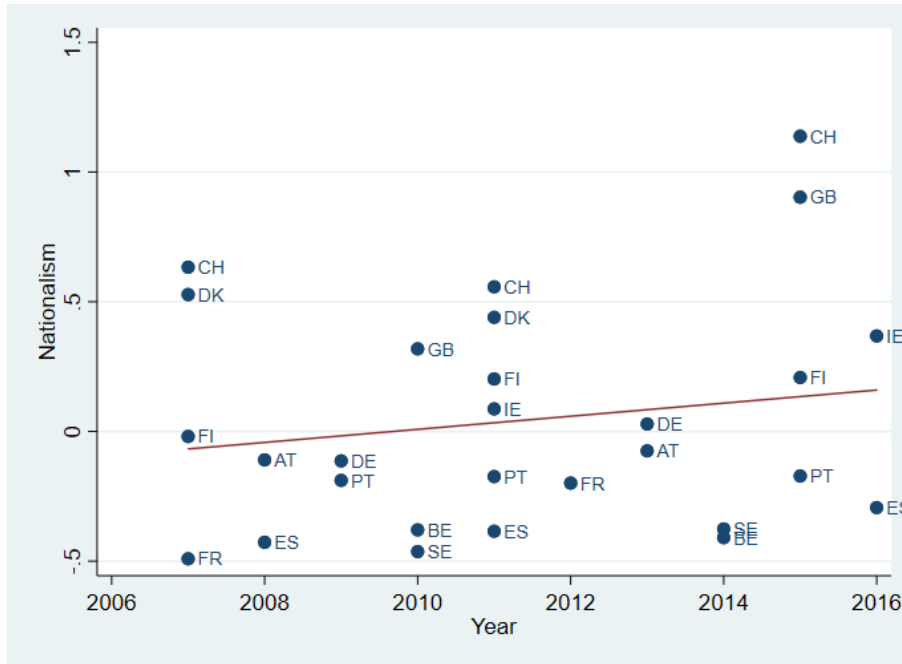
Note: authors' calculation on ESS and Manifesto Project Database. The figure shows the average level of nationalism index associated with each individual self-declared political position on the axis Left-Right.

Figure 5: Average nationalism across regions - top/bottom 20



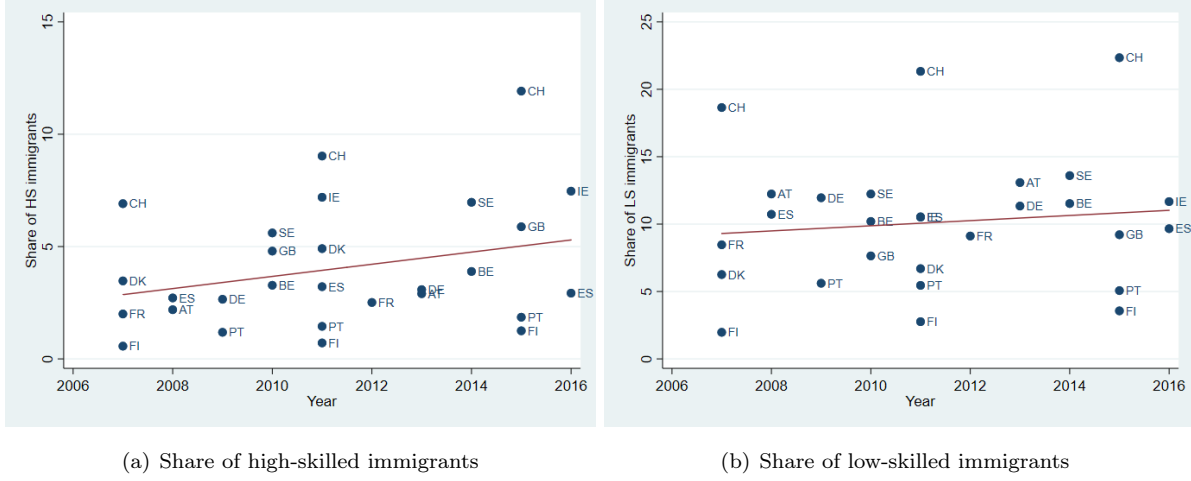
Note: authors' calculations on ESS and Manifesto Project Database. The figure plots the highest and lowest average level of nationalism index at regional level.

Figure 6: Nationalism over time



Note: authors' calculations on ESS and Manifesto Project Database. The figure plots the average country level of nationalism after each election event in our analysis.

Figure 7: Share of high-skilled and low-skilled immigrants over time



Note: authors' calculations on EULFS data. The figure plots the average share of immigrants at regional level by country and education.

Table 3: Correlation between 2000-2005 Economic Indicators and post-2006 Predicted Migrants Growth

| Predicted Mig growth           | (1)<br><i>All</i> | (2)<br><i>All<sub>HS</sub></i> | (3)<br><i>All<sub>LS</sub></i> | (4)<br><i>No EU</i> | (5)<br><i>No EU<sub>HS</sub></i> | (6)<br><i>No EU<sub>LS</sub></i> | (7)<br><i>EU</i> | (8)<br><i>EU<sub>HS</sub></i> | (9)<br><i>EU<sub>LS</sub></i> |
|--------------------------------|-------------------|--------------------------------|--------------------------------|---------------------|----------------------------------|----------------------------------|------------------|-------------------------------|-------------------------------|
| <i>GDP Capita<sub>05</sub></i> | -0.01<br>(0.05)   | -0.14<br>(0.10)                | 0.05<br>(0.03)                 | -0.01<br>(0.10)     | -0.11<br>(0.16)                  | 0.02<br>(0.08)                   | -0.01<br>(0.09)  | -0.14*<br>(0.07)              | 0.04<br>(0.11)                |
| Observations                   | 96                | 96                             | 96                             | 96                  | 96                               | 96                               | 96               | 96                            | 96                            |
| Adj. R-Square                  | -0.01             | 0.12                           | 0.02                           | -0.01               | 0.04                             | -0.01                            | -0.01            | 0.06                          | -0.00                         |
| <i>Empl. Rate<sub>05</sub></i> | -0.00<br>(0.06)   | -0.32***<br>(0.08)             | 0.13**<br>(0.04)               | -0.01<br>(0.16)     | -0.35*<br>(0.18)                 | 0.11<br>(0.14)                   | 0.04<br>(0.22)   | -0.21<br>(0.19)               | 0.14<br>(0.24)                |
| Observations                   | 99                | 99                             | 99                             | 99                  | 99                               | 99                               | 99               | 99                            | 99                            |
| Adj. R-Square                  | -0.01             | 0.21                           | 0.06                           | -0.01               | 0.12                             | 0.01                             | -0.01            | 0.04                          | 0.00                          |
| <i>Population<sub>05</sub></i> | 0.04<br>(0.09)    | -0.14<br>(0.14)                | 0.10<br>(0.08)                 | 0.14<br>(0.21)      | 0.05<br>(0.23)                   | 0.13<br>(0.18)                   | -0.15<br>(0.47)  | -0.43<br>(0.43)               | -0.05<br>(0.51)               |
| Observations                   | 109               | 109                            | 109                            | 109                 | 109                              | 109                              | 109              | 109                           | 109                           |
| Adj. R-Square                  | -0.01             | 0.01                           | 0.01                           | 0.01                | -0.01                            | 0.00                             | -0.00            | 0.08                          | -0.01                         |
| <i>Tertiary<sub>05</sub></i>   | 0.01<br>(0.02)    | -0.02<br>(0.05)                | 0.03<br>(0.03)                 | 0.04<br>(0.05)      | 0.02<br>(0.07)                   | 0.04<br>(0.05)                   | -0.05<br>(0.06)  | -0.09<br>(0.06)               | -0.03<br>(0.06)               |
| Observations                   | 99                | 99                             | 99                             | 99                  | 99                               | 99                               | 99               | 99                            | 99                            |
| Adj. R-Square                  | -0.00             | -0.00                          | 0.02                           | 0.02                | -0.01                            | 0.02                             | 0.01             | 0.09                          | -0.00                         |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at country level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The table shows the predicted coefficients regressing the growth rate of regional macro indicators between 2000 and 2005 on the regional predicted migration growth with our shift-share strategy over the period 2007 and 2012.



Table 4: Nationalism Intensity and Immigrant Share

|                        | (1)<br>OLS     | (2)<br>IV        | (3)<br>OLS       | (4)<br>IV        | (5)<br>OLS        | (6)<br>IV         | (7)<br>OLS        | (8)<br>IV         |
|------------------------|----------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| Time                   | 2007-2016      | 2007-2016        | 2007-2016        | 2007-2016        | 2007-2016         | 2007-2016         | 2007-2016         | 2007-2016         |
| <b>All Migrants</b>    |                |                  |                  |                  |                   |                   |                   |                   |
| <i>Share</i>           | 0.01<br>(0.01) | 0.11**<br>(0.05) |                  |                  |                   |                   |                   |                   |
| <i>Share HS</i>        |                |                  | -0.06*<br>(0.03) | -0.16*<br>(0.08) |                   |                   | -0.08**<br>(0.03) | -0.11<br>(0.10)   |
| <i>Share LS</i>        |                |                  |                  |                  | 0.04**<br>(0.02)  | 0.14***<br>(0.04) | 0.05***<br>(0.02) | 0.12***<br>(0.04) |
| Observations           | 48319          | 48319            | 48319            | 48319            | 48319             | 48319             | 48319             | 48319             |
| K-P rk Wald F-stat     |                | 24.96            |                  | 19.92            |                   | 46.24             |                   | 5.34              |
| Adj. R-Square          | 0.13           | 0.13             | 0.13             | 0.13             | 0.13              | 0.13              | 0.13              | 0.13              |
| <b>Non EU Migrants</b> |                |                  |                  |                  |                   |                   |                   |                   |
| <i>Share No EU</i>     | 0.00<br>(0.01) | 0.12**<br>(0.05) |                  |                  |                   |                   |                   |                   |
| <i>Share No EU HS</i>  |                |                  | -0.08<br>(0.05)  | -0.17<br>(0.19)  |                   |                   | -0.10*<br>(0.05)  | -0.33<br>(0.29)   |
| <i>Share No EU LS</i>  |                |                  |                  |                  | 0.01<br>(0.02)    | 0.15***<br>(0.05) | 0.03<br>(0.02)    | 0.17***<br>(0.05) |
| Observations           | 48319          | 48319            | 48319            | 48319            | 48319             | 48319             | 48319             | 48319             |
| K-P rk Wald F-stat     |                | 31.36            |                  | 12.11            |                   | 38.27             |                   | 7.00              |
| Adj. R-Square          | 0.13           | 0.13             | 0.13             | 0.13             | 0.13              | 0.13              | 0.13              | 0.13              |
| <b>EU Migrants</b>     |                |                  |                  |                  |                   |                   |                   |                   |
| <i>Share EU</i>        | 0.03<br>(0.02) | 0.89<br>(4.45)   |                  |                  |                   |                   |                   |                   |
| <i>Share EU HS</i>     |                |                  | -0.08<br>(0.05)  | -0.23*<br>(0.12) |                   |                   | -0.10**<br>(0.05) | -0.23**<br>(0.11) |
| <i>Share EU LS</i>     |                |                  |                  |                  | 0.09***<br>(0.03) | -0.06<br>(0.11)   | 0.11***<br>(0.03) | -0.02<br>(0.16)   |
| Observations           | 48319          | 48319            | 48319            | 48319            | 48319             | 48319             | 48319             | 48319             |
| K-P rk Wald F-stat     |                | 0.04             |                  | 11.88            |                   | 5.45              |                   | 2.22              |
| Adj. R-Square          | 0.13           | 0.02             | 0.13             | 0.13             | 0.13              | 0.13              | 0.13              | 0.13              |
| NUTS2 f.e.             | Yes            | Yes              | Yes              | Yes              | Yes               | Yes               | Yes               | Yes               |
| Year f.e.              | Yes            | Yes              | Yes              | Yes              | Yes               | Yes               | Yes               | Yes               |
| NUTS2 Controls         | Yes            | Yes              | Yes              | Yes              | Yes               | Yes               | Yes               | Yes               |
| Individual Controls    | Yes            | Yes              | Yes              | Yes              | Yes               | Yes               | Yes               | Yes               |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummy are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is our standardized measure of nationalism.

Table 5: Salience of Nationalism and Immigrant Share

|                        | (1)<br>OLS          | (2)<br>IV          | (3)<br>OLS        | (4)<br>IV           | (5)<br>OLS          | (6)<br>IV           | (7)<br>OLS          | (8)<br>IV            |
|------------------------|---------------------|--------------------|-------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| Time                   | 2007-2016           | 2007-2016          | 2007-2016         | 2007-2016           | 2007-2016           | 2007-2016           | 2007-2016           | 2007-2016            |
| <b>All Migrants</b>    |                     |                    |                   |                     |                     |                     |                     |                      |
| <i>Share</i>           | 0.000**<br>(0.000)  | 0.001<br>(0.001)   |                   |                     |                     |                     |                     |                      |
| <i>Share HS</i>        |                     |                    | -0.001<br>(0.001) | -0.005**<br>(0.002) |                     |                     | -0.001**<br>(0.000) | -0.004**<br>(0.002)  |
| <i>Share LS</i>        |                     |                    |                   |                     | 0.001***<br>(0.000) | 0.002***<br>(0.001) | 0.001***<br>(0.000) | 0.002**<br>(0.001)   |
| Observations           | 48319               | 48319              | 48319             | 48319               | 48319               | 48319               | 48319               | 48319                |
| K-P rk Wald F-stat     |                     | 24.96              |                   | 19.92               |                     | 46.24               |                     | 5.34                 |
| Adj. R-Square          | 0.12                | 0.12               | 0.12              | 0.12                | 0.12                | 0.12                | 0.12                | 0.12                 |
| <b>Non EU Migrants</b> |                     |                    |                   |                     |                     |                     |                     |                      |
| <i>Share No EU</i>     | 0.000<br>(0.000)    | 0.002**<br>(0.001) |                   |                     |                     |                     |                     |                      |
| <i>Share No EU HS</i>  |                     |                    | -0.001<br>(0.001) | -0.007**<br>(0.003) |                     |                     | -0.001<br>(0.001)   | -0.010**<br>(0.004)  |
| <i>Share No EU LS</i>  |                     |                    |                   |                     | 0.000<br>(0.000)    | 0.003***<br>(0.001) | 0.001**<br>(0.000)  | 0.004***<br>(0.001)  |
| Observations           | 48319               | 48319              | 48319             | 48319               | 48319               | 48319               | 48319               | 48319                |
| K-P rk Wald F-stat     |                     | 48.39              |                   | 19.10               |                     | 64.78               |                     | 9.55                 |
| Adj. R-Square          | 0.12                | 0.12               | 0.12              | 0.12                | 0.12                | 0.12                | 0.12                | 0.11                 |
| <b>EU Migrants</b>     |                     |                    |                   |                     |                     |                     |                     |                      |
| <i>Share EU</i>        | 0.001***<br>(0.000) | 0.050<br>(0.244)   |                   |                     |                     |                     |                     |                      |
| <i>Share EU HS</i>     |                     |                    | -0.001<br>(0.001) | -0.006**<br>(0.003) |                     |                     | -0.001*<br>(0.001)  | -0.005***<br>(0.002) |
| <i>Share EU LS</i>     |                     |                    |                   |                     | 0.002***<br>(0.001) | 0.004*<br>(0.002)   | 0.002***<br>(0.001) | 0.005<br>(0.004)     |
| Observations           | 48319               | 48319              | 48319             | 48319               | 48319               | 48319               | 48319               | 48319                |
| K-P rk Wald F-stat     |                     | 0.06               |                   | 21.30               |                     | 6.05                |                     | 2.76                 |
| Adj. R-Square          | 0.12                | -1.36              | 0.12              | 0.12                | 0.12                | 0.12                | 0.12                | 0.12                 |
| NUTS2 f.e.             | Yes                 | Yes                | Yes               | Yes                 | Yes                 | Yes                 | Yes                 | Yes                  |
| Year f.e.              | Yes                 | Yes                | Yes               | Yes                 | Yes                 | Yes                 | Yes                 | Yes                  |
| NUTS2 Controls         | Yes                 | Yes                | Yes               | Yes                 | Yes                 | Yes                 | Yes                 | Yes                  |
| Individual Controls    | Yes                 | Yes                | Yes               | Yes                 | Yes                 | Yes                 | Yes                 | Yes                  |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummy are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is our measure of salience of nationalism.

Table 6: Nationalism and Immigrant Share- Including controls

|                            | (1)                  | (2)                  | (3)                   | (4)                  | (5)                   |
|----------------------------|----------------------|----------------------|-----------------------|----------------------|-----------------------|
|                            | IV                   | IV                   | IV                    | IV                   | IV                    |
| Time                       | 2007-2016            | 2007-2016            | 2007-2016             | 2007-2016            | 2007-2016             |
| <i>Share HS</i>            | -0.137<br>(0.0922)   | -0.092<br>(0.1033)   | -0.133<br>(0.0913)    | -0.113<br>(0.1042)   | -0.110<br>(0.1017)    |
| <i>Share LS</i>            | 0.190***<br>(0.0573) | 0.172***<br>(0.0474) | 0.191***<br>(0.0575)  | 0.119***<br>(0.0428) | 0.121***<br>(0.0424)  |
| <i>Flows HS</i>            |                      | 0.017<br>(0.0876)    |                       |                      |                       |
| <i>Flows LS</i>            |                      | -0.057<br>(0.0425)   |                       |                      |                       |
| <i>Female (ind)</i>        |                      |                      | -0.083***<br>(0.0178) |                      | -0.082***<br>(0.0178) |
| <i>Age (ind)</i>           |                      |                      | -0.001<br>(0.0008)    |                      | -0.001<br>(0.0008)    |
| <i>Tertiary (ind)</i>      |                      |                      | -0.194***<br>(0.0300) |                      | -0.193***<br>(0.0294) |
| <i>GDP cap (NUTS2)</i>     |                      |                      |                       | -0.000<br>(0.0091)   | 0.001<br>(0.0092)     |
| <i>Pop. Dens. (NUTS2)</i>  |                      |                      |                       | -0.001<br>(0.0007)   | -0.001*<br>(0.0007)   |
| <i>Unemp. rate (NUTS2)</i> |                      |                      |                       | -0.015**<br>(0.0064) | -0.015**<br>(0.0065)  |
| <i>Tertiary (NUTS2)</i>    |                      |                      |                       | 0.060**<br>(0.0255)  | 0.058**<br>(0.0249)   |
| Observations               | 48319                | 48319                | 48319                 | 48319                | 48319                 |
| K-P rk Wald F-stat         | 17.81                | 2.92                 | 17.82                 | 5.34                 | 5.34                  |
| Adj. R-Square              | 0.12                 | 0.12                 | 0.12                  | 0.12                 | 0.13                  |
| NUTS2 f.e.                 | Yes                  | Yes                  | Yes                   | Yes                  | Yes                   |
| Year f.e.                  | Yes                  | Yes                  | Yes                   | Yes                  | Yes                   |

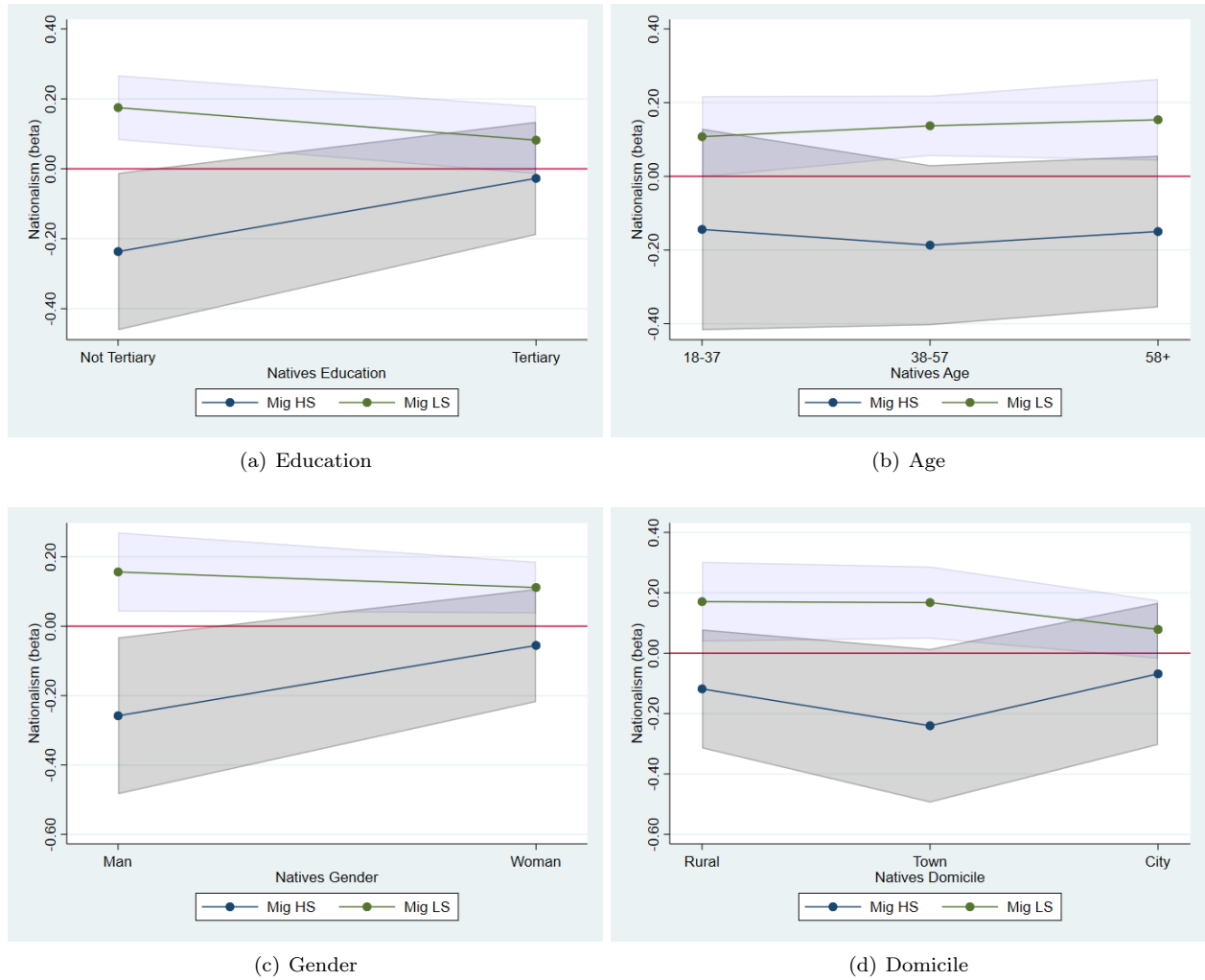
Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The dependent variable is our standardized measure of nationalism. Flows in column (2) are instrumented with predicted flows using a shift-share strategy.

Table 7: Nationalism and Immigrant Share- Interaction with Regional Characteristics

|                                   | (1)<br>IV        | (2)<br>IV         | (3)<br>IV        | (4)<br>IV        | (5)<br>IV       | (6)<br>IV      |
|-----------------------------------|------------------|-------------------|------------------|------------------|-----------------|----------------|
| Time                              | 2007-2016        | 2007-2016         | 2007-2016        | 2007-2016        | 2007-2016       | 2007-2016      |
| Regional Characteristic           | Social Transf.   | Children          | Crime            | Social Transf.   | Children        | Crime          |
| <i>Share HS (above Median)</i>    | -0.13*<br>(0.08) | - 0.06<br>(0.13)  | -0.19*<br>(0.10) |                  |                 |                |
| <i>Share HS (below Median)</i>    | -0.21*<br>(0.11) | -0.23**<br>(0.10) | - 0.09<br>(0.06) |                  |                 |                |
| <i>Share LS (above Median)</i>    |                  |                   |                  | 0.13<br>(0.12)   | 0.24*<br>(0.14) | 0.02<br>(0.33) |
| <i>Share LS (below Median)</i>    |                  |                   |                  | 0.14**<br>(0.06) | 0.03<br>(0.10)  | 0.89<br>(2.51) |
| F-stat ( <i>HP : same coeff</i> ) | 1.21             | 3.01              | 1.34             | 0.00             | 0.84            | 0.09           |
| P-value F-stat                    | 0.27             | 0.09              | 0.25             | 0.96             | 0.36            | 0.76           |
| Observations                      | 48319            | 48319             | 48319            | 48319            | 48319           | 48319          |
| K-P rk Wald F-stat                | 4.60             | 6.29              | 6.68             | 2.65             | 4.17            | 0.07           |
| Adj. R-Square                     | 0.13             | 0.13              | 0.13             | 0.13             | 0.13            | 0.08           |
| NUTS2 f.e.                        | Yes              | Yes               | Yes              | Yes              | Yes             | Yes            |
| Year f.e.                         | Yes              | Yes               | Yes              | Yes              | Yes             | Yes            |
| NUTS2 Controls                    | Yes              | Yes               | Yes              | Yes              | Yes             | Yes            |
| Individual Controls               | Yes              | Yes               | Yes              | Yes              | Yes             | Yes            |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummy are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is our standardized measure of nationalism. Columns (1) and (4) distinguishes on the level of social transfer per capita. Columns (2) and (5) distinguishes regions on the ratio  $\frac{0-14}{15-65}$  old. Columns (3) and (6) distinguishes on the total number of crime.

Figure 8: Nationalism Response to Immigrant Share and Natives' Individual Characteristics



Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. The graphs plots the coefficients of the share of migrants HS and LS estimated on different subsamples by individual characteristics: education (a), age (b), gender (c) and domicile (d). All the coefficients are estimated with IV estimations. The shadowed area represent the 95% interval of confidence. All the regressions includes individual and regional controls, NUTS2 and year fixed effects. The dependent variable is our standardized measure of nationalism. The F-stat of the first stage is always above 10. The results are available in Tables A-1, A-2, A-3 and A-4

Table 8: Voting for Radical Right/liberal parties and Immigrant Share

|                     | (1)<br>IV            | (2)<br>IV       | (3)<br>IV         | (4)<br>IV       | (5)<br>IV       | (6)<br>IV      |
|---------------------|----------------------|-----------------|-------------------|-----------------|-----------------|----------------|
| Time                | 2007-2016            | 2007-2016       | 2007-2016         | 2007-2016       | 2007-2016       | 2007-2016      |
| Party Family        | <i>Radical Right</i> |                 |                   | <i>Liberal</i>  |                 |                |
|                     |                      |                 |                   |                 |                 |                |
| <b>All Migrants</b> |                      |                 |                   |                 |                 |                |
| <i>Share</i>        | 0.03**<br>(0.01)     |                 |                   | 0.02*<br>(0.01) |                 |                |
| <i>Share HS</i>     |                      | -0.04<br>(0.02) |                   |                 | 0.15*<br>(0.08) |                |
| <i>Share LS</i>     |                      |                 | 0.02***<br>(0.01) |                 |                 | 0.00<br>(0.01) |
| Observations        | 45771                | 45771           | 45771             | 45771           | 45771           | 45771          |
| K-P rk Wald F-stat  | 9.74                 | 5.69            | 24.92             | 9.74            | 5.69            | 24.92          |
| Adj. R-Square       | 0.09                 | 0.10            | 0.10              | 0.11            | 0.10            | 0.12           |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database, Chapell Hill Database and Eurostat data. Standard errors are clustered at NUTS2 level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . As individual controls age, gender, education dummy are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is a dummy that takes value of 1 if voter for a party that belongs to the Radical Right political family (col. (1),(2) and (3)) or to the Liberal political family (col. (4),(5) and (6)). The definition of the political family of parties is determined by the Chapell Hill survey dataset.

Table 9: Voting Turnout and Immigrant Share

|                     | (1)<br>IV        | (2)<br>IV      | (3)<br>IV       | (4)<br>IV         | (5)<br>IV       | (6)<br>IV       |
|---------------------|------------------|----------------|-----------------|-------------------|-----------------|-----------------|
| Time                | 2007-2016        | 2007-2016      | 2007-2016       | 2007-2016         | 2007-2016       | 2007-2016       |
| Natives             | <i>Education</i> |                |                 | <i>Age Groups</i> |                 |                 |
| Subsample           | All              | Not Tertiary   | Tertiary        | 18-37             | 38-57           | 58+             |
| <b>All Migrants</b> |                  |                |                 |                   |                 |                 |
| <i>Share HS</i>     | 0.00<br>(0.02)   | 0.00<br>(0.01) | -0.01<br>(0.03) | 0.06<br>(0.04)    | -0.03<br>(0.03) | -0.01<br>(0.02) |
| <i>Share LS</i>     | 0.00<br>(0.01)   | 0.00<br>(0.01) | 0.00<br>(0.01)  | 0.02<br>(0.02)    | -0.01<br>(0.01) | 0.00<br>(0.01)  |
| Observations        | 78814            | 53675          | 25139           | 20730             | 28605           | 29478           |
| K-P rk Wald F-stat  | 3.64             | 3.41           | 3.79            | 3.84              | 2.83            | 4.47            |
| Adj. R-Square       | 0.10             | 0.10           | 0.07            | 0.13              | 0.06            | 0.03            |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . As individual controls age, gender, education dummy are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is a dummy that take values of 1 if the individual voted during the last national elections. From column (2) to column (6) we perform our analysis on subsample by education (col. (2) and (3)) and age groups (col. (4),(5) and (6)).

Table 10: Nationalism and Immigrant Share - individual panel

|                              | (1)<br>IV         | (2)<br>IV        | (3)<br>IV       | (4)<br>IV           | (5)<br>IV        | (6)<br>IV       | (7)<br>IV       | (8)<br>IV       | (9)<br>IV      |
|------------------------------|-------------------|------------------|-----------------|---------------------|------------------|-----------------|-----------------|-----------------|----------------|
| Time                         | 2007-2016         | 2007-2016        | 2007-2016       | 2007-2016           | 2007-2016        | 2007-2016       | 2007-2016       | 2007-2016       | 2007-2016      |
| Immigrants                   | <i>All</i>        |                  |                 | <i>Not European</i> |                  |                 | <i>European</i> |                 |                |
| Natives                      | All               | Not Tertiary     | Tertiary        | All                 | Not Tertiary     | Tertiary        | All             | Not Tertiary    | Tertiary       |
| <i>Share HS</i> ( $\Delta$ ) | -0.07<br>(0.07)   | -0.10<br>(0.09)  | -0.03<br>(0.05) | -0.13<br>(0.12)     | -0.20<br>(0.17)  | -0.05<br>(0.08) | -0.04<br>(0.13) | -0.10<br>(0.20) | 0.03<br>(0.14) |
| <i>Share LS</i> ( $\Delta$ ) | 0.07***<br>(0.03) | 0.08**<br>(0.03) | 0.06*<br>(0.03) | 0.11**<br>(0.05)    | 0.12**<br>(0.05) | 0.09*<br>(0.05) | 0.17<br>(0.14)  | 0.30<br>(0.22)  | 0.04<br>(0.14) |
| $\Delta Years$               | 0.01<br>(0.01)    | 0.01<br>(0.01)   | 0.01<br>(0.01)  | 0.00<br>(0.01)      | -0.00<br>(0.02)  | 0.01<br>(0.01)  | 0.01<br>(0.01)  | 0.01<br>(0.01)  | 0.02<br>(0.01) |
| Individuals                  | 29238             | 18229            | 11009           | 29238               | 18229            | 11009           | 29238           | 18229           | 11009          |
| K-P rk Wald F-stat           | 2.77              | 2.95             | 2.53            | 1.97                | 2.22             | 1.67            | 1.52            | 1.62            | 1.26           |
| Adj. R-Square                | -0.00             | -0.00            | -0.00           | -0.01               | -0.01            | -0.00           | -0.01           | -0.04           | 0.00           |
| Year f.e.                    | Yes               | Yes              | Yes             | Yes                 | Yes              | Yes             | Yes             | Yes             | Yes            |
| NUTS2 Controls ( $\Delta$ )  | Yes               | Yes              | Yes             | Yes                 | Yes              | Yes             | Yes             | Yes             | Yes            |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . As NUTS2 controls we include the differences in GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is the difference between our standardized measures of nationalism of the party that they feel close to and the party for which they voted for in the last national election. The analysis is performed with different immigrants shares: all migrants (col (1),(2),(3)), not European migrants (col (4),(5),(6)) and European migrants (col (7),(8),(9)). Moreover the analysis is performed on different samples of natives voters based on their level of education: all kind of education (col (1),(4),(7)), not tertiary education (col (2),(5),(8)) and tertiary education (col (3),(6),(9)). The estimation is performed through an IV estimation procedure. The analysis is performed on subsamples by natives education: not tertiary (col. (1),(3),(5) and (7)) and tertiary (col. (2),(4),(6) and (8))

Table 11: Attitudes towards Migrants and Immigrant Share

|                     | (1)<br>IV       | (2)<br>IV       | (3)<br>IV       | (4)<br>IV       | (5)<br>IV        | (6)<br>IV         | (7)<br>IV            | (8)<br>IV          | (9)<br>IV         |
|---------------------|-----------------|-----------------|-----------------|-----------------|------------------|-------------------|----------------------|--------------------|-------------------|
| Time                | 2010-2016       | 2010-2016       | 2010-2016       | 2010-2016       | 2010-2016        | 2010-2016         | 2010-2016            | 2010-2016          | 2010-2016         |
| Attitudes           | Good Economy    |                 |                 | Enrich Culture  |                  |                   | Better place to live |                    |                   |
| <b>All Migrants</b> |                 |                 |                 |                 |                  |                   |                      |                    |                   |
| <i>Share HS</i>     | -0.02<br>(0.03) |                 | -0.00<br>(0.04) | -0.02<br>(0.03) |                  | -0.00<br>(0.03)   | -0.07*<br>(0.04)     |                    | -0.05<br>(0.03)   |
| <i>Share LS</i>     |                 | -0.04<br>(0.03) | -0.04<br>(0.02) |                 | -0.05*<br>(0.02) | -0.04**<br>(0.02) |                      | -0.09***<br>(0.03) | -0.07**<br>(0.03) |
| Observations        | 74072           | 74072           | 74072           | 74085           | 74085            | 74085             | 74091                | 74091              | 74091             |
| K-P rk Wald F-stat  | 71.06           | 23.87           | 8.50            | 71.09           | 23.88            | 8.50              | 71.09                | 23.88              | 8.50              |
| Adj. R-Square       | 0.13            | 0.13            | 0.13            | 0.13            | 0.13             | 0.13              | 0.12                 | 0.11               | 0.12              |
| NUTS2 f.e.          | Yes             | Yes             | Yes             | Yes             | Yes              | Yes               | Yes                  | Yes                | Yes               |
| Year f.e.           | Yes             | Yes             | Yes             | Yes             | Yes              | Yes               | Yes                  | Yes                | Yes               |
| NUTS2 Controls      | Yes             | Yes             | Yes             | Yes             | Yes              | Yes               | Yes                  | Yes                | Yes               |
| Individual Controls | Yes             | Yes             | Yes             | Yes             | Yes              | Yes               | Yes                  | Yes                | Yes               |

Note: authors' calculations on ESS, EULFS and Eurostat data. Standard errors are clustered at NUTS2 level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Individual controls are age, gender and education dummy are included. NUTS2 controls are GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable are different standardized (mean 0, sd 1) measures of attitudes towards immigrants: good for the economy (col (1)-(3)), enrich country cultural life (col (4)-(6)) and make the country a better place to live (col(7)-(9)). Higher values imply positive attitudes.

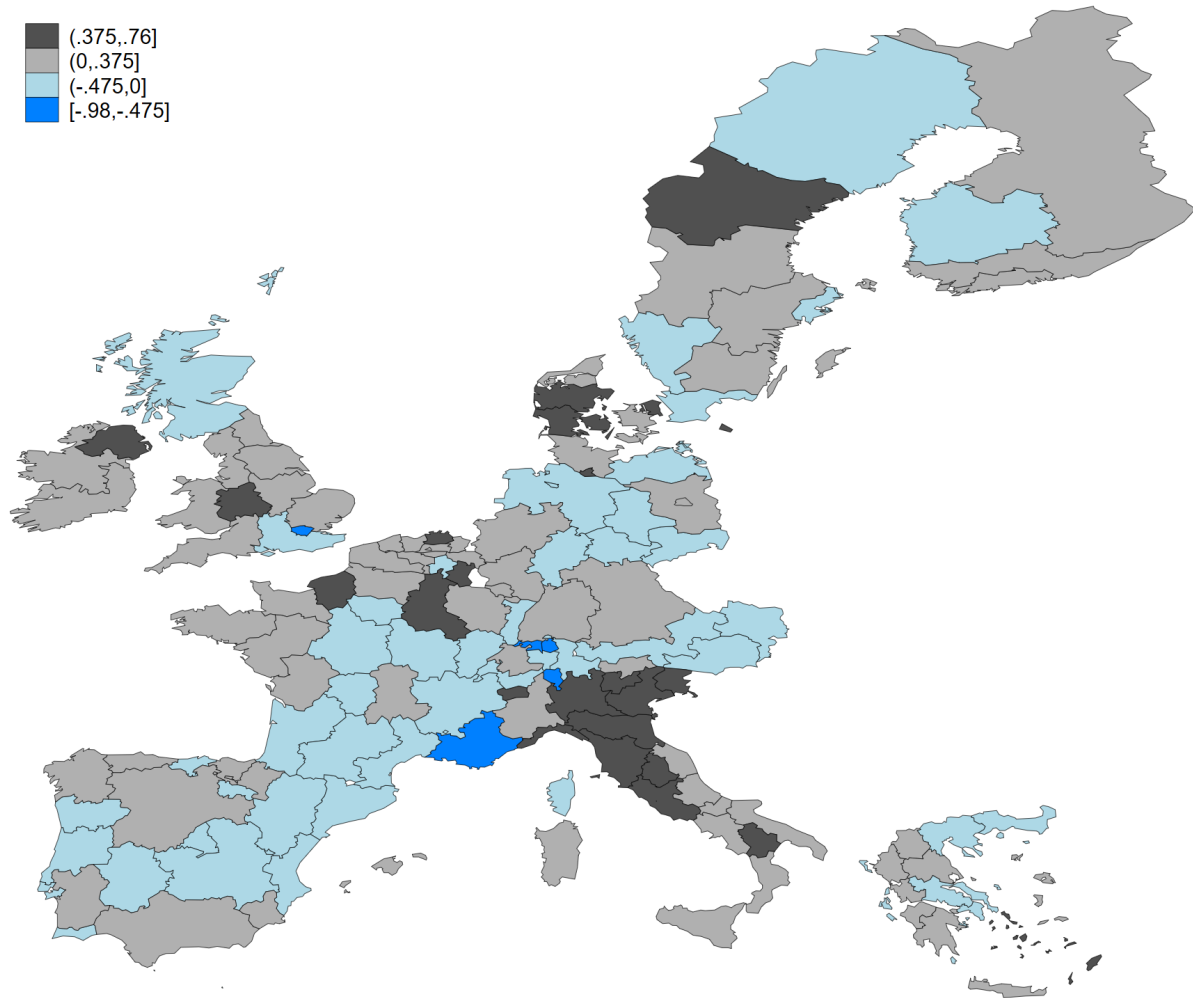
Table 12: Simulated Effect of Immigration/Education changes on nationalism: Country level and EU averages

|                | (1)               | (2)                         | (3)                            | (4)                      | (5)                            | (6)                            | (7)           | (8)             | (9)               | (10)             |
|----------------|-------------------|-----------------------------|--------------------------------|--------------------------|--------------------------------|--------------------------------|---------------|-----------------|-------------------|------------------|
|                |                   | Standard Sim.               |                                | Country Characteristics  |                                |                                | Mig. Policies |                 | Educ. Policies    |                  |
| Country        | $\Delta Nation_c$ | $\widehat{\Delta Nation_c}$ | $\widehat{\Delta Nation_{EU}}$ | $\overline{Tert}_c^{16}$ | $\overline{\Delta Mig}_c^{HS}$ | $\overline{\Delta Mig}_c^{LS}$ | <i>No LS</i>  | <i>Balanced</i> | <i>+20% Tert.</i> | <i>Max Tert.</i> |
| Austria        | 0.04              | -0.253                      | 0.064                          | 0.314                    | 2.641                          | 1.597                          | -0.492        | -0.071          | -0.297            | -0.312           |
| Belgium        | -0.018            | 0.269                       | 0.064                          | 0.375                    | 2.131                          | 4.183                          | -0.324        | -0.074          | 0.188             | 0.166            |
| Denmark        | -0.092            | 0.368                       | 0.064                          | 0.377                    | 0.47                           | 2.898                          | -0.1          | -0.038          | 0.269             | 0.246            |
| Finland        | 0.222             | 0.09                        | 0.064                          | 0.428                    | 1.254                          | 2.185                          | -0.122        | -0.019          | -0.006            | -0.007           |
| France         | 0.255             | -0.069                      | 0.064                          | 0.349                    | 0.676                          | 0.445                          | -0.178        | -0.023          | -0.136            | -0.149           |
| Germany        | 0.141             | 0.025                       | 0.064                          | 0.282                    | 1.086                          | 1.499                          | -0.235        | -0.055          | -0.033            | -0.041           |
| Greece         |                   | -0.067                      | 0.064                          | 0.3                      | 0.081                          | 0.399                          | -0.023        | 0               | -0.131            | -0.144           |
| Ireland        | 0.28              | 0.202                       | 0.064                          | 0.43                     | 0.477                          | 2.081                          | -0.082        | -0.024          | 0.096             | 0.113            |
| Italy          |                   | 0.454                       | 0.064                          | 0.177                    | 0.473                          | 3.357                          | -0.101        | -0.098          | 0.404             | 0.399            |
| Portugal       | 0.043             | -0.141                      | 0.064                          | 0.239                    | 0.728                          | 0.107                          | -0.122        | -0.012          | -0.188            | -0.195           |
| Spain          | 0.045             | -0.039                      | 0.064                          | 0.357                    | 0.339                          | 0.178                          | -0.045        | -0.007          | -0.116            | -0.13            |
| Sweden         | 0.103             | -0.112                      | 0.064                          | 0.409                    | 3.018                          | 3.319                          | -0.541        | -0.066          | -0.164            | -0.184           |
| Switzerland    | 0.494             | -0.34                       | 0.064                          | 0.411                    | 5.621                          | 3.347                          | -0.833        | -0.091          | -0.361            | -0.381           |
| United Kingdom | 0.55              | 0.056                       | 0.064                          | 0.421                    | 1.779                          | 2.739                          | -0.317        | -0.04           | -0.015            | -0.053           |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Column (1) the country averages of the regional differences in nationalism between the last and the first election available. Columns (2) and (3) show country averages and EU average, respectively, of the simulated standardized nationalism from the standard simulation using as regional weights the total population. Column (4) shows the country regional average of tertiary individuals. Columns (5) and (6) show the country average variation of migration share of HS and LS immigrants respectively over the 2007-2016 period. Column (7) shows the result of the simulation when we remove the variation of low educated immigrants. Column (8) shows the result of the simulation when we assume skill-balanced immigration. Column (9) shows the result of the simulation when we increase by 20% the share of tertiary educated natives by region. Column (10) shows the result of the simulation when each region has the same share of tertiary educated natives as the highest educated one in the same country.

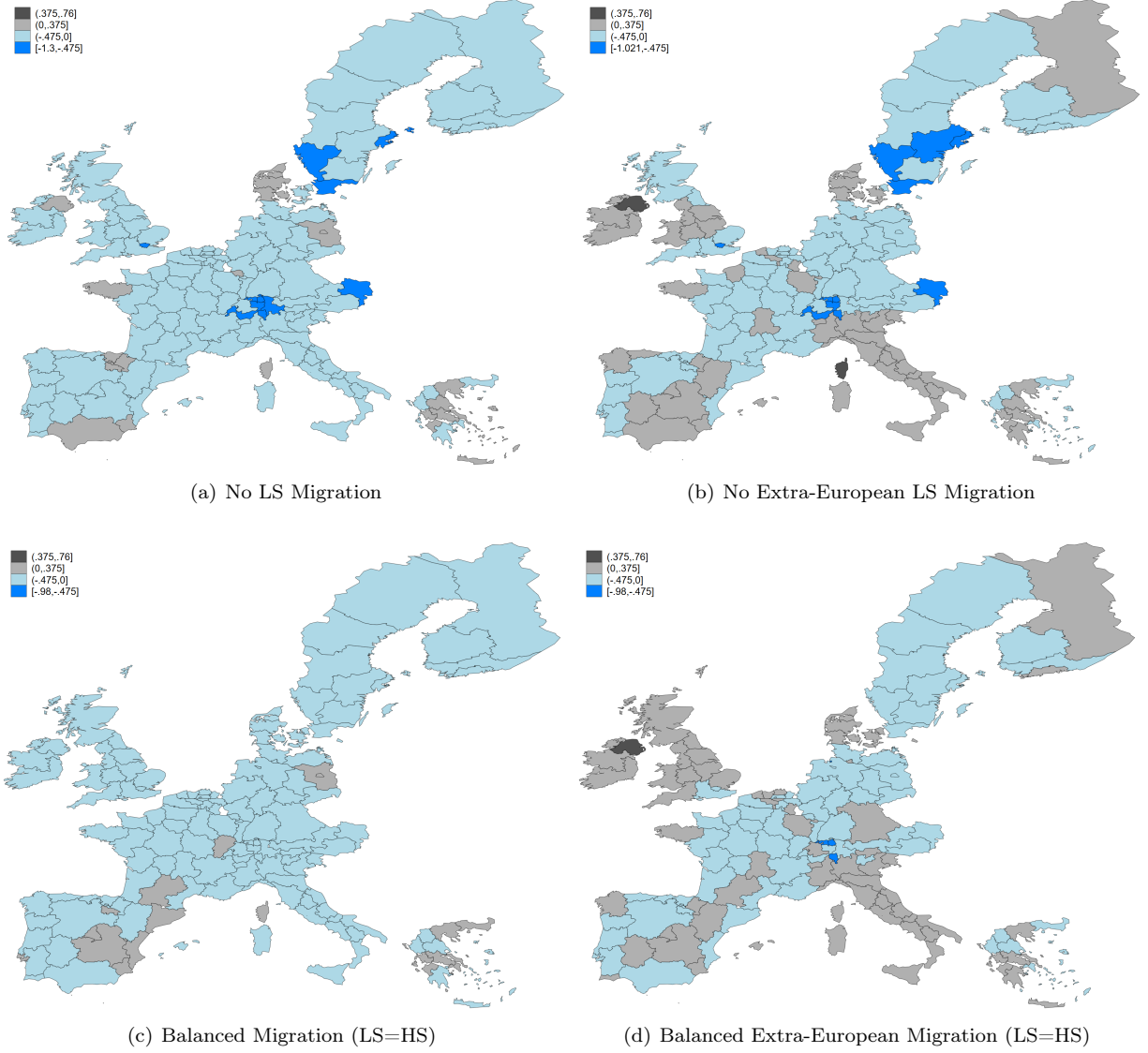


Figure 9: Baseline simulation analysis



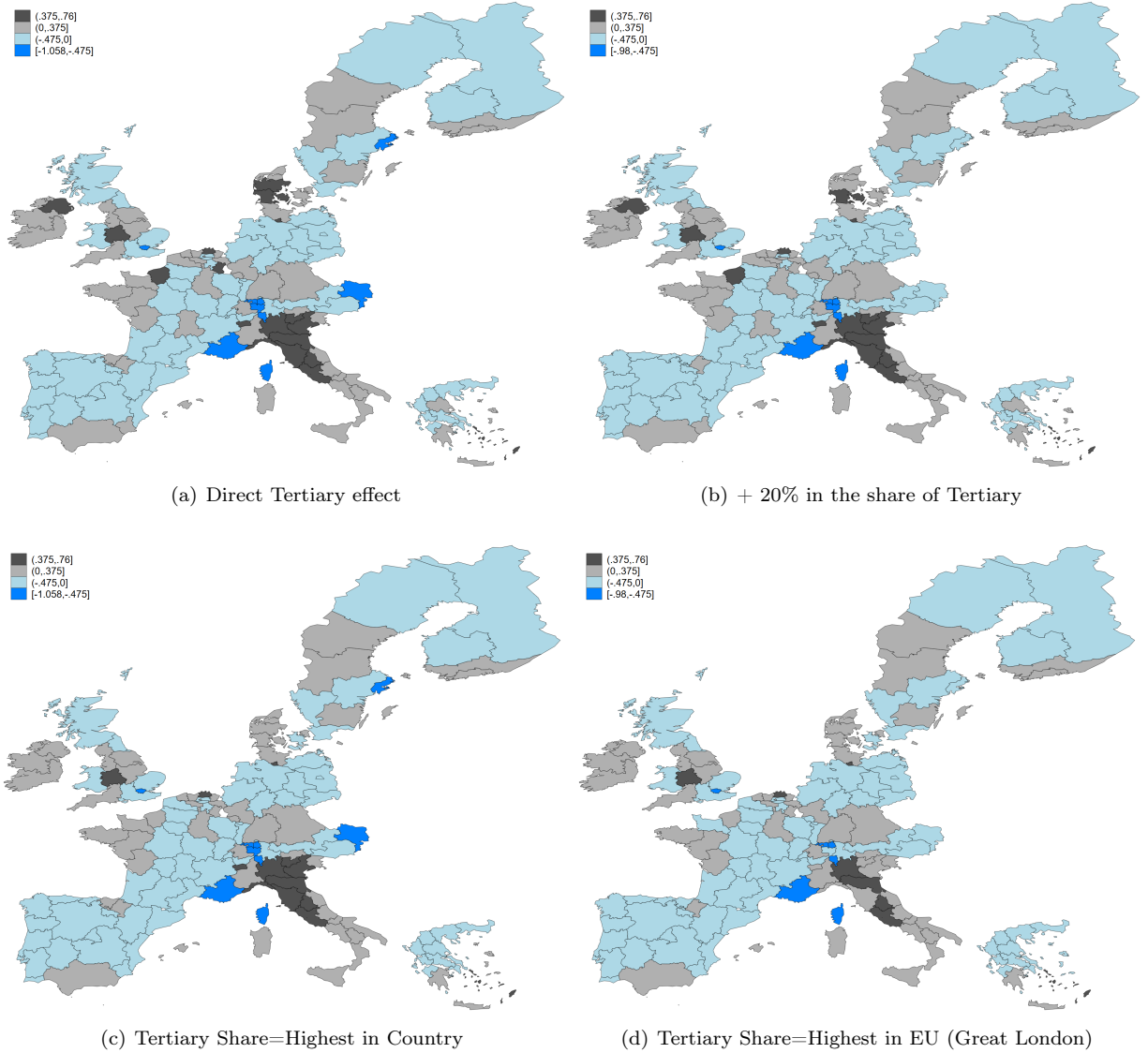
Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. The figure plots the results of equation (11) at NUTS2 level, which simulate the average level of nationalism over 2007-2016 due to the variation of immigrants by education and the level of natives education. For Germany, United Kingdom and Austria the results are plotted at NUTS1 level. Azores islands, Madeira islands and Canary islands are not plotted for visual reasons.

Figure 10: Simulations for different Migration Scenarios



Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. The figure plots the simulated average level of nationalism after different migration policy scenarios, due to the variation of immigrants by education and level of education of natives over the 2007-2016. The figure plots the results of equation (11) at NUTS2 level when: LS immigrants are excluded (panel (a)), not European LS immigrants are excluded (panel (b)), LS and HS immigrants are exactly balanced in each region (panel (c)) and not European LS and HS immigrants are exactly balanced in each region.

Figure 11: Simulation for Different Education Scenarios



Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. The figure plots the simulated average level of nationalism after different education policy scenarios, due to the variation of immigrants by education and level of education of natives over the 2007-2016. The figure plots the results of equation (11) at NUTS2 level when: the direct effect of tertiary education on nationalism is included (panel (a)), regional level of tertiary educated natives is increased by 20% (panel (b)), each region has the same level of tertiary educated natives as the highest region in the same country (panel (c)) and each region has the same level of tertiary educated natives as the highest in our sample (Greater London) (panel (d)).

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## appendix A Additional Tables

Table A-1: Nationalism and voters' education

|                              | (1)<br>IV         | (2)<br>IV       | (3)<br>IV         | (4)<br>IV       |
|------------------------------|-------------------|-----------------|-------------------|-----------------|
| Time                         | 2007-2016         | 2007-2016       | 2007-2016         | 2007-2016       |
| Subsample                    | <i>Education</i>  |                 | <i>Education</i>  |                 |
| Natives Education            | Not Tertiary      | Tertiary        | Not Tertiary      | Tertiary        |
| <b>All Migrants</b>          |                   |                 |                   |                 |
| <i>Share HS</i>              | -0.24**<br>(0.11) | -0.03<br>(0.08) |                   |                 |
| <i>Share LS</i>              |                   |                 | 0.17***<br>(0.05) | 0.08*<br>(0.05) |
| Observations                 | 31103             | 17214           | 31103             | 17214           |
| K-P rk Wald F-stat           | 20.05             | 18.51           | 47.15             | 42.50           |
| Adj. R-Square                | 0.13              | 0.16            | 0.13              | 0.16            |
| <b>Not European Migrants</b> |                   |                 |                   |                 |
| <i>Share No EU HS</i>        | -0.23<br>(0.26)   | -0.01<br>(0.18) |                   |                 |
| <i>Share No EU LS</i>        |                   |                 | 0.20***<br>(0.06) | 0.07<br>(0.05)  |
| Observations                 | 31103             | 17214           | 31103             | 17214           |
| K-P rk Wald F-stat           | 19.30             | 17.86           | 65.75             | 60.84           |
| Adj. R-Square                | 0.14              | 0.16            | 0.13              | 0.16            |
| <b>European Migrants</b>     |                   |                 |                   |                 |
| <i>Share EU HS</i>           | -0.35**<br>(0.16) | -0.05<br>(0.11) |                   |                 |
| <i>Share EU LS</i>           |                   |                 | 0.02<br>(0.12)    | -0.22<br>(0.15) |
| Observations                 | 31103             | 17214           | 31103             | 17214           |
| K-P rk Wald F-stat           | 21.42             | 20.33           | 6.71              | 5.43            |
| Adj. R-Square                | 0.13              | 0.16            | 0.14              | 0.15            |
| NUTS2 f.e.                   | Yes               | Yes             | Yes               | Yes             |
| Year f.e.                    | Yes               | Yes             | Yes               | Yes             |
| NUTS2 Controls               | Yes               | Yes             | Yes               | Yes             |
| Individual Controls          | Yes               | Yes             | Yes               | Yes             |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummies are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is our standardized measure of nationalism. Analysis by subsamples based on individual education groups: not tertiary education (col. (1)-(3)) and tertiary (col. (2)-(4)).

Table A-2: Nationalism and voters' age

|                              | (1)<br>IV        | (2)<br>IV        | (3)<br>IV       | (4)<br>IV        | (5)<br>IV         | (6)<br>IV         |
|------------------------------|------------------|------------------|-----------------|------------------|-------------------|-------------------|
| Time                         | 2007-2016        | 2007-2016        | 2007-2016       | 2007-2016        | 2007-2016         | 2007-2016         |
| Subsample                    | <i>Age Group</i> |                  |                 | <i>Age Group</i> |                   |                   |
| Individual age group         | 18-37            | 38-57            | 58+             | 18-37            | 38-57             | 58+               |
| <b>All Migrants</b>          |                  |                  |                 |                  |                   |                   |
| <i>Share HS</i>              | -0.14<br>(0.14)  | -0.19*<br>(0.11) | -0.15<br>(0.10) |                  |                   |                   |
| <i>Share LS</i>              |                  |                  |                 | 0.11*<br>(0.06)  | 0.14***<br>(0.04) | 0.15***<br>(0.06) |
| Observations                 | 10847            | 17787            | 19681           | 10847            | 17787             | 19681             |
| K-P rk Wald F-stat           | 13.84            | 18.53            | 24.32           | 40.72            | 45.62             | 48.30             |
| Adj. R-Square                | 0.14             | 0.12             | 0.17            | 0.14             | 0.12              | 0.17              |
| <b>Not European Migrants</b> |                  |                  |                 |                  |                   |                   |
| <i>Share No EU HS</i>        | 0.03<br>(0.28)   | -0.28<br>(0.21)  | -0.18<br>(0.29) |                  |                   |                   |
| <i>Share No EU LS</i>        |                  |                  |                 | 0.12*<br>(0.07)  | 0.14***<br>(0.05) | 0.17**<br>(0.07)  |
| Observations                 | 10847            | 17787            | 19681           | 10847            | 17787             | 19681             |
| K-P rk Wald F-stat           | 13.07            | 19.30            | 23.13           | 64.84            | 65.97             | 61.21             |
| Adj. R-Square                | 0.14             | 0.12             | 0.17            | 0.14             | 0.12              | 0.16              |
| <b>European Migrants</b>     |                  |                  |                 |                  |                   |                   |
| <i>Share EU HS</i>           | -0.30<br>(0.20)  | -0.23<br>(0.14)  | -0.21<br>(0.14) |                  |                   |                   |
| <i>Share EU LS</i>           |                  |                  |                 | 0.02<br>(0.14)   | -0.08<br>(0.13)   | -0.07<br>(0.16)   |
| Observations                 | 10847            | 17787            | 19681           | 10847            | 17787             | 19681             |
| K-P rk Wald F-stat           | 15.92            | 19.57            | 26.11           | 5.75             | 5.82              | 6.07              |
| Adj. R-Square                | 0.14             | 0.12             | 0.17            | 0.14             | 0.12              | 0.17              |
| NUTS2 f.e.                   | Yes              | Yes              | Yes             | Yes              | Yes               | Yes               |
| Year f.e.                    | Yes              | Yes              | Yes             | Yes              | Yes               | Yes               |
| NUTS2 Controls               | Yes              | Yes              | Yes             | Yes              | Yes               | Yes               |
| Individual Controls          | Yes              | Yes              | Yes             | Yes              | Yes               | Yes               |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummies are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is our standardized measure of nationalism. Analysis by subsamples based on individual age groups characteristics: from 18 to 37 (col. (1)-(4)), 38 to 57 (col. (2)-(5)), 58+ (col. (3)-(6)).

Table A-3: Nationalism and voters' gender

|                              | (1)<br>IV         | (2)<br>IV       | (3)<br>IV         | (4)<br>IV         |
|------------------------------|-------------------|-----------------|-------------------|-------------------|
| Time                         | 2007-2016         | 2007-2016       | 2007-2016         | 2007-2016         |
| Subsample                    | <i>Gender</i>     |                 | <i>Gender</i>     |                   |
| Natives Gender               | Male              | Female          | Male              | Female            |
| <b>All Migrants</b>          |                   |                 |                   |                   |
| <i>Share HS</i>              | -0.26**<br>(0.11) | -0.06<br>(0.08) |                   |                   |
| <i>Share LS</i>              |                   |                 | 0.16***<br>(0.06) | 0.11***<br>(0.04) |
| Observations                 | 24054             | 24265           | 24054             | 24265             |
| K-P rk Wald F-stat           | 21.99             | 17.82           | 42.94             | 48.66             |
| Adj. R-Square                | 0.14              | 0.13            | 0.14              | 0.13              |
| <b>Not European Migrants</b> |                   |                 |                   |                   |
| <i>Share No EU HS</i>        | -0.42*<br>(0.24)  | 0.07<br>(0.20)  |                   |                   |
| <i>Share No EU LS</i>        |                   |                 | 0.17**<br>(0.06)  | 0.12***<br>(0.05) |
| Observations                 | 24054             | 24265           | 24054             | 24265             |
| K-P rk Wald F-stat           | 19.77             | 18.62           | 62.47             | 65.93             |
| Adj. R-Square                | 0.14              | 0.13            | 0.14              | 0.13              |
| <b>European Migrants</b>     |                   |                 |                   |                   |
| <i>Share EU HS</i>           | -0.31**<br>(0.15) | -0.15<br>(0.12) |                   |                   |
| <i>Share EU LS</i>           |                   |                 | -0.07<br>(0.14)   | -0.03<br>(0.10)   |
| Observations                 | 24054             | 24265           | 24054             | 24265             |
| K-P rk Wald F-stat           | 22.34             | 19.79           | 6.24              | 5.92              |
| Adj. R-Square                | 0.14              | 0.13            | 0.14              | 0.13              |
| NUTS2 f.e.                   | Yes               | Yes             | Yes               | Yes               |
| Year f.e.                    | Yes               | Yes             | Yes               | Yes               |
| NUTS2 Controls               | Yes               | Yes             | Yes               | Yes               |
| Individual Controls          | Yes               | Yes             | Yes               | Yes               |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummies are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is our standardized measure of nationalism. Analysis by subsamples based on individual gender: male (col. (1)-(3)) and female (col. (2)-(4)).



Table A-4: Nationalism and voters' domicile

|                              | (1)<br>IV       | (2)<br>IV         | (3)<br>IV       | (4)<br>IV        | (5)<br>IV         | (6)<br>IV       |
|------------------------------|-----------------|-------------------|-----------------|------------------|-------------------|-----------------|
| Time                         | 2007-2016       | 2007-2016         | 2007-2016       | 2007-2016        | 2007-2016         | 2007-2016       |
| Subsample                    | <i>Domicile</i> |                   |                 | <i>Domicile</i>  |                   |                 |
| <i>Voters domicile</i>       | Rural           | Town              | City            | Rural            | Town              | City            |
| <b>All Migrants</b>          |                 |                   |                 |                  |                   |                 |
| <i>Share HS</i>              | -0.12<br>(0.10) | -0.24*<br>(0.13)  | -0.07<br>(0.12) |                  |                   |                 |
| <i>Share LS</i>              |                 |                   |                 | 0.17**<br>(0.07) | 0.17***<br>(0.06) | 0.08<br>(0.05)  |
| Observations                 | 18938           | 15087             | 14289           | 18938            | 15087             | 14289           |
| K-P rk Wald F-stat           | 22.87           | 28.16             | 9.20            | 23.35            | 43.07             | 45.10           |
| Adj. R-Square                | 0.15            | 0.14              | 0.13            | 0.14             | 0.13              | 0.13            |
| <b>Not European Migrants</b> |                 |                   |                 |                  |                   |                 |
| <i>Share No EU HS</i>        | -0.07<br>(0.50) | -0.23<br>(0.39)   | -0.08<br>(0.18) |                  |                   |                 |
| <i>Share No EU LS</i>        |                 |                   |                 | 0.14**<br>(0.06) | 0.22***<br>(0.08) | 0.07<br>(0.05)  |
| Observations                 | 18938           | 15087             | 14289           | 18938            | 15087             | 14289           |
| K-P rk Wald F-stat           | 7.37            | 16.21             | 13.31           | 48.52            | 57.66             | 58.30           |
| Adj. R-Square                | 0.15            | 0.14              | 0.13            | 0.14             | 0.13              | 0.13            |
| <b>European Migrants</b>     |                 |                   |                 |                  |                   |                 |
| <i>Share EU HS</i>           | -0.16<br>(0.10) | -0.36**<br>(0.17) | -0.09<br>(0.17) |                  |                   |                 |
| <i>Share EU LS</i>           |                 |                   |                 | -0.19*<br>(0.10) | 0.10<br>(0.11)    | -0.15<br>(0.31) |
| Observations                 | 18938           | 15087             | 14289           | 18938            | 15087             | 14289           |
| K-P rk Wald F-stat           | 34.91           | 30.16             | 9.72            | 17.16            | 10.77             | 1.05            |
| Adj. R-Square                | 0.15            | 0.14              | 0.13            | 0.14             | 0.14              | 0.13            |
| NUTS2 f.e.                   | Yes             | Yes               | Yes             | Yes              | Yes               | Yes             |
| Year f.e.                    | Yes             | Yes               | Yes             | Yes              | Yes               | Yes             |
| NUTS2 Controls               | Yes             | Yes               | Yes             | Yes              | Yes               | Yes             |
| Individual Controls          | Yes             | Yes               | Yes             | Yes              | Yes               | Yes             |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummies are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is our standardized measure of nationalism. Analysis by subsamples on voters domicile location: farm or country village (col. (1)-(4)), town or small city (col. (2)-(5)) and big city or suburbs of it (col. (3)-(6)).

Table A-5: Voting for radical right or liberal parties - Voters Education

|                     | (1)<br>IV            | (2)<br>IV       | (3)<br>IV         | (4)<br>IV         | (5)<br>IV       | (6)<br>IV      | (7)<br>(IV)     | (8)<br>(V)     |
|---------------------|----------------------|-----------------|-------------------|-------------------|-----------------|----------------|-----------------|----------------|
| Time                | 2007-2016            | 2007-2016       | 2007-2016         | 2007-2016         | 2007-2016       | 2007-2016      | 2007-2016       | 2007-2016      |
| Party Family        | <i>Radical Right</i> |                 |                   |                   | <i>Liberal</i>  |                |                 |                |
| Natives Education   | Not Tertiary         | Tertiary        | Not Tertiary      | Tertiary          | Not Tertiary    | Tertiary       | Not Tertiary    | Tertiary       |
| <b>All Migrants</b> |                      |                 |                   |                   |                 |                |                 |                |
| <i>Share HS</i>     | -0.05<br>(0.03)      | -0.01<br>(0.02) |                   |                   | 0.16*<br>(0.08) | 0.14<br>(0.09) |                 |                |
| <i>Share LS</i>     |                      |                 | 0.03***<br>(0.01) | 0.02***<br>(0.00) |                 |                | -0.00<br>(0.01) | 0.02<br>(0.01) |
| Observations        | 29574                | 16195           | 29574             | 16195             | 29574           | 16195          | 29574           | 16195          |
| K-P rk Wald F-stat  | 5.76                 | 5.16            | 25.85             | 22.89             | 5.76            | 5.16           | 25.85           | 22.89          |
| Adj. R-Square       | 0.12                 | 0.04            | 0.12              | 0.03              | 0.08            | 0.12           | 0.11            | 0.13           |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database, Chapell Hill Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender, education dummy are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is a dummy that takes value of 1 if voter for a party that belongs to the Radical Right political family (col. (1),(2), (3) and (4)) or to the Liberal political family (col. (5),(6),(7),(8)). The definition of the political family of parties is determined by the Chapell Hill survey dataset.

# Skill of the Immigrants and Vote of the Natives: Immigration and Nationalism in European Elections 2007-2016 - Appendix

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## Appendix I Descriptive statistics and data sources

We provide additional descriptive statistics as well as additional details on the data sources and definitions. Section Appendix I provides information of the different data sources. Table A1 lists the variables used in the empirical analysis with their definition and source. Section Appendix I describes the voting data available from the ESS.

### Data description

Our analysis is built on four different datasets: (i) European Social Survey (ESS), (ii) Manifesto Project Database (MPD), (iii) European Labor Force Survey (EULFS) and (iv) Eurostat. Here below we describe each data source, their characteristics and how we combine them.

*European Social Survey (ESS)*- Our primary data source is the European Social Survey. This is a multi-country survey, which was administered in 8 waves (one every two years) in 36 countries between 2002 and 2016. Each individual in the ESS is selected by strict random probability method and the samples are representative of the population over 15 in each country. On average each wave contains around 1500 individuals for each country. The data include detailed information on personal and family characteristics such as age, gender, education, marital status, number of children in the family, place of birth and labor market characteristics such as employment status and work characteristics. It also includes detailed information on the parental background, such as parents' education, employment status, occupation when the respondent was 14 years old and their country of birth. From 2010 on it provides also intra-country geographical location of respondents at NUTS2 level. Finally, it provides also voting and political preferences of individuals. In particular, we are interested in two specific questions: (i) which party did you vote in the last national election? (ii) which party do you feel close to? The answers to those questions are the actual names of the parties in each surveyed country, giving a clear definition of the voting preferences/political closeness of each individual.

*Manifesto Project Database (MPD)* – The Manifesto Project Database, originally created by the Manifesto Research Group in the late 1970s and evolved under different names (e.g. Comparative Manifesto Project), analyses the parties' political manifesto to study parties' political preferences. It covers all the parties that are candidate at the national elections and gain at least one seat in the parliament. Democratic countries in the OECD and Eastern Europe are covered, having a sample of 56 countries over the 1945-2017 period. The number of parties analyzed by the MPD are 1093 over 715 parliamentary elections. Parties' political preferences are studied through a content analysis of the political manifesto: the share of quasi-sentences related to a topic are calculated as a fraction over the whole political manifesto. For each topic the MPD identifies two measures: one of favorable/positive mentions and the other of unfavorable/negative mentions. Several topics are analyzed, like the role of military, constitutionalism, decentralization, market regulation, etc. For our research we focus on parties' political preferences on: (i) European Community/Union (ii) National way of life. The former takes into account all the mentions on the EU like the desirability/opposition of expanding the EU or increasing EU competences. The latter contains all the mentions related to nationalism, patriotism, pride of citizenship, etc. For each one of the two topics we then compute two measures. One is a measure of saliency, computed as the sum of the mentions (both positive and negative) related to the topic in analysis. The other is a measure of favorable political position of the party, computed as the difference between positive and negative mentions of the topic. We compute the average over time of those indicators

for each party, dropping all years before the 1990.<sup>1</sup> Finally, we harmonized and merged the MPD with the voting/political preferences of individual from ESS through the name of the party voted and the year of elections. In this way we know also the political preferences of the party voted by each individual in the ESS.

*European Labor Force Survey (EULFS)* – The European Labor Forces Survey is a large household survey conducted over the 28 members of the EU, the 3 member of the EFTA (Switzerland, Norway and Iceland) and two candidate countries. Data are available from 1983 on and it is representative of the population above 15. Information related to age, employment status and education are available in this survey. Moreover, from 2005, a disaggregate variable of country of birth is available across the majority of the countries. Fifteen birthplace regions are recognized by the EULFS: natives, EU15, New European member state from 2004, new European member state of 2007/2013, EFTA, Other Europe, North Africa, Other Africa, Near and Middle East, East Asia, South and South East Asia, North America, Central America and Caribbean, South America and Australia and Oceania. Thanks to the latter variable we can easily recognize the native and immigrant population at NUTS2 level in each country. Using the microdata of European Labor Force Survey and focusing on 14 European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Ireland, Portugal, Spain, Switzerland, Sweden and United Kingdom) we compute the share of immigrants over the total population in 2005 at NUTS2 level as follow:

$$m_{r,s,t}^O = \frac{M_{r,s,t}^O}{Pop_{r,2005}} \quad (1)$$

where  $m_{r,s,t}^O$  is the share of migrants and  $M_{r,s,t}^O$  is the total stock of migrants in NUTS2 region  $r$  born in the group of origin countries  $O \in \{All, NonEU28\}$ , with skills  $s \in \{All, HS, LS\}$  at time  $t$ . For the 14 countries in analysis we built those origin-skill specific shares of migrants at NUTS2 level, excluding Austria, Germany and United Kingdom, where we built them at NUTS1 level. Since Germany does not provide information on the birthplace of the foreign born individuals in their country, we impute the country of birth with the available information on nationality and we distribute the population of foreign born naturalized people using the shares by nationality within the foreign born population. NUTS2 information are available for Denmark from 2007. Our sample includes 146 regions over the 2005-2016 period.

*Eurostat* – Being the statistical office of the EU, Eurostat can provide several socio-economics data of the EU members. For our analysis, we utilize Eurostat to build a vector of relevant NUTS2 control variables for our main analysis. In particular, we extract data on GDP per capita, population density, unemployment rate and percentage of tertiary educated individuals. Since a measure of GDP per capita is not available for Switzerland, we extract this information from the Regional Economy Dataset available from the OECD. Moreover, we used Eurostat to extract relevant data at NUTS2 level to perform our heterogeneity analysis at regional level, like the value of social benefits other than social transfer in kind per capita, the ratio 0-14 over 15-65 years old population and a measure of total number of crimes.

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<sup>1</sup>In this way we focus on a period in which the European integration process becomes an faster. In most cases, information at the party level do not go back that far.

Table A1: Data Sources and definitions

| Variable                 | Description                              | Definition                                                                                                                                                                                                                      | Source                                                      |
|--------------------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| <b>Individual</b>        |                                          |                                                                                                                                                                                                                                 |                                                             |
| $Nationalism_{i,r,t}$    | Measure of Nationalism                   | First component from a PCA on the shares of favorable mentions on EU and Nationalism of each party's political manifesto. It measures the level of Nationalism of the party voted by individual $i$ in region $r$ at time $t$ . | Author's Calculation on the ESS and MPD data.               |
| $Salience_{i,r,t}$       | Measure of Salience of Nationalism issue | First component from a PCA on the shares of total mentions on EU and Nationalism of each party's political manifesto. It measures the saliency of those topics of the party voted by individual $i$ in region $r$ at time $t$ . | Author's Calculation on the ESS and MPD data.               |
| $Age_{i,r,t}$            | Respondent's age                         | Age of individual $i$ .                                                                                                                                                                                                         | ESS data.                                                   |
| $Tertiary_{i,r,t}$       | Tertiary dummy                           | Dummy variable that takes value of 1 if individual $i$ is tertiary educated                                                                                                                                                     | ESS data.                                                   |
| $Female_{i,r,t}$         | Woman dummy                              | Dummy variable that takes value of 1 if individual $i$ is a woman.                                                                                                                                                              | ESS data.                                                   |
| $Tertiary\ fath_{i,r,t}$ | Father educational background dummy      | Dummy variable that takes value of 1 if individual $i$ 's father is tertiary educated.                                                                                                                                          | ESS data.                                                   |
| <b>Regional</b>          |                                          |                                                                                                                                                                                                                                 |                                                             |
| $m_{r,s,t}^O$            | Share of migrants                        | Share of migrants in region $r$ at time $t$ of skill $s$ from origin countries $O$ over the 2005 population of region $r$ .                                                                                                     | Authors' Calculation on EULFS data.                         |
| $Y_{r,t}$                | Gross domestic product                   | Gross domestic product (GDP) at current market prices per capita in region $r$ at time $t$ .                                                                                                                                    | Authors' Calculation on Eurostat data and Regional Economy. |
| $E_{r,t}$                | Tertiary education                       | Percentage of tertiary educated in the population in region $r$ at time $t$ .                                                                                                                                                   | Eurostat data.                                              |
| $U_{r,t}$                | Unemployment rate                        | Unemployment rate in region $r$ at time $t$ .                                                                                                                                                                                   | Eurostat data.                                              |
| $P_{r,t}$                | Population density                       | Total population over the area ( $km^2$ ) in region $r$ at time $t$ .                                                                                                                                                           | Eurostat data.                                              |
| $Soc_{r,t}$              | Social benefits                          | Social benefits other than social transfer in kind per capita.                                                                                                                                                                  | Authors' Calculation on Eurostat data                       |
| $Ch_{r,t}$               | Children to adults ratio                 | Ratio of the total children aged 0 to 14 over the population aged 15 to 65                                                                                                                                                      | Eurostat data.                                              |
| $C_{r,t}$                | Total number of crimes                   | Total number of crimes, including robberies, homicides, burglaries and thefts in region $r$ at time $t$ .                                                                                                                       | Eurostat data.                                              |
| <b>Party</b>             |                                          |                                                                                                                                                                                                                                 |                                                             |
| $Pro\ EU_p$              | Pro EU political position                | Measure party $p$ pro EU political stance, computed as a difference between the shares of favorable and negative mentions in the political manifesto                                                                            | Authors' calculation on MPD data                            |
| $Pro\ Nation._p$         | Pro Nationalism political position       | Measure party $p$ pro Nationalism political stance, computed as a difference between the shares of favorable and negative mentions in the political manifesto                                                                   | Authors' calculation on MPD data                            |
| $Total\ EU_p$            | Salience EU issue                        | Measure of salience of EU topic for party $p$ , computed as the sum of favorable and negative mentions in the political manifesto                                                                                               | Authors' calculation on MPD data                            |
| $Total\ Nation._p$       | Salience Nationalism issue               | Measure of salience of Nationalism topic for party $p$ , computed as the sum of favorable and negative mentions in the political manifesto                                                                                      | Authors' calculation on MPD data                            |

Table A2: Summary Statistics - Party closeness data

| <b>Party Closeness Data</b>       |                               | Obs.  | Mean    | Std. Dev. | Min    | Max      |
|-----------------------------------|-------------------------------|-------|---------|-----------|--------|----------|
| <i>Individual Characteristics</i> | Age                           | 36155 | 51.593  | 18.082    | 18     | 90       |
|                                   | Female                        | 36155 | 0.482   | 0.500     | 0      | 1        |
|                                   | Tertiary                      | 36155 | 0.348   | 0.476     | 0      | 1        |
|                                   | Tertiary (father)             | 30501 | 0.212   | 0.409     | 0      | 1        |
|                                   | Preferences Pro EU            | 35749 | 0.014   | 0.031     | -0.242 | .080     |
|                                   | Salience EU                   | 35749 | 0.033   | 0.019     | 0      | 0.262    |
|                                   | Preferences Pro National way  | 35749 | 0.012   | 0.020     | -0.061 | 0.117    |
|                                   | Salience National Way         | 35749 | 0.015   | .019      | 0      | 0.117    |
|                                   | Nationalism (PCA, std)        | 35749 | 0       | 1         | -1.543 | 7.486    |
|                                   | Salience Nationalism (PCA)    | 35749 | 0.024   | 0.016     | 0      | 0.174    |
| <i>Regional Characteristics</i>   | GDP per capita                | 446   | 32.229  | 11.510    | 13.201 | 69.902   |
|                                   | Pop density                   | 446   | 416.621 | 1025.116  | 3.3    | 7515.507 |
|                                   | Unemployment rate (%)         | 446   | 10.06   | 6.205     | 0      | 37       |
|                                   | Tertiary rate (%)             | 446   | 32.109  | 7.647     | 12.3   | 57.1     |
|                                   | Share of Mig (%)              | 446   | 13.28   | 8.837     | 1.7    | 50.7     |
|                                   | Share of Mig (HS) (%)         | 446   | 3.6     | 3.3       | 0.4    | 21.7     |
|                                   | Share of Mig (LS) (%)         | 446   | 9.7     | 6.0       | 1.3    | 34.7     |
|                                   | Share of Mig (not EU) (%)     | 446   | 7.2     | 5.2       | 0.6    | 32.4     |
|                                   | Share of Mig (not EU, HS) (%) | 446   | 1.8     | 1.8       | 0      | 15.6     |
|                                   | Share of Mig (not EU, LS) (%) | 446   | 5.4     | 3.7       | 0.4    | 23.2     |
|                                   | Share of Mig (EU) (%)         | 446   | 6.0     | 5.4       | 0      | 33.5     |
|                                   | Share of Mig (EU, HS) (%)     | 446   | 1.7     | 1.9       | 0      | 12.0     |
|                                   | Share of Mig (EU, LS) (%)     | 446   | 4.3     | 3.7       | 0      | 24.3     |

Note: authors' calculations on ESS data.

## ESS voting

Table A3: Party closeness and party voted: differences (%)

| Country        | (1)<br>$\Delta$ PC and PV | (2)<br>DK Party close to | (3)<br>DK Party voted | (4)<br>$\Delta$ Tot. EU | (5)<br>$\Delta$ Pro EU | (6)<br>$\Delta$ Tot. Nation. | (7)<br>$\Delta$ Pro Nation. |
|----------------|---------------------------|--------------------------|-----------------------|-------------------------|------------------------|------------------------------|-----------------------------|
| Austria        | 5.12                      | 37.18                    | 7.93                  | 0.146                   | -0.054                 | 0.096                        | 0.063                       |
| Belgium        | 12.34                     | 38.55                    | 8.08                  | -0.044                  | -0.026                 | -0.035                       | 0.015                       |
| Denmark        | 14.09                     | 23.36                    | 8.09                  | 0.250                   | -0.486                 | 0.495                        | 0.397                       |
| Finland        | 11.69                     | 31.93                    | 11.43                 | -0.011                  | -0.103                 | 0.032                        | 0.032                       |
| France         | 30.00                     | 39.84                    | 16.47                 | -0.037                  | -0.026                 | -0.169                       | -0.193                      |
| Germany        | 15.27                     | 32.71                    | 11.32                 | 0.071                   | -0.270                 | -0.001                       | -0.090                      |
| Ireland        | 28.32                     | 55.43                    | 6.25                  | 0.625                   | -0.509                 | -0.582                       | -0.530                      |
| Portugal       | 9.16                      | 22.36                    | 16.90                 | 0.062                   | -0.191                 | -0.023                       | -0.022                      |
| Spain          | 16.50                     | 34.81                    | 11.86                 | -0.259                  | -0.245                 | -0.016                       | -0.084                      |
| Sweden         | 14.06                     | 24.62                    | 6.32                  | -0.058                  | -0.257                 | -0.035                       | -0.024                      |
| Switzerland    | 25.14                     | 15.94                    | 24.88                 | 0.382                   | -0.409                 | 0.509                        | 0.484                       |
| United Kingdom | 12.30                     | 33.53                    | 11.52                 | -0.275                  | -0.098                 | 0.021                        | -0.042                      |
| Whole Sample   | 16.76                     | 34.01                    | 12.33                 | 0.103                   | -0.250                 | -0.007                       | -0.031                      |

Note: authors' calculations on ESS data and Manifesto Project Database. Column (1) shows the share of individual who feels close to a party different from the party voted in the last national election. This share is computed only for the population who answered with a party name at both questions on party voted and party closeness. Column (2) shows the share of individual over the total population who answered "don't know" to the question related to the party close to. Column (3) shows the share of individual over the total population who answered "don't know" to the question related to the party voted in the last national election. From column (4) to (7) we compute the differences between the political platform of the party they feel close to and the party voted in the last national election. All the differences above are calculated among the population who feels close to a party different from the party voted in the last national election. The differences in the table are calculated as follow  $\frac{(Party\ Close_j - Party\ Voted_j)}{sd(Party\ Voted_j)}$  for each topic  $j$ . All the differences in this tables are standardized by dividing the differences for the standard deviation of each topic among all the elected parties in the sample. Columns (4) and (6) show the std. differences on the total mentions of EU and National way of life topic respectively. Columns (5) and (7) show the std. differences on the favorable mentions of EU and Nationalism topic respectively.

Table A4: ESS data and actual voting ( $\Delta$ )

| Country        | Year | (1)<br>Top 5 parties<br>Mean | (2)<br>Top 5 parties<br>SD | Country               | Year      | (1)<br>Top 5 parties<br>Mean | (2)<br>Top 5 parties<br>SD |
|----------------|------|------------------------------|----------------------------|-----------------------|-----------|------------------------------|----------------------------|
| <i>Austria</i> | 2008 | 0.882                        | 7.16                       | <i>Ireland</i>        | 2016      | 1.74                         | 4.39                       |
| <i>Austria</i> | 2013 | 0.831                        | 5.16                       | <i>Portugal</i>       | 2009      | 0.972                        | 7.13                       |
| <i>Belgium</i> | 2010 | 1.61                         | 2                          | <i>Portugal</i>       | 2011      | 1.52                         | 8.18                       |
| <i>Belgium</i> | 2014 | 1.36                         | 1.61                       | <i>Portugal</i>       | 2015      | -0.0255                      | 9.7                        |
| <i>Denmark</i> | 2007 | 0.17                         | 2.96                       | <i>Spain</i>          | 2008      | 0.797                        | 3.2                        |
| <i>Denmark</i> | 2011 | -.0823                       | 1.78                       | <i>Spain</i>          | 2011      | 0.628                        | 1.59                       |
| <i>Finland</i> | 2007 | 0.16                         | 3.09                       | <i>Sweden</i>         | 2010      | 0.428                        | 3.39                       |
| <i>Finland</i> | 2011 | -0.304                       | 3.44                       | <i>Sweden</i>         | 2014      | 0.004                        | 3.87                       |
| <i>Finland</i> | 2015 | 0.686                        | 3.33                       | <i>Switzerland</i>    | 2007      | 0.0323                       | 2.56                       |
| <i>France</i>  | 2007 | 0.381                        | 4.71                       | <i>Switzerland</i>    | 2011      | 0.337                        | 4.48                       |
| <i>France</i>  | 2012 | 1.45                         | 3.39                       | <i>Switzerland</i>    | 2015      | 0.463                        | 5.04                       |
| <i>Germany</i> | 2009 | 0.876                        | 7.88                       | <i>United Kingdom</i> | 2010      | -0.117                       | 2.55                       |
| <i>Germany</i> | 2013 | 1.42                         | 4.22                       | <i>United Kingdom</i> | 2015      | 0.106                        | 3.35                       |
| <i>Ireland</i> | 2011 | 0.7                          | 7.78                       | <b>Whole Sample</b>   | 2007-2016 | 0.63                         | 0.57                       |

Note: authors' calculations on ESS, European Election Database (EED) and National Statistics. This table shows the mean and the standard deviation of the difference between voting shares computed with ESS and actual election results for the top 5 parties voted in each national election available in the sample.



## Appendix II Principal Component Analysis

We provide here below the results of the Principal Component Analysis on: (i) measures of favorable political position of the party, computed as the difference between positive and negative mentions, on the European Union and National Way of life; (ii) measures of saliency of European Union and National Way of life in the parties' political manifesto.

### (i) Favorable political position

Table A5: PCA on favorable political position

| Component | Eigenvalue | Difference | Proportion | Cumulative |
|-----------|------------|------------|------------|------------|
| Comp1     | 1.51       | 1.03       | 0.758      | 0.758      |
| Comp2     | 0.484      | .          | 0.242      | 1.00       |

Table A6: PCA eigenvectors

| Variable        | Comp1   | Comp2  | Unexplained |
|-----------------|---------|--------|-------------|
| Pro Nationalism | 0.7071  | 0.7071 | 0           |
| Pro EU          | -0.7071 | 0.7071 | 0           |

### (ii) Saliency

Table A7: PCA on measures of saliency

| Component | Eigenvalue | Difference | Proportion | Cumulative |
|-----------|------------|------------|------------|------------|
| Comp1     | 1.402      | 0.805      | 0.701      | 0.701      |
| Comp2     | 0.597      | .          | 0.298      | 1.00       |

Table A8: PCA eigenvectors

| Variable          | Comp1  | Comp2   | Unexplained |
|-------------------|--------|---------|-------------|
| Total Nationalism | 0.7071 | 0.7071  | 0           |
| Total EU          | 0.7071 | -0.7071 | 0           |

## Appendix III Parties' names and political preferences

Table A9: Partys' names and political preferences

| Country        | Party (abbrev) | Party (full name)                                                                   | Nationalism | Salience |
|----------------|----------------|-------------------------------------------------------------------------------------|-------------|----------|
| <b>Austria</b> | BZÖ            | <i>Bündnis Zukunft Österreich (Alliance for the Future of Austria)</i>              | 0.681       | 0.023    |
|                | FPÖ            | <i>Freiheitliche Partei Österreichs (Austrian Freedom Party)</i>                    | 1.080       | 0.032    |
|                | TS             | <i>Team Stronach für Österreich (Team Stronach for Austria)</i>                     | 1.075       | 0.025    |
|                | NEOS           | <i>Das Neue Österreich (The New Austria)</i>                                        | -0.638      | 0.018    |
|                | LIF            | <i>Liberales Forum (Liberal Forum)</i>                                              | 0.105       | 0.000    |
|                | GRÜNE          | <i>Die Grünen (The Greens)</i>                                                      | -0.596      | 0.029    |
|                | SPÖ            | <i>Sozialdemokratische Partei Österreichs (Austrian Social Democratic Party)</i>    | -0.272      | 0.020    |
|                | KPÖ            | <i>Kommunistische Partei Österreichs (Austrian Communist Party)</i>                 | 0.819       | 0.033    |
|                | ÖVP            | <i>Österreichische Volkspartei (Austrian People's Party)</i>                        | -0.258      | 0.029    |
|                | pirate         | <i>Pirate Party</i>                                                                 | 0.200       | 0.006    |
| <b>Belgium</b> | groen!         | <i>Groen! (Green!)</i>                                                              | -0.215      | 0.008    |
|                | openVLD        | <i>Open Vlaamse Liberalen en Democraten (Open Flemish Liberals and Democrats)</i>   | -0.294      | 0.011    |
|                | sp.a           | <i>Socialistische Partij Anders (Socialist Party Different)</i>                     | -0.055      | 0.004    |
|                | ECOLO          | <i>Écologistes Confédérés pour l'Organisation de Luttes Originales (Ecologists)</i> | -0.301      | 0.012    |
|                | CD&V           | <i>Christen-Democratisch en Vlaams (Christian Democratic and Flemish)</i>           | -0.565      | 0.016    |
|                | PSC            | <i>Parti Social Chrétien (Christian Social Party)</i>                               | -0.376      | 0.012    |
|                | LDD            | <i>Lijst Dedeker (List Dedeker)</i>                                                 | 0.008       | 0.002    |
|                | N-VA           | <i>Nieuw-Vlaamse Alliantie (New Flemish Alliance)</i>                               | -0.482      | 0.016    |
|                | VB             | <i>Vlaams Belang (Flemish Interest)</i>                                             | 0.369       | 0.013    |
|                | PS             | <i>Parti Socialiste (Francophone Socialist Party)</i>                               | -0.706      | 0.019    |
|                | MR             | <i>Alliance: Mouvement Réformateur (Reform Movement)</i>                            | -0.418      | 0.015    |
|                |                |                                                                                     |             |          |
| <b>Denmark</b> | V              | <i>Venstre (Liberals)</i>                                                           | -0.491      | 0.025    |
|                | SF             | <i>Socialistisk Folkeparti (Socialist People's Party)</i>                           | 0.398       | 0.013    |
|                | KrF            | <i>Kristeligt Folkeparti (Christian People's Party)</i>                             | 0.552       | 0.018    |
|                | SD             | <i>Socialdemokratiet (Social Democratic Party)</i>                                  | 0.277       | 0.006    |
|                | KF             | <i>Konservative Folkeparti (Conservative People's Party)</i>                        | -0.095      | 0.025    |
|                | EL             | <i>Alliance: Enhedslisten - De Rød-Grønne (Red-Green Unity List)</i>                | 1.117       | 0.033    |
|                | DF             | <i>Dansk Folkeparti (Danish People's Party)</i>                                     | 5.155       | 0.107    |

|                |           |                                                                                                                               |        |       |
|----------------|-----------|-------------------------------------------------------------------------------------------------------------------------------|--------|-------|
|                | NY        | <i>Ny Alliance (New Alliance)</i>                                                                                             | 0.105  | 0.021 |
|                | RV        | <i>Det Radikale Venstre (Danish Social-Liberal Party)</i>                                                                     | -1.028 | 0.024 |
| <b>Finland</b> | SSDP      | <i>Suomen Sosialidemokraattinen Puolue (Finnish Social Democrats)</i>                                                         | -0.043 | 0.006 |
|                | LKP       | <i>Liberaalinen Kansanpuolue (Liberal People's Party)</i>                                                                     | 1.084  | 0.020 |
|                | VL        | <i>Vihreä Liitto (Green Union)</i>                                                                                            | 0.036  | 0.005 |
|                | PS        | <i>Perussuomalaiset (True Finns)</i>                                                                                          | 2.573  | 0.051 |
|                | VAS       | <i>Vasemmistoliitto (Left Wing Alliance)</i>                                                                                  | -0.142 | 0.008 |
|                | SK        | <i>Suomen Kansanpuolue (Finnish People's Party)</i>                                                                           | -0.412 | 0.020 |
|                | pirate    | <i>Pirate Party</i>                                                                                                           | 0.200  | 0.006 |
|                | RKP/SFP   | <i>Ruotsalainen Kansanpuolue/Svenska Folkpartiet (Swedish People's Party)</i>                                                 | -0.348 | 0.009 |
|                | KD        | <i>Suomen Kristillisdemokraatit (Christian Democrats in Finland)</i>                                                          | 0.295  | 0.009 |
|                | KK        | <i>Kansallinen Kokoomus (National Coalition)</i>                                                                              | -0.273 | 0.024 |
| <b>France</b>  | NC        | <i>Nouveau Centre (New Centre)</i>                                                                                            | -1.596 | 0.035 |
|                | Les Verts | <i>Les Verts, Confédération Écologiste - Parti Écologiste (The Greens)</i>                                                    | -1.251 | 0.028 |
|                | FDG       | <i>Alliance: Front de Gauche (Left Front)</i>                                                                                 | -1.108 | 0.035 |
|                | UDF       | <i>Union pour la Démocratie Française (Union for French Democracy)</i>                                                        | -1.026 | 0.025 |
|                | PCF       | <i>Parti Communiste Français (French Communist Party)</i>                                                                     | -0.047 | 0.020 |
|                | PRG       | <i>Parti Radical de Gauche (Left Radical Party)</i>                                                                           | -1.520 | 0.039 |
|                | UMP       | <i>Alliance: Union pour la Majorité Présidentielle (Union for the Presidential Majority)</i>                                  | -0.355 | 0.054 |
|                | MoDem     | <i>Mouvement Démocrate (Democratic Movement)</i>                                                                              | -0.620 | 0.047 |
|                | PS        | <i>Parti Socialiste (Socialist Party)</i>                                                                                     | -0.971 | 0.027 |
|                | FN        | <i>Front National (National Front)</i>                                                                                        | 3.533  | 0.073 |
|                | PR        | <i>Parti Radical (Radical Party)</i>                                                                                          | -0.580 | 0.066 |
| <b>Germany</b> | LINKE     | <i>Die Linke (The Left)</i>                                                                                                   | -0.165 | 0.011 |
|                | SPD       | <i>Sozialdemokratische Partei Deutschlands (Social Democratic Party of Germany)</i>                                           | -0.366 | 0.021 |
|                | 90/Greens | <i>Bündnis'90/Die Grünen (Alliance'90/Greens)</i>                                                                             | -0.570 | 0.016 |
|                | CDU/CSU   | <i>Alliance: Christlich-Demokratische Union/Christlich-Soziale Union (Christian Democratic Union/ Christian Social Union)</i> | 0.297  | 0.033 |
|                | AfD       | <i>Alternative für Deutschland (Alternative for Germany)</i>                                                                  | 4.181  | 0.090 |
|                | pirate    | <i>Pirate Party</i>                                                                                                           | 0.200  | 0.006 |
|                | FDP       | <i>Freie Demokratische Partei (Free Democratic Party)</i>                                                                     | -0.593 | 0.025 |
| <b>Ireland</b> | SoDeIR    | <i>Social Democrats</i>                                                                                                       | 0.016  | 0.005 |

|                 |          |                                                                                           |        |       |
|-----------------|----------|-------------------------------------------------------------------------------------------|--------|-------|
|                 | irish    | <i>Fine Gael (Family of the Irish)</i>                                                    | -0.198 | 0.020 |
|                 | SF       | <i>Sinn Féin (We Ourselves)</i>                                                           | 1.375  | 0.032 |
|                 | PBPA     | <i>People Before Profit Alliance</i>                                                      | 0.105  | 0.006 |
|                 | ULA      | <i>Alliance: United Left Alliance</i>                                                     | 0.105  | 0.000 |
|                 | Greens   | <i>Green Party/Comhaontas Glas (Green Party)</i>                                          | 0.414  | 0.014 |
|                 | AAA      | <i>Anti-Austerity Alliance</i>                                                            | -0.219 | 0.015 |
|                 | IndIR    | <i>Independent Alliance</i>                                                               | 1.446  | 0.041 |
|                 | Labour   | <i>Páirti Lucht Oibre (Labour Party)</i>                                                  | -0.128 | 0.013 |
|                 | sd       | <i>Fianna Fáil (Soldiers of Destiny)</i>                                                  | -0.045 | 0.019 |
| <b>Portugal</b> | PCP      | <i>Partido Comunista Português (Portuguese Communist Party)</i>                           | 0.559  | 0.019 |
|                 | CDS-PP   | <i>Centro Democrático Social-Partido Popular (Social Democratic Center-Popular Party)</i> | 0.192  | 0.020 |
|                 | PS       | <i>Partido Socialista (Socialist Party)</i>                                               | -0.356 | 0.014 |
|                 | PEV      | <i>Partido Ecologista "Os Verdes" (Ecologist Party "The Greens" )</i>                     | 0.249  | 0.006 |
|                 | PSD      | <i>Partido Social Democrata (Social Democratic Party)</i>                                 | -0.198 | 0.016 |
|                 | CDU      | <i>Coligação Democrática Unitária (Unified Democratic Coalition)</i>                      | 0.226  | 0.017 |
|                 | BE       | <i>Bloco de Esquerda (Left Bloc)</i>                                                      | 0.463  | 0.017 |
| <b>Spain</b>    | CC       | <i>Coalición Canaria (Canarian Coalition)</i>                                             | -0.468 | 0.013 |
|                 | Amaiur   | <i>Alliance: Amaiur (Amaiur)</i>                                                          | 0.105  | 0.000 |
|                 | CDC      | <i>Convergència Democràtica de Catalunya (Democratic Convergence of Catalonia)</i>        | -0.015 | 0.002 |
|                 | EH Bildu | <i>Euskal Herria Bildu (Basque Country Unite)</i>                                         | 0.534  | 0.009 |
|                 | intide   | <i>En marea (In Tide)</i>                                                                 | 0.105  | 0.00  |
|                 | C's      | <i>Ciudadanos (Citizens)</i>                                                              | -0.191 | 0.013 |
|                 | Podemos  | <i>Unidos Podemos (United We Can)</i>                                                     | 0.105  | 0.003 |
|                 | BNG      | <i>Bloque Nacionalista Galego (Galician Nationalist Bloc)</i>                             | 0.849  | 0.020 |
|                 | PNV/EAJ  | <i>Partido Nacionalista Vasco/Euzko Alderdi Jeltzalea (Basque Nationalist Party)</i>      | -1.215 | 0.032 |
|                 | cq       | <i>Alliance: Compromís-Q (Commitment-Q)</i>                                               | 0.039  | 0.001 |
|                 | ERC      | <i>Esquerra Republicana de Catalunya (Catalan Republican Left)</i>                        | -0.564 | 0.014 |
|                 | CiU      | <i>Alliance: Convergència i Unió (Convergence and Union)</i>                              | -0.598 | 0.015 |
|                 | UPyD     | <i>Unión, Progreso y Democracia (Union, Progress and Democracy)</i>                       | -0.323 | 0.009 |
|                 | IU       | <i>Izquierda Unida (United Left)</i>                                                      | 0.213  | 0.010 |
|                 | yes      | <i>Alliance: Geroa Bai (Future Yes)</i>                                                   | -0.114 | 0.004 |
|                 | PP       | <i>Partido Popular (People's Party)</i>                                                   | -0.438 | 0.022 |

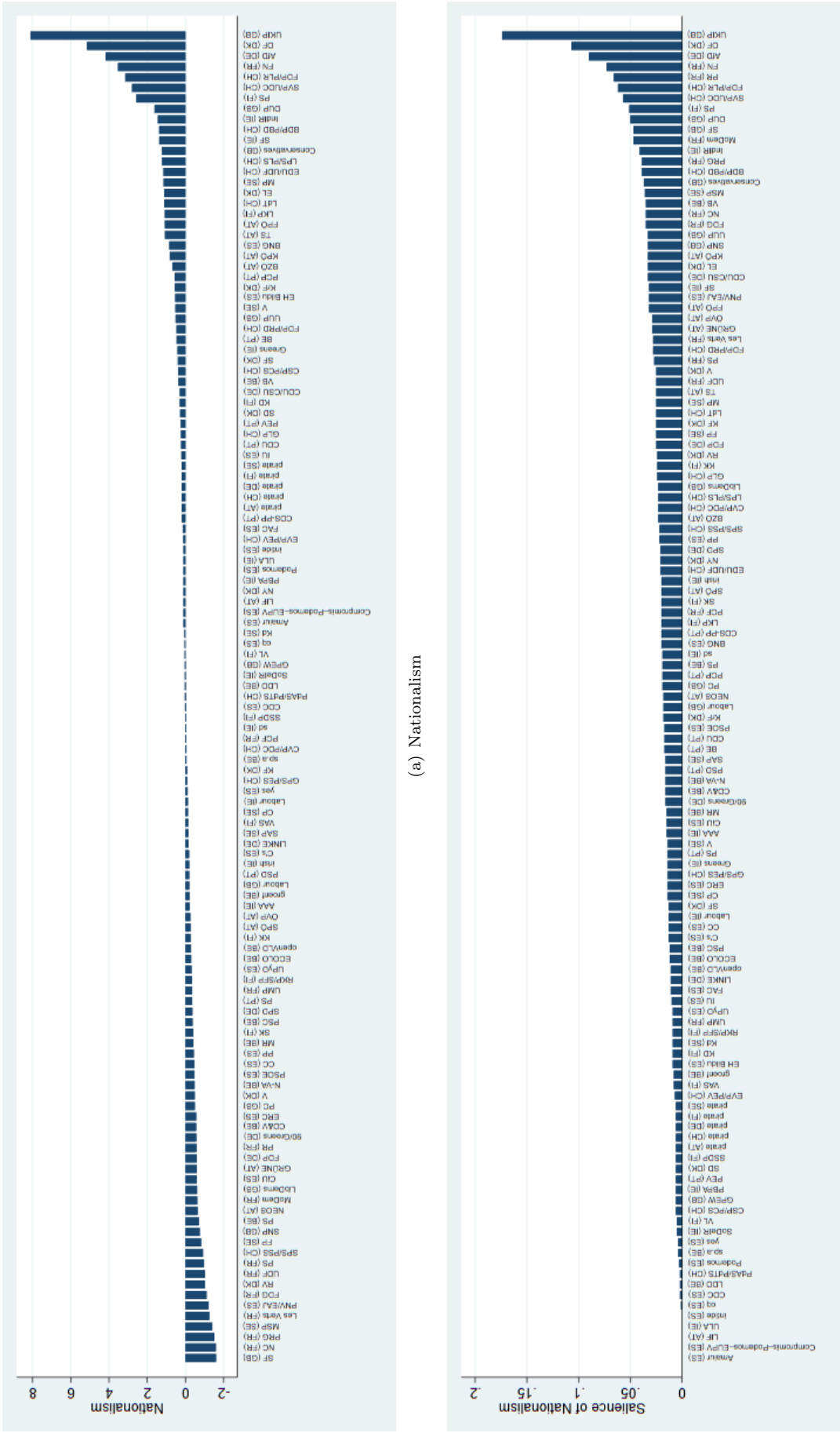
|                       |           |                                                                                                                 |        |       |
|-----------------------|-----------|-----------------------------------------------------------------------------------------------------------------|--------|-------|
|                       | PSOE      | <i>Partido Socialista Obrero Español (Spanish Socialist Workers' Party)</i>                                     | -0.477 | 0.017 |
|                       | FAC       | <i>Foro Asturias (Forum Asturias)</i>                                                                           | 0.141  | 0.011 |
| <b>Sweden</b>         | SAP       | <i>Socialdemokratiska Arbetareparti (Social Democratic Labour Party)</i>                                        | -0.156 | 0.016 |
|                       | FP        | <i>Folkpartiet Liberalerna (Liberal People's Party)</i>                                                         | -0.823 | 0.025 |
|                       | MP        | <i>Miljöpartiet de Gröna (Green Ecology Party)</i>                                                              | 1.143  | 0.025 |
|                       | Kd        | <i>Kristdemokraterna (Christian Democrats)</i>                                                                  | 0.051  | 0.009 |
|                       | pirate    | <i>Pirate Party</i>                                                                                             | 0.200  | 0.006 |
|                       | CP        | <i>Centerpartiet (Centre Party)</i>                                                                             | -0.131 | 0.014 |
|                       | V         | <i>Vänsterpartiet (Left Party)</i>                                                                              | 0.527  | 0.014 |
|                       | MSP       | <i>Moderata Samlingspartiet (Moderate Coalition Party)</i>                                                      | -1.403 | 0.036 |
| <b>Switzerland</b>    | GLP       | <i>Grünliberale Partei der Schweiz (Green Liberal Party)</i>                                                    | 0.235  | 0.024 |
|                       | FDP/PLR   | <i>FDP.Die Liberalen/PLR.Les Libéraux-Radicaux (FDP.The Liberals)</i>                                           | 3.151  | 0.062 |
|                       | GPS/PES   | <i>Grüne Partei der Schweiz/Parti écologiste suisse (Green Party of Switzerland)</i>                            | -0.099 | 0.014 |
|                       | SVP/UDC   | <i>Schweizerische Volkspartei/Union démocratique du centre (Swiss People's Party)</i>                           | 2.797  | 0.057 |
|                       | SPS/PSS   | <i>Sozialdemokratische Partei der Schweiz/Parti socialiste suisse (Social Democratic Party of Switzerland)</i>  | -0.920 | 0.022 |
|                       | EVP/PEV   | <i>Evangelische Volkspartei der Schweiz/Parti Evangélique Suisse (Protestant People's Party of Switzerland)</i> | 0.115  | 0.007 |
|                       | BDP/PBD   | <i>Bürgerlich-Demokratische Partei Schweiz/Parti Bourgeois (Conservative Democratic Party of Switzerland)</i>   | 1.377  | 0.039 |
|                       | LPS/PLS   | <i>Liberale Partei der Schweiz/Parti libéral suisse (Liberal Party of Switzerland)</i>                          | 1.231  | 0.023 |
|                       | CVP/PDC   | <i>Parti démocrate-chrétien suisse (Christian Democratic People's Party of Switzerland)</i>                     | -0.053 | 0.023 |
|                       | LdT       | <i>Lega dei Ticinesi (Ticino League)</i>                                                                        | 1.116  | 0.025 |
|                       | EDU/UDF   | <i>Union Démocratique Fédérale (Federal Democratic Union)</i>                                                   | 1.149  | 0.021 |
|                       | CSP/PCS   | <i>Christlich-soziale Partei/Parti Chrétien-Social (Christian Social Party)</i>                                 | 0.385  | 0.006 |
|                       | FDP/PRD   | <i>Parti radical-démocratique suisse (Radical Democratic Party)</i>                                             | 0.470  | 0.028 |
|                       | PdAS/PdTS | <i>Partei der Arbeit der Schweiz/Parti suisse du travail (Swiss Labour Party)</i>                               | -0.006 | 0.002 |
|                       | pirate    | <i>Pirate Party</i>                                                                                             | 0.200  | 0.006 |
| <b>United Kingdom</b> | SNP       | <i>Scottish National Party (Scottish National Party)</i>                                                        | -0.748 | 0.033 |

|               |                                                                                  |        |       |
|---------------|----------------------------------------------------------------------------------|--------|-------|
| UUP           | <i>Ulster Unionist Party (Ulster Unionist Party)</i>                             | 0.516  | 0.033 |
| LibDems       | <i>Liberal Democrats (Liberal Democrats)</i>                                     | -0.608 | 0.023 |
| PC            | <i>Plaid Cymru (The Party of Wales)</i>                                          | -0.495 | 0.019 |
| SF            | <i>Sinn Féin (We Ourselves)</i>                                                  | -1.602 | 0.047 |
| Labour        | <i>Labour Party (Labour Party)</i>                                               | -0.204 | 0.018 |
| Conservatives | <i>Conservative Party (Conservative Party)</i>                                   | 1.238  | 0.037 |
| UKIP          | <i>United Kingdom Independence Party (United Kingdom<br/>Independence Party)</i> | 8.115  | 0.174 |
| GPEW          | <i>Green Party of England and Wales (Green Party of Eng-<br/>land and Wales)</i> | 0.017  | 0.006 |
| DUP           | <i>Democratic Unionist Party (Democratic Unionist Party)</i>                     | 1.620  | 0.050 |

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Note: authors' calculations on ESS data and Manifesto Project Database. The table shows all the parties voted reported by the ESS and that won at least one seat in the parliament. The last two columns show the parties' political preferences measured with indicators of nationalism and Saliency.

Figure A1: Nationalism, Saliency and parties



Note: authors' calculations on Manifesto Project Database.

## Appendix IV Regional level Mechanisms

Table A10: Nationalism - Regional characteristics - Migrants Origin

|                                       | (1)<br>IV        | (2)<br>IV          | (3)<br>IV         | (4)<br>IV       | (5)<br>IV       | (6)<br>IV         |
|---------------------------------------|------------------|--------------------|-------------------|-----------------|-----------------|-------------------|
| Time                                  | 2007-2016        | 2007-2016          | 2007-2016         | 2007-2016       | 2007-2016       | 2007-2016         |
| Regional Characteristic               | Social Transf.   | Children           | Crime             | Social Transf.  | Children        | Crime             |
| <b>Not European Migrants</b>          |                  |                    |                   |                 |                 |                   |
| <i>Share not EU HS (above Median)</i> | - 0.17<br>(0.17) | - 0.21<br>(0.20)   | -0.17<br>(0.19)   |                 |                 |                   |
| <i>Share not EU HS (below Median)</i> | -0.17<br>(0.20)  | -0.81***<br>(0.29) | - 0.25<br>(0.16)  |                 |                 |                   |
| <i>Share not EU LS (above Median)</i> |                  |                    |                   | 0.21<br>(0.25)  | 0.79<br>(0.55)  | 0.15***<br>(0.06) |
| <i>Share not EU LS (below Median)</i> |                  |                    |                   | 0.13<br>(0.08)  | -0.15<br>(0.19) | 0.14<br>(0.13)    |
| F-stat ( <i>HP : same coef f</i> )    | 0.00             | 7.57               | 0.45              | 0.07            | 1.67            | 0.00              |
| P-value F-stat                        | 0.96             | 0.01               | 0.50              | 0.79            | 0.20            | 0.98              |
| Observations                          | 48319            | 48319              | 48319             | 48319           | 48319           | 48319             |
| K-P rk Wald F-stat                    | 5.37             | 4.44               | 7.40              | 1.25            | 1.09            | 3.10              |
| Adj. R-Square                         | 0.13             | 0.12               | 0.13              | 0.13            | 0.10            | 0.13              |
| <b>European Migrants</b>              |                  |                    |                   |                 |                 |                   |
| <i>Share EU HS (above Median)</i>     | -0.17<br>(0.11)  | 0.12<br>(0.97)     | -0.40**<br>(0.19) |                 |                 |                   |
| <i>Share EU HS (below Median)</i>     | -0.38*<br>(0.20) | -0.23*<br>(0.13)   | -0.09<br>(0.07)   |                 |                 |                   |
| <i>Share EU LS (above Median)</i>     |                  |                    |                   | -0.28<br>(0.48) | 0.12<br>(1.68)  | 0.22<br>(0.22)    |
| <i>Share EU LS (below Median)</i>     |                  |                    |                   | 0.01<br>(0.16)  | -0.24<br>(1.64) | - 0.38<br>(0.34)  |
| F-stat ( <i>HP : same coef f</i> )    | 1.72             | 0.15               | 3.17              | 0.25            | 0.01            | 1.48              |
| P-value F-stat                        | 0.19             | 0.70               | 0.08              | 0.62            | 0.91            | 0.23              |
| Observations                          | 48319            | 48319              | 48319             | 48319           | 48319           | 48319             |
| K-P rk Wald F-stat                    | 3.36             | 0.58               | 4.02              | 0.68            | 0.02            | 1.92              |
| Adj. R-Square                         | 0.13             | 0.13               | 0.13              | 0.13            | 0.13            | 0.13              |
| NUTS2 f.e.                            | Yes              | Yes                | Yes               | Yes             | Yes             | Yes               |
| Year f.e.                             | Yes              | Yes                | Yes               | Yes             | Yes             | Yes               |
| NUTS2 Controls                        | Yes              | Yes                | Yes               | Yes             | Yes             | Yes               |
| Individual Controls                   | Yes              | Yes                | Yes               | Yes             | Yes             | Yes               |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummies are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is our standardized measure of nationalism. Columns (1) and (4) distinguishes on the level of Social transfer per capita. Columns (2) and (5) distinguishes regions on the ratio  $\frac{0-14}{15-65}$  old. Columns (3) and (6) distinguishes on the total number of crime.



## Appendix V Robustness Checks by regional economic conditions

Table A11: Nationalism - Subsample analysis based on unemployment rate quartiles

|                          | (1)<br>IV<br>1 <sup>st</sup> | (2)<br>IV<br>2 <sup>nd</sup> | (3)<br>IV<br>3 <sup>rd</sup> | (4)<br>IV<br>4 <sup>th</sup> | (5)<br>IV<br>1 <sup>st</sup> | (6)<br>IV<br>2 <sup>nd</sup> | (7)<br>IV<br>3 <sup>rd</sup> | (8)<br>IV<br>4 <sup>th</sup> |
|--------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Unempl. Quartile<br>Time | 2007-2016                    | 2007-2016                    | 2007-2016                    | 2007-2016                    | 2007-2016                    | 2007-2016                    | 2007-2016                    | 2007-2016                    |
| <b>All Migrants</b>      |                              |                              |                              |                              |                              |                              |                              |                              |
| <i>Share</i>             | 0.06<br>(0.06)               | 0.19*<br>(0.11)              | -0.19**<br>(0.08)            | -0.04<br>(0.02)              |                              |                              |                              |                              |
| <i>Share HS</i>          |                              |                              |                              |                              | -0.14<br>(0.10)              | - 0.20<br>(0.15)             | -0.34***<br>(0.12)           | -0.06<br>(0.06)              |
| <i>Share LS</i>          |                              |                              |                              |                              | 0.10<br>(0.07)               | 0.16*<br>(0.09)              | -0.02<br>(0.05)              | -0.03<br>(0.03)              |
| Observations             | 15741                        | 10053                        | 11792                        | 10733                        | 15741                        | 10053                        | 11792                        | 10733                        |
| K-P rk Wald F-stat       | 5.60                         | 11.17                        | 8.73                         | 8.79                         | 3.01                         | 3.79                         | 3.91                         | 5.07                         |
| Adj. R-Square            | 0.16                         | 0.09                         | 0.12                         | 0.08                         | 0.16                         | 0.10                         | 0.12                         | 0.08                         |
| <b>Non EU Migrants</b>   |                              |                              |                              |                              |                              |                              |                              |                              |
| <i>Share No EU</i>       | 0.12<br>(0.10)               | 0.38<br>(0.24)               | -0.23**<br>(0.11)            | 0.04<br>(0.10)               |                              |                              |                              |                              |
| <i>Share No EU HS</i>    |                              |                              |                              |                              | - 0.14<br>(0.35)             | -1.24<br>(0.78)              | -0.63*<br>(0.34)             | 0.75<br>(3.79)               |
| <i>Share No EU LS</i>    |                              |                              |                              |                              | 0.20<br>(0.17)               | 0.58<br>(0.58)               | -0.09<br>(0.11)              | 0.09<br>(0.61)               |
| Observations             | 15741                        | 10053                        | 11792                        | 10733                        | 15741                        | 10053                        | 11792                        | 10733                        |
| K-P rk Wald F-stat       | 7.35                         | 6.99                         | 2.84                         | 0.81                         | 2.26                         | 1.25                         | 0.82                         | 0.02                         |
| Adj. R-Square            | 0.16                         | 0.08                         | 0.12                         | 0.08                         | 0.16                         | 0.07                         | 0.12                         | -0.03                        |
| <b>EU Migrants</b>       |                              |                              |                              |                              |                              |                              |                              |                              |
| <i>Share EU</i>          | -0.21<br>(0.19)              | -0.31<br>(1.63)              | 1.19<br>(1.17)               | -0.09<br>(0.06)              |                              |                              |                              |                              |
| <i>Share EU HS</i>       |                              |                              |                              |                              | -0.17<br>(0.12)              | -1.11<br>(4.21)              | 8.60<br>(99.32)              | -0.04<br>(0.11)              |
| <i>Share EU LS</i>       |                              |                              |                              |                              | - 0.03<br>(0.10)             | -1.45<br>(6.18)              | 4.87<br>(48.74)              | -0.16<br>(0.11)              |
| Observations             | 15741                        | 10053                        | 11792                        | 10733                        | 15741                        | 10053                        | 11792                        | 10733                        |
| K-P rk Wald F-stat       | 3.28                         | 0.16                         | 0.91                         | 2.02                         | 4.83                         | 0.04                         | 0.00                         | 0.91                         |
| Adj. R-Square            | 0.16                         | 0.09                         | 0.07                         | 0.08                         | 0.16                         | -0.02                        | -1.03                        | 0.07                         |
| NUTS2 f.e.               | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          |
| Year f.e.                | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          |
| NUTS2 Controls           | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          |
| Individual Controls      | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          | Yes                          |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummy are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is our standardized measure of nationalism. Quartiles are defined on the regional level of Unemployment rate in 2010.

Table A12: Nationalism - Subsample analysis based on Unemployment and Unemployment Variation

| Characteristics        | (1)<br>IV          | (2)<br>IV          | (3)<br>IV          | (4)<br>IV          | (5)<br>IV                          | (6)<br>IV          | (7)<br>IV          | (8)<br>IV          |
|------------------------|--------------------|--------------------|--------------------|--------------------|------------------------------------|--------------------|--------------------|--------------------|
|                        | Unemployment       |                    |                    |                    | Unemployment variation (2010-2007) |                    |                    |                    |
| Median Time            | Below<br>2007-2016 | Above<br>2007-2016 | Below<br>2007-2016 | Above<br>2007-2016 | Below<br>2007-2016                 | Above<br>2007-2016 | Below<br>2007-2016 | Above<br>2007-2016 |
| <b>All Migrants</b>    |                    |                    |                    |                    |                                    |                    |                    |                    |
| <i>Share</i>           | 0.08<br>(0.06)     | 0.16<br>(0.15)     |                    |                    | 0.01<br>(0.10)                     | 0.17<br>(0.11)     |                    |                    |
| <i>Share HS</i>        |                    |                    | -0.05<br>(0.16)    | -0.19*<br>(0.11)   |                                    |                    | -0.26***<br>(0.09) | 0.11<br>(0.25)     |
| <i>Share LS</i>        |                    |                    | 0.08*<br>(0.05)    | 0.09<br>(0.09)     |                                    |                    | 0.11<br>(0.12)     | 0.16<br>(0.11)     |
| Observations           | 27750              | 20569              | 27750              | 20569              | 26577                              | 21742              | 26577              | 21742              |
| K-P rk Wald F-stat     | 9.31               | 2.18               | 1.38               | 0.93               | 2.89                               | 2.83               | 1.67               | 0.58               |
| Adj. R-Square          | 0.16               | 0.09               | 0.16               | 0.10               | 0.16                               | 0.09               | 0.16               | 0.09               |
| <b>Non EU Migrants</b> |                    |                    |                    |                    |                                    |                    |                    |                    |
| <i>Share No EU</i>     | 0.07*<br>(0.04)    | 0.20<br>(0.18)     |                    |                    | 0.03<br>(0.08)                     | 0.13*<br>(0.07)    |                    |                    |
| <i>Share No EU HS</i>  |                    |                    | -0.11<br>(0.32)    | -0.59**<br>(0.23)  |                                    |                    | -0.69**<br>(0.28)  | 0.45<br>(0.82)     |
| <i>Share No EU LS</i>  |                    |                    | 0.10*<br>(0.05)    | 0.12<br>(0.09)     |                                    |                    | 0.14*<br>(0.08)    | 0.13<br>(0.09)     |
| Observations           | 27750              | 20569              | 27750              | 20569              | 26577                              | 21742              | 26577              | 21742              |
| K-P rk Wald F-stat     | 29.74              | 5.04               | 12.07              | 1.54               | 8.42                               | 15.11              | 2.97               | 0.96               |
| Adj. R-Square          | 0.16               | 0.09               | 0.16               | 0.10               | 0.16                               | 0.09               | 0.16               | 0.09               |
| <b>EU Migrants</b>     |                    |                    |                    |                    |                                    |                    |                    |                    |
| <i>Share EU</i>        | 0.02<br>(0.38)     | 0.87<br>(5.21)     |                    |                    | -0.21<br>(0.64)                    | 0.04<br>(0.38)     |                    |                    |
| <i>Share EU HS</i>     |                    |                    | -0.16<br>(0.13)    | -0.23**<br>(0.11)  |                                    |                    | -0.19<br>(0.23)    | -0.09<br>(0.15)    |
| <i>Share EU LS</i>     |                    |                    | -0.07<br>(0.17)    | 0.02<br>(0.19)     |                                    |                    | -0.17<br>(0.34)    | -0.02<br>(0.12)    |
| Observations           | 27750              | 20569              | 27750              | 20569              | 26577                              | 21742              | 26577              | 21742              |
| K-P rk Wald F-stat     | 0.66               | 0.03               | 1.35               | 3.84               | 0.25                               | 0.21               | 0.46               | 3.69               |
| Adj. R-Square          | 0.16               | 0.00               | 0.16               | 0.10               | 0.16                               | 0.10               | 0.16               | 0.10               |
| NUTS2 f.e.             | Yes                | Yes                | Yes                | Yes                | Yes                                | Yes                | Yes                | Yes                |
| Year f.e.              | Yes                | Yes                | Yes                | Yes                | Yes                                | Yes                | Yes                | Yes                |
| NUTS2 Controls         | Yes                | Yes                | Yes                | Yes                | Yes                                | Yes                | Yes                | Yes                |
| Individual Controls    | Yes                | Yes                | Yes                | Yes                | Yes                                | Yes                | Yes                | Yes                |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummy are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is our standardized measure of nationalism. Subsample analysis splitting regions above and below the country median level in 2010.

## Appendix VI Vote for Party Families

### Radical Right

Table A13: Voting Radical Right parties

|                              | (1)<br>OLS      | (2)<br>IV         | (3)<br>OLS         | (4)<br>IV         | (5)<br>OLS        | (6)<br>IV         |
|------------------------------|-----------------|-------------------|--------------------|-------------------|-------------------|-------------------|
| Time                         | 2007-2016       | 2007-2016         | 2007-2016          | 2007-2016         | 2007-2016         | 2007-2016         |
| <b>Not European Migrants</b> |                 |                   |                    |                   |                   |                   |
| <i>Share No EU</i>           | 0.00<br>(0.00)  | 0.02***<br>(0.01) |                    |                   |                   |                   |
| <i>Share No EU HS</i>        |                 |                   | -0.01*<br>(0.01)   | -0.01<br>(0.03)   |                   |                   |
| <i>Share No EU LS</i>        |                 |                   |                    |                   | 0.01**<br>(0.00)  | 0.03***<br>(0.01) |
| Observations                 | 45771           | 45771             | 45771              | 45771             | 45771             | 45771             |
| K-P rk Wald F-stat           |                 | 29.46             |                    | 10.23             |                   | 37.07             |
| Adj. R-Square                | 0.10            | 0.10              | 0.10               | 0.10              | 0.10              | 0.10              |
| <b>European Migrants</b>     |                 |                   |                    |                   |                   |                   |
| <i>Share EU</i>              | 0.01*<br>(0.01) | 0.04<br>(0.03)    |                    |                   |                   |                   |
| <i>Share EU HS</i>           |                 |                   | -0.03***<br>(0.01) | -0.08**<br>(0.04) |                   |                   |
| <i>Share EU LS</i>           |                 |                   |                    |                   | 0.02***<br>(0.01) | 0.03<br>(0.02)    |
| Observations                 | 45771           | 45771             | 45771              | 45771             | 45771             | 45771             |
| K-P rk Wald F-stat           |                 | 3.12              |                    | 5.14              |                   | 2.29              |
| Adj. R-Square                | 0.10            | 0.10              | 0.10               | 0.10              | 0.10              | 0.10              |
| NUTS2 f.e.                   | Yes             | Yes               | Yes                | Yes               | Yes               | Yes               |
| Year f.e.                    | Yes             | Yes               | Yes                | Yes               | Yes               | Yes               |
| NUTS2 Controls               | Yes             | Yes               | Yes                | Yes               | Yes               | Yes               |
| Individual Controls          | Yes             | Yes               | Yes                | Yes               | Yes               | Yes               |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database, Chapell Hill Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummies are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is a dummy that take values of 1 if the individual voted for Radical Right parties, following Chapell Hill codification. Data on Switzerland are not available.

Table A14: Voting Radical Right parties - Voters Education

|                              | (1)<br>IV        | (2)<br>IV         | (3)<br>IV         | (4)<br>IV         |
|------------------------------|------------------|-------------------|-------------------|-------------------|
| Time                         | 2007-2016        | 2007-2016         | 2007-2016         | 2007-2016         |
| Subsample                    | <i>Education</i> |                   | <i>Education</i>  |                   |
| Natives Education            | Not Tertiary     | Tertiary          | Not Tertiary      | Tertiary          |
| <b>All Migrants</b>          |                  |                   |                   |                   |
| <i>Share HS</i>              | -0.05<br>(0.03)  | -0.01<br>(0.02)   |                   |                   |
| <i>Share LS</i>              |                  |                   | 0.03***<br>(0.01) | 0.02***<br>(0.00) |
| Observations                 | 29574            | 16195             | 29574             | 16195             |
| K-P rk Wald F-stat           | 5.76             | 5.16              | 25.85             | 22.89             |
| Adj. R-Square                | 0.12             | 0.04              | 0.12              | 0.03              |
| <b>Not European Migrants</b> |                  |                   |                   |                   |
| <i>Share No EU HS</i>        | -0.03<br>(0.04)  | 0.02<br>(0.03)    |                   |                   |
| <i>Share No EU LS</i>        |                  |                   | 0.04***<br>(0.01) | 0.02***<br>(0.01) |
| Observations                 | 29574            | 16195             | 29574             | 16195             |
| K-P rk Wald F-stat           | 10.55            | 9.30              | 37.13             | 35.68             |
| Adj. R-Square                | 0.12             | 0.03              | 0.12              | 0.03              |
| <b>European Migrants</b>     |                  |                   |                   |                   |
| <i>Share EU HS</i>           | -0.08*<br>(0.05) | -0.07**<br>(0.03) |                   |                   |
| <i>Share EU LS</i>           |                  |                   | 0.02<br>(0.03)    | 0.03*<br>(0.02)   |
| Observations                 | 29574            | 16195             | 29574             | 16195             |
| K-P rk Wald F-stat           | 5.02             | 4.82              | 2.89              | 1.61              |
| Adj. R-Square                | 0.12             | 0.03              | 0.13              | 0.03              |
| NUTS2 f.e.                   | Yes              | Yes               | Yes               | Yes               |
| Year f.e.                    | Yes              | Yes               | Yes               | Yes               |
| NUTS2 Controls ( $\Delta$ )  | Yes              | Yes               | Yes               | Yes               |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database, Chapell Hill Database and Eurostat data. Standard errors are clustered at NUTS2 level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . As individual controls age, gender and education dummies are included. As NUTS2 controls we include the differences in GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is a dummy that takes values of 1 if the individual voted for Radical Right parties, following Chapell Hill codification. Data on Switzerland are not available.

## Liberals

Table A15: Voting Liberal parties

|                              | (1)<br>OLS        | (2)<br>IV        | (3)<br>OLS      | (4)<br>IV        | (5)<br>OLS        | (6)<br>IV       |
|------------------------------|-------------------|------------------|-----------------|------------------|-------------------|-----------------|
| Time                         | 2007-2016         | 2007-2016        | 2007-2016       | 2007-2016        | 2007-2016         | 2007-2016       |
| <b>Not European Migrants</b> |                   |                  |                 |                  |                   |                 |
| <i>Share No EU</i>           | 0.00<br>(0.00)    | -0.01<br>(0.01)  |                 |                  |                   |                 |
| <i>Share No EU HS</i>        |                   |                  | 0.00<br>(0.01)  | 0.11**<br>(0.05) |                   |                 |
| <i>Share No EU LS</i>        |                   |                  |                 |                  | 0.00<br>(0.01)    | -0.01<br>(0.01) |
| Observations                 | 45771             | 45771            | 45771           | 45771            | 45771             | 45771           |
| K-P rk Wald F-stat           |                   | 29.46            |                 | 10.23            |                   | 37.07           |
| Adj. R-Square                | 0.12              | 0.12             | 0.12            | 0.11             | 0.12              | 0.12            |
| <b>European Migrants</b>     |                   |                  |                 |                  |                   |                 |
| <i>Share EU</i>              | -0.02**<br>(0.01) | -0.21*<br>(0.11) |                 |                  |                   |                 |
| <i>Share EU HS</i>           |                   |                  | -0.01<br>(0.01) | 0.25*<br>(0.15)  |                   |                 |
| <i>Share EU LS</i>           |                   |                  |                 |                  | -0.02**<br>(0.01) | -0.25<br>(0.15) |
| Observations                 | 45771             | 45771            | 45771           | 45771            | 45771             | 45771           |
| K-P rk Wald F-stat           |                   | 3.12             |                 | 5.14             |                   | 2.29            |
| Adj. R-Square                | 0.12              | 0.07             | 0.12            | 0.10             | 0.12              | 0.07            |
| NUTS2 f.e.                   | Yes               | Yes              | Yes             | Yes              | Yes               | Yes             |
| Year f.e.                    | Yes               | Yes              | Yes             | Yes              | Yes               | Yes             |
| NUTS2 Controls               | Yes               | Yes              | Yes             | Yes              | Yes               | Yes             |
| Individual Controls          | Yes               | Yes              | Yes             | Yes              | Yes               | Yes             |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database, Chapell Hill Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummies are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is a dummy that take values of 1 if the individual voted for Liberal parties, following Chapell Hill codification. Data on Switzerland are not available.

Table A16: Voting Liberal parties - Voters Education

|                              | (1)              | (2)       | (3)              | (4)       |
|------------------------------|------------------|-----------|------------------|-----------|
|                              | IV               | IV        | IV               | IV        |
| Time                         | 2007-2016        | 2007-2016 | 2007-2016        | 2007-2016 |
| Subsample                    | <i>Education</i> |           | <i>Education</i> |           |
| Natives Education            | Not Tertiary     | Tertiary  | Not Tertiary     | Tertiary  |
| <b>All Migrants</b>          |                  |           |                  |           |
| <i>Share HS</i>              | 0.16*            | 0.14      |                  |           |
|                              | (0.08)           | (0.09)    |                  |           |
| <i>Share LS</i>              |                  |           | -0.00            | 0.02      |
|                              |                  |           | (0.01)           | (0.01)    |
| Observations                 | 29574            | 16195     | 29574            | 16195     |
| K-P rk Wald F-stat           | 5.76             | 5.16      | 25.85            | 22.89     |
| Adj. R-Square                | 0.08             | 0.12      | 0.11             | 0.13      |
| <b>Not European Migrants</b> |                  |           |                  |           |
| <i>Share No EU HS</i>        | 0.13**           | 0.07      |                  |           |
|                              | (0.06)           | (0.06)    |                  |           |
| <i>Share No EU LS</i>        |                  |           | -0.02**          | -0.01     |
|                              |                  |           | (0.01)           | (0.02)    |
| Observations                 | 29574            | 16195     | 29574            | 16195     |
| K-P rk Wald F-stat           | 10.55            | 9.30      | 37.13            | 35.68     |
| Adj. R-Square                | 0.10             | 0.13      | 0.11             | 0.13      |
| <b>European Migrants</b>     |                  |           |                  |           |
| <i>Share EU HS</i>           | 0.23*            | 0.31      |                  |           |
|                              | (0.13)           | (0.20)    |                  |           |
| <i>Share EU LS</i>           |                  |           | -0.15*           | -0.49     |
|                              |                  |           | (0.09)           | (0.34)    |
| Observations                 | 29574            | 16195     | 29574            | 16195     |
| K-P rk Wald F-stat           | 5.02             | 4.82      | 2.89             | 1.61      |
| Adj. R-Square                | 0.09             | 0.11      | 0.09             | -0.04     |
| NUTS2 f.e.                   | Yes              | Yes       | Yes              | Yes       |
| Year f.e.                    | Yes              | Yes       | Yes              | Yes       |
| NUTS2 Controls ( $\Delta$ )  | Yes              | Yes       | Yes              | Yes       |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database, Chapell Hill Database and Eurostat data. Standard errors are clustered at NUTS2 level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . As individual controls age, gender and education dummies are included. As NUTS2 controls we include the differences in GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is a dummy that takes values of 1 if the individual voted for Liberal parties, following Chapell Hill codification. Data on Switzerland are not available.

## Appendix VII Effects on Voting

Table A17: Voting

|                              | (1)<br>OLS     | (2)<br>IV      | (3)<br>OLS      | (4)<br>IV       | (5)<br>OLS     | (6)<br>IV       |
|------------------------------|----------------|----------------|-----------------|-----------------|----------------|-----------------|
| Time                         | 2007-2016      | 2007-2016      | 2007-2016       | 2007-2016       | 2007-2016      | 2007-2016       |
| <b>All Migrants</b>          |                |                |                 |                 |                |                 |
| <i>Share</i>                 | 0.00<br>(0.00) | 0.00<br>(0.01) |                 |                 |                |                 |
| <i>Share HS</i>              |                |                | -0.00<br>(0.01) | 0.00<br>(0.02)  |                |                 |
| <i>Share LS</i>              |                |                |                 |                 | 0.00<br>(0.00) | 0.00<br>(0.01)  |
| Observations                 | 78814          | 78814          | 78814           | 78814           | 78814          | 78814           |
| K-P rk Wald F-stat           |                | 14.39          |                 | 14.33           |                | 26.24           |
| Adj. R-Square                | 0.10           | 0.10           | 0.10            | 0.10            | 0.10           | 0.10            |
| <b>Not European Migrants</b> |                |                |                 |                 |                |                 |
| <i>Share No EU</i>           | 0.00<br>(0.00) | 0.00<br>(0.01) |                 |                 |                |                 |
| <i>Share No EU HS</i>        |                |                | -0.02<br>(0.01) | 0.01<br>(0.05)  |                |                 |
| <i>Share No EU LS</i>        |                |                |                 |                 | 0.00<br>(0.00) | 0.00<br>(0.01)  |
| Observations                 | 78814          | 78814          | 78814           | 78814           | 78814          | 78814           |
| K-P rk Wald F-stat           |                | 30.65          |                 | 14.24           |                | 37.39           |
| Adj. R-Square                | 0.10           | 0.10           | 0.10            | 0.10            | 0.10           | 0.10            |
| <b>European Migrants</b>     |                |                |                 |                 |                |                 |
| <i>Share EU</i>              | 0.00<br>(0.00) | 0.05<br>(0.64) |                 |                 |                |                 |
| <i>Share EU HS</i>           |                |                | 0.01<br>(0.01)  | -0.00<br>(0.02) |                |                 |
| <i>Share EU LS</i>           |                |                |                 |                 | 0.01<br>(0.01) | -0.01<br>(0.03) |
| Observations                 | 78814          | 78814          | 78814           | 78814           | 78814          | 78814           |
| K-P rk Wald F-stat           |                | 0.01           |                 | 13.51           |                | 6.10            |
| Adj. R-Square                | 0.10           | 0.10           | 0.10            | 0.10            | 0.10           | 0.10            |
| NUTS2 f.e.                   | Yes            | Yes            | Yes             | Yes             | Yes            | Yes             |
| Year f.e.                    | Yes            | Yes            | Yes             | Yes             | Yes            | Yes             |
| NUTS2 Controls               | Yes            | Yes            | Yes             | Yes             | Yes            | Yes             |
| Individual Controls          | Yes            | Yes            | Yes             | Yes             | Yes            | Yes             |

Note: authors' calculations on ESS, EULFS and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender, education dummy are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is a dummy that take values of 1 if the individual voted during the last national elections.

Table A18: Voting - Voters Education

|                              | (1)              | (2)       | (3)              | (4)       |
|------------------------------|------------------|-----------|------------------|-----------|
|                              | IV               | IV        | IV               | IV        |
| Time                         | 2007-2016        | 2007-2016 | 2007-2016        | 2007-2016 |
| Subsample                    | <i>Education</i> |           | <i>Education</i> |           |
| Natives Education            | Not Tertiary     | Tertiary  | Not Tertiary     | Tertiary  |
| <b>All Migrants</b>          |                  |           |                  |           |
| <i>Share HS</i>              | 0.00             | -0.01     |                  |           |
|                              | (0.01)           | (0.03)    |                  |           |
| <i>Share LS</i>              |                  |           | 0.00             | 0.00      |
|                              |                  |           | (0.01)           | (0.01)    |
| Observations                 | 53675            | 25139     | 53675            | 25139     |
| K-P rk Wald F-stat           | 23.01            | 21.43     | 45.97            | 43.64     |
| Adj. R-Square                | 0.10             | 0.07      | 0.10             | 0.07      |
| <b>Not European Migrants</b> |                  |           |                  |           |
| <i>Share No EU HS</i>        | 0.01             | -0.00     |                  |           |
|                              | (0.04)           | (0.10)    |                  |           |
| <i>Share No EU LS</i>        |                  |           | 0.00             | 0.01      |
|                              |                  |           | (0.01)           | (0.01)    |
| Observations                 | 53675            | 25139     | 53675            | 25139     |
| K-P rk Wald F-stat           | 20.87            | 21.58     | 62.48            | 60.59     |
| Adj. R-Square                | 0.10             | 0.07      | 0.10             | 0.07      |
| <b>European Migrants</b>     |                  |           |                  |           |
| <i>Share EU HS</i>           | 0.00             | -0.01     |                  |           |
|                              | (0.02)           | (0.03)    |                  |           |
| <i>Share EU LS</i>           |                  |           | -0.02            | 0.02      |
|                              |                  |           | (0.04)           | (0.04)    |
| Observations                 | 53675            | 25139     | 53675            | 25139     |
| K-P rk Wald F-stat           | 24.87            | 21.52     | 6.42             | 5.51      |
| Adj. R-Square                | 0.10             | 0.07      | 0.09             | 0.07      |
| NUTS2 f.e.                   | Yes              | Yes       | Yes              | Yes       |
| Year f.e.                    | Yes              | Yes       | Yes              | Yes       |
| NUTS2 Controls               | Yes              | Yes       | Yes              | Yes       |
| Individual Controls          | Yes              | Yes       | Yes              | Yes       |

Note: authors' calculations on ESS, EULFS and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age and gender are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is a dummy that take values of 1 if the individual voted during the last national elections. Subsample analysis by education: not tertiary natives (col. (1) and (3)), tertiary natives (col. (2) and (4)).



Table A19: Voting - Voters age

|                              | (1)<br>IV        | (2)<br>IV       | (3)<br>IV       | (4)<br>IV        | (5)<br>IV       | (6)<br>IV       |
|------------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|
| Time                         | 2007-2016        | 2007-2016       | 2007-2016       | 2007-2016        | 2007-2016       | 2007-2016       |
| Subsample                    | <i>Age Group</i> |                 |                 | <i>Age Group</i> |                 |                 |
| Individual age group         | 18-37            | 38-57           | 58+             | 18-37            | 38-57           | 58+             |
| <b>All Migrants</b>          |                  |                 |                 |                  |                 |                 |
| <i>Share HS</i>              | 0.06<br>(0.04)   | -0.03<br>(0.03) | -0.01<br>(0.02) |                  |                 |                 |
| <i>Share LS</i>              |                  |                 |                 | 0.01<br>(0.02)   | -0.00<br>(0.01) | 0.00<br>(0.01)  |
| Observations                 | 20730            | 28605           | 29478           | 20730            | 28605           | 29478           |
| K-P rk Wald F-stat           | 24.21            | 19.93           | 25.50           | 44.96            | 42.09           | 49.73           |
| Adj. R-Square                | 0.13             | 0.06            | 0.03            | 0.13             | 0.06            | 0.03            |
| <b>Not European Migrants</b> |                  |                 |                 |                  |                 |                 |
| <i>Share No EU HS</i>        | 0.23**<br>(0.10) | -0.04<br>(0.07) | -0.08<br>(0.06) |                  |                 |                 |
| <i>Share No EU LS</i>        |                  |                 |                 | 0.01<br>(0.02)   | 0.00<br>(0.01)  | -0.00<br>(0.01) |
| Observations                 | 20730            | 28605           | 29478           | 20730            | 28605           | 29478           |
| K-P rk Wald F-stat           | 17.63            | 19.45           | 26.33           | 61.57            | 61.75           | 61.48           |
| Adj. R-Square                | 0.13             | 0.06            | 0.03            | 0.14             | 0.06            | 0.03            |
| <b>European Migrants</b>     |                  |                 |                 |                  |                 |                 |
| <i>Share EU HS</i>           | 0.01<br>(0.04)   | -0.04<br>(0.03) | 0.02<br>(0.02)  |                  |                 |                 |
| <i>Share EU LS</i>           |                  |                 |                 | -0.00<br>(0.05)  | 0.02<br>(0.04)  | -0.04<br>(0.04) |
| Observations                 | 20730            | 28605           | 29478           | 20730            | 28605           | 29478           |
| K-P rk Wald F-stat           | 24.48            | 20.95           | 27.51           | 6.08             | 5.99            | 5.77            |
| Adj. R-Square                | 0.14             | 0.06            | 0.03            | 0.14             | 0.06            | 0.03            |
| NUTS2 f.e.                   | Yes              | Yes             | Yes             | Yes              | Yes             | Yes             |
| Year f.e.                    | Yes              | Yes             | Yes             | Yes              | Yes             | Yes             |
| NUTS2 Controls               | Yes              | Yes             | Yes             | Yes              | Yes             | Yes             |
| Individual Controls          | Yes              | Yes             | Yes             | Yes              | Yes             | Yes             |

Note: authors' calculations on ESS, EULFS and Eurostat data. Standard errors are clustered at NUTS2 level.

\* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummies are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is a dummy that take values of 1 if the individual voted during the last national elections. Subsample analysis by age groups: 18-37 (col. (1) and (4)), 38-57 (col. (2) and (5)) and 58+ (col. (3) and (6)).

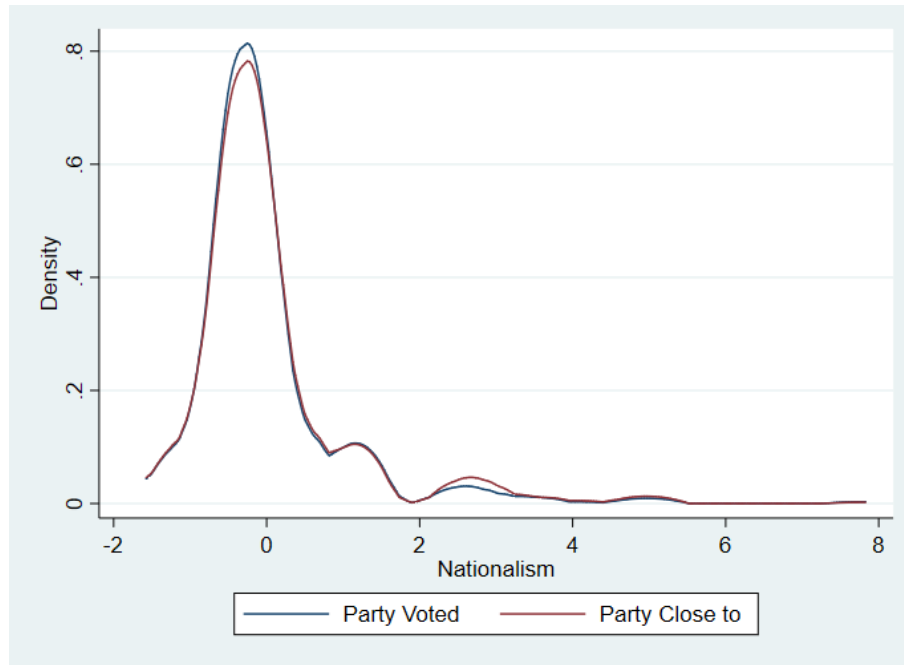
Table A20: Voting - Voters political orientation

|                              | (1)                          | (2)       | (3)       | (4)                          | (5)       | (6)       |
|------------------------------|------------------------------|-----------|-----------|------------------------------|-----------|-----------|
|                              | IV                           | IV        | IV        | IV                           | IV        | IV        |
| Time                         | 2007-2016                    | 2007-2016 | 2007-2016 | 2007-2016                    | 2007-2016 | 2007-2016 |
| Subsample                    | <i>Political Orientation</i> |           |           | <i>Political Orientation</i> |           |           |
| Individual age group         | Left                         | Centre    | Right     | Left                         | Centre    | Right     |
| <b>All Migrants</b>          |                              |           |           |                              |           |           |
| <i>Share HS</i>              | -0.04                        | 0.03      | -0.00     |                              |           |           |
|                              | (0.03)                       | (0.03)    | (0.03)    |                              |           |           |
| <i>Share LS</i>              |                              |           |           | 0.00                         | 0.00      | 0.01      |
|                              |                              |           |           | (0.01)                       | (0.01)    | (0.01)    |
| Observations                 | 16408                        | 39339     | 17160     | 16408                        | 39339     | 17160     |
| K-P rk Wald F-stat           | 20.24                        | 25.81     | 21.47     | 43.05                        | 43.36     | 46.44     |
| Adj. R-Square                | 0.09                         | 0.10      | 0.09      | 0.09                         | 0.10      | 0.09      |
| <b>Not European Migrants</b> |                              |           |           |                              |           |           |
| <i>Share No EU HS</i>        | -0.16**                      | 0.12**    | 0.01      |                              |           |           |
|                              | (0.07)                       | (0.06)    | (0.09)    |                              |           |           |
| <i>Share No EU LS</i>        |                              |           |           | 0.00                         | 0.00      | 0.01      |
|                              |                              |           |           | (0.01)                       | (0.01)    | (0.01)    |
| Observations                 | 16408                        | 39339     | 17160     | 16408                        | 39339     | 17160     |
| K-P rk Wald F-stat           | 21.02                        | 22.80     | 19.57     | 58.20                        | 59.39     | 67.98     |
| Adj. R-Square                | 0.08                         | 0.10      | 0.09      | 0.09                         | 0.10      | 0.09      |
| <b>European Migrants</b>     |                              |           |           |                              |           |           |
| <i>Share EU HS</i>           | -0.00                        | 0.01      | -0.01     |                              |           |           |
|                              | (0.02)                       | (0.03)    | (0.03)    |                              |           |           |
| <i>Share EU LS</i>           |                              |           |           | -0.00                        | -0.02     | -0.02     |
|                              |                              |           |           | (0.04)                       | (0.06)    | (0.04)    |
| Observations                 | 16408                        | 39339     | 17160     | 16408                        | 39339     | 17160     |
| K-P rk Wald F-stat           | 20.89                        | 27.72     | 21.62     | 3.16                         | 7.14      | 7.88      |
| Adj. R-Square                | 0.09                         | 0.10      | 0.09      | 0.09                         | 0.10      | 0.09      |
| NUTS2 f.e.                   | Yes                          | Yes       | Yes       | Yes                          | Yes       | Yes       |
| Year f.e.                    | Yes                          | Yes       | Yes       | Yes                          | Yes       | Yes       |
| NUTS2 Controls               | Yes                          | Yes       | Yes       | Yes                          | Yes       | Yes       |
| Individual Controls          | Yes                          | Yes       | Yes       | Yes                          | Yes       | Yes       |

Note: authors' calculations on ESS, EULFS and Eurostat data. Standard errors are clustered at NUTS2 level.  
 \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummies are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is a dummy that take values of 1 if the individual voted during the last national elections. Analysis is run on subsamples based on the self-reported level of left-right political orientation of voters.

## Appendix VIII Individual Panel Analysis

Figure A2: Nationalism Distribution



Note: authors' calculations on ESS data and Manifesto Project Database. The figure plot the distribution of the population in terms of nationalism.

Table A21: Difference Nationalism - Individual Panel

|                                    | (1)       | (2)       | (3)       | (4)       | (5)       | (6)       | (7)       | (8)       |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                                    | OLS       | IV        | OLS       | IV        | OLS       | IV        | OLS       | IV        |
| Time                               | 2007-2016 | 2007-2016 | 2007-2016 | 2007-2016 | 2007-2016 | 2007-2016 | 2007-2016 | 2007-2016 |
| <b>All Migrants</b>                |           |           |           |           |           |           |           |           |
| <i>Share</i> ( $\Delta$ )          | 0.02*     | 0.03***   |           |           |           |           |           |           |
|                                    | (0.01)    | (0.01)    |           |           |           |           |           |           |
| <i>Share HS</i> ( $\Delta$ )       |           |           | 0.02      | 0.02      |           |           | 0.02      | -0.07     |
|                                    |           |           | (0.02)    | (0.03)    |           |           | (0.02)    | (0.07)    |
| <i>Share LS</i> ( $\Delta$ )       |           |           |           |           | 0.01      | 0.05***   | 0.01      | 0.07***   |
|                                    |           |           |           |           | (0.01)    | (0.02)    | (0.01)    | (0.03)    |
| $\Delta Years$                     | 0.02**    | 0.02**    | 0.02***   | 0.02***   | 0.02**    | 0.01      | 0.02**    | 0.01      |
|                                    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    |
| Individuals                        | 29238     | 29238     | 29238     | 29238     | 29238     | 29238     | 29238     | 29238     |
| K-P rk Wald F-stat                 |           | 44.37     |           | 20.73     |           | 29.96     |           | 2.77      |
| Adj. R-Square                      | 0.01      | 0.00      | 0.01      | 0.01      | 0.01      | 0.00      | 0.01      | -0.00     |
| <b>Non EU Migrants</b>             |           |           |           |           |           |           |           |           |
| <i>Share No EU</i> ( $\Delta$ )    | 0.02      | 0.05**    |           |           |           |           |           |           |
|                                    | (0.01)    | (0.02)    |           |           |           |           |           |           |
| <i>Share No EU HS</i> ( $\Delta$ ) |           |           | 0.02      | 0.00      |           |           | 0.02      | -0.13     |
|                                    |           |           | (0.03)    | (0.04)    |           |           | (0.03)    | (0.12)    |
| <i>Share No EU LS</i> ( $\Delta$ ) |           |           |           |           | 0.02      | 0.07**    | 0.02      | 0.11**    |
|                                    |           |           |           |           | (0.01)    | (0.03)    | (0.01)    | (0.05)    |
| $\Delta Years$                     | 0.02**    | 0.02**    | 0.02***   | 0.02***   | 0.02**    | 0.01      | 0.02**    | 0.00      |
|                                    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    |
| Individuals                        | 29238     | 29238     | 29238     | 29238     | 29238     | 29238     | 29238     | 29238     |
| K-P rk Wald F-stat                 |           | 30.12     |           | 12.45     |           | 27.99     |           | 1.97      |
| Adj. R-Square                      | 0.01      | 0.00      | 0.00      | 0.00      | 0.01      | 0.00      | 0.01      | -0.01     |
| <b>EU Migrants</b>                 |           |           |           |           |           |           |           |           |
| <i>Share EU</i> ( $\Delta$ )       | 0.02      | 0.08*     |           |           |           |           |           |           |
|                                    | (0.02)    | (0.05)    |           |           |           |           |           |           |
| <i>Share EU HS</i> ( $\Delta$ )    |           |           | 0.03      | 0.10      |           |           | 0.03      | -0.04     |
|                                    |           |           | (0.03)    | (0.07)    |           |           | (0.03)    | (0.13)    |
| <i>Share EU LS</i> ( $\Delta$ )    |           |           |           |           | 0.01      | 0.15      | 0.01      | 0.17      |
|                                    |           |           |           |           | (0.02)    | (0.10)    | (0.02)    | (0.14)    |
| $\Delta Years$                     | 0.02***   | 0.02**    | 0.02***   | 0.02***   | 0.02***   | 0.01      | 0.02***   | 0.01      |
|                                    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.01)    |
| Individuals                        | 29238     | 29238     | 29238     | 29238     | 29238     | 29238     | 29238     | 29238     |
| K-P rk Wald F-stat                 |           | 18.78     |           | 33.78     |           | 6.08      |           | 1.52      |
| Adj. R-Square                      | 0.01      | 0.00      | 0.00      | 0.00      | 0.00      | -0.01     | 0.01      | -0.01     |
| Year f.e.                          | Yes       | Yes       | Yes       | Yes       | Yes       | Yes       | Yes       | Yes       |
| NUTS2 Controls ( $\Delta$ )        | Yes       | Yes       | Yes       | Yes       | Yes       | Yes       | Yes       | Yes       |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As NUTS2 controls we include the differences in GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is the difference between the standardized measures of nationalism of the party that they feel close to and the party for which they voted for in the last national election. The control  $\Delta Years$  takes into account the number of years between the year when the voters express the party that they feel close and the year of election.

Table A22: Difference Nationalism - Individual Panel - Individuals education

|                              | (1)              | (2)              | (3)               | (4)              |
|------------------------------|------------------|------------------|-------------------|------------------|
|                              | IV               | IV               | IV                | IV               |
| Time                         | 2007-2016        | 2007-2016        | 2007-2016         | 2007-2016        |
| Subsample                    | <i>Education</i> |                  | <i>Education</i>  |                  |
| Natives Education            | Not Tertiary     | Tertiary         | Not Tertiary      | Tertiary         |
| <b>All Migrants</b>          |                  |                  |                   |                  |
| <i>Share HS</i> ( $\Delta$ ) | 0.01<br>(0.03)   | 0.04<br>(0.03)   |                   |                  |
| <i>Share LS</i> ( $\Delta$ ) |                  |                  | 0.06***<br>(0.02) | 0.05**<br>(0.02) |
| $\Delta Years$               | 0.02**<br>(0.01) | 0.02**<br>(0.01) | 0.01<br>(0.01)    | 0.01<br>(0.01)   |
| Individuals                  | 18229            | 11009            | 18229             | 11009            |
| K-P rk Wald F-stat           | 21.52            | 20.40            | 34.08             | 23.58            |
| Adj. R-Square                | 0.01             | 0.00             | 0.00              | 0.00             |
| <b>Not European Migrants</b> |                  |                  |                   |                  |
| <i>Share HS</i> ( $\Delta$ ) | -0.05<br>(0.06)  | 0.05<br>(0.05)   |                   |                  |
| <i>Share LS</i> ( $\Delta$ ) |                  |                  | 0.07**<br>(0.03)  | 0.07**<br>(0.04) |
| $\Delta Years$               | 0.02**<br>(0.01) | 0.02**<br>(0.01) | 0.01<br>(0.01)    | 0.01<br>(0.01)   |
| Individuals                  | 18229            | 11009            | 18229             | 11009            |
| K-P rk Wald F-stat           | 13.18            | 11.76            | 30.46             | 23.56            |
| Adj. R-Square                | 0.01             | 0.00             | 0.01              | 0.00             |
| <b>European Migrants</b>     |                  |                  |                   |                  |
| <i>Share HS</i> ( $\Delta$ ) | 0.15<br>(0.09)   | 0.06<br>(0.07)   |                   |                  |
| <i>Share LS</i> ( $\Delta$ ) |                  |                  | 0.24<br>(0.16)    | 0.05<br>(0.08)   |
| $\Delta Years$               | 0.02**<br>(0.01) | 0.02**<br>(0.01) | 0.01<br>(0.01)    | 0.02<br>(0.01)   |
| Individuals                  | 18229            | 11009            | 18229             | 11009            |
| K-P rk Wald F-stat           | 31.41            | 33.88            | 6.39              | 5.14             |
| Adj. R-Square                | 0.01             | 0.00             | -0.02             | 0.00             |
| Year f.e.                    | Yes              | Yes              | Yes               | Yes              |
| NUTS2 Controls ( $\Delta$ )  | Yes              | Yes              | Yes               | Yes              |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Standard errors are clustered at NUTS2 level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . As NUTS2 controls we include the differences in GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable is the difference between our standardized measures of Nationalism of the party that they feel close to and the party for which they voted for in the last national election. The control  $\Delta Years$  takes into account the number of years between the year when the voters express the party that they feel close and the year of election. Subsample analysis on the level of education of voters: not tertiary (col. (1) and (3)) and tertiary (col. (2) and (4)).

## Appendix IX Attitudes towards migrants

Table A23: Attitudes towards immigrants - OLS regression

| Attitudes              | (1)          | (2)       | (3)       | (4)            | (5)       | (6)       | (7)                  | (8)       | (9)       |
|------------------------|--------------|-----------|-----------|----------------|-----------|-----------|----------------------|-----------|-----------|
|                        | Good Economy |           |           | Enrich Culture |           |           | Better place to live |           |           |
| Time                   | OLS          | OLS       | OLS       | OLS            | OLS       | OLS       | OLS                  | OLS       | OLS       |
|                        | 2010-2016    | 2010-2016 | 2010-2016 | 2010-2016      | 2010-2016 | 2010-2016 | 2010-2016            | 2010-2016 | 2010-2016 |
| <b>All Migrants</b>    |              |           |           |                |           |           |                      |           |           |
| <i>Share HS</i>        | -0.02        |           | -0.02     | -0.00          |           | -0.00     | -0.01                |           | -0.01     |
|                        | (0.02)       |           | (0.02)    | (0.02)         |           | (0.02)    | (0.02)               |           | (0.02)    |
| <i>Share LS</i>        |              | -0.00     | -0.00     |                | -0.01     | -0.01     |                      | -0.01     | -0.01     |
|                        |              | (0.01)    | (0.01)    |                | (0.01)    | (0.01)    |                      | (0.01)    | (0.01)    |
| Observations           | 74072        | 74072     | 74072     | 74085          | 74085     | 74085     | 74091                | 74091     | 74091     |
| Adj. R-Square          | 0.13         | 0.13      | 0.13      | 0.13           | 0.13      | 0.13      | 0.12                 | 0.12      | 0.12      |
| <b>Non EU Migrants</b> |              |           |           |                |           |           |                      |           |           |
| <i>Share No EU HS</i>  | -0.02        |           | -0.03     | 0.01           |           | 0.01      | 0.01                 |           | 0.00      |
|                        | (0.03)       |           | (0.03)    | (0.03)         |           | (0.03)    | (0.03)               |           | (0.03)    |
| <i>Share No EU LS</i>  |              | -0.04***  | -0.04***  |                | -0.03**   | -0.03**   |                      | -0.03**   | -0.03**   |
|                        |              | (0.01)    | (0.01)    |                | (0.02)    | (0.02)    |                      | (0.02)    | (0.02)    |
| Observations           | 74072        | 74072     | 74072     | 74085          | 74085     | 74085     | 74091                | 74091     | 74091     |
| Adj. R-Square          | 0.13         | 0.13      | 0.13      | 0.13           | 0.13      | 0.13      | 0.12                 | 0.12      | 0.12      |
| <b>EU Migrants</b>     |              |           |           |                |           |           |                      |           |           |
| <i>Share EU HS</i>     | -0.02        |           | -0.03     | -0.02          |           | -0.02     | -0.03                |           | -0.03     |
|                        | (0.03)       |           | (0.03)    | (0.03)         |           | (0.03)    | (0.03)               |           | (0.03)    |
| <i>Share EU LS</i>     |              | 0.04**    | 0.05***   |                | 0.01      | 0.02      |                      | 0.01      | 0.02      |
|                        |              | (0.02)    | (0.02)    |                | (0.02)    | (0.02)    |                      | (0.02)    | (0.02)    |
| Observations           | 74072        | 74072     | 74072     | 74085          | 74085     | 74085     | 74091                | 74091     | 74091     |
| Adj. R-Square          | 0.13         | 0.13      | 0.13      | 0.13           | 0.13      | 0.13      | 0.12                 | 0.12      | 0.12      |
| NUTS2 f.e.             | Yes          | Yes       | Yes       | Yes            | Yes       | Yes       | Yes                  | Yes       | Yes       |
| Year f.e.              | Yes          | Yes       | Yes       | Yes            | Yes       | Yes       | Yes                  | Yes       | Yes       |
| NUTS2 Controls         | Yes          | Yes       | Yes       | Yes            | Yes       | Yes       | Yes                  | Yes       | Yes       |
| Individual Controls    | Yes          | Yes       | Yes       | Yes            | Yes       | Yes       | Yes                  | Yes       | Yes       |

Note: authors' calculations on ESS, EULFS and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummy are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable are different standardized (mean 0, sd 1) measures of attitudes towards immigrants: immigrants are good for the economy (col (1)-(3)), immigrants enrich country cultural life (col (4)-(6)) and immigrants make the country a better place to live (col(7)-(9)). Higher values imply positive attitudes towards immigration.

Table A24: Attitudes towards immigrants - IV regression

| Attitudes              | (1)          | (2)       | (3)       | (4)            | (5)       | (6)       | (7)                  | (8)       | (9)       |
|------------------------|--------------|-----------|-----------|----------------|-----------|-----------|----------------------|-----------|-----------|
|                        | Good Economy |           |           | Enrich Culture |           |           | Better place to live |           |           |
| Time                   | IV           | IV        | IV        | IV             | IV        | IV        | IV                   | IV        | IV        |
|                        | 2010-2016    | 2010-2016 | 2010-2016 | 2010-2016      | 2010-2016 | 2010-2016 | 2010-2016            | 2010-2016 | 2010-2016 |
| <b>All Migrants</b>    |              |           |           |                |           |           |                      |           |           |
| <i>Share HS</i>        | -0.02        |           | -0.00     | -0.02          |           | -0.00     | -0.07*               |           | -0.05     |
|                        | (0.03)       |           | (0.04)    | (0.03)         |           | (0.03)    | (0.04)               |           | (0.03)    |
| <i>Share LS</i>        |              | -0.04     | -0.04     |                | -0.05*    | -0.04**   |                      | -0.09***  | -0.07**   |
|                        |              | (0.03)    | (0.02)    |                | (0.02)    | (0.02)    |                      | (0.03)    | (0.03)    |
| Observations           | 74072        | 74072     | 74072     | 74085          | 74085     | 74085     | 74091                | 74091     | 74091     |
| K-P rk Wald F-stat     | 71.06        | 23.87     | 8.50      | 71.09          | 23.88     | 8.50      | 71.09                | 23.88     | 8.50      |
| Adj. R-Square          | 0.13         | 0.13      | 0.13      | 0.13           | 0.13      | 0.13      | 0.12                 | 0.11      | 0.12      |
| <b>Non EU Migrants</b> |              |           |           |                |           |           |                      |           |           |
| <i>Share No EU HS</i>  | 0.06         |           | 0.06      | 0.07           |           | 0.06      | -0.02                |           | -0.02     |
|                        | (0.05)       |           | (0.06)    | (0.05)         |           | (0.05)    | (0.06)               |           | (0.07)    |
| <i>Share No EU LS</i>  |              | 0.03      | 0.02      |                | 0.03      | 0.01      |                      | 0.00      | 0.01      |
|                        |              | (0.04)    | (0.04)    |                | (0.04)    | (0.04)    |                      | (0.04)    | (0.04)    |
| Observations           | 74072        | 74072     | 74072     | 74085          | 74085     | 74085     | 74091                | 74091     | 74091     |
| K-P rk Wald F-stat     | 25.12        | 34.20     | 17.32     | 25.12          | 34.19     | 17.30     | 25.12                | 34.19     | 17.31     |
| Adj. R-Square          | 0.13         | 0.13      | 0.13      | 0.13           | 0.13      | 0.13      | 0.12                 | 0.12      | 0.12      |
| <b>EU Migrants</b>     |              |           |           |                |           |           |                      |           |           |
| <i>Share EU HS</i>     | -0.12        |           | -5.65     | -0.14**        |           | -5.75     | -0.22***             |           | -8.09     |
|                        | (0.07)       |           | (100.19)  | (0.06)         |           | (101.52)  | (0.07)               |           | (142.46)  |
| <i>Share EU LS</i>     |              | -0.42     | 10.42     |                | -0.46     | 10.58     |                      | -0.69     | 14.85     |
|                        |              | (0.52)    | (184.31)  |                | (0.50)    | (186.76)  |                      | (0.73)    | (262.11)  |
| Observations           | 74072        | 74072     | 74072     | 74085          | 74085     | 74085     | 74091                | 74091     | 74091     |
| K-P rk Wald F-stat     | 73.56        | 2.12      | 0.00      | 73.63          | 2.12      | 0.00      | 73.62                | 2.12      | 0.00      |
| Adj. R-Square          | 0.13         | 0.09      | -20.38    | 0.13           | 0.09      | -20.89    | 0.12                 | 0.02      | -43.07    |
| NUTS2 f.e.             | Yes          | Yes       | Yes       | Yes            | Yes       | Yes       | Yes                  | Yes       | Yes       |
| Year f.e.              | Yes          | Yes       | Yes       | Yes            | Yes       | Yes       | Yes                  | Yes       | Yes       |
| NUTS2 Controls         | Yes          | Yes       | Yes       | Yes            | Yes       | Yes       | Yes                  | Yes       | Yes       |
| Individual Controls    | Yes          | Yes       | Yes       | Yes            | Yes       | Yes       | Yes                  | Yes       | Yes       |

Note: authors' calculations on ESS, EULFS and Eurostat data. Standard errors are clustered at NUTS2 level. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. As individual controls age, gender and education dummy are included. As NUTS2 controls we include GDP per capita, unemployment rate, population density and share of tertiary educated individuals. The dependent variable are different standardized (mean 0, sd 1) measures of attitudes towards immigrants: immigrants are good for the economy (col (1)-(3)), immigrants enrich country cultural life (col (4)-(6)) and immigrants make the country a better place to live (col(7)-(9)). Higher values imply positive attitudes towards immigration.

## Appendix X Simulations of different scenarios

Table A25: Simulations: exercises and robustness checks

|                | (1)                  | (2)                 | (3)                    | (4)                  | (5)                   | (6)                | (7)                    |
|----------------|----------------------|---------------------|------------------------|----------------------|-----------------------|--------------------|------------------------|
|                | Standard Sim.        | Mig. Policies       |                        | Educ. Policies       |                       | Robustness Checks  |                        |
| Country        | $\widehat{Nation}_c$ | <i>No Not EU LS</i> | <i>Balanced Not EU</i> | <i>Tertiary eff.</i> | <i>Max Tert. (EU)</i> | <i>Only LS Nat</i> | <i>Origin-specific</i> |
| Austria        | -0.253               | -0.361              | -0.169                 | -0.314               | -0.254                | -0.268             | -0.53                  |
| Belgium        | 0.269                | -0.117              | 0.004                  | 0.197                | 0.159                 | 0.159              | -0.07                  |
| Denmark        | 0.368                | 0.133               | 0.125                  | 0.295                | 0.221                 | 0.26               | -0.02                  |
| Finland        | 0.09                 | -0.058              | 0.008                  | 0.007                | -0.016                | 0.041              | -0.017                 |
| France         | -0.069               | -0.187              | -0.089                 | -0.136               | -0.152                | -0.079             | -0.06                  |
| Germany        | 0.025                | -0.185              | -0.126                 | -0.029               | -0.055                | -0.005             | -0.079                 |
| Greece         | -0.067               | -0.036              | -0.021                 | -0.125               | -0.169                | -0.052             | -0.049                 |
| Ireland        | 0.202                | 0.001               | 0.155                  | 0.119                | 0.081                 | 0.135              | 0.148                  |
| Italy          | 0.454                | 0.096               | 0.106                  | 0.419                | 0.259                 | 0.402              | 0.269                  |
| Portugal       | -0.141               | -0.096              | -0.015                 | -0.187               | -0.206                | -0.13              | -0.191                 |
| Spain          | -0.039               | -0.024              | -0.009                 | -0.108               | -0.141                | -0.033             | -0.082                 |
| Sweden         | -0.112               | -0.572              | -0.257                 | -0.191               | -0.165                | -0.17              | -0.061                 |
| Switzerland    | -0.34                | -0.547              | -0.317                 | -0.419               | -0.341                | -0.388             | -1.019                 |
| United Kingdom | 0.056                | -0.087              | 0.094                  | -0.025               | -0.053                | -0.006             | -0.339                 |

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Column (1) shows country averages of the simulated standardized nationalism from the standard simulation using as regional weights the total population. Column (2) shows the result of the simulation when we remove the variation of low educated immigrants from not European countries. Column (3) shows the result of the simulation when we assume skill-balanced immigration from not European countries. Column (4) shows the result of the simulation when we include the direct effect of tertiary education. Column (5) shows the result of the simulation when each region has the same share of tertiary educated natives as the highest educated one in Europe (Great London). Column (6) shows the results of the simulation when we include in the equation only to low educated natives. Column (7) shows the results when we take into account country of origin specific effects.

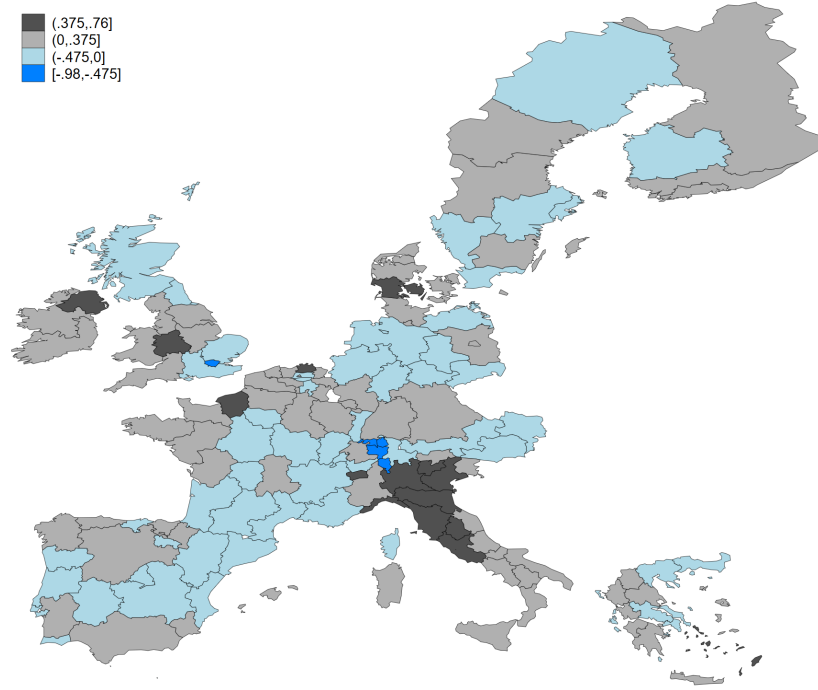
Table A26: Actual and predicted Nationalism

|                | (1)                                  | (2)                                         | (3)                   |
|----------------|--------------------------------------|---------------------------------------------|-----------------------|
| Country        | Year ( <i>1<sup>st</sup> elect</i> ) | Nationalism ( <i>1<sup>st</sup> elect</i> ) | Predicted Nationalism |
| Austria        | 2008                                 | -0.116                                      | -0.37                 |
| Belgium        | 2010                                 | -0.396                                      | -0.126                |
| Denmark        | 2007                                 | 0.516                                       | 0.884                 |
| Finland        | 2007                                 | -0.022                                      | 0.068                 |
| France         | 2007                                 | -0.486                                      | -0.553                |
| Germany        | 2009                                 | -0.118                                      | -0.093                |
| Greece         | 2009                                 | 0.358                                       | 0.29                  |
| Ireland        | 2011                                 | 0.08                                        | 0.282                 |
| Italy          | 2013                                 | -0.609                                      | -0.155                |
| Portugal       | 2009                                 | -0.189                                      | -0.333                |
| Spain          | 2008                                 | -0.435                                      | -0.473                |
| Sweden         | 2010                                 | -0.469                                      | -0.581                |
| Switzerland    | 2007                                 | 0.588                                       | 0.248                 |
| United Kingdom | 2010                                 | 0.327                                       | 0.384                 |

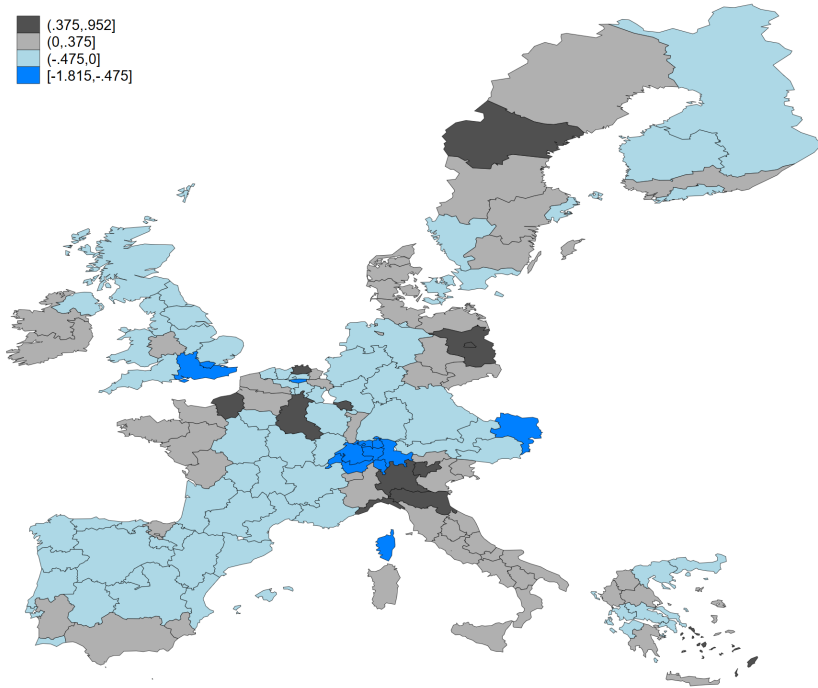
Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. Column (1) shows the year of the first election available in our dataset. Column (2) shows the average level of Nationalism in the first election available, while column (3) shows the sum between column (2) and the variation on the level of nationalism from our standard simulation.



Figure A3: Robustness Checks



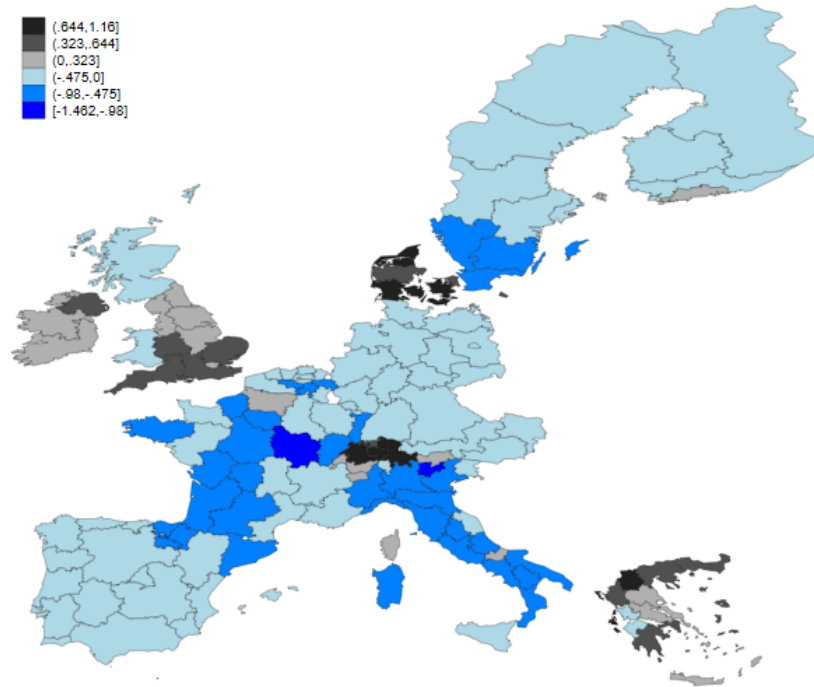
(a) Only LS Natives



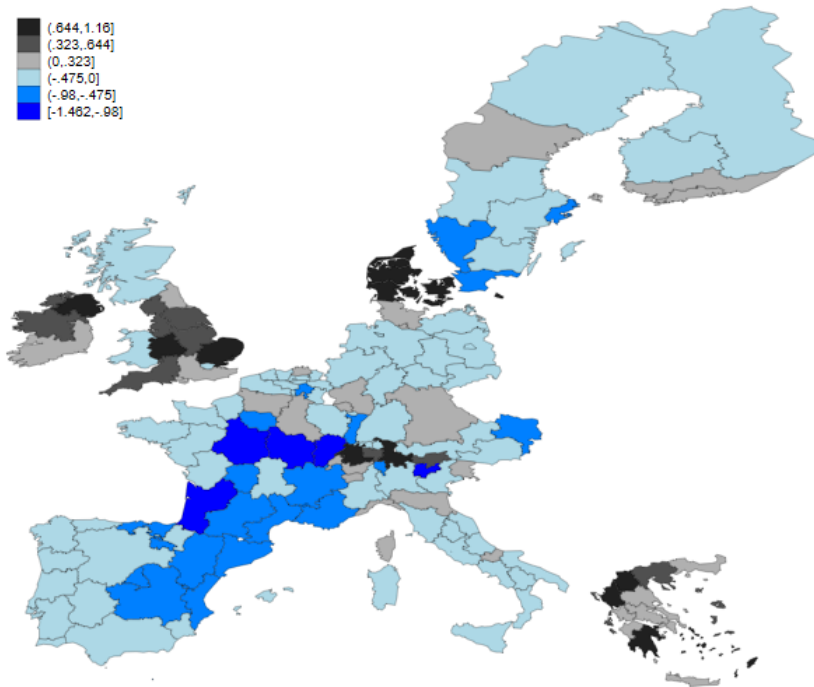
(b) Origin-skill specific analysis

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. The figure plots the simulated average level of nationalism after different scenarios, due to the variation of immigrants by education and level of education of natives over the 2007-2016. The figure plots the results of equation (11) at NUTS2 level when: only LS natives are included (panel (a)), skill and origin specific coefficients and migration variations are included (panel (b)).

Figure A4: Actual and predicted scenarios



(a) Results first election



(b) Results first election + sim.

Note: authors' calculations on ESS, EULFS, Manifesto Project Database and Eurostat data. The figure plots the average level of nationalism at NUTS2 level for the first election available in the sample (panel (a)) and how change the level of nationalism if we included the effect of immigration computed by equation (11).

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