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Are Immigrants more Left-leaning than Natives?\*

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Abstract

We analyze whether second generation immigrants have different political preferences relative to observationally identical host country's citizens. Using data on individual voting behavior in 22 European countries between 2001 and 2017 we characterize each vote on a left-right scale using ideological and policy position of the party from the Manifesto Project Database. In the first part of the paper we characterize the size of the "left-bias" in the vote of second generation immigrants, after controlling for a large set of individual characteristics and origin and destination country unobservable factors. We find a significant left-bias of second generation migrants relative to observationally identical natives, similar in magnitude to the association between left-bias and secondary education, or living in urban areas. We then show that this left-bias associates with stronger preferences for government intervention

**Keywords**: Immigration, Elections, Europe

to reduce economic inequality, and for internationalism and multiculturalism.

JEL codes: D72, J61, P16, Z1

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## 1 Introduction

Immigrants differ from natives in several respects. Differences in language, schooling, skills generate valuable productive complementarities with natives (Peri and Sparber, 2009; Ottaviano and Peri, 2012). They can also generate earning and employment gaps between them as foreign-accumulated human capital and skills are not as productive in the host country (Borjas, 1985). Strong economic and social incentives exist for the children of immigrants, called second generation immigrants, to assimilate in terms of education, language, skills. Several studies (Abramitzky et al., 2020) have shown that the second generation of immigrants have historically caught up with natives in earnings, employment and education levels in the US. Assimilation patterns for the second generation appear slower in several European countries, like France, Germany and the United Kingdom (Algan et al., 2010).

We know much less, however, about the convergence of second generation immigrants towards natives' preferences over politics and policies. The recent literature on immigration and political vote has focused on how the inflow of immigrants (first generation) affects the vote of natives (Edo et al., 2019; Tabellini, 2020; Mayda et al., 2022; Moriconi et al., 2022) by increasing (or decreasing) support for anti-immigration parties. In the longer run, however, immigrants can change the political landscape of a country in another important way. Their offsprings, who usually have full voting rights, could have systematically different preferences for policies and parties, relative to natives. As immigrants and their children become a larger share of many developed countries' population, this can be an important factor in deciding elections. We know much less about this potential impact.

This paper advances our understanding of voting and political preference of second generation immigrants, first by comparing them with observationally similar natives. In particular, we ask whether second generation immigrants differ systematically in their left-right scale positioning vis-a-vis observationally equivalent natives. Then we analyze whether these differences for second generation immigrants as a group, survive controlling for preferences of the country of origin of their parents and if they differ by destination. Additionally we "decompose" left-right preferences into different preferences on specific policies and on key social and individual values. We also differentiate across destination countries by analyzing the extent of migrant-to-native voting differences on each country sample.

We use data relative to 150,000 individuals residing in 22 European Union countries between 2002 and 2018. We combine the European Social Survey (ESS) that reveals the party voted by each individual in

the national elections and the Manifesto Project database (MPD) which generates through text analysis, standardized information on the content of political manifesto of parties. This allows us to measure the preference along the left-right political spectrum for all parties, and therefore for all voters. Additionally the ESS, includes an array of personal preferences and attitudes on many issues, and detailed information on individual's demographics including the parent's country of birth. This allows us to identify natives, first and second generation immigrants.

Using these data and simple regression analysis, we show that second generation immigrants and observationally identical natives hold systematically different political preferences. On average, immigrants' offspring have a left-bias relative to natives. Such difference persists when accounting for origin-specific factors or even for destination-by-year dummies, where origin is the country of birth of their parents. Based on our preferred specification, a second generation immigrant is about 8% more leftist than an observationally equivalent native voter. The magnitude is comparable in size with the leftward shift associated with obtaining a secondary education degree, and only one third smaller than the coefficient on living in an urban neighbourhood. Using then data on specific preferences on policies and values we document that the "left-leaning" bias of second generation immigrants' corresponds to preferences towards policies in favor of government intervention to reduce economic and social disparities and policies allowing individual freedom and expression, rather than ideology or party identification.

Our paper makes two important contributions to the literature. First, we use our detailed data to describe and characterize how cultural, social, and institutional factors predict the voting behavior of European individuals. The existing literature points out that differences in policy preferences and voting behaviors are strongly correlated with individual socioedemographic characteristics (such as age, race, education, income, and religiosity) as well as contextual factors related to the residence and location of voters (see Cantoni and Pons, 2022 for a synthesis). Up to our knowledge, this literature does not point out a role for the migration status of individuals with voting rights in the residence country. We check how being a second generation immigrant correlates to voting behaviors, and also account for the potentially confounding role of political preferences coming from the country of origin of the migrant. Second, we point out a novel left-bias of the second generation. We show this is robust to the inclusion of many fixed effects, matching techniques to limit unbalanced distribution of covariates and selection on unobservable characteristics (Imbens and Rubin, 2015; Oster, 2019). We also show this is associated with preferences for social policies, individual and international views.

The economic literature on second generation (and further) immigrants has focused mainly on their educational/skills and economic assimilation. Studies have been conducted in the United States (Borjas, 1993; Card et al., 2000; Smith, 2003; Abramitzky and Boustan, 2017; Duncan and Trejo, 2018), Canada (Kucera, 2008), Israel (Deutsch et al., 2006) and in a subset of European Countries (Algan et al., 2010, 2013). As noteworthy exception, Giavazzi et al. (2019) study the cultural convergence of immigrants' descendants using the Generalized Social Survey data in the United States. By exploiting different dimensions of culture, it shows that the speed of convergence towards natives' norms is trait specific. The sociology literature, on the other hand, by describing the assimilation process as a rational choice, highlighted different aspects that can directly influence immigrants' offspring choice and preferences, like natives' attitudes, local culture, family ties and origin-specific factors (Portes and Rumbaut, 2001; Alba and Nee, 2009; Luthra et al., 2018).

Focusing on first generation immigrants very few papers provide evidence of the effect of immigration on voting through the direct participation of immigrants in the elections. Chevalier et al. (2018) study the impact of immigration on public policy setting, exploiting as a natural experiment the sudden arrival of eight million forced migrants in West Germany after World War II. The authors find local German governments responded to this migration inflow by raising local taxes and welfare spending. The authors interpret these results in terms of migration inflows directly affecting the local public policy preferences through the voting behavior of this group of immigrants who had full voting rights and eligibility for social welfare. Some papers adopt a cultural economics' approach that compares emigrants to natives from their country of origin. Luttmer and Singhal (2011) show that immigrants coming from countries with strong preferences for redistribution support parties with similar preferences. Giuliano and Tabellini (2021) find that immigrants to the US originating from countries where social reforms had been enacted in the last 1800's affected the political preferences in the US counties of destination, in the long run, towards more social spending and public education. To the best of our knowledge, our paper provides unique and novel evidence of the differences in voting behaviors between immigrants and natives in the destination, conditional on the cultural, origin-specific channel. We argue these differences likely stem from the "family emigration experience" of second generations, which is mediated by the economic integration of their parents. We are also the first to characterize these differences using specific preferences on policies and attitudes.

## 2 Data and Variables

Our primary data source is the *European Social Survey (ESS)*, which was administered in 9 waves (one every two years) in 36 countries between 2002 and 2018. It is a repeated cross-section of a random sample of individuals which are representative of the adult national population. The data include detailed socio-demographic information on personal and family characteristics, and parental background.

We restrict our sample to 22 OECD countries that participated to economic integration processes in Europe (i.e. EU or EFTA). We end up with a set of countries belonging to the European Union (Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Lithuania, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain and Sweden), plus Norway, Switzerland and the United Kingdom. This is a balanced sample of economically integrated European democracies at a similar stage of economic development, plus some Central Eastern countries, who went through economic integration and democratisation process quite recently.

ESS records individual participation and voting choices of respondents at each wave to the most recent national elections in the country. Table A-1 reports the number and year of elections covered for each country in columns (1) and (2), and the number and years of the surveys in columns (3) and (4). In the 22 countries of our sample, the waves of 2004-2018 cover the elections held during 2001-2018.<sup>2</sup> Survey respondents are asked the following question: "which party did you vote for in the last national election?". Individuals respond by identifying party names. In a second step we link these to the corresponding information on party political agenda from the Manifesto Project Database (MPD) (Budge et al., 2001; Klingemann et al., 2006).<sup>3</sup> Among political manifesto variables, we focus on the left-to-right index proposed by Budge and Laver (2016). This is constructed as the difference between a party positive stance on free markets, importance of economic incentives, importance of traditional values and morality (usually associated with the political right), and its positive stance on welfare state, public education,

<sup>&</sup>lt;sup>1</sup>In practice, we exclude non-OECD countries in Europe (Bulgaria, Croatia, Kosovo, Romania, Russia and Serbia) and non-European OECD countries (Turkey, Israel, Cyprus). We exclude Latvia and Luxembourg, for which we observe only one electoral event during the sample period, and Italy, given the extremely small share of migrants' children reported.

<sup>&</sup>lt;sup>2</sup>For this reason, since some consecutive survey rounds have been conducted without any electoral occurrence between them, the respondents to different waves may provide voting preferences associated with the same electoral event.

<sup>&</sup>lt;sup>3</sup>The MPD identifies through text analysis the share of quasi-sentences related to each specific political topic (as a fraction of all sentences in the manifesto) as a measure of the relevance of the topic (or intensity of the political position) in the party's political agenda. For a wide range of topics, MPD provides the share of favorable/positive and unfavorable/negative mentions, which allow to better grasp the precise parties' stance (e.g. Welfare state, societies' values, etc.). The MPD includes all parties that participated in national elections and obtained at least one seat in their country's parliament over the 1945-2017 period, covering all democratic countries in the OECD and Eastern Europe.

market regulations and workers' rights (usually associated with the political right). The raw index takes values between -74 (radical left-wing party) to +91 (radical right-wing party). This index represents a synthetic measure of a key political dimension across parties.<sup>4</sup> Additionally, in the analysis we explore the role of parties' preferences towards the fundamental political issues, constitutive of their left-right stance, such as favouring the welfare state, public education, support for labor rights, support for traditional values, internationalism and multiculturalism.

For each party, we compute a time-invariant average of the left-right index over our sample. This way, our measure capture voters' changes across parties and not changes in parties political stances. To facilitate the interpretation of the variable, we standardize the left-to-right index with mean zero and standard deviation equal to one. The ensuing distribution of parties according to votes' shares is depicted in Figure A-1. The figure shows that around 80% of existing parties range from -1.3 to 1.3 in their left-to-right position.

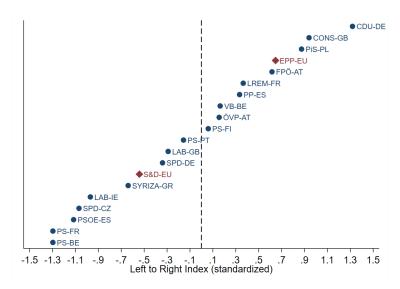


Figure 1: Left-to-Righ Index - Relevant Parties

Note: authors' calculations on MPD. The figure plots the standardized left-to-right index associated to a selected pool of voted parties, and the average left-to-right index of parties belonging to the S&D and EPP European Political families. The dashed line shows the average value over our sample

Figure 1 shows the index for a subset of leading political parties across the considered countries. Left-wing parties are characterized by negative values like the *Socialist Party* in France (-1.30), the *PSOE* in Spain (-1.16), *Syriza* in Greece (-0.64) or the *SPD* in Germany (-0.34), while right-wing parties hold

<sup>&</sup>lt;sup>4</sup>Undoubtedly, the left-right divide is the most recognized divide between political actors. Another potential political cleavage is the split between populist and not-populist parties, but MPD does not provide a synthetic index of such divide.

positive values of the index, like the CDU in Germany (1.31), the  $Conservative\ Party$  in United Kingdom (0.94), the  $FP\ddot{O}$  in Austria (0.61) or the PP in Spain (0.33). Interestingly the index allows a comparison of the left-to-right position of parties across countries, based on their stance on the key issues. Moreover, using the composition<sup>5</sup> of the two major European political groups, the  $Socialist\ \mathcal{E}\ Democrats\ (S\mathcal{E}D)$  and the  $European\ People's\ Party\ (EPP)$ , we construct their left-to-right index by computing the average over the parties belonging to each group. The two European political families locate themselves almost symmetrically in the the left-to-right index: -0.54 for  $S\mathcal{E}D$  and at 0.65 for EPP coalition.

## 2.1 Second Generation Immigrants: definition and descriptive statistics

For the empirical analysis we focus on second generation immigrants, which we define as those born in the country of residence and whose father was born abroad (Fernandez and Fogli, 2009).<sup>6</sup> We focus on second generation migrants since they are more comparable to natives, and usually have same voting rights as natives' descendants. More than 95% of second generation immigrants has citizenship rights in our sample (see Figure A-2 in the Appendix).<sup>7</sup> We remove from each of the 22 countries in the sample the origin groups with less than 10 observations based on father's origin, to avoid noise driven by small and not representative groups. Our final sample includes 156248 individuals (all of them born in the country of residence), of which 5219 are second generation immigrants from 46 origin countries that span a large range of location and levels of economic development.<sup>8</sup>

Second generation immigrants in our sample are more likely to be females, younger, living in urban areas, and with higher family income levels than natives. At the age of 14 years old, they were also less likely to have a working highly educated father compared to natives (see Table A-2, columns (1)-(3)). In the empirical analysis we control for these variables to reduce concerns regarding omitted variable bias. To better account for compositional differences, we constructed a matched sample according to the covariates matching methodology described by Imbens and Rubin (2015). This method selects a control sub-sample,

<sup>&</sup>lt;sup>5</sup>Our measure is constructed using the composition described by the political groups in their website in January 2022

<sup>&</sup>lt;sup>6</sup>In Table B-3 we present evidence showing that having a foreign-born father affects more significantly political preferences compared to having a foreign-born mother. The cultural economics literature points out that the mother often provides a more effective transmission channel for other traits of the culture of origin on sons/daughters preferences (Rodríguez-Planas and Sanz-de Galdeano, 2019).

<sup>&</sup>lt;sup>7</sup>Voting behaviors of the first generation immigrants involves issues of selection on preferences and on characteristics as well as a much older group (on average). Such concerns are significantly reduced among second generation immigrants.

<sup>&</sup>lt;sup>8</sup>The final set of origin countries combines the set of countries included as destination, Greece excluded, plus the following 25 countries: Algeria, Angola, Bosnia and Herzegovina, Belarus, Canada, Chile, Croatia, Cyprus, India, Indonesia, Italy, Jamaica, Latvia, Morocco, Nigeria, Pakistan, Republic of Congo, Romania, Russia, Serbia, Suriname, Tunisia, Turkey, Ukraine and United States.

which is more balanced in terms of covariates relative to the treated sample of second generation immigrants. To do so, we match second generation immigrants and natives using the *Mahalanobis Metric Matching* method, and all observed covariates to compute and minimize the distance between individuals (Zhao, 2004; Docquier et al., 2020; Turati, 2020). Columns (4) to (6) of Table A-2 show that after matching the distribution of covariates becomes more balanced between natives and second generation immigrants. In the empirical section we use the matched sample, to perform a robustness check of our analysis.

In the Appendix, we present additional figures and descriptive statistics for our sample of second generation immigrants. In some cases, we find it useful to present figures for first generation immigrants (i.e. living in the country of residence but born abroad) too, as a relevant comparison group. This descriptive evidence shows the size of the second generation immigrants population (relative the native population) is highly correlated geographically with the relative size of the first generation, being concentrated in Western European countries with a strong colonial background, like France, United Kingdom or Belgium. Additionally we see that that the overall size of second generation immigrant population has increased, particularly in Western Europe (cfr. Figures A-3 to A-5). Around 60% of the second generation immigrant population has European origins. Russia is the most represented country of origin, which counts for the 14% of the second generation immigrants population in our sample, followed by Germany and Italy. Among non-European countries with a sizeable share, Turkish origin accounts for 6% of the second generation immigrants origin (cfr. Figure A-6). Finally, raw comparisons of political preferences reveals that second generation immigrants are more likely to be on the left-wing political spectrum compared to natives, both in terms of self-declared political preferences and voting behavior (cfr. Figure A-7).

## 3 Natives vs Immigrants: Theoretical Background

This is one of the very few papers, to our knowledge, to measure the differences in political preferences between natives and second generation immigrants. Identifying persistent migrant-to-native differences raises the question of what is driving such persistence (e.g. contextual conditions, parental background,

<sup>&</sup>lt;sup>9</sup>A particular property of the *Mahalanobis Metric Matching* method is that the resulting set of matches is invariant to affine transformations of the covariates. Such matching process does not involve the dependent variable at any point.

<sup>&</sup>lt;sup>10</sup>Figure A-5 shows Central Eastern European countries were characterized by a change in the distribution of young second generation immigrants in the 2005-2008 period, potentially caused by high emigration towards European Union countries after the access to the Schengen Area with the 2004 EU Enlargement.

origin-specific traits). Thus far, the economic migration literature has provided little insight into the pattern of political assimilation, since the focus has been on the economic assimilation of migrants instead (Abramitzky et al., 2020; Borjas, 1993; Hammarstedt, 2009; Algan et al., 2010; Duncan and Trejo, 2018). An exception is Giavazzi et al. (2019), which investigate the assimilation to the natives norms of different cultural traits up to the fourth generation of immigrants in the United States. Using data from the General Social Survey, they argue that political attitudes are particularly persistent across generations. This paper, however, does not focus on voting behavior.

The sociological literature, in particular in the US context, broadly summarized by Luthra et al. (2018), advances the interesting "Segmented Assimilation" hypothesis (Portes and Rumbaut, 2001), which focused on two factors which could affect the assimilation path of individuals from immigrant families. First, the role of the context, such as natives attitudes, immigration policies and co-ethnic community, influences the mode of incorporation of second generation immigrants. Second, family-level strategies can influence directly the children's behaviours and process of assimilation. Moreover, Alba and Nee (2009) point out a rational and selfish component behind second generation immigrants' assimilation choice. In our analysis, we include a set of relevant controls related to parental background and to country-by-year characteristics to account for important context or family level aspects. The focus on second generation increases comparability with natives in terms of economic and political opportunities (Steinhardt, 2012; Bean et al., 2015; Gathmann and Keller, 2018) and reduces omitted variable bias. Remaining differences in voting preferences between natives and second generation, as a group, can reveal differences in their economic and social interests possibly affected by a view of society, shaped by the migratory experience of their family, after controlling for all observables and culture of origin.

# 4 Empirical analysis of Migrant-to-Native Differences in Voting Behaviors

In order to identify the average difference between second generation immigrants and natives in the leftright voting index, after controlling for all observable characteristics as well as for destination and origin

<sup>&</sup>lt;sup>11</sup>Luttmer and Singhal (2011) explores immigrants preferences and also voting behaviours on redistributive issues, but they explore the origin-specific effect rather than comparing the behaviours of migrants and natives.

specific non-observables we estimate the following specification:<sup>12</sup>

$$Y_{i,o,c,e}^{\pi} = \alpha + \beta Mig_{i,o,c,e}^{2nd} + \gamma \mathbf{X}_{i,o,c,e} + \theta_{c,e} + \theta_o + \epsilon_{i,o,c,e}. \tag{1}$$

The dependent variable  $Y_{i,o,c,e}^{\pi}$  measure the left-to-right index of party  $\pi$  voted by individual i in country c from origin o in election e. Later on in the analysis, we consider other important dimensions of political preferences as outcomes (individual turnout, political ideology, views on relevant political issues such as EU integration, public policy and government intervention, societal views) and voting behaviors on both economic and societal stances (e.g. related to welfare, education, traditional morality, national identity as opposed to multiculturalism). The main variable of interest is  $Mig_{i,o,c,e}^{2nd}$ , a dummy variable which takes value of one if the voter has a foreign-born father. The vector  $\mathbf{X}_{i,o,c,e}$  includes a set of individual level characteristics, including age, gender, education, family background and whether the individual lives in a urban area. Country-by-election-year fixed-effects ( $\theta_{c,e}$ ) capture time-variant country-specific factors in the destination, like economic and labor market conditions, while origin-specific time-invariant factors are captured by the origin fixed effect ( $\theta_o$ ).

The coefficient  $\beta$  captures the average migrant-to-native differences in voting behavior, conditional on individual characteristics, parental background, destination-by-year and country-of-origin fixed-effects. Destination (by-year) fixed effects account for economic and institutional factors in the destination that affect the voting behavior of both natives and migrants. Origin fixed effects capture time-invariant origin-specific factors, some of which are typically associated with culture of origin, and may be persistent factors of different voting behavior between second generation immigrants and natives. We argue that conditional on this set of controls and fixed effects migrants can be considered observationally similar to natives in the destination. To minimize concerns regarding unobserved heterogeneity across origin countries, through the analysis we gradually restrict the set of migrants to more homogeneous countries of origin (e.g. OECD and Eu21 countries).

Besides origin-specific omitted factors, we address also concerns of unobserved heterogeneity between natives and second generation migrants that carries over to some observed dimension. This source of heterogeneity would imply that disparities in the distribution of covariates between natives and  $2^{nd}$  gen.

<sup>&</sup>lt;sup>12</sup>Algan et al. (2013) considers a similar specification, which investigates differences of first and second generation immigrants by origin group with respect to natives in a number of cultural dimensions. We depart from that analysis as (i) we abstract from first generation immigrants, who in general do not have voting rights in the country of destination. Moreover, (ii) in equation (1) we control for origin-specific factors instead of analyzing heterogeneous voting behaviors by origin groups.

immigrants may not be fully accounted for by the control variables, and reduce the accuracy of our estimates. Imbens and Rubin (2015) show that large distributional gaps magnify the sensitivity of the estimated coefficients to any ostensibly minor change in the specification. We address this issue by implementing a covariates matching technique. Namely, we implement a design phase that precedes the empirical analysis, and which consists in constructing a balanced sample in terms of observed covariates. Table A-2 shows that natives and  $2^{nd}$  gen. immigrants hold a similar distribution of covariates after matching. Hence, we can estimate our empirical model on the balanced sample, making it more robust and more credible in terms of internal validity. Other concerns could raise related to the contextual factors pointed out by Portes and Rumbaut (2001). We address such issue by estimating equation (1) after including regional time-invariant NUTS2 fixed-effects and a set of time-variant NUTS2 controls, like the GDP per capita, unemployment rate and the fertility rate. Such demanding specification would then control for contextual factors at more local level.

At this stage, conditional on observable characteristics, the estimated  $\hat{\beta}$  coefficient of equation (1) gives us an intuitive partial correlation between being a second generation immigrants and the specific political stance in the destination, independently of the specific origin or destination of the migrants. As the culture of origin channel is captured though the origin fixed effect and destination conditions are captured by the destination-by-period effect, the second generation dummy captures the common difference, likely stemming from the "emigration experience". This is likely mediated by the family dimension (e.g the economic integration of parents) for the political preferences of second generation relative to natives (see North, 1991, and Alesina and Giuliano, 2015 for comprehensive discussions on the comparison of formal and informal institutions affecting immigrants cultural assimilation). We think that it is interesting to see if a common attitude, significantly different from natives, emerges in this group (as such) characterizing it as giving a common left-to-right bias.

## 5 Empirical Results

Table 1 reports the baseline set of estimates for equation (1). For comparison purposes, we present empirical results from a simplified version of equation (1) where we omit the origin-specific fixed effect  $\theta_o$ . We consider three different samples for the origin countries (of  $2^{nd}$  generation immigrants): an unrestricted sample, including all 46 origins, some of them presenting very different institutions and economic conditions

compared to the destinations. Second, we propose an OECD sample, which includes origin countries that feature relatively similar institutions and economic structures compared to 22 destinations. Third, we consider the squared matrix of origin and destination countries, which includes countries that appear as both origin and destination in our data. This final specification uses a balanced sample of 21 European countries (Eu21), acting both as origin and destination.<sup>13</sup> This conservative strategy attenuates concerns of unobserved heterogeneity related to institutional, or structural economic differences between origin and destination along each migration trajectory. Additionally it allows identification of a country of origin effect on a sample of both non-migrants and migrants.

The estimated coefficients of individual controls are statistically significant at conventional levels, and quite stable across specifications. Results from these regressions tend to confirm the insights coming from the literature that studies the individual and contextual determinants of voting behavior, usually on one single country (see e.g. Cantoni and Pons, 2022). Being a male voter, religious, married, with at least one child, in an economically comfortable position (i.e. employed in a full time job, increasing household income), and with an advantaged family background (father working, and in high skilled occupation when the respondent was 14 y.o.) is associated with voting for a party with positive right-wing index. Conversely, having a degree beyond primary education, <sup>14</sup> living in urban area, and becoming older increase individual propensity to vote for a left-leaning party. The coefficient of the second-generation migrant dummy has consistently a negative sign, which is always statistically significant (at the 1% or 5% level). As we move from the heterogeneous set of migration origins, featuring all 46 origins, to our preferred specification, which considers the same origin and destinations inside Eu21, the estimated coefficient is quite stable, if country of origin effects are included. The stability of this estimated coefficient suggests that migrants-to-native differences are not driven by unobserved factors related to specific migration origins (e.g. from a lower middle-income developing country to a Eu21 country).

Taken at face value, estimates in column (6) imply that a second generation immigrant in a Eu21 country tends to be 8.3% more leftist than a Eu21 native voter with the same individual, family, and parental characteristics. The magnitude is comparable to the leftist shift of a reduction in (log) income

 $<sup>\</sup>overline{\phantom{a}}^{13}$ From our original set of 22 destination countries, we remove Greece, since in our sample we do not have  $2^{nd}$  generation migrants with Greek origin across the other destinations, and  $2^{nd}$  generation immigrants in Greece are from not European countries of origin.

<sup>&</sup>lt;sup>14</sup>The coefficients of secondary and tertiary education go in opposite directions. However the negative coefficient of secondary education is way larger than the positive coefficient of tertiary education. This suggests that educated voters are more leftleaning than voters with a primary education degree, on average.

Table 1: Migrant to native difference Origin-specific effect and sample selection

	Unrestri	cted Sample	OECD	Sample	EU21 Sample		
	(1) Without Origin FE or Controls	(2) With Origin FE or Controls	(3) Without Origin FE or Controls	(4) With Origin FE or Controls	(5) Without Origin FE or Controls	(6) With Origin FE or Controls	
2nd-gen Immigrants	-0.140*** (0.026)	-0.073** (0.033)	$-0.117*** \\ (0.027)$	-0.083*** $(0.029)$	$-0.076** \\ (0.033)$	-0.083*** (0.020)	
Age	-0.013***	-0.013***	-0.013***	-0.013***	-0.014***	-0.014***	
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	
$Age^2$	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
Female	-0.076***	-0.076***	-0.076***	-0.076***	-0.075***	-0.075***	
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	
Secondary Edu.	-0.093***	-0.094***	-0.093***	-0.094***	-0.097***	-0.097***	
	(0.025)	(0.024)	(0.026)	(0.025)	(0.027)	(0.027)	
Tertiary Edu.	0.021**	0.021**	0.022**	0.022**	0.018	0.018	
· ·	(0.009)	(0.009)	(0.010)	(0.010)	(0.011)	(0.011)	
Married	0.053***	0.054***	0.052***	0.053***	0.055***	0.055***	
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	
At least 1 child	0.024*	$0.024^{*}$	0.026**	0.026**	0.025**	0.025**	
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	
Urban Area Resident	-0.122***	-0.119***	-0.121***	-0.120****	-0.121***	-0.121***	
	(0.034)	(0.034)	(0.034)	(0.034)	(0.035)	(0.035)	
Log Household Income	0.088***	0.086***	0.086***	0.085***	0.086***	0.087***	
	(0.025)	(0.024)	(0.025)	(0.025)	(0.025)	(0.025)	
Employed	0.027***	0.026***	0.028***	0.028***	0.031***	0.031***	
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	
Prays Everyday	0.206***	0.210***	0.213***	0.214***	0.219***	0.218***	
rays Every day	(0.051)	(0.051)	(0.049)	(0.050)	(0.052)	(0.052)	
Father Working	0.042***	0.040***	0.041***	0.041***	0.040**	0.040***	
radio Werming	(0.013)	(0.012)	(0.013)	(0.013)	(0.014)	(0.014)	
Father High Skilled	0.050*	0.049*	0.048*	0.047*	0.047*	0.047*	
Tuoner Tilgir Similed	(0.024)	(0.025)	(0.026)	(0.026)	(0.026)	(0.026)	
Observations	130911	130911	129361	129361	126373	126373	
R2	0.205	0.207	0.204	0.206	0.206	0.206	
Destination#Year F.E.	√	0.201 ✓	√	√	√	√.200	
Origin F.E.	•	<b>v</b>	•	<b>√</b>	•	<b>√</b>	

Notes: Unrestricted sample includes all natives and 2nd-gen immigrants. OECD sample includes natives and 2nd-gen immigrants from OECD origin countries, and the EU21 sample includes destination and origin countries from the restricted origin-destination countries available from our dataset (square matrix). All specifications also include destination country-by-election, and in even columns country of origin fixed-effects. Robust standard errors are clustered at country level. Significance levels: \*: 10% \*\*: 5% \*\*\*: 1%.

by one standard deviation (equivalent to a reduction of monthly household income by 1150 euros). It is also comparable in size with the leftward shift associated with obtaining a secondary education degree, and only one third smaller than the coefficient on living in an urban neighbourhood.

In political terms, and comparing the magnitude of the estimates with the evidence of Figure 1, the estimated effect is equivalent to the 16% of the difference in political preferences between a perfect centrist (standardized leftism =0) and one voting for the Europen social-democrat party, S&D-EU (standardized leftism =-0.5). This is a sizeable magnitude, which suggest that migration status is an equally important "identity" of individual voting behavior, as other individual characteristics pointed out by the literature.

Cantoni and Pons (2022) show that overall, individual level factors explain roughly the 63% of the variation in turnout and party affiliation preferences in the United States, while state of residence accounts for the rest. It is worth noting that while the migratory status is one important dimension to take into full consideration, we are not claiming that this dimension alone may have sizeable effects on the voting patterns of European countries. In Appendix C we use the estimated  $\hat{\beta}$  coefficient to perform a simple simulation exercise, based on both observed and projected shares of second generation immigrants, over the total population of each country. This exercise suggests that this second generation bias, by itself, is likely to have only a limited impact on the average voter of most Western European countries, even in scenarios resembling the US mass migration phenomena, where  $2^{nd}$  generation immigrants may reach 30% of the total population in a country (see Table C-1).

In Table B-1 we present important checks of the robustness and credibility of our results in terms of internal validity. To comparison purposes, in column (1) we report our preferred specification (this is taken from Table 1, column (6)). The first two robustness exercises concern the sample used in the analysis. In line with the stylized facts, column (2) presents robust results after focusing on the sample of Western European countries. In Column (3), we present results on the balanced sample obtained after implementing the *Mahalanobis Metric Matching* technique, which accounts for the distributional gaps evidenced in Table A-2 (cfr. Columns (3) and (6)). Our results go through in a similar way as we account for time invariant regional factors through regional FE (column (4)), and regional FE plus time varying regional controls (column (5)). Finally, in columns (6) and (7), we address the selection upon unobservables concern. The value of  $\tilde{\delta}$  from the Oster (2019)'s test is higher than 1, indicating that selection on unobservables is not a major concern for our estimates.<sup>15</sup>

#### 5.1 Second generation differences on individual political issues

In this section, we explore the more detailed characteristics of second generation immigrants' voting preferences, beyond the left-right index. While the left-right definition is an aggregate of positions on

<sup>&</sup>lt;sup>15</sup>Table B-2 in the Appendix provides additional consistent results after performing the following robustness checks: (i) removing Estonia and Portugal from the sample, countries with the highest and lowest share of second generation migrants, (ii) removing countries not belonging to the European Union, (iii) dropping the first and last electoral event per country, and (iv) removing second generation immigrants with German origins, since they are the most representative in our restricted sample. Table B-3 considers an alternative definition of of second generation migrant based on the country of origin of the mother (rather than the father). The negative coefficient is preserved, but its size drops by half, implying that mother's migration status is a less important channel of migrant-to-native voting differences in the residence country. These results are confirmed once exploring the role of played by parent's absence in the respondent's adolescence: father's absence is associated with a milder left-wing stance compared to mother's absence.

several areas, here we see if being second generation carries a difference in preferences, relative to natives, in each area of political action and values and which one shows the strongest difference in attitudes.

Table 2: Migrant to native difference - EU21 Sample Voting and Political Preferences

	Participation	to Politics	Soc	iety and Opennes	SS	
	(1) Voting	(2) Interested in Politics	(3) Gay and Lesbians free to live	(4) Immigrants Enrich Culture	(5) EU Integration go further	
2nd-gen Immigrants	0.007 (0.010)	0.073** (0.009)	0.109*** (0.026)	0.078** (0.033)	0.049** (0.022)	
R2 Observations	0.117 $180465$	0.213 $180157$	0.237 $124482$	0.154 $124087$	0.109 $105672$	
	Public	Sector and Re	edistribution	Ideologic	al Intensity	
	(6) Satisfied Education Sys.	(7) Satisfied Health Sys.	(8) Government reduce income differences	(9) Self-declared Ideology	(10) Feel Close to a Party	
2nd-gen Immigrants	$-0.142^{***}$ $(0.025)$	-0.061** (0.027)	0.073** (0.026)	$-0.061^*$ $(0.034)$	-0.023 (0.014)	
R2 Observations	0.145 $122886$	0.184 $125760$	0.109 $125510$	0.071 $121909$	0.059 $126359$	
	Voting:	Economic-rel	ated Stances	Voting: Values-related Stances		
	(11) Welfare Expansion	(12) Education Expansion	(13) Support Workers	(14) National Way of life	(15) Multiculturalism	
2nd-gen Immigrants	0.064** (0.026)	0.137** (0.052)	0.076** (0.027)	-0.092*** (0.022)	0.052** (0.022)	
R2 Observations	0.54 $126373$	0.46 $126373$	0.45 $126373$	0.18 $126373$	0.25 $126373$	
Individual Controls Destination#Year F.E. Origin F.E.	√ √ √	√ √ √	√ √ √	√ √ √	√ √ √	

Notes: 2nd-gen immigrants are respondents who are born in the destination country but whose father is not born in the destination country. All specifications include controls for age, logarithm of income, dummy for female, two dummies for education, a dummy for marital status, dummy for children, dummy for urban resident, dummy for praying everyday, dummy for employment status, dummy for father's employment status and two dummies for father's occupational skill. Dependent variable is a dummy equal to one if individuals voted in the last election (col. 1) and a variables capturing respondent's interest in Politics (col. 2). Cols. (3) and (4) reports estimates on individual's attitudes towards a positive stance towards gays and lesbians and towards the positive contribution of immigration on local culture. Col. (5) shows estimates on individual's attitudes towards a stronger EU integration. Cols. (6) and (7) reports estimates associated to individual's satisfaction on the education and health system. Col. (8) shows results on individual's attitudes towards a stronger government intervention in reducing income differences. Col. (9) reports results on individual's self-declared left-to-right ideology, while col. (10) shows whether respondent feel close to a specific party. Col.s (11) to (15) report results using alternative parties' political dimension as dependent variables. Robust standard errors clustered at country level. Significance levels: \*: 10% \*\*: 5% \*\*\*: 1%

We present the results in Table 2. We start by investigating migrant-to-native differences in political attitudes, ideological views, beliefs on institutions (e.g. EU, government policies), and the society as a whole, based on replies to ESS survey questions. These opinion are directly elicited in the survey and not inferred from vote in the election. We find that  $2^{nd}$  generation migrants are significantly more

interested in politics than natives, even though they do not turn out to elections more frequently than natives (see columns 1 and 2). Migrants have more open views about individual freedom to express own sexual preferences, and recognize the enriching role of diversity in the host society (columns 3 and 4). On the institutional side, migrants support more than natives the EU integration process, and government intervention to improve national education and health, and reduce inequalities (columns 5-8). These results suggest that migrants vote for left-wing parties because they exhibit specific policy preferences that line up with the left parties. Column 9 shows that their self-reported ideological views exhibit only a weak significantly left wing bias and, if any, they tend to identify less with a specific party compared to natives (column 10). Taken together these results suggest that the left bias of second generation migrants derives more from policy preferences than political identity or party identification. In some sense the 2<sup>nd</sup> generation experience makes this group more sensitive to a set of issues, relative to similar natives, and this has an impact on their vote. <sup>16</sup>

We then go back to analyze preferences for specific political traits, looking at the content analysis of the Manifesto Project database. We use as dependent variable the voted-party support for specific policy-related positions and values-related positions.<sup>17</sup> Estimates show that, compared to natives, migrants vote for parties that support expansion of the welfare state, the education system, and policies that support workers. As far as societal views, migrants vote less for parties that emphasize nationalist and conservative views, while support parties in favor of multiculturalism.

One interpretation of these results is that immigrants vote for policies they consider useful to overcome potential barriers to their (or their fellows' immigrants) full integration. Alternatively, their parents experience of downgrading, segregation in low-skilled / low paid jobs, or discrimination (e.g. based on nationality, race or ethnicity) may drive these preferences. In column (1) of Table 3 we extend the migrant-to-native comparison to include individuals born from a migrant mother, and by two migrant parents. Results from this check show that it is mainly the presence of a foreign-born father that produces the leftist bias in  $2^{nd}$  generation migrants. Then, in column (2) we check for different voting responses of migrant and native respondents to past experience of the father being in a poor labor market match. We include a dummy equal to one if the father was in job for which he was overqualified when the

<sup>&</sup>lt;sup>16</sup>Gonnot and Lo Polito (2021) find similar results for preferences for redistribution of first-generation immigrants.

<sup>&</sup>lt;sup>17</sup>Using the same method of share of quasi-sentences related to each specific political topic as a fraction of all sentences in the manifesto and favorable/positive mentions or unfavorable/negative mentions we can construct net position of parties on each issue.

Table 3: Migrant to native difference - EU21 sample
Discrimination & Mismatch

	(1) Migrants' Parents	(2) Father Mismatch	(3) Personal Disc.	(4) Father Mismatch and Personal Disc.
2nd-gen (Father)	-0.092***	-0.077***	-0.077***	-0.072***
2nd-gen (Mother)	(0.023) $-0.038$ $(0.039)$	(0.022)	(0.021)	(0.021)
2nd-gen (Father) x 2nd-gen (Mother)	0.080 $(0.125)$			
2nd-gen (Father) x Pos. Mismatch	` ,	-0.047		-0.045
2nd-gen (Father) x Neg. Mismatch		(0.116) -0.248***		(0.116) -0.245***
Pos. Mismatch		(0.050) $0.091***$		(0.049) 0.088***
		(0.025)		(0.022)
Neg. Mismatch		0.024		0.025
		(0.019)	0.000	(0.019)
2nd-gen (Father) x Discriminated			-0.088 $(0.078)$	-0.105 $(0.078)$
Discriminated			0.003	(0.078) -0.023
Discinninated			(0.044)	(0.037)
Pos. Mismatch x Discriminated			(0.011)	0.039
				(0.059)
Neg. Mismatch x Discriminated				-0.020
				(0.033)
R2	0.206	0.208	0.206	0.208
Observations	125107	100977	125107	100977
Individual Controls	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Destination $\#$ Year F.E.	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Origin F.E.	✓	✓	✓	✓

Notes: All specifications include controls for age, logarithm of income, dummy for female, two dummies for education, a dummy for marital status, dummy for children, dummy for urban resident, dummy for praying everyday, dummy for employment status, dummy for father's employment status and two dummies for father's occupational skill. Pos. Mismatch is a dummy that takes value of 1 if the skill content of father's occupation is higher than his education, while Neg. Mismatch is a dummy that takes value of 1 if the skill content of father's occupation is lower than his education. Discriminated is a dummy variable which report whether the individual perceive to belong to a discriminated group within the country. All specifications also include destination country-by-election FE and origin FE. Robust standard errors clustered at the country destination level. Significance levels: \*: 10% \*\*: 5% \*\*\*: 1%

respondent was 14 years old (zero otherwise; negative mismatch), and one dummy for the father being underqualified for his job when the respondent was 14 y.o. (positive mismatch). We create interactions with the  $2^{nd}$  generation migrant dummy, to model heterogeneous voting behaviors of migrant and native voters depending on the job match of the father.

Results show that, while the job match quality of fathers does not explain directly (main effect) migrant-to-native differences, having an immigrant father in a negative job match while growing up (interaction of mis-match and second generation), rises the leftist bias of migrants relative to natives by four times. Conversely, the experience of a father in a positive mismatch shifts preferences towards right-wing parties, without any significant difference between migrants and natives. In column (3), we perform a similar heterogeneity exercise using a dummy equal to 1 if the respondent identifies herself as belonging to a

discriminated group in the country (Fouka, 2019).<sup>18</sup> Neither the dummy, nor its interaction with the main variable of interest turn out to be statistically significant. Finally, in column (4), we consider the job mismatch and discrimination dimensions simultaneously, by including all controls and interactions in the same specification. Results of columns (2) and (3) are confirmed i.e. the relevance of the job mismatch channel only, as a contributing factor of migrant-to-native differences in voting behavior.

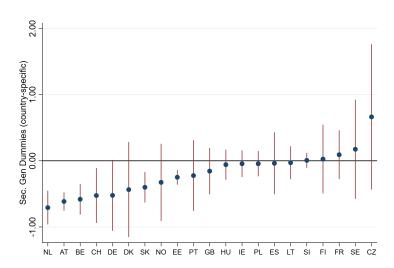


Figure 2: Migrant to native difference: country-specific Regressions

Note: authors' calculations on ESS and MPD. Each dot shows the the estimated coefficient of migrant to native difference in voting preferences and the associated 95% interval of confidence, estimated on the country-specific sample. Each regression includes the full set of individual controls, origin and election year fixed effects.

Finally we characterize the migrant-to-native difference estimated in Table 1 differentiating across destination countries. We investigate this by carrying out a heterogeneity exercise where we run equation (1) on each country sample, conditional on the usual set of individual characteristics, origin fixed effects and election fixed effects. Figure 2 plots the estimated destination-specific migrant to native differences. One fact stands out from this exercise. The reported coefficients confirm that, even when they are estimated at the country level, the majority of estimates is negative (implying a left-leaning bias) in most cases. The coefficients turns out to be positive for only three countries (France, Sweden and Czech Republic) and, in those cases, never statistically different from zero. This suggests that left-bias is a common feature of the "second generation" experience, with significant voting consequences. The size of migrant-to-native differences shows however significant heterogeneity across countries, being larger in Western countries from

<sup>&</sup>lt;sup>18</sup>The dummy variable has a value equal to one if the respondent recognize himself as "member of a group discriminated against in this country".

<sup>&</sup>lt;sup>19</sup>To maximize sample size these country-specific regressions are carried out on the unrestricted sample of countries of origin.

Continental Europe (Netherlands, Austria, Belgium, Switzerland).

## 6 Conclusions

This paper uses an original dataset which combines information from the European Social Survey (ESS) and the Manifesto Project database (MPD) to analyze the voting behavior of  $2^{nd}$  generation immigrants in comparison to that of natives across a large sample of European countries. We consider the left-to-right index as well as important specific policy preferences. In the first part of the paper, we show significant migrant-to-native differences in the left-to-right index, which are robust to the inclusion of destination by year fixed effects and origin fixed effects, capturing both the effects of formal institutions in the destination and informal ones pertaining to the origin country of the migrants. We showed that on average, the offspring of migrants in European destinations vote for more left-wing parties compared to local natives, and this association is quantitatively non-trivial, similar to the association of education and neighbourhood with voting preferences.

In the second part of the paper we consider the same difference on specific policy issues. We show that second generation migrants support policies for redistribution, education and social welfare, but they do not exhibit strong party affiliation or ideological belonging. These results have two interesting political implication. First they suggest that being second generation immigrants is a trait that generate some commonality of political view, hence this can be a block of people that can be targeted by some specific political campaign. Second, the specific analysis shows that this is a rather pragmatic and policy-oriented group, swayed, possibly by policy proposals more than by ideological affiliation.

Additionally, however, simulations that we do in the appendix, show that the left-bias of this group, even if non trivial, is not large enough to affect significantly the left-right distribution of the electorate in most European countries. Even projecting the second generation immigrant becoming as larger as 20-30% of the population as it was in the US at its peak during the 20th century this will not generate more than a fraction of one percent shift in the average left-right ideology index in most EU countries. Indirectly, this confirms that while culture of origin (as shown by other studies) and the shared second generation experience (as showed in this study) matter for preferences and voting, assimilation in the country of destination is a prevalent force for second generation immigrants even in terms of voting.

## References

- Abramitzky, R. and Boustan, L. (2017). Immigration in American economic history. *Journal of economic literature*, 55(4):1311–45.
- Abramitzky, R., Boustan, L., and Eriksson, K. (2020). Do immigrants assimilate more slowly today than in the past? *American Economic Review: Insights*, 2(1):125–41.
- Alba, R. D. and Nee, V. (2009). Remaking the American mainstream: Assimilation and contemporary immigration.

  Harvard University Press.
- Alesina, A. and Giuliano, P. (2015). Culture and institutions. Journal of Economic Literature, 53(4):898–944.
- Algan, Y., Bisin, A., Manning, A., and Verdier, T. (2013). Cultural integration of immigrants in Europe. Oxford University Press.
- Algan, Y., Dustmann, C., Glitz, A., and Manning, A. (2010). The economic situation of first and second-generation immigrants in France, Germany and the United Kingdom. *The Economic Journal*, 120(542):F4–F30.
- Bean, F. D., Brown, S. K., Bachmeier, J. D., Brown, S., and Bachmeier, J. (2015). Parents without papers: The progress and pitfalls of Mexican American integration. Russell Sage Foundation.
- Borjas, G. J. (1985). Assimilation, changes in cohort quality, and the earnings of immigrants. *Journal of labor Economics*, 3(4):463–489.
- Borjas, G. J. (1993). The intergenerational mobility of immigrants. *Journal of Labor Economics*, 11(1, Part 1):113–135.
- Budge, I., Klingemann, H.-D., Volkens, A., Bara, J., Tanenbaum, E., et al. (2001). *Mapping policy preferences:* estimates for parties, electors, and governments, 1945-1998, volume 1. Oxford University Press on Demand.
- Budge, I. and Laver, M. J. (2016). Party policy and government coalitions. Springer.
- Cantoni, E. and Pons, V. (2022). Does context outweigh individual characteristics in driving voting behavior? Evidence from Relocations within the United States. *American Economic Review*, 112(4):1226–72.
- Card, D., DiNardo, J., and Estes, E. (2000). The more things change: Immigrants and the children of immigrants in the 1940s, the 1970s, and the 1990s. In *Issues in the Economics of Immigration*, pages 227–270. University of Chicago Press.
- Chevalier, A., Elsner, B., Lichter, A., and Pestel, N. (2018). Immigrant voters, taxation and the size of the welfare state. *IZA DP*, (11725):1–74.

- Deutsch, J., Epstein, G. S., and Lecker, T. (2006). Multi-generation model of immigrant earnings: theory and application. In *The Economics of Immigration and Social Diversity*. Emerald Group Publishing Limited.
- Docquier, F., Tansel, A., and Turati, R. (2020). Do emigrants self-select along cultural traits? evidence from the MENA countries. *International Migration Review*, 54(2):388–422.
- Duncan, B. and Trejo, S. J. (2018). Socioeconomic integration of US immigrant groups over the long term. The Human and Economic Implications of Twenty-First Century Immigration Policy, pages 33–85.
- Edo, A., Giesing, Y., Öztunc, J., and Poutvaara, P. (2019). Immigration and electoral support for the far-left and the far-right. *European Economic Review*, 115:99–143.
- Fernandez, R. and Fogli, A. (2009). Culture: An empirical investigation of beliefs, work, and fertility. *American economic journal: Macroeconomics*, 1(1):146–77.
- Fouka, V. (2019). How do immigrants respond to discrimination? The case of Germans in the US during World War I. American Political Science Review, 113(2):405–422.
- Gathmann, C. and Keller, N. (2018). Access to citizenship and the economic assimilation of immigrants. *The Economic Journal*, 128(616):3141–3181.
- Giavazzi, F., Petkov, I., and Schiantarelli, F. (2019). Culture: Persistence and evolution. *Journal of Economic Growth*, 24(2):117–154.
- Giuliano, P. and Tabellini, M. (2021). The seeds of ideology: Historical immigration and political preferences in the United States. *Harvard Business School BGIE Unit Working Paper*, (20-118).
- Gonnot, J. and Lo Polito, F. (2021). The political assimilation of immigrants: Migrant-to-native differences in Western Europe. Eui rsc, 2021/87, migration policy centre, European University Institute (EUI).
- Hammarstedt, M. (2009). Intergenerational mobility and the earnings position of first-, second-, and third-generation immigrants. *Kyklos*, 62(2):275–292.
- Imbens, G. W. and Rubin, D. B. (2015). Causal inference in statistics, social, and biomedical sciences. Cambridge University Press.
- Klingemann, H.-D., Volkens, A., McDonald, M. D., Budge, I., and Bara, J. (2006). Mapping policy preferences II: estimates for parties, electors, and governments in Eastern Europe, European Union, and OECD 1990-2003, volume 2. Oxford University Press on Demand.

- Kucera, M. (2008). The educational attainment of second generation immigrants in Canada: Analysis based on the General Social Survey. *MPRA Paper*, No. 14036.
- Luthra, R., Waldinger, R., and Soehl, T. (2018). Origins and destinations: The making of the second generation.

  Russell Sage Foundation.
- Luttmer, E. F. and Singhal, M. (2011). Culture, context, and the taste for redistribution. *American Economic Journal: Economic Policy*, 3(1):157–79.
- Mayda, A. M., Peri, G., and Steingress, W. (2022). The political impact of immigration: Evidence from the United States. *American Economic Journal: Applied Economics*, 14(1):358–89.
- Moriconi, S., Peri, G., and Turati, R. (2022). Skill of the immigrants and vote of the natives: Immigration and nationalism in European elections 2007–2016. *European Economic Review*, 141:103986.
- North, D. C. (1991). Institutions. Journal of Economic Perspectives, 5(1):97–112.
- Oster, E. (2019). Unobservable selection and coefficient stability: Theory and evidence. *Journal of Business & Economic Statistics*, 37(2):187–204.
- Ottaviano, G. I. and Peri, G. (2012). Rethinking the effect of immigration on wages. *Journal of the European economic association*, 10(1):152–197.
- Peri, G. and Sparber, C. (2009). Task specialization, immigration, and wages. *American Economic Journal: Applied Economics*, 1(3):135–69.
- Pew Research Center (2013). Second-generation americans: A portrait of the adult children of immigrants. Technical report, Washington, D.C.: Pew Research Center.
- Portes, A. and Rumbaut, R. G. (2001). Legacies: The story of the immigrant second generation. Univ of California Press.
- Rodríguez-Planas, N. and Sanz-de Galdeano, A. (2019). Intergenerational transmission of gender social norms and teenage smoking. *Social Science & Medicine*, 222:122–132.
- Smith, J. P. (2003). Assimilation across the Latino generations. American Economic Review, 93(2):315–319.
- Steinhardt, M. F. (2012). Does citizenship matter? The economic impact of naturalizations in Germany. *Labour Economics*, 19(6):813–823.
- Tabellini, M. (2020). Gifts of the immigrants, woes of the natives: Lessons from the Age of Mass Migration. *The Review of Economic Studies*, 87(1):454–486.

Turati, R. (2020). Network-based connectedness and the diffusion of cultural traits. Available at SSRN 3580396.

Van Mol, C. and Valk, H. d. (2016). Migration and immigrants in europe: A historical and demographic perspective.

In *Integration processes and policies in Europe*, pages 31–55. Springer, Cham.

Zhao, Z. (2004). Using matching to estimate treatment effects: Data requirements, matching metrics, and Monte Carlo evidence. Review of economics and statistics, 86(1):91–107.

## **Appendix**

## A Data Appendix

Our primary data source is the European Social Survey (ESS). Established to monitor social change in Europe, the survey was administered in 9 waves/rounds (one every two years) in 36 countries between 2002 and 2018. The ESS is a repeated cross-section of a random sample of individuals which are representative of the national population over 18 in each country. On average, each wave contains around 1,500 individuals for each country. The data include detailed socio-demographic information on personal and family characteristics such as age, gender, education, marital status, number of children in the family, place of birth, labor market characteristics such as employment status, and NUTS2 region of residence. <sup>20</sup> It also includes detailed information on parental background, such as parents' education, employment status, occupation when the respondent was 14 years old, and their own country of birth.

ESS is composed of 'rotating modules', which are themes occasionally included across the waves, and a 'core module', which includes themes that are largely the same across rounds. Questions concerning individuals behavior and beliefs on political issues belong to the second group. Specifically on voting, which is the focus of this paper, ESS records individual's participation to national elections and voting choice, by asking the following question: "which party did you vote for in the last national election?". Individuals respond by identifying party names, and we link these party names to information on their political agenda obtained from the Manifesto Project Database (MPD). Widely used among political scientists and economists as the most comprehensive and accurate source to compare parties' agenda and ideology across countries and over time (Budge et al., 2001; Klingemann et al., 2006; Moriconi et al., 2022), the MPD analyzes the political manifesto of 1,093 parties over 715 parliamentary elections covering all the countries and the years we consider.<sup>21</sup> Each party's political manifesto is analyzed through a content analysis. Specifically, the MPD provides the share of quasi-sentences related to each specific political topic as a fraction of all sentences in the manifesto. Such share is taken as a measure of the relevance of the political topic (or intensity of that political position) in analysis in the party's political agenda. Additionally, for

<sup>&</sup>lt;sup>20</sup>ESS data provides information on the location of respondents based on the "Nomenclature for Territorial Units for Statistics" (NUTS) system at the regional level (NUTS2) for all EU countries, with a few exceptions (e.g. Austria, Germany, UK) where the local units identified are larger (NUTS1).

<sup>&</sup>lt;sup>21</sup>The MPD includes all parties that participated in national elections and obtained at least one seat in their country's parliament over the 1945-2017 period, covering all democratic countries in the OECD and Eastern Europe.

a wide range of topics, MPD provides the share of favorable/positive and unfavorable/negative mentions, which allow to better grasp parties' stance on relevant topics (e.g. Welfare state, societies' values, etc.).

Table A-1: Elections and ESS Rounds by Country and Year

	(1)	(2)	(3)	(4)
Country	# Elections	Election Years	# Survey Rounds	Survey Years
Austria	5	2002, 2006, 2008, 2013, 2017	7	2004, 2006, 2008, 2010, 2014, 2016, 2018
Belgium	4	2003, 2007, 2010, 2014	8	2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018
Czech Republic	5	2002,2006,2010,2013,2017	7	2004, 2008, 2010, 2012, 2014, 2016, 2018
Denmark	4	2001, 2005, 2007, 2011	6	2004, 2006, 2008, 2010, 2012, 2014, (2018)
Estonia	4	2003, 2007, 2011, 2015	8	2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018
Finland	4	2003, 2007, 2011, 2015	8	2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018
France	4	2002, 2007, 2012, 2017	8	2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018
Germany	5	2002,2005,2009,2013,2017	8	2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018
Greece	3	2004, 2007, 2009	3	2004, 2010, 2012
Hungary	4	2002, 2006, 2010, 2014	8	2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018
Ireland	4	2002, 2007, 2011, 2016	8	2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018
Lithuania	3	2008, 2012, 2016	5	2008, 2010, 2012, 2014, 2016, (2018)
Netherlands	5	2003,2006,2010,2012,2017	8	2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018
Norway	5	2001, 2005, 2009, 2013, 2017	8	2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018
Poland	3	2005, 2007, 2011	5	2006, 2008, 2010, 2012, 2014
Portugal	5	2002, 2005, 2009, 2011, 2015	7	2004, 2006, 2008, 2010, 2012, 2014, 2016, (2018)
Slovakia	4	2002, 2006, 2010, 2012	5	2004, 2006, 2008, 2010, 2012, (2018)
Slovenia	4	2004, 2008, 2011, 2014	6	2006, 2008, 2010, 2012, 2014, 2016
Spain	4	2004, 2008, 2011, 2016	7	2004, 2006, 2008, 2010, 2012, 2014, 2016, (2018)
Sweden	4	2002, 2006, 2010, 2014	7	2004, 2006, 2008, 2010, 2012, 2014, 2016, (2018)
Switzerland	4	2003, 2007, 2011, 2015	8	2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018
United Kingdom	5	2001, 2005, 2010, 2015, 2017	8	2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018

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 waves by country and column (4) the year of each round. In parenthesis the year of the waves not available yet. Source: ESS.

We include in our sample only OECD countries that participated to economic integration processes in Europe (i.e. EU or EFTA). In practice, we exclude non-OECD countries (Bulgaria, Croatia, Kosovo, Romania, Russia and Serbia) and non-European OECD countries (Turkey, Israel, Cyprus). We also exclude Latvia and Luxembourg, for which we observe only one electoral event during the sample period, and Italy, given the extremely small share of migrants' children reported. As reported in Table A-1, this process leaves 19 OECD countries belonging to the European Union (Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Lithuania, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain and Sweden), plus Norway, Switzerland and the United Kingdom. This constitutes a balanced sample including economically integrated European democracies at a similar stage of economic development, plus some Central Eastern countries, which have a recent experience with economic integration and democratic institutions.

As ESS data convey information on the vote cast by each respondent in the *most recent* national election, the survey rounds carried out between 2004 and 2018 report the votes of respondents in elections

held during the 2001-2018 period. Since some consecutive survey rounds have been conducted without any electoral occurrence between them, the respondents to different waves may provide voting preferences associated with the same electoral event. This is better understood by looking at Table A-1, which reports the number and year of elections covered by ESS for each country in columns (1) and (2), and the number and years of the surveys in columns (3) and (4).

In the case of France, for instance, the survey records respondents most recent voting behavior every two years between 2004 and 2018 (column (4)) but there are French national elections only in 2002, 2007, 2012 and 2017. Hence the vote in the 2002 elections was the one recorded both in 2004 and 2006 ESS, the vote in 2007 was recorded in the 2008 and 2010 ESS waves and the vote in 2012 was recorded in 2014 and 2016. When the survey and election years corresponded (e.g. in France in 2012, or Sweden in 2010 and 2014), we use the exact dates of the ESS interviews (i.e. including months and days if needed) to determine which is the most recent national elections in which the respondent participated. Following this procedure, we map countries' election-year into survey years. The time-variation in political indicators, in our analysis is across election-years (rather than survey-years).

Among the several political dimensions available in the MPD, we focus our attention on the *left-to-right* index proposed by Budge and Laver (2016). This index is constructed as the difference between a party positive stance on political preferences associated with the right, such as pro-free market, pro-economic incentives, pro-traditional values and morality, and the positive stance on political preferences associated with the left, such as pro-welfare state, pro-public education, pro-market regulations and workers' rights. The index takes values between -74 (radical left-wing party) to +91 (radical right-wing party). The advantage of using such index is to rely on one synthetic measure that captures a key political dimension across parties.

Additionally, in the analysis we explore the role of parties' preferences towards individual political issues such as favouring the welfare state, public education expansion, support for labor rights, support for traditional values, internationalism and multiculturalism. Following Moriconi et al. (2022) we link measures of parties political preferences with the individual votes expressed through their voting behavior. Given the fact that we want to exploit differences driven by changes in voting preferences, for each party we compute a time-invariant average of the left-right index over our sample, such that variations are driven by voters' changes across parties and not changes in parties political stances. Moreover, to facilitate the interpretation of the variable, we standardize the left-to-right index with mean zero and standard deviation

equal to one.

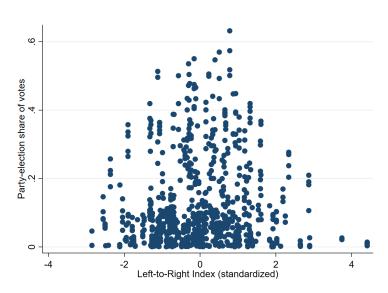


Figure A-1: Left-to-Righ Index - Full Sample

Note: authors' calculations on MPD and ESS. Each dot shows party's standardized left-to-right index and election-specific votes' share across our sample of national elections.

Figure A-1 shows the distribution of parties over the standardized left-right index and their shares of votes. Parties' characterized by the highest share of votes locate themselves around the mean of the distribution, and around 80% of our parties are characterized by a standardized left-to-right value between -1.3 to 1.3. Nonetheless, there are still relevant parties characterized by both an high share of votes and relevant right wing stance (e.g., the Swiss People's Party or the Slovak Democratic and Christian Union) or left wing stance (e.g., Podemos or Socialistisk Folkeparti in Denmark), with a standardized left-to-right index above two in absolute terms.

Since our paper aims at exploring differences in terms of political preferences between natives and  $2^{nd}$  generation immigrants, a coherent definition of the second group is needed. Following the literature, we define a  $2^{nd}$  generation immigrant as an individual born in the country of residence and with his/her father born abroad (Fernandez and Fogli, 2009).<sup>22</sup> In our final sample, we systematically exclude first generation immigrants from the empirical analysis, since these migrants are less comparable to natives, and they are less likely to hold voting rights in the host country. Additionally, we remove from each of

<sup>&</sup>lt;sup>22</sup>In Table B-3 we present evidence showing that having a foreign-born father affects more significantly political preferences compared to having a foreign-born mother. The cultural economics literature instead points out that the mother often provides a more effective transmission channel for specific traits of the culture of origin on sons/daughters preferences (Rodríguez-Planas and Sanz-de Galdeano, 2019).

the 22 countries in the sample the origin groups with less than 10 observations based on father's origin, to avoid noise driven by small and not representative groups. Our final sample includes 156248 individuals (all of them born in the country of residence), of which 5219 are  $2^{nd}$  generation immigrants from 46 origin countries that span a large range of location and levels of economic development.

Table A-2 reports descriptive statistics for the personal characteristics of individuals belonging to our final sample. The first two columns report the mean and standard deviations of each variable for natives and immigrants respectively. The third column reports whether the differences between the two are significant or not. Table A-2 shows significant differences between migrants and natives:  $2^{nd}$  generation immigrants are on average younger, living in urban areas, having higher level of income and being women than natives. Moreover,  $2^{nd}$  generation immigrants' father was less likely to work and being highly educated when the respondent was fourteen than natives' father. Thus, in the empirical analysis we control for these variables to avoid concerns regarding omitted variable bias.

Table A-2: Descriptive Statistics

		Full Sample	е		Matched Sam	ple
	(1) Natives	(2) Immigrants	(3) Difference	(4) Natives	(5) Immigrants	(6) Difference
Age	51.89	49.39	-2.505**	49.91	49.33	-0.581*
	(16.90)	(15.69)	(0.994)	(15.66)	(15.63)	(0.302)
Female	0.504	0.531	0.026***	0.544	0.532	-0.012
	(0.500)	(0.499)	(0.006)	(0.498)	(0.499)	(0.012)
Tertiary ed.	$0.338^{'}$	$0.356^{'}$	0.018	$0.363^{'}$	$0.357^{'}$	-0.006
v	(0.473)	(0.479)	(0.021)	(0.481)	(0.479)	(0.007)
Secondary ed.	$0.414^{'}$	$0.459^{'}$	$0.045^{'}$	$0.438^{'}$	$0.459^{'}$	0.021**
Ţ.	(0.493)	(0.498)	(0.029)	(0.496)	(0.498)	(0.010)
Married	$0.635^{'}$	0.619	-0.017	0.596	$0.620^{'}$	0.024
	(0.481)	(0.486)	(0.013)	(0.491)	(0.485)	(0.014)
At least 1 child	0.402	0.430	0.028	0.427	0.433	0.006
	(0.490)	(0.495)	(0.021)	(0.495)	(0.496)	(0.013)
Urban Area Resident	$0.283^{'}$	$0.374^{'}$	0.091***	0.381	$0.374^{'}$	-0.007
	(0.450)	(0.484)	(0.033)	(0.486)	(0.484)	(0.020)
Father Working	0.898	0.853	-0.045***	0.845	0.855	0.010
_	(0.303)	(0.354)	(0.012)	(0.362)	(0.352)	(0.009)
Father High Skilled	0.205	$0.167^{'}$	-0.039***	0.234	0.168	-0.066* <sup>*</sup> **
_	(0.404)	(0.373)	(0.012)	(0.423)	(0.374)	(0.014)
Log Household Income	10.07	10.19	0.117**	10.19	10.19	0.009
	(0.862)	(0.821)	(0.052)	(0.829)	(0.817)	(0.021)
Employed	0.554	0.589	0.035	0.600	0.590	-0.010
	(0.497)	(0.492)	(0.023)	(0.490)	(0.492)	(0.022)
Prays Everyday	0.177	0.220	0.043*	0.203	0.215	0.011
	(0.382)	(0.414)	(0.022)	(0.403)	(0.411)	(0.021)
Observations	151029	5219	156248	4533	5127	9660

Notes: authors' calculation on ESS data. Immigrants refers to  $2^{nd}$  generation immigrants, that is all individuals born in the country of destination but whose father is not born in the destination country. Standard errors reported in parenthesis. The difference column reports robust standard errors clustered at the country level. Significance levels: \*: 10% \*\*: 5% \*\*\*: 1%

In order to understand whether these compositional differences matter for our results, we constructed

a matched sample according to the methodology by Imbens and Rubin (2015). The idea is to select a control sub-sample, which is more balanced in terms of covariates with respect to the treated sample of  $2^{nd}$  generation immigrants. Although this can be performed using two matching methods - covariates and propensity score matching - we chose to use the former method due to its robustness properties. To do so, we match  $2^{nd}$  generation immigrants and natives using the *Mahalanobis Metric Matching* method, using all observed covariates to compute the distance between individuals (Zhao, 2004; Docquier et al., 2020; Turati, 2020). Columns (4) to (6) of Table A-2 reports descriptive statistics for the matched sample. The results clearly show that distribution of covariates is more balanced, although significantly trimming the sample. Natives and  $2^{nd}$  generation immigrants are more alike in the matched sample and differences in terms of average covariates are substantially reduced, excluding for father's education and respondent's secondary education. In the empirical section we perform our analysis also over the matched sample, to increase the robustness of our estimates once we minimize concerns related to covariates disparities.

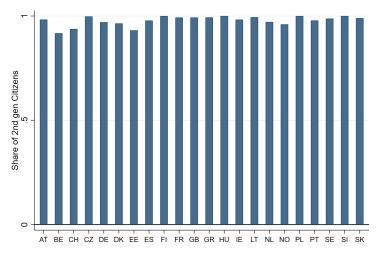


Figure A-2: Share of 2nd-Gen immigrants Citizens

Notes: authors' elaboration using ESS data. The histograms represent the share of 2nd generation migrants that are citizens of the country of residence

Below we present some figures and descriptive statistics for our sample of  $2^{nd}$  generation immigrants. In some cases, we find it useful to present figures for first generation immigrants (i.e. living in the country of residence but born abroad) too, as a relevant comparison group. Nonetheless, an important relevant factors for our research is that the majority of our sample of  $2^{nd}$  generation immigrants hold citizenship status (i.e., right to vote). Figure A-2 shows the country-specific share of  $2^{nd}$  generation migrants with citizenship, which is always close to one.

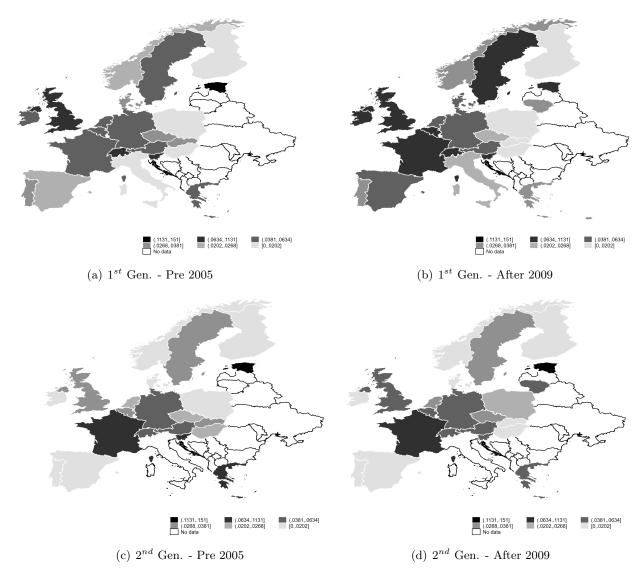


Figure A-3: Immigration Distribution - Country Level

Note: authors' calculation on ESS data. The figure plots the average share of first and second-generation immigrants over the total population before 2005 (a, c) included, and after 2009 (b, d) included. The legend is determined by the quartile distribution of  $2^{nd}$  generation immigrants in the period before 2005.

Figure A-3 shows the distribution of the average share of first and  $2^{nd}$  generation immigrants over the native population across our sample of European Countries over the pre 2005 period and the post 2009 period, revealing two main evidence. First, the size of the  $2^{nd}$  generation immigrants population (relative the native population) is highly correlated geographically with the relative size of the first generation (correlation coefficient equal to 0.74), although the population of  $2^{nd}$  generation immigrants is on average smaller than the population of the first generation population (relatively to natives). Estonia is the country with the highest intensity of  $2^{nd}$  generation immigrants, around 12% of the native population, due to the

high number of Russian-born fathers. Countries characterized by a strong colonial background, like France, United Kingdom or Belgium, are also characterized by a sizeable groups of  $2^{nd}$  generation immigrants, equal to 7%- 5% of the native population. Among Southern European countries, only Greece host a relevant group of  $2^{nd}$  generation immigrants (5% of the native population, mainly from not European origins) while countries like Portugal and Spain present a small incidence of  $2^{nd}$  generation immigrants (around 0.02%), compared to first generation immigrants (around 3%). Second, by comparing the pre 2005 period in Figures A-3(a) and A-3(c) with the post 2009 period in Figures A-3(b) and A-3(d), on average the country-specific intensities of first and second generation immigrants increase over time.

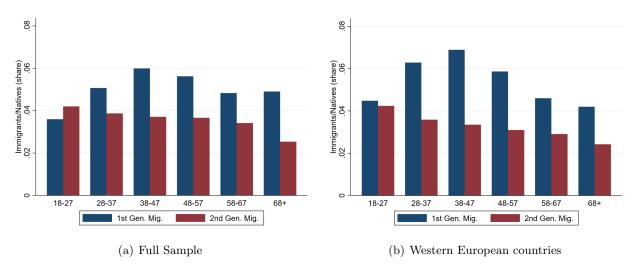


Figure A-4: Immigrants by Age Groups

Note: authors' calculation on ESS data. The Figure reports the share of first and second generation immigrants over natives by age groups. Figure (a) reports the results for our overall sample, while Figure (b) reports the results for the Western European Countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Norway, Portugal, Spain, Sweden, Switzerland, The Netherlands and United Kingdom)

Hence, compared to natives, both immigrant groups are increasing in size over the years. The underlying dynamics are different though for first and second generations. Figure A-4(a) shows the share of the two immigrant groups over natives by age groups. The incidence of  $2^{nd}$  generation immigrants has a linear and declining trend over the age groups, suggesting that the overall size of  $2^{nd}$  generation immigrant population is increasing after each generational change. Compared to  $2^{nd}$  generation immigrants, the incidence of first generation immigrants is higher in almost all age groups (in line with Figure A-3), it reaches its highest value among the 38-47 age group (6%) and it has an hump-shaped distribution over the age groups. The only notable exception is among the youngest cohort (18-27 y.o.) where the  $2^{nd}$  generation

immigrants have a higher incidence compared to first generation immigrants. This suggestive evidence is confirmed once focusing on Western European countries in Figure A-4(b), characterized by a longer and different immigration history compared to Central Eastern countries (Van Mol and Valk, 2016).

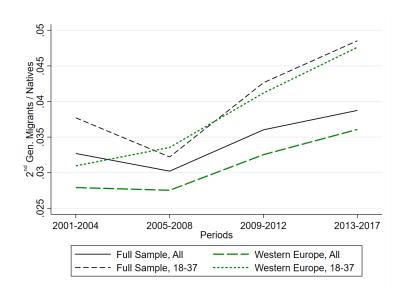


Figure A-5: Share of  $2^{nd}$  migrants over different populations

Note: authors' calculation on ESS data. The figure shows the share of  $2^{nd}$  generation immigrants over the natives population between 18 and 37 years old and across all age groups. The figure reports the average over four periods, and over the full sample and Western European countries only.

Figure A-5 confirms the previous highlighted suggestive evidence, by plotting the average ratios between  $2^{nd}$  generation immigrants and natives over different sub-periods. Over our period of analysis the incidence of  $2^{nd}$  generation immigrants is increasing over time, and the growth is stronger among young cohorts (18-37 years old) compared to the overall  $2^{nd}$  generation immigrants population. Moreover, the trend is stronger and more persistent among Western European countries than among Central Eastern European countries. These were characterized by a change in the distribution of young  $2^{nd}$  generation immigrants in the 2005-2008 period, potentially caused by high emigration towards European Union countries after the access to the Schengen Area with the 2004 EU Enlargement.

Figure A-6 plots the broad area-specific average share of first and  $2^{nd}$  generation immigrants over the total respective populations. We define the broad areas of origin by aggregating countries of origin using the same methodology adopted by EULFS statistics. Both distributions show that Europeans origins are the most represented ones, both for first and  $2^{nd}$  generation immigrants: around 60% of immigrant population has European origins. Russian origin is the most represented group, which counts for the

14% of the  $2^{nd}$  generation immigrants population in our sample, followed by German and Italian origins. Among not European countries, Turkish origin accounts for 6% of the  $2^{nd}$  generation immigrants origin.

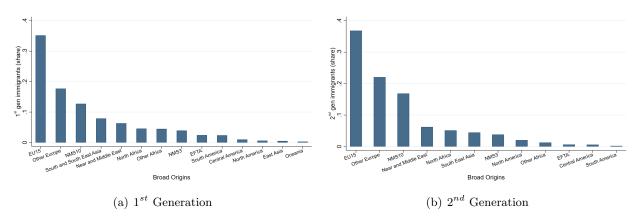


Figure A-6: Distribution by broad origins

Note: authors' calculation on ESS data. The figure plots the broad origin-specific share of first-generation (a) and second-generation (b) immigrants over their total population, respectively.

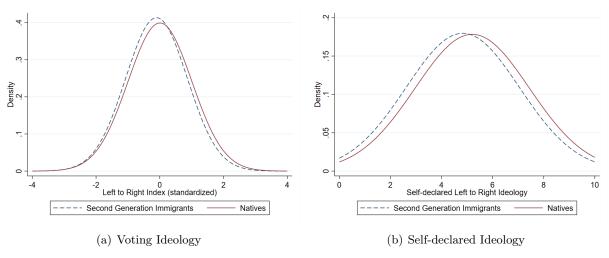


Figure A-7: Left to Right Preferences: voting and self-declared ideology

Note: authors' calculation on ESS data. The figure plots the normal density curves of natives and second generation immigrants concerning the standardized left to right index (a) and self-declared left-to-right wing political stance (b).

Finally, Figure A-7 explores the raw differences in political preferences between natives and  $2^{nd}$  generation immigrants by plotting the normal density distribution of: (a) the standardized left-right index derived from respondent's voting preferences, and (b) the respondent self-placement over the left-to-right index. Both figures suggest that  $2^{nd}$  generation immigrants are more likely to locate themselves on the left-wing political spectrum compared to natives.

## B Additional Results: Robustness Checks

In the section we firstly conduct a robustness analysis and produce results with alternative samples, specifications, and methodologies over the more strict sample of Eu21 countries (origin and destination). Table B-1 shows results consistent to our benchmark results (presented in column 1) after: (i) focusing on the subsample of Western European destination countries; (ii) focusing on the balanced sample of individuals after the trimming due to the covariates matching technique; (iii) including NUTS2 regional fixed effects; (iv) including NUTS2 regional fixed effects and controls; and (v) estimating the degree of selection on unobservables using Oster (2019) approach, and clustering the standard errors at the destination and origin countries.

Table B-1: Migrant to native difference - EU21 Sample Robustness Checks

	Benchmark	Alternative	Samples	Regional Level		Oster Test	
	(1) Party Voted Ideology	(2) Western EU Sample	(3) Matched Sample	(4) With FE	(5) With FE and Controls	(6) Cluster Destination	(7) Cluster Origin
2nd-gen Immigrants	-0.083*** (0.020)	-0.073** (0.028)	-0.085*** (0.025)	-0.066** (0.028)	-0.059* (0.031)	-0.083*** (0.020)	-0.083*** (0.023)
Delta						-44.948	-44.948
R2	0.206	0.188	0.186	0.238	0.238	0.206	0.206
Observations	126373	98156	5470	126372	104290	126373	126373
Individual Controls	✓	$\checkmark$	✓	$\checkmark$	$\checkmark$	✓	✓
Destination#Year F.E.	✓	✓	$\checkmark$	✓	✓	✓	$\checkmark$
Origin F.E.	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$

Notes: 2nd-gen immigrants (by father) are respondents who are born in the destination country but whose father is not born in the destination country. All specifications include controls for age, logarithm of income, dummy for female, two dummies for education, a dummy for marital status, dummy for children, dummy for urban resident, dummy for praying everyday, dummy for employment status, dummy for father's employment status and two dummies for father's occupational skill. Column (1) shows our benchmark specification. Column (2) provides results over the Western European countries. Column (3) uses the same definition as column (1), but only includes respondents in the matched sample which is balanced on observable individual and parental characteristics. Column (4) includes NUTS-2 regional FE and country-by-election FE. Column (5) includes additional NUTS-2 controls - fertility rate, unemployment rate and GDP per-capita. Columns (6) and (7) use different clustering (destination and origin, respectively) and provides the results from Oster (2019) test. Robust standard errors clustered at the region and country level. Significance levels: \*: 10% \*\*: 5% \*\*\*:

Table B-2 provides additional consistent results after performing the following robustness checks: (i) removing Estonia and Portugal from the sample, countries with the highest and lowest share of second generation migrants, (ii) removing countries not belonging to the European Union, (iii) dropping the first and last electoral event per country, and (iv) removing second generation immigrants with German origins, since they are the most representative in our restricted sample.

Table B-3 considers an alternative definition of of second generation migrant based on the country of origin of the mother (rather than the father). The negative coefficient is preserved, but its size drops

Table B-2: Migrant to native difference - EU21 Robustness Checks - Subsample Analysis

	(1) No Estonia	(2) No Portugal	(3) No Norway and Switzerland	$(4)$ No $1^{st}$ Election	(5) No Last Election	(6) No German 2nd Gen
2nd-gen Immigrants (by father)	-0.084*** (0.020)	-0.083*** (0.020)	-0.071*** (0.018)	-0.071*** (0.017)	-0.058** (0.021)	-0.143*** (0.034)
R2 Observations Individual Controls Destination#Year F.E. Origin F.E.	0.206 121728 ✓ ✓	0.207 123065 ✓ ✓	0.210 114087 ✓	0.198 103102 ✓ ✓	0.207 99383 ✓ ✓	0.206 125977 ✓ ✓

Notes: 2nd-gen immigrants (by father) are respondents who are born in the destination country but whose father is not born in the destination country. All specifications include controls for age, logarithm of income, dummy for female, two dummies for education, a dummy for marital status, dummy for children, dummy for urban resident, dummy for praying everyday, dummy for employment status, dummy for father's employment status and two dummies for father's occupational skill. Columns (1) and (2) exclude Estonia and Portugal, respectively, which are the countries with the highest and lowest share of 2nd generation immigrants. Column (3) excludes Norway and Switzerland, which are not part of the European Union. Column (4) excludes from the sample the first election of each country, while column (5) excludes the last election. Column (6) excludes from the sample of 2nd generation migrants the ones with Russian origin, which is the most represented in our sample. Column (7) shows the results after removing 2nd generation migrants with German origin, which is the most represented origin among the European ones. Robust standard errors clustered at the country level. Significance levels: \*: 10% \*\*: 5% \*\*\*: 1%

by half, implying that mother's migration status is a less important channel of migrant-to-native voting differences in the residence country. These results are confirmed once exploring the role of played by parent's absence in the respondent's adolescence: father's absence is associated with a milder left-wing stance compared to mother's absence.

Table B-3: Migrant to native difference - EU21 sample Parents death & both immigrant parents

	(1)	(2)	(3) Father's Death	(4) Mother's Death
	Mother's Definition	Migrants' Parents	or Absence	or Absence
2nd-gen (Mother)	-0.038	-0.038		-0.034
- , ,	(0.027)	(0.039)		(0.026)
2nd-gen (Father)		-0.092***	-0.079**	
		(0.023)	(0.029)	
2nd-gen (Father) x 2nd-gen (Mother)		0.080		
		(0.125)		
Father Death			0.031*	
			(0.015)	
2nd-gen (Father) x Father Death			0.039	
			(0.147)	
Mother Death				-0.025
				(0.025)
2nd-gen (Mother) x Mother Death				0.400**
				(0.168)
R2	0.206	0.206	0.207	0.207
Observations	125107	125107	123288	124193
Individual Controls	$\checkmark$	$\checkmark$	$\checkmark$	✓
Destination#Year F.E.	$\checkmark$	$\checkmark$	$\checkmark$	✓
Origin F.E.	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$

Notes: All specifications include controls for age, logarithm of income, dummy for female, two dummies for education, a dummy for marital status, dummy for children, dummy for urban resident, dummy for praying everyday, dummy for employment status, dummy for father's employment status and two dummies for father's occupational skill. They also include destination country-by-election and origin FE. Robust standard errors clustered at the country destination level. Significance levels: \*: 10% \*\*: 5% \*\*\*: 1%

## C Simulations

To quantify the actual and potential contribution of  $2^{nd}$  generation immigrants to determining voting patterns of European countries, we perform a simulation exercise, based on observed and expected shares of  $2^{nd}$  generation immigrants over the total population of each country. We start by considering an initial time 0, where the degree of leftism of country c is a weighted average of the observed leftism of natives and incumbent  $2^{nd}$  generation immigrants:

$$\widehat{Leftism}_{c,0} = (1 - Share_{c,0}^{2nd}) Leftism_{N,0} + (Share_{c,0}^{2nd}) Leftism_{M,0}. \tag{C-1}$$

Equation (C-1) can be simplified as follows:

$$\widehat{Leftism}_{c,0} = Leftism_{c,N,0} + Share_{c,0}^{2nd} \times (Leftism_{c,M,0} - Leftism_{c,N,0}), \tag{C-2}$$

where the term in brackets is the average migrant-to-native difference predicted from equation (1), so that:

$$\widehat{Leftism}_{c,0} = Leftism_{c,N,0} + Share_{c,0}^{2nd} \times \widehat{\beta}.$$
 (C-3)

 $Leftism_{c,0}$  is the predicted average leftist content of voting of the population of country c, at hypothetical national elections taking place at time 0. Equation (C-3) shows this is equal to the leftism of the native population, N, of country c at time 0, plus the contribution of incumbent  $2^{nd}$  generation immigrants, M in the country, weighted by the corresponding share at time 0.

To properly evaluate the relative contribution of  $2^{nd}$  generation immigrants to the actual political outcomes of country c's national elections, we propose a normalization of the indicator  $\widehat{Leftism}_{c,0}$ , based on the absolute value of the leftism of natives  $\|Leftism_{c,N,0}\|$ . This is a measure of increasing radicalization of political preferences of the native electorate (either to the right or to the left) in the country of destination. We divide both sides of equation (C-3) by  $\|Leftism_{c,N,0}\|$ , and obtain a predicted leftism measure normalized by natives' political preferences in country c at time 0, i.e.  $\widehat{Leftism}_{c,0}^{Pol} = \frac{\widehat{Leftism}_{c,0}}{\|Leftism_{c,N,0}\|}$  such that:

$$\widehat{Leftism}_{c,0}^{Pol} = \frac{Leftism_{c,N,0}}{\|Leftism_{c,N,0}\|} + \frac{(Share_{c,0}^{2nd} \times \beta)}{\|Leftism_{c,N,0}\|}.$$
 (C-4)

The first term in equation (C-4) is equal to -1 or +1 depending on whether natives of country c are on average left-leaning or right-leaning, respectively. The second term,  $\frac{(Share_{c,0}^{2nd} \times \beta)}{\|Leftism_{c,N,0}\|}$ , measures the normalized contribution of  $2^{nd}$  generation migrants. In practice, it tells us by how much immigrants reduce the right-wing stance (or increase the leftist stance) of the electorate in country c at time 0.23

While equation (C-4) points out the predicted contributions of incumbent migrants at time 0, we can use the same approach to compute some counterfactual scenarios. For example, we can imagine hypothetical scenarios where  $Share_{c,EXP}^{2nd} = \{10\%, 30\%, \}$ . These are consistent with plausible shares of  $2^{nd}$  generation immigrant population for the US by 2050 according to Pew Research Center (2013):

$$\widehat{Leftism}_{c,EXP}^{Pol} = \frac{Leftism_{c,N,0}}{\|Leftism_{c,N,0}\|} + \frac{(Share_{c,EXP}^{2nd} \times \beta)}{\|Leftism_{c,N,0}\|}$$
(C-5)

Table C-1 reports results from the simulation exercises. We feature as average native preferences and share of immigrants at a hypothetical time 0, the corresponding country-specific averages over the electoral span covered by our ESS sample (e.g.  $Leftism_{FR,N,0}$  and  $Share_{FR,0}^{2nd}$  are country-specific average preferences and immigrant shares for France over electoral years 2002-2017). Columns (1) and (2) reports the average native leftism and share of  $2^{nd}$  generation migrants at time 0, respectively. The share is below 1% in Southern European countries (Greece being a relevant exception), while it is in the range between 3%-7% for continental European countries (e.g. Germany, France, Austria, Switzerland). Countries from Central Eastern Europe (with the relevant exception of Estonia) present shares comprised between 2% and 5% of the national sample. Generally speaking, these percentages of migrant population do not produce significant departures of the average voter from the voting preferences of the native population (col. 3). The generalized increase in leftist stance is equivalent to up the 3% of native voting stance. Two notable exceptions are Belgium and Estonia. The former country presents a very moderate native population, so that the 5% share of  $2^{nd}$  generation migrants is enough to shift the preferences of the average Belgian voter by the 49% of the native voting stance. The latter country presents a relatively large share of  $2^{nd}$  generation immigrants (11% of the national sample), able to reduce the right-wing stance of the Estonian

Recalling that  $\beta = -0.083$ , when native voters are right-wing on average,  $\frac{(Share^{2nd}_{c,0} \times \beta)}{\|Leftism_{c,N,0}\|} = (\widehat{Leftism}^{Pol}_{c,0} - 1)$ , incumbent immigrants reduce the right-wing stance of the electorate in country c at time 0. When the native electorate is left-wing on average,  $\frac{(Share^{2nd}_{c,0} \times \beta)}{\|Leftism_{c,N,0}\|} = (\widehat{Leftism}^{Pol}_{c,0} + 1)$ , migrants further polarize the national electorate, moving preferences of the average voter of country c at time 0 towards more extreme left-wing positions.

average voter by the 4%.

Table C-1: Simulation: country-specific normalization

	$Leftism_{N,0}$	Leftis	$\widehat{Leftism}_{c,0}^{Pol}$		$n_{c,EXP}^{Pol}$
	(1)	(2)	(3)	(4)	(5)
		$ Sh_{c,0}^{2nd} $ [Avg]		$Sh^{2nd}$ [10%]	$Sh^{2nd}$ [30%]
Norway	-0,736	0,011	-1,00	-1,01	-1,03
Spain	-0,562	0,002	-1,00	-1,01	-1,04
France	-0,537	0,069	-1,01	-1,02	-1,05
Finland	-0,425	0,005	-1,00	-1,02	-1,06
Ireland	-0,380	0,018	-1,00	-1,02	-1,07
Austria	-0,354	0,042	-1,01	-1,02	-1,07
Sweden	-0,162	0,034	-1,02	-1,05	-1,15
Czech Republic	-0,134	0,030	-1,02	-1,06	-1,19
Belgium	-0,009	0,050	-1,49	-1,98	-3,93
Portugal	0,021	0,003	0,99	0,61	-0.17
Slovenia	0,136	0,056	0,97	0,94	0,82
Lithuania	0,165	0,039	0,98	0,95	0,85
United Kingdom	0,209	0,044	0,98	0,96	0,88
Germany	0,233	0,044	0,98	0,96	0,89
Estonia	0,245	0,111	0,96	0,97	0,90
Denmark	0,249	0,013	1,00	0,97	0,90
Hungary	0,455	0,018	1,00	0,98	0,95
Poland	0,525	0,020	1,00	0,98	0,95
Switzerland	0,577	0,048	0,99	0,99	0,96
Netherlands	0,598	0,030	1,00	0,99	0,96
Slovakia	1,122	0,021	1,00	0,99	0,98

Notes: authors calculations. Column (3) reports the results of equation (C-4), while columns (4) and (5) show the results of equation (C-5) with respectively the following shares of second generation immigrants: 0.10 and 0.30.

Columns (4)-(5) simulate hypothetical shifts of the preferences of the average voter in each country, under the scenarios described above. Two facts seem to emerge very clearly. First, migration has a very limited impact on the average voter of most Western European countries, whose natives exhibit political preferences clearly located on one of the two sides of the left-to-right political spectrum. For instance, Switzerland, Netherlands, or Poland have very right-wing native voters, while Spain, Finland, and France are characterized by very left-leaning voters. In these countries, even the scenario where half of the population is composed of  $2^{nd}$  generation immigrants implies a shift of the preferences of the average voter by no more than 10%. Second, in some Southern and Central European countries such as Slovenia, Lithuania, Czech Republic, Greece, the long term effects of migration on the average voter may be sizeable: in these countries the high migration incidence scenario is associated with a left-wing shift of the preferences of the average voter by over 15%. In a country like Portugal, where the native population has very moderate political preferences, the leftism of the average voter increases by 117% as  $2^{nd}$  generation migrants touch the 30% of the total population.