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**Immigration and Extreme Voting: Evidence from France<sup>1</sup>**

**PREVIOUS RESEARCH**

Previous research has already linked immigration and extremist voting, as well as studied the mechanisms behind opposition towards immigration. Otto and Steinhardt (2014) find that larger immigrant shares increased support for the far-right in Hamburg, using data on city districts with fixed-effects. Halla et al. (2017) study the case of Austria and show that increasing immigrant shares lead to higher vote shares for the far-right party. Card et al. (2012) use European Social Survey (ESS) data to study the relative importance of labour market and cultural concerns in driving opposition to immigration. They conclude that compositional amenities related to the utility that natives derive from their neighbourhoods, schools and workplaces are an important reason for negative attitudes towards immigration.

When it comes to the psychological determinants of anti-immigration attitudes, Poutvaara and Steinhardt (2015) show that bitter people who feel that they have not gotten what they deserve in life worry more about immigration. Their analysis uses German Socio-Economic Panel (SOEP) data and holds both in cross sections and a panel approach, when changes in bitterness are used to explain changes in worries about immigration. The link between bitterness and worries about immigration holds among different skill categories, men and women, those living in former West and former East Germany, and young and old. Furthermore, the link cannot be explained away by labour market competition, as it holds among civil servants who have permanent contracts and are not affected by labour market competition as a result.

Nikolka and Poutvaara (2016) analysed voting in the Brexit referendum in 326 local authority districts in England. They show that the share of the electorate with some tertiary education alone can explain 80% of variation in the Leave vote share across local authority

districts. Adding the share of electorate aged 45 and over boosts this figure to 85.7%. Adding population shares of EU15, EU accession and non-EU immigrants as additional explanatory variables does not change much, as the share accounted for is then 86%. To a large extent, this can be expected to reflect endogenous migration responses. Migrants are more likely to migrate to areas that are doing well economically, and where people are more likely to support European Union membership, and have positive attitudes towards immigration and globalisation more generally. In the present paper, we account for this potential identification issue – i.e. the fact that migrants may prefer to settle in areas where the propensity to support far-right parties is low.

Hainmueller and Hangartner (2013) studied discrimination against immigrants in Switzerland, where some municipalities used to decide on naturalisation of immigrants by referenda on individual applicants. They find that the country of origin is a more important determinant of being naturalised than any other applicant characteristic, including language skills, education, and socioeconomic status. The applicants from ex-Yugoslavia and Turkey are rejected considerably more often than applicants with similar age, education and labour market status from northern and western Europe.

**DATA**

We investigate the determinants of voting outcomes for the first round of the presidential elections that occurred in 1988, 1995, 2002, 2007, 2012 and 2017. The data on voting outcomes are available for around 36,000 French municipalities. They record the aggregated number of registered voters, abstentions, cast votes, valid and invalid votes and the votes for each presidential candidate in each municipality. Registered voters refer to all people who are eligible to cast a vote at the ballot box. Registered voters are split into abstentions (people who refrain from voting) and cast votes (people who fill out a ballot paper at the ballot box). Cast votes are split into invalid votes (blank and erroneous votes on the ballot paper) and valid votes (votes that can

be ascribed to a presidential candidate). If votes for all different presidential candidates are aggregated, they yield the number of valid votes.

Since we are interested in the determinants of votes for far-left and far-right candidates, we identify presidential candidates that were classified as either far-left or far-right by the media in recent presidential elections. Jean Marie Le Pen, Marine Le Pen, Nicolas Dupont-Aignan, Philippe de Villiers and Bruno Mégret are included in the set of far-right presidential candidates. The set of far-left candidates consists of Jean-Luc Mélenchon, Nathalie Arthaud, Olivier Besancenot, Philippe Poutou, Marie-George Buffet, Robert Georges August Hue, Pierre Juquin, André Francois Lajoinie, Pierre Boussel, George Marchais and Arlette Laguiller. Finally, we aggregate the number of votes for all far-right (far-left) presidential candidates to obtain an aggregated number of votes for far-right (far-left) parties in a presidential election. In order to calculate vote shares, we divide the aggregated votes by the total number of votes cast (invalid and valid votes).

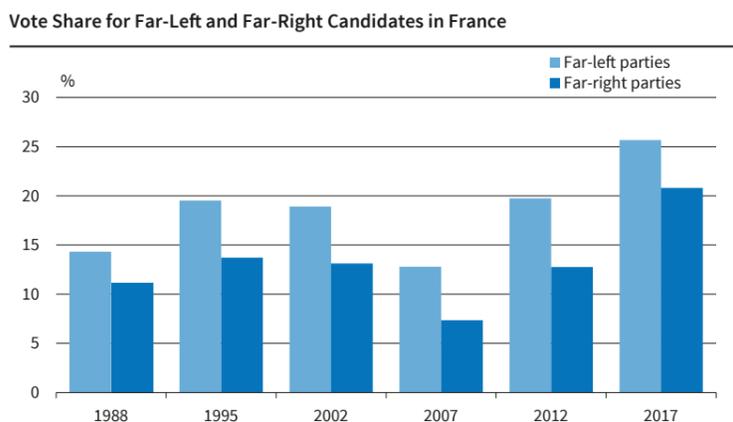
**INTRODUCTION**

In recent decades, immigration has become one of the most divisive issues in many Western countries. Opposing immigration has been a central pillar of the platforms of extremist parties in many Western countries, in the Leave campaign against British membership in the European Union, and in Donald Trump's electoral campaign. Opposition to immigration and globalisation were also central in Marine Le Pen's campaign in the French presidential election in 2017. The Front National's Marine Le Pen made it to the second round and won 34% of votes. This was almost twice the 18% vote share that her father Jean-Marie Le Pen won in 2002, the only previous presidential election in which Front National made it to the second round. The Front National's platform is anti-EU, anti-immigration and anti-globalisation.

In this article, we summarise our ongoing research with Yvonne Giesing on extreme voting in France. Given the central role that France plays in the European Union, together with Germany, understanding French politics is important in its own right. Furthermore, French politics is an ideal setting to test the role of immigration and economic concerns in the rise of far-left and far-right voting more generally. The Front National has run, and won more than 10% of votes in all French presidential elections since 1988. Far-left candidates have also won over 10% of votes in all presidential elections since 1988, apart from in 2007. Ours is the first paper that separately analyses the effects of immigration on voting in terms of political support for the far-left and far-right. Importantly, our analysis controls for various economic and demographic factors that could also explain extreme voting, and accounts for the fact that immigrants may prefer to reside in areas where the propensity to vote for extreme parties differs from other places.

<sup>1</sup> This article is based on the research paper "Immigration and Electoral Support for the Far Left and the Far Right" by A. Edo, Y. Giesing, J. Öztunc and P. Poutvaara, presented in the OECD-CEPII conference "Immigration in OECD Countries" in Paris in December 2017, and available as ifo Working Paper No. 244, 2017.

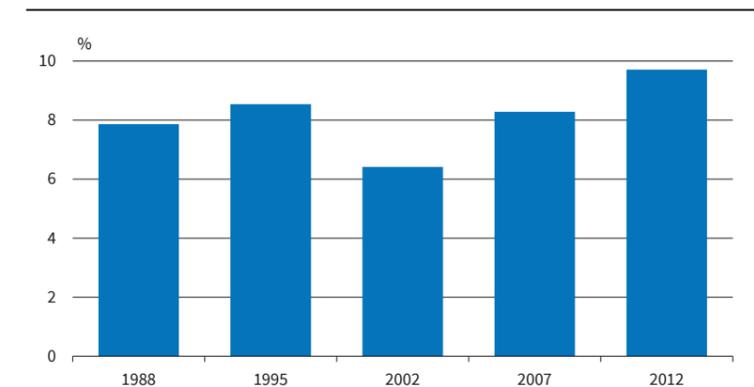
Figure 1



Source: Presidential election data (2017) made available by the French government. Data on vote shares for the year 1988 comes from the centre de données socio-politiques. © ifo Institute

Figure 2

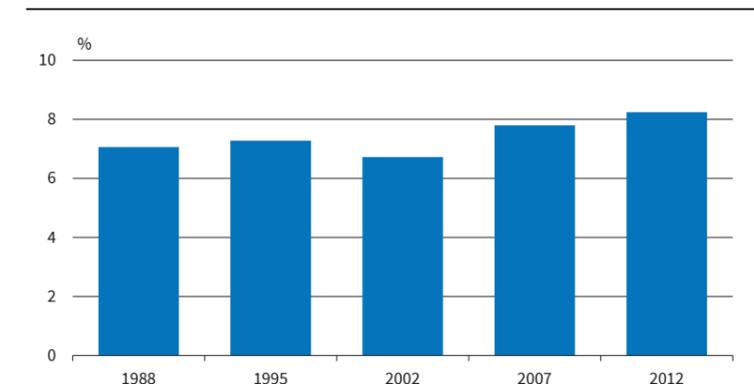
Development of Unemployment Rate over Time



Source: French census data; French National Institute for Statistics and Economic Studies (INSEE). © ifo Institute

Figure 3

Development of the Immigration Share over Time



Source: French census data; French National Institute for Statistics and Economic Studies (INSEE). © ifo Institute



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In order to show that our results are not sensitive to the geographical unit of analysis used in the empirical section, we aggregate the data on votes at three different regional levels: the canton, department and region level. While there are around 2,000 cantons, there are 96 departments and 22 regions. Using larger geographical areas allows us to show that our results are not contaminated by the fact that French citizens may respond to the arrival of immigrants in a given area by moving away.

We use the French censuses from 1990, 2007 and 2012 to infer the number of immigrants for the presidential elections of 1988, 2007 and 2012. No census was implemented for the years 1995 and 2002. Instead, we use the pooled 1994-1995 labour force survey (LFS) and 2001-2002 LFS to ensure a high level of precision in estimating our variables for these two election years. For the year 2017, we use the most recent wave of available data, which is the 2015 LFS to infer the number of immigrants for each French region. We define an immigrant as a person born abroad without the French citizenship. This definition allows us to exclude the migrants with French nationality who can vote and avoid any composition effect due to their inclusion in the sample.

We can therefore investigate the impact of immigration on far-right and far-left voting at the canton level between 2002 and 2012, at the department level between 1988 and 2012 and at the regional level between 1988 and 2017.

**DESCRIPTIVE STATISTICS ON FAR-RIGHT AND FAR-LEFT VOTING**

Figure 1 shows how the first-round vote share of far-right and far-left candidates has changed between 1988 and 2017. Both vote shares have increased dramatically since 2007, following the financial crisis, the Eurozone crisis and, most recently, the refugee crisis. Figures 2 and 3 show how unemployment and the population share of immigrants have changed between 1988 and 2012 (2017 data is not yet available). Both unemployment and the population share of immigrants have increased steadily since 2002.

Figure 4 displays the regional distribution of the first-round vote share for far-right and far-left candidates in 1988. Far-right candidates were initially very strong in the southeast of France, while far-left candidates were popular in the north, centre and south of France.

Figure 5 respectively displays the corresponding change in the vote share from 1988 until 2012 for far-right and far-left parties across departments. In contrast to the initial vote share, the increase in the vote share for far-right candidates was concentrated in north eastern departments, departments in the center and to some extent in the southwest of France, as well as Corsica. In these departments, the vote share for far-right candidates increased by between 7 and 16 percentage points. The right-hand side of Figure 5 presents the change in the vote share from 1988 until 2012 for

far-left candidates. The increase in the vote share for these candidates was particularly concentrated in the north western and eastern French region (ranging between about three and five percentage points).

**EMPIRICAL METHOD: SPATIAL CORRELATION APPROACH**

Our empirical strategy exploits the fact that immigrants tend to cluster in a limited number of geographical areas. We use the spatial distribution of immigrants in order to estimate their impact on far-right and far-left voting. The idea of this spatial correlation approach is to compare the changes in votes for far-right and far-left voting of high-immigration places with those of low-immigration places.

This approach is subject to the main limitation that immigrants are not randomly distributed across areas. They may prefer to settle in areas experiencing positive economic shocks and where the share of far-right voters is relatively low. This behaviour among migrants will create a spurious negative correlation between immigration and far-right voting, contaminating the measured effects of immigration on political outcomes. In order to limit this potential bias, we estimate the impact of changes in local immigrant shares on changes in vote shares. This estimation in first differences accounts for all time-invariant differences between areas that may affect immigrant inflows and votes. We also introduce a large set of control variables to account

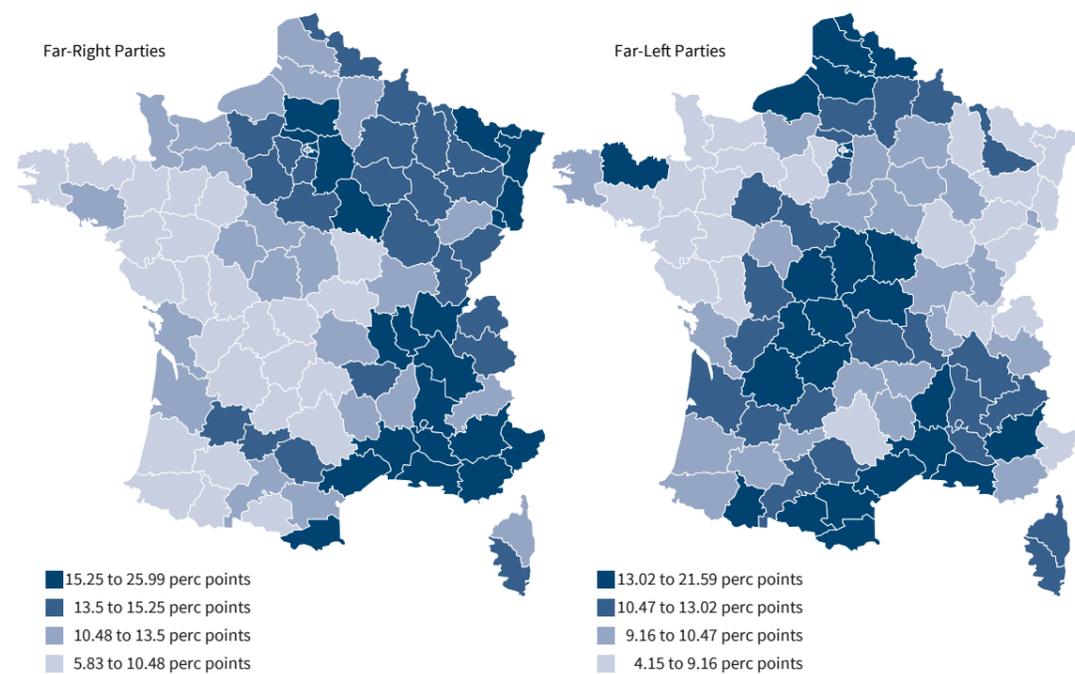
for omitted variables that could affect immigration and political outcomes within an area. In particular, we include the share of unemployment in the population and control for the age, education and employment structure of each area.

However, it is still possible that immigrants settle in places with a small share of votes for anti-immigration parties. In order to tackle this endogeneity issue, we use an instrumental variable (IV) strategy. The idea is to use variations in immigration that are due to another variable whose changes are plausibly exogenous (unrelated) to the outcome. In this respect, literature on the subject generally uses past migrant networks (past settlements) as predictors for future migration flows. In our study, we use the historical distribution of immigrants across French departments from the 1968 French census as a predictor for their subsequent flows. Our instrument is based on the idea that the stock of previous immigrants has an impact on subsequent flows through network effects, while assuming that past immigrant concentrations are uncorrelated with current unobserved economic shocks (for details, see Edo et al. (2017)).

The use of the 1968 census allows us to predict subsequent inflows based on immigration patterns that took place at least 20 years earlier. Moreover, the *Front National*, which is the first post-1945 extreme right party, was created in 1972 and participated in the presidential election for the first time in 1988. As a result, the spatial distribution of immigrants in 1968 was not

Figure 4

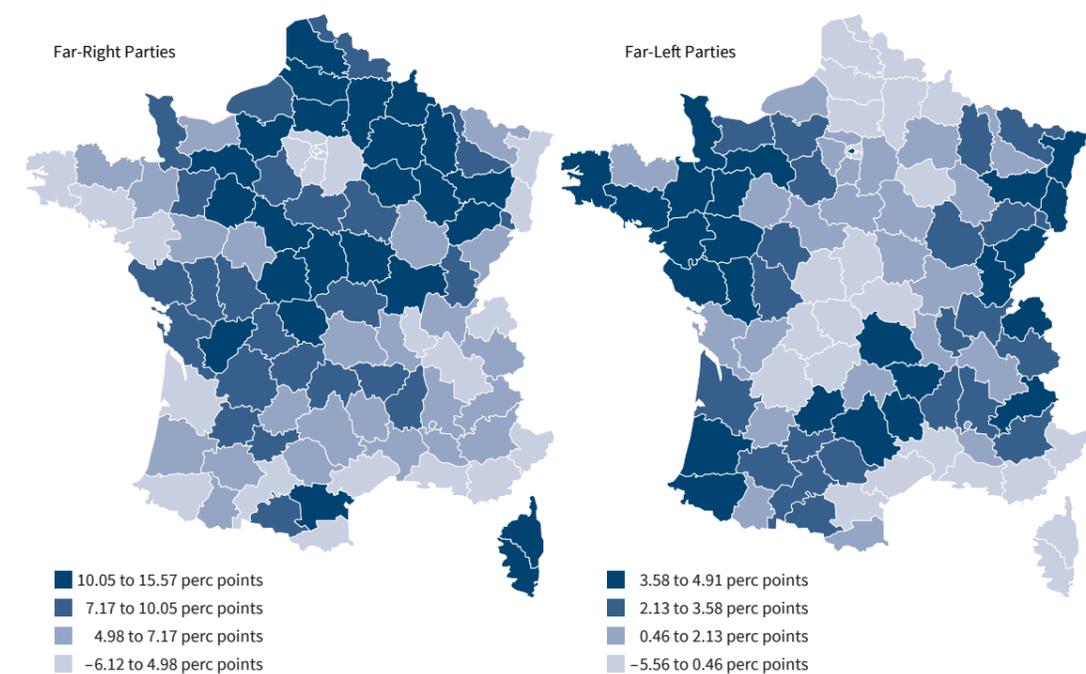
Initial Vote Share for Far-Right and Far-Left Parties in France in 1988



Notes: The heatmaps are made available from [https://www.data.gouv.fr/fr/datasets/contours-des-departements-francais-issus-d-openstreetmap/#\\_](https://www.data.gouv.fr/fr/datasets/contours-des-departements-francais-issus-d-openstreetmap/#_) and come from the contributors of OpenStreetMap. We use the 2017 version. The data is available under the Open Database License and the cartography is licensed as CC BY-SA. The copyright of the maps lies with OpenStreetMap (<http://www.openstreetmap.org/copyright/en>).  
Source: Authors' illustration using data from the Open Platform of French Public Data (2017). © Contributors of OpenStreetMap under ODbL licence © ifo Institute

Figure 5

Increase in Vote Share for Far-Right and Far-Left Parties in France in 1988



Notes: The heatmaps are made available from [https://www.data.gouv.fr/fr/datasets/contours-des-departements-francais-issus-d-openstreetmap/#\\_](https://www.data.gouv.fr/fr/datasets/contours-des-departements-francais-issus-d-openstreetmap/#_) and come from the contributors of OpenStreetMap. We use the 2017 version. The data is available under the Open Database License and the cartography is licensed as CC BY-SA. The copyright of the maps lies with OpenStreetMap (<http://www.openstreetmap.org/copyright/en>).  
Source: Authors' illustration using data from the Open Platform of French Public Data (2017). © Contributors of OpenStreetMap under ODbL licence © ifo Institute

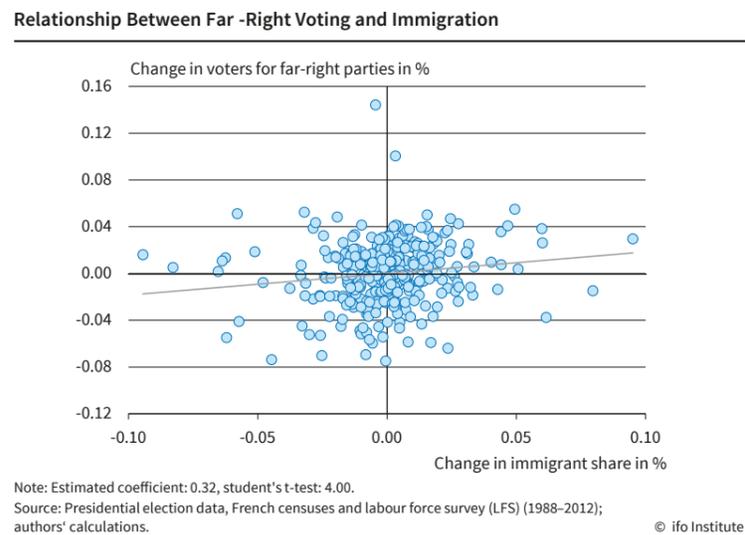
caused by extreme right voting and is very likely to be unrelated to the share of votes for far-right parties in subsequent years.

**THE AVERAGE IMPACT OF IMMIGRATION ON VOTES FOR FAR-RIGHT AND FAR-LEFT PARTIES**

Figure 6 provides a preliminary look at the correlation between the change in the vote share for far-right parties within a given department and the change in the share of immigrants for that department.<sup>2</sup> The figure indicates a positive and significant relationship: the estimated coefficient (and T-statistic) is -0.32 (4.00). This preliminary result suggests that the votes for far-right parties grew fastest in the departments that experienced the highest increase in immigration. The econometric results reported in Table 1 shows the robustness of this correlation.

Table 1 reports the OLS and IV estimated effects of immigration on the change in votes for far-right and far-left parties across French areas. We use past immigrant settlement patterns as an instrument. In addition to using the 96 French departments as our baseline geographical unit of analysis, we also use cantons (1,989) and regions (22) as alternative units. Cantons are smaller than departments, while regions are larger. The regressions at the Canton level are performed over the 2002-2012 period. We extend this period of analysis to

Figure 6



the 1988 and 1995 presidential elections when using the department as an alternative unit of analysis. Regressions across French regions even allow us to account for the first-round results during the 2017 presidential election.

The results from Table 1 indicate that immigration has a positive impact on votes for far-right parties and a modest negative impact on those for far-left parties. The fact that the OLS estimates are weaker than the IV estimates is consistent with the fact that immigrants are more likely to migrate to regions where the vote share for far-right parties is low; or to regions with thriving economies that may be less inclined to support far-right parties. In particular, our IV estimates implies that a one percentage point increase in the immigrant share

increases the share of votes for far-right parties by 2.02 percentage point at the department level.

**THE IMPACT OF IMMIGRATION ON FAR-RIGHT VOTING ACROSS EDUCATION-NATIONALITY GROUPS**

In Edo et al. (2017) we go beyond the average impact of immigration on far-right voting by decomposing its effect across education-nationality groups. We break down the immigrant population into six education-nationality groups and use three education groups: low, medium and high education groups. The low education group is composed of people who have an elementary school diploma or no diploma, the medium education group is composed of people who have a high school degree and a French diploma giving access to high school, the high education group is composed of people who have a college degree, some college or a French diploma giving access to the university. For each education group, we compute the change in the share of non-European and European immigrants.

Our break-down firstly shows that the average positive effect of immigration on extreme right voting is asymmetric across education groups. This effect is fully driven by the share of poorly educated immigrants. This result is consistent with the fact that low-skilled immigration may have detrimental labour market effects, as compared to highly-skilled immigration. Secondly, the positive impact of poorly educated immigrants on extreme right voting is only driven by those migrants who have a non-European nationality. By contrast, medium and high educated non-European immigration have insignificant or negative effects on support for far-right parties. Taken together, our results suggest that the educational composition of immigrants, as well as their origin, matter in determining their impact on votes for far-right parties.

**CONCLUSION**

We estimated the impact of immigration on voting for far-left and far-right parties in France, using panel data on presidential elections from 1988 to 2012 (and in some analyses until 2017). We found that immigration increases support for far-right candidates, in all analysed geographical units of observations. This result was especially strong when using instrumented immigration flows, but it was also present in ordinary least squared regressions. There is no robust pattern on far-left voting.

Our additional analyses suggest that an increase in the electoral support for the far-right is driven primarily by low-skilled immigrants from non-Western countries. Furthermore, our results indicate that both economic concerns (related to the educational level of migrants) and cultural concerns (related to migrants' region of origin, most saliently whether they come from Western or non-Western countries) play an important role.

Understanding the grievances of those voting for extreme parties is also important to those who do not agree with them. Ignoring these grievances puts gains from globalisation and migration at jeopardy at the ballot box. In the French context, it is notable that the total first-round vote share for far left and far right candidates increased from 34.3% in 2012 to 47.3% in 2017. If labour market reforms do not succeed in boosting economic growth and reducing unemployment, an extremist candidate is likely to win in the next French presidential election.

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<sup>2</sup> More specifically, the points in the scatter diagram are the residuals from a regression of the change in votes for far-right parties and the change in immigrant share on a set of year fixed effects. The year fixed effects remove any year-specific effects that are common to all geographical areas.

Table 1

**Impact of Immigration on Extreme Voting Across Alternative Geographical Units**

	Canton		Department		Region		Region	
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
Far-right	0.42*** (8.61)	2.55*** (3.39)	0.38*** (3.57)	2.02*** (3.46)	0.97** (2.52)	2.52** (2.26)	0.99** (2.63)	2.29** (2.17)
Far-left	0.02 (0.71)	-0.27 (-0.50)	-0.10*** (-2.82)	-0.16 (-0.81)	-0.38* (-1.90)	-0.64*** (-2.75)	-0.32 (-1.60)	-0.70*** (-2.88)
Time Period	2002-2012		1988-2012		1988-2012		1988-2017	
Observations	3,895		384		88		110	

Note: \*\*\*, \*\*, \* mean different from 0 at the 1%, 5%, 10% significance level. T-statistics are indicated in parentheses below the point estimate. Source: Presidential election data, French censuses and labour force survey (LFS) (1988-2012); authors' calculations.