

How Does Refugee Immigration Influence Redistribution Politics? Evidence from Finland*

Konstantinos Matakos[†] Riikka Savolainen[‡] Janne Tukiainen[§]

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Abstract

We study whether establishing new asylum seeker centres influences the redistribution related policy positions of candidates in local elections in Finland –a country where municipalities have significant control over fiscal policies. The sudden and unprecedentedly large inflow of the asylum seekers in autumn 2015 and the resulting establishment of asylum centres facilitates a difference-in-differences research design. We focus on the supply side of politics and find that on average candidates do not respond to the presence of the centres by proposing less (or more) redistribution in a voting aid application survey. Our estimates are precise enough to rule out even fairly small effects both for all the candidates and the elected ones. In contrast, there is evidence of various voter responses on average suggesting that electoral politics may limit to some extent the impact of voter preferences on policies. However, in the very smallest municipalities where there are many refugees per capita also the candidates become less favourable towards redistribution. Moreover, a similar result obtains for the ethnically most homogenous municipalities.

Keywords: candidates; immigration; local elections; redistribution; refugee crisis

JEL codes: D72; H71; H72; J15

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[†]Department of Political Economy, King’s College London, 40 Aldwych, Bush House NE, London WC2B 4BG, UK.

[‡]*Corresponding author:* email: riikka.m.savolainen@gmail.com

[§]Department of Government, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, United Kingdom, and VATT Institute for Economic Research, P.O. Box 1279 (Arkadiankatu 7), FI-00101 Helsinki, Finland.

1 Introduction

The European immigration debate often concentrates on the fiscal impacts of immigration, especially when it comes to refugees. There is evidence on some negative fiscal impact of humanitarian immigration in a welfare state (Ruist 2015; Ruist 2018) but the evidence on the impact of immigration on the demand for and –especially– supply of redistributive politics is much more scarce. The rather robust result that immigration tends to increase the support for far-right (see e.g. Dinas et al. 2019) could be consistent both with non-economic reasons and welfare chauvinism. For example, Alesina et al. (2018) find that immigration decreases the voter support for redistribution.¹

Our main question is whether refugee migration has any effect on *actual* redistributive policies and outcomes. This, in turn, is a two-part question: on the one hand we still care about voters’ preferences towards redistribution and how those translate into support for different political parties and policies. In other words, do voters respond to refugee migration by voting for alternatives –parties and candidates– that propose less redistribution? On the other hand, even if voters change their views about redistribution due to immigration, would politicians be willing to implement such changes? That is, does the supply of redistribution policies respond to (possible) changes in demand? After all, the impact of the voter preferences on the actual policies depend on and is mitigated by many factors such as the nature of political competition (see e.g. Besley et al. 2010), electoral institutions (see e.g. Matakos et al. 2016; Matakos et al. 2019) and the ability of politicians to commit to their electoral promises (Osborne and Slivinski 1996; Besley and Coate 1997).

In this paper, we study the impact that refugee immigration has on the redistribution positions taken by the local politicians in Finland, as well as, voters preferences towards public good provision. In doing so, ours is the first comprehensive study that *explores simultaneously both the demand and supply sides* of redistribution policies in the presence of mass migration flows. Finland provides an excellent case to study the question for three reasons. First, we study hasty establishment of asylum centres in Finland in the autumn 2015 when Finland was one of the biggest asylum seeker receiving EU countries in per capita terms, to which the authorities were unprepared for. Therefore, the central government did not require the permission of the local government to set up and fund privately run asylum centres. This alleviates concerns for self-selection and provides a

¹In a Finnish representative survey in 2016, 37% of the respondents disagreed somewhat or strongly with the statement that humanitarian immigrants should be entitled to same level of social benefits than others. In the 2018 survey round, 44% of the respondents agreed somewhat or strongly with the statement that humanitarian immigrants receive more social benefits than natives while 50% agreed somewhat or strongly with the statement that immigrants seek to exploit the Finnish social welfare system.

good setting for implementing a difference-in-differences research design.²

Second, a comprehensive data on policy positions of individual local politicians is available in Finland. We ask if setting up an asylum centre in a municipality in the autumn 2015 influences politicians' redistribution positions by using voting advice application data in the municipal elections in 2012 and in 2017. Voting advice applications are a way of informing voters about individual candidates' policy positions during the pre-electoral period. They are provided by the Finnish non-partisan media and are free of charge. Filling in policy positions in a voting advice application is voluntary. However, their popularity among the voters and the free publicity that they provide are incentives for politicians to participate, given that open-list systems, such as in Finland, put the focus on candidates rather than parties.

Third, our interest in Finland is also motivated by the fact that Hyytinen et al. (2018) and Meriläinen (2018) show that in the Finnish local politics, the characteristics of even one barely elected local politician suffice to change the local economic policies. Furthermore, Fiva et al. (2018) document a direct, intuitive link from the positions taken by the politicians to the policy outcomes in an institutionally similar context, Norway. Therefore, it is likely that, in this context, a change in policy positions of the candidates would also lead to different redistributive local policies. Given that in Finland, municipalities are responsible for a large share of public spending and revenue collection, and can set the local income tax rates independently, the resulting policy effects may be substantial.

We conduct several types of analyses. First, we analyse the supply side by estimating the effects of asylum centres on candidates' redistribution positions either using the full sample of respondents or by focusing on a panel data containing only the candidates who ran and responded both in 2012 and in 2017. The latter allows us to control for the candidate fixed effects. Second, we study whether the possible effects are heterogeneous in party affiliations, and thus, the pre-treatment policy position levels. Third, we also study the impact of the asylum inflows on the candidates' attitudes towards immigration. Fourth, we study if the effect differs by ethnic heterogeneity of municipalities. We also study whether the effects depend on the intensity of the treatment by analysing small and large municipalities separately. Fifth, we analyse various demand side (voter responses) outcomes such as the voter opinion responses in a survey, the vote shares of the parties, vote shares of most extreme candidates on their redistribution positions, turnout, and mobility.

We do not find an effect on the redistribution or immigration positions of the can-

²However, the central government did not set them up at random locations as we detail in the next section.

didates on average either in the full sample or the candidate panel. Given the nature of the recent refugee crisis and the underlying publicity, this finding is surprising in itself. First, in the context of an electoral democracy, one might anticipate that (at least some) candidates' policy positions vis-à-vis redistribution would have changed, especially since there is evidence –in the Finish as well as in the European context– that voters' preferences tend to respond to such shocks (see e.g. Alesina et al. 2018, 2019). Second, even if migration flows had *no effect* on redistributive preferences, and, as a result, there was no need for election-seeking candidates to respond to such changes, we know that in the context of a multi-dimensional choice framework there are important policy spillovers from the non-economic (e.g. identity) dimensions to the economic ones, such as redistribution (see e.g. Lindbeck and Weibull 1987; Roemer 1999; Krasa and Polborn 2010, 2012, 2014; Matakos and Xefteris 2016). However, we do observe an increased opposition to redistribution on a small number of the smallest and thus most intensively treated municipalities. The latter is consistent with recent findings on how intensity of exposure to the refugee flows matters (see e.g. Dinas et al. 2019) and, it is important from a policy perspective as it points to the possibility of addressing some of the issues arising by mass migration via better management and fairer allocation of the flows. We also find that support for redistribution decreases in the ethnically most homogenous municipalities, which suggests that salience may well be a channel.

Regarding the demand side effects, voter opinion becomes less in favour of redistribution in average. However, the total vote share of the most anti-redistribution candidates or of the economic left-wing parties is still unaffected. In contrast, the total vote share of the most pro-redistribution candidates decreases, but the significance level is only 10%. The vote share of rightist parties decreases by 2 percentage points which could be an anti-incumbent effect, given that both the National Coalition and the Center Party were in the national government during the autumn 2015. Moreover, there is a small decrease in the net mobility, implying that moving from the municipality is slightly larger than moving to the municipality. Overall we thus have evidence of various demand responses on average. As the candidate response required more intense treatment than the voter response to show, these results overall suggest that politics in the context of a *representative democracy* mitigate to some extent the way that voter preferences transmit into policies.

We contribute to several strands of literature. First, there is a large literature that considers the impact of immigration on the demand for redistribution, starting with the seminal paper by Alesina et al. (2001) which proposes an association between ethnic fractionalisation and a lower demand for public goods.³ The related causal evidence

³Cf. Freier et al. (2016) find that increasing religious heterogeneity in terms of Christian denomina-

includes Alesina et al. (2018) who find that priming the survey respondents to think about immigrants decreases the support for redistribution and the charity donation willingness. The effect is heterogeneous so that it is driven by the leftists respondents, the respondents without the college degree and those working at a high-immigration sector. In addition, Dahlberg et al. (2012) use refugee placement as the instrument and document that increased immigration decreases the support for redistribution in Sweden.⁴ Alesina et al. (2019) show that natives are less likely to support redistribution in the European regions with more immigrants, and Finland is one of the countries included in their data set.⁵ Our novel contribution is to focus on the supply side of redistributive politics, a necessary condition for a policy impact.⁶ The study closest to us is simultaneous ongoing work by Lahdelma (2019) who uses the same Finnish data and design to study the effects on candidates' immigration attitudes. She argues that attitudes become more positive in sparsely populated municipalities with weak economic conditions that benefit from the central government funding related to the refugees.

Second, this paper is also related to the rapidly increasing literature on the impact of immigration on the vote share of extremist parties. A common result from several European countries, including Germany, Italy, Denmark, Austria, France, and Greece is that immigration increases the popularity of the far-right and, to a lesser degree, conservative parties (Otto and Steinhardt 2014; Barone et al. 2016; Dustmann et al. 2016; Halla et al. 2017; Harmon 2018; Edo et al. 2018; Dinas et al. 2019; Sørensen 2016; for the exceptions see Steinmayr 2018; Gehrsitz and Ungerer 2017; Vertier and Viskanic 2018)⁷ which may indicate changes in preferences for redistribution as well.

Third, this paper also contributes to the large literature on the immigration attitudes of the natives⁸, especially to a more recent strand that focuses specifically on attitudes related to refugees. The survey by Bansak et al. (2016) finds that, in addition to non-economic factors, Europeans have a more positive attitude towards refugees that already have work experience as a high-skilled worker, speak the language fluently, are young and are not migrating for economic reasons. This suggests that concerns about the refugees being fiscal burdens may influence the attitudes towards them. In contrast, the survey

tions decreases the public spending. See Costa-Font and Cowell (2015) for a survey on the social identity and redistribution preferences.

⁴For a further discussion see Nekby and Pettersson-Lidbom (2017) and Dahlberg et al. (2017).

⁵Stichnoth (2012) documents that German natives are slightly less likely to think that the state should assist the unemployed if they live in an area with more unemployed foreigners.

⁶Also direct evidence on policy impacts is scarce and mixed. Jofre-Monseny et al. (2016) find that, in Spain, the inflows of labour immigrants decreased per capita social spending. In contrast, Green and Riddell (2019) find no effect on benefit generosity in Canada.

⁷Nevertheless, Steinmayr (2018) and Vertier and Viskanic (2018) do find, like us, that intensity of exposure matters: support for far-right parties increased in municipalities that were more intensely exposed to refugee flows.

⁸On immigration attitudes in general, see for example Hainmueller and Hopkins (2014).

by Lergetporer et al. (2017) finds that refugees education level does not influence general attitudes towards them among the German university students. Neither do they become concerned even if told that refugees have a low educational level. However, the results with the students may not generalise to the population as a whole. The pre-registered survey by Hangartner et al. (2018) documents that the attitudes of the residents in those Greek islands through which the refugees passed on their way to the continental Greece and Europe became more negative both towards refugees and non-refugee immigrants. Furthermore, they became more likely to support anti-refugee policy measures.⁹

2 Institutional background

An asylum centre hosts asylum seekers while their asylum application is being processed. In addition, they often contain some asylum seekers who already have secured a positive asylum decision, but have not yet managed to find regular accommodation. Finally, they also contain asylum seekers who have appealed against their negative asylum decision and are waiting for the administrative court to consider the case.

The average capacity of asylum centres in Finland is about 180 people. Typical facilities used as asylum centres consist of former hotels, hostels, nursing homes, schools, and hospitals. The costs of the asylum centres are all born by the Finnish government. The municipality where the centre is located has to provide education for the children aged 15 years or less but the government will compensate the municipality for the incurred expenses¹⁰. (Ministry of Finance 2017).

In 2015, the inflow of asylum seekers rose in Finland at the same time as it did in Germany, Sweden and some other affected countries and totalled 32,476 applicants¹¹, most of whom arrived during the autumn. In contrast, there had been 3,651 applicants in total in 2014. There had been 28 asylum centres in the beginning of 2015 while they would amount to 227 by the beginning of 2016 (Ministry of Finance 2017).

The large inflow took the Finnish authorities at a surprise. First, the Migration Office reacted by increasing the capacity in the existing asylum centres and by establishing some new ones. In the beginning of September, the Migration Office announced that they

⁹Entorf and Lange (2019) document that, in Germany, refugee inflows increase anti-foreigner hate crimes in the regions with few pre-existing immigrants and in the economically deprived regions.

¹⁰In addition to the accommodation while waiting for the asylum decision, an asylum applicant is entitled to acute healthcare, interpretation services, legal counselling, and some pocket money. On average, the accommodation cost was 45-61 euros per night per applicant in 2012-2016 (Ministry of Finance 2017).

¹¹Most of the asylum applicants in 2015 and in the first half of 2016 were Iraqis (~21,000) while the remaining applicants were mainly Afghans (~5,700), Somalis (~2,200) or Syrian (~1,100) (Hangartner and Sarvimäki 2017).

will no longer ask for the approval of the municipality if the asylum centre will be run by a private organisation, thus overriding possible objections by the municipality. The situation was really acute at this point: with one thousand asylum applicants per week, the anticipated need was 4-5 new asylum centres every week.

At this point, the Migration Office prioritised the municipalities located close to the existing the asylum centres because, in addition to the space constraints, it also had to deal with the personnel constraints due to the sudden inflow. Setting up a new asylum centre was easier if the personnel in a nearby asylum centre could assist in the beginning.

As the asylum seeker inflow kept growing, the Migration Office had to find ever more innovative solutions while frantically looking for new asylum centre facilities. For example, in mid-November 2015, an asylum centre consisting of containers was opened in Eurajoki and the Migration Office was also preparing for the use of heated tents.

After 2015, the inflow of the asylum seekers diminished again to the earlier levels as the countries along the Balkan route tightened their border controls. Asylum centres started to be gradually closed again in 2016-2017 as the asylum applications were processed.

This paper focuses on the asylum centres established in the autumn 2015, which were typically set up in the municipalities with a larger population (Table 1) due to a better availability of sufficiently large facilities, a closer location to the asylum authorities and the existing asylum centres (for their locations, see Figure A.1). Larger municipalities have larger shares of women, of university graduates and of immigrants¹². They also have smaller vote shares for economic right-wing parties since the agrarian Center Party is a very important economic right-wing party, yet less popular in the cities.

2.1 Humanitarian immigration and redistribution

The fiscal impact of immigration is very heterogeneous as it depends on the age upon the arrival and the labour market integration of the immigrants as well as that of their children. Humanitarian immigrants typically struggle with the labour market integration due to their low average level of educational achievement. This is especially pronounced in the countries with a high wage level and the high average level of educational achievement such as Finland. Furthermore, labour market authorities have also struggled to come up with efficient integration measures for the immigrants with a low level of education.

Ruist (2015) provides an example of the fiscal impact of humanitarian immigration in Sweden that has a similar extensive welfare state as Finland. According to his static calculation, the total redistribution towards the humanitarian immigrants was 1% of the Swedish GDP in 2007, mostly due to lower employment rates.¹³ On average, humanitarian

¹²The asylum seekers are not included in this figure.

¹³The dynamic calculations for Sweden in Ruist (2018) show a negative impact for the first ten years,

Table 1: Descriptive statistics for the municipalities with and without an asylum centre established in the autumn 2015

	Without	With	Difference	P-value
Number of hosp. buildings	3.08 (6.29)	6.62 (8.39)	3.54	0.00
Population	14652.90 (48336.55)	29392.78 (44558.38)	14739.87	0.02
Share senior	0.23 (0.05)	0.22 (0.05)	-0.01	0.19
Share uni. graduates	0.21 (0.06)	0.24 (0.06)	0.03	0.00
Share of non-Eur. for.-born	0.01 (0.01)	0.01 (0.01)	0.00	0.03
Share female	0.49 (0.01)	0.50 (0.01)	0.01	0.00
Right vote share	0.73 (0.10)	0.67 (0.10)	-0.05	0.00
True Finn vote share	0.19 (0.06)	0.20 (0.07)	0.01	0.19
Far-right niche share	0.00 (0.00)	0.00 (0.00)	0.00	0.11
Observations	219	76		

Notes: The hospitality building variables are from 2014 and include hotels, camping grounds, and other accommodation facilities. The demographic variables are from 2014. “Share senior” is the ratio of the residents older than 65 years relative to the population. “Share uni. graduates” is the ratio of the residents with a university degree relative to the over 15-years old population. “Share of non. Eur. for.-born” is the ratio of the non-European foreign-born residents relative to the population. “Share female” is the ratio of women to the population. The political variables are from the parliamentary elections in April 2017. “Right-wing vote share” is the votes received by the National Coalition, the Swedish People’s Party, the Center Party and the True Finns relative to all the votes. “Far-right niche share” is the votes of Muutos2011 and the Freedom Party relative to all the votes.

immigrants use about 50% more social welfare compared to the native Finns, amounting to ca. 6,500 annually. This amount decreases in the years spent in the country, from almost 8,000 during the first three years to less than 6,000 after ten years, which is mainly due to substantial decrease in the unemployment benefits paid out. In contrast, the social and health care usage of humanitarian immigrants is similar to the natives (Päivinen 2017).

2.2 Municipalities

The Finnish municipalities are tasked with providing many local services, including social welfare. They are autonomous and employ ca. 20% of the Finnish workforce and their spending amounts to 18% as a share of GDP. The municipal income tax is the largest single source of revenues and is about 41% of the revenue¹⁴, while the property tax provides 2.5% of the revenues. User charges accounts for ca. 25% of the revenues but they are mostly not related to social welfare or health expenditure. (Moisio et al. 2010)

Finland has an open-list PR system with no less than eight parties in the parliament. However, not all these parties are equally active in the municipalities: at the municipal level, the most important party is the conservative Center Party. Other Finnish main parties consist of the Social Democrat Party, the conservative National Coalition, the liberal Swedish Peoples Party, the populist True Finns, the Greens, the Left Alliance, and the conservative Christian Democrats. While the True Finns is not a pure anti-immigration party, they are nevertheless the main channel for the anti-immigration votes.

Municipal council is the main seat of power in the Finnish municipalities and has the decisive vote on all matters. The council appoints a mayor who is a civil servant, and the municipal board that has an important preparatory role in the decision making. In contrast to the national parliament, the municipal councils do not have a fixed government and the opposition but rather bargain, vote and form coalitions issue-by-issue. Also local party discipline is typically weaker than in the national parliament. These institutional details imply that individual councillors are relevant for policy making.

2.3 Voting advice applications

Voting advice applications are interactive questionnaires provided online by the non-partisan main media in the run-up to the elections. Their purpose is to assist voters in finding a candidate with matching policy positions. Open lists require voters always to

followed a zero impact for 30 years up until to refugees become retired when the fiscal impact becomes negative again.

¹⁴The municipal tax is flat while the nationally set tax allowance makes it more progressive.

choose an individual candidate, which is why Finnish voting advice applications focus specifically on the candidates' positions. Using them is free of charge for both candidates and voters.

The widespread Internet usage makes the country a fertile ground for voting advice applications. For example, the 2012 voting advice application of the Finnish public broadcasting company, Yle, was visited about 700,000 times (Naalisvaara 2013) while the Finnish population is about five millions.

Filling in a voting advice application questionnaire is not obligatory for the candidates. The candidates using them are more likely to be female and younger. They might well be more skilled and more ambitious, as their total vote shares and winning probabilities are higher. Incumbent councillors are slightly over-represented (Table A.1).

The voting advice applications are open only to the candidates during a certain pre-electoral period. During this period, candidates may reply to close-ended questions focusing on current policy issues and their replies are saved in a data base. While the response period is pending, candidates have access only to their own replies, which can be modified during this time but not afterwards (Naalisvaara 2013).

Once the candidates' response period is over, the voting aid applications become publicly available. Voters can fill in the same questionnaire online and compare their replies to those of the candidates. Most voters focus on their best matches provided by the voting advice application algorithms and, at most, study the replies of these best matches in more detail (Suojanen 2007). In essence, these recommendation algorithms match a voter to those candidates whose positions are closest to his, making some assumptions on the voter utility function in order to define the closeness.

Because the algorithms are trade secrets, they are not trivial to game. In fact, even the service providers have noted that the algorithms occasionally come up with strange final recommendations (Kauppinen 2007). The strategic behaviour by the candidates is further complicated by the fact that voter responses are not available, even afterwards. In addition, the responses of the candidates are fixed once the response period has ended so that candidates cannot react at other candidates' responses. On the other hand, there is anecdotal evidence that, at least in the parliamentary elections, the candidates choose more moderate positions than voters (Kerkkänen 2015), suggesting strategic behaviour. However, it is hard to say to which degree such behaviour generalises to the municipal elections, in which most candidates are not professional politicians.

3 Data

The electoral data for the municipal elections in 2012 and 2017 is provided by the Ministry of Justice. It contains the votes received by individual candidates by each party or electoral association in each municipality, some basic socio-economic information on the candidates as well as the number of eligible voters and the total votes cast for each party in each municipality.

There were 19 municipal mergers between 2012 and 2017. We take them into account by merging the municipal structure of the years prior to 2017 into the municipal structure effective in 2017, as if the municipalities would have merged together already earlier than they in reality did.

The asylum centre data comes from the Finnish Migration Office. It contains the municipality, the organisation in charge (e.g. the name of the municipality or the operator, for example, Finnish Red Cross), the capacity and the opening and, if applicable, closing date of the asylum centre. There is no information on the utilisation rates but it is safe to assume that the amount of refugees is quite strongly correlated with the capacity. Given that the average accommodation cost was 45-61 euros per night per applicant in 2012-2016 (Ministry of Finance 2017), the Migration Office has an incentive to close down asylum centres that are not needed.

The data on municipal population, age structure, immigration, mobility, educational achievement, and unemployment comes from Statistics Finland. Asylum seekers are not included in these data. They only included once they have received the positive asylum decision and the residence permit.

We use voting advice application to study politicians and EVA survey data to study voters. Both have the same structure, namely, that there are various statements and the respondents can choose one of the following options: “Strongly agree”, “Somewhat agree”, “Don’t know”, “Somewhat disagree”, and “Strongly disagree”.¹⁵

The voting advice application data for 2008 and for 2012 comes from the Finnish public broadcaster, YLE, while that for 2017 comes for the most important Finnish newspaper, Helsingin Sanomat¹⁶. Prior to 2017, we use the YLE data because Helsingin Sanomat did not cover the whole country back then but focused only on the region around the capital, Helsinki. In 2017, YLE did organise a voting advice application. However, its questions focused on the forthcoming health care reform and on how the related services should be allocated between different administrative levels, and thus, is not informative for our purposes. In contrast, many questions in the 2017 voting advice application by

¹⁵For both, the scale is “Strongly agree” = 4; “Somewhat agree” = 3; “Don’t know” = 2; “Somewhat disagree” = 1; “Strongly disagree” = 0.

¹⁶The voting advice application data prior to 2008 is not available.

Helsingin Sanomat addressed redistribution or immigration topics.

The most important difference between the two voting advice applications is that the number of the respondent is twice as large prior to 2017. This is probably due to the fact that, when it comes to the municipal elections, Helsingin Sanomat had not covered the whole country before but focused only on the municipalities within and close to the Greater Helsinki. In contrast, YLE has been covering all the municipalities for several municipal elections, hence, it was better-known among the candidates. In addition, the respondents in 2017 are slightly younger, likelier to be female and less likely to be incumbent councillors. There is no difference in terms of the vote share, the electoral success, the redistribution attitudes, nor the likelihood of being a True Finn (Table A.2).

The YLE voting advice application in 2008 contained no immigration questions while its voting advice application in 2012 contained one related question: “My municipality should receive refugees after a positive residence permit decision.” The Helsingin Sanomat voting advice application in 2017 contained five related questions. Out of them, we use the following formulation as it is closest to the one used by Yle in 2012: “My municipality should take actively up the initiative to receive refugees after their positive residence permit decision.” When forming the panel data of candidates’ policy positions, we merge the survey years by the candidates’ municipality of residence, name and age. As a result, the panel data consists only of those candidates who did not move across the municipalities.

Finally, in order to measure voters’ preferences, we utilise the EVA Survey on Finnish Values and Attitudes collected by a Finnish think tank, EVA, in 2013-2018 at the beginning of each year. These data are representative repeated cross-sections and we use questions that were asked both before and after the treatment period, the autumn 2015. The complete list of the survey questions is in the Appendix including a note which years each question was asked.

The redistribution-related questions focuses on the value and impact of welfare state and a desirable level of taxes and services. (For the descriptive statistics on the socio-economic background variables and the redistribution-related questions see Table A.3.) The immigration-related questions focus on assessing economic and cultural value of immigration and the appropriate attitude towards foreigners. Moreover, there is a question on national pride. In addition, we use for descriptive purposes single-round questions about views on refugees and benefits. The inequality-related questions deal with the desirable level of income inequality. (For the descriptive statistics on the immigration- and inequality-related questions see Table A.4.)

3.1 Redistribution index

There is a large number of voting advice application questions and several focus on redistribution, though none is identical across the elections. In order to alleviate multiple-testing problem, we pick the redistribution-related questions and, using them, construct a summary index using a procedure described in Kling et al. (2007) for each year (Alesina et al. (2018) use the same method to construct their redistribution support index.). Both the 2008 and 2012 indices consist of seven questions while the index for 2017 consists of ten questions. The complete list of the voting advice application questions is in the Appendix including a note if a question contributes to the index.

The index describes how much a candidate supports income redistribution (for the distribution of the index see Figure A.2). The most important predictor of weaker support is a membership in a right-wing party¹⁷ (Table A.5).

In order to construct the index, we first switch the scales where needed, so that a higher value of any variable grouped with the index indicates a stronger support for redistribution. Next, we demean the policy positions with the control group mean and divide them by the control group standard deviation, resulting in z-scores. The control group consists the municipalities where there was no new asylum centre established in the autumn 2015. The index consists of an equally weighted average of these z-scores.

Overall means could result in noisy estimations because of across-party heterogeneity, given that parties have predictably different positions on redistribution. This is why we also do a party-specific redistribution index in which policy positions are related to the party-specific control group positions. For example, policy positions of a Social Democrat candidate are compared to Social Democrat positions in untreated municipalities.

4 Empirical specification and results

We are interested in the effect of establishing an asylum centre on various outcomes, the key of which is the policy position of the candidates with respect to redistribution. Our full sample analysis follows a standard DID specification (1):

$$\begin{aligned} \text{Policy position}_{imt} &= \alpha + \delta \text{ASYLUM}_m * \text{AFTER}_t \\ &+ \beta \text{ASYLUM}_m + \gamma \text{AFTER}_t + \varepsilon_{imt}. \end{aligned} \tag{1}$$

Here i refers to a candidate, m stands for a municipality, and t refers to an election

¹⁷The right-wing candidates belong to the the National Coalition, the Swedish People’s Party, the Center Party or the True Finns.

year. $ASYLUM_m$ equals one for the municipalities where an asylum centre was set up in the autumn 2015, while $AFTER_t$ is the dummy for year 2017. The effect of interest is δ .

Next, we focus on the panel of 4,663 candidates who used the voting advice application in both election years and estimate the equation (2) for this subset. For this sample, we can control for the candidate effects α_i . Again, the interest is on the effect of the the establishment of a new asylum centre on candidates' policy positions δ .¹⁸

$$\begin{aligned} \text{Policy position}_{imt} = & \alpha_i + \delta ASYLUM_m * AFTER_t \\ & + \beta ASYLUM_m + \gamma AFTER_t + \varepsilon_{imt} \end{aligned} \quad (2)$$

We also conduct an intensity of treatment style analysis using specifications (1) and (2), but splitting the sample based on the population size of the municipalities. As municipal populations varies much more than asylum centre capacity this simple division effectively captures the share of refugees in population. We also split the sample by population density motivated by the findings in Lahdelma (2019).

Motivated by Alesina et al. (2019), who find that the decreased support for redistribution among Europeans is driven by right-wing voters, we also study the possible heterogeneity in the effect using a fully saturated model (3) as follows:

$$\begin{aligned} \text{Policy position}_{imt} = & \alpha_i + \delta_1 ASYLUM_m * AFTER_t + \beta ASYLUM_m + \gamma AFTER_t \\ & + \delta_2 ASYLUM_m * AFTER_t * RIGHT_i + \mu ASYLUM_m * RIGHT_i \\ & + \kappa AFTER_t * RIGHT_i + \zeta RIGHT_i + \varepsilon_{imt} \end{aligned} \quad (3)$$

The division into right and left corresponds to the economic left-right division, so that $RIGHT_i$ marks an affiliation with the National Coalition, the Swedish People's Party, the Centre Party or the True Finns. The effects of interest are δ_1 and δ_2 .¹⁹

In addition to these individual-level estimations, we consider various aggregated outcomes y_{mt} at the municipal level, estimating:

$$y_{mt} = \alpha + \delta ASYLUM_m * AFTER_t + \beta ASYLUM_m + \gamma AFTER_t + \varepsilon_{mt} \quad (4)$$

¹⁸The candidate fixed effect is effectively also a municipality fixed effect since the panel data only consists of the candidates who stayed in the same municipality. Therefore, $ASYLUM_m$ is a redundant variable.

¹⁹Normally one would want to include also party fixed effects. However, it is rare in the Finnish system that candidates change the parties, and thus, to any practical relevance candidate fixed effects account also for party affiliation.

We also explore voter opinion using the EVA data in a difference-in-differences specification identical to (1) except that i refers to a survey respondent rather than a candidate.

4.1 Supply-side results

Our main results are presented in Table 2. Setting up an asylum centre does not have an impact on the redistribution attitudes, neither when considering all the candidates (specification (1)) nor when focusing on the candidate level panel (specification (2)). This means that the candidates neither change their personal opinion nor does the entry and exit of the candidates lead to different positions in the candidate pool. The results are quite precise as we can exclude an effects larger than 15% of the outcome standard deviation.

As Table 2 shows, there are no statistically significant effects either when restricting the analysis of specification (2) only on the rightists, leftists or True Finns candidates. Moreover, alternative to studying such effect heterogeneity is to estimate specification (3), that is, the analyse the interaction with the party affiliation. We present those results in Table 3 showing that the interaction of the treatment and the party affiliation is also insignificant.

Next, we allow the redistribution index distribution vary across parties in Table 4. For example, candidates of the Left Alliance now get a high value of the party-specific redistribution index only if they are more supportive of redistribution than an average candidate of the Left Alliance, while more left-leaning candidates of the conservative National Coalition can get a high value of the party-specific redistribution index, even if they get just an average value of the overall redistribution index. Nevertheless, the previous results do not change, and there is no evidence of within-party position changes.

In addition, we study if the results vary with ethnic heterogeneity, which we proxy with the share of foreign-born with a non-European background²⁰ relative to the total population. The hypothesis is that the municipalities that are less used to immigrants might react differently and this seems to be the case: the candidates in the ethnically most homogenous municipalities start supporting redistribution less (Table 5). In other words, in areas where the presence of refugees could be more salient and, hence, the perceived change in the municipality's demographic composition more visible, candidates' support for redistribution declines.

We also consider heterogeneity related to number of residents or population density²¹

²⁰Asylum seekers are not included in this figure. According to the Statistics Finland definition, a person has an immigrant background if both parents or the only known parent was born abroad or the person was born abroad and there's no information on the parents.

²¹See Figure A.3 for their distributions.

Table 2: Impact of asylum centers on the redistribution index, with and without control variables

	(1)	(2)	(3)	(4)	(5)
Dependent variable	Redistribution index				
Sample	All	All	All	Right-wing	True Finns
Asylum centre, autumn 2015	-0.010 (0.017)	-0.011 (0.022)	-0.010 (0.022)	-0.008 (0.025)	-0.047 (0.057)
Control variables					
R-squared	0.000	0.007	0.027	0.088	0.035
	(6)	(7)	(8)	(9)	(10)
Asylum centre, autumn 2015	0.001 (0.022)	-0.013 (0.024)	-0.022 (0.023)	-0.010 (0.026)	-0.056 (0.063)
Control variables	X	X	X	X	X
R-squared	0.019	0.031	0.031	0.088	0.055
Panel		X	X	X	X
Candidate effects			X	X	X
Observations	32,543	9,321	9,321	4,971	930
Number of candidates		4,663	4,663	2,544	504

Notes: The redistribution index is described in detail in **3.1 Redistribution index**. A larger index value implies a more favourable view on income redistribution. Right-wing candidates belong to the National Coalition, the Swedish People’s Party, the Center Party or the True Finns. The control variables are municipal unemployment rate, municipal population, population share of the at least 66 years old residents, population share of non-European foreign-born residents, population share of women as well as share of the university graduates out of at least 16 years old residents. Standard errors are clustered at the municipality level. *** p<0.01, ** p<0.05, * p<0.1

Table 3: Within-party heterogeneity

Dep. var.	Redistribution index	
Asylum centre, autumn 2015	-0.005 (0.027)	-0.020 (0.031)
Asylum centre * right-wing cand.	0.002 (0.022)	-0.002 (0.034)
R-squared	0.244	0.059
Candidate effects		X
Observations	32,543	9,321
# of candidates		4,663

Notes: The redistribution index is described in detail in **3.1 Redistribution index**. A larger index value implies a more favourable view on income redistribution. Right-wing candidates belong to the National Coalition, the Swedish People’s Party, the Center Party or the True Finns. All the specifications control for the party and year effects, the main treatment effect and running in the elections in a municipality that will be treated in 2015. Standard errors are clustered at the municipality level. *** p<0.01, ** p<0.05, * p<0.1

Table 4: Impact of asylum centres on party-specific redistribution index

	(1)	(2)	(3)	(4)	(5)
Dependent variable	Party-specific redistribution index				
Sample	All	All	All	Right-wing	True Finns
Asylum centre, autumn 2015	0.000 (0.015)	0.006 (0.021)	0.007 (0.022)	-0.009 (0.025)	-0.044 (0.055)
R-squared	0.001	0.000	0.000	0.001	0.003
Panel		X	X	X	X
Candidate effects			X	X	X
Observations	31,316	9,048	9,048	4,971	930
# of candidates			4,558	2,544	504

Notes: The party-specific redistribution index is described in detail in **3.1 Redistribution index**. A larger index value implies a more favourable view on income redistribution. Right-wing candidates belong to the National Coalition, the Swedish People’s Party, the Center Party or the True Finns. All the specifications control for the party and year effects, the main treatment effect and running in the elections in a municipality that will be treated in 2015. Standard errors are clustered at the municipality level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

as the influx of asylum seekers could well be more salient in such municipalities. The candidates in the municipalities with the fewest residents start to support redistribution less (Table 6) while those in the most sparsely populated municipalities start to support it more (Table 7). These results indicate that *intensity of exposure*, which is increasing in the number of asylum-seekers per municipal resident, seems to matter in driving opposition to redistribution. However, the first set of coefficients is not always significant while the latter set never is as the small number of candidates in this sub-sample decreases precision.

Finally, the results on the positions of the candidates regarding refugee resettlement²² and attitudes towards them, mirror those for the redistribution attitudes: there is no impact neither among all the candidates nor among the subsets (Table 8).²³

²²The question does not refer to asylum centres but to refugees whose application has been processed and who have received a positive asylum decision.

²³Similarly, immigration attitudes among the population do not change in the representative survey (Table A.7)

Table 5: Impact of asylum centres on redistribution positions, by ethnic homogeneity

Dependent variable	Redistribution index					
Sample	Very homogenous			Less homogenous		
Homogeneity = non-Eur. foreigner share less than 25th percentile						
	(1)	(2)	(3)	(4)	(5)	(6)
Asylum centre, autumn 2015	0.013 (0.041)	-0.065 (0.069)	-0.164*** (0.047)	0.002 (0.018)	0.002 (0.023)	-0.000 (0.022)
R-squared	0.002	0.002	0.015	0.000	0.008	0.031
Observations	3,454	585	585	29,089	8,736	8,736
Number of candidates			432			4,508
Homogeneity = non-Eur. foreigner share less than median						
	(7)	(8)	(9)	(10)	(11)	(12)
Asylum centre, autumn 2015	0.002 (0.045)	-0.093 (0.068)	-0.116* (0.069)	0.005 (0.020)	0.012 (0.026)	0.004 (0.025)
R-squared	0.000	0.004	0.016	0.001	0.010	0.038
Observations	8,355	1,616	1,616	24,188	7,705	7,705
Number of candidates			1,127			4,172
Panel		X	X		X	X
Candidate effects			X			X

Notes: The redistribution index is described in detail in **3.1 Redistribution index**. A larger index value implies a more favourable view on income redistribution. We proxy ethnic heterogeneity with the share of foreign-born with a non-European background relative to the total population. A person has an immigrant background if both parents or the only known parent was born abroad or the person was born abroad and there is no information on the parents. Asylum seekers are not included in this figure. The 25th percentile is 0.22% while the median is 0.37%. Standard errors are clustered at the municipality level. *** p<0.01, ** p<0.05, * p<0.1

Table 6: Impact of asylum centres on redistribution positions, by municipality size

Dependent variable	Redistribution index					
Sample	Small municipalities			Large municipalities		
	Small = less than 25th percentile					
	(1)	(2)	(3)	(4)	(5)	(6)
Asylum centre, autumn 2015	-0.014 (0.062)	-0.222** (0.084)	-0.131* (0.073)	-0.005 (0.018)	-0.008 (0.022)	-0.008 (0.022)
R-squared	0.002	0.011	0.015	0.000	0.007	0.028
Observations	1,589	327	327	30,954	8,994	8,994
Number of candidates			180			4,516
	Small = less than median					
	(7)	(8)	(9)	(10)	(11)	(12)
Asylum centre, autumn 2015	0.054 (0.036)	-0.003 (0.082)	0.019 (0.085)	-0.006 (0.019)	-0.009 (0.023)	-0.006 (0.023)
R-squared	0.001	0.008	0.018	0.000	0.007	0.029
Observations	4,921	1,004	1,004	27,622	8,317	8,317
Number of candidates			517			4,176
Panel		X	X		X	X
Candidate effects			X			X

Notes: The redistribution index is described in detail in **3.1 Redistribution index**. A larger index value implies a more favourable view on income redistribution. The 25th percentile for 2012 and 2017 is 3192 residents while the corresponding median is 6627 residents. For the distribution of the municipality sizes see Figure A.3. Standard errors are clustered at the municipality level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 7: Impact of asylum centres on redistribution positions, by population density

Dependent variable Sample	Redistribution index					
	Sparsely populated			Densely populated		
Sparsely-populated municipality = more than 75th percentile						
	(1)	(2)	(3)	(4)	(5)	(6)
Asylum centre, autumn 2015	0.043 (0.045)	0.122 (0.130)	0.122 (0.130)	-0.004 (0.018)	-0.010 (0.022)	-0.009 (0.022)
R-squared	0.006	0.005	0.006	0.000	0.007	0.030
Observations	1,952	382	382	30,591	8,939	8,939
Number of candidates			191			4,472
Sparsely-populated municipality = more than median						
	(7)	(8)	(9)	(10)	(11)	(12)
Asylum centre, autumn 2015	0.070* (0.040)	-0.004 (0.072)	-0.005 (0.072)	-0.006 (0.019)	-0.007 (0.023)	-0.007 (0.023)
R-squared	0.001	0.004	0.013	0.000	0.008	0.030
Observations	5,493	1,087	1,087	27,050	8,234	8,234
Number of candidates			544			4,119
Panel		X	X		X	X
Candidate effects			X			X

Notes: The redistribution index is described in detail in **3.1 Redistribution index**. A larger index value implies a more favourable view on income redistribution. Population density is measured by the share of municipal residents living in sparsely populated areas of the municipality so that a larger number indicates a more sparsely-populated municipality. In the median municipality in 2017, 39% of residents are living in sparsely populated areas. At the 75th percentile, 51% of residents are living in sparsely populated areas. For the distribution of the municipality densities see Figure A.3. Standard errors are clustered at the municipality level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 8: The impact of asylum centres on the refugee positions, with and without control variables

	(1)	(2)	(3)	(4)	(5)
Dependent variable	“My municipality should receive refugees”				
Sample	All	All	All	Right-wing	True Finns
Asylum centre, autumn 2015	-0.082* (0.044)	-0.020 (0.050)	-0.020 (0.050)	0.011 (0.074)	0.183 (0.131)
Control variables					
R-squared	0.006	0.016	0.076	0.087	0.334
	(6)	(7)	(8)	(9)	(10)
Asylum centre, autumn 2015	-0.013 (0.054)	-0.014 (0.059)	-0.029 (0.049)	-0.002 (0.073)	0.155 (0.132)
Control variables	X	X	X	X	X
R-squared	0.074	0.087	0.084	0.102	0.354
Panel		X	X	X	X
Candidate effects			X	X	X
Observations	32,554	9,326	9,326	4,972	930
Number of candidates		4,663	4,663	2,544	504

Notes: The dependent variable is the candidate response to the statement “My municipality should receive refugees with a positive asylum decision”. A larger number indicates a stronger agreement. Right-wing candidates belong to the National Coalition, the Swedish People’s Party, the Center Party or the True Finns. The control variables are municipal unemployment rate, municipal population, population share of the at least 66 years old residents, population share of non-European foreign-born residents, population share of women as well as share of the university graduates out of at least 16 years old residents. Standard errors are clustered at the municipality level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

4.2 Demand-side results

To understand better the mechanisms behind the zero effects in the supply side, we want to understand whether the candidates do not respond even if voter preferences change or whether the voter preferences do not actually change. Theoretically also the first option is possible as the impact of the voter preferences on the actual policies are possibly limited by many factors such as the nature of political competition, electoral institutions and the ability of politicians to commit to their electoral promises, as in the citizen-candidate models (Osborne and Slivinski 1996; Besley and Coate 1997). We utilise a representative repeated cross-sections survey data in order to explore voters' views. In addition, we classify vote shares as demand side outcomes.

Results for the survey data provide suggestive evidence that voters become more redistribution-averse. The three questions that are most related to the redistribution attitudes are “Even though it’s costly to maintain generous social welfare and public services, the Finnish welfare state is worth it.”, “Generous benefits make people lazy and make them lack initiative.”, and “If the taxes were cut, I’d be willing to give up some public services.”²⁴ The support for the welfare maintenance decreases statistically significantly and the effect size is 10% of the standard deviation. The two remaining questions get a positive but insignificant coefficient (Table 9).²⁵

Furthermore, we analyse if candidates' redistribution attitudes predict the impact of asylum centre on their vote shares. We measure the outcome by summing up the total votes gained by the pro-redistribution candidates and by dividing them by the total votes of all the voting advice application respondents, and similarly for the anti-redistribution candidates. We estimate the effect within these subsamples with the specification (4) (municipality-level analysis).

The total vote share of the most pro-redistribution candidates decreases but the result is statistically significant only at the 10% significance level. There is no impact for the most anti-redistribution candidates (Table 10). Candidates are pro-redistribution if their redistribution index value is larger than the 75th percentile and anti-redistribution if it is smaller than the 25th percentile. There is also no significant effect on the mean values of the redistribution index in the municipalities either when calculated over all the candidates in the municipality or only over the elected candidates.

Finally, we study partisan voting, turnout and mobility (Table 11). The vote share of the right-wing parties decreases almost 2 percentage points due to asylum centres. This is potentially a response to most of these candidates being part of the incumbent

²⁴The fourth question is “Finland should participate more in international tax competition and substantially decrease wage, corporate and capital taxes.” but the coefficient for the asylum centre is omitted because of collinearity.

²⁵The coefficients for the concern for inequality decrease but not statistically significantly (Table A.6).

Table 9: The impact of asylum centers on the redistribution-related survey questions

	(1)	(2)	(3)
Dependent variable	Welfare state	Lazy	Cut services
Asylum centre autumn 2015	-0.110** (0.042)	0.075 (0.068)	0.032 (0.089)
Control variables			
R-squared	0.003	0.007	0.004
Observations	10,174	6,101	4,096
Asylum centre autumn 2015	-0.096** (0.047)	0.078 (0.077)	0.034 (0.096)
Control variables	X	X	X
R-squared	0.042	0.084	0.078
Observations	8,165	4,092	4,096

Note: The dependent variable is the survey respondent response to the following statements so that a higher number indicates agreement. “Welfare state” = “Even though it’s costly to maintain generous social welfare and public services, the Finnish welfare state is worth it.” (2013, 2014, 2015, 2016), “Lazy” = “Generous benefits make people lazy and make them lack initiative.” (2014, 2017), “Cut services” = “If the taxes were cut, I’d be willing to give up some public services.” (2015, 2017). The scale for survey questions is “Strongly agree” = 4; “Somewhat agree” = 3; “Don’t know” = 2; “Somewhat disagree” = 1; “Strongly disagree” = 0. Surveys are conducted in the beginning of each year except there were two rounds in 2018, in the beginning of the year and the autumn. The control variables are gender, age group, supporting a right-wing party and being a university graduate or a public employee. The second round of 2018 does not contain the gender variable. Standard errors are clustered at the municipality level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 10: Impact of asylum centres on the vote shares of pro- and anti-redistribution candidates

Dependent variable	(1)	(2)	(3)	(4)
	Vote share of:	Vote share of:	Mean redistribution index for:	
	pro-redist.	anti-redist.	all	elected
Asylum centre, autumn 2015	-0.038* (0.022)	-0.005 (0.023)	-0.011 (0.022)	-0.021 (0.030)
Observations	590	590	584	575
R-squared	0.006	0.008	0.016	0.002

Notes: The municipal elections in 2012 and 2017. “Pro-redistribution vote share” is the total vote share of the pro-redistribution candidates relative to the total vote share of all the voting advice application respondents while “Anti-redistribution vote share” is the equivalent number for the anti-redistribution candidates. The redistribution index value of a pro-redistribution candidate is higher than the 75th percentile of the index. The redistribution index value of an anti-redistribution candidate is lower than the 25th percentile of the index. Both vote shares get the value of zero in case there were no pro- resp. anti-redistribution candidates. “Mean redistribution index” refers to the mean value of the redistribution index in a municipality in a given year either for all the candidates or just the elected ones. Standard errors are clustered at the municipality level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

coalition in power. Turnout increases by almost one percentage point. There is a decrease in the net mobility, implying that out-migration exceeds in-migration when considering only the within-country moves. The vote share of True Finns does not change. While a systematic pattern and reasons for voter responses is elusive, the results are suggestive of some voter reaction.

Table 11: The impact of asylum centres on the party popularity, the turnout in the municipal elections, and mobility

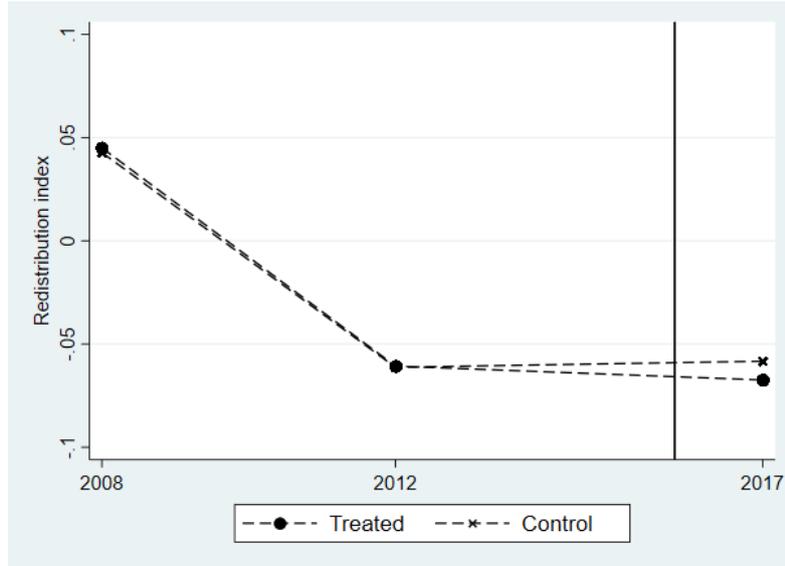
	(1)	(2)	(3)	(4)	(5)
Dependent variable	Right vote	True Finns vote	Turnout	Net mobility	Within-munic. mobility
Asylum centre autumn 2015	-0.017*** (0.008)	0.004 (0.005)	0.009*** (0.003)	-0.003*** (0.001)	0.001 (0.001)
Observations	590	590	590	590	590
R-squared	0.071	0.092	0.051	0.009	0.090

Note: The municipal elections in 2012 and 2017. The mobility data covers the years 2008, 2012, and 2017. “Right” refers to the vote share of the economic right-wing parties, ie. the National Coalition, the Swedish People’s Party, the Center Party, and the True Finns. “Net mobility” is the ratio of the net migration relative to the population, so that a negative number implies that out-migration exceeded in-migration. “Within-municipality mobility” is a ratio of the municipality residents that moved within the municipality relative to the population. All the specifications control for the municipality and year effects. Standard errors are clustered at the municipality level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

4.3 Validity and robustness

To assess the validity of the research design, we test for the common pre-treatment trends as the standard indirect test of the common trend assumption crucial for DID identification. Figure 1 shows the average redistribution index values by the municipalities for the three municipal elections for which the policy position data exists.²⁶ The treatment and the control group evolve similarly in the pre-treatment period for all the outcomes.

Figure 1: Pre-trends of the average redistribution index by municipality



Moreover, we estimate the following equation only for the elections prior to the asylum seeker inflow, namely, for 2008 and 2012:

$$\text{Policy position}_{imt} = \alpha + \beta \text{ASYLUM}_m + \gamma \text{Year2012} + \delta \text{ASYLUM}_m * \text{Year2012} + \varepsilon_{imt}. \quad (5)$$

Notation is as before. The insignificance of γ in Table 12 provides evidence for the absence of the placebo effect.

To address the issue that policy position data is available for a fairly short period, we report longer pre-treatment parallel trends on party vote shares in Figures A.5-A.7.

²⁶In addition, Tables A.5, A.6 and A.7 show the trends for the municipality-level vote shares for the economic left- and right-wing parties starting from 1983.

Table 12: Placebo estimations

Dependent variable	Redistribution index
$TREATED_m$	0.002 (0.014)
Year 2012	-0.104*** (0.016)
$TREATED_{m,2012}$	-0.002 (0.021)
Observations	40,843
R-squared	0.011

Notes: The redistribution index is described in detail in 3.1 Redistribution index. A larger index value implies a more favourable view on income redistribution. Standard errors are clustered at the municipality level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

5 Conclusions

We study the impact of asylum centre establishment on the redistribution attitudes of candidates and voters using difference-in-differences design. Regarding the supply (candidate) side, we do not find an effect on the redistribution or immigration positions of the candidates on average, and we can exclude an effect larger than 15% of the standard deviation. Effects are absent for both all the candidates and the sample of elected ones, both in a cross-section and for panel of candidate survey respondents.

However, we do find that attitudes towards redistribution become more negative in the very smallest municipalities where also the per capita inflow of immigrants is the largest. A similar result holds also for the ethnically most homogenous municipalities. In other words, we find that the *intensity of exposure* to the refugee flows and *saliency* matter and seem to be key in moving attitudes towards redistribution in this negative direction. This finding – that intensity of exposure matters – is in line with recent findings on heterogeneous effects of mass immigration flows on attitudes towards refugees and immigrants in general in various European contexts (see e.g. Dinas et al. 2019; Stainmeyer 2019; Vertier and Viskanic 2018). The latter point is also important in terms of policy design: our results suggest that a more proportional allocation of refugees (in per capita terms) in the host communities might mitigate some of the refugee-related backlash that many European countries experience. This is a relatively simple, yet promising, policy solution. Our work, thus, joins the above-mentioned body of literature and reinforces this point.

Regarding the demand (voter) side we find that attitudes towards redistribution become more negative on average. All the total vote share of the most pro-redistribution candidates decreases, but only at the significance level of 10 %. There is a small decrease in the net mobility. The vote share of economic right-wing parties decreases by almost 2 percentage points which might have been an anti-incumbent effect, given that both the National Coalition and the Centre Party were in the national government during the period.

Taken together, our results are consistent with candidates being somewhat less responsive to asylum centres (and the presence of refugees) than the voters. There are two important conclusions coming out from this study that one can carry further. First, our results indicate that *representative democracy* may moderate the transmission of voter preferences on policies. While voters' preferences regarding redistribution and public good provision might become more negative in the presence of migration shocks that increase the perceived (and sometimes actual) underlying ethnic heterogeneity of the population (see e.g. Alesina et al. 2001; Alesina et al. 2018) policy outcomes appear to be much

stickier and intra-party dynamics (candidates) seem to play a key role in this. This is somewhat surprising, if someone had a citizen-candidate version of representative democracy in mind. Second, our results also speak for the case of other EU countries that have received large flows of refugees and migrants during the recent refugee crisis. The magnitude, intensity and the time dynamics of the refugee exposure in Finland is similar to what many other European countries have experienced recently. Moreover, those countries have similar welfare provisions and undergo the same debate on the future of and public support for their welfare states in the presence of mass migration flows.²⁷ Hence, while the particular findings of this study pertain to Finland alone, the broader implications on how supply and demand for redistribution policies interact in the context of mass migration flows, as well as the implications on the mitigating role of representative democracy, should carry over to those cases as well.

²⁷For instance, Alesina et al. (2019), using cross-regional survey data from Europe, found that support for redistribution has dwindled significantly in the presence of the recent large migration flows.

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APPENDIX

Yle voting advice application questions in 2008

In order to provide our municipality with more revenue, we should [choose two]:

- increase the property tax rate for residential buildings (Redistribution index)
- increase the property tax rate for holiday houses (Redistribution index)
- increase user fees (Redistribution index)
- sell off municipal property
- attract business with favorable conditions or financial support
- attract new well-off taxpayers by offering them building plots²⁸
- request for more state subsidies
- consider a municipality merger
- introduce new user fees. (Redistribution index)

Which of the following services should we privatize [choose as many as you like but at least one of the following]:

- comprehensive school
- health center
- eldercare
- day care
- municipal engineering
- social welfare
- substance abuse treatment and rehabilitation
- fire and rescue services
- zoning

²⁸Municipalities are big land owners and rural municipalities frequently sell building plots at token prices in order to attract new well-to-do taxpayers.

- special health care
- water utility
- none of the above

The following questions have a five-step scaling:

- 0 = “completely disagree”
- 1 = “somewhat disagree”
- 2 = empty
- 3 = “somewhat agree”
- 4 = “completely agree”

If there is no other option, we should raise the municipal tax rate rather than cut from the municipal services. (Redistribution index)

It is nowadays too easy to be admitted to social welfare. (Redistribution index)

The municipal user fees should be made more progressive in income. (Redistribution index)

We should compromise on environmental protection if employment can be thus increased.

If one of the parents is at home, we should limit the right of the family to have their child placed in daycare.

We should downsize the number of employees in my municipality because there are too many of them.

If we must choose, it is better to cut funding from health center than school because the private health care exists while there are no private schools.

Yle voting advice application questions in 2012

The following questions have a five-step scaling:

- 0 = “completely disagree”
- 1 = “somewhat disagree”
- 2 = “don’t know” or empty
- 3 = “somewhat agree”

- 4 = “completely agree”

We should increase the health care user fees in my municipality. (Redistribution index)

It is nowadays too easy to be admitted to social welfare.²⁹ (Redistribution index)

We should raise the property tax rate in my municipality. (Redistribution index)

The municipal user fees should be made more progressive in income. (Redistribution index)

If one of the parents is at home, we should limit the right of the family to have their child placed in daycare.

The old should have a universal right to a retirement home similar to one enjoyed now by children with respect to day care.

Privatisation of municipal health care would increase efficiency and lower the costs.

My municipality should receive refugees.

Too little attention has been paid to marginalization of the children and the youth of my municipality.

Recycling should be possible in the public trash cans in my municipality.

My municipality should spend more money in the road maintenance.

We should compromise on environmental protection if employment can be thus increased.

If my municipality were to merge with another municipality in the near future, a consultative referendum should be held on the merger decision.

The voting age limit in the municipal elections should be decreased to 16 years [from 18 years].

Members of Parliament should not run in the municipal elections.

The five-year long dismissal period for the municipal employees in conjunction with a municipality merger is too long.

Municipal employees should not be nominated as municipal board members.

Which of the following options should be mainly used in order to balance the municipal budget in your municipality? Choose two from the following options:

- Increasing existing user fees or introduction of new ones (Redistribution index)
- Raising taxes (Redistribution index)
- Issuing more municipal debt
- Selling off municipal property

²⁹While social welfare is regulated nationally, one of its important components is income support, access to which is determined by the case evaluation of municipal authorities. (Moisio et al. 2010). Moreover, a municipality may in practice complicate or facilitate information acquisition on social welfare.

- Developing the business in the municipality
- Cutting down services (Redistribution index)

Let's assume that your municipality is financially troubled. You must save and there is a trade-off between the services for the elderly and the children. What will you do?

- I cut from the services for the elderly.
- I cut from the services for the children.
- I try to cut even-handedly from both kinds of services.
- We should save but I still propose issuing more debt.

If your municipality were to get a large donation in order to improve the municipal services, which services should be mainly targeted? Choose two from the following options:

- Social services
- Day care
- Eldercare
- Schools
- Nursing staff salaries
- Health centres
- Special health care

Helsingin Sanomat voting advice application questions in 2017

All the questions have the following five-step scaling:

- 0 = "completely disagree"
- 1 = "somewhat disagree"
- 2 = "don't know"
- 3 = "somewhat agree"

- 4 = “completely agree”

In case it is necessary either to cut public services and welfare or to increase the tax rate, it is preferable to increase the tax rate. (Redistribution index)

The user fees for public health care should be completely abolished. (Redistribution index)

A user fee should be charged for the library loans in order to strengthen the municipal finances. (Redistribution index)

There should be free public transport in my municipality even if it would increase the municipal tax rate. (Redistribution index)

The user fees for childcare should be more progressive in parental income than nowadays. (Redistribution index)

The present level of public services and welfare are in the longer run unsustainable for the public sector. (Redistribution index)

It is better for the municipality to increase its tax rate than to cut its services. (Redistribution index)

The public services provide in the residential areas mainly inhabited by the rich do not need to be as good as in ones inhabited by the poor. (Redistribution index)

Large disparities in the income are acceptable in order to reward the differences in the ability and industriousness. (Redistribution index)

Higher income inequality is harmful for the society. (Redistribution index)

Euthanasia should be allowed.

I would prefer that the health care services in my region be provided by the public sector, not by the private sector.

Homosexual and lesbian couples must have the same rights to marriage and adoption as the heterosexual couples do.

Old boy networks steer the municipal decision-making.

If the health issues of a citizen can be considered to be due to his or her own life style, he or she should contribute to the health care costs.

If the state offers to set up an asylum centre in the municipality, the offer should be accepted.

Public services should be outsourced to the private companies more than now.

Public services should be increasingly outsourced to the private companies.

All the decision-making should take into account the environmental impacts and, if necessary, give up environmentally harmful projects.

My municipality should be incorporated to a larger municipality or other municipalities should be incorporated to mine.

There should be more vegetarian food and less meat at schools.

There should be a law forbidding begging at the streets.

Public libraries should focus on books and not further extend their activities to loaning out items or other novel activities.

The whole Finland should be kept inhabited even if it would be costly for the taxpayers.

My municipality should actively receive the asylum seekers who have received a positive asylum decision.

Schools treat pupils too softly.

More stringent discipline would make the schools better.

There should be joint physical education classes for girls and boys.

There should be school tracking by the ability of the pupils. There is scope for savings in the cultural services (museums, theatres, orchestras).

It is more important to facilitate private transport rather than public transport in my municipality.

When it comes to zoning, municipal residents should have weaker rights of appeal.

The present network of schools in my municipality must remain intact even if it would increase the municipal costs.

My municipality should abandon the policy of requiring parking slots to be built next to new residential buildings.

My municipality should make compulsory purchases of private plots more boldly in order to facilitate zoning.

My municipality should support children's home care by additional financial means.

My municipality should help people even if they reside in Finland illegally.

My municipality must guarantee a full-time day care slot to all the children younger than three years even if one of their parents is not employed.

There should be gender quotas for the municipal jobs.

There should be a cap for the share of the children with an immigrant background in a class.

Multiculturalism is good for the municipality.

Pupils should leave their phones outside the classroom during the class.

Traditional values – such as family, religion and patriotism – are a good basis for the political values.

Cycleways and pavements should be cleaned from snow and be sprinkled grit on before the streets.

The municipal tax base should also include the capital income, not just the earned income.

Helping Finns should be prioritised to helping foreigners.

Economic growth and job creation should be prioritised above the protection environmental protection when there is a conflict between these.

The right of the parents to choose a school for their children should be restricted.

EVA survey questions

Redistribution-related questions

Even though it's costly to maintain generous social welfare and public services, the Finnish welfare state is worth it. (In 2013, 2014, 2015, 2016, and 2018)

Generous benefits make people lazy and make them lack initiative. (In 2014, 2017, and 2018)

If the taxes were cut, I'd be willing to give up some public services. (In 2015 and 2017)

Finland should participate more in international tax competition and substantially decrease wage, corporate and capital taxes. (In 2013 and 2015)

Immigration- or nationalism-related questions

Increasing immigration provides Finland with useful international influences. (In 2013, 2014, 2016, and 2018)

The immigration policy should become more lax in order to counteract the ageing and eventual reduction of the population. (In 2013, 2014, 2015, 2016, 2017, and 2018)

The cautious attitude of Finns towards foreigners is due to sensible prudence, instead of ignorance or racism. (In 2013, 2016, and 2018)

It's a privilege to be Finnish. (In 2013, 2014, and 2016).

We must not reduce the benefits enjoyed by the asylum seekers who got a residence permit because they are equal to any other Finnish resident. (In 2016)

Refugees get more generous benefits than Finns. (In 2018)

Immigrants want just to benefit from our standard of living and welfare state. (In 2018)

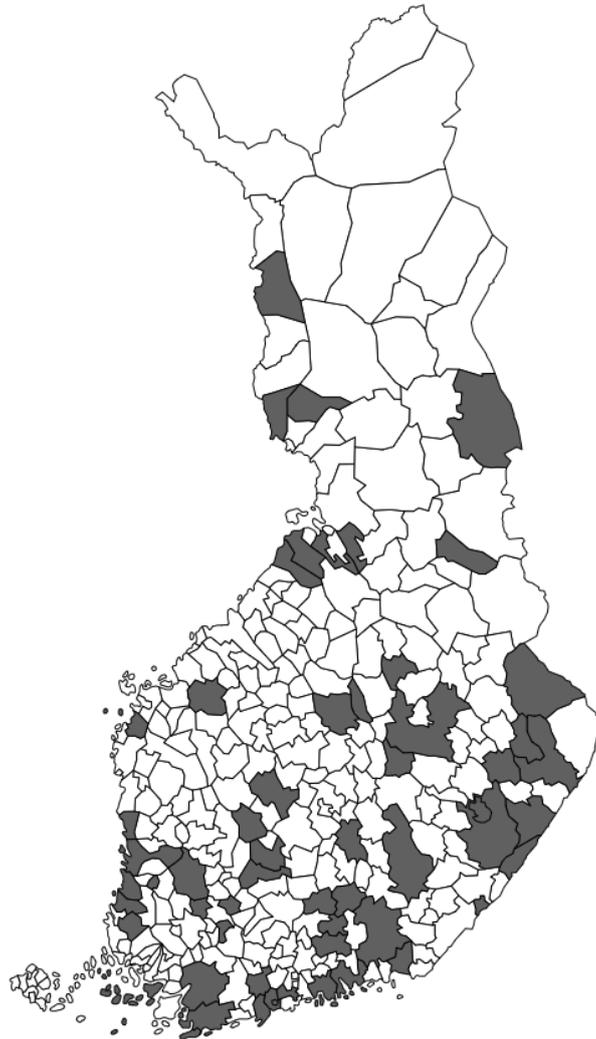
Inequality-related questions

Income differentials are risky because becoming richer is a zero-sum game and someone else loses. (In 2014 and 2017)

Inequality has become too large in our country. (In 2014, 2015, 2016, 2017, and 2018)

It's acceptable that high performers are paid substantially more than others even if it would increase income inequality. (In 2015, 2016, 2017, and 2018).

Figure A.1: Treated municipalities



Notes: A new asylum centre was established in these municipalities during the autumn 2015 while there was no prior functioning asylum centre.

Figure A.2: Distribution of the redistribution index

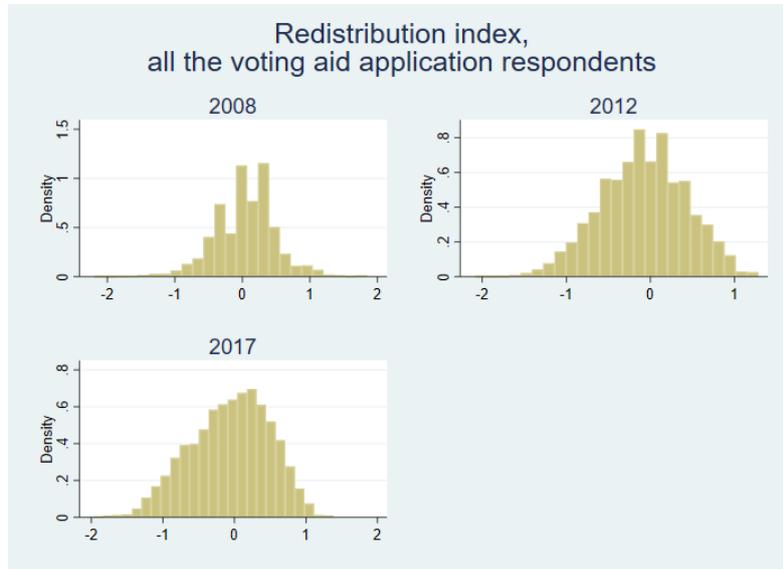


Figure A.3: Distribution of populations and population densities of municipalities

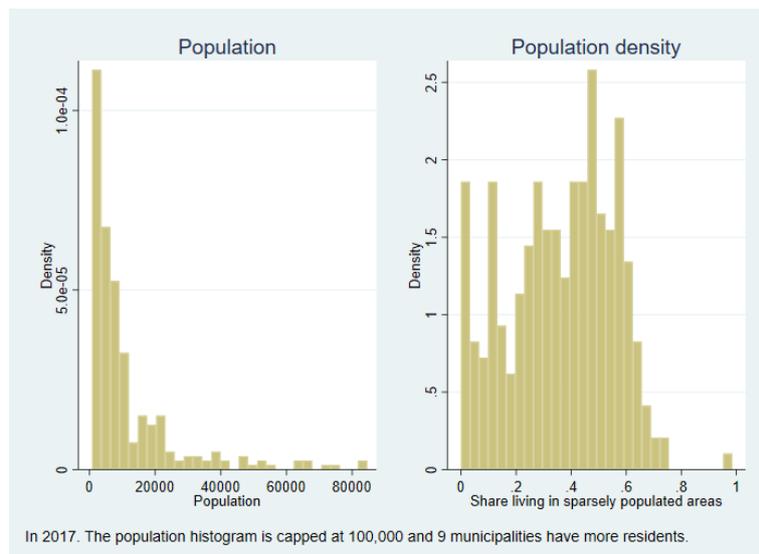


Figure A.4: Age profile of voter survey respondents

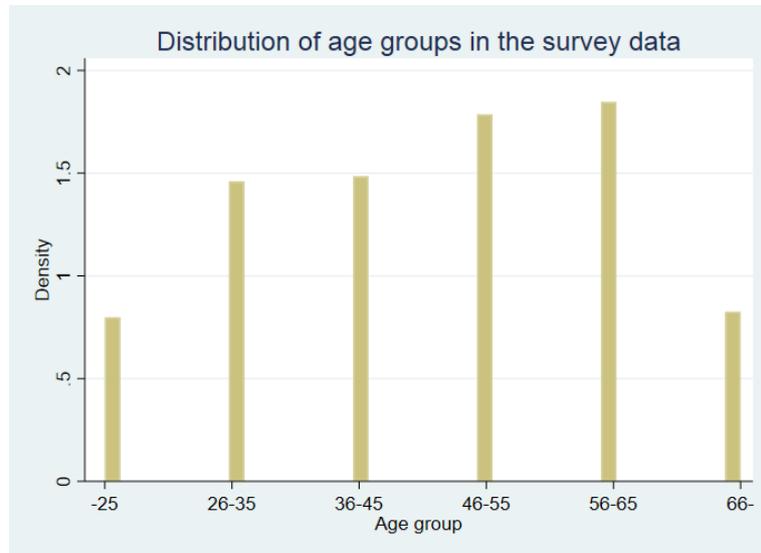
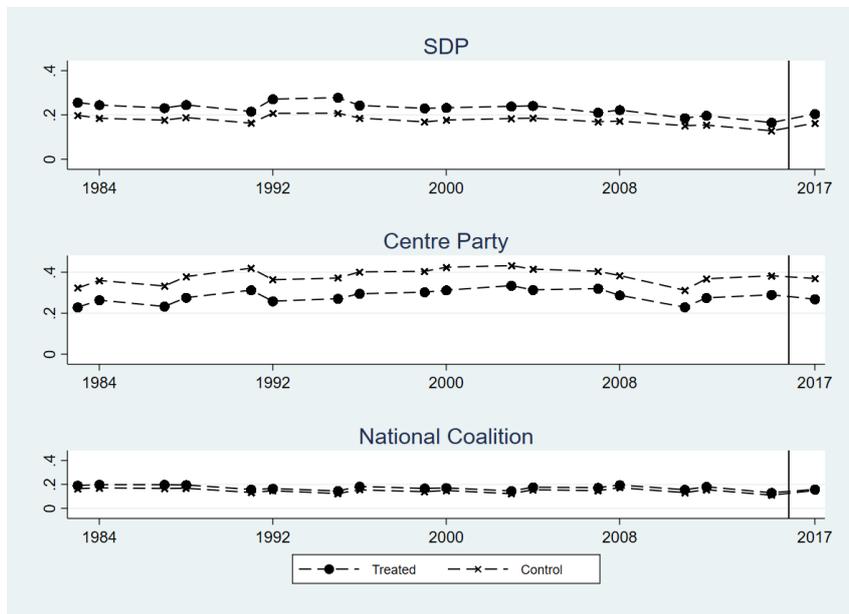
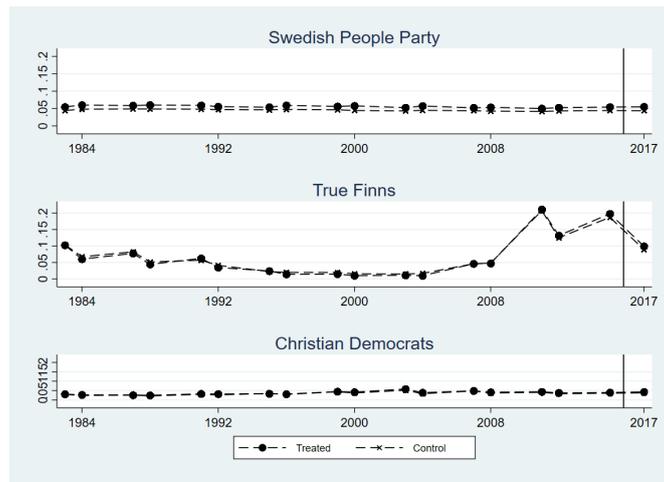


Figure A.5: Pre-trends of the vote shares of three largest parties by municipality



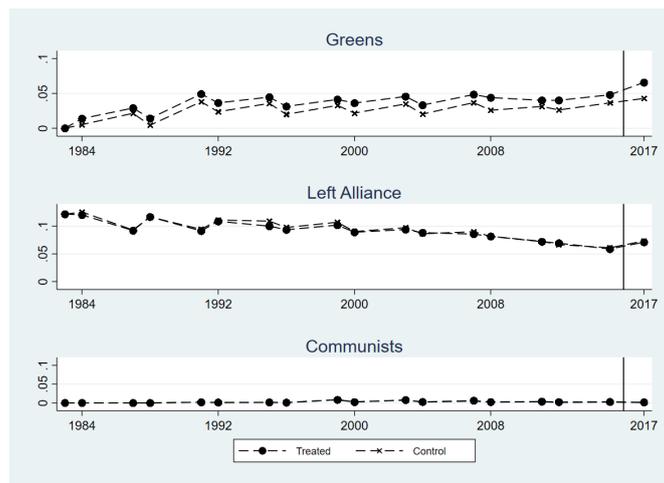
Notes: Both municipal and parliamentary elections. The Centre Party and the National Coalition are economic right-wing parties while the Social Democrats is an economic left-wing party.

Figure A.6: Pre-trends of the vote shares of the smaller right-wing parties by municipality



Notes: Both municipal and parliamentary elections.

Figure A.7: Pre-trends of the vote shares of the smaller left-wing parties by municipality



Notes: Both municipal and parliamentary elections. The vote shares of three Communist parties have been summed up.

Table A.1: Descriptive statistics on the candidates by whether they used voting advice application

Year	2008		2012		2017	
Voting advice respondent	Yes	No	Yes	No	Yes	No
Right-wing	0.56 (0.50)	0.52 (0.50)	0.57 (0.49)	0.56 (0.50)	0.50 (0.50)	0.57 (0.49)
True Finn	0.03 (0.17)	0.07 (0.25)	0.10 (0.30)	0.14 (0.35)	0.09 (0.29)	0.12 (0.33)
Female	0.43 (0.50)	0.37 (0.48)	0.41 (0.49)	0.36 (0.48)	0.43 (0.50)	0.38 (0.49)
Age	45.36 (12.79)	50.30 (13.25)	46.39 (13.27)	51.65 (13.75)	45.19 (13.25)	51.87 (13.87)
Was previously councillor	0.24 (0.43)	0.19 (0.39)	0.22 (0.41)	0.17 (0.38)	0.18 (0.39)	0.21 (0.40)
Is elected as councillor	0.33 (0.47)	0.21 (0.41)	0.31 (0.46)	0.20 (0.40)	0.29 (0.45)	0.26 (0.44)
Vote share in the elections (%)	0.92 (1.20)	0.79 (1.08)	0.83 (1.14)	0.75 (1.09)	0.75 (1.14)	0.95 (1.30)
Observations	20,114	18,308	20,735	16,348	11,834	21,754

Notes: “Right-wing” refers to the National Coalition, the Swedish People’s Party, the Center Party and the True Finns. “Was previously councillor” refers to the politicians who had been elected as councillors in the previous elections.

Table A.2: Descriptive statistics on the voting advice application respondents by year

Year	2017	2012	Difference	P-value
Right-wing	0.50 (0.49)	0.57 (0.50)	0.08	0.01
True Finn	0.09 (0.29)	0.10 (0.30)	0.01	0.50
Female	0.43 (0.50)	0.41 (0.49)	-0.03	0.00
Age	45.19 (13.25)	46.39 (13.27)	1.20	0.01
Was previously councillor	0.18 (0.39)	0.22 (0.41)	0.03	0.09
Is elected	0.29 (0.45)	0.31 (0.46)	0.02	0.52
Vote share in the elections (%)	0.75 (1.14)	0.83 (1.14)	0.08	0.63
Redistribution index	-0.06 (0.52)	-0.06 (0.55)	0.00	0.97
“Municipality should receive refugees”	2.36 (1.32)	2.52 (1.27)	0.16	0.11
“No help to illegal immigrants”	1.83 (1.43)			
“Yes to municipality -run asylum centre”	2.55 (1.36)			
“Prioritise helping Finns”	2.02 (1.40)			
“Multiculturalism good”	3.09 (1.09)			
Observations	11,825	20,729		

Notes: “Right-wing” refers to the National Coalition, the Swedish People’s Party, the Center Party and the True Finns. “Was previously councillor” refers to the politicians who had been elected as councillors in the previous elections. The redistribution index is described in detail in **3.1 Redistribution index**. The scale for individual voting advice application questions is “Strongly agree” = 4; “Somewhat agree” = 3; “Don’t know” = 2; “Somewhat disagree” = 1; “Strongly disagree” = 0.

Table A.3: Descriptive statistics on background of voter survey respondents and on redistribution-related voter survey questions

Lives in a treated municipality	0.39 (0.49)
Right-wing	0.38 (0.49)
Left-wing	0.32 (0.47)
Female	0.48 (0.50)
University degree	0.25 (0.43)
Public sector employee	0.38 (0.49)
“Even if costly, Finnish welfare state is worth it.”	2.96 (1.01)
“Generous benefits make people lazy.”	1.96 (1.30)
“If the taxes were cut, I’d be willing to give up some public services.”	2.05 (1.19)

Notes: “Right-wing” refers to the National Coalition, the Swedish People’s Party, the Center Party and the True Finns. “Left-wing” refers to the Social Democrats, the Left Alliance and the Greens. The scale for survey questions is “Strongly agree” = 4; “Somewhat agree” = 3; “Don’t know” = 2; “Somewhat disagree” = 1; “Strongly disagree” = 0. Surveys are conducted in the beginning of each year except there were two rounds in 2018, in the beginning of the year and the autumn. The second round of 2018 does not contain the gender variable. “Even though it’s costly to maintain generous social welfare and public services, the Finnish welfare state is worth it.”: 2013, 2014, 2015, 2016, 2018. “Generous benefits make people lazy and make them lack initiative.”: 2014, 2017, 2018. “Finland should participate more in international tax competition and substantially decrease wage, corporate and capital taxes.”: 2013, 2015. “If the taxes were cut, I’d be willing to give up some public services.”: 2015, 2017.

Table A.4: Descriptive statistics on immigration- and inequality-related voter survey questions

“More lax immigration policy”	1.78 (1.19)
“Immigration and useful international influences.”	2.04 (1.21)
“Cautious attitude sensible”	2.22 (1.34)
“It’s a privilege to be Finnish.”	2.98 (0.98)
“Must not cut benefits for refugees”	2.15 (1.37)
“Refugees get more generous benefits”	2.12 (1.41)
“Immigrants seek benefits”	2.35 (1.25)
“Income differentials risky”	2.04 (1.26)
“Finland too unequal”	2.78 (1.18)
“Acceptable to pay high performers more”	2.43 (1.19)

Notes: The scale for survey questions is “Strongly agree” = 4; “Somewhat agree” = 3; “Don’t know” = 2; “Somewhat disagree” = 1; “Strongly disagree” = 0. Surveys are conducted in the beginning of each year except there were two rounds in 2018, in the beginning of the year and the autumn. “Increasing immigration provides Finland with useful international influences.”: 2013, 2014, 2016, 2018. “The immigration policy should become more lax in order to counteract the ageing and eventual reduction of the population.”: 2013, 2014, 2015, 2016, 2017, 2018. “The cautious attitude of Finns towards foreigners is due to sensible prudence, instead of ignorance or racism.”: 2013, 2016, 2018. “It’s a privilege to be Finnish.”: 2013, 2014, 2016. “We must not reduce the benefits enjoyed by the asylum seekers who got a residence permit because they are equal to any other Finnish resident.”: 2016. “Refugees get more generous benefits than Finns.”: 2018. “Immigrants want just to benefit from our standard of living and welfare state.”: 2018. “Income differentials are risky because becoming richer is a zero-sum game and someone else loses.”: 2014, 2017. “Inequality has become too large in our country.”: 2014, 2015, 2016, 2017, 2018. “It’s acceptable that high performers are paid substantially more than others even if it would increase income inequality.”: 2015, 2016, 2017, 2018.

Table A.5: Correlates of the overall redistribution index

Dependent variable	Redistribution index
Female	0.059*** (0.004)
Age	0.000 (0.000)
Right-wing	-0.461*** (0.015)
R-squared	0.217
Observations	52,657

Notes: “Right-wing” refers to the National Coalition, the Swedish People’s Party, the Center Party and the True Finns. The regression controls for the year effects. Standard errors are clustered at the municipality level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A.6: Impact of asylum centres on voters’ inequality-related opinions

	(1)	(2)	(3)
Dependent variable	Inequality risky	Too inequal	Top wages
Asylum centre autumn 2015	-0.067 (0.073)	-0.082 (0.061)	0.005 (0.076)
Control variables			
R-squared	0.020	0.001	0.005
Observations	4,092	10,255	8,203
Asylum centre autumn 2015	-0.068 (0.074)	-0.069 (0.054)	-0.008 (0.074)
Control variables	X	X	X
R-squared	0.107	0.131	0.103
Observations	4,092	10,255	8,203

Note: The dependent variable is the survey respondent response to the following statements so that a higher number indicates a stronger agreement. “Inequality risky” = “Income differentials are risky because becoming richer is a zero-sum game and someone else loses.” (2014, 2017), “Too inequal” = “Inequality has become too large in our country.” (2014, 2015, 2016, 2017, 2018), “Top wages” = “It’s acceptable that high performers are paid substantially more than others even if it would increase income inequality.” (2015, 2016, 2017, 2018). The scale for survey questions is “Strongly agree” = 4; “Somewhat agree” = 3; “Don’t know” = 2; “Somewhat disagree” = 1; “Strongly disagree” = 0. Surveys are conducted in the beginning of each year except there were two rounds in 2018, in the beginning of the year and the autumn. The control variables are gender, age group, supporting a right-wing party and being a university graduate or a public employee. Standard errors are clustered at the municipality level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A.7: Impact of asylum centres on voters' immigration-related opinions

	(1)	(2)	(3)	(4)
Dependent variable	Ageing society	Useful influences	Prudent	Privilege
Asylum centre autumn 2015	0.081* (0.042)	0.055 (0.053)	0.005 (0.077)	0.065 (0.047)
Control variables				
R-squared	0.001	0.004	0.013	0.003
Observations	12,214	8,118	6,066	6,109
Asylum centre autumn 2015	0.036 (0.044)	0.020 (0.066)	0.064 (0.086)	0.050 (0.048)
Control variables	X	X	X	X
R-squared	0.053	0.082	0.102	0.025
Observations	10,205	6,109	4,057	6,109

Note: The dependent variable is the survey respondent response to the following statements so that a higher number indicates a stronger agreement. "Ageing society" = "The immigration policy should become more lax in order to counteract the ageing and eventual reduction of the population." (2013, 2014, 2015, 2016, 2017, 2018), "Useful influences" = "Increasing immigration provides Finland with useful international influences." (2013, 2014, 2016, 2018), "Prudent" = "The cautious attitude of Finns towards foreigners is due to sensible prudence, instead of ignorance or racism." (2013, 2016, 2018), "Privilege" = "It's a privilege to be Finnish." (2013, 2014, 2016). The scale for survey questions is "Strongly agree" = 4; "Somewhat agree" = 3; "Don't know" = 2; "Somewhat disagree" = 1; "Strongly disagree" = 0. Surveys are conducted in the beginning of each year except there were two rounds in 2018, in the beginning of the year and the autumn. The control variables are gender, age group, supporting a right-wing party and being a university graduate or a public employee. The second round of 2018 does not contain the gender variable. Standard errors are clustered at the municipality level. *** p<0.01, ** p<0.05, * p<0.1