

DISCUSSION PAPER SERIES

IZA DP No. 14159

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ABSTRACT

The Consequences of Hosting Asylum Seekers for Citizens' Policy Preferences*

Asylum migration is a major societal challenge in the Western world affecting residents' policy preferences. We analyze the effects of newly hosting asylum seekers in a given municipality on local citizens' preferences in terms of migratory and redistributive policies as well as of support or opposition to political change in general. Policy preferences are measured based on citizens' actual voting behavior in national referendums in Switzerland between 1987 and 2017. We exploit the administrative placement of asylum seekers across municipalities and find that citizens vote temporarily slightly more restrictively on immigration issues in national referendums and are less supportive of redistribution than before hosting asylum seekers. Citizens are not more likely to vote for the status quo and not more likely to participate per se.

JEL Classification: F22, H53, I38, J15, Z13

Keywords: asylum seekers, direct democracy, political preferences, pro-immigration attitudes, redistribution, status quo effect, voter participation

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1 Introduction

People migrating to the Western world from countries where they have few economic and political perspectives presents a major societal challenge.¹ Citizens of the receiving countries react to their new fellow residents with a mixture of feelings including compassion, insecurity and angst. And governments struggle to find arrangements to cope with people asking for asylum.² How much this development will transform Western societies is a subject of controversy itself. Asylum migration is often seen as an important driver of new nationalist and populist movements. This is reflected in a growing body of research studying the link between asylum immigration and voters' support of right-wing parties.³ However, whether and how citizens' *specific* policy preferences shift in response to exposure to asylum seekers is still not well understood.

In this paper, we analyze the consequences of hosting asylum seekers⁴ on local voters' policy preferences in a given municipality. In particular, we focus on preferences regarding migratory and redistributive policies as well as on support for or opposition to political change in general. In this, policy preferences are measured on the basis of citizens' actual voting behavior in national referendums in Switzerland between 1987 and 2017. The underlying hypothesis is that immigration is affecting the "demand" for public policy. While there are

¹These challenges are widely discussed in research literature across the social sciences (see, e.g., Borjas 2016, Collier 2013, Hatton 2017; 2020 or Joppke 1998).

²A fair process for granting asylum is only one of numerous aspects involved in the difficult decisions concerning these people's right to stay and the measures to be undertaken to integrate accepted refugees economically, socially, and politically into their host countries. Recent research studies have dealt with, for example, various labor market policies (Brell et al. 2020, Fasani et al. 2020, Marbach et al. 2018 and Slotwinski et al. 2019), housing policies (Martén et al. 2019, Schüller 2016), or non-citizen voting rights (Slotwinski et al. 2020).

³While Dinas et al. (2019) and Gessler et al. (2019) find that people who experience an exceptionally high exposure to refugees, as in some parts of Greece and Hungary are much more likely to support extreme-right-parties, studies in contexts involving fewer refugees report heterogeneous findings: Dustmann et al. (2019) discover a positive effect on right-leaning parties in rural, yet a negative effect in the most urban municipalities in Denmark; Steinmayr (2020) distinguishes between mere exposure, which has led to an increase in the vote share of far-right parties in Upper Austria, and sustained contact, which has resulted in a corresponding decrease; and Schneider-Strawczynski (2020) and Vertier and Viskanac (2020) provide suggestive evidence that anti-immigrant sentiments in France are lower when the inflow is small-scaled, but stronger when exposure is more disruptive.

⁴Our use of the term *asylum seeker* encompasses persons in the process of applying for asylum as well as individuals who have been rejected for asylum, yet have obtained a temporary residence permit. Fully recognized refugees are not the subject of our analysis (see detailed explanations in Sections 3.2 and 4.2).

potentially many reasons for such a link, we are particularly interested in the aspect of a cultural threat (or a rather unspecific fear of what is foreign). This aspect seems especially relevant for the type of immigration that is not driven by a labor shortage in the host country but by push factors in the country of origin. Specifically, we want to study whether citizens who are newly exposed to asylum seekers in their municipality become less open to immigration and immigrants, less likely to support redistribution, and maintain a stronger preference for the political status quo than previously. In a complementary analysis, we also check whether there are mobilization effects in terms of turnout. This is relevant for the interpretation of the effects on aggregate voting behavior.

In our empirical strategy we exploit the placement of asylum seekers across municipalities. Importantly, the municipality of residence is not chosen by the asylum seekers but is assigned by the cantonal authorities. Across cantons the allocation of asylum seekers is close to random and every canton hosts asylum seekers in proportion to its population size.⁵ Accordingly, many municipalities receive and host asylum seekers over time. We focus on the consequences of intensified asylum immigration to Switzerland starting from the mid-1990s and define our treatment as the new exposure to a group of asylum seekers (on average, 3.2 individuals) in a given municipality. The municipalities that are treated during our observation period are relatively small, with, on average, 862 residents. This treatment intensity is fairly representative for the exposure to asylum seekers of many people in Europe. However, it is far from the confrontation with migrants reported for some hot spots in the news.⁶ Moreover, the treatment continues for quite some time, as the asylum process takes, on average, more than a year (and subsequently provisionally admitted foreigners must stay in the assigned municipality at least as long as they have no job). Finally, there is some heterogeneity in the treatment, for example, with regard to the degree of asylum seekers' foreignness based on their origin (Africa/Asia versus Europe or in terms of language proximity), as well as other dimensions.

⁵Asylum seekers are only allowed to change their place of residence once they are granted refugee status.

⁶An example of the latter might be the many refugees landing on the small Greek islands next to Turkey. Hangartner et al. (2019) show that this experience has clearly affected citizens' policy preferences in Greece.

We define the sample for the empirical analysis based on a matching strategy and the requirements of an event study design (an approach that is similar to that by Gathmann et al. 2020). We begin by matching the newly treated municipalities with untreated ones, relying on propensity score matching with replacement, and subsequently estimate the effect of the exposure on policy preferences within an event study design for which we group the data into two-year periods around an announcement and initial placement period and use binning at the endpoints. Regarding the measurement of policy preferences, we consider from the universe of popular votes at the federal level between 1987 and 2017 those that are categorized as related to immigration (25 votes) or redistribution (40 votes) and validate their common policy domain with a principal component analysis. A preference for change and against the status quo is measured in terms of the fraction of people voting “yes” in 275 popular votes (as initiatives as well as referendums are always set up so that people express support for the new by voting “yes”).

The estimation results indicate a series of systematic patterns. First, citizens who have newly experienced the hosting of asylum seekers in their municipality of residence tend to vote temporarily slightly more restrictively in national referendums on immigration issues than before the hosting. The most pronounced negative effect is estimated for the two years following the initial hosting with a drop in support for an open immigration policy of around 1.7 percentage points ($p = 0.005$) with a mean level of support in the sample of 47.7%. This drop seems driven by placements during the beginning of our sample period and votes related to asylum issues. There is no clear evidence for a persistent negative long-term effect on policy preferences in this domain. While the effect seems more pronounced for culturally (and linguistically) more distant asylum seekers from Africa and Asia than those from Europe, the wide confidence bounds do not allow us to draw strong conclusions about clear patterns of heterogeneity in terms of foreignness. If we differentiate between groups of asylum seekers with lower and higher application acceptance rates, there is suggestive evidence that hosting asylum seekers who have a lower probability of being granted asylum leads to a more pronounced negative effect on voting pro foreigners, in particular regarding potential longer-term effects.

Second, citizens who newly experience the hosting of asylum seekers in their municipality of residence show less voting support for redistribution. The effect is relatively small and amounts to -1.1 percentage points ($p = 0.009$) in the first and second year after the placement of asylum seekers and -1.0 percentage points ($p = 0.032$) in the third and fourth year at a mean level of support in the sample of 44.1%. There is no clear pattern indicating that the effect would be more pronounced in reaction to culturally more distant asylum seekers. However, there is some suggestive evidence that the negative effect on voting pro redistribution is driven by asylum seekers whose chances of being granted asylum are of lower probability. Finally, asylum seekers whose labor force participation rate is comparatively higher seem to provoke less of a reaction in the intermediate term, although statistically it is not possible to reject the hypothesis that the point estimates are the same as for asylum seekers with a comparatively lower participation rate.

Third, citizens are not more likely to vote for the status quo, i.e. there is no effect in terms of a stronger reluctance to change independent of the concrete policy context.

Fourth, citizens who newly experience the hosting of asylum seekers in their municipality of residence are, on average, not more likely to vote. This corroborates an interpretation of the above results in terms of a change in policy preferences rather than differential mobilization. However, as we are analyzing aggregate data, we cannot rule out that there is a change in the composition of the active electorate.

In Section 2, we put our contribution in perspective and present the underlying theoretical arguments as well as the related empirical evidence. Section 3 provides background information on the migration context and the institutional environment in Switzerland. Section 4 describes our data sources, and Section 5 sets up our empirical strategy. Section 6 presents the main empirical findings for the overall effects, the heterogeneity analyses and the robustness tests. Section 7 offers some concluding remarks.

2 Theoretical Background and Previous Evidence

Our study rests upon a large body of related research on the effects of immigration on host societies. The potential reactions of the resident population are manifold and reflect various

sociopsychological and economic forces (see, e.g., Hainmueller and Hopkins 2014 or Elsner and Concannon 2020 for reviews). We first mention the theoretical ideas and the evidence related to the reactions to immigrants in general and then focus on asylum seekers (being aware that a distinction is often difficult).

2.1 Consequences of immigration on policy preferences

At the risk of oversimplification, theories about how the experience of immigration affects policy preferences can be broadly classified into two groups. On the one hand, there are approaches explaining why immigration increases reservations regarding foreigners and reduces (economic) solidarity; for example, the Group Conflict Theory (see, e.g., Blumer 1958 or Blalock 1967) or the theory of In-Group Bias (see, e.g., Tajfel 1970 or Brewer 1979). Regarding the former, the larger the size of an out-group, the more the corresponding in-group perceives it to threaten its own interests, resulting in the in-group members having more negative attitudes toward the out-group. In economics, the focus is on reservations that arise due to residents' concerns about wage pressure, a higher risk of unemployment or price increases for particularly scarce goods and services like housing. Regarding the latter theory, biases in favor of members of one's own group are the product of intergroup competition, serving the dual functions of preserving in-group solidarity and justifying exploitation of out-groups. One specific aspect is emphasized in the so-called fiscal threat hypothesis (see, e.g., Hanson et al. 2007 or Facchini and Mayda 2009), in which residents, especially the more skilled, worry about immigrants being a burden on the welfare system and therefore support a liberal immigration system less.

On the other hand, there are theories that predict positive effects for inter-ethnic contact on attitudes towards ethnic minorities. Most prominently among these approaches is the intergroup contact hypothesis by Allport (1954). Intergroup contact is posited to lead to reduced prejudice in the presence of equal group status, common goals, intergroup co-operation and support of authorities, law, or custom.

Many empirical analyses consider these theories together when trying to understand the relationship between the stock or inflow of immigrants and some indicator of reservations

towards them. Any net effect is usually interpreted as either favoring some conflict/in-group theory or the contact theory. While research in social psychology often explores people’s reported attitudes towards immigrants⁷, applied research in political science and economics focuses on reported policy preferences as well as on stated and actual party support in elections.⁸ In doing so, eliciting attitudes towards foreigners from surveys creates the additional challenge that respondents might be reluctant to truly report their political stance. A recent contribution by Funk (2016) provides corresponding evidence that preferences for immigration are especially prone to survey bias. One of the few exceptions of studies that investigate people’s directly revealed policy preferences in popular votes is Brunner and Kuhn (2018). Relying on an instrumental variable approach, they find that citizens vote more restrictively towards immigrants and immigration if more culturally different immigrants (from former Yugoslavia, Africa, Asia and South America) are present.

Regarding the drivers of reservations, economic factors are often contrasted with non-economic cultural or social factors like crime.⁹ Here it is important to consider the kind of immigration (Lee, 1966). Any expected economic effects of immigration, i.e. pressure on wages and higher unemployment strongly depend on whether the same number of immigrants have entered because they are pulled due to a labor shortage or because they are pushed by the adverse conditions in their country of origin. We focus on the latter kind and try to understand the consequences that arise due to variation in the inflow of asylum seekers.

⁷In their meta-analyses for the contact hypothesis, Paluck et al. (2018) and Pettigrew and Tropp (2006) conclude that contact ”typically reduces prejudice”. Yet they also caution that interventions directed at ethnic or racial prejudice generally generate rather small effects. Related work in the Swiss context shows that the net effect depends heavily on the cultural diversity of immigrants (Green et al. 2010).

⁸In many studies, and based on different identification strategies, labor immigration generally affects voting for right-wing parties positively (see, e.g., Mendez and Cutillas 2014 for Spain, Barone et al. 2016 for Italy, Halla et al. 2017 for Austria or Levi et al. 2019 for the UK). The general finding is qualified in Mayda et al. (2018) presenting contrasting effects for high- and low-skilled immigrants in the US, i.e., the former strengthen openness and the latter reduce it.

⁹Studies that put the two categories of forces in perspective include, for example, Card et al. (2012) and Müller and Tai (2020), who find that non-economic factors are more important than economic ones, or Böhm et al. (2018), who find the opposite.

2.2 Reactions to asylum seekers

Large scale survey research indicates that sociotropic evaluations of asylum seekers' economic contributions, humanitarian concerns about the accuracy of their claims, and a general reservation towards Muslims are important determinants of public preferences in many Western countries (Bansak et al., 2016). Differences in these preferences seem to arise partly because some natives overestimate the total number of immigrants and their cultural distance, yet underestimate their economic contribution (Alesina et al., 2018).

Field studies that explore how preferences for redistribution and political preferences in general shift with a greater presence or influx of asylum seekers often exploit placement programs. In an early contribution, Dahlberg et al. (2012) find negative effects of increased immigration on the support for redistribution, exploiting exogenous variation in the share of immigrants from a refugee placement program in Sweden during the years 1985-1994.¹⁰ Using a similar scheme in Denmark, yet focusing on party preferences in elections, Dustmann et al. (2019) identify a negative causal effect of the allocation of refugees between electoral cycles on the vote share of right-leaning parties in all but the most urban municipalities. Next to differences in age, gender and educational composition, they explain this urban-rural divide partly by residents in rural communities being involuntarily exposed to refugees in their immediate neighborhood, in contrast to urban citizens, who might have chosen to be in contact by selecting in a particular neighborhood or job.

In the Swiss context, two recent concurrent studies have also started to exploit the quasi-random placement of asylum seekers across cantons in order to explain policy preferences. At the cantonal level, Zurlinden et al. (2020) observe that the arrival of asylum seekers increases voters' alignment with policy recommendations from right-wing and conservative parties in referendums during the years 1995-2015. Exploiting intra-year variation in the number of asylum seekers a canton is allocated, they reveal that the shift in voters' policy orientation is mainly explained by episodes of unusually high inflows of asylum seekers.¹¹

¹⁰For a further discussion, see the comment by Nekby and Pettersson-Lidbom (2017) and the reply by Dahlberg et al. (2017).

¹¹When differentiating the policy topics of the 181 referendums, they surprisingly find that it is *not* the right-most party that benefits most from high asylum inflows with regard to recommendations on immigration and refugee laws, even though it pursued an active electoral strategy based on anti-immigration topics.

At the local level, Myohl and Stadelmann (2020) find that residents living within close proximity to an asylum center opened between the years 2011-2017 are more likely to relocate compared to those living further away. In line with their argument about increased anti-immigrant sentiments, the rise in the propensity to move away is higher across municipalities than across cantons, especially in municipalities in which many voters support parties oriented towards the right. Their heterogeneity analysis further reveals that the effect is mainly driven by highly educated individuals and renters, i.e., people who exhibit more flexibility to move (presumably due to their financial means).

Finally, there are potential effects on politics that are not related to shifts in specific preferences but rather to a more general stance towards change in institutions and policies and towards political engagement. Resistance to change has not so far been linked to exposure to refugees in the empirical literature. However, it has been linked to negative mood (i.e., feeling down in Meier et al. 2019) and overload in complex political decisions (Hessami and Resnjanskij, 2019), in both cases leading to behavior maintaining the status quo.

Regarding mobilization, Dustmann et al. (2019) provide evidence for increasing voter turnout in response to refugee allocation in municipality elections but not in national parliamentary elections. One reason for the differential response might be that anti-immigrant parties are more likely to stand in municipal elections where past refugee allocation was comparatively higher. Steinmayr (2020) finds no effect on voter participation in state elections of Upper Austrian municipalities hosting asylum seekers. Analyzing European elections between 2007 and 2016, Moriconi et al. (2018) find no impact on voter turnout in national parliamentary elections. In contrast, Barone et al. (2016) and Russo (2018) find a negative relationship between the immigrant share and voter turnout in Italy, attributing the negative impact to incensed center and left-wing voters, who opted to abstain rather than to vote for a right-wing party.

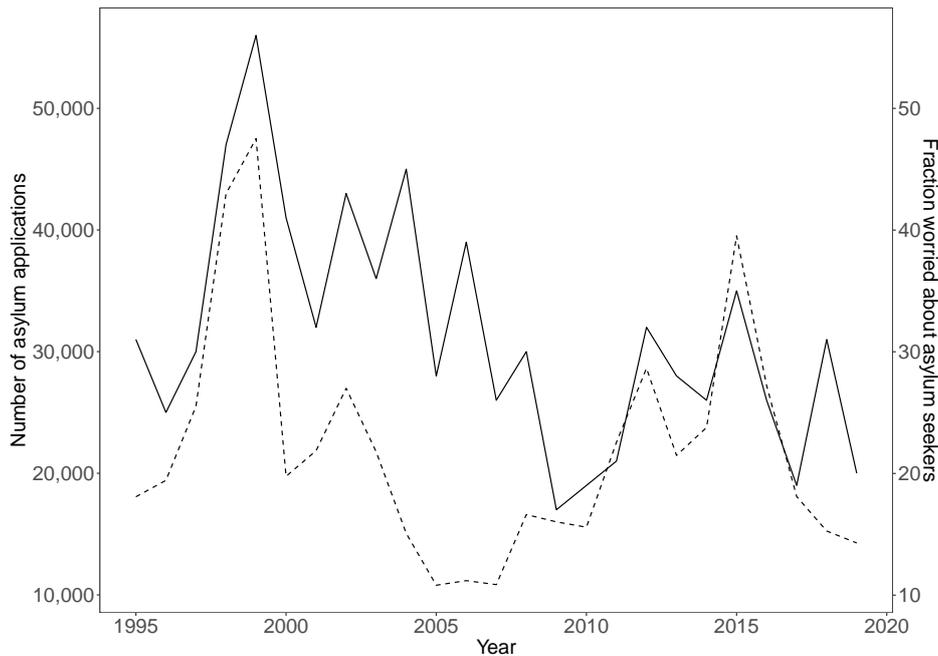
Instead, policy recommendations of the conservative center party and the right-leaning liberal party seem to be increasingly endorsed by the electorate. Only when other policy domains, such as reforms of the welfare state, international integration and the rights of minorities are analyzed, does the right-most party seem to benefit.

3 Migration Context and Institutional Setting

3.1 Labor and asylum migration to Switzerland

Switzerland has had long experience with immigration: Since the reversal of the migratory balance in the late 19th century, the number of foreigners coming to work in Switzerland has increased steadily and led to the introduction of the first federal law regarding the residence and settlement of foreigners in 1931. Long regarded as a stronghold of political freedom, Switzerland has been equally attractive for persons seeking refuge from persecution in Europe, yet a separate asylum law was not introduced until 1981. While asylum migration still accounts for only a minor share of total immigration today, its weight in public and political discourse matches if not surpasses that of work-related migration (D’Amato, 2008).

Figure 1: Asylum applications and reported worries about asylum immigration



Note: The graph shows the number of new applications for asylum (solid line) and the percentage of eligible voters mentioning asylum seekers as one of the five most pressing issues (dashed line).

Data sources: State Secretariat for Migration and gfs.bern (2019)

The high levels of immigration to Switzerland have also been reflected in its citizens’ reported worries. An annual survey among eligible voters in Switzerland has regularly ranked concerns about immigrants in general and asylum seekers in particular among the top five

of the most pressing issues in Swiss politics (gfs.bern, 2019). Figure 1 shows the proportion of respondents who consider asylum migration to be one of the top five problems in relation to the number of new asylum applicants over the years 1995 to 2019. Particularly at the end of the 1990s, when many individuals from the Balkans as well as from Sri Lanka applied for asylum¹², a large proportion of people were concerned. In 1999, 56% of respondents considered asylum migration a top five societal problem. The prominence of the issue in the political process is also reflected in the high number of related federal referendums and popular initiatives that have been brought to a vote over the last few decades: While there were only 10 votes in total on migration-related issues in the 120 years before 1980, Swiss citizens have had the opportunity to express their opinion about migration in national votes almost every year since.

3.2 Placement of asylum seekers

The law on foreigners in Switzerland (i.e., the Foreign Nationals and Integration Act, FNIA) as well as the asylum law (i.e., the Asylum Act, AsyLA) are federal laws and form the legal basis for the asylum process. This includes the reception and placement of asylum seekers in Switzerland. Upon arrival, persons seeking asylum are first accommodated in federal asylum centers run by the State Secretariat for Migration (SEM).¹³ In a preparatory phase, SEM staff carry out preliminary investigations and verify whether or not Switzerland is responsible for conducting the asylum procedure.¹⁴ If the initial criteria are met, the applicant gets status N, which allows her to stay in Switzerland until the final decision of the SEM is made. The procedure at the federal asylum center is limited to 140 days, after which the applicant is transferred to one of the 26 cantons. Assignment to a canton is undertaken at the federal level by staff of the SEM without interference from the cantons. The single

¹²Figure A.1 in the Appendix shows the main countries of origin of the people who applied for asylum between 1995 and 2017.

¹³As of 1st March 2019, the asylum procedure involves six asylum regions, with each region processing asylum requests.

¹⁴This might not be the case, for example, if a person has already filed an application for asylum in another member state of the Dublin agreement, in which case that country will be asked to carry out the asylum procedure.

relevant criterion is a canton's population size, proportional to which a canton is allocated new asylum seekers according to Art. 21 of Asylum Decree 1. Exceptions to this rule are rarely granted to individual asylum seekers¹⁵ and occur primarily if the initial assessment cannot be completed before assignment to a canton. In this latter case, asylum seekers are placed in a canton where the main language is the same as in the federal asylum center, so that the case documentation does not need to be translated. The allocation of asylum seekers to Swiss cantons can thus essentially be regarded as close to random.¹⁶ Figure 2 depicts the relationship between the average cantonal population and the average number of hosted asylum seekers with status N, i.e., people in the application process, and status F, i.e., foreigners who have been provisionally admitted, over the period 1995 to 2017 showing that the proportional assignment is working.

If the evaluation of an application ends in a positive decision, the applicant is given the refugee status permit B, which allows him or her to stay in Switzerland and move freely between cantons. If the application is rejected, the applicant has to leave the country. However, if removal is seen as inadmissible, unreasonable or impossible, the applicant will be given status F as a provisionally admitted foreigner.¹⁷ With status F, the person is allowed to stay in Switzerland, yet cannot move between cantons if she is receiving social benefits. Since the quota for the latter usually fluctuates around 90 per cent, people with status F can thus plausibly also be seen as being exogenously allocated to cantons.¹⁸ Taken together, persons with statuses N and F constitute the basic asylum population in Switzerland (and of our analysis as further discussed in Section 4).

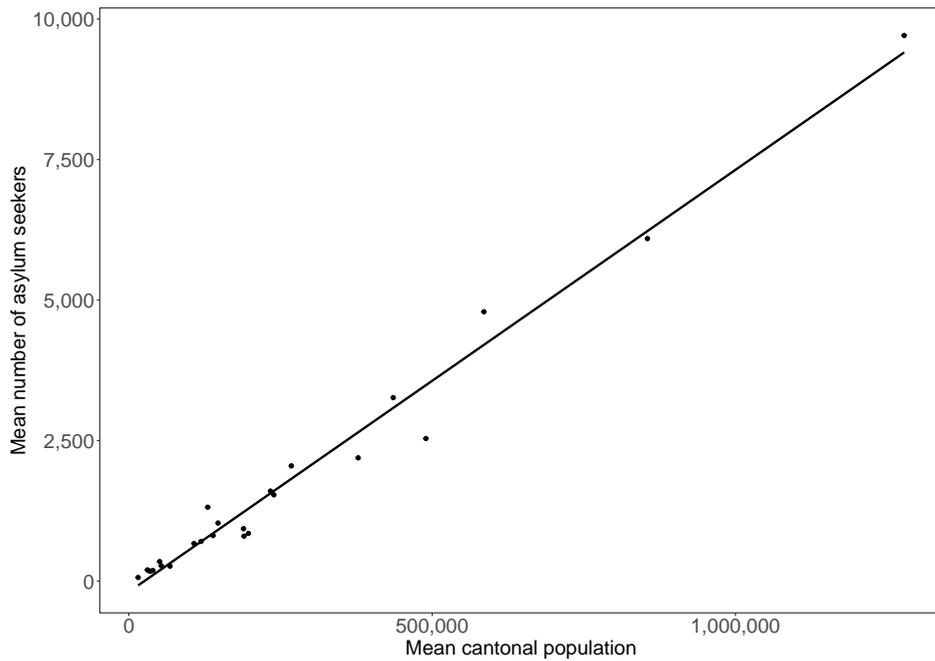
¹⁵A change of cantons is only possible if both cantons give their consent and if the applicant has a valid claim to be reunited with his close family or is in serious danger according to Art. 22 of Asylum Decree 1.

¹⁶A description of the quasi-random allocation of asylum seekers across cantons is provided, for example, in Couttenier et al. (2019) or Hangartner and Schmid (2020).

¹⁷A removal is inadmissible if it violates international law, unreasonable if the foreign person is considered vulnerable and impossible if enforcement is not possible.

¹⁸We are aware that within the group of foreigners with status F, there are about 10 per cent provisionally admitted refugees. They can freely choose their place of residence. Our administrative data do not allow us to separate them out.

Figure 2: Proportional placement policy: Cantonal population and the hosting of asylum seekers between 1995 and 2017



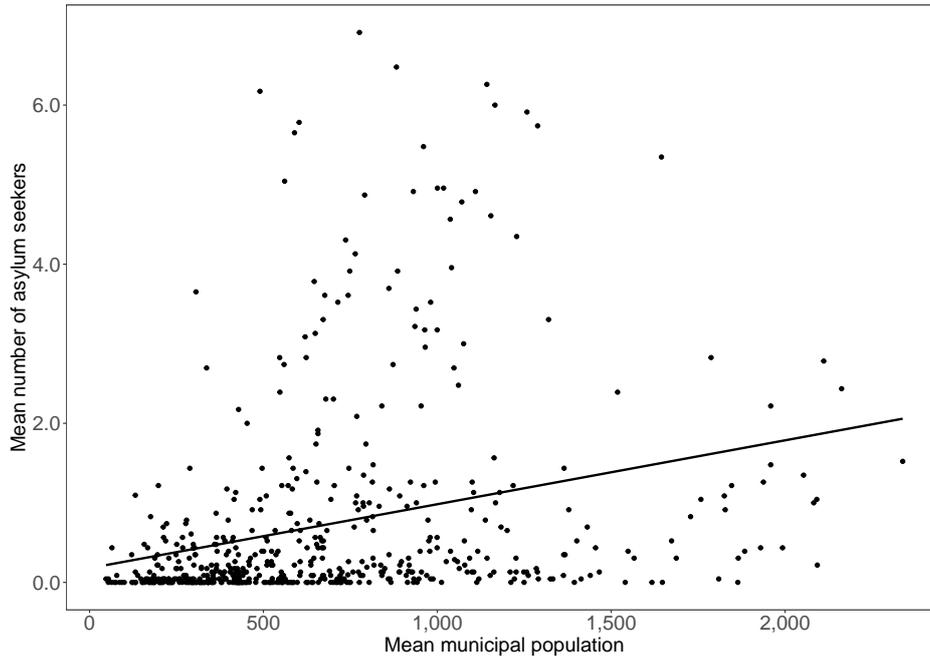
Note: The graph shows the mean cantonal population and the mean number of hosted asylum seekers (N and F) per year, both over the whole observation period 1995-2017.

Slope of the regression line: 0.0075.

Data sources: State Secretariat for Migration and Federal Statistical Office.

The cantonal authorities are then responsible for allocating asylum seekers within cantons. Due to the federal structure of the Swiss asylum system, cantonal asylum practices vary substantially (Belser, 2015), which also influences how asylum seekers are allocated across municipalities. Some cantons follow the national strategy more or less and pass on the responsibility for hosting asylum seekers to the municipalities in proportion to their population size (e.g., in the cantons of Aargau and Basel-Landschaft). The municipalities then have to provide accommodation for the asylum seekers that have been assigned to their municipality. Other cantons organize the accommodation centrally and host asylum seekers in rented apartments, houses and cantonal centers.

Figure 3: Discretionary placement policy: Municipal population and the hosting of asylum seekers between 1995 and 2017



Note: The graph shows the mean municipal population and the mean number of hosted asylum seekers (N and F) per year for the 131 non-treated and 421 newly treated municipalities over the whole observation period 1995-2017. For the sake of readability, only 99% of the mean municipal population and the mean number of asylum seekers are shown. Slope of the regression line: 0.0015.

Data sources: State Secretariat for Migration and Federal Statistical Office.

As Switzerland has many small municipalities, these cantonal allocation procedures mean that it is no longer the case that every municipality hosts asylum seekers; furthermore, those that host might only do so after some point in time. It is this variation between municipalities and over time that we exploit in our empirical analysis. Figure 3 shows for our set of municipalities introduced in the next section that there is substantial variation in the mean number of asylum seekers hosted across municipalities over the years 1995 to 2017. While the mean number is higher in relatively larger municipalities as indicated by the line reflecting the simple correlation, there are numerous municipalities that do not host any asylum seekers during our observation period. This holds in particular for municipalities with a population of less than 1,000 inhabitants. For these smaller municipalities some do not host asylum seekers – or only in recent years – probably because there has not been any need to do so or because suitable housing was not available. However, it was then during

the Yugoslav Wars that such a need arose and many municipalities newly (or again) hosted asylum seekers.

To the extent that no hosting or later hosting of asylum seekers reflects local opposition, our empirical strategy introduced below will capture lower bound effects of citizens' reactions to the exposure to asylum seekers in their municipality. However, when approximating local opposition by the share of right-wing parties in the 1995 national elections, municipalities that subsequently did *not* host asylum seekers exhibited no more opposition than municipalities that did, actually even a bit less (see Table D.1 in the Appendix). This is indicative of local opposition not constituting a force large enough to disrupt the allocation process of higher-level authorities - even before the share of right-wing parties is considered in the econometric matching procedure.

4 Data

4.1 Policy preferences

Policy preferences of citizens on the municipal level are captured based on their voting behavior in federal referendums and popular initiatives in Switzerland between 1987 and 2017. Data were obtained from the Federal Statistical Office (FSO). For the selection of migration-specific votes, we rely on the carefully selected and validated Dataset on Migration Referendums and Initiatives of Arrighi (2017). For our time period, this dataset involves 25 votes that are re-scaled so that a higher vote share reflects higher support for immigration or immigrants.¹⁹ The same approach is pursued for 40 votes reflecting preferences for redistribution. In Appendix B we provide a list for both sets of votes. For the measurement of voter turnout and the maintenance of the status quo, we consider all votes in the years 1987 to 2017. Support for the status quo can thus be simply measured by the share of "no" votes.

¹⁹We further rely on the sub-categories in Arrighi (2017) to distinguish between votes that specifically targeted asylum seekers and votes that refer to migrants in general.

As an additional validation check on whether the sets of votes capture a common underlying issue-specific policy preference, we conducted Principal Components Analyses (PCA) (see Appendix C). It shows that all the votes in the two respective datasets meaningfully load on the first principal component.

4.2 Asylum seekers

Data on asylum seekers for the period 1995-2017 is from the administrative registry PETRA (the aliens register until 2009) and its successor registry STATPOP (registry of all residents from 2010 onwards).²⁰ Specifically, we derive the number of asylum seekers in the admission process (with an N permit) and that for the provisionally admitted foreigners (with an F permit) in every municipality as of December 31st every year. The individual-level data contain various characteristics of the asylum seekers such as their gender, age and country of origin, which we will exploit in the heterogeneity analyses (see also Appendix A). Information on acceptance rates and labor force participation rates available on an annual basis for every canton, every country of origin and also separately for both statuses (N and F) is then matched with the individual data.

Based on the registry data, we define our treatment, i.e., the new exposure to a group of asylum seekers in the municipality. This is possible for 461 municipalities that newly hosted asylum seekers in the period 1996-2017.²¹ In addition, we have 292 municipalities that could have been treated but did not host any asylum seekers during this time period.²² These are all municipalities that are observed over the whole time period and were not involved in a merger.²³ The new exposure to asylum seekers involves, on average, 3.2 individuals

²⁰This data was kindly provided by the SEM.

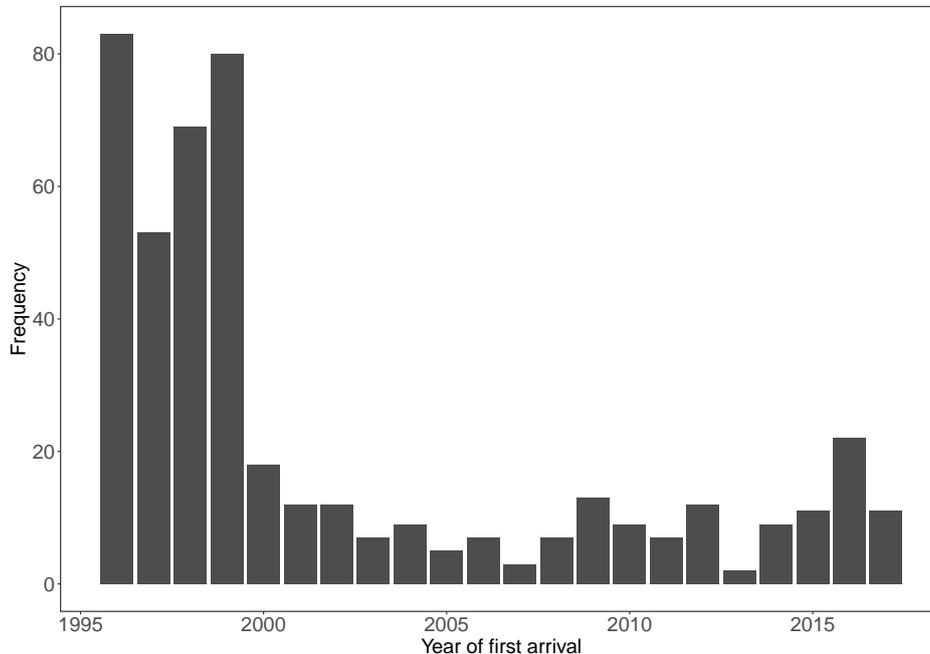
²¹It can be derived from the 1990 population census that some of these municipalities already accommodated asylum seekers before Switzerland experienced a large inflow in the mid-1990s. We consider this fact in a test of potential effect heterogeneity and do not observe systematic differences across groups of municipalities (see Appendix E).

²²Overall, observations from 22 of all 26 cantons are available (those not represented are the cantons of Appenzell Outer Rhodes, Glarus, Obwalden and Zug) in both the treatment and control group (except for the canton of Zurich, where all municipalities are treated).

²³Starting from the 2,222 Swiss municipalities as of January 1, 2018, 256 municipalities were not observed during the entire time period 1995-2017 (because of mergers, etc.) and thus discarded from the sample. Of the remaining 1,966 municipalities, 1,208 had hosted asylum seekers already at the beginning of the observation period, and thus were not included in the empirical analysis.

in municipalities that, on average, have 862 residents.²⁴ Figure 4 shows that many of these incidences occurred in the years 1996 to 1999, which is a direct consequence of the dissolution of the former Yugoslavia.

Figure 4: Newly hosting asylum seekers



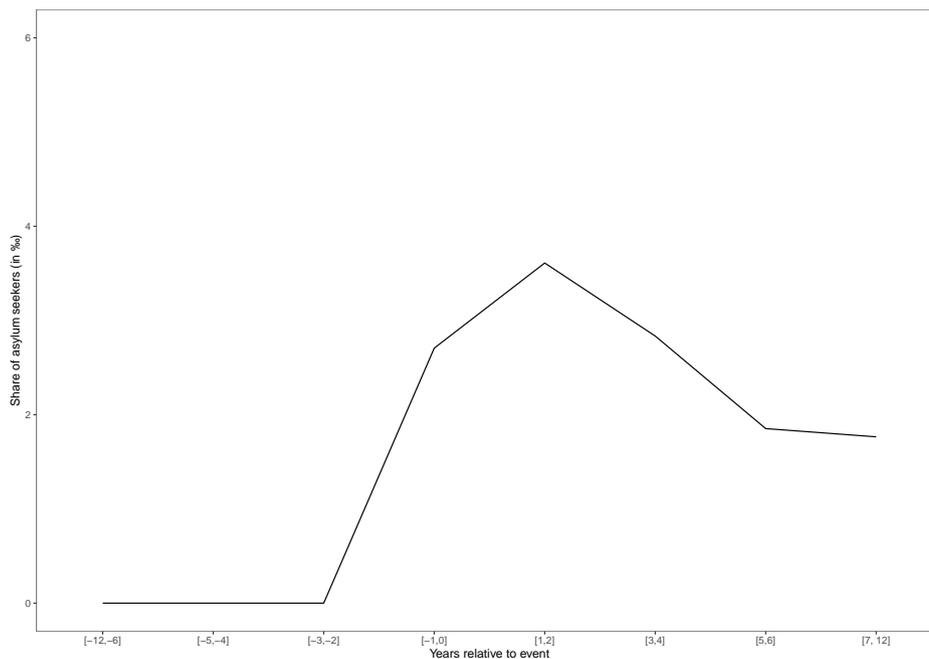
Note: The graph shows the number of municipalities that newly hosted asylum seekers in the years 1996-2017 ($n = 461$).

Data sources: State Secretariat for Migration.

The duration for which the 461 municipalities hosted asylum seekers varied from just one year to 6 years and more. We still code the treatment as in a regular event study design, i.e., after being newly treated, treatment continues indefinitely. This follows from the theoretical idea that the experience of asylum seekers in the municipality shifts otherwise rather stable policy preferences. It is thus the initial presence that brings about a broader discourse on immigration with a potentially long-lasting impact. Moreover, asylum seekers who are granted asylum get a B permit. These people are no longer observed in our data. However, they are still present in the municipality as long as they do not move away.

²⁴The 95th percentile of the 461 newly treated municipalities lies at hosting eight asylum seekers, which means the vast majority are treated by relatively small collective housing or private apartments and not large-scale asylum centers. And while an average population size of 862 inhabitants might seem very low from an international perspective, it is actually not too far from the median of all Swiss municipalities (1,143 residents) at the beginning of the treatment period (and in the year when most new treatments occurred).

Figure 5: Intensity of hosting asylum seekers



Note: The graph shows the average annual share of asylum seekers in the 461 municipalities that newly hosted asylum seekers during the period 1996-2017. The time is normalized around year 0, i.e., the year during which the asylum seekers arrived in the municipality. The same intervals of years are adopted in the main analysis.

Figure 5 depicts treatment intensity by plotting the share of asylum seekers, i.e. the number of asylum seekers allocated to the 461 newly treated municipalities over the study period divided by the permanent resident population. Compared to the study on whether refugees affect attitudes, policy preferences and political engagement in Greece by Hangartner et al. (2019), the exposure here is much weaker yet assumed to be longer lasting. It is thus fairly representative of the experience with asylum seekers in many parts of Western Europe, and similar to the treatment intensity studied by Dustmann et al. (2019) in their work for Denmark.

4.3 Municipality characteristics

For the propensity score matching below, we draw on administrative data at the municipality level from the FSO. This includes the average population size, the share of foreigners, the vote shares of political parties in the 1995 national elections, the vacancy rates of flats/houses, the

share of people with tertiary education, the spatial structure of municipalities as classified by the FSO, and the main language spoken in a particular municipality.

5 Empirical Strategy

A challenge for any analysis of the effect of the presence of asylum seekers on policy preferences is reverse causality. Not only do natives who are intolerant of migration move to places with a low share of migrants, but migrants themselves are more likely to move to places where people hold positive attitudes towards foreigners. Slotwinski and Stutzer (2019), for example, show that immigrants to Switzerland are less likely to move to municipalities that expressed strong reservations about foreigners in a national referendum. As a result, any straightforward regression estimates of the impact of foreigners on policy preferences would be biased.

We address the issue of selection by exploiting that asylum seekers are not free to choose where they reside within Switzerland. Instead, federal authorities centrally decide on the allocation of asylum seekers to cantons according to their population in an almost random manner (as pointed out in Section 3 above). Within cantons, it is again higher-level authorities that decide on the placement of asylum seekers across municipalities. Still, if these authorities avoid anticipated opposition in municipalities and are less likely to assign asylum seekers to these places, any observed negative effect of the treatment would be downward biased.

Moreover, as we want to focus on changes in policy preferences over time in response to the exposure to asylum seekers, trends in attitudes over time might be different in treated municipalities than in non-treated ones. In order to address these two threats to identification, we select a sample of control municipalities that is most similar to the treated ones based on a propensity score matching approach that considers variables related to policy preferences as observed before any treatment occurs.

Finally, we choose the municipalities as the spatial units in our analysis as they are the natural units within which social interactions with fellow residents as well as asylum seekers take place.²⁵

5.1 Propensity score matching

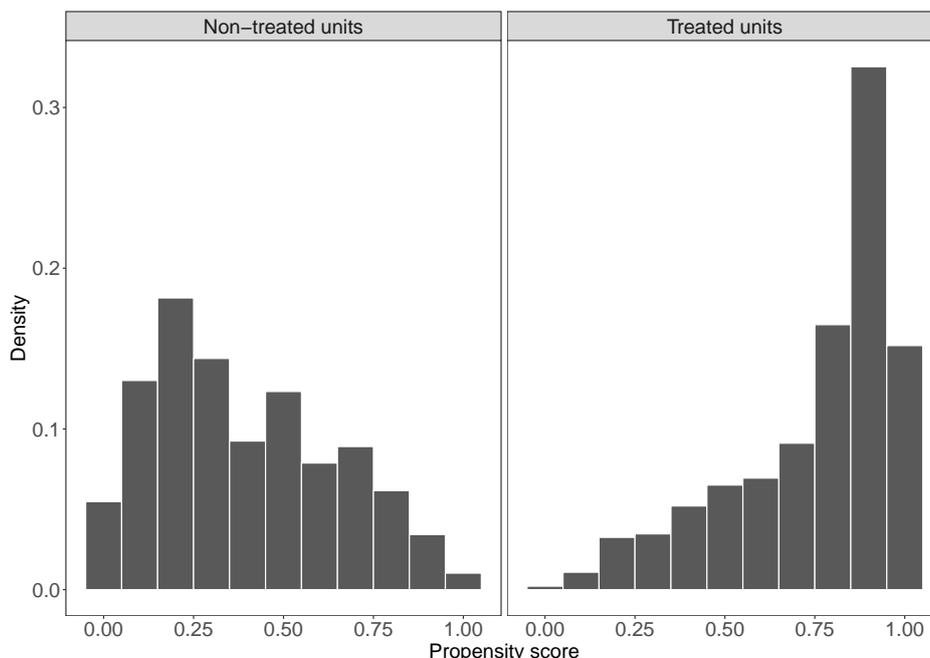
An appropriate control group that has a good overlap with the treatment group is key for causal inference with observational data (Cochran, 1965; Rubin, 1973; Rosenbaum, 1999). In our context, the control group might involve all Swiss municipalities that have either already initially or never hosted any asylum seekers, assuming that in the former municipalities any reactions have stabilized over time. However, these municipalities might be subject to large changes in the number of asylum seekers, especially those with asylum centers that are filled up first when new asylum seekers arrive. Moreover, the majority of Swiss municipalities differ systematically from the treated municipalities, for example, in terms of geographic location (more urbanized) or population size (more populous). Accordingly, a more suitable control group might be the 292 municipalities that are not exposed to asylum seekers during the observation period. We empirically compare the 292 never-treated municipalities with the 461 newly treated municipalities based on propensity scores with the goal of increasing overlap in the covariate distributions of the treatment and control group.

One way to assess the overall difference in the distribution of covariates is to visually look at the propensity scores. The propensity score can be understood as the conditional probability of receiving treatment given some distribution of the pre-treatment variables. The idea of such a scalar balancing score is to find lower-dimensional functions of the covariates that will remove the bias associated with differences in the pre-treatment variables. Following Imbens and Rubin (2015, p. 283 ff.), we use a combination of substantive knowledge and an automatic procedure in order to determine which variables are to enter into the specification

²⁵As mentioned by David et al. (2018), the scale chosen is not innocuous when measuring the effects of contextual factors (i.e. characteristics of the locality in which individuals are embedded) on voters' policy preferences. Their results suggest that the most significant impacts are found on an intermediary scale, i.e., 5 to 15 km radius around one's residence or at the municipality level. The latter is also the scale that we use in our analysis. A lower scale was not available and also does not makes sense in our opinion: The majority of Swiss municipalities are relatively small and there are few large cities where asylum seekers are hosted without any form of interaction with the native population.

of the propensity score. For example, the vacancy rate of flats/houses can *a priori* be viewed as being associated with the assignment process: authorities might allocate asylum seekers to municipalities with a higher availability of free (and cheap) housing. Moreover, the vacancy rate is also plausibly related to the outcome of interest: If municipalities with relatively high vacancy rates have also in the past attracted more low-income Swiss citizens who are less open to migration, this could bias estimates towards anti-migration attitudes. Next to these reasons on substantive grounds, the vacancy rate also sufficiently increases the likelihood function when included in a logistic regression model, and thus we add it to the specification of the propensity score. Our final specification of the propensity score includes six linear terms and two interaction terms (see Appendix D).

Figure 6: Histograms of the propensity scores before matching



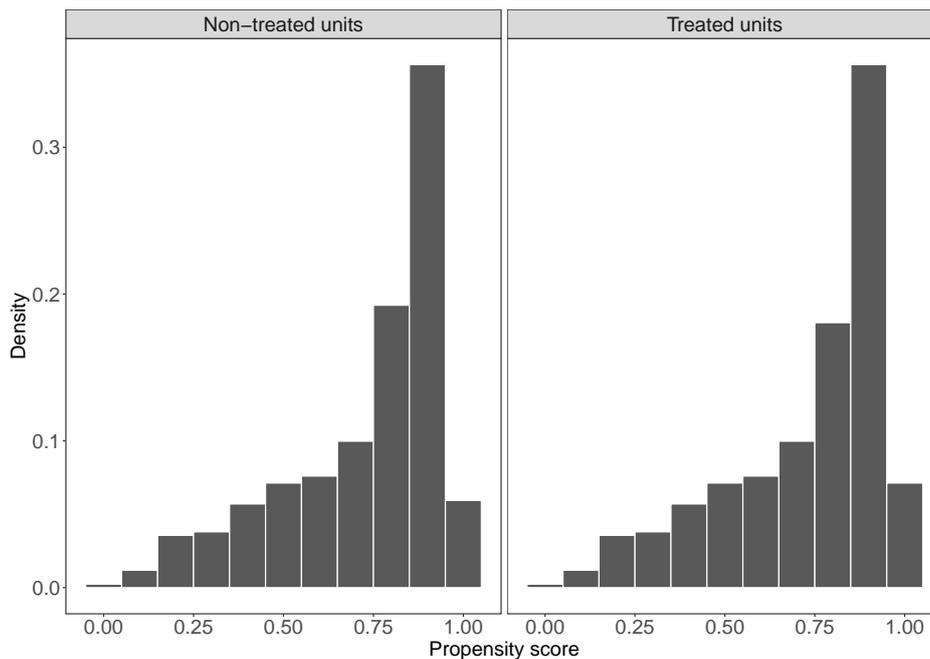
Note: The graph shows the distribution of estimated propensity scores for the treated and non-treated units, respectively, before matching on the estimated propensity score. The following linear and interaction terms based on the year 1995 are included for estimating the propensity scores: log of average population, share of right-wing parties in national elections, indicator for German-speaking municipalities, vacancy rate of flats/houses, share of foreigners, indicator for German-speaking municipalities*vacancy rate of flats/houses, share of tertiary educated*share of foreigners.

Figure 6 reveals that there is considerable covariate imbalance between the treated and the non-treated units. The estimated propensity scores of the non-treated units are skewed

to the right (meaning they are less likely to be treated given their covariates), while those of the treated units are skewed to the left (meaning they are predicted to be more likely to be treated). Table D.1 in the Appendix reveals that this imbalance is mainly attributable to the fact that the non-treated municipalities are less populous than the treated municipalities. It is for this reason that we adopt a matching approach to select the data so as to improve the balance between the treatment and the control group. Having applied the two most common distance measures, Mahalanobis matching and matching on the propensity score, we decided to go with the latter because it provided the most closely matched samples.²⁶ Since our setting is characterized by a limited pool of control municipalities (i.e. there are relatively few municipalities to compare the treated municipalities with), we chose matching with replacement, i.e., control units can be used as a match more than once so as to raise the number of potential matches for each treated unit. Moreover, this has the advantage of increasing the overlap in the covariate distributions of the treatment and control units and of rendering dependence on the ordering of the to-be-matched units irrelevant.

²⁶Since matching in the design phase does not involve any outcome data, we can compare different approaches without having to worry about biasing the final estimation results for the treatment effects (Osborne et al., 2011, p. 172). Furthermore, regression results remain largely unchanged when Mahalanobis matching is used instead of propensity score matching.

Figure 7: Weighted histograms of the propensity scores after matching



Note: The graph plots weighted histograms of the propensity scores for the matched treated and non-treated units, respectively, after matching on the estimated propensity score. The following linear and interaction terms based on the year 1995 are included for estimating the propensity scores: log of average population, share of right-wing parties in national elections, indicator for German-speaking municipalities, vacancy rate of flats/houses, share of foreigners, indicator for German-speaking municipalities*vacancy rate of flats/houses, share of tertiary educated*share of foreigners.

After performing propensity score matching with replacement, the covariate distributions of the selected treatment and control group are characterized by a much higher overlap. Figure 7 shows that the weighted histograms of the propensity scores are almost identical (see also Table D.2 in the Appendix). Since during the matching procedure municipalities in both the treated and non-treated group lying outside the support of the distance measure were discarded, the final sample consists of 421 treated units and 131 (weighted) non-treated units.²⁷

Having established a matched sample with substantial overlap between the treatment and control units, we will next turn to how we estimate treatment effects in an event study design.

²⁷461-421 = 40 treated units were discarded because their propensity score (PS) was higher than the highest PS in the non-treated group; 292-131 = 161 non-treated units were discarded because their PS was lower than the lowest PS in the treated group.

5.2 Event study design

Following Schmidheiny and Siegloch (2020), we apply a standard event study design where each municipality $i = 1, \dots, 421$ is newly assigned asylum seekers at a unit-specific time e_i , i.e., treatment is staggered over the period 1996-2017 (see Section 4.2). We add 131 matched non-treated units to the sample because this puts much less weight on potentially problematic two-group/two-period difference-in-differences estimators that use the already treated municipalities as control units (Goodman-Bacon, 2018). While this set-up does not accommodate treatment effect heterogeneity (Sun and Abraham, 2020), treatment effects can be captured dynamically over time. In our baseline model, we estimate the following equation:

$$y_{it} = \mu_i + \theta_t + \sum_{j=\underline{j}}^{\bar{j}} \beta_j b_{it}^j + \varepsilon_{it} \quad (1)$$

where y_{it} is one of the outcome measures for policy preferences in municipality i at time t . We observe the dependent variable y_{it} in a balanced panel on a yearly basis with $t = 1987, \dots, 2017$. On the right-hand side of the equation, we include a set of municipality (μ_i) and vote (θ_t) fixed effects in order to control for unobserved heterogeneity across these units. $\beta_j b_{it}^j$ is a treatment indicator for newly hosting asylum seekers, which is defined as:

$$b_{it}^j = \begin{cases} \sum_{s=-\infty}^{\underline{j}} d_{is} & \text{if } j = \underline{j} \\ d_{i,t-j} & \text{if } \underline{j} < j < \bar{j} \\ \sum_{s=\bar{j}}^{\infty} d_{is} & \text{if } j = \bar{j} \end{cases} \quad (2)$$

where d_{it} is an event dummy that takes the value 1 in the year of the treatment, e_i , and zero otherwise.

We allow the treatment effect to vary over a window ranging from $\underline{j} = -6$ years prior to the event to $\bar{j} = 7$ periods after the event. That is, we assume constant treatment effects outside of the effect window $[-6, 7]$. We deem this economically plausible for the following reasons: First, it is likely that municipalities' citizens learn about the assignment

before asylum seekers actually arrive, for example, because some accommodation is prepared. However, it is unlikely that this has an effect on the outcome variables more than six years before any new arrivals, even with long planning horizons.

Second, while treatment effects are likely to vary after asylum seekers have been placed, for example, due to contact with the host municipality’s citizens, changing numbers of asylum seekers, and/or the relocation of accepted refugees, we expect any remaining effect to stabilize after some years. Instead, new factors might come into play. For this reason, we also apply a further sample restriction and only consider observations of the dependent variable that lie no more than 12 years away from treatment. Furthermore, we bin observations at the endpoints $\underline{j} = -6$ years prior to the event and $\bar{j} = 7$ periods after the event.²⁸

In order to gain precision, we group the event study coefficients in two-year groups: D_i^g is an indicator variable equal to 1 if municipality i is observed in event-year group g , where g is a category for $j \leq -6$, $-5 \leq j \leq -4$, $-3 \leq j \leq -2$, $-1 \leq j \leq 0$, $1 \leq j \leq 2$, $3 \leq j \leq 4$, $5 \leq j \leq 6$, and $j \geq 7$. All the following tables and figures reflect this grouping of event study estimates.

Since treatment indicators b_{it}^j sum up to one over all j treated units (i.e., the binned event indicators b_{it}^j are perfectly multicollinear with the municipality-specific effect), at least one coefficient β_j needs to be fixed as a standardization. The standard procedure is to drop the pre-treatment indicator b_{it}^{-1} from the regression. In our case though, a change in resident citizens’ attitudes towards foreigners might already be expected and reflected in voting results before the actual event takes place due to an announcement/anticipation of the treatment.²⁹ Following Borusyak and Jaravel (2017) (see also Malani and Reif 2015), we

²⁸A common alternative to binning the event dummies at the endpoints would be to restrict the sample to observations of the dependent variable within the effect window. While such a sample restricted in event time would be underidentified, the inclusion of never-treated units could resolve that issue. However, as Schmidheiny and Siegloch (2020) state, *observing* a unit not be treated does not imply that this unit is never treated: Municipalities could have been treated before the observation period of our sample (for which we found some evidence, see Section 4.2), or they could be treated in the yet unrealized future. If we allow treatment effects to affect the infinite future (or the infinite past), no unit can with certainty be known to be never-treated. For that reason, it makes sense to include control units and still bin observations at the endpoints.

²⁹For example, in order to organize and prepare accommodation, the municipal administration most likely had to be informed in advance by the cantonal authorities who allocate the asylum seekers. In local networks, information about the placement of asylum seekers is thereby likely to find its way to other inhabitants in the municipality.

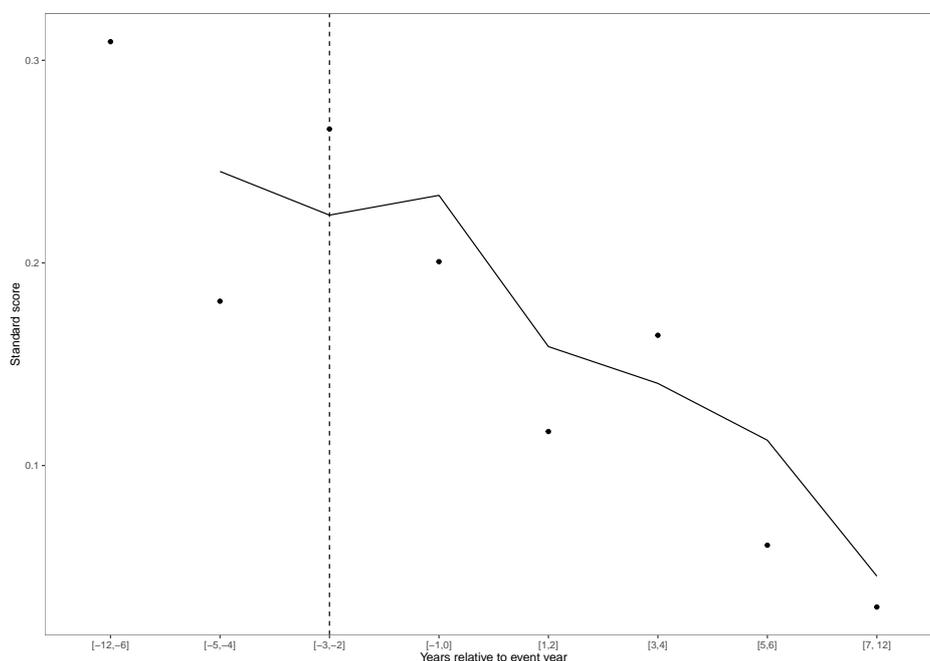
chose a fixed number of periods for anticipation of the event, in our case one year, and set $\beta_{-3 \leq j \leq -2}$ as the omitted category, i.e. we standardize the grouped coefficient $\beta_{-3 \leq j \leq -2}$ from the pre-treatment indicator $b_{it}^{-3 \leq j \leq -2}$ to zero.

6 Empirical Results

6.1 Standardized voting outcomes

Standardized voting outcomes offer a first impression of how voting behavior changed in response to the hosting of asylum seekers in Swiss municipalities. They are calculated for the municipalities in the treatment group by subtracting the population mean (i.e., the mean of all Swiss municipalities for each vote) from each individual raw score (i.e., the voting outcome indicating preferences for immigration or redistribution in the corresponding treated municipality) and then dividing this difference by the population standard deviation.

Figure 8: Standardized outcomes regarding pro-foreigner voting

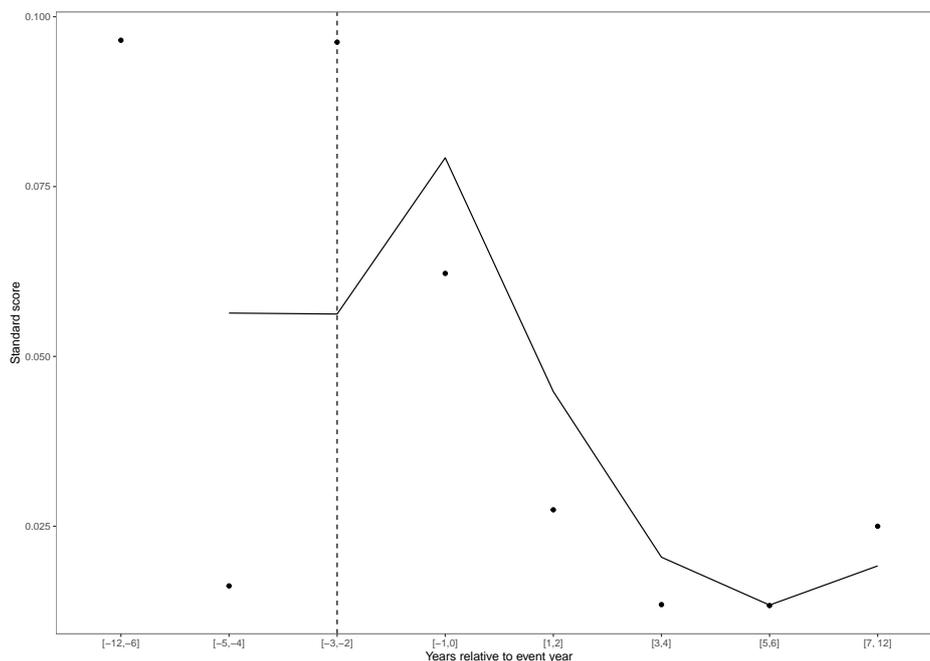


Note: The graph shows standardized voting outcomes (points) and the moving average (line) of the 421 municipalities that newly hosted asylum seekers during the observation period 1996 to 2017.

Figure 8 indicates that the standardized voting outcomes of the treated municipalities are all positive before treatment, indicating that the citizens in these municipalities voted in support of immigration around 0.2-0.3 standard deviations above the Swiss mean. After treatment, the standard scores are still positive yet sharply decline and approach the Swiss mean, which suggests that citizens reacted negatively to being exposed to asylum seekers.

Figure 9 shows the corresponding standardized vote outcomes for support for redistribution. The pattern suggests a similar negative reaction as for the support of immigration.

Figure 9: Standardized outcomes regarding pro-redistribution voting



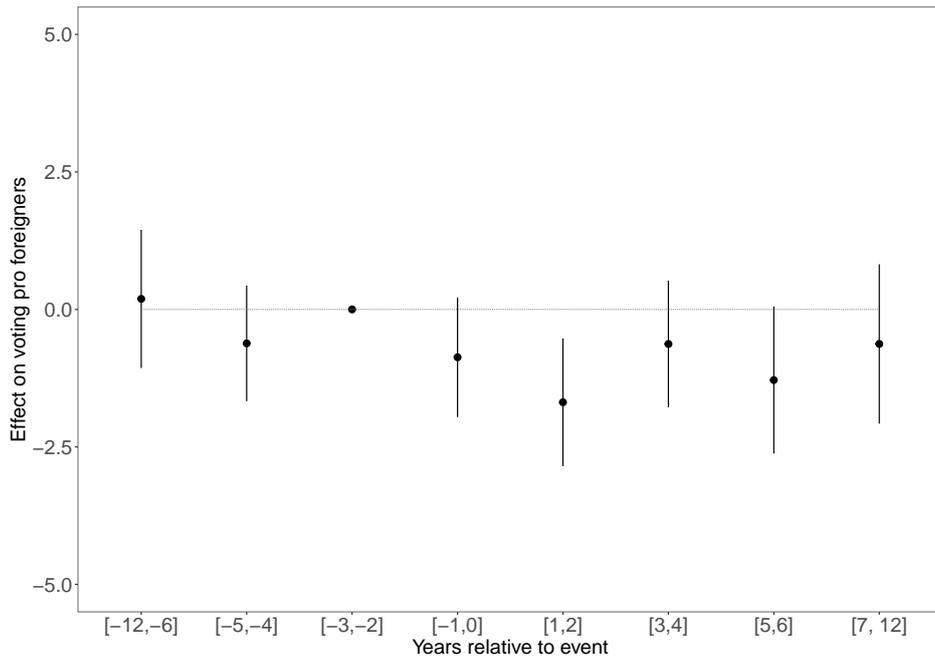
Note: The graph shows standardized voting outcomes (points) and the moving average (line) of the 421 municipalities that newly hosted asylum seekers during the observation period 1996 to 2017.

On the basis of these descriptive analyses, it remains open whether the negative reactions were unique to the treated municipalities, or whether they were part of a more general pattern affecting other Swiss municipalities as well. In the latter case, it would not allow us to causally interpret these developments. We address this issue in the next section.

6.2 Main results

Based on the sample of treated and control municipalities derived from the propensity score matching approach and a regression analysis relying on equation (1) with an event study design, we derive our main results for citizens' voting behavior in response to newly hosting asylum seekers. The full estimation outputs are shown in Appendix G. Here, we display the event study coefficients and the corresponding 95% confidence intervals based on the baseline model for our four main outcome variables. Figure 10 shows the effect on pro-foreigner voting. In accordance with the graphic summary of standardized voting outcomes presented above, citizens who newly experience the hosting of asylum seekers in their municipality of residence reveal slightly more restrictive policy preferences in national referendums and popular initiatives on immigration issues than before hosting.

Figure 10: Hosting asylum seekers and pro-foreigner voting



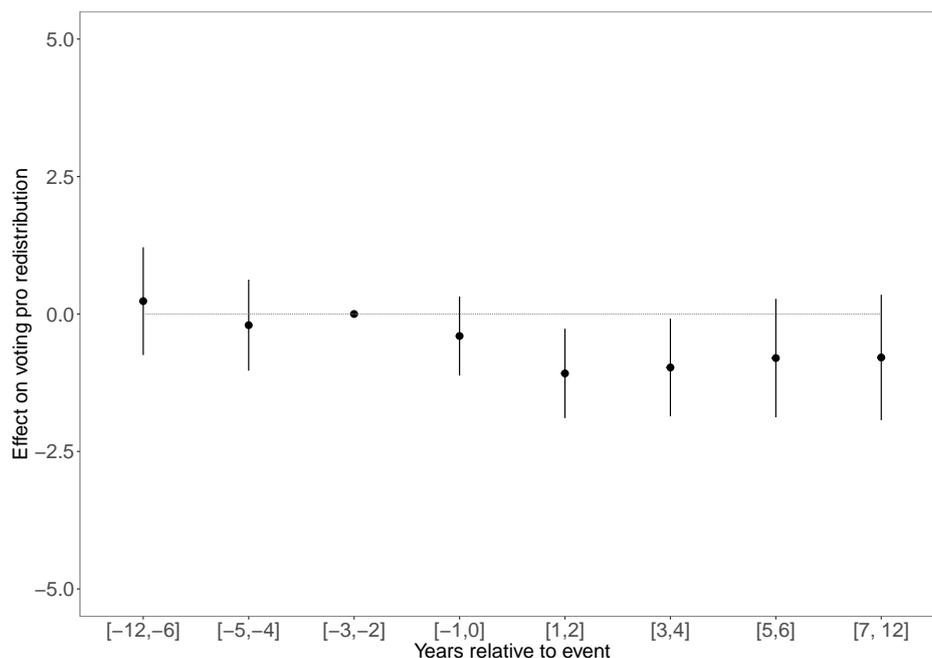
Note: The graph shows event time coefficients estimated for newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the difference in the vote share relative to two to three years before treatment. The dependent variable is the vote share in favor of foreigners for legislation about immigration and immigrants. The 95% confidence intervals are based on standard errors clustered at the municipality level.

However, there is no clear evidence for a persistent negative long-term effect on policy preferences regarding immigration and immigrants. While there is a negative point estimate for the time period around the initial placement (period during which the placement is potentially announced and the asylum seekers arrive), the small negative effect is not statistically significant ($p = 0.117$). The most pronounced negative effect is estimated for the two years following the initial placement with a drop in support for foreigners of around 1.7 percentage points ($p = 0.005$) at a mean level of support in the sample of 47.7 %. This amounts to 9.2 % of a standard deviation (of 18.4) in the sample.

The overall pattern is particularly pronounced in the sub-sample of votes related to asylum but much less so in votes more generally related to immigration and immigrants. In the latter case, the confidence intervals of the point estimates in the first few years cover both the zero and the values obtained in the estimations overall (see Figures E.21 and E.22 and the corresponding regression tables in the Appendix).

Figure 11 shows how citizens react to newly hosting asylum seekers with regard to preferences for redistribution. The estimate indicates that the effect is relatively small and amounts to -1.1 percentage points ($p = 0.009$) in the first and second years after the placement of asylum seekers and -1.0 percentage points ($p = 0.032$) in the third and fourth years. These effect sizes amount to 5.8 % and 5.2 %, respectively, of a standard deviation (of 18.7) in the sample.

Figure 11: Hosting asylum seekers and pro-redistribution voting

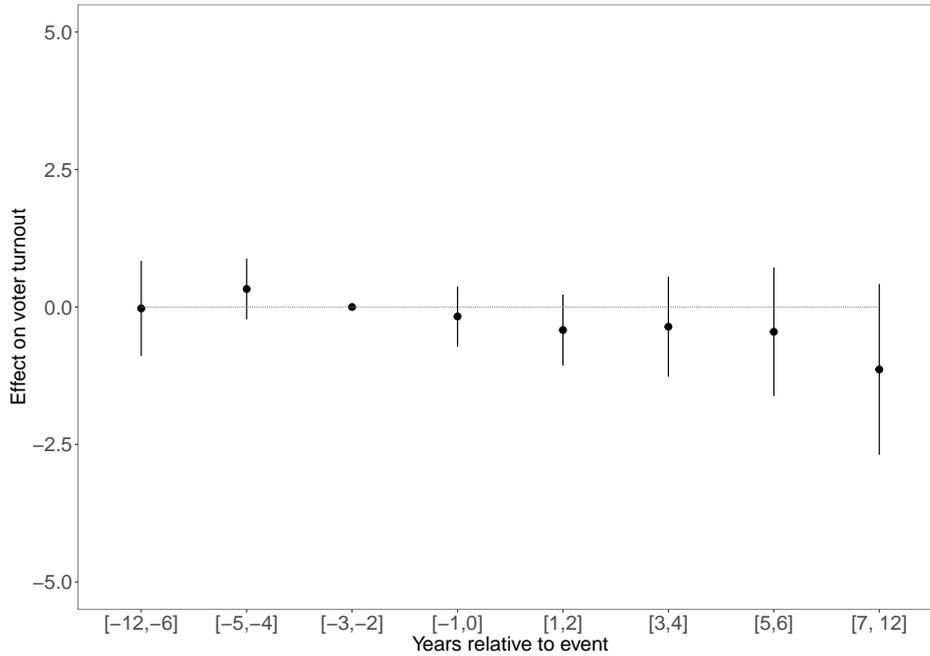


Note: The graph shows event time coefficients estimated for newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of higher redistribution. The 95% confidence intervals are based on standard errors clustered at the municipality level.

We cannot draw a strong conclusion regarding the persistence of the effect. While the negative point estimates still amount to about -1 percentage point for the periods five and more years after the exposure, they are not statistically precisely estimated.

So far, we have implicitly assumed that any change in a municipality's share of citizens voting pro-foreigners or pro-redistribution is due to a change in individuals' policy preferences. There is, of course, a second channel through which the hosting of asylum seekers might affect voting outcomes, i.e., the prompting of citizens who would otherwise not care about voting to participate in referendums and initiatives. While we cannot directly test for a change in the composition of the active electorate due to the aggregate nature of the data, we can analyze whether or not the placement of asylum seekers increases participation. In order to investigate this second channel, we analyze voter participation as the dependent variable and re-estimate the event study model specified above with *all* votes within the observation window.

Figure 12: Hosting asylum seekers and voter turnout

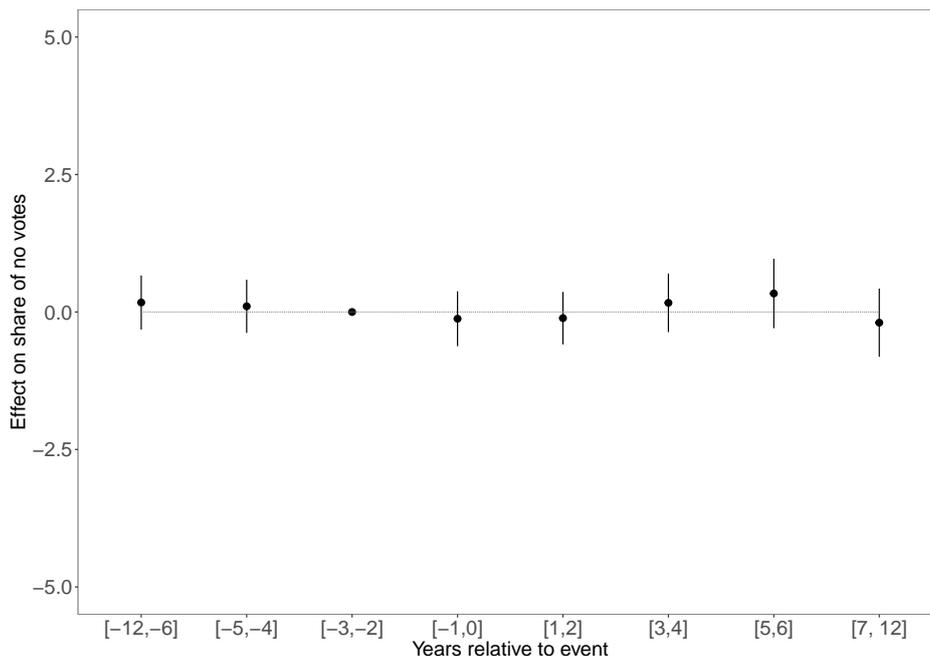


Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is voter turnout in referendums and popular initiatives on all topics. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure 12 indicates that citizens who newly experience the hosting of asylum seekers in their municipality of residence are, on average, not more likely to vote. This result is in line with that in Dustmann et al. (2019) for parliamentary (but not municipality) elections in Denmark and Moriconi et al. (2018) for European elections between 2007 and 2016. It suggests that the political reaction to hosting asylum seekers is mainly due to a shift in individual policy preferences rather than a change in the number of people who are mobilized to vote.

Finally, if citizens become worried when asylum seekers are placed in their municipality, they might react by generally opposing legal change. Figure 13 shows the result for the effect on citizens voting for the status quo, i.e., voting "no" in any referendum or initiative. The evidence clearly indicates that there is no effect in terms of a stronger resistance to change.

Figure 13: Hosting asylum seekers and voting for the status quo



Note: The graph shows event time coefficients estimated for newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the share of citizens voting "no" in referendums and initiatives on all topics. The 95% confidence intervals are based on standard errors clustered at the municipality level.

6.3 Effect heterogeneity

Political reactions to the hosting of asylum seekers likely depend on the context. We study a series of contextual factors that should help to interpret the general effects presented above. In particular, we consider the linguistic and cultural proximity of asylum seekers, their acceptance rates, their labor force participation, but also treatment intensity and timing. For the heterogeneity analysis, we either interact the event study indicators with some characteristic of the treated municipalities' asylum population, or split the sample into sub-samples.

Linguistic and cultural proximity — Imagine that voters react to the foreignness of asylum seekers. Citizens from a French-speaking municipality might then, for example, find it easier to interact with asylum seekers from the Democratic Republic of Congo. However, the Congolese's different ethnicity might be perceived as more of a threat by the resident population than, for example, the ethnicity of asylum seekers originating from the Balkans.

We explore this aspect on the basis of two different measures. Related to the first aspect of the example above, we create a binary variable that denotes those municipalities whose asylum seekers have on average linguistic proximity at treatment start, representing those above the median as 1 and the rest as 0.³⁰ For the second aspect, we create two sets of binary variables differentiating the 105 municipalities that hosted at least one asylum seeker from Africa at treatment start from the 218 municipalities that exclusively hosted European asylum seekers, and the remaining 138 municipalities that hosted Asian (and European) asylum seekers. The Figures E.1 and E.3 in the Appendix suggest that the negative effect on pro-foreigner preferences are more pronounced for culturally more distant asylum seekers from Africa and Asia versus Europe as well as for linguistically more distant ones. However, the large confidence bounds do not allow us to draw strong conclusions about clear patterns of heterogeneity. Similarly, there is no substantive evidence indicating that the effect on preferences for redistribution would be more pronounced in reaction to culturally more distant asylum seekers. If anything, exposure to asylum seekers from Europe seems to stimulate stronger reactions, and the negative effect is larger with closer linguistic proximity (see Figures E.2 and E.4 in the Appendix).

Acceptance rates of asylum applications — If citizens consider asylum seekers with a higher acceptance rate of their applications as more deserving, they might react less to their presence in the municipality. We implement this differentiation with an interaction term denoting those municipalities whose asylum seekers have, on average, an acceptance rate at treatment start above the median as 1 and the rest as 0. Figure E.5 for voting pro-foreigners and Figure E.6 for voting pro-redistribution in the Appendix provide suggestive evidence for this expected pattern, in particular for potential long-term effects.

Labor force participation — Asylum seekers who are integrated into the labor market might be considered less likely to be a fiscal or criminal threat. Accordingly, asylum seekers from, for example, Sri Lanka with comparatively high labor force participation rates would evoke less negative (or even positive) reactions with regard to citizen’s policy preferences, especially in the domain of redistribution as they could be seen as actively contributing

³⁰In order to make that distinction, we draw on the common language index created by Melitz and Toubal (2014).

to the social insurance system. We consider information on asylum seekers' labor force participation rate on an annual basis separately for every canton and for every country of origin as well as for both immigration statuses (N and F). We denote those municipalities whose asylum seekers have, on average, a labor force participation rate above the median at treatment start, as "high" (and coded 1) and the rest as "low" (and coded 0). Figures E.7 and E.8 in the Appendix reveal that asylum seekers whose labor force participation rate is comparatively higher indeed seem to provoke less of a negative reaction with regard to preferences for immigration and redistribution in the intermediate term, though statistically it is not possible to reject the hypothesis that the point estimates are the same as those for asylum seekers with comparatively lower participation rates.

Treatment intensity — The placement of asylum seekers in our sample refers to a relatively mild exposure (as discussed in Section 4.2). Small differences in the number of assigned asylum seekers relative to a municipality's population size might thus give rise to substantive variation in treatment intensity. We create another set of interaction terms and denote municipalities whose relative share of asylum seekers at treatment start lies above the median as 1 and the rest as 0. Figures E.9 and E.10 in the Appendix suggest that effects, especially during the first two years following the treatment, are indeed driven by municipalities with a relatively more intense treatment.

Prior asylum experience — As mentioned in Section 4.2, some of the municipalities that were newly treated during our observation period had already hosted asylum seekers in 1990. Having had prior experience with asylum seekers locally might lead to different reactions compared to being treated for the first time. We thus distinguish the two corresponding groups of municipalities with another set of interaction terms. Figure E.11 in the Appendix suggests that for those municipalities that did not host asylum seekers in 1990, the observed effect of newly hosting asylum seekers during our main study period is not more pronounced regarding the political preferences pro-foreigners. However, Figure E.12 in the Appendix indicates that for political preferences pro-redistribution, municipalities newly exposed and potentially for the first time seem to react and reduce support more strongly.

Time of placement — More than half of the 461 municipalities in the treatment group newly received asylum seekers in the four years just before the turn of the century (see Figure 4 above). This was mainly a consequence of the conflicts in the Balkans and in Sri Lanka which drove the total number of asylum applications to an all-time high in the years 1998 and 1999 (not even surpassed by the influx of refugees in 2015). We explore whether the impact on policy preferences was different during the first half compared to the second half of our study period. Accordingly, we split the sample in those 355 municipalities that were treated during the years 1996 to 2006 and separate them from the 106 municipalities that were treated during the years 2007 to 2017. We then again match the two sets of treated municipalities with the 292 non-treated municipalities and analyze these two samples separately. The Figures E.13 and E.14 in the Appendix show that the early period (1996-2006) seems to drive the effects of both main outcomes: zero as well as positive effects for at least six years following the exposure to asylum seekers can be statistically rejected with high probability. For the late period (2007-2017), the effects seem - if anything - slightly positive for pro-foreigner voting (though the statistical significance is rather low) and no clear pattern is observable regarding policy preferences pro-redistribution (see Figures E.15 and E.16 in the Appendix).³¹

Overall, the results for the various subset analyses suggest that the municipalities treated early indeed drive the effects with regard to citizens' policy preferences. Asylum seekers from the Balkans, who are over-represented in the early sample, thereby seem particularly relevant for the negative effect on policy preferences pro-redistribution (see Figure E.24 in the Appendix). However, people from the Balkans seem not to drive the negative effect on pro-foreigner policy preferences (see Figure E.17 in the Appendix). Rather, non-Balkan

³¹Asylum seekers from the Balkans constitute by far the largest group hosted in the municipalities in our sample (as well as in Switzerland overall, see Figure A.1). Due to the ending of the Yugoslav wars they are mainly (but not exclusively) represented in the early treatment sample (1996-2006). Municipalities with asylum seekers from the Balkans might thus drive the negative reactions of citizens with regard to policy preferences. In order to further explore this descriptively, we split the sample into those 218 municipalities that hosted asylum seekers from the Balkans at treatment start and the 243 municipalities that did not do so. We also performed an analysis with the 195 municipalities that *exclusively* hosted asylum seekers from the Balkans at treatment start with very similar results. We again match the two samples with municipalities in the control group, and analyze them separately. Figures E.17 and E.19 in the Appendix show that the negative point estimates for voting pro-foreigners for municipalities hosting asylum seekers from the Balkans at treatment start are only statistically significantly different from zero in the two years following treatment, whereas for the other municipalities this is the case for all six years following treatment. Regarding the negative effects on voting pro-redistribution, the evidence suggests that both groups of municipalities contribute equally to the drop in support for redistribution (see Figures E.18 and E.20 in the Appendix).

people, who also constitute a non-negligible group in the sample for the early period, seem to substantially contribute to this latter effect.

6.4 Robustness checks

Topic-specific mobilization — In the main specification of the event study model with voter participation as the dependent variable, we consider all the available votes during the period 1987-2017. However, voters could also selectively turn out for referendums about immigration and/or redistribution while abstaining from any other votes. In order to test this conjecture, we restrict the sample to the 25 and 40 votes on policies regarding immigration and redistribution, respectively, and re-estimate the model. Figure F.1 in the Appendix indicates that there are small positive effects on voter participation for immigration-related votes compared to the small negative effects in the main specification. Yet neither of the estimates are statistically significant and zero effects cannot be rejected in both specifications. For the votes on redistribution in Figure F.2, no systematic effect on voter turnout can be observed while relatively small positive effects can be rejected. These results lend support to the interpretation that the political reaction to hosting asylum seekers is mainly due to a shift in individual policy preferences rather than an increase or decrease in the active voter population.

Topic-specific resistance to change — While citizens might not oppose legal change on votes in general, they might actually vote in favor of policies regarding immigration because maintaining Switzerland with low number of foreigners often means voting in support of a restrictive popular initiative. Figure F.3 in the Appendix indicates that voters indeed tend to vote less for the status quo following the two years after treatment when exclusively estimating the model with votes on immigration. However, effects turn positive five to six years after hosting asylum seekers and are generally imprecisely estimated. Analyzing all but those votes on immigration leads to very precise effects that are very close to zero (see Figure F.4 in the Appendix), corroborating the evidence found in the main analysis.

7 Conclusion

Citizens' decisions at the ballot box on concrete legal changes or policy measures are the most direct manifestation of political preferences tied to substantive consequences. We study whether the policy preferences expressed in two important areas of politics, namely immigration and welfare, are in any way systematically related to citizens' local exposure to asylum seekers. On the one hand, based on incorrect beliefs about the presence of asylum seekers or prejudices, policy preferences on immigration might well be unrelated to the actual confrontation with asylum seekers in people's vicinity. On the other hand, locally concentrated strong reactions might be a major driver of policy demand.

Our study based on citizens' decisions in 25 immigration-related votes and 40 welfare-related votes in Switzerland over the period 1987-2017 reveals that reactions to the hosting of asylum seekers are present but are rather moderate. The reaction of locally affected citizens is thus a relevant mechanism via which policy demand in these areas is determined. In it, asylum seekers seem to be perceived as a threat. Citizens in municipalities that newly host asylum seekers reduce their support for pro-immigration popular votes within the first six years by around 1.2 percentage points. Moreover, electoral support in pro-redistribution votes is reduced by around 0.9 percentage points within the same period. Our statistical power is too weak to draw strong conclusions about the persistence of these effects seven and more years after the initial exposure to asylum seekers. As there is no reaction in aggregate turnout in response to the hosting of asylum seekers, we interpret the effects to be actual changes in policy preferences rather than a reflection of differential mobilization. Moreover, the changes in policy preferences are issue-specific and do not reflect a general resistance to change (or a preference for the status quo) in response to the experience with asylum seekers.

While the analysis relies on a subset of Swiss municipalities that either experienced the hosting of asylum seekers relatively late or not at all (by 2017), we expect the results to be externally valid for Switzerland as a whole. Specifically, we observe that the partisan preferences in the municipalities in the sample are rather similar to those in the rest of Switzerland, i.e., the share of votes for parties on the political right in the national elections in 1995 was 0.26 for the sample and 0.29 for the non-sample municipalities.

While there is a policy reaction that is tied to the local exposure to asylum seekers in citizens' municipalities, we consider this reaction to be relatively small (compared, for example, to the reactions in Greece mentioned above). We can only speculate on the contextual factors that moderate citizens' reactions. The presence of asylum seekers reflects the outcome of an orderly process that ensures an equal distribution of them across cantons and thus an equal contribution to this joint responsibility. It remains an open question as to whether the benefits of decentral allocation - in the form of a shared responsibility that potentially strengthens national cohesion - outweigh its potential drawbacks - in the form of asylum seekers being placed in regions where it is difficult for them to benefit from ethnic networks and relatively easier access to the labor market.

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The Consequences of Hosting Asylum Seekers for Citizens' Policy Preferences

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Appendix

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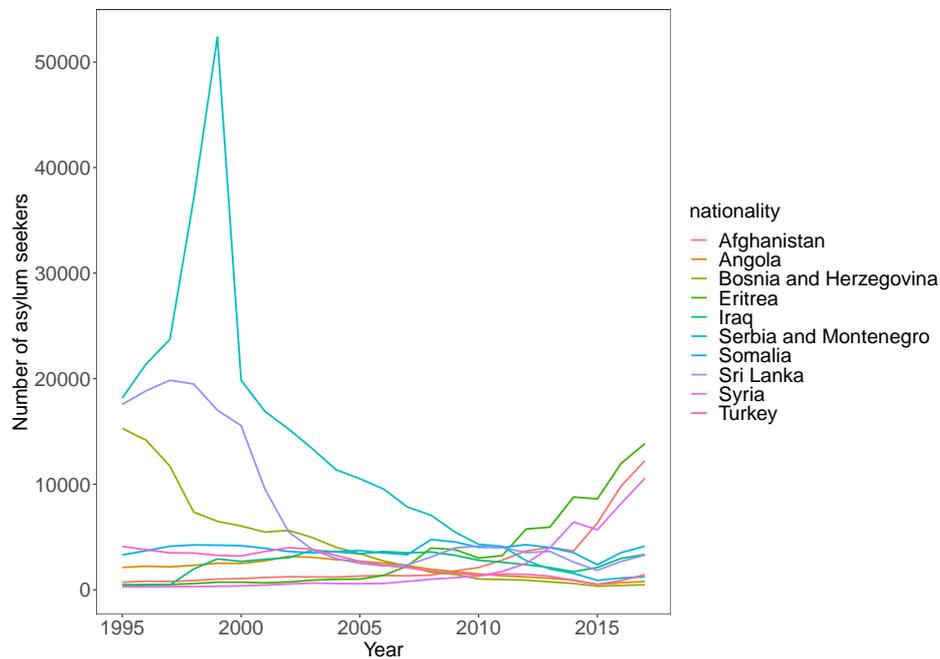
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A Descriptive statistics

Figure A.1: Nationalities of asylum seekers (top 10)



Note: The graph shows the number of asylum seekers of the ten most frequent countries of origin over the period 1996-2017. Serbia and Montenegro have been two separate countries after the dissolution of their union in 2006, yet in order to facilitate the reading of the graph, the number of asylum seekers from these two countries was summed up.

B Classification of votes

Table B.1: National referendums on migration-related issues in Switzerland, 1987-2017

| No. | Date | Label | Theme | Type | Orientation | Outcome | Approval | Turnout |
|-----|------------|--|-------|------|-------------|---------|----------|---------|
| 344 | 05/04/1987 | Federal law on asylum | AA | OR | Restrictive | Passed | 67.3% | 42.4% |
| 345 | 05/04/1987 | Federal law on the residence and settlement of foreigners | IM | OR | Restrictive | Passed | 67.3% | 42.2% |
| 355 | 04/12/1988 | For limiting immigration | IM | PI | Restrictive | Failed | 32.7% | 52.8% |
| 411 | 12/06/1994 | Federal bill on facilitated naturalisation for foreign youth | CN | MR | Expansive | Failed | 52.8% | 46.8% |
| 417 | 04/12/1994 | Federal law on constraining measures in foreigners' law | AA | OR | Restrictive | Passed | 51.8% | 43.8% |
| 432 | 01/12/1996 | Against illegal immigration | AA | PI | Restrictive | Failed | 46.3% | 46.8% |
| 454 | 13/06/1999 | Federal law on asylum | AA | OR | Restrictive | Passed | 70.6% | 45.6% |
| 455 | 13/06/1999 | Federal law on emergency measures on asylum and foreigners law | AA | OR | Restrictive | Passed | 70.8% | 45.6% |
| 467 | 24/09/2000 | For regulating immigration | IM | PI | Restrictive | Failed | 36.2% | 45.3% |
| 491 | 24/11/2002 | Against abuses in asylum law | AA | PI | Restrictive | Failed | 49.9% | 48.1% |
| 510 | 26/09/2004 | Federal bill on ordinary and facilitated naturalisation (2nd generation) | CN | MR | Expansive | Failed | 43.2% | 53.8% |
| 511 | 26/09/2004 | Federal bill on ordinary and facilitated naturalisation (3rd generation) | CN | MR | Expansive | Failed | 48.4% | 53.8% |
| 519 | 25/09/2005 | Extension of free mobility to new EU member states (EU-10) | IM | OR | Expansive | Passed | 56.0% | 54.5% |
| 524 | 24/09/2006 | Federal law on foreigners | AA | OR | Restrictive | Passed | 67.8% | 48.9% |
| 525 | 24/09/2006 | Federal law on asylum | AA | OR | Restrictive | Passed | 68.0% | 48.9% |
| 532 | 01/06/2008 | For democratic naturalisation | CN | PI | Restrictive | Failed | 36.2% | 45.2% |
| 540 | 08/02/2009 | Renewal of the EU-Switzerland bilateral agreement on free mobility | IM | MR | Expansive | Passed | 50.1% | 51.4% |
| 547 | 29/11/2009 | Against the construction of minarets | CR | PI | Restrictive | Passed | 57.2% | 53.8% |
| 552 | 28/11/2010 | For the deportation of foreign criminals | AA | PI | Restrictive | Passed | 52.9% | 52.9% |
| 571 | 09/06/2013 | Urgent modification of asylum Law | AA | OR | Restrictive | Passed | 78.4% | 39.4% |
| 580 | 09/02/2014 | Against mass immigration | IM | PI | Restrictive | Passed | 50.3% | 56.6% |
| 588 | 30/11/2014 | Stop overpopulation (ECOPOP) | IM | PI | Restrictive | Failed | 25.9% | 50.0% |
| 597 | 28/02/2016 | For the actual deportation of foreign criminals | AA | PI | Restrictive | Failed | 41.0% | 63.7% |
| 604 | 05/06/2016 | Federal law on asylum | AA | OR | Expansive | Passed | 78.4% | 46.8% |
| 609 | 12/02/2017 | On the facilitated naturalisation of third generation foreign youth | CN | OR | Expansive | Passed | 60.1% | 46.8% |

Notes: The table lists all 25 referendums and popular initiatives on migration-related issues that took place in Switzerland at the federal level from 1987 to 2017. Vote no. 519 is not included in the original Dataset on Migration Referendums (Arrighi, 2017) yet has been added after personal communication with the author. Vote no. 411 had an approval of over 50 per cent yet failed due to not enough cantons accepting it (“Ständemehr”). The referendums are distinguished by type (mandatory referendum (MR), optional referendum (OR) and popular initiative (PI)) and by sub-theme (asylum and alienage (AA), citizenship and nationality (CN), culture and religion (CR) and immigration and mobility (IM)).

Table B.2: National referendums on redistribution-related issues in Switzerland, 1987-2017

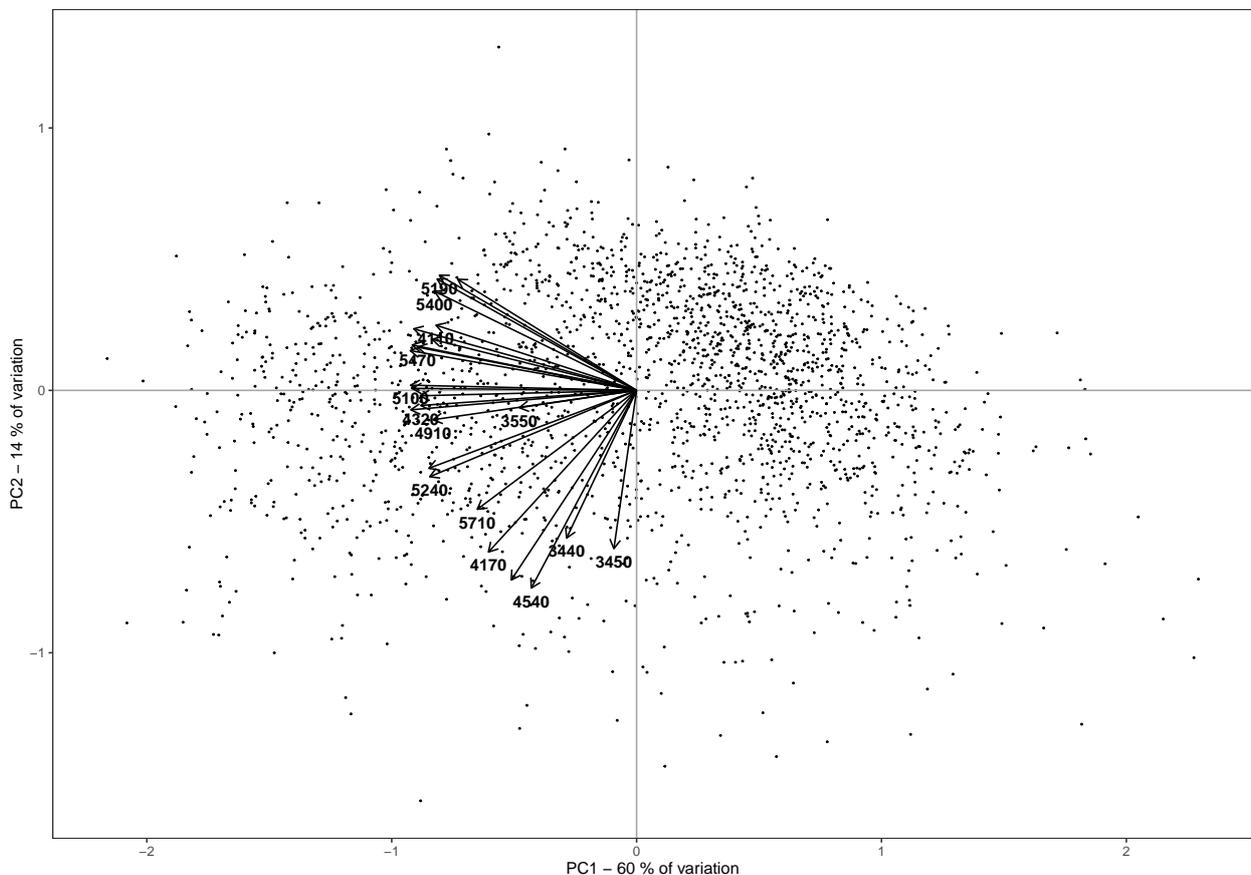
| No. | Date | Label | Type | Orient. | Result | Approval | Turnout |
|------|------------|--|------|---------|--------|----------|---------|
| 3490 | 06/12/1987 | Health insurance law | OR | E | F | 28.0% | 48.0% |
| 3520 | 12/06/1988 | Lowering of the retirement age | PI | E | F | 35.0% | 42.0% |
| 3730 | 16/02/1992 | Sick fund initiative | PI | E | F | 39.0% | 44.0% |
| 3860 | 27/09/1992 | Stamp duties law | OR | R | P | 62.0% | 46.0% |
| 3970 | 26/09/1993 | Temporary measures in health insurance | OR | R | P | 81.0% | 40.0% |
| 3980 | 26/09/1993 | Measures in unemployment insurance | OR | R | P | 81.0% | 40.0% |
| 4000 | 28/11/1993 | Value Added Tax 6.5% | MR | R | P | 58.0% | 45.0% |
| 4150 | 04/12/1994 | Health insurance law | OR | E | P | 52.0% | 44.0% |
| 4160 | 04/12/1994 | For a healthy health insurance | PI | E | F | 23.0% | 44.0% |
| 4220 | 25/06/1995 | 10th AHV revision | OR | R | P | 61.0% | 40.0% |
| 4230 | 25/06/1995 | Expansion of AHV and IV | PI | E | F | 28.0% | 40.0% |
| 4370 | 28/09/1997 | Funding of unemployment insurance | OR | R | F | 49.0% | 41.0% |
| 4440 | 27/09/1998 | 10th AHV revision w/o increase of age | PI | E | F | 42.0% | 52.0% |
| 4510 | 07/02/1999 | Home ownership initiative | PI | R | F | 41.0% | 38.0% |
| 4570 | 13/06/1999 | Disability insurance | OR | R | F | 30.0% | 46.0% |
| 4580 | 13/06/1999 | Maternity insurance | OR | E | F | 39.0% | 46.0% |
| 4690 | 26/11/2000 | Flexibilisation of AHV | PI | E | F | 40.0% | 42.0% |
| 4700 | 26/11/2000 | Retirement age as of 62 for men/women | PI | E | F | 46.0% | 42.0% |
| 4810 | 02/12/2001 | Taxing energy instead of work | PI | E | F | 23.0% | 38.0% |
| 4840 | 02/12/2001 | Capital gains tax | PI | E | F | 34.0% | 38.0% |
| 4910 | 24/11/2002 | Misuse of asylum law | PI | R | F | 50.0% | 48.0% |
| 4920 | 24/11/2002 | Unemployment insurance law | OR | R | P | 56.0% | 48.0% |
| 4990 | 18/05/2003 | Health initiative | PI | E | F | 27.0% | 50.0% |
| 5000 | 18/05/2003 | Equal rights for the disabled | PI | E | F | 38.0% | 50.0% |
| 5070 | 16/05/2004 | 11th AHV revision | OR | R | F | 32.0% | 51.0% |
| 5090 | 16/05/2004 | Tax package | OR | R | F | 34.0% | 51.0% |
| 5130 | 26/09/2004 | Compensated maternity/military service | OR | E | P | 56.0% | 54.0% |
| 5140 | 28/11/2004 | Reorganisation of financial adjustment | MR | E | P | 64.0% | 37.0% |
| 5270 | 26/11/2006 | Family allowance law | OR | E | P | 68.0% | 45.0% |
| 5290 | 17/06/2007 | 5th IV revision | OR | R | P | 59.0% | 36.0% |
| 5310 | 24/02/2008 | Business tax reform II | OR | R | P | 51.0% | 38.0% |
| 5360 | 30/11/2008 | For a flexible retirement age | PI | E | F | 41.0% | 47.0% |
| 5430 | 27/09/2009 | IV front-end financing | MR | E | P | 55.0% | 41.0% |
| 5510 | 26/09/2010 | Revision of unemployment insurance law | OR | R | P | 53.0% | 36.0% |
| 5530 | 28/11/2010 | Tax equity | PI | E | F | 42.0% | 51.0% |
| 5750 | 24/11/2013 | 1:12 initiative | PI | E | F | 35.0% | 54.0% |
| 5940 | 14/06/2015 | Inheritance tax reform | PI | E | F | 29.0% | 44.0% |
| 6010 | 05/06/2016 | Unconditional basic income | PI | E | F | 23.0% | 47.0% |
| 6140 | 24/09/2017 | AHV front-end financing | MR | E | F | 50.0% | 47.0% |
| 6150 | 24/09/2017 | Reform of pension plan 2020 | OR | E | F | 47.0% | 47.0% |

Notes: The table lists all 40 national referendums and popular initiatives on redistribution-related issues that took place in Switzerland at the federal level from 1987 to 2017. The referendums are distinguished by type: mandatory referendum (MR), optional referendum (OR) and popular initiative (PI). Column 5 distinguishes the referendum's orientation (expansive/restrictive), whereas column 6 displays the resulting outcome (passed/failed).

C Principal components analysis

In order to further corroborate that by grouping the votes in policy domains we capture the most important underlying dimension by retaining most of the variability of the original votes, we run a Principal Components Analysis (PCA) for both indices on migration and redistribution. Figure C.1 illustrates that the loadings of the 25 votes on migration-related issues all show in the same direction of the first component and explain 60 per cent of total variation, thus strengthening our belief that we measure policy preferences for migration.

Figure C.1: Biplot of national referendums on migration-related issues in Switzerland, 1987-2017

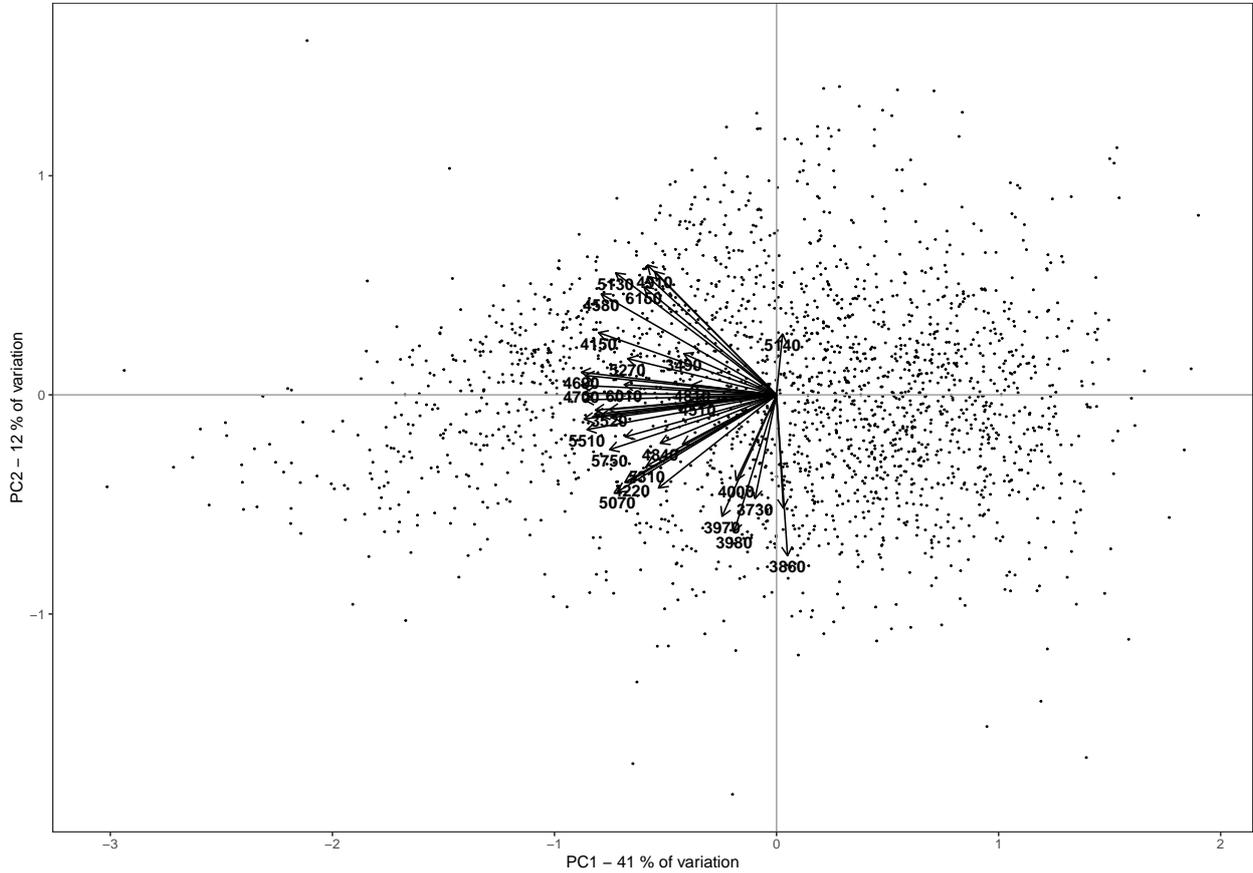


Note: The biplot shows the loadings of the votes (arrows) and the scores of the municipalities (dots) resulting from a Principal Components Analysis done with the 25 votes on migration-related issues in Switzerland from 1987 to 2017.

As can be seen from Figure C.2, the first component of the redistribution-related referendums captures somewhat less variation (41%) than that of the votes regarding migrants (60%). This is not surprising since the variety of subtopics is much higher in the latter than in the former, where the focus on the migration topic is very clear. Nevertheless, 41

per cent of the variation still constitutes a satisfactory value for a PCA done in the social sciences (Hair et al., 2014), and lets us interpret these votes as having a common underlying dimension, namely redistribution.

Figure C.2: Biplot of national referendums on redistribution-related issues in Switzerland, 1987-2017



Note: The biplot shows the loadings of the votes (arrows) and the scores of the municipalities (dots) resulting from a Principal Components Analysis done with the 40 votes on redistribution-related issues in Switzerland from 1987 to 2017.

Figure C.2 also indicates that three votes loaded positively on the first principal component, i.e., in the opposite direction. These were the following votes: Stamp duties law (vote no. 3860), disability insurance (vote no. 4570) and the reorganisation of the NFA (vote no. 5140). Albeit the vote on stamp duties law was clearly not decided along the lines of solidarity with the poor but mainly in places where financial intermediaries were strongly present, and thus might have loaded in the opposite direction on the first principal component, we left it in the sample. Regarding the abolition of the quarter disability pension (vote no. 4570), very limited savings were to be expected which might explain the opposite load on the first

principal component. Nevertheless, this vote as well as the vote on the reorganisation of the NFA (vote no. 5140) were still included in the sample. The only vote which was excluded *ex ante* was the one on the lump sum taxation (vote no. 5870).

D Propensity score matching

Table D.1: Balance between treated and controls before matching

| | Controls | | Treated | | Overlap measures | | | |
|------------------------------|---------------|--------|---------------|--------|------------------|---------------|----------|---------|
| | $(N_c = 292)$ | | $(N_t = 461)$ | | $\pi^{0.05}$ | | | |
| | Mean | (S.D.) | Mean | (S.D.) | Nor Dif | Log Ratio STD | Controls | Treated |
| Share of vacant flats/houses | 0.247 | 0.233 | 0.171 | 0.178 | -0.368 | -0.268 | 0.063 | 0.113 |
| Share of foreigners | 0.064 | 0.06 | 0.093 | 0.077 | 0.419 | 0.244 | 0.076 | 0.082 |
| German-speaking municipality | 0.312 | 0.464 | 0.512 | 0.5 | 0.415 | 0.076 | 0 | 0 |
| Log of average income | 9.936 | 0.301 | 10.031 | 0.25 | 0.346 | -0.185 | 0.063 | 0.068 |
| Share of naturalisations | 0.001 | 0.005 | 0.001 | 0.003 | 0.082 | -0.62 | 0.039 | 0.014 |
| Share of pensioners | 0.158 | 0.059 | 0.142 | 0.04 | -0.32 | -0.382 | 0.022 | 0.137 |
| Log of average population | 5.507 | 0.792 | 6.446 | 0.717 | 1.243 | -0.1 | 0.154 | 0.295 |
| Share of left voters | 0.214 | 0.108 | 0.235 | 0.114 | 0.19 | 0.056 | 0.065 | 0.014 |
| Share of right-wing parties | 0.236 | 0.231 | 0.269 | 0.234 | 0.141 | 0.014 | 0.015 | 0.034 |
| Share of tertiary educated | 0.111 | 0.083 | 0.132 | 0.09 | 0.249 | 0.084 | 0.069 | 0.079 |
| Share of unemployed | 0.015 | 0.017 | 0.016 | 0.012 | 0.119 | -0.367 | 0.013 | 0.045 |
| Urban municipality | 0.116 | 0.321 | 0.293 | 0.456 | 0.448 | 0.349 | 0 | 0 |

Notes: Columns 2-5 provide means and standard deviations of the treatment and control group, respectively. Columns 6-9 provide summary measures as defined by Imbens and Rubin (2015, p. 310 ff.). The following linear and interaction terms based on the year 1995 are included for estimating the propensity scores: log of average population, share of right-wing parties (EDU, FPS, Lega, SD and SVP) in national elections, indicator for German-speaking municipalities, vacancy rate of flats/houses, share of foreigners, indicator for German-speaking municipalities*vacancy rate of flats/houses, share of tertiary educated*share of foreigners.

Table D.2: Balance between treated and controls after matching

| | Controls | | Treated | | Overlap measures | | | |
|------------------------------|---------------|--------|---------------|--------|------------------|---------------|----------|---------|
| | $(N_c = 131)$ | | $(N_t = 421)$ | | $\pi^{0.05}$ | | | |
| | Mean | (S.D.) | Mean | (S.D.) | Nor Dif | Log Ratio STD | Controls | Treated |
| Share of vacant flats/houses | 0.168 | 0.196 | 0.176 | 0.178 | 0.044 | -0.095 | 0.105 | 0.061 |
| Share of foreigners | 0.093 | 0.067 | 0.086 | 0.067 | -0.101 | 0.002 | 0.036 | 0.076 |
| German-speaking municipality | 0.425 | 0.471 | 0.494 | 0.501 | 0.142 | 0.060 | 0 | 0 |
| Log of average income | 10.039 | 0.249 | 10.026 | 0.246 | -0.049 | -0.013 | 0.064 | 0.061 |
| Share of naturalisations | 0.001 | 0.007 | 0.001 | 0.003 | 0.019 | -0.961 | 0.040 | 0.015 |
| Share of pensioners | 0.140 | 0.046 | 0.144 | 0.041 | 0.083 | -0.124 | 0.040 | 0.084 |
| Log of average population | 6.319 | 0.734 | 6.342 | 0.646 | 0.034 | -0.129 | 0.055 | 0.137 |
| Share of left voters | 0.228 | 0.109 | 0.236 | 0.115 | 0.076 | 0.055 | 0.062 | 0.023 |
| Share of right-wing parties | 0.266 | 0.240 | 0.268 | 0.236 | 0.008 | -0.014 | 0.017 | 0.046 |
| Share of tertiary educated | 0.129 | 0.085 | 0.132 | 0.092 | 0.042 | 0.077 | 0.081 | 0.038 |
| Share of unemployed | 0.017 | 0.015 | 0.016 | 0.012 | -0.058 | -0.211 | 0.040 | 0.015 |
| Urban municipality | 0.321 | 0.382 | 0.276 | 0.447 | -0.109 | 0.158 | 0 | 0 |

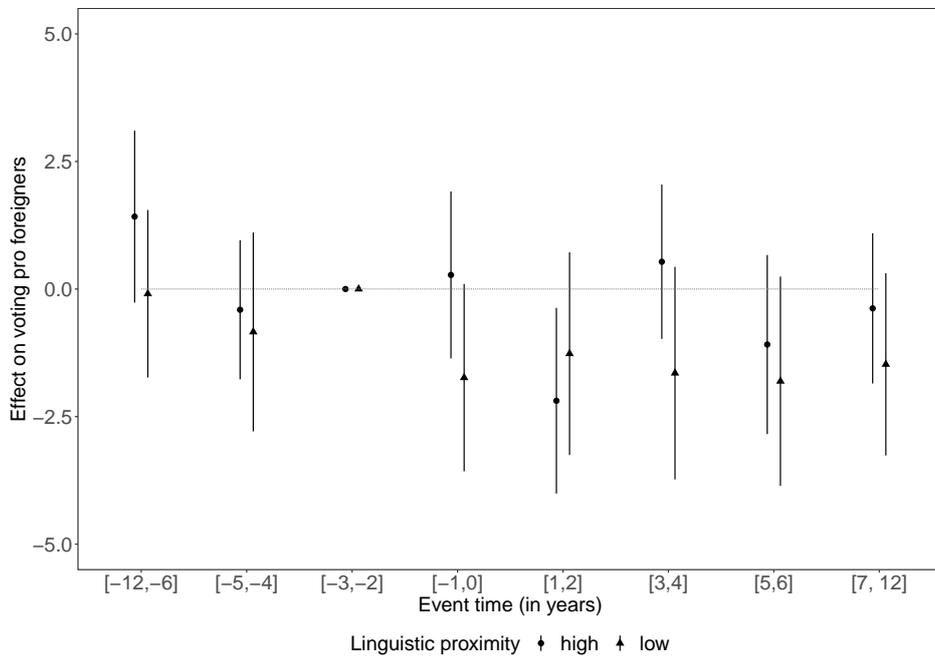
Notes: Columns 2-5 provide means and standard deviations of the treatment and control group, respectively. Columns 6-9 provide summary measures as defined by Imbens and Rubin (2015, p. 310 ff.). The following linear and interaction terms based on the year 1995 are included for estimating the propensity scores: log of average population, share of right-wing parties (EDU, FPS, Lega, SD and SVP) in national elections, indicator for German-speaking municipalities, vacancy rate of flats/houses, share of foreigners, indicator for German-speaking municipalities*vacancy rate of flats/houses, share of tertiary educated*share of foreigners.

E Heterogeneity analyses

E.1 Linguistic proximity

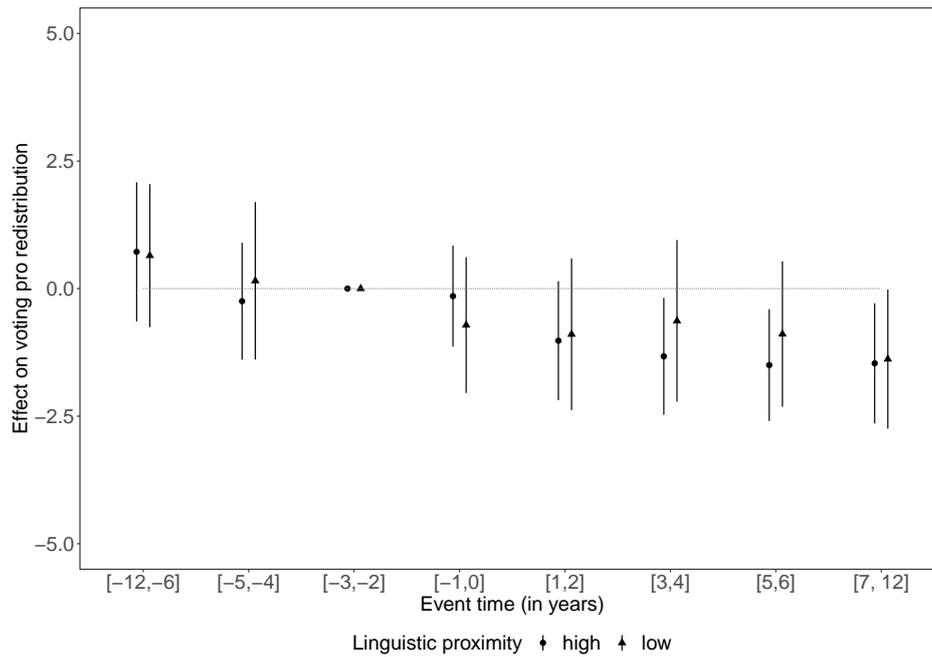
Differentiating asylum seekers by the linguistic proximity of their country of origin to the language of the host municipality (French, German or Italian) is achieved by denoting those municipalities whose asylum seekers have, on average, at treatment start a linguistic proximity above the median as "high" and the rest as "low" by means of the common language index created by Melitz and Toubal (2014).

Figure E.1: Hosting asylum seekers and voting pro foreigners: differentiating at median of linguistic proximity at treatment start



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about linguistic proximity, which takes the value of one (zero) for municipalities above the median that hosted asylum seekers that were linguistically close at treatment start. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending foreigners legislation as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure E.2: Hosting asylum seekers and voting pro redistribution: differentiating at median of linguistic proximity at treatment start

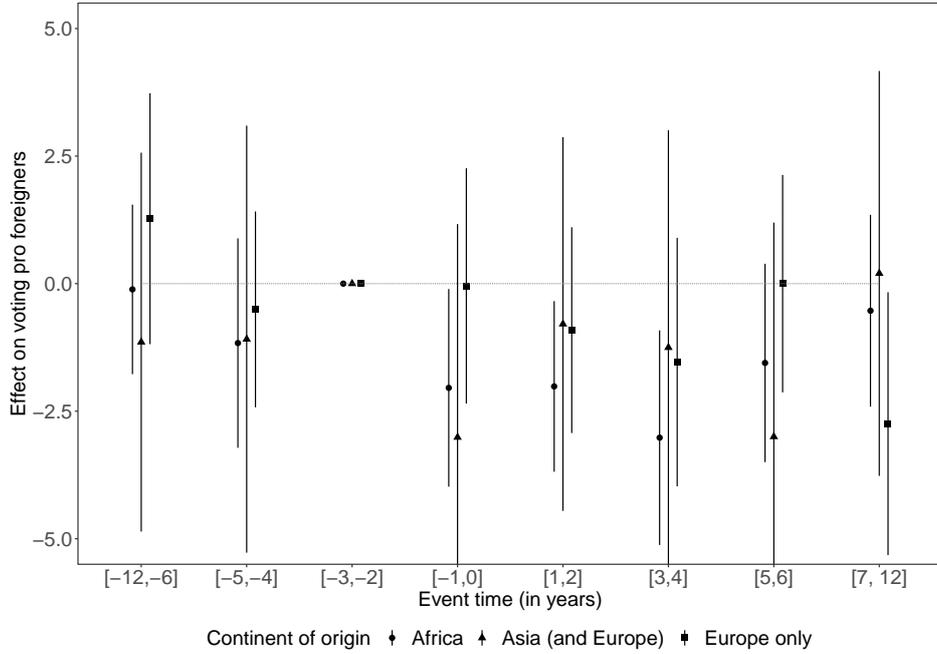


Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about linguistic proximity, which takes the value of one (zero) for municipalities above the median that hosted asylum seekers that were linguistically close at treatment start. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending redistribution as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

E.2 Continent of origin

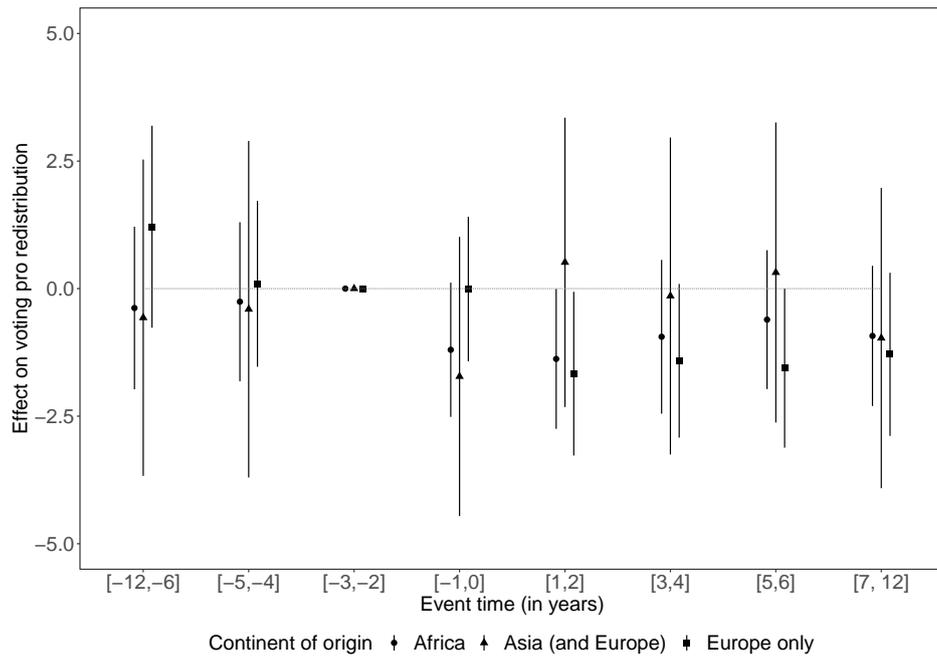
Differentiating asylum seekers by their continent of origin results in 107 municipalities that hosted at least one asylum seeker from Africa at treatment start, 218 municipalities with exclusively European asylum seekers and 138 with Asian (and European) asylum seekers.

Figure E.3: Hosting asylum seekers and voting pro foreigners: differentiating by continent of origin at treatment start



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about the continent of origin. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending foreigners legislation as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure E.4: Hosting asylum seekers and voting pro redistribution: differentiating by continent of origin at treatment start

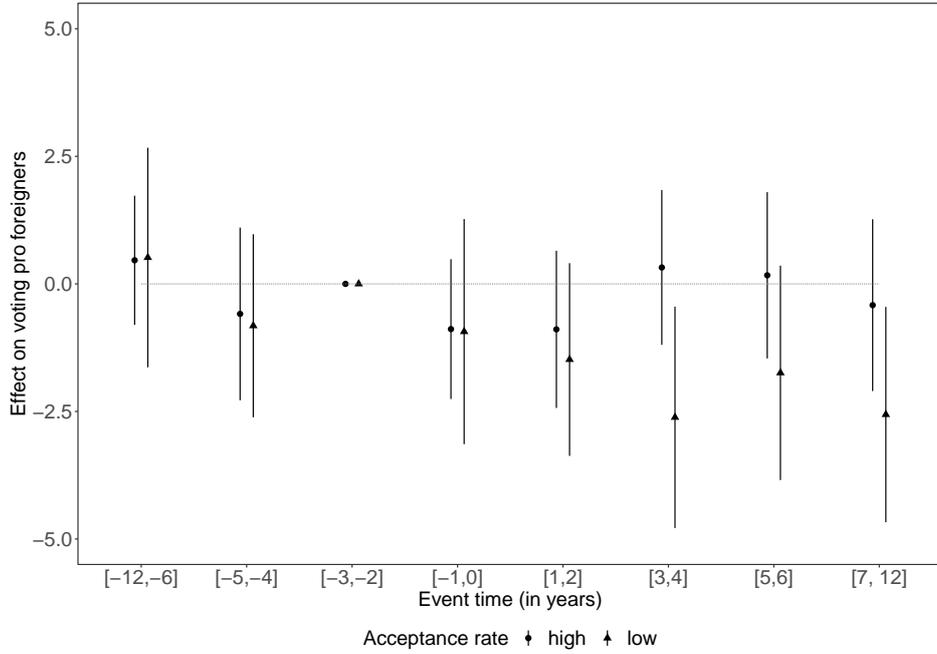


Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about the continent of origin. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending redistribution as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

E.3 Acceptance rates

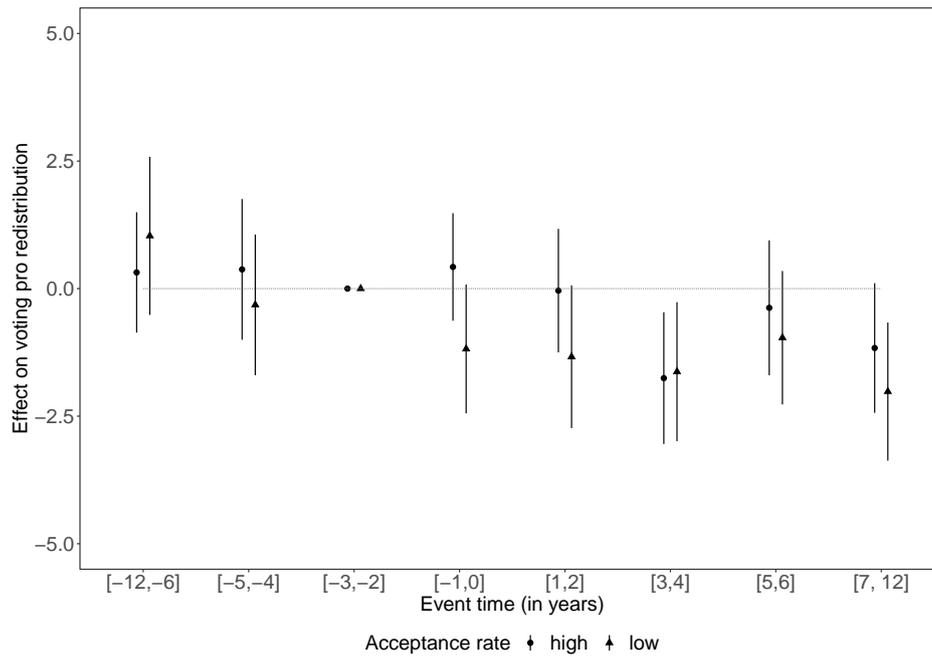
Differentiating asylum seekers by the acceptance rate of their country of origin is achieved by denoting those municipalities whose asylum seekers have on average an acceptance rate at treatment start above the median as "high" and the rest as "low".

Figure E.5: Hosting asylum seekers and voting pro foreigners: differentiating at median of acceptance rates at treatment start



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about the acceptance rates. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending foreigners legislation as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure E.6: Hosting asylum seekers and voting pro redistribution: differentiating at median of acceptance rates at treatment start

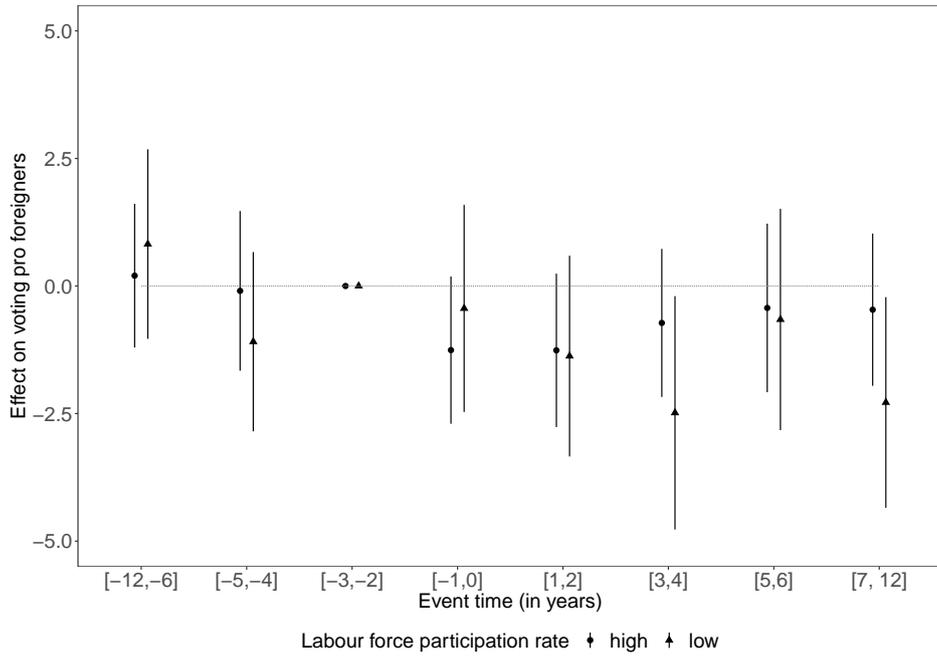


Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about the acceptance rates. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending redistribution as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

E.4 Labor force participation rates

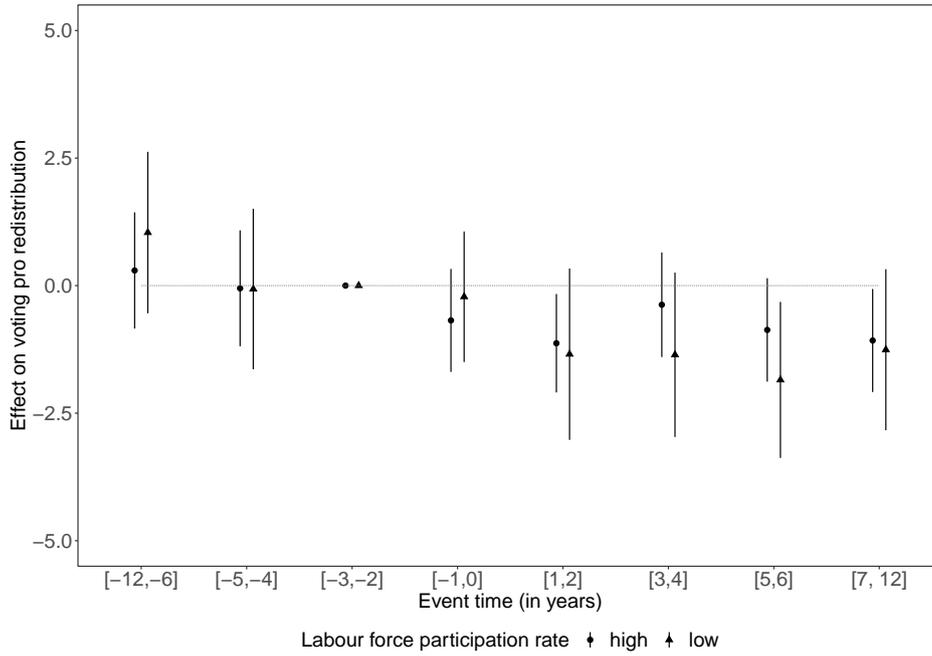
Differentiating asylum seekers by their labor force participation rate, which we have on an annual basis for every canton for every country of origin and separately for both statuses (N and F), is achieved by denoting those municipalities whose asylum seekers have on average a labor force participation rate at treatment start above the median as "high" and the rest as "low".

Figure E.7: Hosting asylum seekers and voting pro foreigners: differentiating at median of labor force participation rates at treatment start



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about the labor force participation rate. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending foreigners legislation as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure E.8: Hosting asylum seekers and voting pro redistribution: differentiating at median of labor force participation rates at treatment start

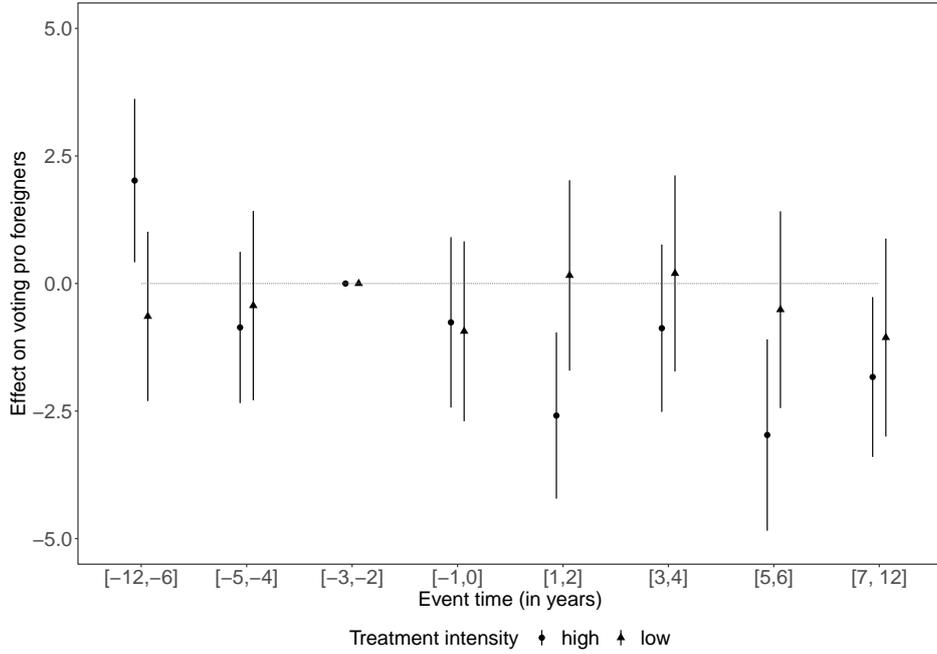


Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about the labor force participation rate. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending redistribution legislation as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

E.5 Treatment intensity

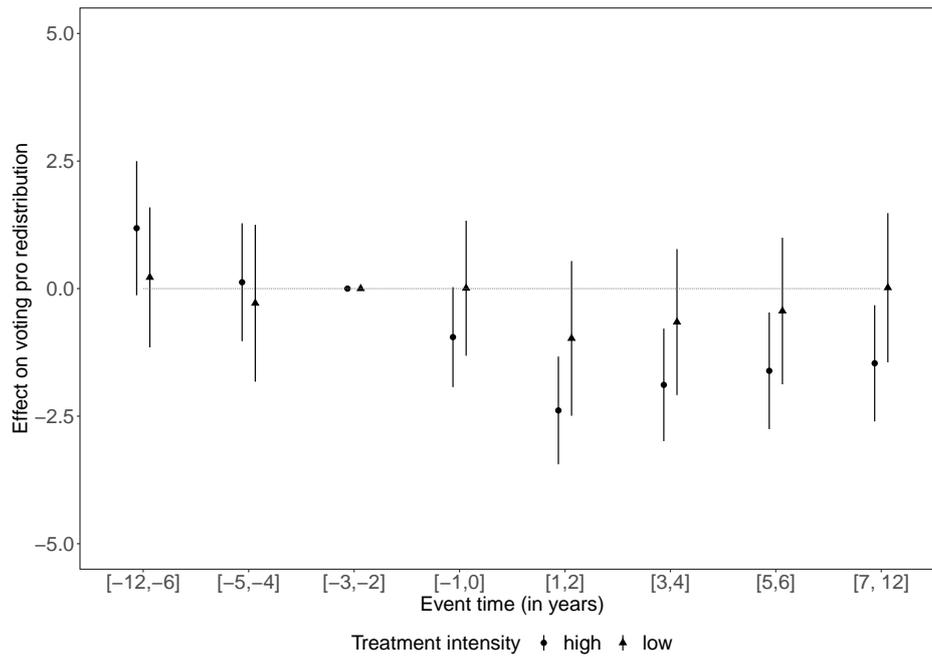
Differentiating asylum seekers by their treatment intensity, i.e. the number of asylum seekers relative to the host municipality's average constant population, is achieved by denoting those municipalities whose relative share of asylum seekers at treatment start is above the median as "high" and the rest as "low".

Figure E.9: Hosting asylum seekers and voting pro foreigners: differentiating at median of treatment intensity at treatment start



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about treatment intensity, which takes the value of one (zero) for municipalities that hosted asylum seekers above (below) the median at treatment start. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending foreigners legislation as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure E.10: Hosting asylum seekers and voting pro redistribution: differentiating at median of treatment intensity at treatment start

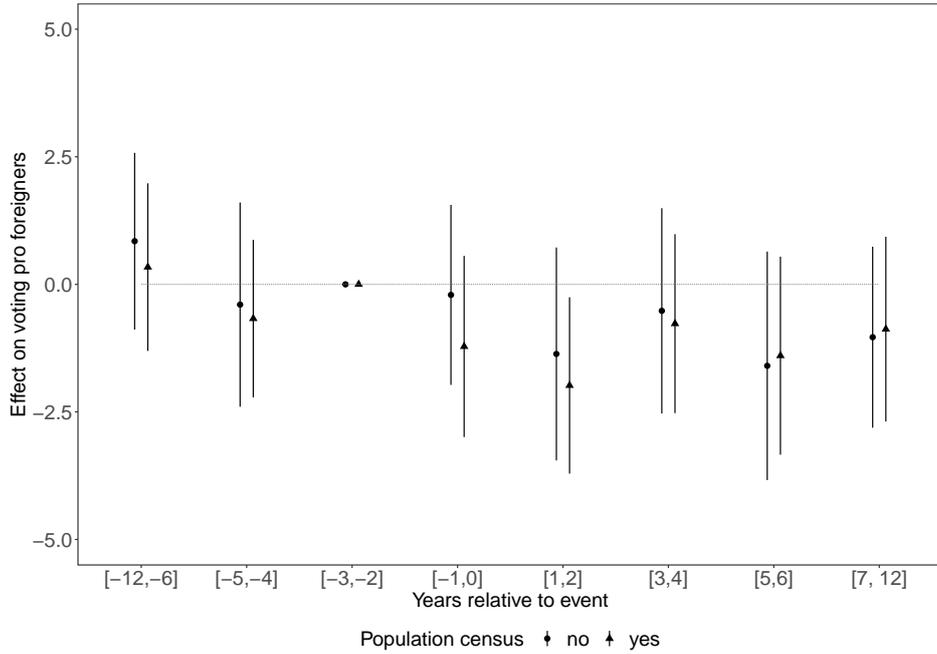


Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about treatment intensity, which takes the value of one (zero) for municipalities that hosted asylum seekers above (below) the median at treatment start. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending redistribution legislation as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

E.6 Prior experience with asylum seekers in the municipality

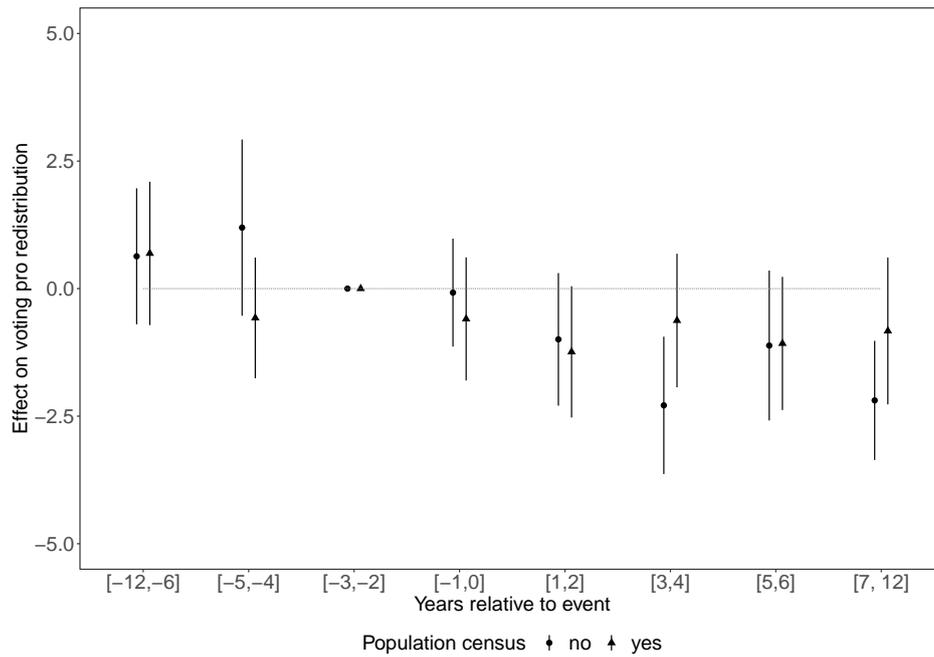
Differentiating the sample by whether municipalities hosted asylum seekers before Switzerland experienced a large inflow in the mid-1990s is achieved by denoting those municipalities that accommodated asylum seekers according to the 1990 population census as "yes" and the rest as "no".

Figure E.11: Hosting asylum seekers and voting pro foreigners: differentiating municipalities by prior experience with asylum seekers



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about prior local experience with asylum seekers, which takes the value of zero (one) for municipalities that did not (did) host asylum seekers as early as 1990. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending foreigners legislation as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure E.12: Hosting asylum seekers and voting pro redistribution: differentiating municipalities by prior experience with asylum seekers



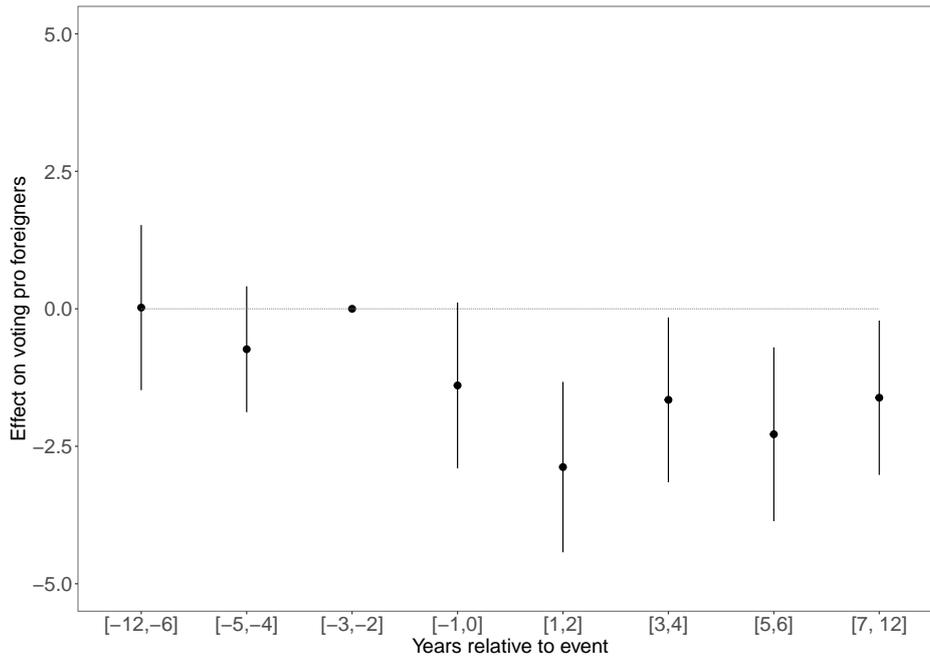
Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. Estimates in dots (triangles) result from interactions of the event time coefficients with an indicator about prior local experience with asylum seekers, which takes the value of zero (one) for municipalities that did not (did) host asylum seekers as early as 1990. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending redistribution legislation as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Contrary to heterogeneity analyses via interactions, sample splits require the matching procedure to be performed anew (since the original sample has been split in one or another way).

E.7 Early treatment years

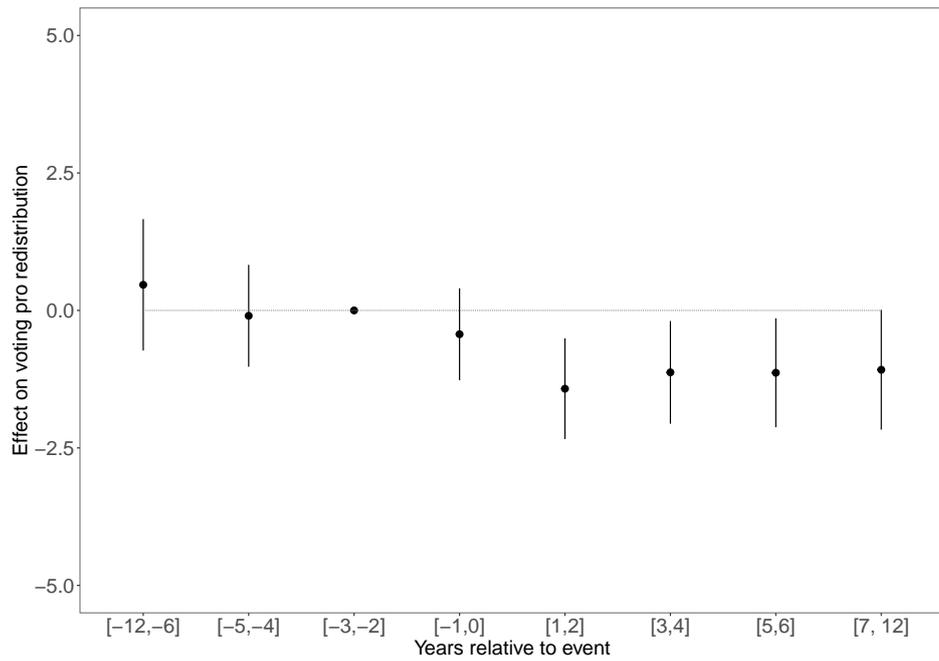
The sample for matching consists of 647 municipalities, of which 355 had been newly treated during the period 1996-2006 (and 292 municipalities that had never been treated). From the propensity score matching with replacement, a sample of 423 municipalities results with 103 (weighted) control and 320 treatment units. From the 355 treatment units, 35 were discarded ($355-35=320$); from the 292 control units, 173 were unmatched and 16 discarded ($292-173-16=103$).

Figure E.13: Hosting asylum seekers and voting pro foreigners: using early treated municipalities (1996-2006)



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers during the period 1996-2006. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable are all votes on foreigners. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure E.14: Hosting asylum seekers and voting pro redistribution: using early treated municipalities (1996-2006)

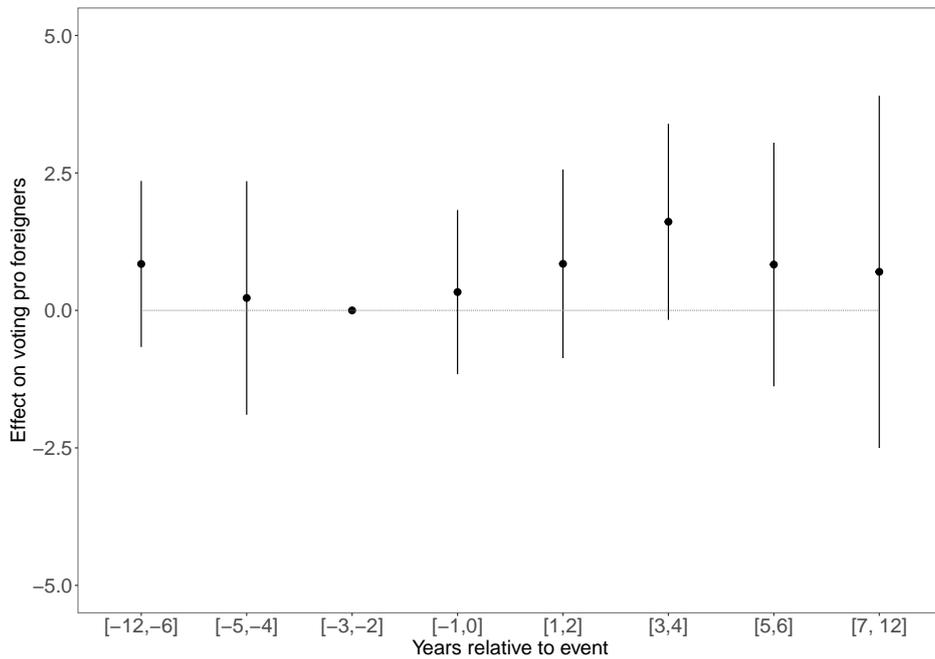


Note: The graph shows event time coefficients estimated of newly hosting asylum seekers during the period 1996-2006. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable are all votes on redistribution. The 95% confidence intervals are based on standard errors clustered at the municipality level.

E.8 Late treatment years

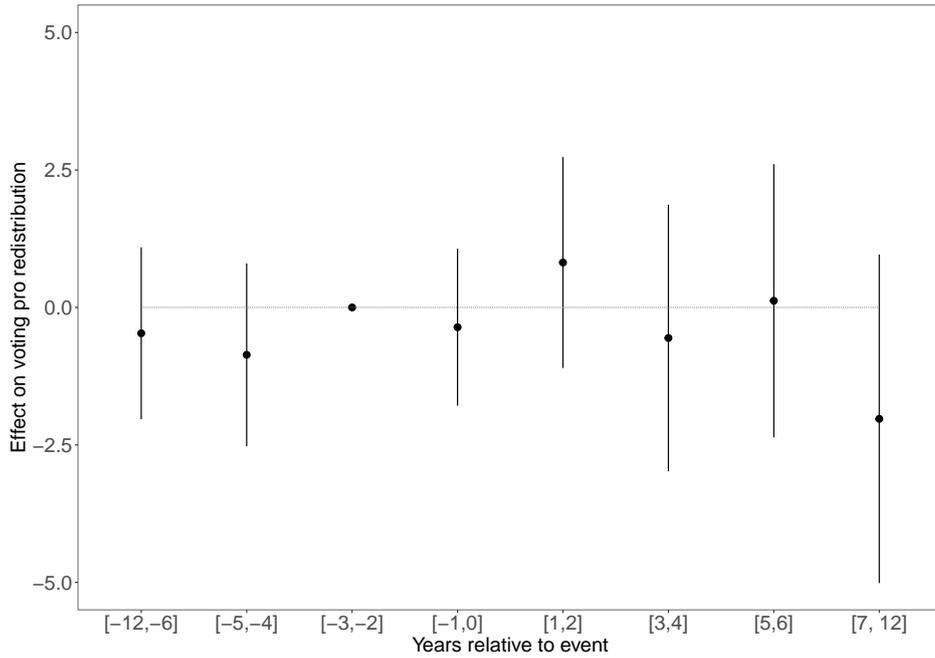
The sample for matching consists of 398 municipalities, of which 106 had been newly treated during the period 2007-2017 (and 292 municipalities that had never been treated). From the propensity score matching with replacement, a sample of 168 municipalities results with 66 (weighted) control and 102 treatment units. From the 106 treatment units, 4 were discarded ($106-4=102$); from the 292 control units, 204 were unmatched and 22 discarded ($292-204-22=66$).

Figure E.15: Hosting asylum seekers and voting pro foreigners: using late treated municipalities (2007-2017)



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers during the period 2007-2017. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable are all votes on foreigners. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure E.16: Hosting asylum seekers and voting pro redistribution: using late treated municipalities (2007-2017)



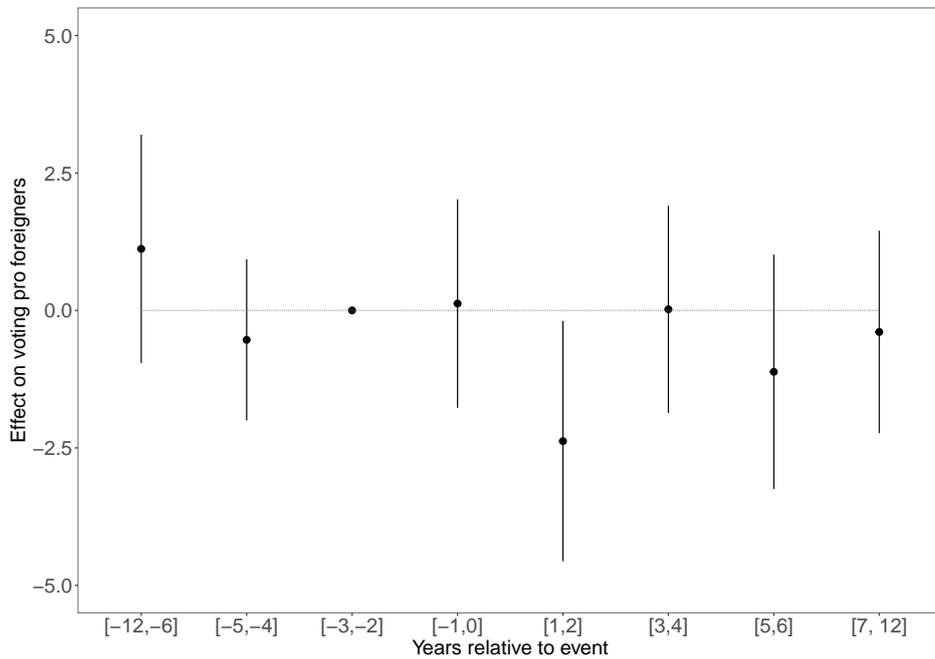
Note: The graph shows event time coefficients estimated of newly hosting asylum seekers during the period 2007-2017. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable are all votes on redistribution. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Municipalities that were newly treated during the early period (1996-2006) received about the same share of asylum seekers (5.75 permille) as municipalities that were newly treated during the late period (5.6 permille), which implies that treatment intensity cannot explain the result above (i.e. that municipalities that were treated during the early years show a relatively more negative reaction than municipalities that were treated during late years).

E.9 Asylum seekers from Balkans

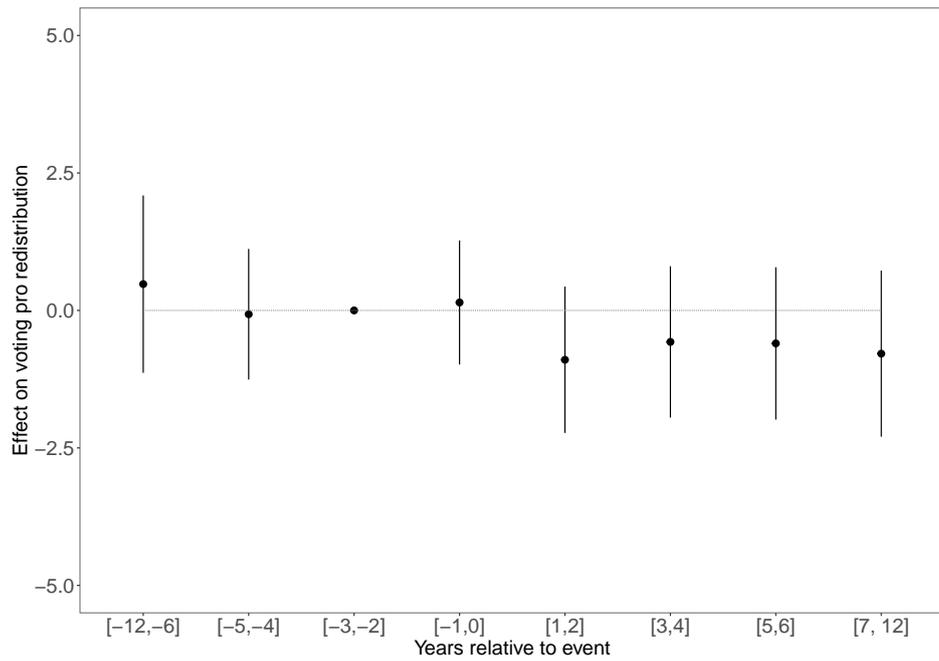
The sample for matching consists of 510 municipalities, of which 218 had been newly treated during the period 1996-2015 and hosted asylum seekers from the Balkans at treatment start (and 292 municipalities that had never been treated). From the propensity score matching with replacement, a sample of 261 municipalities results with 71 (weighted) control and 190 treatment units. From the 218 treatment units, 28 were discarded ($218-28=190$); from the 292 control units, 151 were unmatched and 70 discarded ($292-151-70=71$).

Figure E.17: Hosting asylum seekers and voting pro foreigners: using municipalities that hosted asylum seekers from the Balkans



Note: The graph shows event time coefficients estimated of hosting asylum seekers from the Balkans at treatment start. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable are all votes on foreigners. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure E.18: Hosting asylum seekers and voting pro redistribution: using municipalities that hosted asylum seekers from the Balkans

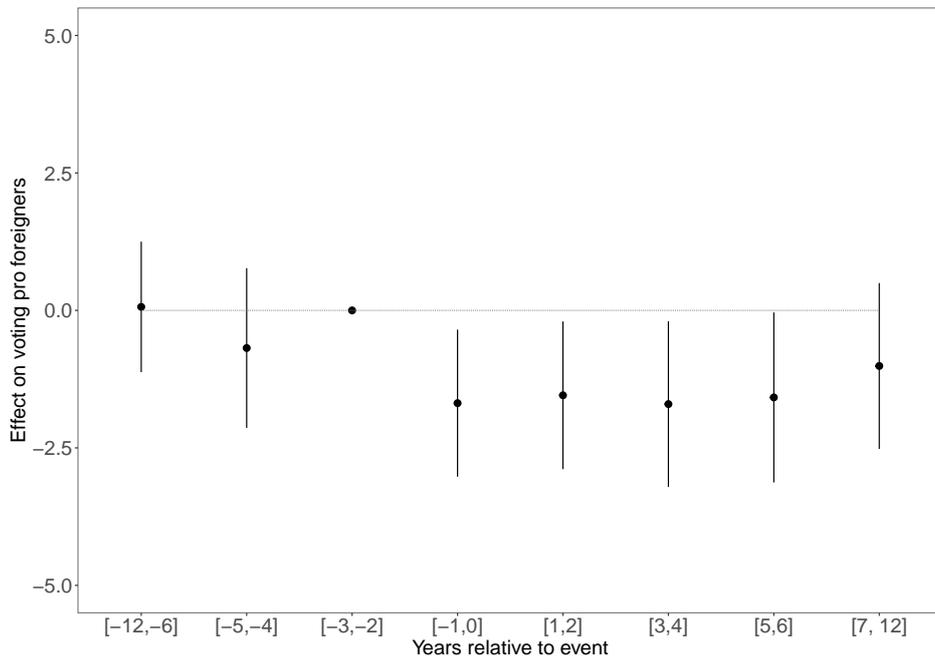


Note: The graph shows event time coefficients estimated of hosting asylum seekers from the Balkans at treatment start. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable are all votes on redistribution. The 95% confidence intervals are based on standard errors clustered at the municipality level.

E.10 Asylum seekers not from Balkans

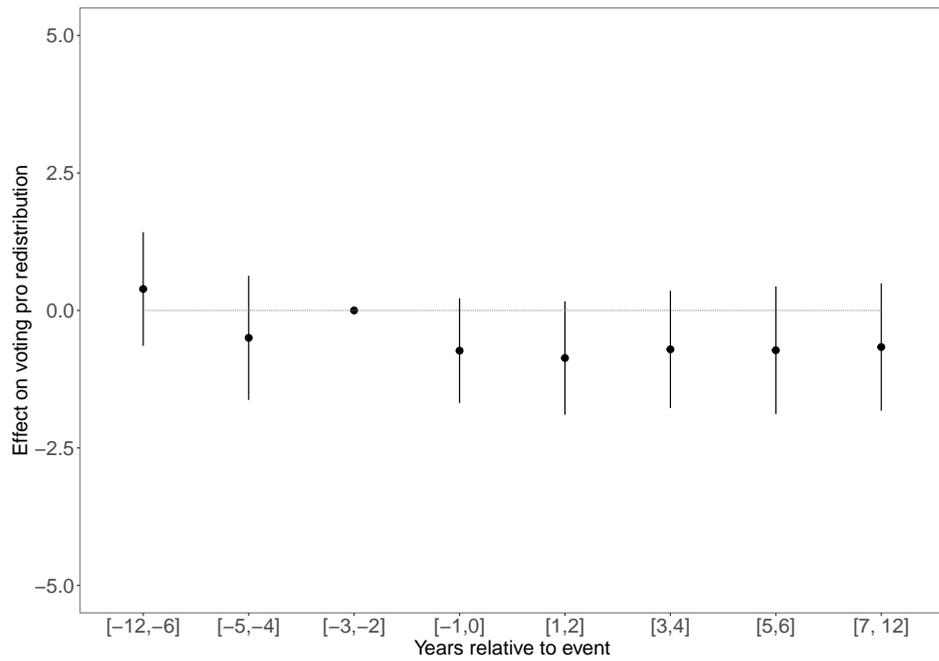
The sample for matching consists of 535 municipalities, of which 243 had been newly treated during the period 1996-2017 and did not host asylum seekers from the Balkans at treatment start (and 292 municipalities that had never been treated). From the propensity score matching with replacement, a sample of 327 municipalities results with 101 (weighted) control and 226 treatment units. From the 243 treatment units, 17 were discarded ($243-17=226$); from the 292 control units, 182 were unmatched and 9 discarded ($292-182-9=101$).

Figure E.19: Hosting asylum seekers and voting pro foreigners: using municipalities that did not host asylum seekers from the Balkans



Note: The graph shows event time coefficients estimated of hosting asylum seekers not from the Balkans at treatment start. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable are all votes on foreigners. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure E.20: Hosting asylum seekers and voting pro redistribution: using municipalities that did not host asylum seekers from the Balkans

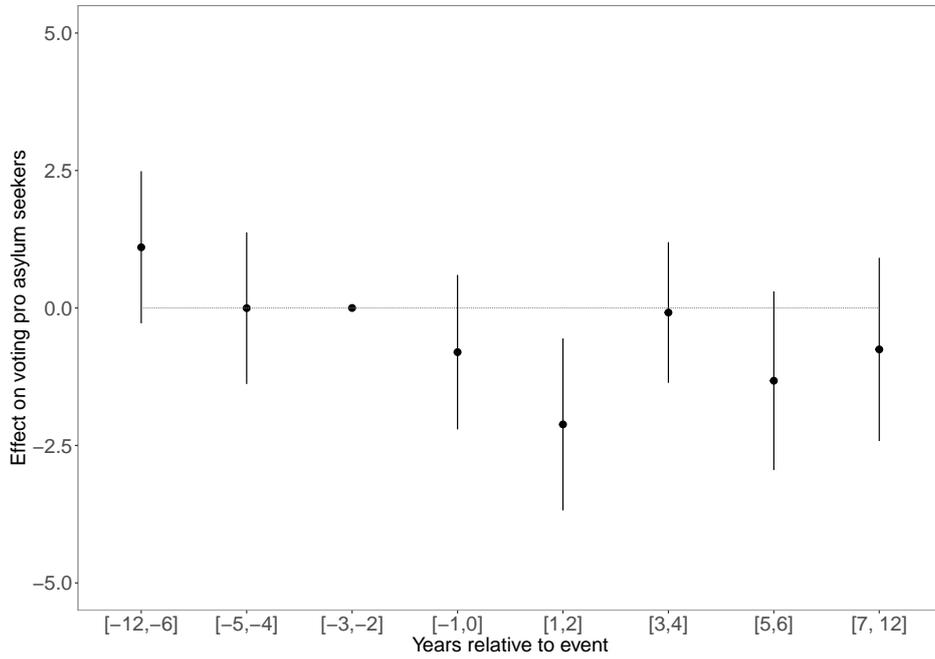


Note: The graph shows event time coefficients estimated of hosting asylum seekers not from the Balkans at treatment start. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable are all votes on redistribution. The 95% confidence intervals are based on standard errors clustered at the municipality level.

E.11 Sub-themes: asylum and alien status

Splitting the sample not along the lines of municipalities but between votes with different types of sub-themes does not require to perform the matching process anew since the composition of the treatment and control group remains unchanged. Differentiating the themes of the referendums is achieved by denoting those 12 votes that specifically targeted the subtopic of asylum and alien status as *asylum* and the remaining 13 votes as *migrants* (covering the subtopics of immigration and mobility, citizenship and nationality and culture and religion).

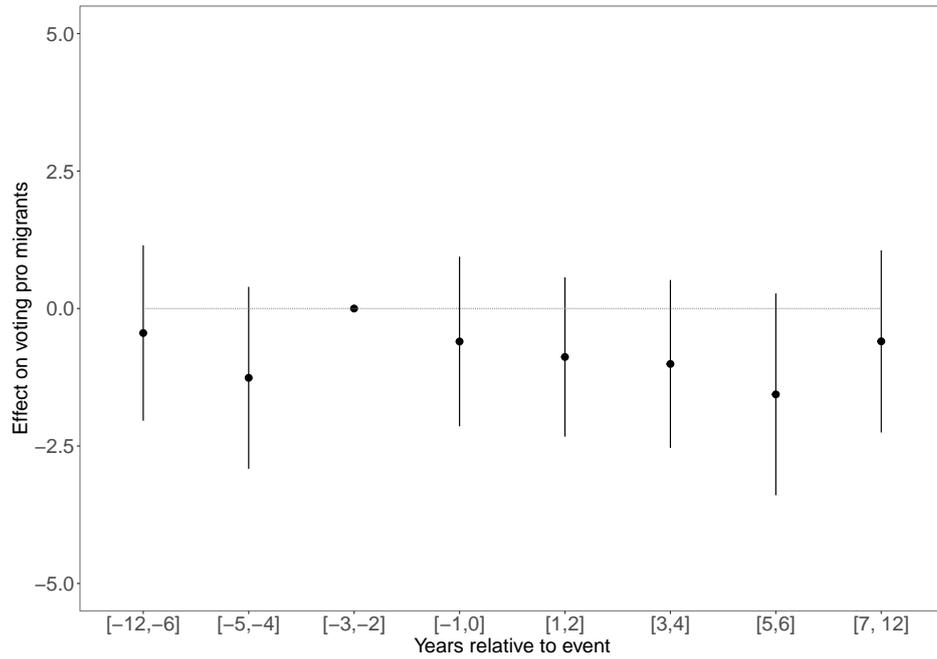
Figure E.21: Hosting asylum seekers and voting pro asylum



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending asylum legislation as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

E.12 Sub-themes: immigration and mobility, etc.

Figure E.22: Hosting asylum seekers and voting pro migrants

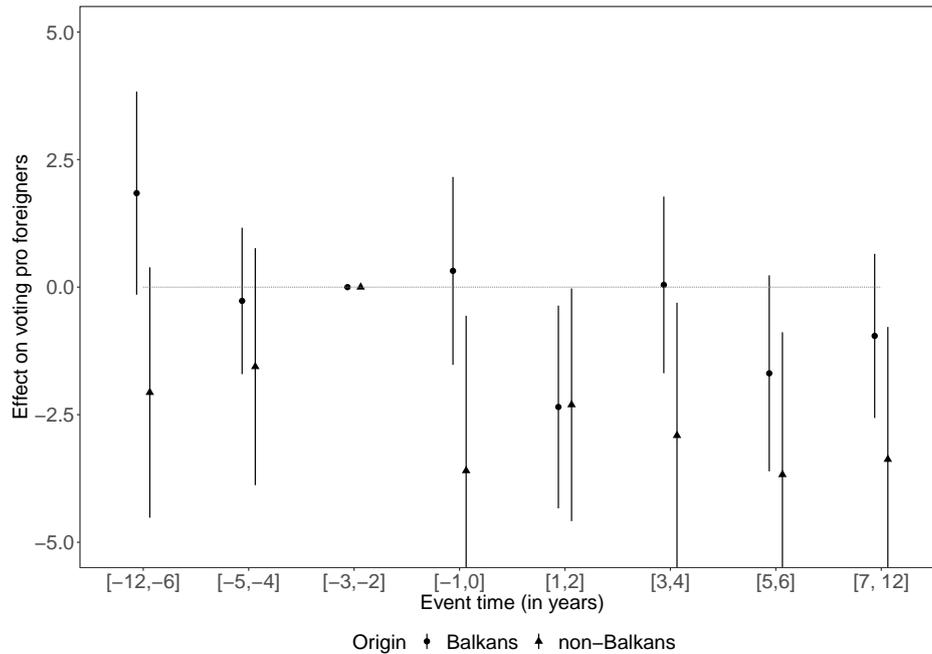


Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the vote share in favor of extending migrant legislation as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level.

E.13 Early treatment years and asylum seekers from Balkans/non-Balkans

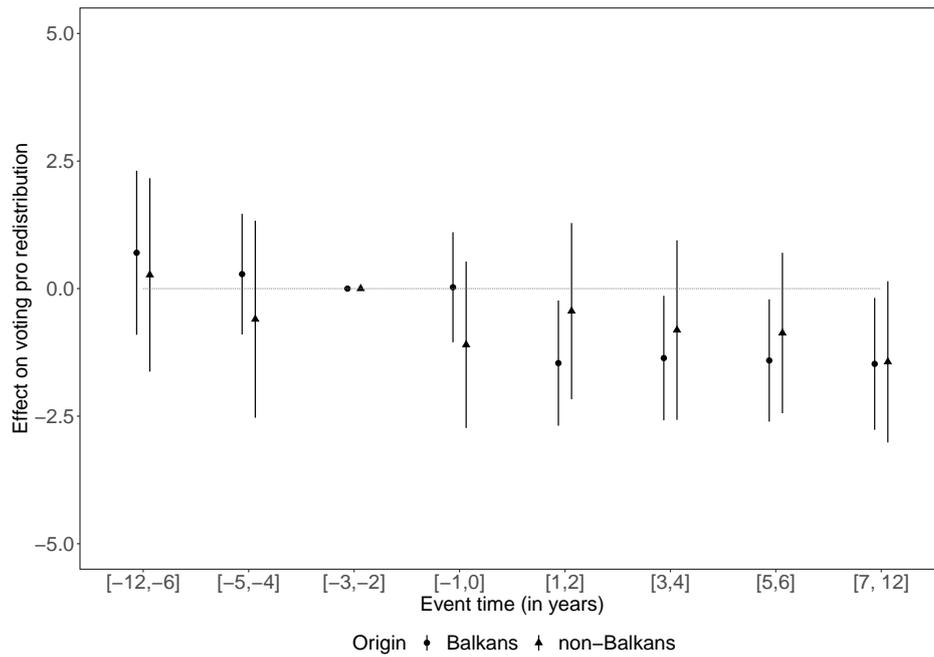
This is a combination of a sample split with interactions.

Figure E.23: Hosting asylum seekers and voting pro foreigners: differentiating early treated municipalities by region of origin



Note: The graph shows event time coefficients estimated of hosting asylum seekers during the early period (1996-2006) and differentiating by region of origin. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable are all votes on foreigners. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure E.24: Hosting asylum seekers and voting pro redistribution: differentiating early treated municipalities by region of origin

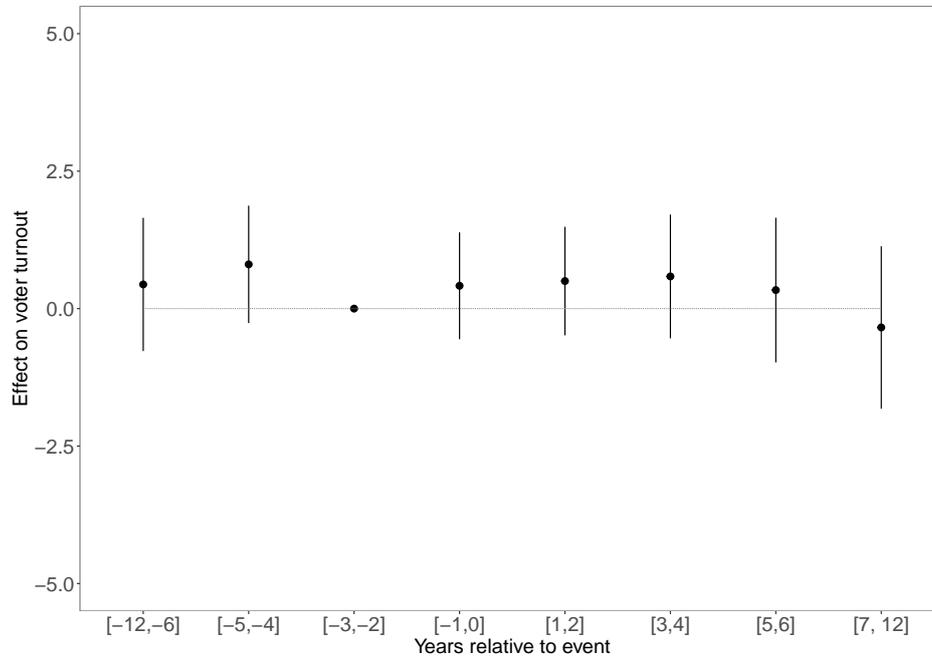


Note: The graph shows event time coefficients estimated of hosting asylum seekers during the early period (1996-2006) and differentiating by region of origin. The effects are measured relative to event time $t = [-3, -2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable are all votes on redistribution. The 95% confidence intervals are based on standard errors clustered at the municipality level.

F Robustness checks

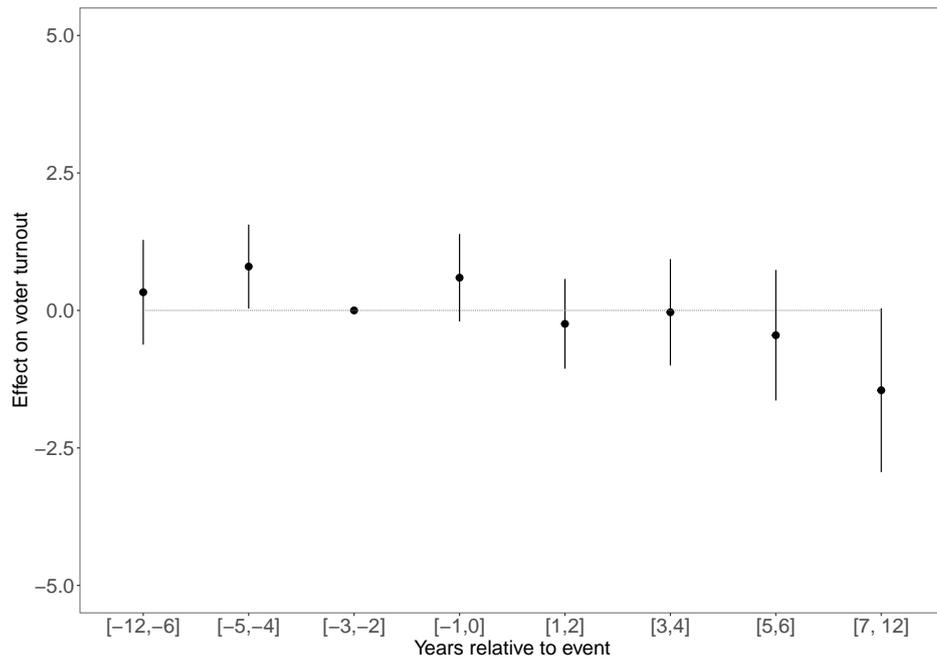
F.1 Turnout

Figure F.1: Hosting asylum seekers and voter turnout: using only the 25 votes on foreigners



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is voter turnout of the 25 referenda considering foreigners. The 95% confidence intervals are based on standard errors clustered at the municipality level.

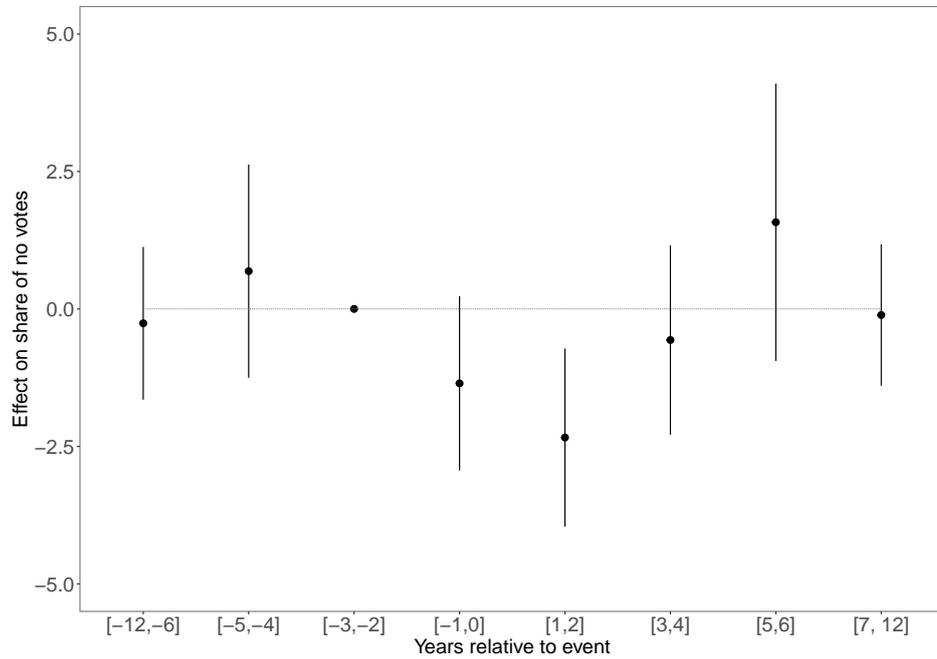
Figure F.2: Hosting asylum seekers and voter turnout: using only the 40 votes on redistribution



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is voter turnout of the 40 referenda considering redistribution. The 95% confidence intervals are based on standard errors clustered at the municipality level.

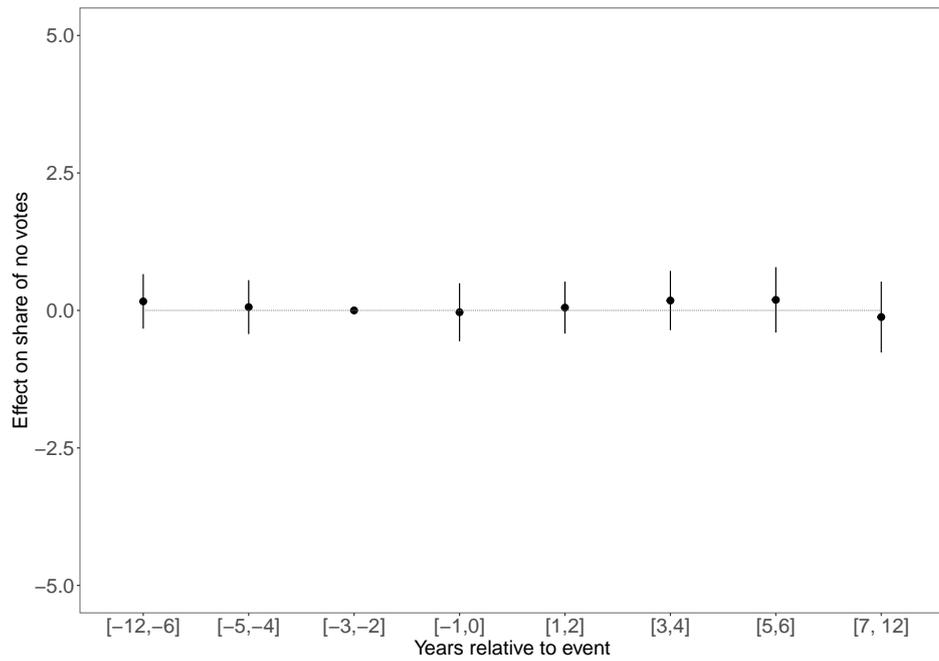
F.2 Status quo

Figure F.3: Hosting asylum seekers and voting for the status quo: using only the 25 votes on foreigners



Note: The graph shows event time coefficients estimated of newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the share of no votes of the 25 referenda considering foreigners. The 95% confidence intervals are based on standard errors clustered at the municipality level.

Figure F.4: Hosting asylum seekers and voter turnout: using all votes but those on foreigners



Note: The graph shows event time coefficients estimated for newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the y-axis depicts the vote share difference relative to two to three years before treatment. The dependent variable is the share of no votes of all votes except those on foreigners. The 95% confidence intervals are based on standard errors clustered at the municipality level.

G Regression tables

Table G.1: Hosting asylum seekers and voting outcomes

| | <i>Dependent variable:</i> | | | |
|-------------------------|----------------------------|---------------------------|---------------------|----------------------|
| | Pro foreigners (1) | Pro redistribution (2) | Turnout (3) | Status quo (4) |
| Event time [-12,-6] | 0.192 (0.641) | 0.234 (0.500) | -0.026 (0.441) | 0.173 (0.251) |
| Event time [-5,-4] | -0.618 (0.537) | -0.204 (0.422) | 0.327 (0.282) | 0.104 (0.247) |
| Event time [-1,0] | -0.871 (0.555) | -0.400 (0.367) | -0.172 (0.279) | -0.122 (0.254) |
| Event time [1,2] | -1.688*** (0.592) | -1.080*** (0.414) | -0.419 (0.330) | -0.112 (0.244) |
| Event time [3,4] | -0.629 (0.588) | -0.973** (0.453) | -0.358 (0.465) | 0.167 (0.272) |
| Event time [5,6] | -1.285* (0.682) | -0.801 (0.549) | -0.451 (0.596) | 0.336 (0.322) |
| Event time [7, 12] | -0.628 (0.739) | -0.791 (0.582) | -1.136 (0.792) | -0.194 (0.317) |
| Observations | 10,701 | 18,142 | 117,665 | 117,665 |
| R ² | 0.809 | 0.725 | 0.712 | 0.726 |
| Adjusted R ² | 0.798 | 0.716 | 0.710 | 0.724 |
| Residual std. error | 8.184 (df = 10120) | 9.830 (df = 17546) | 7.340 (df = 116834) | 11.190 (df = 116834) |

Notes: The table shows event time coefficients estimated for newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the latter has been standardized. The dependent variables are the four main variables as defined in the data section. The 95% confidence intervals are based on standard errors clustered at the municipality level. * $p<0.1$; ** $p<0.05$; *** $p<0.01$.

Table G.2: Hosting asylum seekers and interactions: treatment intensity

| | <i>Dependent variable:</i> | |
|---------------------------|----------------------------|----------------------|
| | Pro foreigners | Pro redistribution |
| | (1) | (2) |
| Main effect [-12,-6] | 2.019** (0.817) | 1.184* (0.671) |
| Main effect [-5,-4] | -0.861 (0.756) | 0.125 (0.590) |
| Main effect [-1,0] | -0.761 (0.852) | -0.951* (0.500) |
| Main effect [1,2] | -2.588*** (0.831) | -2.388*** (0.539) |
| Main effect [3,4] | -0.876 (0.837) | -1.887*** (0.563) |
| Main effect [5,6] | -2.969*** (0.957) | -1.611*** (0.583) |
| Main effect [7, 12] | -1.832** (0.799) | -1.463** (0.581) |
| Interaction term [-12,-6] | -2.663*** (0.949) | -0.964 (0.796) |
| Interaction term [-5,-4] | 0.428 (1.017) | -0.411 (0.831) |
| Interaction term [-1,0] | -0.175 (1.058) | 0.959 (0.685) |
| Interaction term [1,2] | 1.529 (1.034) | 2.406*** (0.725) |
| Interaction term [3,4] | 0.363 (1.013) | 1.447** (0.715) |
| Interaction term [5,6] | 3.167*** (1.058) | 0.955 (0.713) |
| Interaction term [7, 12] | 1.991** (0.831) | 0.487 (0.678) |
| Observations | 10,701 | 18,142 |
| R ² | 0.803 | 0.717 |
| Adjusted R ² | 0.791 | 0.708 |
| Residual std. error | 8.422 (df = 10113) | 10.109 (df = 17539) |

Notes: The main effects are capturing the effect of the municipalities experiencing a relatively high treatment, whereas the interaction terms are capturing the effect of the relatively low treated municipalities. Unlike for the corresponding graphs, the coefficients of the interaction terms presented in the table are not yet linear combinations of the main with the interaction effect but would have to be added/subtracted from the main effects in order to be compared with the graphs in the results section. The 95% confidence intervals are based on standard errors clustered at the municipality level.*p<0.1; **p<0.05; ***p<0.01.

Table G.3: Hosting asylum seekers and interactions: linguistic proximity

| | <i>Dependent variable:</i> | |
|---------------------------|----------------------------|----------------------|
| | Pro foreigners | Pro redistribution |
| | (1) | (2) |
| Main effect [-12,-6] | 1.419* (0.859) | 0.722 (0.695) |
| Main effect [-5,-4] | -0.406 (0.695) | -0.247 (0.585) |
| Main effect [-1,0] | 0.276 (0.835) | -0.147 (0.504) |
| Main effect [1,2] | -2.190** (0.928) | -1.021* (0.595) |
| Main effect [3,4] | 0.534 (0.771) | -1.328** (0.585) |
| Main effect [5,6] | -1.088 (0.895) | -1.498*** (0.559) |
| Main effect [7, 12] | -0.379 (0.751) | -1.465** (0.601) |
| Interaction term [-12,-6] | -1.512 (0.988) | -0.075 (0.823) |
| Interaction term [-5,-4] | -0.434 (1.000) | 0.399 (0.826) |
| Interaction term [-1,0] | -2.013* (1.068) | -0.567 (0.692) |
| Interaction term [1,2] | 0.713 (1.078) | -0.360 (0.744) |
| Interaction term [3,4] | -2.341** (1.010) | 0.437 (0.733) |
| Interaction term [5,6] | -0.561 (1.064) | 0.866 (0.745) |
| Interaction term [7, 12] | -0.888 (0.847) | 0.570 (0.684) |
| Observations | 10,701 | 18,142 |
| R ² | 0.802 | 0.717 |
| Adjusted R ² | 0.790 | 0.707 |
| Residual std. error | 8.449 (df = 10113) | 10.116 (df = 17539) |

Notes: The main effects are capturing the effect of the municipalities hosting asylum seekers from linguistically proximate countries, whereas the interaction terms are capturing the effect of asylum seekers from linguistically distant countries of origin. Unlike for the corresponding graphs, the coefficients of the interaction terms presented in the table are not yet linear combinations of the main with the interaction effect but would have to be added/subtracted from the main effects in order to be compared with the graphs in the results section. The 95% confidence intervals are based on standard errors clustered at the municipality level.*p<0.1; **p<0.05; ***p<0.01.

Table G.4: Hosting asylum seekers and interactions: continent of origin

| | <i>Dependent variable:</i> | |
|----------------------------|----------------------------|---------------------------|
| | Pro foreigners (1) | Pro redistribution (2) |
| Africa [-12,-6] | -0.112 (0.847) | -0.380 (0.813) |
| Africa [-5,-4] | -1.165 (1.047) | -0.256 (0.795) |
| Africa [-1,0] | -2.042** (0.988) | -1.199* (0.671) |
| Africa [1,2] | -2.014** (0.853) | -1.378** (0.700) |
| Africa [3,4] | -3.019*** (1.073) | -0.944 (0.769) |
| Africa [5,6] | -1.554 (0.992) | -0.608 (0.694) |
| Africa [7, 12] | -0.531 (0.959) | -0.927 (0.701) |
| Europe only [-12,-6] | 1.386 (1.185) | 1.593 (1.057) |
| Europe only [-5,-4] | 0.660 (1.262) | 0.352 (1.009) |
| Europe only [-1,0] | 1.998 (1.292) | 1.191 (0.841) |
| Europe only [1,2] | -0.730 (1.216) | 0.090 (0.889) |
| Europe only [3,4] | 3.018** (1.255) | -0.615 (0.927) |
| Europe only [5,6] | 0.018 (1.243) | -0.806 (0.832) |
| Europe only [7, 12] | -0.380 (1.027) | -0.740 (0.813) |
| Asia (and Europe) [-12,-6] | -1.033 (1.163) | -0.190 (0.904) |
| Asia (and Europe) [-5,-4] | 0.077 (1.198) | -0.147 (0.978) |
| Asia (and Europe) [-1,0] | -0.969 (1.257) | -0.523 (0.810) |
| Asia (and Europe) [1,2] | 2.215* (1.287) | 0.408 (0.902) |
| Asia (and Europe) [3,4] | 0.019 (1.220) | 1.260 (0.823) |
| Asia (and Europe) [5,6] | 0.302 (1.298) | 0.463 (0.968) |
| Asia (and Europe) [7, 12] | -0.260 (1.047) | 1.442* (0.839) |
| Observations | 10,701 | 18,142 |
| R ² | 0.802 | 0.717 |
| Adjusted R ² | 0.790 | 0.707 |
| Residual std. error | 8.447 (df = 10106) | 10.114 (df = 17532) |

Notes: Unlike for the corresponding graphs, the coefficients of the interaction terms (Europe only and Asia (and Europe)) presented in the table are not yet linear combinations of the main with the interaction effect but would have to be added/subtracted from the main effects (Africa) in order to be compared with the graphs in the results section. The 95% confidence intervals are based on standard errors clustered at the municipality level. *p<0.1; **p<0.05; ***p<0.01.

Table G.5: Hosting asylum seekers and interactions: acceptance rates

| | <i>Dependent variable:</i> | |
|---------------------------|----------------------------|----------------------|
| | Pro foreigners | Pro redistribution |
| | (1) | (2) |
| Main effect [-12,-6] | 0.463 (0.646) | 0.317 (0.602) |
| Main effect [-5,-4] | -0.588 (0.863) | 0.376 (0.704) |
| Main effect [-1,0] | -0.886 (0.699) | 0.424 (0.538) |
| Main effect [1,2] | -0.891 (0.786) | -0.040 (0.618) |
| Main effect [3,4] | 0.321 (0.774) | -1.755*** (0.658) |
| Main effect [5,6] | 0.168 (0.832) | -0.376 (0.675) |
| Main effect [7, 12] | -0.417 (0.859) | -1.164* (0.648) |
| Interaction term [-12,-6] | 0.054 (0.991) | 0.716 (0.798) |
| Interaction term [-5,-4] | -0.232 (1.100) | -0.695 (0.887) |
| Interaction term [-1,0] | -0.049 (1.092) | -1.606** (0.710) |
| Interaction term [1,2] | -1.670 (1.074) | -1.978** (0.770) |
| Interaction term [3,4] | -2.065** (1.028) | 0.792 (0.770) |
| Interaction term [5,6] | -2.784*** (1.057) | -1.252 (0.780) |
| Interaction term [7, 12] | -1.065 (0.906) | -0.172 (0.706) |
| Observations | 10,701 | 18,142 |
| R ² | 0.802 | 0.717 |
| Adjusted R ² | 0.790 | 0.707 |
| Residual std. error | 8.448 (df = 10113) | 10.111 (df = 17539) |

Notes: The main effects are capturing the effect of the municipalities hosting asylum seekers from countries with relatively high acceptance rates, whereas the interaction terms are capturing the effect of asylum seekers from countries with relatively low acceptance rates. Unlike for the corresponding graphs, the coefficients of the interaction terms presented in the table are not yet linear combinations of the main with the interaction effect but would have to be added/subtracted from the main effects in order to be compared with the graphs in the results section. The 95% confidence intervals are based on standard errors clustered at the municipality level.*p<0.1; **p<0.05; ***p<0.01.

Table G.6: Hosting asylum seekers and interactions: labor force participation

| | <i>Dependent variable:</i> | |
|---------------------------|----------------------------|---------------------|
| | Pro foreigners | Pro redistribution |
| | (1) | (2) |
| Main effect [-12,-6] | 0.202 (0.719) | 0.297 (0.581) |
| Main effect [-5,-4] | -0.095 (0.799) | -0.053 (0.580) |
| Main effect [-1,0] | -1.256* (0.736) | -0.682 (0.515) |
| Main effect [1,2] | -1.261 (0.767) | -1.130** (0.492) |
| Main effect [3,4] | -0.724 (0.740) | -0.375 (0.523) |
| Main effect [5,6] | -0.430 (0.843) | -0.868* (0.517) |
| Main effect [7, 12] | -0.464 (0.761) | -1.076** (0.515) |
| Interaction term [-12,-6] | 0.619 (0.926) | 0.743 (0.786) |
| Interaction term [-5,-4] | -0.997 (1.024) | -0.014 (0.839) |
| Interaction term [-1,0] | 0.817 (1.036) | 0.464 (0.684) |
| Interaction term [1,2] | -1.021 (1.015) | -0.127 (0.731) |
| Interaction term [3,4] | 0.067 (1.008) | -1.473** (0.713) |
| Interaction term [5,6] | -2.056* (1.069) | -0.487 (0.720) |
| Interaction term [7, 12] | -0.909 (0.830) | -0.268 (0.680) |
| Observations | 10,701 | 18,142 |
| R ² | 0.802 | 0.717 |
| Adjusted R ² | 0.790 | 0.707 |
| Residual std. error | 8.448 (df = 10113) | 10.115 (df = 17539) |

Notes: The main effects are capturing the effect of the municipalities hosting asylum seekers from countries with relatively high labor force participation rates, whereas the interaction terms are capturing the effect of asylum seekers from countries with relatively low labor force participation rates. Unlike for the corresponding graphs, the coefficients of the interaction terms presented in the table are not yet linear combinations of the main with the interaction effect but would have to be added/subtracted from the main effects in order to be compared with the graphs in the results section. The 95% confidence intervals are based on standard errors clustered at the municipality level.*p<0.1; **p<0.05; ***p<0.01.

Table G.7: Hosting asylum seekers and interactions: prior asylum experience

| | <i>Dependent variable:</i> | |
|---------------------------|----------------------------|----------------------|
| | Pro foreigners | Pro redistribution |
| | (1) | (2) |
| Main effect [-12,-6] | 0.846 (0.883) | 0.633 (0.680) |
| Main effect [-5,-4] | -0.397 (1.021) | 1.195 (0.881) |
| Main effect [-1,0] | -0.207 (0.900) | -0.079 (0.540) |
| Main effect [1,2] | -1.364 (1.065) | -0.995 (0.663) |
| Main effect [3,4] | -0.519 (1.027) | -2.288*** (0.687) |
| Main effect [5,6] | -1.597 (1.142) | -1.116 (0.749) |
| Main effect [7, 12] | -1.036 (0.905) | -2.191*** (0.595) |
| Interaction term [-12,-6] | -0.508 (1.017) | 0.057 (0.822) |
| Interaction term [-5,-4] | -0.274 (1.163) | -1.769* (0.988) |
| Interaction term [-1,0] | -1.011 (1.099) | -0.515 (0.691) |
| Interaction term [1,2] | -0.617 (1.186) | -0.245 (0.783) |
| Interaction term [3,4] | -0.252 (1.143) | 1.663** (0.797) |
| Interaction term [5,6] | 0.199 (1.245) | 0.040 (0.835) |
| Interaction term [7, 12] | 0.157 (0.929) | 1.361** (0.678) |
| Observations | 10,701 | 18,142 |
| R ² | 0.801 | 0.717 |
| Adjusted R ² | 0.790 | 0.707 |
| Residual Std. Error | 8.455 (df = 10113) | 10.111 (df = 17539) |

Notes: The main effects are capturing the effect of the municipalities that did not accommodate asylum seekers at the time of the 1990 population census, whereas the interaction terms are capturing the effect of municipalities that already hosted asylum seekers according to the 1990 population census. Unlike for the corresponding graphs, the coefficients of the interaction terms presented in the table are not yet linear combinations of the main with the interaction effect but would have to be added/subtracted from the main effects in order to be compared with the graphs in the results section. The 95% confidence intervals are based on standard errors clustered at the municipality level.*p<0.1; **p<0.05; ***p<0.01.

Table G.8: Hosting asylum seekers and policy preferences: sample splits by time period

| | <i>Dependent variable:</i> | | | |
|-------------------------|----------------------------|-------------------|---------------------------|-------------------|
| | Voting pro foreigners | | Voting pro redistribution | |
| | (1996-2006) | (2007-2017) | (1996-2006) | (2007-2017) |
| | (1) | (2) | (3) | (4) |
| Event time [-12,-6] | 0.022 (0.766) | 0.845 (0.771) | 0.466 (0.610) | -0.470 (0.798) |
| Event time [-5,-4] | -0.735 (0.584) | 0.226 (1.084) | -0.097 (0.473) | -0.862 (0.848) |
| Event time [-1,0] | -1.393* (0.770) | 0.333 (0.761) | -0.433 (0.426) | -0.360 (0.728) |
| Event time [1,2] | -2.878*** (0.790) | 0.848 (0.875) | -1.424*** (0.467) | 0.816 (0.978) |
| Event time [3,4] | -1.655** (0.765) | 1.613* (0.910) | -1.126** (0.477) | -0.556 (1.237) |
| Event time [5,6] | -2.282*** (0.806) | 0.834 (1.130) | -1.133** (0.505) | 0.121 (1.268) |
| Event time [7, 12] | -1.617** (0.716) | 0.702 (1.635) | -1.079* (0.556) | -2.026 (1.524) |
| Observations | 8,328 | 3,285 | 14,871 | 4,746 |
| R ² | 0.796 | 0.804 | 0.714 | 0.737 |
| Adjusted R ² | 0.784 | 0.792 | 0.704 | 0.724 |
| Residual std. error | 8.415 (df = 7876) | 8.313 (df = 3088) | 10.057 (df = 14404) | 9.924 (df = 4534) |

Notes: The table shows event time coefficients estimated for newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the latter has been standardized. The dependent variables are voting pro foreigners and voting pro redistribution, each for the early (1996-2006) as well as late (2007-2017) sample. The 95% confidence intervals are based on standard errors clustered at the municipality level. * $p<0.1$; ** $p<0.05$; *** $p<0.01$.

Table G.9: Hosting asylum seekers and policy preferences: sample splits by origin from Balkans

| | <i>Dependent variable:</i> | | | |
|-------------------------|----------------------------|---------------------|---------------------------|--------------------|
| | Voting pro foreigners | | Voting pro redistribution | |
| | (Balkans) | (Non-Balkans) | (Balkans) | (Non-Balkans) |
| | (1) | (2) | (3) | (4) |
| Event time [-12,-6] | 1.119 (1.060) | 0.064 (0.605) | 0.479 (0.823) | 0.390 (0.527) |
| Event time [-5,-4] | -0.535 (0.748) | -0.684 (0.741) | -0.069 (0.606) | -0.498 (0.577) |
| Event time [-1,0] | 0.125 (0.968) | -1.687** (0.682) | 0.145 (0.576) | -0.732 (0.486) |
| Event time [1,2] | -2.377** (1.114) | -1.543** (0.685) | -0.898 (0.679) | -0.866 (0.527) |
| Event time [3,4] | 0.020 (0.961) | -1.704** (0.769) | -0.573 (0.702) | -0.708 (0.544) |
| Event time [5,6] | -1.117 (1.088) | -1.582** (0.789) | -0.600 (0.707) | -0.724 (0.591) |
| Event time [7, 12] | -0.392 (0.939) | -1.010 (0.769) | -0.786 (0.771) | -0.666 (0.591) |
| Observations | 5,187 | 6,409 | 9,196 | 10,361 |
| R ² | 0.787 | 0.812 | 0.713 | 0.724 |
| Adjusted R ² | 0.775 | 0.801 | 0.703 | 0.714 |
| Residual std. error | 8.614 (df = 4895) | 8.199 (df = 6054) | 10.089 (df = 8889) | 10.043 (df = 9991) |

Notes: The table shows event time coefficients estimated for newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the latter has been standardized. The dependent variables are voting pro foreigners and voting pro redistribution, each for the Balkans as well as non-Balkans sample. The 95% confidence intervals are based on standard errors clustered at the municipality level. * $p<0.1$; ** $p<0.05$; *** $p<0.01$.

Table G.10: Hosting asylum seekers and turnout/status quo voting: robustness checks with restricted sample

| | <i>Dependent variable:</i> | | | |
|-------------------------|----------------------------|---------------------------|-----------------------|-------------------------------|
| | Turnout | | Status quo | |
| | (votes on foreigners) | (votes on redistribution) | (votes on foreigners) | (all votes except foreigners) |
| | (1) | (2) | (3) | (4) |
| Event time [-12,-6] | 0.440 (0.618) | 0.330 (0.486) | -0.261 (0.709) | 0.164 (0.253) |
| Event time [-5,-4] | 0.805 (0.544) | 0.798** (0.390) | 0.687 (0.989) | 0.061 (0.250) |
| Event time [-1,0] | 0.415 (0.496) | 0.596 (0.406) | -1.352* (0.808) | -0.033 (0.269) |
| Event time [1,2] | 0.501 (0.503) | -0.244 (0.417) | -2.338*** (0.826) | 0.051 (0.241) |
| Event time [3,4] | 0.585 (0.574) | -0.033 (0.494) | -0.565 (0.878) | 0.180 (0.275) |
| Event time [5,6] | 0.337 (0.671) | -0.451 (0.606) | 1.577 (1.287) | 0.193 (0.303) |
| Event time [7, 12] | -0.342 (0.753) | -1.452* (0.760) | -0.110 (0.656) | -0.121 (0.329) |
| Observations | 10,701 | 18,142 | 10,701 | 106,964 |
| R ² | 0.701 | 0.695 | 0.541 | 0.742 |
| Adjusted R ² | 0.684 | 0.685 | 0.515 | 0.740 |
| Residual std. error | 6.745 (df = 10120) | 6.663 (df = 17546) | 12.541 (df = 10120) | 10.954 (df = 106158) |

Notes: The table shows event time coefficients estimated for newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the latter has been standardized. The 95% confidence intervals are based on standard errors clustered at the municipality level. * $p<0.1$; ** $p<0.05$; *** $p<0.01$.

Table G.11: Hosting asylum seekers and policy preferences: placebo treatment

| | <i>Dependent variable:</i> | |
|-------------------------|----------------------------|--------------------|
| | Pro foreigners | Pro redistribution |
| | (1) | (2) |
| Event time [-12,-6] | 0.072 (0.866) | -0.253 (0.761) |
| Event time [-5,-4] | -0.047 (1.128) | -0.779 (0.801) |
| Event time [-1,0] | 1.245 (0.944) | 0.214 (0.695) |
| Event time [1,2] | 1.524 (0.986) | -0.279 (0.780) |
| Event time [3,4] | 0.774 (1.072) | 0.416 (0.783) |
| Event time [5,6] | -0.946 (1.099) | -0.432 (0.917) |
| Event time [7, 12] | -0.276 (1.163) | 0.764 (0.859) |
| Observations | 4,441 | 7,131 |
| R ² | 0.734 | 0.664 |
| Adjusted R ² | 0.719 | 0.651 |
| Residual std. error | 10.042 (df = 4191) | 11.572 (df = 6866) |

Notes: The table shows event time coefficients estimated for newly hosting asylum seekers. The effects are measured relative to event time $t=[-3,-2]$, and thus the latter has been standardized. The 95% confidence intervals are based on standard errors clustered at the municipality level. * $p<0.1$; ** $p<0.05$; *** $p<0.01$.

Appendix References

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