

Contact versus Exposure: Refugee Presence and Voting for the Far-Right^{*}

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Abstract

This paper investigates how different forms of exposure to refugees affect voting for far-right parties. I study the state of Upper Austria where many municipalities hosted asylum seekers and also experienced a massive flow of refugees crossing into Germany in 2015. Exposure to refugees passing through border municipalities increased far-right votes by about 1.5 pp., which suggests that mere exposure can increase far-right support. Conversely, contact and sustained interactions between natives and asylum seekers in hosting municipalities decreased far-right votes by about 4 pp., which is in line with the intergroup contact theory.

Keywords: Immigration, refugees, asylum seekers, political economy, voting

JEL classification: J15, P16

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The inflow of refugees to Europe sharply increased in 2014 and 2015. In these two years, EU countries received almost two million asylum applications compared to 1.6 million in the five preceding years (Eurostat Asylum Statistics). Many Europeans were exposed to refugees from culturally distinct countries, not only in cities but also in rural areas where exposure to non-European foreigners has traditionally been limited. In the same period, far-right parties with anti-immigration agendas gained considerable support in many countries that experienced large refugee inflows. A key question is whether the refugee inflow caused the increase in support for far-right parties.

In this paper, I study how different forms of exposure to refugees affect natives' support for the far-right. First, I analyze mere exposure to transiting refugees without sustained interactions. Second, I analyze extended exposure to locally housed asylum seekers that allowed for contact and sustained interactions with natives. I investigate the case of Upper Austria that held local and state elections on September 27, 2015, at the peak of the refugee crisis. The far-right *Freedom Party* (FPÖ) that ran a nationalistic, anti-asylum campaign doubled its vote share in state elections from 15.29% to 30.36%.¹ On the one hand, hundreds of thousands of refugees² crossed Austria in 2015 on what became known as the Western Balkan Route (see Figure 1 and Dustmann *et al.* (2017) for statistics based on Frontex data). Austrian authorities shuttled many of them in buses from the southern and eastern border of Austria to the German border and then directed them to cross the border on foot. Thus, the population in municipalities close to the German border was exposed to the transit of

¹The Freedom Party is considered a member of the far-right party family (Mudde, 1996) and centers its political program around anti-immigration topics. A second far-right party, the *Alliance for the Future of Austria* (BZO) ran in 2009 (2.83%) but not in 2015.

²I use the term *refugee* as an umbrella term for individuals applying for asylum in Austria and individuals entering or passing Austria on their way to other destinations. I use the term *asylum seeker* specifically for a person applying for asylum in Austria. The paper is not concerned with individuals that have already been granted asylum.

a large number of refugees. On the other hand, more than 116,000 individuals applied for asylum in Austria in 2014 and 2015. About 16.8% or 19,500 of these asylum seekers were assigned to be accommodated in Upper Austrian municipalities. Thus, the population in these municipalities was exposed to the same asylum seekers for extended periods of time. Local authorities and NGOs actively facilitated interactions between natives and asylum seekers. The situation in these municipalities resembled the features that Allport (1954) laid out in the intergroup contact theory.³ Thus, the setting provides an opportunity to study in a single context how different forms of exposure to refugees affect far-right support.

[Figure 1 about here]

At the time of the election in September 2015, 42% of Upper Austrian municipalities accommodated asylum seekers (own calculation). This variation allows me to investigate how the extended presence of asylum seekers affected voting for the far-right. I use an instrumental variables strategy to deal with the endogeneity in the distribution of asylum seekers across municipalities. The availability of buildings suitable to accommodate larger groups, such as homes for the elderly, disabled, or students, in combination with the sudden inflow of asylum seekers, creates an instrument for the local presence of asylum seekers. These buildings were built for purposes other than hosting asylum seekers and their existence should thus be unrelated to changes in attitudes towards asylum seekers and voting behavior. However, spare capacity in such buildings was used when the number of arriving asylum seekers sharply increased in 2014 and 2015. I use pre-2015 election results as placebo outcomes and find the instrument is unrelated to changes in vote shares in these elections.

I find that the presence of asylum seekers in a municipality reduces the far-right vote share by 3.86 pp. in state elections. Votes predominantly go to the conservative *People's Party* (ÖVP), thus marking a shift in the support from a far-right to a center-right party.

³See Pettigrew (1998); Pettigrew and Tropp (2006); Pettigrew *et al.* (2011) for extensive literature reviews on the intergroup contact theory.

Results for local elections are similar but imprecisely estimated and less robust. The presence of asylum seekers also decreases far-right support in neighboring municipalities.

On the contrary, the situation in municipalities at the German border barely permitted interactions between natives and refugees since the refugees only stayed for a few hours before continuing their journey. Thus, the intergroup contact hypothesis does not seem applicable in this setting. The situation at the Austrian-German border resembles to some extent the setting on Greek islands. There, refugees arrived from the Turkish coast in boats, which increased hostility towards refugees, immigrant and Muslim minorities, increased support for more restrictive asylum policies, and increased support for the extreme-right Golden Dawn Party (Dinas *et al.*, 2019; Hangartner *et al.*, 2019). The passing of a large number of refugees disrupted everyday life, was perceived as an upset of the social order, and generated a feeling of threat. It acted as a situational trigger that fueled electoral backlash through galvanizing individuals predisposed against immigration and creating support for anti-immigration policies among those that previously did not hold anti-immigrant views (Sniderman *et al.*, 2004).

Indeed, I find that municipalities at the German border show an above-average increase in the far-right vote share by 1.47 pp. in state elections. This finding suggests that short and unmediated exposure without interaction can lead to increased far-right voting, corroborating the finding of Dinas *et al.* (2019). Analysis using a more detailed exposure measure based on official statistics on violations against immigration law from the German side of the border lead to similar results.

My investigation of the effects of different types of exposure to a relatively sudden inflow of refugees complements several recent studies on the effects of immigration on the support for right-wing parties. These studies tend to find positive effects of immigration on the support for right-wing parties. Halla *et al.* (2017) study the effect of immigration in Austria on the support for the Freedom Party, concluding a higher percentage of low- and medium-skilled immigrants in a municipality increases the support for the Freedom Party. They suggest

that voters' worries about changing ethnic and cultural composition in their neighborhoods and schools are the driving force. Other recent papers come to similar conclusions for other European countries but focus on center-right instead of far-right voting (Otto and Steinhardt, 2014; Harmon, 2018; Gerdes and Wadensjö, 2010; Barone *et al.*, 2016; Becker and Fetzner, 2016; Edo *et al.*, 2019). Mayda *et al.* (2016) document that high levels of immigration can create more support for the Republican Party among native voters. Most closely related, Dustmann *et al.* (2018) study the effect of local refugee presence in Danish municipalities on voting outcomes. They document large effect heterogeneity with respect to municipality characteristics. In rural municipalities, an increase in the refugee share increases the vote share for anti-immigration parties. In urban municipalities, the opposite is the case. Effects also vary with respect to previous immigration shares, crime levels, and economic conditions.

This paper makes several contributions to the literature. First, it studies the effect of different types of exposure to refugees on electoral outcomes in the same setting. On the one hand, it shows that mere exposure to passing refugees in border municipalities increases far-right voting. On the other hand, it is the first to show that exposure to asylum seekers can reduce support for far-right parties, if the conditions for positive contact as outlined in the intergroup contact theory are met.

Second, it studies a context that differs from the circumstances in other studies in several ways. I study a very salient and publicly managed migration episode, which is often the case with refugee migration and thus highly policy relevant. Interaction between natives and asylum seekers was actively facilitated by local authorities and NGO's. The type of immigrants differs as well. I investigate the effect of the presence of asylum seekers. Most other studies with the exception of Dustmann *et al.* (2018) look at immigrants in general or other types of migrants. In particular, in the Austrian setting, Halla *et al.* (2017) study the effect of migrants mostly coming through family reunification schemes. Thus, the findings in this paper do not necessarily contradict previous findings but highlight that the conditions under which exposure takes place are crucial for the political response of natives.

Third, to my best knowledge it is the first to study the effects of the European refugee crisis on political outcomes. Understanding the short-run effects is especially important for policy decisions in situations of sudden migrant inflows.

1 Background and data

1.1 The refugee crisis and trends in support for far-right parties

The stark increase in support for the far-right in Upper Austria is similar to other European nations and closely matches the timing of the increasing refugee numbers. Figure 2 plots the monthly number of asylum applications in Upper Austria, Austria, Sweden, and Germany, as well as electoral support for the far-right in the respective country. In Upper Austrian state elections, polls indicate that support for the far-right Freedom Party remained roughly at the level of the 2009 elections until late 2014 but then drastically increased in 2015 when the refugee numbers also started to grow (upper left panel).⁴ In 2015, the Freedom Party received more than 30% of the votes. At the national level, the Freedom Party increased from a low of around 20% in the polls in 2013 to 32% in late 2015 (upper right panel). The salience of the issue in the media, measured as the number of newspaper articles covering the refugee situation, increased almost proportional to the number of asylum applications.

[Figure 2 about here]

In comparison, the Sweden Democrats obtained 5.7% of the votes in the 2010 parliamentary elections (lower left panel). After that, support increased parallel to the rising number of refugees, which rose earlier in Sweden than in other European countries. In parliamentary elections 2014, the Sweden Democrats obtained 12.9% of the vote and polled around 20% in late 2015 at the peak of the refugee inflow into Sweden. Finally, the Alternative for Germany (AfD) was founded only in 2013. Polls show a sharp increase in support up to 15%, alongside

⁴The figure does not take into account votes for the BZO that obtained 2.83% of the votes in state elections 2009 but did not run in 2015.

the increasing refugee numbers (lower right panel).

1.2 The Upper Austrian setting

Upper Austria resembles many of the features of other refugee-receiving countries in Europe and is especially comparable to Germany regarding economic performance, culture, and previous experience with immigration. According to the population census 2011, 12.3% of the population was foreign-born, a somewhat lower share than in Austria overall (15.6%). 9.2% of the population 15 years and older have higher education (university and university of applied sciences) compared to 11% in Austria overall. Economic conditions in Upper Austria were fairly strong with an unemployment rate in 2011 of 3.9% compared to 5.9% in Austria overall (in 2014 5% vs. 7.3%). Voting patterns were similar to the Austrian average (see Table A2 in the Appendix) and anti-immigrant sentiments in Upper Austria and Austria are similar to the European average (see Figure A1 in the Appendix). Upper Austria's size is about 12,000 square kilometers (4,626 square miles). Its population is 1.4 million. About two-thirds (69%) of the population lives in municipalities smaller than 10,000 inhabitants. By September 21, 2015, a week before the election, 42% of Upper Austrian municipalities hosted asylum seekers (see Figure 3). In many municipalities, asylum seekers arrived only over the course of 2015. In February 2014, 16% of municipalities hosted asylum seekers. The share increased to 28% in February, 31% in June, and 42% in September 2015. Local authorities and NGOs actively encouraged contact between asylum seekers and the local population. Official municipality newsletters sent from the mayor's office to the municipality population describe many such examples. Activities include dedicated welcome events, integration of asylum seekers in local festivities, and active integration measures through (sports) clubs. Several specific examples are provided in Appendix C.3. In a survey conducted in Upper Austria in fall 2016, about 50% of respondents stated that they had interacted with *immigrants* at least several times per month and 68% of respondents that lived in municipalities with asylum seekers reported that hosting of asylum seekers worked

well or very well (Hofinger *et al.*, 2017). Competition for jobs local economic resources was limited: Asylum seekers were not permitted to work until their application was approved and they stayed in organized accommodations. Financial assistance for asylum seekers was funded from the state budget. Thus, municipalities hosting asylum seekers did not experience significant fiscal effects.

Besides being a host for asylum seekers, Upper Austria was also a major transit region for refugees. Many refugees did not apply for asylum in Austria but crossed the country to continue to Germany and beyond. Germany was the primary destination of refugees coming to Europe in 2015, especially after German chancellor Angela Merkel signaled a positive stance towards the incoming refugees. Many refugees took trains directly from Budapest to Munich. But Austrian authorities also facilitated refugee transit by providing buses from the southern and eastern borders to the German border, especially after the train connection was discontinued in early September 2015 (see excerpts of media coverage in Figure A2 in the Appendix). The buses were not allowed to take the refugees across the border. Instead, refugees were brought to border municipalities on the Austrian side and from there walked across the border. Overall, the Ministry of the Interior estimates that 200,000 refugees crossed Austria in September 2015 alone. Austrian and German media reported extensively about the situation at the border.⁵ Precise figures on the number of refugees crossing through the border municipalities are not available but in Section 2.2, I introduce a measure for exposure to passing refugees based on official statistics from the German police.

Upper Austria holds state, local, and mayoral elections jointly every six years. The election on September 27, 2015 took place at the peak of the refugee crisis.⁶ Ever since WWII,

⁵See for example articles in the Austrian newspapers KURIER: <https://kurier.at/chronik/oberoesterreich/oberoesterreich-oesterreichische-fluchthilfe-an-der-deutschen-grenze/156.977.219> (October 6, 2015) and DER STANDARD: <https://www.derstandard.at/story/2000023306734> (October 7, 2015).

⁶State elections in Austria follow different schedules and Vienna was the only other state

the conservative People’s Party has been the dominant political power. In state elections 2009, the People’s Party obtained 46.8% of the votes, followed by the Social Democratic Party with 24.9% and the Freedom Party with 15.3% (see Table A2 in the Appendix for election results between 2008 and 2015). The Alliance for the Future of Austria (BZO), another far-right populist party founded by Jörg Haider as a splinter of the Freedom Party in 2005, obtained 2.83% of the vote and failed to obtain a seat in the state parliament. Upper Austria has a unity government with the strongest political parties automatically represented in the executive branch. The elections in 2015 brought landslide changes to the political landscape with the Freedom Party doubling its vote share and receiving 30.4%. The People’s Party lost more than 10 pp., receiving a record low of 36.3% of the vote. The Social Democratic Party lost about 6.5 pp. and received 18.4%, while the Green Party improved slightly to 10.3% of the vote. The BZO did not run in these elections.

Figure A3 in the Appendix shows the far-right vote share in Upper Austrian municipalities in state elections 2009 (Freedom Party and BZO combined) and 2015 (Freedom Party only). Notably, the far-right increased its vote share in every single municipality.

The refugee crisis dominated electoral campaigns. Political observers and political parties agreed that the refugee crisis was the leading issue in the election, even though asylum policy is no competence of federal states. In an opinion poll conducted at the time of the election, 62% of respondents stated they had intensely discussed the issue. No other topic received nearly as much attention (see Table A1 in the Appendix). The main parties took rather distinct positions. The Green Party was most asylum friendly, Social Democrats and Conservatives sent mixed signals, emphasizing the moral duty to help people in need but also pointing to capacity limits and potential social and economic problems. The Freedom Party took a strong anti-asylum stance, in line with the general anti-immigration position to hold state elections in fall 2015. However, the urban Viennese setting is less suitable, since data on the exact location of refugee accommodations is not available. Thus, I restrict the analysis to Upper Austria.

of the party. In Section 4, I provide evidence that the local presence of asylum seekers did not affect political campaigning by the Freedom Party at the local level.

1.3 Processing applications and distribution of asylum seekers

Finding housing for asylum seekers became a substantial logistical problem for the receiving countries in 2014 and 2015. The Department of Interior is responsible for processing asylum applications and for running primary care facilities. After arrival, asylum seekers stayed in these facilities for a few days or weeks before being assigned to a state according to a pre-defined quota.⁷ Federal states were responsible for providing housing for the asylum seekers for the duration of the asylum process. The time to a decision was on average about six months. Asylum seekers have to stay in the assigned accommodation until a decision is reached. In the system in place until September 30, 2015, states had to rely on municipalities, NGOs, the church, or private citizens to offer accommodation for asylum seekers. However, states had no legal but only a political handle over potential hosts, making it hard to find a sufficient number of accommodations. States could only appeal to a humanitarian responsibility or exert political pressure. In terms of financial incentives, the state paid the host 19 Euro per day and asylum seeker for board and lodging. If the host did not provide food, she had to give 5.5 Euro per day to the asylum seeker for food and other necessities.⁸ Private hosts could directly reach agreements with the state governments. Still, municipalities used political pressure to fight unwanted asylum seeker accommodations (Haselbacher

⁷The so-called *Grundversorgungsvereinbarung*, that became effective on May 1, 2004, stipulates in Article 1, § 4 that the distribution of asylum seekers across federal states shall be proportional to the resident population. Upper Austria accounted for 16.8% of the Austrian population in 2009 (2015: 16.7%) according to Statistics Austria.

⁸For information on the regulation on hosting of of asylum seekers, see the website of the Department of the Interior (http://www.bmi.gv.at/cms/BMI_Asyl_Betreuung/unterbringung/) and the Upper Austrian government (<https://www.land-oberoesterreich.gv.at/26937.htm>).

and Rosenberger, 2016). Overall, the distribution of asylum seekers was very much the result of negotiations between various actors that lead to an underprovision of accommodations.⁹

Due to the logistical challenges, taking into account the asylum seekers' and the municipalities' preferences regarding the composition of asylum seekers in terms of characteristics or existing social networks was mostly impossible. Social connections of the asylum seekers were only taken into account if they concerned the nuclear family.¹⁰

1.4 Data and descriptive statistics

The analysis is based on municipality level data from Upper Austria. Data on the distribution of asylum seekers are reported by the state government. I use the number of asylum seekers in municipalities on September 21, 2015, six days before the election. Overall, Upper Austria hosted 7,603 asylum seekers at that point in time. Data on election results are available from the Ministry of the Interior and the state's open data portal. My main outcome variable is the change in far-right vote share between the 2009 and the 2015 state elections. For 2009, I combine the vote share of the Freedom Party and the BZO. For 2015, I use the Freedom Party only as the BZO did not run in this election. The portal provides further data on municipality demographics (number of inhabitants, sex and age structure, educational level, share of existing foreign population), the financial situation of the municipality, and economic status of the population. I complement this data with further variables obtained directly

⁹On October 1, 2015, after the elections in Upper Austria took place, new legislation regarding the distribution of asylum seekers came into effect. According to this law, every municipality is supposed to provide space for asylum seekers amounting to 1.5% of the population size. The law allowed the central government to accommodate asylum seekers in suitable accommodations even without the consent of the respective local and state government. See <http://www.bmi.gv.at/cms/cs03documentsbmi/1750.pdf>.

¹⁰However, the qualitative interviews with social workers from Caritas revealed even this was not possible all the time. NGOs had some informal leeway to influence the allocation if Pareto improvements could be achieved, which however, did not happen very often.

from Statistics Austria. See Section C in the Appendix for a more detailed account of the data sources and variable definitions. Several variables are only available for the year 2011, when a register-based population census was conducted. Information on the financial situation of municipalities is based on official accounts. Specifically, I use the per-capita tax revenue to proxy for the financial strength of a municipality.

Data on the availability of group accommodations come from the 2011 housing census that provides information on type and ownership of buildings in all Austrian municipalities. These are buildings used to *house groups for extended periods*. This category includes retirement homes, boarding schools and student housing, homes for disabled, among others. Note that this category does not include hotels and guesthouses. Group accommodations also do not equate to social housing, i.e., accommodations for an impoverished population. Buildings with subsidized apartments would be classified as residential buildings.¹¹ Figure 3 shows the availability of such buildings in Upper Austrian municipalities.

For a measure of exposure to passing refugees in municipalities near the German border, I use data from official statistics in Germany that allow me to proxy refugee apprehensions. Section 2.2 describes the construction of the exposure measure and the data sources used.

I drop the municipalities with more than ten group accommodations (10 municipalities) from the analysis for three reasons. First, exposure might be different in urban environments, especially if the measure of exposure does not vary within the municipality. Second, all larger municipalities and especially district capitals host asylum seekers and thus do not have meaningful counterfactuals. Third, the numbers of group accommodations in these municipalities are large outliers that create substantial noise and weaken the first stage (see

¹¹Harmon (2018) is most similar in terms of empirical strategy as it also uses buildings as an instrumental variable. However, the rationale for the instrument is different from the one in this paper. Harmon argues that Danish law restricts immigrants ability to purchase real estate in Denmark which makes them more likely to rent rather than buy real estate. Places that have higher stocks of rental housing, therefore, attract relatively more immigrants.

Figure A4 in the Appendix for the distribution of the number of group accommodations). The estimation sample consists of 432 municipalities. To assess the sensitivity of the results to this sample selection, I present robustness using different restrictions (Table A12 in the Appendix).

[Table 1 about here]

Table 1 shows descriptive statistics of municipalities with and without asylum seekers on September 21, 2015. Municipalities hosting asylum seekers are on average larger than municipalities that do not (3,311 versus 1,694 inhabitants). The population in municipalities with asylum seekers is slightly more educated, the share of foreigners is higher, as is the share of the population working in the service sector. Financial strength measured as tax revenue per capita is also higher. Equality of means is rejected in almost all cases. However, all differences are most likely closely related to the differences in municipality size.

Municipalities with and without asylum seekers differ to some extent in the pre-treatment political outcomes. In municipalities without asylum seekers, the Freedom Party received on average 15.8% and the BZO 2.83% of the vote in 2009. In municipalities which subsequently received asylum seekers, the combined vote share was 1.1 pp. lower.¹² The far-right vote share in parliamentary elections 2013 and elections to the European Parliament in 2014 was also higher in municipalities that subsequently did not host asylum seekers. This might be an indication that local opposition, here proxied by far-right vote shares, indeed lowered the probability of hosting asylum seekers in a municipality.

¹²The Freedom Party ran in local elections in 83.9% of all municipalities in 2009 and in 86.9% in 2015. Votes shares for local elections are presented only for the sample of municipalities where the Freedom Party ran in 2009. The Freedom Party did not run in eleven municipalities in 2015, where it ran in 2009. These municipalities are assigned a value of zero for the 2015 local council vote share.

2 Empirical strategy

The structural model of interest as shown in Equation 1 aims at explaining the change in the vote share of party p in municipality i between 2009 and 2015 ($\Delta v_{s_{p,i},0915}$) as a function of hosting asylum seekers at the time of the election in September 2015 ($r_{i,15}$)¹³ and of being exposed to passing refugees at the German border ($border_i$). Thus, $\beta_{1,p}$ corresponds to the effect of living in a municipality that hosts asylum seekers and $\beta_{2,p}$ to the effect of living in a municipality exposed to passing refugees. X_i is a vector of municipality-level covariates.

$$\Delta v_{s_{p,i},0915} = \beta_{0,p} + \beta_{1,p}r_{i,15} + \beta_{2,p}border_i + X_i\theta_p + u_{p,i} \quad (1)$$

Since $r_{i,15}$ and $border_i$ are two different and virtually uncorrelated treatments ($\rho = 0.03$), I separate the discussion of the identification of $\beta_{1,p}$ and $\beta_{2,p}$ as well as the presentation of the results. In Table 5, I show a specification that combines the IV analysis for hosting asylum seekers with the analysis for border exposure. Whether they are estimated separately or jointly hardly makes a difference for the results.

2.1 Effect of hosting of asylum seekers

Estimating Equation 1 with OLS will yield inconsistent estimates of $\beta_{1,p}$ since the decision to host asylum seekers in a municipality is likely associated with unobserved municipality characteristics and thus the error term $u_{p,i}$. Table 1 shows that far-right support in previous

¹³ Several municipalities hosted small numbers of asylum seekers also in previous years but usually not continuously. For example, from the municipalities that hosted asylum seekers in 2009, less than half of them did so in February 2014. Removing all municipalities with prior experience in hosting asylum seekers would significantly reduce the sample and lead to more imprecise estimates. In the main specification, I use all municipalities irrespective of whether they hosted asylum seekers before. To inspect the sensitivity of the results regarding previous experience with asylum seekers, Table A11 presents results dropping municipalities that hosted asylum seekers either in 2009 or in February 2014.

elections was higher in municipalities that did not host asylum seekers in 2015, thus indicating the importance of political factors for the distribution of asylum seekers. Using the changes in electoral results over time as outcomes or conditioning on results of earlier elections might address confounding due to stable political preferences. However, such strategies would not be able to capture the political dynamics in 2014 and 2015 that are potentially decisive for the distribution of asylum seekers and subsequent elections outcomes. Massive voter flows occurred mostly in 2015 as evident from polls (see Figure 2) when no fundamental conditions - except for the refugee inflow - changed. The events surrounding the asylum seeker distribution and the reactions of local stakeholders are decisive factors for the election outcomes. The resulting endogeneity problems cannot be addressed by controlling for municipality characteristics or trends in political support for the far-right and other parties.

Instrumental variables strategy

Since the onset of the refugee crisis, public authorities had hastily searched for potential accommodations to host the vast number of asylum seekers and to alleviate pressure from the overcrowded primary care centers. Dwellings to house asylum seekers had to fulfill a range of criteria. For logistical reasons, authorities preferred accommodations that could host larger groups over apartments. Many asylum seekers were placed in existing group accommodations, such as (former) boarding houses, retirement homes, student housing, and hotels and guesthouses, both privately and publicly owned. The media reported about many such instances. For example, in Popping and Bad Goisern, old but still existing buildings from former retirement homes were used to accommodate asylum seekers.¹⁴ In July 2015, the state government announced to use boarding schools that were empty due to the ongoing

¹⁴See OÖ NACHRICHTEN from June 22, 2015 (www.nachrichten.at/oberoesterreich/wels/Kloster-und-Altenheim-als-Asylquartiere;art67,1863095) and December 17, 2014 (www.nachrichten.at/oberoesterreich/salzkammergut/Bad-Goisern-rueckt-fuer-Fluechtlinge-zusammen;art71,1564217).

vacations as temporary asylum seeker accommodations.¹⁵

[Figure 3 about here]

The existence of group accommodations increased the probability that asylum seekers were present in a municipality without being directly related to attitudes towards asylum seekers. Thus, group accommodations are a potential IV.¹⁶ The left panel in Figure 3 shows that such buildings exist in 43% of Upper Austrian municipalities. Already a visual comparison between the left and right panel, which depicts municipalities that hosted asylum seekers in September 2015, suggests a strong correlation between the availability of group accommodations and the hosting of asylum seekers.

Municipalities with one group accommodation are 24 pp. more likely to host asylum seekers than those without a group accommodation and municipalities with more than one group accommodation are 47 pp. more likely (Table A4 in the Appendix). Conditional on hosting any asylum seekers, the absolute number of asylum seekers in municipalities with one group accommodation is 28.8 (46.8 in municipalities with more than one group accommodation) and thus larger as in municipalities without group accommodations (20.6). However, since municipalities with group accommodations are also larger, the share of asylum seekers relative to the overall population is almost identical in the different municipalities (about 1.3%). Since the instrument primarily affects the extensive and not the intensive margin, I use a binary indicator for asylum seeker presence as the main treatment variable.

A related question is whether asylum seekers hosted in municipalities with group accom-

¹⁵*Landeskorrespondenz* 132: <https://www.land-oberoesterreich.gv.at/159639.htm>.

¹⁶Qualitative interviews with persons managing the asylum seeker care suggested that the availability of such buildings likely increased the probability of receiving asylum seekers in a municipality even if the asylum seekers were eventually not hosted there but in other buildings. Municipalities with such buildings anticipated that they would face pressure to host asylum seekers in these buildings and proactively provided accommodation “on their own terms.”

modations differ in their characteristics from asylum seekers in municipalities without group accommodations. Bansak *et al.* (2016) show that Europeans’ willingness to accept asylum seekers depends on the asylum seekers’ characteristics, such as sex, occupation, and religion but not on origin country. As Table A4 in the Appendix shows, demographic characteristics of asylum seekers are not systematically different in municipalities with no, one, or multiple group accommodations. Roughly 20% of asylum seekers are children younger than 16 years and they are overwhelmingly male (about 70%). The distribution of asylum seekers by origin country is somewhat more diverse in municipalities with group accommodations. Taken together, asylum seekers in municipalities with group accommodations seem fairly representative of asylum seekers in Upper Austria overall, especially in the characteristics that Bansak *et al.* (2016) identify to matter most for public attitudes.

The association between group accommodations and hosting asylum seekers holds conditional on a set of municipality characteristics that I discuss in more detail below. Equation 2 shows the first stage regression, with ga_i being the availability of any, or alternatively, the number of group accommodations in a municipality.

$$r_{i,15} = \alpha_0 + \alpha_1 ga_i + X_i \lambda + v_i \quad (2)$$

Column (1) in Table shows the first stage regression using the existence of any group accommodation as instrument. Column (2) uses the number of group accommodations as instrument. Column (3) uses privately and publicly owned group accommodations separately as instruments.¹⁷ The specification in column (1) suggests that having any group accommodation increases the probability of hosting asylum seekers by 17 pp. The second specification suggests that one additional group accommodation increases the probability by 6 pp. The F-statistic that takes into account spatial clustering for the excluded instrument is about 12.58 in the first specification and 17.8 in the second, indicating that the instrument has sufficient strength. Since the F-statistic in the second specification is considerably higher, I use it as the baseline specification. Instrumenting with group accommodations by

¹⁷Group accommodations with ownership “other” are excluded in this specification.

ownership somewhat reduces the F-statistic but indicates that both privately and publicly owned group accommodations affect the presence of asylum seekers.

[Table 2 about here]

The exclusion restriction requires that the availability and number of group accommodations are uncorrelated with changes in vote shares over time, other than by changing the probability of hosting asylum seekers. This is a weaker assumption than assuming no relationship with vote shares in levels. Still, several potential concerns arise. In particular, suitable buildings may be constructed or even demolished as a reaction to the expected inflow of asylum seekers. Since I use the availability of buildings measured in 2011, before the onset of the massive refugee influx, this is highly unlikely.

Another potential concern is that municipalities with different numbers of group accommodations differ in their characteristics and thus follow different political trends. Most importantly in terms of observable characteristics, municipalities with more group accommodations have more inhabitants and a higher population density (see Table A3 in the Appendix). These more urban municipalities also have a somewhat more educated population and a larger share of foreigners. Unlike when comparing municipalities with and without asylum seekers (Table 1), we see no differences in far-right support in previous elections between municipalities with no, one, or more than one group accommodation.

I address concerns that underlying municipality characteristics lead to different political trends by conditioning on a set of covariates that capture important municipality characteristics, which have also been reported to correlate with far-right votes. In the main specification, I use populations size and its square, population density, population growth between 2001 and 2011, share of women in the population, share of population younger than 30 years, education distribution in the adult population, local unemployment rate, share of foreigners in the population, tax revenues per capita as a proxy for financial strength, an indicator for municipalities in the vicinity of the state capital Linz, and an indicator for the five municipalities that have primary care facilities for asylum seekers run by the federal government. I

use 2011 measurements for all variables in the main specification since several variables are only available from the census. By including these variables in levels, I allow, for example, municipalities with different population sizes to follow different trends. I test the sensitivity of the results to covariate and specification choices extensively in the robustness section.

I argue that conditional on this set of covariates, it is highly unlikely that municipalities with and without group accommodations follow different political trends. To further strengthen this argument, I conduct a set of falsification tests. In particular, I use the elections to the Austrian parliament in 2013 and the European parliament in 2014 as placebo outcomes since they took place before the massive increase in refugee arrivals. I also show how vote shares evolved in the decade before 2015. No differential political trends are visible.

2.2 Exposure through transit of refugees in border municipalities

The second form of micro-level exposure to the refugee crisis took place in municipalities close to the German border. These municipalities experienced the transit of refugees who were shuttled in buses from the southern and eastern border of Austria to these municipalities from where they crossed the border on foot (see excerpts of media coverage in Figure A2 in the Appendix).

Data on the number of passing refugees and the specific locations of crossing is not available. Thus, I use data from the annually published official police statistics "*Sicherheitsberichte*" of Lower Bavaria (Niederbayern) - the region that shares the longest border with Upper Austria (i.e., the grayish part of the map in Figure 4. While the number of crimes not related to immigration was almost stable in Lower Bavaria (-2.1%), the number of violations of immigration law increased sharply from 3.253 to 76.995 in 2015. Apprehensions of refugees that crossed the border into Germany were recorded as violations against immigration law and assigned to the municipality where the apprehension took place. Violations against immigration law are not reported as a separate category at the municipality level but only in the aggregate. However, the stability in the number of other types of crimes

allows me to attribute increases in crime levels to apprehensions of refugees.¹⁸ The map shows the absolute change in the number of crimes recorded between 2014 and 2015, i.e., apprehensions of refugees in municipalities within 40 kilometers from the Austrian border.

The increase is concentrated in municipalities at the Austrian border, with some increase also occurring along the highway further inland. Particular hot-spots were Neuhaus am Inn (31,126) and Passau (13,421). Unlike municipalities at the German border, those at the Czech border were not affected.

For the main specification, I construct a distance-weighted measure for each Upper Austrian municipality by summing up the log number of apprehensions in the municipalities in Lower Bavaria (indexed by j), weighted by the inverse squared straight-distance between the Austrian and Bavarian municipality:

$$exposure_i = \sum \frac{\log(apprehensions_j)}{(dist_{i,j})^2} \quad (3)$$

The exposure measure assigns high values to Upper Austrian municipalities that are close to Bavarian municipalities with many refugee apprehensions. In the robustness analysis (see Table A14 in the Appendix), I use different weighting schemes based on street distance and other functional forms. For easier interpretation, I standardize the exposure measure to have mean zero and standard deviation one.

Thus, the variable $border_i$ in Equation 1 either takes the form of an indicator for municipalities directly bordering Germany or the weighted exposure measure. Under the assumption that municipalities exposed to refugees at the border follow the same counterfactual trends as the other municipalities, $\beta_{2,p}$ can be interpreted as the causal effect of short-term exposure to passing refugees.

[Figure 4 about here]

¹⁸According to the Bavarian police, the number of violations against immigration law does not equal the number of apprehensions, since some refugees might be charged with more than one violation. For easier readability, I use the term apprehensions for the rest of the paper.

3 Results

This section first presents OLS and IV results for the effect of hosting asylum seekers on voting behavior and then for the effect of exposure to passing refugees at the border. For all estimates, standard errors account for spatial correlation (uniformly weighted up to 10 km) and are robust to heteroscedasticity.¹⁹

3.1 OLS results for hosting asylum seekers in a municipality

First, I present results for the effect of hosting asylum seekers using OLS. For reasons explained above, these estimates likely suffer from endogeneity. Table 3 shows a regression of the change in far-right vote share on asylum seeker presence without covariates ($\hat{\beta}_1 = -0.83$, p-value=0.035) and then with the standard set of covariates ($\hat{\beta}_1 = -0.39$, p-value=0.20). The coefficient for the change in People’s Party vote share is 0.66 pp. (p-value=0.12) while the coefficients for the other parties and turnout are even closer to zero and insignificant at conventional levels.

[Table 3 about here]

3.2 IV results for hosting asylum seekers in a municipality

Table 4 presents the second stage IV results for state elections. The first two columns look at the effect on far-right vote share using different versions of the instrument. The first column uses the binary indicator for the existence of group accommodations as instrument. This specification suggests a negative effect of hosting asylum seekers in a municipality of 4.90 pp.

¹⁹I estimate spatial HAC standard errors following Conley (1999) and Conley (2008) that allow for contemporaneous spatial correlations between municipalities whose centers lie within a certain cutoff distance. As suggested in Conley (2008), weights in this matrix are uniform up to that cutoff distance. I set the cutoff distance to 10 kilometers. However, results are insensitive to variations of the cutoff distance. My procedure builds on the Stata code provided as a supplement to Hsiang (2010).

Using the number of group accommodations as instrument also results in a negative effect of similar magnitude (-3.86 pp.).

Hosting asylum seekers in the municipality increases the People’s Party’s vote share by 4.27 pp. These results thus mark a shift from the far-right to the center-right. Vote shares for the Social Democrats and the Green Party as well as turnout are not significantly affected.²⁰

[Table 4 about here]

These results are in line with survey evidence collected about one year after the election. Hofinger *et al.* (2017) find that 68% of the population in municipalities with asylum seekers stated that hosting asylum seekers worked well or very well in their municipality. In contrast, 58% stated hosting asylum seekers worked well in Upper Austria in general. Relatedly, 71% stated that co-residence of natives and *immigrants* worked well in their municipality. Roughly half of the population stated that they were in contact with *immigrants* at least several times per month. Professionals who supported municipalities with the various aspects of hosting asylum seekers reported that a significant share of the population expressed anxiety before asylum seekers arrived. However, in almost all cases the level of anxiety declined after the

²⁰Table A6 in the Appendix presents the results for state elections but uses the share of asylum seekers in the population instead of a binary indicator as main explanatory variable. The preferred specification with the number of group accommodations as instrumental variable (spec 2) suggests that a one pp. increase in the share of asylum seekers in the population decreases the far-right vote share by 1.44 pp. The magnitude of this effect is similar to previous findings. For example, Dustmann *et al.* (2018) finds that a one pp. increase in the share of refugees in the local population increases support for anti-immigration parties in parliamentary elections by 1.34 pp. in rural municipalities but decreases the support by 3.79 pp. in urban municipalities. For the case of Austria, Halla *et al.* (2017) finds that a one pp. increase in the share of low-skilled immigrants increases support for the Freedom Party by 0.3 pp. while a one pp. increase in the share of high-skilled immigrants decreases Freedom Party support by 0.76 pp.

asylum seekers had been there for some time since most of the feared consequences did not materialize.²¹ These findings support the idea that contact with the asylum seekers reduced anxiety, which reduced support for the far-right.

A comparison between the IV and OLS results for the effect on far-right voting suggests a positive bias of the OLS estimate. One possible explanation is the political process surrounding the distribution of asylum seekers. Not only Freedom Party politicians opposed the placement of asylum seekers in a municipality. Also other local politicians showed opposition, especially from the People’s Party that dominates local politics in most municipalities. If local politicians were successful in fending off asylum seekers, right-leaning voters might have voted for the People’s Party instead of the Freedom Party. Such a pattern would induce a negative correlation between hosting asylum seekers and the change in People’s Party vote share. The coefficient on People’s Party votes would be negatively biased, whereas the coefficient for the far-right would be positively biased, which is what we observe.

The IV results for local elections are presented in Table A5 in the Appendix.²² The coefficient on far-right votes is similar to the state election results. However, standard errors are substantially larger. Owing to greater precision of estimates in state elections, I focus on state elections for most of the remainder of the paper.

3.3 Exposure to transiting refugees in border municipalities

Table 5 presents the estimates of the effect of exposure to transiting refugees at the German border on far-right vote share. Columns (1) to (3) show specifications using an indicator for municipalities bordering Germany and columns (4) to (6) show specifications using the weighted exposure measure. All results show that exposure to passing refugees at the border

²¹I conducted three interviews with professionals from an NGO (Caritas) in December 2015 and January 2016 to obtain qualitative insights.

²²The sample is restricted to municipalities where the Freedom Party ran in local elections in 2009. To avoid endogenous sample selection, 11 municipalities where the Freedom Party ran in 2009 but not in 2015 are not excluded but the 2015 vote share is set to zero.

increased support for the far-right. Without covariates, the coefficient of the border indicator is 2.29 but it somewhat decreases when covariates are included (1.47). Column (3) shows a joint specification that includes the border indicator and an indicator for municipalities that host asylum seekers, instrumented by the number of group accommodations. The border effect is 1.60 pp. and the effect of hosting asylum seekers is -3.86 pp. Results using the weighted exposure measure are similar and suggest that a one standard deviation increase in exposure to passing refugees increased the far-right vote share by 0.90 pp. (column 5).

These results are in line with findings that ultra-short-term exposure to passing refugees on Greek islands increased the support for the extremist Golden Dawn Party by about 2 pp. (Dinas *et al.*, 2019) and worsened the population’s attitudes towards refugees, immigrants in general, and Muslims (Hangartner *et al.*, 2019).

[Table 5 about here]

3.4 Falsification tests: no effect in prior elections

Hosting asylum seekers

This section presents falsification tests to strengthen the credibility of the empirical strategy. First, I regress the changes in far-right vote shares in parliamentary elections between 2008 and 2013, and elections to the European Parliament between 2009 and 2014 on the instrument (see Table 6, columns AP 2013 and EP 2014). As both elections took place before the large inflow of refugees started, we would expect to see no effect of the instrument on these earlier elections. Under the assumption that these two elections follow similar political trends as the state elections, this constitutes a test for pre-treatment parallel trends.²³

Indeed, for both elections, I find no significant effects, the coefficients are even positive. In contrast, column SE 2015 presents reduced form estimates for the state elections in 2015

²³Correlation between the far-right trends in state elections and elections to the Austrian Parliament is 0.28 (0.35 for elections to the European Parliament), suggesting that political trends are indeed related between different election types.

(-0.23). The reduced form effect for local elections presented in column LE 15 is of similar magnitude (-0.24) but insignificant.²⁴

Second, I include the changes in the far-right vote shares in these two prior elections as control variables in the main specification (IV w/ trend). While changes in these previous elections are predictive for the changes in state but not local elections, including them hardly changes the estimated effects.

[Table 6 about here]

Border exposure

Identification of the effect of passing refugees at the border on support for the far-right hinges upon the assumption that counterfactual vote share trends for municipalities with and without exposure to passing refugees are identical. I conduct several tests to assess the plausibility of this assumption. Column (1) of Table 7 uses an indicator for municipalities at the unaffected Czech border as a placebo treatment. Columns (2) to (5) use the changes in far-right vote shares in parliamentary elections between 2008 and 2013, and elections to the European Parliament between 2009 and 2014 as placebo outcome variables and regress those on the German border indicator (columns 2 and 3) and the exposure measure (columns 4 and 5). Neither of these regressions yield any significant results, supporting the assumption of parallel trends.

In columns (6) and (7), I include the changes in far-right vote shares in these two prior elections as additional control variables in a regression with changes in the far-right vote share in state elections as dependent variable. Results are almost identical to the ones obtained in Table 5.

[Table 7 about here]

²⁴Table A7 in the Appendix presents the same falsification tests for the other main parties.

Vote share trends

To further assess the relative evolution of vote share trends, I run a pooled regression of the far-right vote share in elections in the ten years prior to 2015 on an interaction between election indicators and the number of group accommodations as well as a dummy for being at the German border. The regression further includes election dummies, the number of group accommodations, a German border dummy, and the municipality population size interacted with election dummies.

[Figure 5 about here]

Thus, these regressions show how the reduced form coefficient of the number of group accommodations (left panel in Figure 5) and the coefficient of the border indicator (right panel) evolve relative to elections to the European Parliament in 2014, which is the omitted category. For both cases, we see that support for the far-right did not change differentially between 2006 and 2014. However, in 2015, when municipalities with more group accommodations had a higher likelihood of hosting asylum seekers, support for the far-right was relatively lower in these municipalities and it was relatively higher in municipalities at the German border that experienced the passing of a large number of refugees.²⁵

These falsification tests provide evidence that neither group accommodations nor exposure to passing refugees in 2015 are associated with different prior political trends.

3.5 Spillovers between municipalities

Direct exposure occurs most likely when the municipality of the voter accommodates asylum seekers. However, voters might also have contact with asylum seekers in other nearby municipalities. Also, indirect contact, i.e., learning about the interaction of natives and asylum seekers in neighboring municipalities, might occur. To test this conjecture and investigate

²⁵Equivalent figures for the vote shares of Center-right (People’s Party) and Center-left (Social Democrats and Green Party) are presented in Figure A7 in the Appendix.

spillovers between municipalities, I create a variable with the number of other municipalities within a radius of 10 km²⁶ that host asylum seekers. I include this variable in the main IV specification. The coefficient for this variable can be consistently estimated under the assumption that the probability that a municipality accommodates asylum seekers is not a function of politics in a neighboring municipality. To strengthen the credibility of this assumption, I include the change in far-right vote share in elections to the Austrian and the European Parliament in the municipality and the mean change in the neighboring municipalities as controls. For further robustness, I employ an IV strategy, using the number of group accommodations in municipalities in the respective radius to instrument for the number of municipalities hosting asylum seekers.

[Table 8 about here]

Columns (1) to (3) in Table 8 present the OLS results, while columns (4) to (6) present the results where asylum seeker presence in neighboring municipalities is also instrumented. An increase in the number of neighboring municipalities hosting asylum seekers by one decreases the far-right vote share by 0.13 pp., suggesting spillovers between municipalities exist (column 1). The instrumented coefficient on asylum seekers in the own municipality becomes slightly larger relative to the baseline specification. Column (2) splits neighboring municipalities into municipalities closer than 5 km, 6-10 km away, and 11-15 km away. For a municipality that does not have a neighboring municipality within 5 km, the variable is set to zero. The results in column (2) suggest that spillovers only appear between close municipalities. One additional municipality with asylum seekers closer than 5 km decreases the far-right vote share by 0.38 pp., whereas for municipalities 6-10 km and 11-15 km away, the coefficient is close to zero. Column (3) presents the same specification as in column (2) but drops all municipalities that do not have neighbors within 5 km. Results remain similar.

²⁶Measured as a straight line between the municipality centroids. One caveat in the creation of this measure is that for border municipalities, neighboring municipalities in other states or countries are not counted, which creates some measurement error.

The IV results are similar to the OLS results, suggesting a coefficient of -0.18 pp. for neighboring municipalities closer than 10 km (column 4) and -0.41 for neighboring municipalities closer than 5 km (column 5, -0.46 in column 6).

These results indicate that spillovers between municipalities exist, implying that that direct exposure to asylum seekers plays an even bigger role than suggested in the baseline estimates. These results strengthen the evidence that the direct and indirect experiences with asylum seekers are the main mechanisms through which the effect of refugee presence works. Policies to inform the native populations (i.e., official municipality newspapers, town hall meetings, etc.) or a change in local political campaigning are unlikely to explain effects on neighboring municipalities.

3.6 Robustness checks

I conduct a wide range of tests to assess the sensitivity of the results to the specifications chosen. The details of these robustness tests are presented in Appendix Section B. The first set of robustness tests evaluates how sensitive the results for hosting asylum seekers are to different sets of covariates. The second set follows the main specification but uses different measures of the instrument, i.e., group accommodations by different ownerships and construction dates. In the third set, I restrict the sample in various ways by excluding municipalities that hosted asylum seekers before, excluding municipalities with very low or high Freedom Party support, excluding border municipalities and municipalities with primary care facilities for asylum seekers. The fourth set addresses further potential issues regarding the specification. The fifth set assesses the sensitivity of the border results to different weighting functions and sample restrictions. Overall, the estimated effects are robust to all these variations.

To assess the sensitivity of the IV estimates to violations of the exclusion restriction, I employ the Bayesian methods introduced in Conley *et al.* (2012). I use the placebo results, where the true effect is zero, to estimate the probability of a violation of the exclusion

restriction that would render the results insignificant at the 10%-level. Depending on the parametrization, estimates of this probability lie between 0.002 and 0.045.

4 Discussion

I have argued in the previous sections that contact with asylum seekers was the most likely mechanism to reduce support for the far-right in municipalities that hosted asylum seekers. However, other mechanisms might be at work as well. In particular, the local presence of asylum seekers may change the dynamics of political campaigning, which in turn could affect electoral results. To assess this possibility, I conduct two empirical exercises.

First, I investigate whether the presence of asylum seekers affects the propensity of different parties to run in local elections. Freedom Party, Social Democrats, and Green Party only ran in a subset of local elections. I regress an indicator for running in the local elections on the indicator for asylum seeker presence on September 21, 2015, an indicator for running in 2009, and the standard set of covariates. Alternatively, I use the number of group accommodations as the main explanatory variable. Both specifications do not reveal a systematic relationship between asylum seeker presence/group accommodations and running in local elections. Only one of the coefficients is significant at the 10% level. Table A8 in the Appendix presents these results.

Second, I investigate the campaigning activities of the Freedom Party more directly. The Freedom Party has an active social media presence, unlike the other parties. It not only runs Facebook pages for the national and state chapter and its top officials but also many of the local chapters have their own public Facebook page. I downloaded posts from the 114 local Freedom Party chapters that ran Facebook pages through the Facebook API and coded 8,346 posts from 2015 concerning their content. Section C.2 in the Appendix provides a detailed description of the data. I use this information to assess which topics are emphasized at the local level.

[Figure 6 about here]

Figure 6 plots the number of Freedom Party Facebook posts that mention general asylum topics as well as topics related to the local presence of asylum seekers. The figure splits municipalities by the presence of asylum seekers on September 21, 2015. Due to the low number of observations, I restrain from an analysis using regressions with covariates and show descriptive statistics only. Planned or actual placement of asylum seekers in the municipality is hardly a topic in Facebook posts, in neither type of municipality. The number of posts referring to general asylum topics is also low from January to April but then increases sharply from May onward. Patterns for local and general asylum topics are quite similar in municipalities with and without asylum seekers or group accommodations (Figure A5 in the Appendix splits municipalities by the existence of group accommodations). It appears that the share of posts referring to general asylum topics is larger in municipalities with group accommodations in the two months *after* the election. However, a t-test cannot reject that the shares are identical also in October and November (available upon request).

Figure A6 shows the evolution of posts on other topics. Overall, patterns are very similar in municipalities with and without asylum seekers or group accommodations. Taken together, these two exercises provide some evidence that a change in the dynamics of electoral campaigning due to the presence of asylum seekers is an unlikely explanation for the effect of asylum seeker presence on election outcomes.

5 Conclusion

Far-right parties gained considerable support in many European countries in the wake of the European refugee crisis in 2014 and 2015. These parties appeal to fears and anti-immigrant sentiments in the native population. This paper studies the case of Upper Austria that has been a major transit region for refugees but many municipalities also hosted asylum seekers that applied for asylum in Austria. Thus the setting allows me to study the electoral effect of two different types of micro-exposure to refugees in the same setting. First, very short-term exposure to transiting refugees in border municipalities and second, more prolonged

exposure and likely contact in municipalities that hosted asylum seekers.

I use the availability of existing group accommodations as an instrument to identify the effect of hosting asylum seekers. I document that the presence of – and likely contact with – asylum seekers dampen the macro trend of growing support for the far-right by 3.86 pp. in state elections that took place on of September 27, 2015. Results for local elections are similar but imprecisely estimated. Local authorities and NGOs in these municipalities facilitated contact between natives and asylum seekers. Thus, the conditions in these municipalities resembled those that Allport described as facilitators for the positive effects of contact. Qualitative evidence suggests that anxiety in the population declined after asylum seekers arrived. This is in line with research in social psychology that argues that reduced anxiety and enhanced empathy towards the out-group are the primary mechanisms for reduced prejudice through contact. At the same time, enhanced knowledge plays only a minor role. An analysis of Facebook posts of local Freedom Party chapters suggests that the presence of asylum seekers did not affect political campaigning by the Freedom Party.

In contrast, exposure to transiting refugees in municipalities at the German border increased far-right gains by 1.47 pp., a similar effect as Dinas *et al.* (2019) find for short-term exposure on Greek islands. Thus, exposure under circumstances that do not allow for contact under favorable conditions can increase voting for a party with strong anti-refugee sentiments. The effects of micro-level exposure to refugees and immigrants more generally on voting for far-right parties are likely highly context-dependent (see Dustmann *et al.* (2018) for an extensive discussion on effect heterogeneity). The specific conditions that lead to positive or negative effects deserve further investigation.

Since the effect of exposure in municipalities that host asylum seekers is negative and the effect of passing refugees in border municipalities is relatively small, micro-level exposure cannot explain the sharp overall increase in support for the far-right by about 13 pp. between January and September 2015. Thus, insofar as the refugee crisis caused the strong increase in far-right support, macro-level exposure in the form of salience of the refugee situation in

traditional and social media, as well as political rhetoric seems to be the primary mechanism. Future research on the analysis of the effects of refugee migration – and immigration more generally – on attitudes and political behavior of the native population should devote more attention to the interaction of exposure at the macro and micro level .

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SPENKUCH, J. L. and TILLMANN, P. (2018). Elite Influence? Religion and the Electoral Success of the Nazis. *American Journal of Political Science*, **62** (1), 19–36.

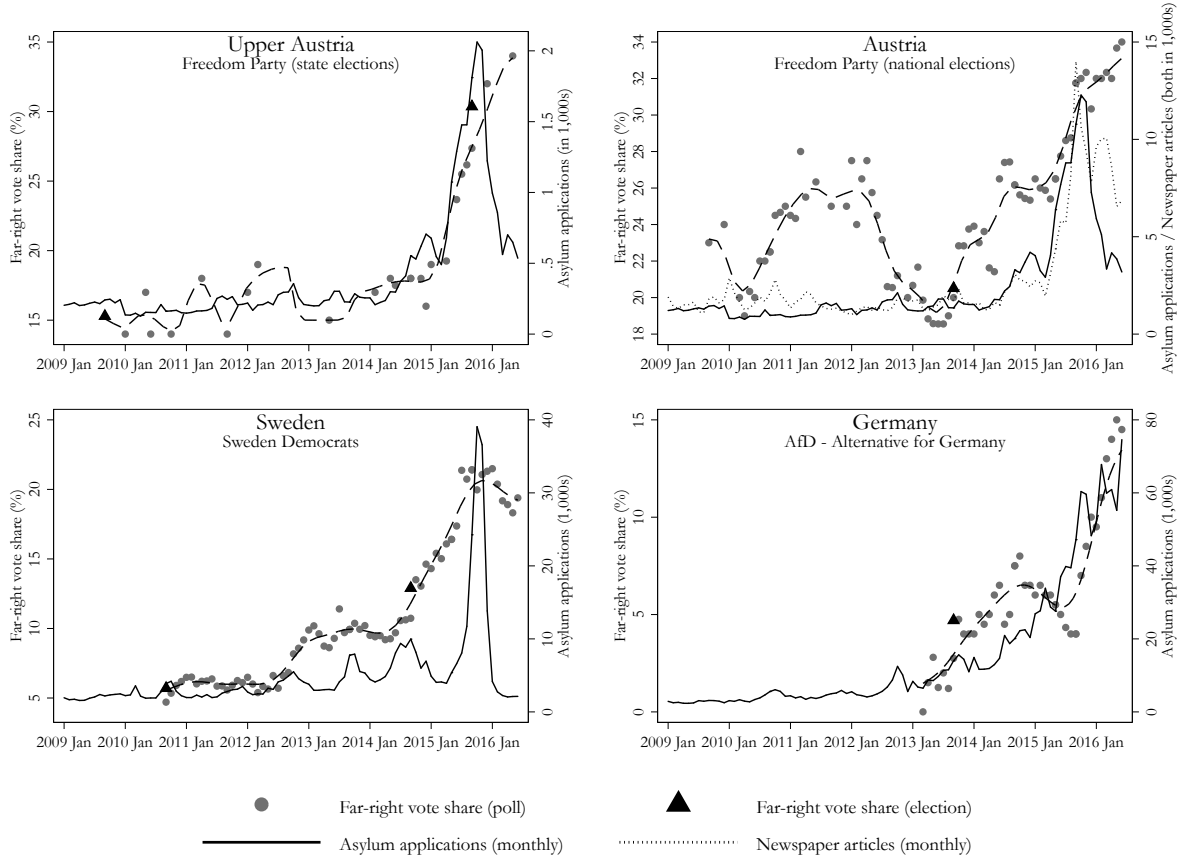
Figures and Tables

Figure 1: Upper Austria on the Balkan route of refugees from Syria and Afghanistan



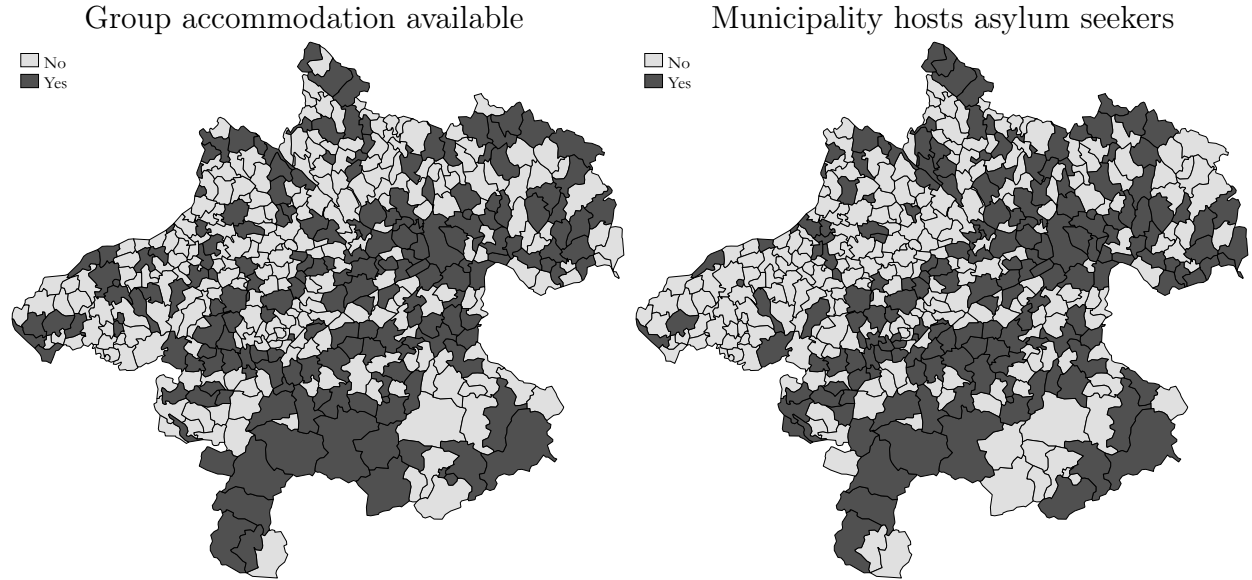
Note: Original figure from *The Independent* (September 2, 2015). The figure has been adapted to highlight the location of Upper Austria.

Figure 2: Number of asylum applications and support for far-right parties in Europe



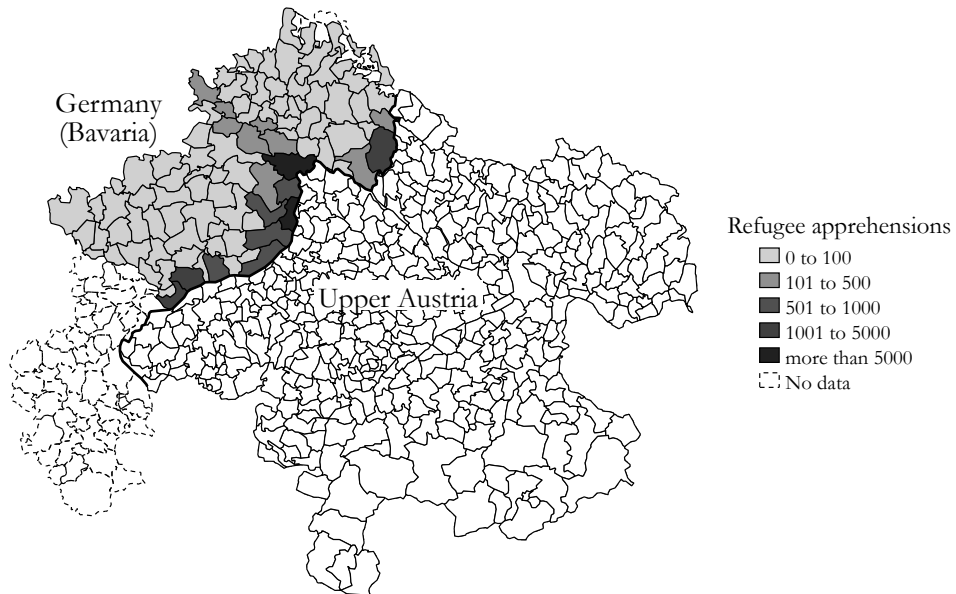
Note: The figures show the monthly number of asylum applications and support for the largest far-right party. Triangles indicate vote shares of the far-right parties in parliamentary elections for Austria (Freedom Party), Germany (AfD), Sweden (Sweden Democrats), and in state elections for Upper Austria (Freedom Party). Dots indicate monthly averages of poll results for the respective elections. Number of asylum applications obtained from Eurostat. Asylum applications assigned to Upper Austria are 16.8% of the Austrian number. The actual inflow of refugees might predate the application month due to delays in processing the asylum applications. 'Newspaper articles' is the monthly number of articles dealing with immigration, refugees and asylum in Austrian daily newspapers. Access to database from the Austrian Press Agency has been generously granted for this research project.

Figure 3: Group accommodations and hosting of asylum seekers



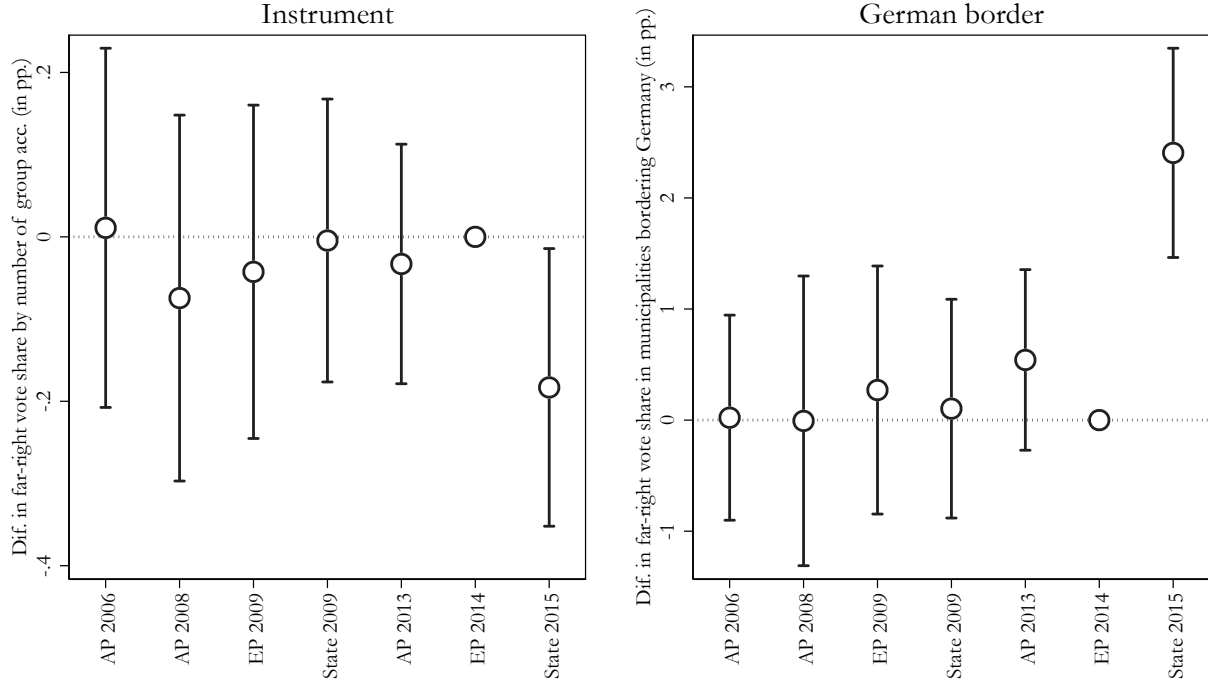
Note: The left figure depicts the availability of group accommodations (*Gebäude für Gemeinschaften*) based on data from the 2011 building and dwellings census conducted by Statistics Austria. The right figure depicts municipalities that hosted asylum seekers on September 21, 2015. Only individuals who filed for asylum in Austria are included. This excludes refugees traveling through Austria and individuals who already have official refugee status.

Figure 4: Refugee apprehensions in Lower Bavaria



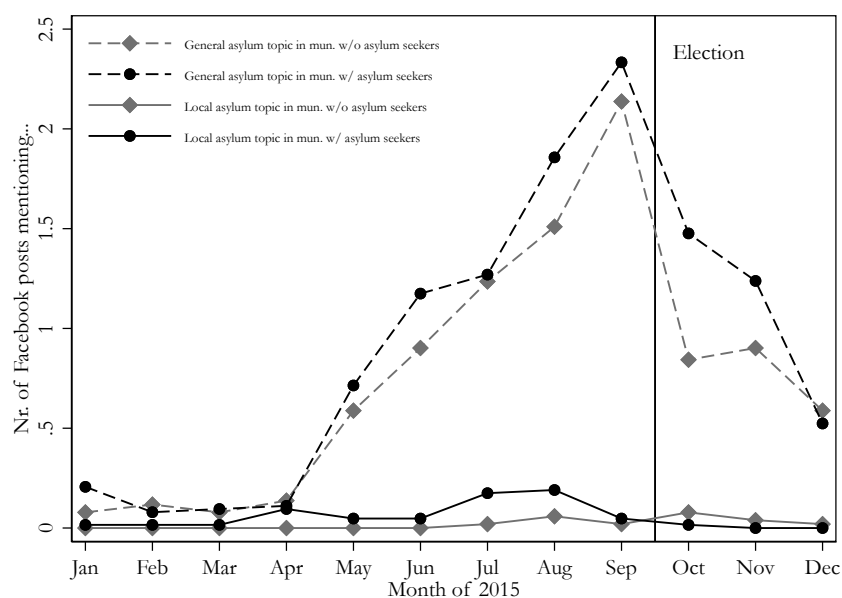
Note: The map displays the change in the number of crimes recorded between 2014 and 2015 in municipalities in Lower Bavaria. Since other crime categories remained stable over these years, the change can be attributed to the apprehension of refugees. Source: Crime Statistics (*Sicherheittsberichte*) of Lower Bavaria. Municipalities with dashed borderlines are in the region of Traunstein that does not publish crime statistics at the municipality level.

Figure 5: Far-right vote share trends in different elections 2006 - 2015



Note: The figures plot the coefficients from a pooled regression of the far-right vote share (Freedom Party and BZO) on an interaction between election dummies and the number of group accommodations (left panel) as well as a dummy for being at the German border (right panel). The regression includes election dummies, the number of group accommodations and a German border dummy, and the municipality population size interacted with election dummies. Bars indicate 95% confidence levels with standard errors clustered at the municipality level.

Figure 6: Freedom Party Facebook posts in 2015 in municipalities w/ and w/o asylum seekers



Note: The figure shows the number of Facebook posts on topics related to asylum in the respective municipality as well as posts on general asylum topics by local Freedom Party chapters. Appendix C.2 explains how the data was constructed.

Table 1: Descriptive statistics for municipalities with and without asylum seekers

	Municipality hosts asylum seekers				
	no		yes		
	mean	sd	mean	sd	p-value
Population					
Population	1694.4	1089.0	3310.9	2520.2	0.00
Population growth in % (2001-11)	2.27	6.37	1.93	5.64	0.56
Population density (inh. per sq. km)	95.3	105.9	188.5	252.5	0.00
Demographics					
Share of women in the population	49.7	1.32	50.3	1.22	0.00
Share of population below 30 years	35.4	2.61	34.8	2.51	0.02
Share pop. compulsory education	32.7	5.42	31.6	4.92	0.03
Share pop. vocational education	50.9	3.07	50.3	3.11	0.05
Share pop. secondary education	12.0	2.80	12.9	2.78	0.00
Share pop. higher education	4.46	2.20	5.26	2.42	0.00
Share of foreigners in pop.	6.01	4.90	8.24	5.00	0.00
Share of EU foreigners in pop.	4.04	4.13	4.40	2.72	0.28
Share of Non-EU foreigners in pop.	1.97	2.11	3.84	3.39	0.00
Unemployment rate	2.55	0.99	3.11	1.28	0.00
Share employed in primary sector	8.30	4.09	5.85	3.77	0.00
Share employed in secondary sector	47.3	6.20	47.2	5.41	0.81
Share employed in tertiary sector	42.5	7.23	46.1	6.95	0.00
Financial strength of municipality	940.2	153.7	1016.8	200.8	0.00
Geography and other					
Border with Germany	0.071	0.26	0.073	0.26	0.91
Linear distance to state capital < 25 km	0.14	0.35	0.24	0.43	0.01
Primary care facility (2015)	0	0	0.028	0.17	0.02
Far-right support					
Far-right votes (state 2009)	18.6	5.29	17.5	4.26	0.01
Far-right votes (state 2015)	32.1	6.87	30.1	5.69	0.00
FP runs in local elections (2009)	0.82	0.39	0.86	0.35	0.27
FP runs in local elections (2015)	0.85	0.36	0.89	0.31	0.16
FP votes (local 2009)	13.9	9.72	12.8	8.39	0.19
FP votes (local 2015)	20.5	11.8	20.0	10.1	0.58
Far-right votes (parliament 2013)	26.6	5.71	25.4	5.08	0.01
Far-right votes (EU parliament 2014)	22.2	6.26	21.3	5.12	0.08
Observations	255		177		

Note: The table presents means and standard deviations for the main variables separately for municipalities with and without asylum seekers as of September 21, 2015. Statistics are based on the 432 municipalities in the estimation sample, i.e., municipalities with at most 10 group accommodations. Freedom Party vote shares for local elections are only based on 361 municipalities where the Freedom Party ran in 2009. Unless otherwise indicated, all values are measured in the census year 2011. P-values are from a t-test on the equality of means in municipalities with and without asylum seekers.

Table 2: IV first stage: Determinants of hosting asylum seekers

	(1)	(2)	(3)
Group accommodation (binary)	0.17*** (0.05)		
Number of group accommodations		0.06*** (0.01)	
Number of privately owned group accommodations			0.11*** (0.03)
Number of publicly owned group accommodations			0.07*** (0.02)
Controls	yes	yes	yes
F-statistic of excl. instruments	12.58	17.88	11.32
R2	0.24	0.25	0.25
Observations	432	432	432

Note: The table reports first stage IV estimates. The sample includes all Upper Austrian municipalities with at most 10 group accommodations. The dependent variable is a dummy whether a municipality hosted asylum seekers on September 21, 2015. In column (1) the excluded instrument is a dummy for the availability of any group accommodation in the municipality. In column (2) the excluded instrument is the number of group accommodations. This is the main specification. Column (3) uses the number of privately and publicly owned group accommodations separately. The set of controls includes municipality-level variables capturing population size (and its square), population change between 2001 and 2011, population density, share of women, share of population below 30 years, share of population with different educational levels, unemployment rate, share of foreigners, financial strength of the municipality proxied by own and shared revenues per capita, an indicator for being in the central region of the state, and an indicator whether the municipality hosts a primary care facility in 2015. Unless otherwise stated, all variables are measured in the census year 2011. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

Table 3: OLS results for effect of asylum seeker presence on changes in state election results and turnout between 2009 and 2015

	Far-right		Other parties			Turnout
	w/o cov	w/ cov	PP	SP	Green	
Asylum seekers in municipality	-0.83** (0.39)	-0.39 (0.30)	0.66 (0.42)	-0.21 (0.28)	-0.12 (0.12)	-0.38 (0.23)
Controls	no	yes	yes	yes	yes	yes
R2	0.01	0.30	0.27	0.30	0.04	0.05
Observations	432	432	432	432	432	432

Note: The table reports OLS estimates of Equation 1. The dependent variables are the changes in vote shares and turnout of different parties between the 2009 and the 2015 state elections in percentage points. Far-right refers to the combined vote share of Freedom Party and BZO (Alliance for the Future of Austria) PP...People's Party; SP...Social Democratic Party. Specification 1, includes no further covariates. See notes in Table 3 for a complete list of control variables and the sample restrictions. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

Table 4: IV second stage results for effect of asylum seekers presence on changes in state election results and turnout between 2009 and 2015

	Far-right		Other parties (spec 2)			Turnout
	spec 1	spec 2	PP	SP	Green	
Asylum seekers in municipality	-4.90** (2.21)	-3.86*** (1.38)	4.27** (1.88)	0.86 (1.23)	-0.23 (0.59)	-0.61 (1.57)
Controls	yes	yes	yes	yes	yes	yes
Observations	432	432	432	432	432	432

Note: The tables report second stage IV estimates of Equation 1. The dependent variables are the changes in vote shares and turnout of different parties between the 2009 and the 2015 state elections in percentage points. Far-right refers to the combined vote share of Freedom Party and BZO (Alliance for the Future of Austria) PP...People's Party; SP...Social Democratic Party. In specification 1, this treatment variable is instrumented using the first stage specification in Table 3, column (1). In specification 2, the first stage specification in Table 3, column (2) is used. All other columns use this instrument specification as well. See notes in Table 3 for a complete list of control variables and the sample restrictions. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

Table 5: Effects from passing refugees on far-right support in state elections

	Border			Weighted exposure		
	(1)	(2)	(3)	(4)	(5)	(6)
Border with Germany	2.29*** (0.58)	1.47** (0.58)	1.60*** (0.48)			
Border exposure (std.)				1.03*** (0.38)	0.90*** (0.26)	0.84*** (0.26)
Asylum seekers in municipality			-3.86*** (1.33)			-2.66** (1.17)
Controls	no	yes	yes	no	yes	yes
R2	0.03	0.30	0.12	0.09	0.35	0.26
Observations	432	432	432	432	432	432

Note: The table reports estimates of Equation 1 investigating the effect of exposure to passing refugees in municipalities at the German border. The dependent variable is the change in far-right vote shares in state elections. *Border with Germany* is an indicator for municipalities bordering Germany. *Border exposure (std.)* is a weighted measure based on apprehensions across the border weighted by the inverse squared straight-distance. See Section 3.2 for a description of the exposure measure. *Asylum seekers in municipality* is instrumented using the number of group accommodations. See notes in Table 3 for a complete list of control variables and the sample restrictions. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

Table 6: Falsification test: Far-right vote shares in prior elections

	Reduced forms				IV w/ trend	
	AP 13	EP 14	SE 15	LE 15	SE 15	LE 15
Number of group accommodations	0.05 (0.09)	0.04 (0.08)	-0.23** (0.09)	-0.24 (0.16)		
Asylum seekers in municipality					-4.15*** (1.30)	-3.46 (2.64)
Δ Far-right votes (AP 2008-13)					0.13** (0.06)	0.00 (0.16)
Δ Far-right votes (EP 2009-14)					0.25*** (0.05)	0.20 (0.13)
Controls	yes	yes	yes	yes	yes	yes
F-statistic of excl. instruments					18.45	21.63
Observations	432	432	432	365	432	365

Note: The table displays falsification tests. The sample includes all Upper Austrian municipalities with at most 10 group accommodations for state elections and is further restricted to municipalities where the Freedom Party ran in local elections 2009 for local election outcomes. The dependent variable are changes in far-right vote shares in elections to the Austrian parliament between 2008 and 2013 (AP 13); the European parliament between 2009 and 2014 (EP 14); the Upper Austrian state parliament between 2009 and 2015 (SE 15); and the local council between 2009 and 2015 (LE 15). The last two columns follow the main specification from Table 4, column 2 and display IV estimates with changes the far-right vote shares in the parliamentary elections and the elections to the European Parliament as additional control variables. See notes in Table 3 for a complete list of control variables. alues in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

Table 7: Falsification tests for border exposure

	Czech b.	German b.		Weighted exp.		Trend control	
	SE (1)	AP (2)	EP (3)	AP (4)	EP (5)	SE (6)	SE (7)
Border with Czech R.	0.14 (1.10)						
Border with Germany		-0.04 (0.93)	-0.54 (0.72)			1.61*** (0.51)	
Border exposure (std.)				0.25 (0.18)	-0.10 (0.13)		0.89*** (0.24)
Δ Far-right (AP 08-13)						0.17*** (0.06)	0.14*** (0.05)
Δ Far-right (EP 09-14)						0.24*** (0.05)	0.25*** (0.04)
Controls	yes	yes	yes	yes	yes	yes	yes
R2	0.30	0.06	0.10	0.06	0.10	0.39	0.43
Observations	432	432	432	432	432	432	432

Note: The table reports placebo estimates of the effects of passing refugees in border municipalities. Column (1) regresses the change in far-right vote share in state elections between 2009 and 2015 on an indicator for municipalities bordering the Czech Republic. The next columns regress the change in far-right vote share in parliamentary elections in Austria between 2008 and 2013 (2) and elections to the European Parliament between 2009 and 2014 (3) on an indicator for municipalities bordering Germany. Columns (4) and (5) regress these earlier election outcomes on the weighted exposure measure. Columns (6) and (7) use the change in far-right vote share in state elections between 2009 and 2015 as outcome but control for the change in far-right vote share in elections to the Austrian and the European Parliament. See notes in Table 3 for a complete list of control variables and the sample restrictions. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

Table 8: Spillovers between neighboring municipalities

	Neighbors OLS			Neighbors IV		
	(1)	(2)	(3)	(4)	(5)	(6)
Asyl. seek. in mun.	-4.39*** (1.41)	-4.78*** (1.51)	-5.36*** (1.83)	-4.43*** (1.47)	-4.80*** (1.54)	-5.35*** (1.87)
Mun. w/ asyl. seek. <10km	-0.13* (0.07)			-0.18** (0.09)		
Mun. w/ asyl. seek. <5km		-0.38** (0.18)	-0.42** (0.19)		-0.41 (0.33)	-0.46 (0.35)
Mun. w/ asyl. seek. 6-10km		-0.07 (0.08)	-0.05 (0.09)		-0.13 (0.12)	-0.13 (0.13)
Mun. w/ asyl. seek. 11-15km		0.02 (0.05)	0.02 (0.06)		0.04 (0.12)	0.04 (0.14)
Controls	yes	yes	yes	yes	yes	yes
Observations	432	432	389	432	432	389

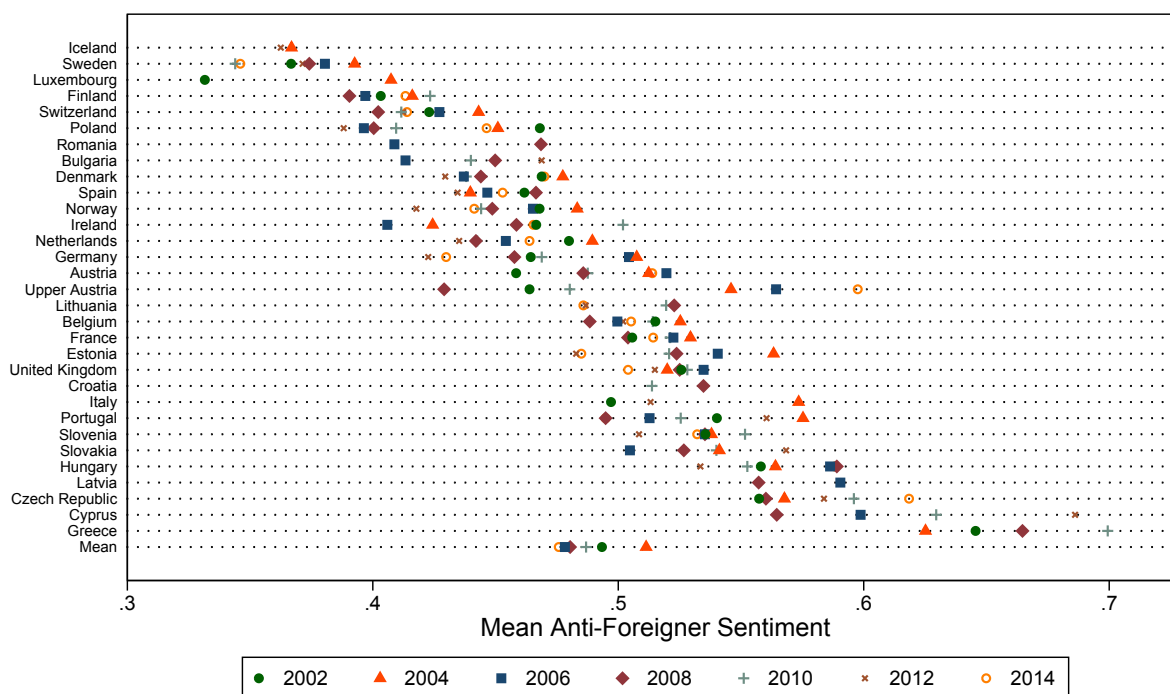
Note: The table displays estimates that allow for spillovers between municipalities. The dependent variable is the change in far-right vote share between the 2009 and 2015 state elections in percentage points. *Asyl. seek. in municipality* is instrumented using the number of group accommodations in the municipality. The specifications also include the number of municipalities within a certain radius that host asylum seekers. Column (1) and (4) use a 10 km radius, columns (2), (3), (5), and (6) use certain distance ranges as additional explanatory variables. In columns (4)-(6), these variables are instrumented with the number of group accommodations in the respective radius. In columns (3) and (6), all municipalities that do not have a neighboring municipality within 5 km are excluded. All specifications include the change in far-right vote share in elections to the Austrian and the European Parliament in the municipality and the neighboring municipalities in the respective radius in addition to the control variables as described in Table 3. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

Appendix for Online Publication to “Contact
versus Exposure: Refugee Presence and Voting
for the Far-Right”

Andreas Steinmayr

A Additional tables and figures

Figure A1: Mean levels of Anti-Foreigner Sentiments across Europe (2002-2014)



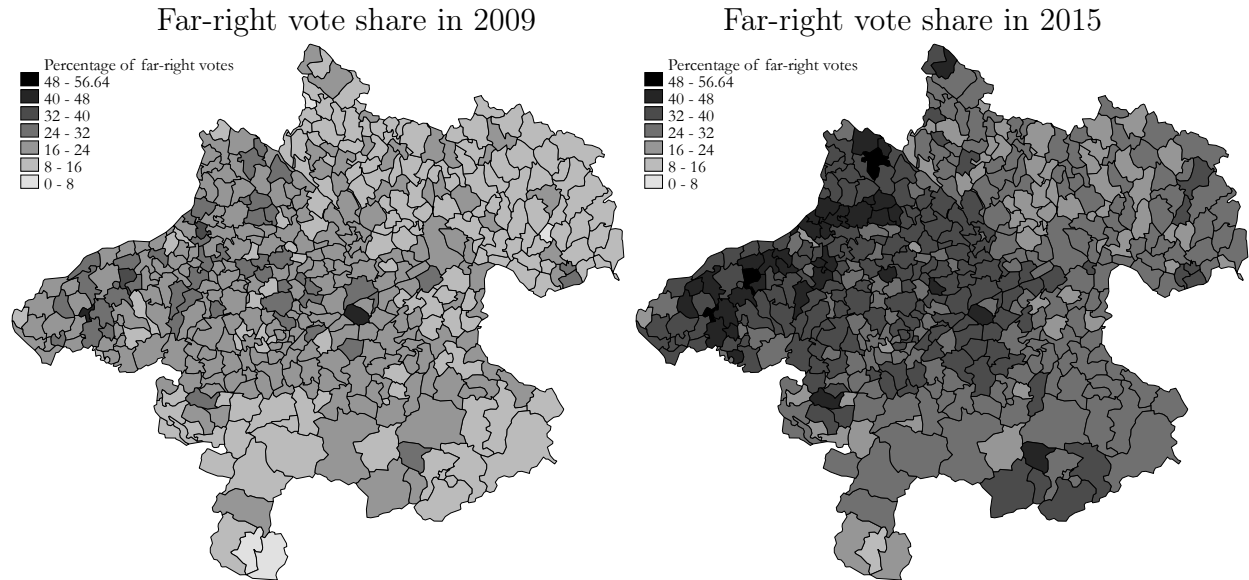
Note: Anti-Foreigner Sentiments are measured with a scale based on the following three questions: “Would you say it is generally bad or good for [country]’s economy that people come to live here from other countries?”; “Would you say that [country]’s cultural life is generally undermined or enriched by people coming to live here from other countries?”; “Is [country] made a worse or a better place to live by people coming to live here from other countries?”. All questions were answered on a 0-10 scale, which has been rescaled, to range between 0 and 1, and reversed, so high values correspond to high levels of anti-foreigner sentiments. Only respondents answering at least two of the questions are included. The data are weighted with sampling weights. Source: European Social Survey, Round 1-7. The figure is based on a similar figure in Dinesen and Sonderskov (2015).

Figure A2: Media coverage of refugee transport through Austria



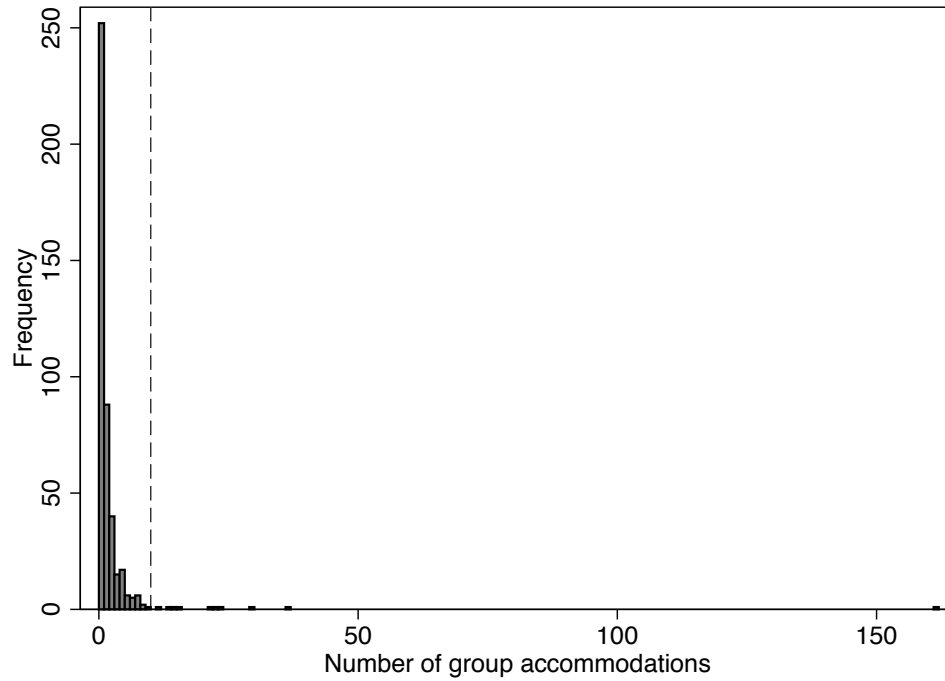
Note: Image source: Quirin Leppert. Originally published in a media report in the German newspaper WELT (October 11, 2015). goo.gl/CAkN5A. Refugees were transported in buses from the southern and eastern border of Austria to municipalities at the German border. From there they were advised to walk the remaining distance to Germany.

Figure A3: Far-right vote share in Upper Austrian state elections 2009 and 2015



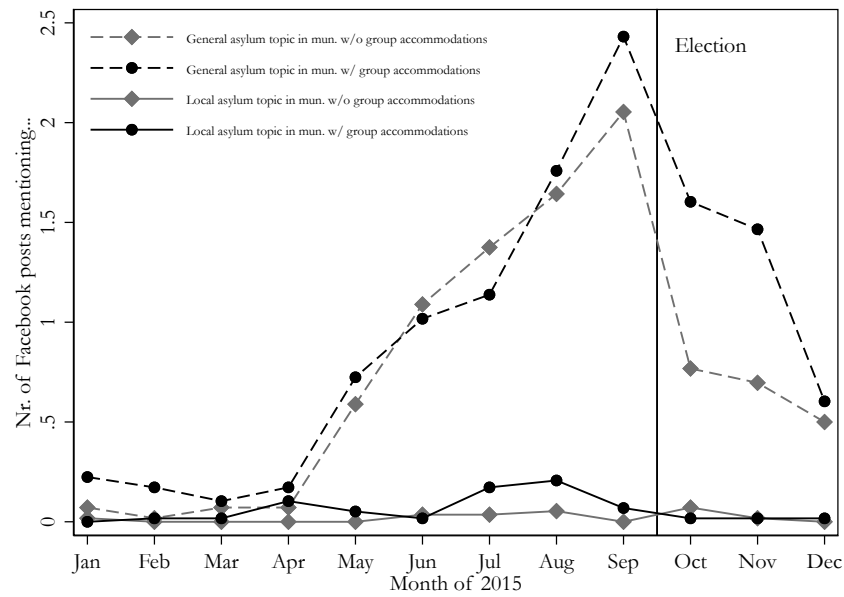
Note: These figures show the vote share of the far-right (Freedom Party and BZO) in state elections in 2009 and 2015 in Upper Austrian municipalities. In two cases, two municipalities were merged in 2015. I aggregate results from 2009 and use the merged data with municipality boundaries as of 2015.

Figure A4: Distribution of the number of group accommodations



Note: The figure depicts the distribution of group accommodations for all Upper Austrian municipalities. The dashed line indicates the cutoff used to restrict the sample for the main analysis.

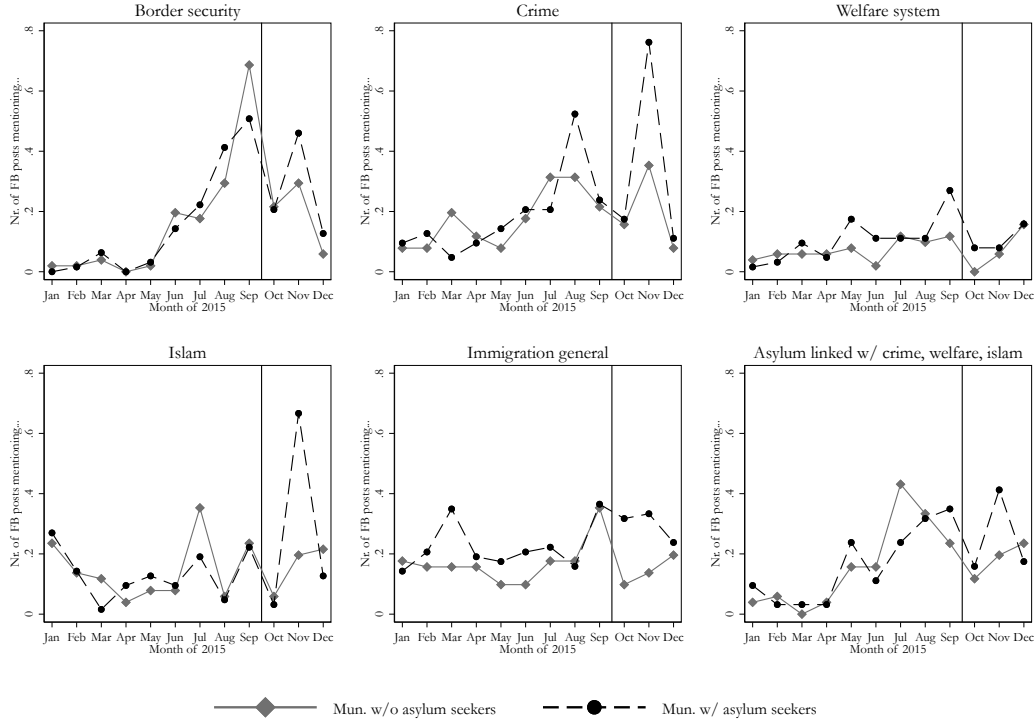
Figure A5: Freedom Party Facebook posts in 2015 in municipalities w/ and w/o group accommodations



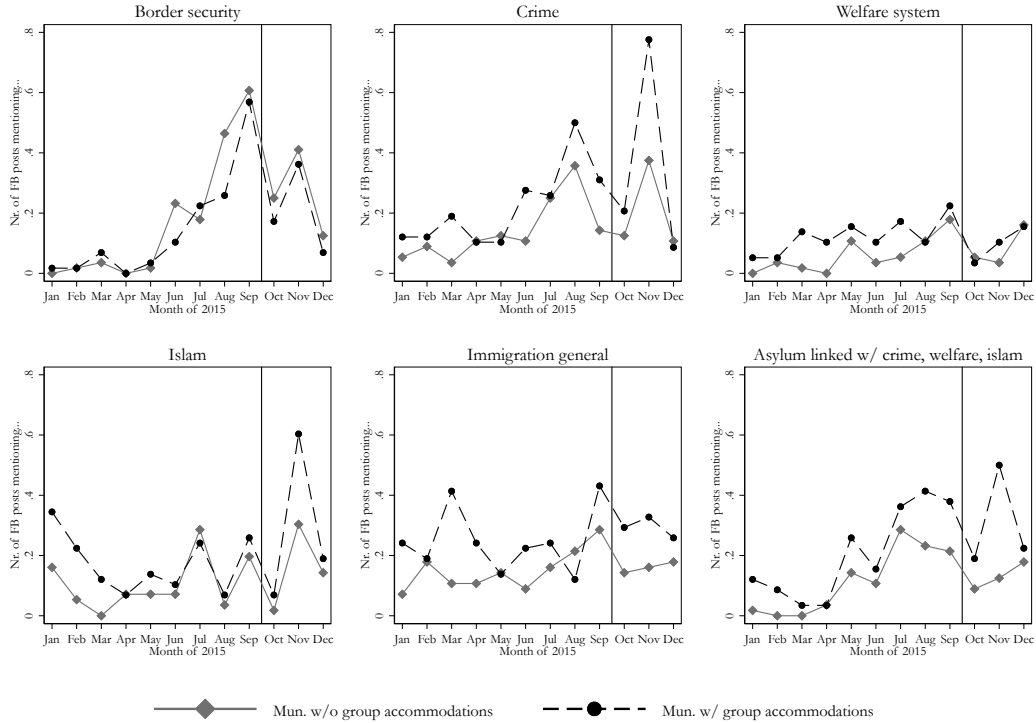
Note: The figure shows the number of Facebook posts that refer to general or local asylum topics by local Freedom Party chapters. The figure distinguishes between municipalities with and without group accommodations. The analysis is based on 114 municipalities with local Freedom Party Facebook pages. Appendix C.2 explains how the data was constructed.

Figure A6: Further topics in Freedom Party Facebook posts in 2015

(a) In municipalities with and without asylum seekers



(b) In municipalities with and without group accommodations



Note: The figures show the number of Facebook posts on various topics by local Freedom Party chapters. Appendix C.2 explains how the data was constructed.

Table A1: Importance of different topics in pre-electoral discussions by preferred party

	PP	SP	FP	Green	Other	Total
	Share of voters that discussed the topic of...					
Refugees and asylum	0.54	0.53	0.89	0.65	0.57	0.62
Security	0.32	0.34	0.61	0.14	0.34	0.37
Economy and jobs	0.36	0.29	0.48	0.23	0.33	0.36
Cost of living	0.31	0.37	0.44	0.21	0.26	0.32
Health and old-age care	0.33	0.39	0.17	0.21	0.34	0.30
Education	0.29	0.27	0.17	0.40	0.32	0.28
Environment protection	0.22	0.27	0.11	0.43	0.23	0.23
Housing and rents	0.20	0.21	0.25	0.16	0.20	0.21
Traffic	0.20	0.14	0.15	0.19	0.20	0.18

Note: The tables presents the importance of various topics based on the opinion poll question 'Did you discuss the following topics during the electoral campaign?'. Statistics presented are means of the binary variable for the answer category 'discussed this topic a lot' by party the person said to vote for. PP...People's Party; SP...Social Democratic Party; FP...Freedom Party. The category 'other' includes non-voters and people not stating the party they vote for. The sample is based on data from a SORA opinion poll conducted between September 26-28, 2015. It includes 886 individuals living in 288 municipalities in the estimation sample.

Table A2: Party vote shares in election in Upper Austria and Austria 2006 - 2015

	PP	SP	FP	BZO	Green	NEOS	Other
Austrian parliament 2006							
Upper Austria	35.2	36.1	12.2	2.6	10.2	-	3.6
Austria	34.3	35.3	11.0	4.1	11.1	-	4.1
Austrian parliament 2008							
Upper Austria	26.8	30.5	19.0	9.1	9.9	-	4.7
Austria	26.0	29.3	17.5	10.7	10.4	-	6.1
EU parliament 2009							
Upper Austria	31.4	24.0	13.8	4.2	8.5	-	18.1
Austria	30.0	23.7	12.7	4.6	9.9	-	19.1
Upper Austria state 2009	46.8	24.9	15.3	2.8	9.2	-	1,0
Upper Austria local 2009	43.6	33.5	14.2	-	5.2	-	3,5
Austrian parliament 2013							
Upper Austria	25.4	27.2	21.4	3.2	14.8	4.6	3,4
Austria	24.0	26.8	20.5	3.5	12.4	5.0	7,8
EU parliament 2014							
Upper Austria	28.0	24.4	20.5	0.5	13.4	7.4	5,8
Austria	27.0	24.1	19.7	0.5	14.5	8.1	6,1
Upper Austria state 2015	36.4	18.4	30.4	-	10.3	3.5	1,0
Upper Austria local 2015	39.6	27.6	22.3	-	6.8	1.0	2,7

Note: Data on parliamentary elections and elections to the European Parliament from the website of the Ministry of the Interior (www.bmi.gv.at). Data on local and state elections from the open data portal of Upper Austria (www.land-oberoesterreich.gv.at/119788.htm). PP...People's Party; SP...Social Democratic Party; FP...Freedom Party; BZO...Alliance for the Future of Austria.

Table A3: Municipality characteristics by number of group accommodations

	Group accommodations in municipality						p-val.
	none		one		more than one		
	mean	sd	mean	sd	mean	sd	
Population							
Population	1642.6	1154.7	2316.6	1395.0	4351.1	2760.4	0.00
Population growth in % (2001-11)	2.10	6.08	1.68	6.53	2.65	5.62	0.56
Population density (inh. per sq. km)	85.2	65.3	135.4	205.9	263.9	297.9	0.00
Demographics							
Share of women in the population	49.6	1.10	50.0	1.61	50.7	1.16	0.00
Share of population below 30 years	35.6	2.48	35.0	2.96	34.2	2.15	0.00
Share pop. compulsory education	32.4	5.10	32.9	5.74	31.3	5.06	0.11
Share pop. vocational education	51.1	2.99	50.4	3.25	49.7	3.02	0.00
Share pop. secondary education	12.1	2.67	12.0	2.95	13.3	2.95	0.00
Share pop. higher education	4.48	2.10	4.72	2.72	5.71	2.29	0.00
Share of foreigners in pop.	5.68	4.54	7.48	4.54	9.80	5.64	0.00
Share of EU foreigners in pop.	3.84	4.00	4.53	3.11	4.82	2.80	0.05
Share of Non-EU foreigners in pop.	1.84	1.80	2.95	2.40	4.98	4.10	0.00
Unemployment rate	2.50	0.94	2.92	1.14	3.42	1.39	0.00
Share employed in primary sector	8.34	3.74	7.35	4.40	4.37	3.50	0.00
Share employed in secondary sector	47.4	5.97	47.4	5.92	46.7	5.65	0.66
Share employed in tertiary sector	42.6	6.62	43.8	7.78	47.9	7.37	0.00
Financial strength of municipality	930.2	145.2	1004.6	203.4	1053.3	200.8	0.00
Geography and other							
Border with Germany	0.063	0.24	0.091	0.29	0.076	0.27	0.68
Linear distance to state capital < 25 km	0.15	0.36	0.14	0.35	0.29	0.46	0.01
Primary care facility (2015)	0	0	0	0	0.054	0.23	0.00
Far-right support							
Far-right votes (state 2009)	18.3	5.34	18.4	4.81	17.7	3.67	0.54
Far-right votes (state 2015)	31.7	6.78	31.2	6.87	30.4	5.07	0.27
FP runs in local elections (2009)	0.81	0.39	0.88	0.33	0.87	0.34	0.22
FP runs in local elections (2015)	0.83	0.38	0.89	0.32	0.95	0.23	0.02
FP votes (local 2009)	13.5	9.79	14.5	8.88	12.4	7.70	0.31
FP votes (local 2015)	20.2	12.0	20.8	11.0	20.2	8.91	0.89
Far-right votes (parliament 2013)	26.1	5.69	26.2	5.87	26.0	4.54	0.94
Far-right votes (EU parliament 2014)	21.8	6.23	22.1	5.91	21.8	4.54	0.91
Observations	252		88		92		

Note: The table presents means and standard deviations for the main variables for municipalities with none, one, and more than one group accommodations. The average number of group accommodations in the third group is 3.48. Statistics are based on the 432 municipalities in the estimation sample, i.e. municipalities with at most 10 group accommodations. Freedom Party vote shares for local elections are only based on 361 municipalities where the Freedom Party ran in 2009. Unless otherwise indicated, all values are measured in the census year 2011. P-values are from an F-test on the equality of means between municipalities with zero, one, or more than one group accommodations.

Table A4: Asylum seeker characteristics by number of group accommodations

	Group accommodations in municipality						p-val
	none		one		more than one		
	mean	sd	mean	sd	mean	sd	
Asylum seeker presence							
Asylum seekers in municipality	0.26	0.44	0.50	0.50	0.73	0.45	0.00
Number and share (if any)							
Absolute number of asylum seekers	20.6	20.4	28.8	22.4	46.8	49.2	0.00
Share of population (%)	1.29	2.10	1.43	1.38	1.30	1.67	0.91
Demographics							
Share below 16 years	20.7	17.1	19.3	16.8	18.1	15.5	0.67
Share male	69.3	21.7	68.2	20.4	75.5	17.1	0.09
Share male 16-60 years	58.6	26.2	57.8	25.3	64.4	24.3	0.31
Origin							
Share from Syria	32.6	30.0	25.4	24.8	31.6	28.7	0.39
Share from Afghanistan	20.2	21.9	20.4	18.1	22.6	25.2	0.80
Share from Iraq	20.1	25.7	14.0	18.0	11.2	15.2	0.04
Share with other nat.	27.1	30.1	40.2	29.3	34.5	27.1	0.06
Observations	252		88		92		
Observations (hosting asylum seekers)	66		44		67		

Note: The table presents descriptive statistics of the asylum seeker population as of 21 September 2015 for municipalities with none, one, and more than one group accommodations. The indicator for the presence of asylum seekers on September 21, 2015 is based on the 432 municipalities in the estimation sample. Statistics of the characteristics of asylum seekers are only available for October 6, 2015. The statistics of the characteristics are based only on the sample of municipalities that hosted asylum seekers on September 21, 2015. P-values are from an F-test on the equality of means between municipalities with zero, one, or more than one group accommodations.

Table A5: IV second stage for effect of asylum seekers presence on changes in local election results

	Far-right		Other parties (spec 2)			Incumbent
	spec 1	spec 2	PP	SP	Green	
Asylum seekers in municipality	-2.48 (3.90)	-3.50 (2.65)	2.29 (4.94)	3.11 (3.84)	-1.43 (3.24)	-1.98 (5.70)
Controls	yes	yes	yes	yes	yes	yes
Observations	361	361	361	361	361	346

Note: The tables report second stage IV estimates of Equation 1. The dependent variables are the changes in vote shares and turnout of different parties between the 2009 and the 2015 local elections in percentage points. PP...People's Party; SP...Social Democratic Party; FP...Freedom Party. Incumbent refers to the change in local council vote share of the 2009 mayor's party. This variable is only defined if the mayor was either affiliated with the People's Party or the Social Democratic Party. The sample includes Upper Austrian municipalities where the Freedom Party ran in local elections 2009, excluding those with more than 10 group accommodations. The endogenous variable is a dummy whether a municipality hosted asylum seekers on September 21, 2015. In specification 1, this variable is instrumented using the first stage specification in Table 3, column (1). In specification 2, the first stage specification in Table 3, column (2) is used. See notes in Table 3 for a complete list of control variables. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

Table A6: IV second stage for the effect of asylum seekers (in % of local population) on changes in state election results

	Far-right		Other parties (spec 2)			Turnout
	spec 1	spec 2	PP	SP	Green	
Share of asyl. seek. in pop. (in %)	-2.21** (0.96)	-1.44** (0.61)	1.59*** (0.59)	0.32 (0.51)	-0.08 (0.23)	-0.23 (0.58)
Controls	yes	yes	yes	yes	yes	yes
F-statistic of excl. instruments	8.08	9.98	9.98	9.98	9.98	9.98
Observations	432	432	432	432	432	432

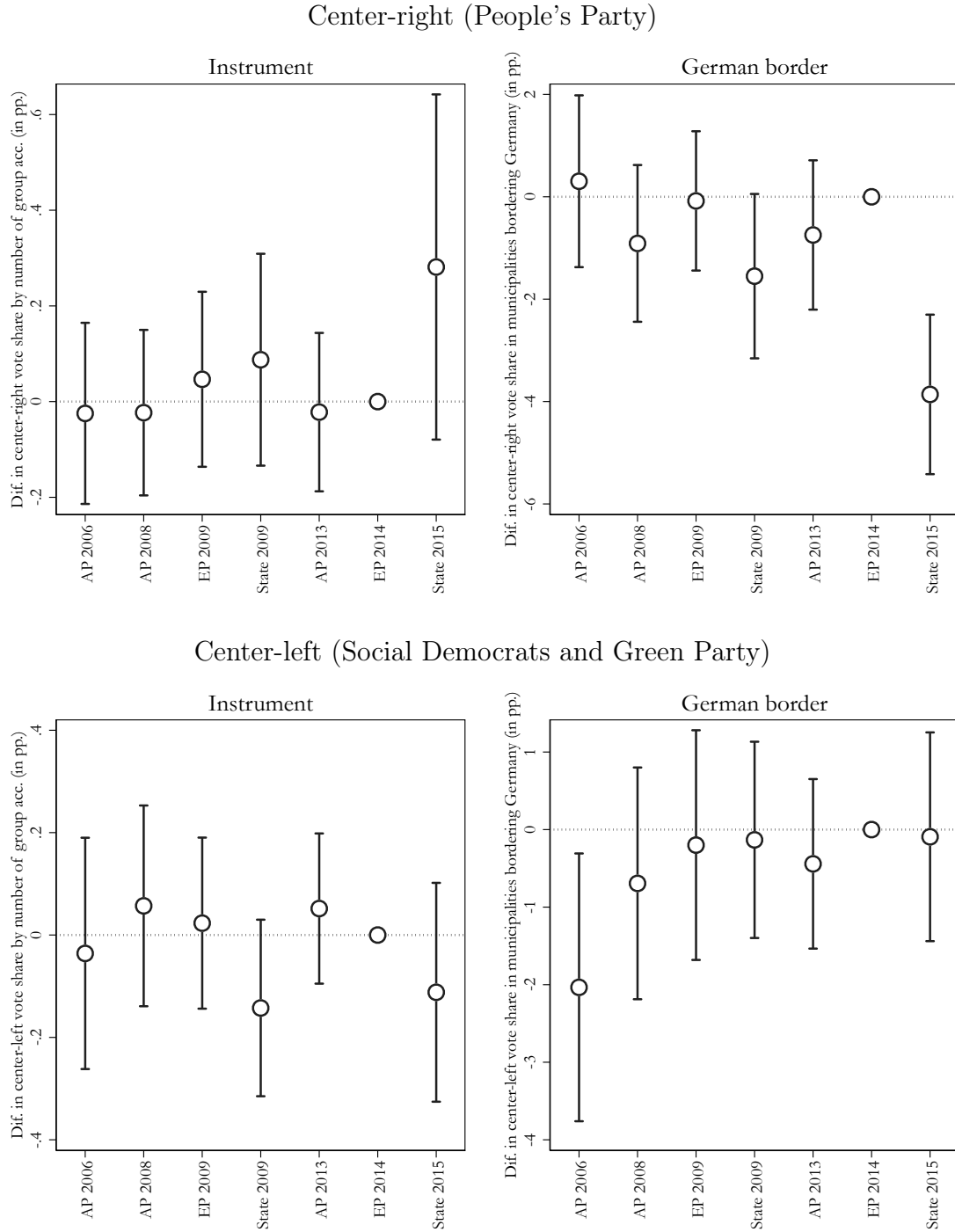
Note: The tables report second stage IV estimates of Equation 1. The sample includes all Upper Austrian municipalities with at most 10 group accommodations. The dependent variables are the changes in vote shares and turnout of different parties between the 2009 and the 2015 state elections in percentage points. Far-right refers to the combined vote share of Freedom Party and BZO (Alliance for the Future of Austria) PP...People's Party; SP...Social Democratic Party. The endogenous variable is the share of asylum seekers in the population on September 21, 2015. In specification 1, this variable is instrumented using the first stage specification in Table 3, column (1). In specification 2, the first stage specification in Table 3, column (2) is used. See notes in Table 3 for a complete list of control variables and the sample restrictions. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

Table A7: Falsification test: Vote shares in prior elections of other parties

	AP 2008 - 2013			EP 2009 - 2014		
	PP	SP	Green	PP	SP	Green
Number of group accommodations	-0.00 (0.08)	0.07 (0.08)	-0.04 (0.05)	-0.06 (0.10)	0.07 (0.07)	-0.05 (0.06)
Controls	yes	yes	yes	yes	yes	yes
Observations	432	432	432	432	432	432

Note: The table displays additional falsification tests for the People's Party(PP), the Social Democratic Party (SP) and the Green Party (Green). The reduced form specification corresponds to the one in Table 7. The dependent variable in columns (1-3) (AP 2008 - 2013) is the change in vote share of the respective party between Austrian parliamentary elections 2008 and 2013, and in columns (4-6) (EP 2009 - 2014) the change in vote share in elections to the European parliament between 2009 and 2014 (all in percentage points).

Figure A7: Vote share trends of center-right and center-left parties



Note: The figures plot the coefficients from a pooled regression of the center-right (top) and center-left (bottom) vote share (SPO and Green Party) on an interaction between election dummies and a) the number of group accommodations (left panel) and b) a dummy for being at the German border (right panel). The regression includes election dummies, the number of group accommodations and a German border dummy, and the municipality population size interacted with election dummies. Bars indicate 95% confidence levels with standard errors clustered at the municipality level.

Table A8: Propensity to run in local elections

	Freedom Party	SP	Green
	By presence of asylum seekers		
Asylum seekers in municipality	-0.001 (0.028)	-0.022 (0.023)	0.020 (0.032)
Party runs in local elections 2009	0.602*** (0.067)	0.792*** (0.090)	0.670*** (0.050)
	By number of group accommodations		
Number of group accommodations	0.015 (0.009)	0.005* (0.003)	-0.001 (0.014)
Party runs in local elections 2009	0.606*** (0.067)	0.790*** (0.090)	0.669*** (0.052)
Observations	432	432	432

Note: The table reports coefficients from linear probability models with indicators whether a party ran in 2015 for seats in the local council as dependent variable. The sample includes all Upper Austrian municipalities excluding those with more than 10 group accommodations. The set of controls includes the standard control variables as in Table 2 and an indicator whether the party ran in local elections in 2009. The upper panel includes an indicator for the presence of asylum seekers on September 21, 2015 as the main variable of interest. The lower panel includes the number of group accommodations as the main variable of interest. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

B Robustness

B.1 Robustness to specification

This appendix presents several tests to assess the sensitivity of the results to the specification chosen. The first set of robustness tests evaluates how sensitive the results are to different sets of covariates used (Table A9). Column (1) presents the baseline specification for comparison. Column (2) controls for the share employed in the primary and secondary sector to account for differences in industry structure that may also be related to changing voting behavior. The specification additionally controls for the number of hotels in a municipality as a proxy for municipalities with a strong tourist industry. On the one hand, these municipalities might react differently to the accommodation of asylum seekers. On the other hand, (older) hotels

were also used to accommodate asylum seekers. The results are not sensitive to the inclusion of these variables. Column (3) uses the covariates from the baseline but additionally includes the share of votes for the Nazis in 1930 elections, and a dummy for municipalities occupied by Soviet forces after WWII,²⁷ which hardly changes the results. Column (4) controls for the changes in the covariates during the most recent electoral cycle instead of the levels. Note that changes can not be constructed for all variables and always for the same time span. The coefficient in this specification is -1.94 (p-value=0.03). Column (5) uses the most recently available measure of the covariates instead of the ones from 2011. The coefficient is very similar to the baseline. Column (6) shows a specification without any covariates. The coefficient is smaller in magnitude but highly significant (p-value=0.008).

²⁷These two robustness tests are motivated by the works of Halla *et al.* (2017) and Ochsner and Rösel (2016). In 1930 the DNSAP, the Austrian equivalent to the German NSDAP, ran in Austrian elections. Halla *et al.* (2017) argue that support for the Nazis proxies long-term xenophobic attitudes in the population that may resurface. I thank Felix Rösel for sharing these data with me and Josef Zweimüller for suggesting this test. Ochsner and Rösel (2016) show that Nazis fleeing the Soviet occupation zone changed the political landscape in Upper Austria.

Table A9: Tests for the sensitivity of the IV estimates to different sets of covariates

	(1) Standard	(2) Economic	(3) Historic	(4) Changes	(5) Recent	(6) No cov.
Asylum seekers in municipality	-3.86*** (1.38)	-3.62** (1.43)	-3.98*** (1.53)	-1.94** (0.89)	-3.59*** (1.30)	-1.89*** (0.71)
Population growth in % (2001-11)	0.10*** (0.04)	0.08** (0.04)	0.10** (0.04)			
Population in thousands (2011)	0.00*** (0.00)	0.00** (0.00)	0.00*** (0.00)			
Population in thousands squared (2011)	-0.00*** (0.00)	-0.00** (0.00)	-0.00*** (0.00)			
Population density (2011)	-0.00* (0.00)	-0.00** (0.00)	-0.00 (0.00)			
Share of women in the population (2011)	0.02 (0.14)	-0.02 (0.13)	-0.01 (0.15)			
Share of pop. below 30 years (2011)	-0.22** (0.09)	-0.20** (0.10)	-0.23*** (0.09)			
Share pop. vocational education (2011)	-0.16*** (0.06)	-0.18*** (0.07)	-0.16*** (0.06)		-0.19*** (0.06)	
Share pop. secondary education (2011)	-0.51*** (0.12)	-0.47*** (0.13)	-0.50*** (0.12)		-0.51*** (0.11)	
Share pop. higher education (2011)	-0.27** (0.12)	-0.21* (0.12)	-0.28** (0.12)		-0.29*** (0.11)	
Unemployment rate (2011)	-0.07 (0.20)	-0.18 (0.19)	-0.09 (0.20)			
Share of foreigners in pop. (2011)	0.06 (0.05)	0.07* (0.04)	0.06 (0.05)			
Financial strength of municipality (2011)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)			
Linear distance to state capital < 25 km	-0.60 (0.46)	-0.48 (0.50)	-0.60 (0.56)		-0.62 (0.44)	
Primary care facility (2015)	2.81*** (1.02)	2.63*** (0.95)	2.81*** (1.06)		2.78*** (0.95)	
Number of hotels (2011)		0.02 (0.03)				
Share employed in primary sector		-0.06 (0.09)				
Share employed in secondary sector		0.09* (0.05)				
DNSAP votes (1930)			0.03 (0.07)			
Soviet occupation zone			-0.14 (0.70)			
Population growth in % (2009-14)				-0.02 (0.05)		
Change in foreigner share in pp. (2009-14)				0.34** (0.17)		
Change in financial strength (2010-14)				-0.03 (0.04)		
Change in unemployment rate in pp. (2009-14)				0.12 (0.19)		
Change in employment in primary sector in pp (2010-14)				-0.17 (0.17)		
Change in employment in tertiary sector in pp (2010-14)				-0.01 (0.10)		
Population growth in % (2004-14)					0.13*** (0.03)	
Population in thousands (2014)					0.00*** (0.00)	
Population in thousands squared (2014)					-0.00*** (0.00)	
Population density (2014)					-0.00** (0.00)	
Share of women in pop. (2014)					-0.05 (0.13)	
Share of pop. below 30 years (2014)					-0.22*** (0.08)	
Unemployment rate (2014)					0.06 (0.17)	
Share of foreigners in pop. (2014)					0.05 (0.05)	
Financial strength of municipality (2014)					0.00 (0.00)	
Constant	34.78*** (8.81)	33.74*** (8.64)	36.98*** (9.15)	14.30*** (1.25)	39.33*** (8.44)	13.91*** (0.51)
F-statistic of excl. instruments	17.88	17.28	13.26	69.41	20.74	168.21
Observations	432	432	426	432	432	432

Note: The specifications presented follow the main IV specification as in Table 4, column (2) but use different sets of control variables. The sample includes all Upper Austrian municipalities with at most 10 group accommodations. Column (1) presents the preferred results as presented in the second column in Table 4. Column (2) also follows the main specification but uses the number of hotels and the share of employment by sector as additional controls. Column (3) follows the main specification but additionally controls for the share of votes for the Nazis in the elections in 1930 and a dummy for the Soviet occupation zone. Column (4) presents results using the changes of the covariates in the legislative period 2009-2015. Note that changes over time are not available for all variables and years. Column (5) uses the most recent available measures of the covariates. Column (6) presents results without any covariates. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

Table A10 presents a second set of robustness tests that follow the main specification but use different variants of the instrument. Column (1) drops group accommodations that were built after 2006 to alleviate concerns that the construction of group accommodations is correlated with the ability of the local incumbent. Results are almost identical to the main specification. Column (2) uses separate variables for group accommodations owned by public and private entities. The first-stage is presented in Table 2 in column (3). The effect is -3.86 pp. and significant at the 1% level. In the remaining two columns, I use only publicly (3) and privately (4) owned group accommodations as instrument. Coefficients remain relatively similar in magnitude (-4.24 and -3.59) but the coefficient using publicly owned group accommodations as instrument is only significant at the 10% level.

Table A10: Tests for the sensitivity of the IV estimates to different instrument specifications

	(1) Old buildings	(2) By ownership	(3) Public	(4) Private
Asylum seekers in municipality	-3.89*** (1.49)	-3.86*** (1.30)	-4.24* (2.16)	-3.59** (1.74)
Controls	yes	yes	yes	yes
F-statistic of excl. instruments	16.06	11.32	12.03	11.37
Observations	432	432	432	432

Note: The table assesses the sensitivity of the results to different specifications of the instrument. The outcome in all specifications is the change in far-right vote share in state elections between 2009 and 2015 in percentage points. The endogenous variable in all specifications is a dummy whether a municipality hosted refugees on September 21, 2015. The sample includes all Upper Austrian municipalities with at most 10 group accommodations. Column (1) uses the number of group accommodations built before 2006 as instrument. Column (2) uses separate instruments for the number of privately and publicly owned group accommodations. This is the first stage presented in Table 3, column (3). Column (3) uses only publicly owned group accommodations as instrument. Column (4) uses only privately owned group accommodations as instrument. See notes in Table 3 for a complete list of control variables and the sample restrictions. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

In the third set of robustness tests, I restrict the sample in various ways (Table A11). First, I drop all municipalities that hosted asylum seekers at the time of the last election in September 2009 or in February 2014. In these specifications, the treatment indicator of hosting asylum seekers in September 2015 is equal to switching into hosting asylum seekers since

2009 or 2014 respectively. Furthermore, these specifications alleviate concerns of reversed causality with respect to the instrument, namely that group accommodations were built for asylum seekers and thus reflect some underlying attitudes towards asylum seekers. Between 2009 and 2014, the total number of asylum seekers accommodated in any of the municipalities in the sample declined from 1,689 to 1,453. Asylum seeker accommodation was very decentralized in 2009. Among municipalities with at least one asylum seeker, 53% hosted just six or fewer persons. Until 2014 a certain centralization took place with the share of municipalities with asylum seekers declining from 23.6% in 2009 to 12.6% in February 2014. Column (1) drops municipalities that hosted more than two asylum seekers in 2009, column (2) drops municipalities that hosted any asylum seekers in 2009. Column (3) additionally drops municipalities that hosted asylum seekers in February 2014. Excluding these municipalities lowers the sample size and leads to lower F-statistics in the first stages.²⁸ However, second stage coefficients become larger in magnitude and remain statistically significant.

Column (4) excludes municipalities with far-right vote share below the 10th and above the 90th percentile in the 2009 elections to test the sensitivity with respect to outliers. Column (5) drops municipalities at the border of Germany that had additional exposure from asylum seekers on the way to Germany (see Section 3.3). Column (6) drops five municipalities with primary care facilities run by the federal government. Column (7) drops municipalities where the Freedom Party did not run in local elections in 2009. In all these specifications, the coefficient is very similar to the baseline and significant at least at the 5% level.

²⁸The size of the coefficients on the instrument is however almost unchanged at 0.06 relative to the baseline specification (0.07) in Table 2, column (2).

Table A11: Tests for the sensitivity of the IV estimates to subset restrictions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Asylum seekers in municipality	-3.27** (1.54)	-4.72** (2.28)	-4.98** (2.29)	-4.31*** (1.55)	-4.04** (1.67)	-3.54** (1.47)	-4.11*** (1.29)
Controls	yes	yes	yes	yes	yes	yes	yes
F-statistic of excl. instruments	16.32	8.39	8.87	18.23	13.95	16.50	21.55
Observations	353	324	314	345	400	427	361

Note: The table reports second stage IV estimates with subsets of the baseline sample of 432 municipalities. The dependent variable is the change in the vote shares of the far-right in state elections between 2009 and 2015. The endogenous variable is a dummy whether a municipality hosted asylum seekers on September 21, 2015. This variable is instrumented using the first stage specification in Table 2, column (2). Column (1) drops all municipalities that hosted more than 2 asylum seekers in September 2009. Column (2) drops all municipalities that hosted any asylum seekers in September 2009. Column (3) drops all municipalities that hosted any asylum seekers either in September 2009 or February 2014. Column (4) drops municipalities that were in the top and bottom 10% of Freedom Party vote shares in 2009. Column (5) drops municipalities at the border to Germany. Column (6) drops municipalities with primary care facilities. Column (7) drops municipalities where the Freedom Party did not run in local elections 2009. See notes in Table 3 for a complete list of control variables and the sample restrictions. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

In the fourth set of robustness tests (Table A12), I assess the sensitivity of the results to dropping the largest municipalities from the sample. All of the large municipalities host asylum seekers and the numbers of group accommodations in these municipalities are large outliers (see Figure A4). Column (1) shows the results when all municipalities are included. The first stage coefficient of the instrument is 0.03 and thus only half of the magnitude as in the main specification (column 3). The F-statistic is 7.51 and the second stage coefficient is -2.28 with large standard errors. Dropping the five municipalities with the most group accommodations (column 2) hardly changes the first stage coefficient and F-statistic but results in a more negative coefficient and smaller standard errors, leading to a significant coefficient at the 5% level (-4.00). In column (3) the ten, and in column (4) the 30 municipalities with the most group accommodations are dropped. The first stage coefficients are very similar but the specification in column (4) results in a lower F-statistic and thus more imprecise second stage coefficients. However, in both cases are the results similar in magnitude and statistically significant. In column (5), I drop all municipalities that have a larger population than the largest municipality that does not host asylum seekers. This results

in a sample of 416 municipalities. The results in this sample are extremely similar to the main specification. Overall, this table shows that including the municipalities with a very large number of group accommodations weakens the first stage and creates very imprecise second stage estimates. Once these few outliers are dropped from the sample, results are more precise and insensitive to different restrictions.

Table A12: Tests for the sensitivity of the IV estimates to dropping the largest municipalities

	(1) Full	(2) Drop 5	(3) Drop 10	(4) Drop 30	(5) Pop. threshold
Asylum seekers in municipality	-2.28 (2.61)	-4.00** (1.73)	-3.86*** (1.38)	-3.93** (1.99)	-3.68*** (1.29)
Instrument coefficient	0.03	0.04	0.06	0.07	0.07
F-statistic of excl. instruments	7.51	7.41	17.88	8.38	19.43
Observations	442	437	432	412	416

Note: The table reports second stage IV estimates for different restrictions on the largest municipalities. The dependent variable is the change in the Far-right vote shares in state elections between 2009 and 2015. The endogenous variable is a dummy whether a municipality hosted asylum seekers on 21 September 2015. This variable is instrumented using the first stage specification in Table 3, column (2). The sample in column (1) includes all municipalities including the large cities. The sample in column (2) excludes the five municipalities with the most group accommodations, in column (3) excludes the ten municipalities with the most group accommodations (main specification) and in column (4) the sample excludes all municipalities larger than the largest municipality without refugees. Instrument coefficient is the coefficient of the number of group accommodations in the first stage regression. See notes in Table 3 for a complete list of control variables and the sample restrictions. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

In Table A13, I address some further potential concerns regarding the specification. In column (1), I ignore the BZO and only use Freedom Party votes in 2009 for calculating the change in far-right vote share between 2009 and 2015. The results remain very similar to the baseline. Column (2) shows results from a weighted regression with the logged number of registered voters in 2015 as weights. Again, the coefficient is similar to the baseline. Column (3) does not use the change over time but uses the far-right vote share in 2015 as outcome and controls for the far-right vote shares in state elections 2009, parliamentary elections 2013, and elections to the European Parliament in 2014. Results remain similar but somewhat smaller in magnitude. Column (4) uses the log of the far-right vote share in

2015 as dependent and the log of far-right vote shares in 2009, 2013, and 2014 as control variables. The resulting coefficient can be interpreted as a semi-elasticity. Asylum seekers in the municipality reduce the far-right vote share by 9%, which from a base of 31 percent translates into an effect of approximately -2.8 pp., which is again similar to the main result.

Overall the estimated effects are very robust to different specifications, alternative variants of the instrument, and subset restrictions.

Table A13: Tests for the sensitivity of the IV estimates to different specifications

	Outcome in changes		...levels	
	(1) w/o BZO	(2) Weighted	(3) Levels	(4) Log
Asylum seekers in municipality	-3.44** (1.48)	-3.93*** (1.48)	-2.96** (1.39)	-0.09** (0.05)
Far-right votes (state 2009)			0.36*** (0.07)	
Far-right votes (parliament 2013)			0.30*** (0.05)	
Far-right votes (EU parliament 2014)			0.36*** (0.06)	
Log share of far-right votes (state 2009)				0.20*** (0.05)
Log share of far-right votes (parliament 2013)				0.21*** (0.06)
Log share of far-right votes (EU parliament 2014)				0.30*** (0.04)
Controls	yes	yes	yes	yes
F-statistic of excl. instruments	17.88	16.09	16.83	16.60
Observations	432	432	432	432

Note: The table reports variants of the main IV specification as in Table 4, column (2). The sample includes all Upper Austrian municipalities with at most 10 group accommodations. The dependent variable in column (1) is the change in the vote shares of the Freedom Party only in state elections between 2009 and 2015. Column (2) equals the baseline specification but weights observations with the logarithm of the number of registered voters in 2015. Note that this specification uses robust standard errors that do not permit spatial clustering. In column (3) the dependent variable is the vote share of the Freedom Party in state elections 2015 and in column (4) the log of Freedom Party vote share in 2015. The endogenous variable is a dummy whether a municipality hosted asylum seekers on September 21, 2015. This variable is instrumented using the first stage specification in Table 2, column (2). See notes in Table 3 for a complete list of control variables and the sample restrictions. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

Finally, I assess the sensitivity of the estimates of the effects of border exposure. In

column (1) and (2) of Table A14, I drop the BZO votes and use changes in Freedom Party vote share only. The coefficients become slightly larger compared to the baseline. In column (3) I drop Austrian municipalities close to the Bavarian region of Traunstein for which no data on refugee apprehensions is available. Again, results are very similar to baseline. In columns (4) to (6) I explore different weighting schemes for the border exposure. Column (4) weights by inverse straight-distance instead of the square of the straight distance as in the baseline. Columns (5) and (6) assign exposure zero to municipalities whose centroid is more than 12.3 km from the centroid of the closest municipality in lower Bavaria.²⁹ Within close municipalities, column (5) weights by inverse straight-distance and column (6) by inverse street distance. For all specifications, results remain very similar to baseline.

²⁹The closest distance between the centroids of a municipality in Upper Austria and Lower Bavaria is 2.3 km. For the cut-off, I use this distance plus 10 km.

Table A14: Tests for the sensitivity of the border effect to different specifications

	(1)	(2)	(3)	(4)	(5)	(6)
Border with Germany	1.79** (0.81)					
Border exposure (std.)		0.95*** (0.36)	0.83*** (0.24)			
Border exposure alt. 1 (std.)				1.15*** (0.18)		
Border exposure alt. 2 (std.)					0.84*** (0.11)	
Border exposure alt. 3 (std.)						0.81*** (0.13)
Controls	yes	yes	yes	yes	yes	yes
R2	0.31	0.35	0.35	0.37	0.34	0.34
Observations	432	432	419	432	432	432

Note: The table assesses the sensitivity of the border effects different specifications. Except in column (3), the sample includes all Upper Austrian municipalities with at most 10 group accommodations. Columns (1) and (2) use the change in Freedom Party vote share instead of combined Far-right vote share. Column (3) excludes municipalities close to the German region of Traunstein where no municipality-level crime data is available. Columns (4) to (6) use alternatively constructed exposure measures. *Border exposure alt. 1* weights by inverse straight-distance. Columns (5) and (6) assign exposure zero to municipalities whose centroid is more than 12.3km from the centroid of the closest municipality in lower Bavaria. Within close municipalities, *Border exposure alt. 2* weights by inverse straight-distance and *Border exposure alt. 3* by inverse street distance. See notes in Table 3 for a complete list of control variables. Values in () are spatial HAC standard errors. ***/**/* indicate statistical significance at the 1/5/10% level.

B.2 Robustness to Violations of Instrument Exogeneity

In this appendix, I use the methods introduced in Conley *et al.* (2012) to assess the robustness of the IV results to violations of the exclusion restriction.³⁰ Consider the following variation of the structural equation of interest (Equation 1). The exclusion restriction implies that the coefficient of the IV ga is zero, i.e., $\gamma = 0$.

$$\Delta v_{s_{sei0915}} = \alpha + \beta r_{i15} + X_i \theta + \gamma ga_i + u_i \quad (4)$$

The Bayesian approach introduced in Conley *et al.* (2012) allows identifying β and conducting inference when the exclusion restriction is violated by specifying the support or the

³⁰The structure and presentation of this appendix follows the applications in Spenkuch and Tillmann (2018) and Satyanath *et al.* (2017).

distribution of γ .

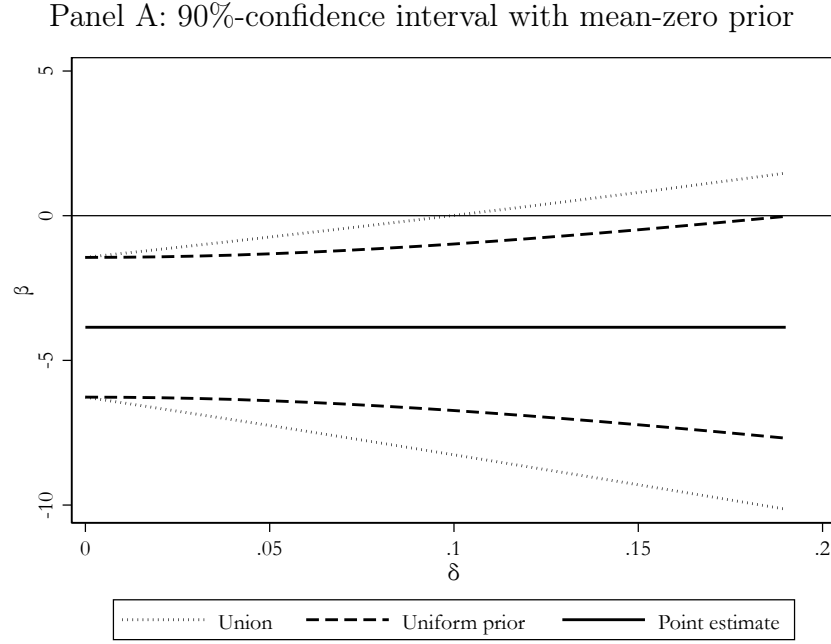
Figure A8 presents the results. Panel A shows the estimated effect of asylum seekers in the municipality without prior information on the sign or distribution of γ . This follows the preferred specification as presented in Table 4, specification 2. Without prior information, the point estimate remains unchanged but larger values of γ widen the confidence intervals. The confidence intervals labeled *Union*, correspond to the 90%-confidence interval if the support of γ is equal to $[-\delta, \delta]$. Conley *et al.* (2012) show that these intervals are too conservative as they require coverage of every possible case, also highly unlikely ones. The thresholds where confidence intervals cross zero is estimated to be $\hat{\delta} = 0.1$.

Tighter confidence intervals can be achieved by making an assumption about the distribution and not only the support of γ . The confidence intervals labeled Uniform prior are based on the assumption that γ is uniformly distributed in the interval $[-\delta, \delta]$. In other words, γ is allowed to deviate from zero up to δ but all scenarios are treated as equally likely. The thresholds where confidence intervals cross zero is estimated to be $\hat{\delta} = 0.2$.

Panel B shows the most problematic case of a negative prior over γ , i.e., more group accommodations in a municipalities have a direct negative effect on the change in Freedom Party vote share. While there is no obvious reason to have such a prior in the given application, investigating the robustness of the results is still interesting. Formally, I impose the assumption that γ is uniformly distributed in the interval $[-\delta, 0]$. The figure in Panel B depicts the behavior of the point estimate and the 90%- and 95%-confidence intervals. The magnitude of the point estimate declines at higher levels of δ but remains negative and quantitatively meaningful for all levels of δ considered. The threshold where 90%-confidence interval crosses zero is estimated to be $\hat{\delta} = 0.11$.

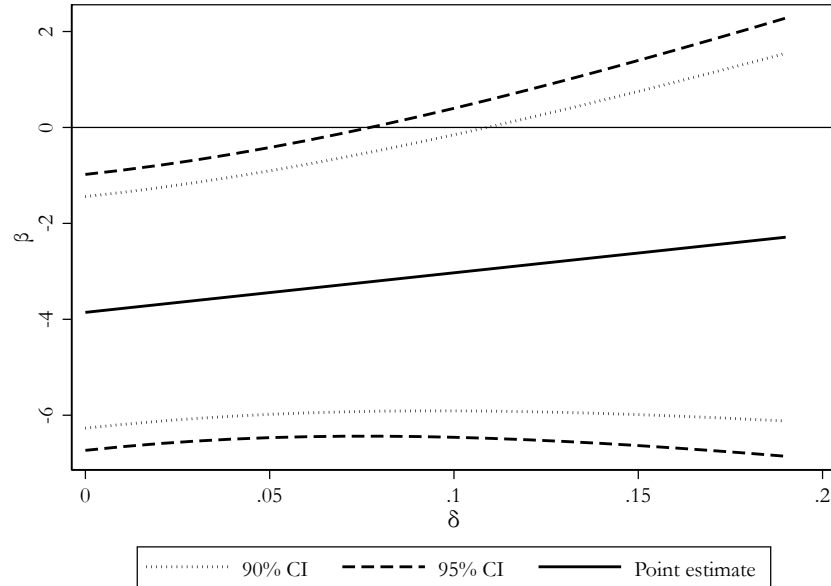
To gauge the magnitude of the violations necessary to render the results insignificant at the 10%-level, we can compare them to the reduced form estimates obtained in the placebo tests. For the placebo tests we know that $\beta = 0$. The reduced form estimates presented in Table 6 can thus be used to assess the probability that $\gamma \leq -\hat{\delta}$. Specifically, I use one-sided

Figure A8: Inference allowing for violations of the exclusion restriction



Note: The figure shows the point estimate and 90%-confidence intervals of the effect of hosting asylum seekers in a municipality on the change in far-right vote share in state elections between 2009 and 2015 (as in specification 2 in Table 4). The intervals allow for a direct effect of the instrument on the change in Freedom Party vote share. The *Union* intervals impose the prior information that γ is in the support of $[-\delta, \delta]$. The Uniform Prior intervals are based on the assumption that γ is distributed $U(-\delta, \delta)$.

Panel B: 90%- and 95%-confidence interval with negative prior



Note: The figure shows the point estimate and 90%- and 95%-confidence intervals of the effect of hosting asylum seekers in a municipality on the change in far-right vote share in state elections between 2009 and 2015 (as in specification 2 in Table 4). The *Union* intervals impose the prior information that γ is in the support of $[-\delta, \delta]$. Estimates are based on the assumption that γ is distributed $U(-\delta, 0)$. At $\delta = 0.11$, β becomes insignificant at the 10% level.

tests for the probability that the reduced form estimates are below the thresholds estimated in this section. Using the parliamentary elections as placebo (point estimate: 0.052), the estimated probability of $\gamma \leq -0.2$ is 0.004 and is 0.045 for $\gamma \leq -0.11$.³¹ Using the elections to the European parliament as placebo (point estimate: 0.045), the corresponding probabilities are 0.004 and 0.033. Overall, direct effects of the instrument that would render the results insignificant at the 10%-level can thus be ruled out with high probability.

C Data description

C.1 List of variables and data sources

Variable name	Description	Source
Asylum seekers in municipality	Indicator whether a municipality hosts any asylum seekers on September 21, 2015 (based on data on the number of asylum seekers hosted in the municipality)	OOAS
Group accommodations	Number of buildings with more than 50% of floor area dedicated to housing of groups/communities (e.g. retirement homes, boarding schools,...). Based on building and housing census 2011.	Statcube
Border with Germany	Indicator for municipality borders Germany	SHP - own calculation
Border exposure (std.)	Measure of exposure to passing refugees based on refugee apprehensions in German municipalities. Weights are based on the inverse squared straight-distance between the municipalities centroids. See Section 2.2 for more details.	LBS, SHP - own calculation
Border exposure alt. 1 (std.)	As above but weights based on inverse straight-distance.	LBS, SHP - own calculation
Border exposure alt. 2 (std.)	As above but zero exposure assigned to municipalities whose centroid is more than 12.3 km from the centroid of the closest municipality in lower Bavaria. Within close municipalities, weights by inverse straight-distance.	LBS, SHP - own calculation

³¹Remember that -0.2 is the estimated threshold for the 90%-CI with mean-zero prior and uniform distribution of γ ; -0.11 is the threshold for the 90%-CI with negative prior and uniform distribution of γ .

Variable name	Description	Source
Border exposure alt. 3 (std.)	As above but zero exposure assigned to municipalities whose centroid is more than 12.3 km from the centroid of the closest municipality in lower Bavaria. Within close municipalities, weights by inverse street distance.	LBS, SHP - own calculation
Vote shares of different parties	Data on parliamentary elections and elections to the European Parliament from BMI. Data on local and state elections from OOD.	BMI, OOD
Primary care facility (2015)	Indicator for primary care facility in municipality in September 2015	OOAS
Population	Municipality population size	OOD
Population growth in % (2001-11)	Municipality population growth in % over ten year period	OOD - own calculation
Population density	Number of people per km^2	OOD, SHP - own calculation
Share of women in the population	Share of women in the population younger in %	OOD
Share of pop. below 30 years	Share of population younger than 30 years in %	OOD
Share pop. vocational/secondary/ higher education	Share of population with vocational/secondary/higher education in % in the population 15 years and older	OOD
Share of foreigners in the population	Share of population born abroad in %	Statcube
Share of EU foreigners in the population	Share of population born in other EU27 or EFTA countries in %	Statcube
Share of Non-EU foreigners in the population	Share of population born in other countries in %	Statcube
Unemployment rate	Share of unemployed workers in the labor force in % based on the harmonized employment statistics of Statistics Austria	Statcube
Share employed in primary/ secondary/ tertiary sector	Share of working population (employed and self-employed) by sector in %	OOD
Financial strength of municipality	Sum of a municipality's own and shared revenue (defined according to § 21 FAG 2008) divided by population	OOD - own calculation
Linear distance to state capital < 25 km	Distance between municipality centroid and centroid of the state capital < 25km	SHP, own calculation

Note: OOAS..Upper Austrian asylum statistics (Oberösterreichische Landesregierung, Referat Grundversorgung für Fremde), Statcube .. Data access portal of Statistics Austria, OOD ... Upper Austrian Open Data Portal, LBS .. Official Statistics of the Lower Bavaria Police Department (Sicherheitsbericht Niederbayern), BMI .. Austrian Ministry of the Interior, SHP .. shapefiles from the geoportal of the European Commission.

C.2 Construction of Facebook data

I proceed in the following steps to obtain and construct the data on Facebook posts by local Freedom Party chapters:

1. I identify all public Facebook pages of local Freedom Party chapters in the municipalities in our sample (n=114).
2. I use the Facebook API to download all posts in the year 2015 from these Facebook pages. These include original posts, sharing of news articles, and sharing of posts from the state or national Freedom Party chapter or other Facebook pages. I include only posts from the maintainer of the page and do not include comments from other users.
3. Two RAs hand-coded the 8,346 posts with respect to their content. About 5% of the posts were coded by both RAs to check consistency. Since the overlap in the classification was extremely high, the rest of the sample was only coded by one of the two. Hand-coding was necessary since many posts consist of images, videos, or links to external websites. Thus, a simple keyword search or more advanced text analysis methods would not have been possible given the non-text data. Posts were coded with binary indicators whether they belonged to one of several non-exclusive categories. For example, a post on a crime committed by an asylum seeker in the poster's municipality would be marked as belonging to categories *Crime* and *Planned or actual presence of asylum seekers in the municipality*. If the crime was committed in another party of the country it would be categorized as *Crime* and *Refugees and asylum in general not related to the local situation*. The most relevant are:

- (a) Planned or actual presence of asylum seekers in the municipality
- (b) Refugees and asylum in general not related to the local situation
- (c) Crime
- (d) Welfare benefits

- (e) Islam
- (f) Immigration and integration in general
- (g) Situation at the Austrian border

4. I sum up the number of posts on a specific topic at the municipality-month level.

C.3 Municipality newsletters

To exemplify activities to foster interaction between native and municipalities, I review municipality newsletters. Municipality newsletters are published by the local authorities, i.e., the mayor's office and distributed by mail to all households in a municipality. Usually, they are also published on the municipality website. These newsletters inform the population about local issues, events, projects by the municipality, etc. No uniform format for these newsletters exist. Some municipalities publish them monthly, others quarterly, and others only occasion-based. Also the content covered varies between municipalities.

I tried to obtain the newsletter for municipalities in my sample that hosted asylum seekers on September 21, 2015. I restrict this analysis to municipalities with names starting with *A* or *B*. These are nineteen municipalities. Out of these, I was able to obtain newsletter for the year 2015 from 17 municipalities, either by downloading them from the municipality website or requesting them by email.

I then reviewed these newsletter for activities and policies that aim at facilitating positive interaction. Eleven (65%) reported at least one such activity. This does not include information events where no asylum seekers were present. Below is a list of activities reported in these newsletters:

Aigen-Schlägl Get-together festival, August 2015, asylum seeker were invited to to participate in sports club (issue December 2015)

Alkoven "Alkoven liest" Welcome event for asylum seeker children with the whole school, October 2015 (issue December 2015)

Altenberg Regular get together for native and asylum seeker children in a two week interval, asylum seekers were invited to participate in the annual municipality hiking day (issue July 2015)

Altmünster Joint cooking event, June 2015 (issue September 2015)

Andorf Repeating integration regular's table for women (all issues 2015)

Ansfelden Joint cooking event, October 2015, evening where asylum seekers report about their experiences, October 2015, asylum seekers invited to soccer event, October 2015 (issue December 2015)

Aurolzmünster Get-together event, August 2019 (issue 3/2015)

Bad Goisern Info event, asylum seekers prepare food, February 2015 (issue 02/2015)

Bad Hall Get-together brunch, September 2015, (issue August 2015)

Bad Zell Integration festival, May 2015 (issue 2/2015)

Braunau Cooking event for asylum seekers, March 2015 (issue June 2015), diversity festival (issue September 2015)