No country for asylum seekers? How short-term exposure to refugees influences attitudes and voting behavior in Hungary

Theresa Gessler[a], Gergő Tóth[b], and Johannes Wachs[c]

[a]Department of Political and Social Sciences, European University Institute, Florence, Italy.
[b]Agglomeration and Social Networks Research Group, Hungarian Academy of Sciences, Budapest, Hungary.
[c]Department of Network and Data Science, Central European University, Budapest, Hungary.

January 2019

Abstract

How does exposure to refugees influence political behavior? We present evidence from Hungary, a country with widespread anti-immigration attitudes, that short term exposure during the 2015 refugee crisis predicts anti-refugee voting and sentiment. We code exposure to refugees at the settlement level using news reports from state media, an independent online news site, and an online social media aggregator. Settlements through which refugees traveled showed significantly higher anti-refugee voting in a national referendum on resettlement in 2016. The effect, estimated between 1.7% and 3.6%, decreases sharply with distance from points of exposure. Using a difference-in-differences model, we find that the far-right opposition party Jobbik gained, while the governing right-wing Fidesz party lost votes in these settlements in subsequent parliamentary elections, suggesting incumbents are punished by voters in these settlements skeptical of immigration regardless of their policy position. Survey data supports this finding of a competition among right-wing parties, as individuals in exposed settlements are more fearful of immigrants and support more restrictive policies, though only if they identify as right-wing partisans.

1 Introduction

While the issue of immigration has moved to the core of the European political conversation (de Vries, Hakhverdian, and Lancee 2013; Green-Pedersen and Otjes 2017), particularly since the 2015 European refugee crisis (Grande, Schwarzbözl, and Fatke 2018), it is still unclear how actual experiences with refugees influence local residents. The issue remains salient, with UNHCR (2018) estimating 4.4 million newly displaced refugees and asylum seekers world-wide in 2017 alone. Citizens' reactions to refugee arrivals are particularly important in contexts where the arrival of refugees and other immigrants is viewed negatively by authorities. When governments scapegoat immigrants instead of sanctioning positive engagement, this affects citizens' views (Ivarsflaten 2005). In this situation, polarizing rhetoric may shape the first impressions refugees make on natives. With the rise of populist and radical right parties across Europe (Kaltwasser et al. 2017; Bustikova 2017), an increasing number of governments mobilize against refugees, rendering encounters between refugees and natives problematic.

We present evidence that exposure to refugees during the 2015 European refugee crisis affected political behavior in Hungary, which was at the center of the crisis both because of the large number of refugees entering the country and its controversial politics of crisis management. Recent scholarship has provided some evidence on attitudinal consequences of proximity to refugee camps and UNHCR reception centers, referred to as hotspots in the literature (Hangartner et al. 2018; Dinas et al., forthcoming; Steinmayr 2016; Dustmann, Vasiljeva, and Damm 2018; Vertier and Viskanic 2018). The Hungarian case differs significantly from these works because refugees were passing through the country in an irregular manner and their interactions with locals were highly transient. In Greece, for example, locals living near hotspots had little opportunity to have substantive interactions with individuals because of the transitory nature of their stay (Dinas et al., forthcoming; Hangartner et al. 2018). Yet the presence of refugees at the hotspots in general was a long-term phenomenon as arrival numbers have remained high for years. In contrast, many Hungarians were only exposed to refugees on a single occasion. The 2015 crisis was the first time many Hungarians encountered non-European refugees and transformed the issue of migration from near irrelevance into the central question of Hungarian politics in the following years (Krekó and Enyedi 2018).The question was salient for voters as the share of Hungarians who named immigration as one of the country's most important problems increased from close to zero in mid 2013 to over thirty percent in November 2015 (European Commission 2016). Meanwhile, the movement of refugees through the country was highly volatile and uncertain, with border closures and the evolving European political situation driving the movement of people through diverse parts of the country. The country thus presents an ideal case to study the conditions under which even short-term encounters may have long-lasting consequences.

The case also provides a unique opportunity to measure the consequences of exposure to the refugee crisis on citizens: shortly after the crisis, Hungary held a national referendum on proposed EU refugee quotas. We use this data to measure the effect of

short-term contact with refugees on voting behavior at the settlement level. The results of this referendum allow us to directly measure anti-refugee sentiment, in contrast with previous studies which use far-right party outcomes as a proxy (Dinas et al., forthcoming; Steinmayr 2016; Dustmann, Vasiljeva, and Damm 2018; Vertier and Viskanic 2018). As the Hungarian government mobilized against the refugees, we can study the impact of exposure during crisis in the unique context of strong anti-refugee sentiment among the elite and political leadership of the country. We find a significant backlash effect: settlements exposed to the crisis were significantly more likely to vote against the EU quota in the referendum.

Notably, both Hungary's ruling right-wing Fidesz party and the far-right opposition party Jobbik campaigned against refugees, a fact which we exploit to study potential motivations for changes in party choice. If voters exposed to the crisis express anti-refugee policy preferences, both Jobbik and Fidesz (collectively the right-wing) are likely to gain votes. If exposure induces resentment against the government, however, one would expect votes to flow from Fidesz to Jobbik. Using a difference-in-differences specification to measures changes in party vote shares in settlements across the 2014 and 2018 parliamentary elections, we find evidence for the latter effect in exposed settlements, while the right-wing as a whole sees no significant change in its share of the vote.

We find further evidence that exposure influences voting behavior only within the right-wing using survey data. At the individual level, only right-wing partisans are significantly more likely to express anti-refugee policy preferences and worries in exposed settlements. These heterogeneous effects indicate more specifically how voting behavior responds to exposure in crisis.

We first outline the theoretical relevance of the underlying mechanisms and review related work. After describing the specifics of our case, we present our data and modelling strategy. We then proceed to test the impact of short-term exposure to refugees in different settings: its effect on voting in a national anti-refugee referendum, the electoral gains of two anti-refugee parties (one in government, one in opposition) in parliamentary elections before and after the crisis, and individual-level survey responses collected shortly after the crisis.

2 Motivation, Theory and Related work

The so-called 2015 European refugee crisis has led to renewed interest in how natives react to the arrival of immigrants and refugees both attitudinally and in their political behavior. The crisis has drastically increased the number of arrivals to Europe and changed patterns of interactions between natives and new arrivals. Many classic studies build on the *contact theory* by Allport (1954) which posits that social interactions can lead to a reduction of prejudices (see also: Pettigrew et al. 2011). Recent work reinvigorates that this proposed virtuous outcome of contact with differences may require some qualifications (Paluck, Green, and Green 2018), for example that contact persists over some extended period of time combined with positive sanctions from the authorities.

These conditions were certainly not met in Hungary during the crisis. As in other so-called transit countries, refugees moved on as soon as they were able to, often only spending days or even hours in a country. We suggest this time was too short to overcome barriers of language and culture. While data from Eastern European countries on the route taken by the refugees is limited, evidence from other regions supports this notion: in a study of reactions to refugees in Austria, Steinmayr (2016, p. 23) argues that the arrival of refugees to settlements created substantial anxiety which reduced only after refugees had lived in the respective settlement for some time. While prejudice may be moderated in the long run, short and involuntary encounters may even inflame prejudice (on the difference between short- and long-term effects: Enos 2014).

In explaining why and when citizens may perceive refugees as a threat in the US context, Hopkins (2010) shows that reactions to immigrants are most likely to be hostile when communities experience a sudden influx of immigration and when national media rhetoric presents this as a threat. He argues that citizens are typically unaware of immigration levels but that they are particularly sensitive to changes to these levels, which he finds may lead to politicization of the topic (p. 42). In this case, local arrivals and hostile national rhetoric combine to produce negative reactions to refugees.

In this context Hungary provides an interesting case: a significant amount of refugees passed through the country in summer and autumn 2015 on their way to Western Europe, until the borders were sealed by a physical barrier in the fall. While Hungary fits the situation outlined by Hopkins (2010) regarding the salience of anti-immigration rhetoric (Bocskor 2018), exposure in most places was temporary. In many cases, refugees merely passed settlements on their way out of the country. This situation provides a test of the effects observed by Hopkins with a key difference: a subsequent return to the previous level of immigrants.

We suggest that this reversion to the status quo does not change the substantive effect on political behavior of residents of Hungarian settlements exposed to the crisis. One likely contributing factor is the strong anti-refugee message in the public discourse in the years following the crisis: the manner in which governments address the issue of immigration has consequences for citizens' attitudes on the issue (Hainmueller and Hopkins 2014). Voters are susceptible to elite opinion leaders who are skeptical towards immigration more generally (Ivarsflaten 2005). In this, Hungary is an extreme case as Hungary's governing elites actively promoted fears of refugees, for example by evoking the idea of an "invasion". The governing party and the most popular opposition party at the time espoused anti-refugee positions, while Hungarian media rarely gave refugees a voice (Bernáth and Messing 2016). As individuals interpret their personal experiences through the lens of public discourse, short-term encounters, especially with groups of refugees, will reify the framing of refugees as dangerous.

Several other studies have analyzed the political outcomes of the recent refugee crisis, albeit with different results. Evidence from France (Vertier and Viskanic 2018) and Austria (Steinmayr 2016) exploiting quasi-random refugee settlement programs find support for the contact hypothesis in the context of long-term contact. In both countries, settle-

ments receiving refugees were less likely to vote for the far-right in subsequent elections. Short-term exposure during the crisis has been studied using data from the Greek islands. Dinas et al. (forthcoming) find an increase in the vote share of the far-right Golden Dawn on islands exposed to the refugee crisis. Hangartner et al. (2018) find more negative attitudes towards refugees on the same islands in a survey fielded almost two years later.

The Hungarian case presents an opportunity to revisit two lines of research about the effect of short term exposure on political behavior and to address gaps therein. One issue with previous works cited above is they measure change in voting behavior using presidential or parliamentary votes for right-wing parties (Dinas et al., forthcoming; Steinmayr 2016; Dustmann, Vasiljeva, and Damm 2018; Vertier and Viskanic 2018). Though anti-immigration is a uniting element of right-wing party ideologies in Europe (Ivarsflaten 2008), citizens may vote for them for other reasons, for example because of their culturally conservative programs. As Hungary held a national referendum on a refugee related policy question shortly after the crisis, we can examine the relationship between exposure during the crisis and anti-refugee voting attitudes directly through voting behavior.

Hypothesis 1 (H1): *Hungarian settlements exposed to refugees during the crisis are more likely to vote against refugee resettlement quotas in the 2016 referendum.*

We assume experiences with refugees in local contexts serve as reference, tying the crisis to everyday life. Even if refugees disappear within hours or days, it is not necessarily personal experiences but the images and anecdotes of unfamiliar refugees in familiar places that will later influence political attitudes on immigration. This familiarity does not stop at the borders of individuals' own settlement but also includes their immediate surroundings and places residents frequently travel to. The media's intense coverage of the refugee crisis meant Hungarians also saw images of refugees in neighboring settlements, even if they and their immediate social contacts did not directly witness the incident. All Hungarians were exposed to the outlined negative rhetorical imagery. Whether citizens living in settlements near the refugee routes personally saw refugees, heard about them through their social networks, or saw what happened on state television, their familiarity with the setting personalizes the events. Hence, we expect the effect of exposure to go beyond the location of exposure itself and include nearby settlements.

Hypothesis 2 (H2): *The effect of refugee exposure on political behavior extends to nearby settlements and decreases with distance.*

A second point of interest in this line of research we reevaluate is whether exposed voters alter their voting behavior to punish the government or to support anti-immigration policy. So far, studies can only indirectly control for this, e.g. by looking into the electoral gains by other opposition parties. For example, Dinas et al. (forthcoming) argue that votes for the Golden Dawn, a far-right opposition party in Greece, are policy-votes rather than anti-government votes. In Hungary we can disentangle this question by comparing the change in vote shares of Fidesz, the governing right-wing party, and Jobbik, a far-right opposition party, across parliamentary elections from 2014 and 2018.

We suggest that the vote for the right-wing in settlements exposed to the crisis has only a weak policy aspect. A key aspect of right parties' capacity to benefit from short-term exposure may be due to disappointment with governing parties. A study from Italy indicates that settlements hosting more refugees were significantly less likely to support Matteo Renzi's proposed constitutional amendment, a referendum that had no direct link to the refugee crisis (Bratti et al. 2017). While right-wing parties may benefit disproportionally, studies of right-wing populist parties have shown these parties frequently claim that governing elites prioritize the interest of immigrants above those of the native population (Mudde and Kaltwasser 2017, 14; Cleen 2017, 350). More generally, it is difficult for governing parties to shift responsibility for immigration under their watch. While Fidesz attempted to solve this dilemma by adopting a tough stance on immigrants and trying to physically constrain immigrants to few places, exposed settlements were the few places that nevertheless experienced the refugee crisis directly. Thus, citizens in these settlements may be discontent with the government's handling of the immigration crisis and cast their ballot for the opposition Jobbik instead.

Hypothesis 3 (H3): *Jobbik, the anti-refugee party in opposition, gained votes relative to Fidesz, the anti-refugee party in government, in settlements exposed to the crisis.*

Given this hypothesis of a reshuffling of voters on the right, it is natural to ask if there is heterogeneity in the effect of exposure based on partisanship. Evidence suggest that voters adjust their views on immigration to the position of their party (Harteveld, Kokkonen, and Dahlberg 2017) and individuals may resort to motivated reasoning based on partisan ideology in their interpretation of experiences with immigrants. It is unclear if the effect of exposure conforms to this observation.

In a study of extended contact (Homola and Tavits 2017) find that contact with immigrants only reduces threat perceptions significantly for individuals with left-wing attitudes because of their higher openess to change. When contact is passing, we suggest that the opposite mechanism may apply. A brief experience may not impact left partisans but reinforce the perception that outsiders are threatening which is associated with resistance towards change (Homola and Tavits 2017). More generally, recent evidence suggests that inaccurate perceptions about the size of foreign-born populations are a consequence of anti-refugee attitudes, and not their cause (Hopkins, Sides, and Citrin 2018). Thus, citizens who are sceptical towards immigration may experience the refugee crisis as more threatening. To borrow a term from Sniderman, Hagendoorn, and Prior (2004), we posit that short exposure galvanizes constituencies already concerned with the topic. Given that policy on immigration and refugees in Hungary is a significantly partisan issue and has become increasingly so during the crisis, we propose that the anti-refugee reaction of citizens to exposure to refugees during the crisis is a right-wing phenomenon.

Hypothesis 4 (H4): *The effect of refugee exposure on political behavior depends on an individual's political attitudes. Short-term contact is more likely to induce anti-immigrant sentiments in right-wing voters.*

3 The Hungarian Case

Hungary is more ethnically homogeneous than most other European countries. The most common immigrants to Hungary are ethnic Hungarians coming from neighboring countries. Since 1990 immigration to Hungary has functioned, both formally and informally, as a two track system distinguishing between ethnic Hungarians and other immigrants (Nyíri 2003; Bocskor 2018). This framework reflects the negative Hungarian attitude towards refugees in particular and non-Hungarian immigrants in general (Simonovits et al. 2016; Enyedi, Fábián, and Sik 2005; Messing and Ságvári 2016). Immigration of non-Hungarians was not previously a significant topic in Hungarian politics. However, nation and nationality were salient topics in other regards e.g. the question of citizenship for ethnic Hungarians from abroad (Batory 2010). While certain ethnic groups certainly have advantages in questions of immigration in all European states, the institutionalized two-tier system in Hungary facilitates xenophobia, for example against the small Chinese and Vietnamese immigrant communities (Nyíri 2003). Indeed, in a comparative analysis using the European Social Survey, Bail (2008) finds that in Hungary symbolic boundaries, conceptual distinctions used by majority groups to construct notions of "us" and "them", have the strongest racial component of all 21 countries. This fertile ground of ethnic prejudice may have been amplified by media reporting about the crisis, similar to how anti-Roma discourse has entered the mainstream (Vidra and Fox 2014).

3.1 2015 Refugee Crisis

The importance of immigration as a political issue in Hungary changed drastically in 2015, as rising immigration numbers and attacks in western Europe led to the political mobilization of the topic on the right. Hungarian Prime Minister Viktor Orbán began to frame immigration as a threat to Hungary in January 2015 in the aftermath of the attack on Charlie Hebdo. The government mailed a "national consultation" questionnaire to each Hungarian citizen on the subjects of immigration and terrorism. The questionnaire was criticized for its leading questions and its framing of the issue[1].

While immigration numbers had been on the rise since 2014, it was only in summer 2015 that refugee traffic reached its high point and that the issue gained traction with the wider public. As Hungary was the first Schengen country before destination countries like Austria and Germany on the so-called Balkan Route, a land route taken by refugees from Greece, nearly 400,000 refugees were registered in Hungary in 2015. Most arrived in August, September and October and were not able to continue their journey at first, due to the EU's Dublin Regulation which required refugees to apply for asylum in the first Member State they reached. We visualize the number of refugees entering Hungary in 2015 in Figure 1. The majority of these refugees entered at the Serbian border, making

1. For example: "Do you think that Hungary could be the target of an act of terror in the next few years?" and "We hear different views on the issue of immigration. There are some who think that economic migrants jeopardise the jobs and livelihoods of Hungarians. Do you agree?"

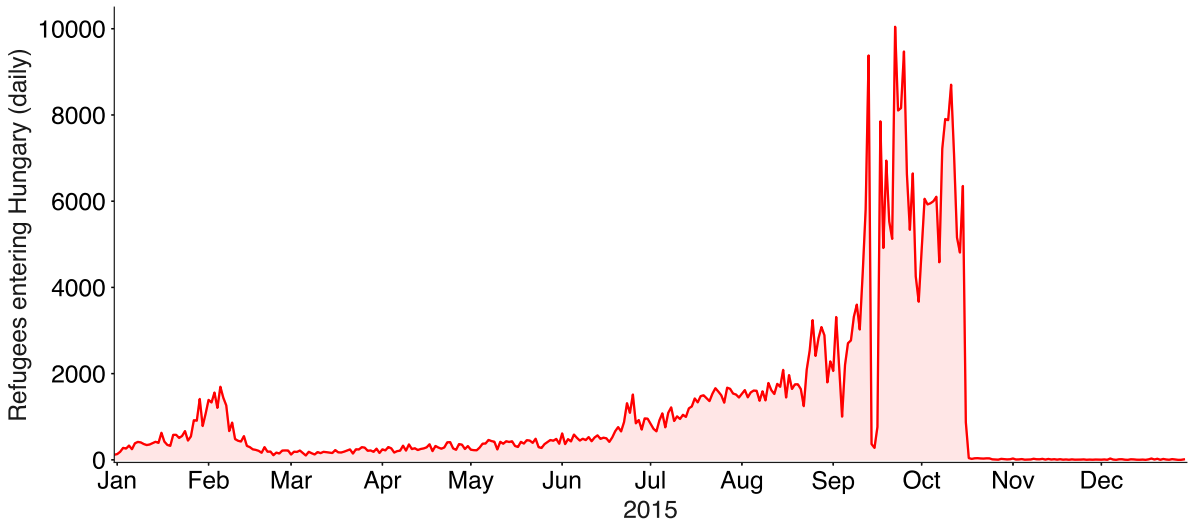

Figure 1: Number of refugees entering Hungary daily in 2015. The Serbian border was sealed on September 18th, causing a brief, sharp decrease in entries. The Croatian border was sealed on October 17th, practically ending the inflow of refugees to Hungary. *Source: police.hu - Border information*

this area a frequent focus of public debate.

For the Hungarian government, decreasing migration became a central goal. This was realized through the construction of a fence along the borders with Serbia and Croatia. When the fence along the Serbian border was completed on September 18th 2015, the Hungarian authorities closed the border, diverting the refugees through Croatia. One month later, that border was closed too. Afterwards, very few refugees entered Hungary as the government drastically restricted the number of legal entries via so-called "transit zones" at the border. However, public discussion regarding how to deal with refugees and how to manage Hungary's border has continued since then as the centerpiece of the ruling party's political discourse.

3.2 Political Consequences and the 2016 Quota Referendum

With its restrictive immigration policy and intensive mobilization around the issue (Bocskor 2018), the governing Fidesz party created a strong link between the prevailing political cleavages and immigration. Immigration had previously been a marginal issue in Hungarian party competition with cultural competition centered around nationalism and cultural liberalism (Gessler and Kyriazi, forthcoming). After the 2014 election, Fidesz faced increasing pressure from the right, with the oppositional far-right party Jobbik gaining popularity (Batory 2016; Bustikova 2017). As Fidesz actively competed for a far-right electorate by enhancing policies that originated from Jobbik (Pirro, forthcoming; Szalai and Göbl 2015), the immigration issue (on which there was no clear issue ownership given its low salience) provided fertile ground for an outbidding regarding restrictive policy proposals between both parties.

Originally, discussion centered around border security. After the closing of the borders, political discussion continued regarding the European level and the European Union's proposed quota-based refugee allocation scheme. According to this scheme, Hungary would be responsible for hosting 1294 refugees. A referendum on the policy was originally proposed by Jobbik in parliament in November 2015, however, the proposal was not advanced. Fidesz also opposed the quota but only announced a referendum in February 2016, to be held in October, a year after refugee arrivals to Hungary had effectively ended. The campaign was centered on presenting immigration as a risk to the Hungarian population. Since the referendum required 50% participation to be valid, opposition parties encouraged voters to stay home or to cast an invalid ballot. Ultimately, 41% of eligible voters cast a valid ballot and of those 98% voted "No", i.e. against the EU quota.

Since then, the Hungarian government has held additional "national consultations" and the topic has remained on the agenda up to and beyond the 2018 parliamentary election (Krekó and Enyedi 2018; Bocskor 2018; Gessler 2017). Competition between Fidesz and Jobbik has remained a driving force of this conflict with both espousing policies to curb immigration. In the context of our study, this means both gained different credentials on the immigration issue: while Fidesz was able to build a track-record of implementing restrictive policies, Jobbik may at times have increased its profile by attacking domains in which Fidesz did not advance new policies, e.g. the country's residency bond scheme that gives residence permits in exchange for buying government bonds (Jacoby and Korkut 2016; Halmai 2017).

4 Data and Measurement

To test our hypotheses, we collected data on the presence of refugees in Hungarian settlements during the peak crisis months in 2015 from three media sources. We relate this to political outcomes while controlling for several potential confounding factors at the settlement level. When using survey data to test heterogeneity of the treatment effect on individuals, we also employ individual-level controls.

4.1 Exposure to refugees

We collected data on the presence and movement of refugees during the crisis from three sources: MTI, the Hungarian state newswire, Index, a popular online news outlet independent from the government, and LiveUAMap (Live Universal Awareness Map), a crowdsourced real-time social media aggregator with geographic information including pictures and videos. Though most of the activity on LiveUAMap relates to the conflicts in Ukraine and Syria, there is also data on the events of the European refugee crisis. It has been used in qualitative studies of the paths taken by refugees on their way to Europe (Proglio 2018).

We coded that significant refugee contact took place in a settlement if it was reported in any of the three sources. For example, we include all the settlements along the

"March of Hope", a widely reported incident often cited as the climax of the crisis in Hungary (Kallius, Monterescu, and Rajaram 2016). On September 4th, thousands of refugees at Budapest's Keleti train station, which was closed to international travel because of the crisis, began walking towards Austria along the M1 highway, disrupting traffic on one of the largest highways in the country. Later that same evening, the Hungarian government decided to bus the refugees to the Austrian border. Soon afterwards, chancellor Angela Merkel signaled that the refugees would be allowed to come to Germany. We also coded smaller scale events throughout the country, including similar marches from the Vámosszabadi refugee camp in the northwest to the Austrian border, and from the Croatian border to the train station in Nagykanizsa in the southwest. In total we label 51 settlements as treated. We visualize the geographic distribution of refugee contact in Figure 2.

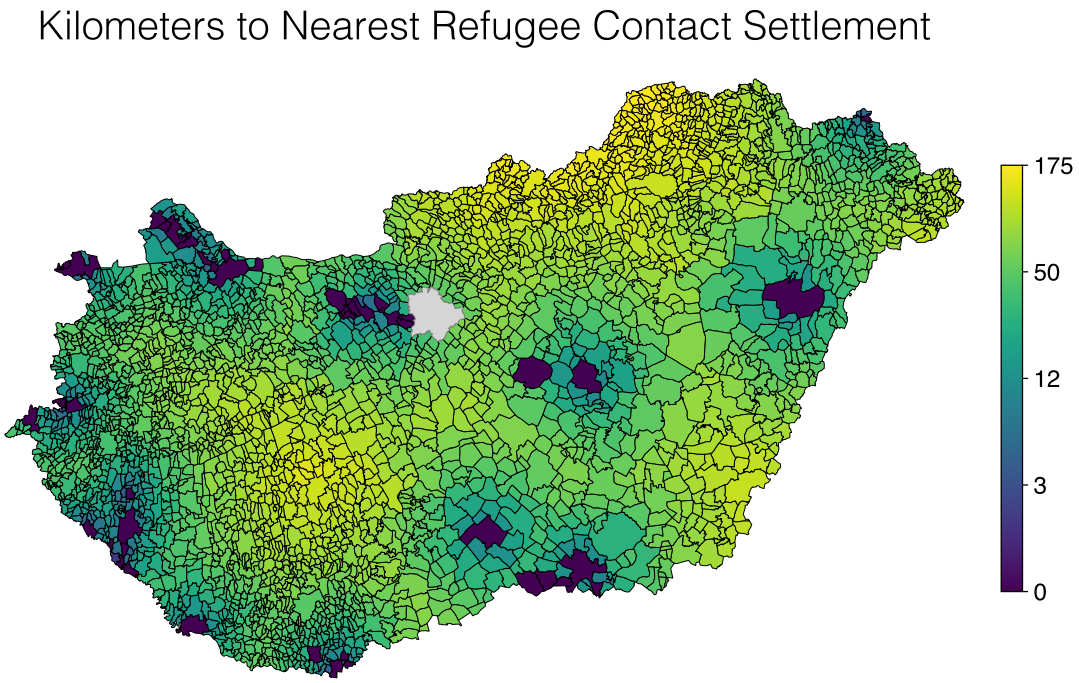

Figure 2: Settlement distances to points of contact with refugees during the 2015 crisis, logarithmic scale. Budapest (in gray) is omitted.

Though we do not claim that we have identified every location of contact between Hungarians and refugees during the crisis, we do suggest that our data describes those locations in which Hungarians had a significantly higher likelihood of seeing unfamiliar refugees in a familiar context. Survey data from January 2016 indicates that individuals in such settlements are significantly more likely to report having encountered a refugee in the past year. This relationship holds even when controlling for whether the individual reports knowing a foreigner personally and whether he or she lives near a border, see Table 7 in the Appendix. Finally, we note that we have excluded Budapest as datapoint from our empirical analysis because it is an outlier in several dimensions including popu-

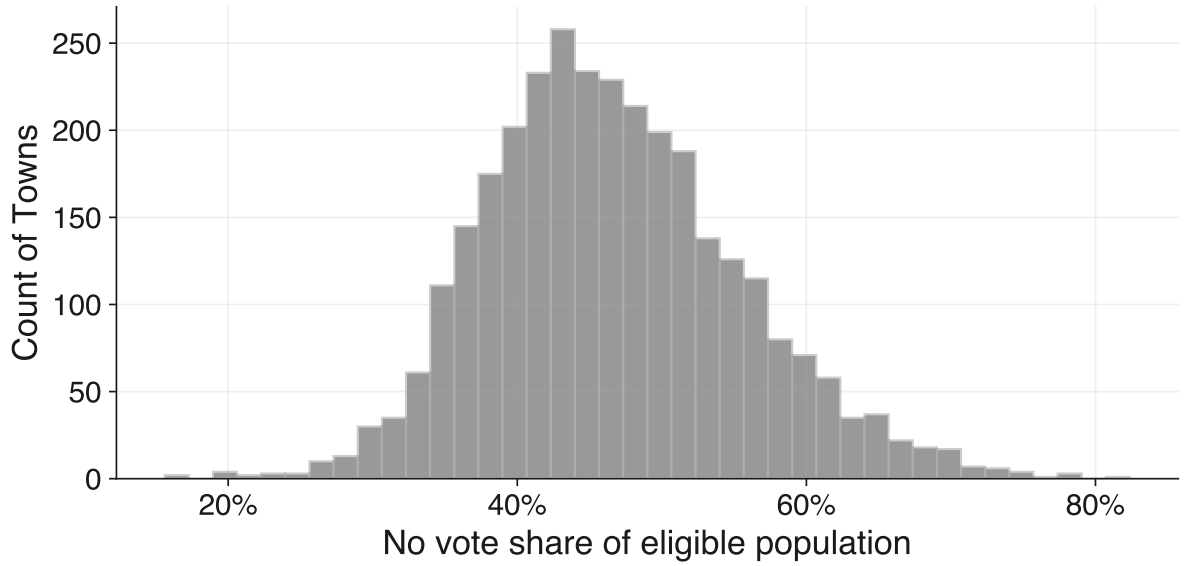

Figure 3: Distribution of refugee quota referendum no votes as share of the eligible voting population of Hungarian settlements with at least 50 voters.

lation, density, diversity, and wealth, and because treatment in the city itself was highly heterogeneous.

4.2 Dependent Variables

In our empirical analysis we analyze three different types of political outcomes: settlement-level outcomes of the quota referendum, settlement-level election results in the following general election in April 2018, and individual responses to a survey on migration-related topics conducted in January 2016. We report summary statistics of all variables used in our models in the Appendix, see Table 4 and Table 6.

We plot the distribution of our primary dependent variable, the number of no votes cast in the referendum over the eligible voting population in a settlement, in Figure 3. Given the boycott strategy of the opposition discussed before, we believe this is a more appropriate measure of the anti-refugee outcome than considering the share of votes against the quota. We note that there is significant variance between cities. We visualize the geographic distribution of the referendum outcomes in Figure 5 in the Appendix. In a second specification, we measure the electoral effects of contact with refugees on party outcomes at the settlement level. Immigration was a major topic of the 2018 election particularly for Fidesz and Jobbik, leading us to use the share of Fidesz, Jobbik, and both combined as dependent variables.

In the individual-level specification, we use data from a survey of the general population of Hungary in January 2016. Specifically, we rely on a rotating module of a repeatedly asked questionnaire of TARKI, a Hungarian social research institute. After excluding respondents from Budapest, we are left with a sample of 772 respondents, 105 of which live in treated settlements. We analyze a battery of attitudinal and policy

questions that are included in the Appendix and discussed in more detail in the results section. Given the skew of the answers towards anti-refugee attitudes, we dichotomize responses into absolute rejection and more moderate attitudes.

4.3 Control Variables

We collected socio-economic data for all Hungarian settlement to rule out some potential confounding factors. Many studies have shown that economically vulnerable populations are more likely to vote for radical right and anti-immigrant parties (Betz 1994; Fitzgerald and Lawrence 2011). Lower levels of education have also been shown to relate to political hostility towards foreigners (Hjerm 2001). We therefore control for each settlement's income per capita, unemployment rate, and share of population with a high school degree in 2016, the year of the referendum. We also include logged population size to control for the size of the settlement.

Additionally, we consider voting data from the previous parliamentary elections in 2014 to account for prevailing local political allegiances. Because they both endorsed and campaigned for the 'no' camp, we include the share of votes received by Jobbik and Fidesz in 2014 in our models.

As we are also interested in potential spillovers of the contact effect to nearby settlements, we use a matrix of inter-settlement travel distances (in minutes by car) to calculate the distance of each settlement to the nearest point of refugee contact[2]. As issues of migration may be more salient near borders, we also note if a settlement is within 25 kilometers of a border.

4.4 Estimation strategies

To measure the anti-refugee sentiment at the settlement level we use the ratio of 'no' votes to the eligible voting population at the 2016 referendum as a dependent variable Y_i, the distribution of which we show in Figure 3. T_i is a dummy variable with a value of 1 if we code refugee contact in a settlement, Z_i denotes our matrix of settlement-level control variables, including pre-referendum settlement-level party preferences, population, and socio-economic factors. ϵ_i is an independent error term, assumed normally distributed with mean 0. In the first extension of the baseline model, we introduce a geographical dummy D_i for settlements within 25 kilometers of any border and county fixed effects ψ_i to control for geographic effects like different settlement structures.

$$Y_i = \alpha_i + \delta_1 T_i + \beta_2 Z_i + \beta_3 D_i + \psi_i + \epsilon_i \tag{1}$$

We also measure the spillover effect of the treatment to nearby settlements using continuous distance measures to the nearest treated settlement in travel minutes. In order to examine the effect of treatment in terms of distance, our final model estimating a settlement's referendum outcome bins observations into categories according to their

2. The results presented are robust to considering geographic distance instead.

distance in travel time from the nearest treated settlement, with treated settlements taken as the reference category.

To address the electoral effects of the refugee crises on parties we use a difference-in-differences estimation strategy. Specifically, we measure the effect of treatment during the crisis on vote shares of right-wing parties between the 2014 and 2018 Hungarian parliamentary elections. The specification constructs a counterfactual estimation of the change in vote shares in treated settlements using changes in vote shares in untreated settlements over the same period. Two factors threaten a causal interpretation of the resulting estimates: 1) if the parallel trends assumption that party vote shares would have followed the same trend in all settlements had the refugee crisis not occurred, and 2) if treated and untreated settlements differ in ways that could affect their response to treatment.

To address the first concern, namely to assess whether the parallel trends assumption holds, we carry out and report a placebo test for differences in party vote shares between the 2010 and 2014 elections. To address the second concern, we use a kernel-based propensity matching strategy (d'Agostino 1998; Stuart et al. 2014) to compare settlements using the same demographic and socio-economic controls as in the ordinary least squares (OLS) specifications. Specifically, we estimate the following model:

$$Y_{it} = \alpha_i + \alpha_t + \beta_1 A_{it} + \beta_2 (T_{it}|\omega_i) + \delta_1 [A_{it} * (T_{it}|\omega_i)] + Z_i + u_{it}, \tag{2}$$

where the dependent variable is the vote share of the two main right-wing parties, A_{it} is an indicator separating time periods before the refugee crisis ($A = 0$) from the period after the crisis ($A = 1$), and T_{it} is the separation of settlements according to exposure to refugees as defined above.

The key variable of interest is the interaction term between A_{it} and T_{it}, which estimates the true treatment effect. Z_i refers to the socio-economic control variables, while ω_i is the matching estimator. When using kernel matching, each treated observation i is matched with several control observations, with weights inversely proportional to the distance in propensity scores between treated and control observations. The propensity scores are estimated using a logit regression using the same controls.

Finally we check for heterogeneity in the impact of treatment on individual policy preferences and attitudes using survey data. Since the answers are heavily skewed towards anti-refugee attitudes, we use logistic regression models in which the dependent variables take the value of 1 if the respondent chooses the response most critical towards refugees. We control for several individual-level attributes that have been shown to relate to anti-immigrant attitudes (Fitzgerald and Lawrence 2011), namely whether individual has a high school degree, if they report that they are in a precarious economic situation, their self-reported gender, and if their settlement is within 25 km of a border (collected in the matrix W_{ij}). We include regional (NUTS 2) fixed-effects rather than county (NUTS 3) fixed-effects because we do not have survey participants from all 20 counties, and in several counties we only have untreated or treated observations. To test our hypothesis that treatment affects right-wing voters more than left-wing or non-partisan citizens,

we introduce an interaction between treatment and whether the individual indicates a political preference for either Jobbik or Fidesz (R_j):

$$P(Y_{ij} = 1) = \alpha + \delta_1 T_i + \delta_2 (T_i * R_j) + \beta_3 R_j + \beta_4 W_{ij} + \epsilon_{ij}. \quad (3)$$

5 Results

5.1 Treatment and Referendum Voting Behavior

Table 1 presents our OLS models estimating results of the 2016 referendum on immigration at the settlement-level. As discussed in the previous section, our dependent variable is the number of 'no' votes in the referendum as share of the total eligible voters. We first estimate the model controlling only for previous election results, population, and the socio-economic controls. In this first estimation, we find that treatment leads to a 3.6 percent higher share of no votes in a settlement. In a second step (Model 2) we introduce county-fixed effects and proximity to the border to control for the different geographic effects across the country. Here we observe a reduced though still significant effect of 1.7 percent. These findings support our first hypothesis, namely that short term exposure to refugees during the crisis leads to anti-refugee voting. Our estimates are similar to the 2 percent effect found by Dinas et al. (forthcoming) in their study of far-right voting on Greek islands following the crisis.

Models 3 and 4 in Table 1 test the effect of distance from treatment. The models suggest that treatment has an effect beyond the treatment settlement itself and this effect decreases as travel time increases. Model 4 replicates this finding with binned distances. We interpret these models as supporting our second hypothesis, that the effect of short term exposure on anti-refugee voting behavior spills over to nearby locations.

5.2 Change in Party Vote Shares

Table 2 presents the results of our difference-in-differences estimations of the change in Fidesz, Jobbik, and combined Fidesz and Jobbik (right-wing, for short) vote shares between the 2014 and 2018 parliamentary elections. The results suggest that there was no significant overall effect of treatment on votes of the right-wing as a whole. However, we see a redistribution of votes within the camp: while Jobbik gained roughly two percent in treated settlement, Fidesz lost two percent, compared to settlements through which refugees did not travel. We also report a placebo test of the same models using data from the 2010 and 2014 parliamentary elections to test the parallel trends assumption. We do not observe the same redistribution of votes from Fidesz to Jobbik across the previous elections.

These findings support our third hypothesis that Jobbik, as opposition party, would gain votes in treated settlements from the ruling Fidesz. They question the interpretation of previous results on short-term exposure and voting for the right as a consequence of

	Dependent variable:			
	Referendum no votes over eligible voting population			
	(1)	(2)	(3)	(4)
Treatment	0.035***	0.017**	0.022**	
	(0.008)	(0.005)	(0.008)	
Mins (10) to treat.			−0.002***	
			(0.0005)	
< 15 min to treat.				−0.027**
				(0.011)
15 - 30 min to treat.				−0.031***
				(0.009)
>30 min to treat.				−0.036***
				(0.009)
Fidesz share 2014	0.430***	0.380***	0.423***	0.429***
	(0.015)	(0.015)	(0.015)	(0.015)
Jobbik share 2014	0.212***	0.203***	0.217***	0.212***
	(0.021)	(0.021)	(0.021)	(0.021)
Population(log)	−0.022***	−0.022***	−0.022***	−0.022***
	(0.001)	(0.001)	(0.001)	(0.001)
Border < 25km		−0.001		
		(0.003)		
Constant	0.341***	0.330***	0.359***	0.377***
	(0.016)	(0.016)	(0.017)	(0.019)
County FE	No	Yes	No	No
Controls	Yes	Yes	Yes	Yes
Observations	3,142	3,142	3,140	3,142
Adjusted R^2	0.367	0.458	0.372	0.367
Resid. Std. Error	0.073	0.067	0.073	0.073
F Statistic	260.602***	103.226***	233.123***	203.153***

Table 1: OLS regressions estimating the relationship between treatment and anti-refugee voting behavior in the 2016 Hungarian Quota Referendum.

Change in vote shares of:	Fidesz	Jobbik	right-wing (F+J)
2014-2018			
After	0.070***	-0.033***	0.042***
	(0.002)	(0.01)	(0.002)
Treatment	-0.040***	-0.032***	-0.072***
	(0.015)	(0.10)	(0.002)
After * Treatment	**-0.021*****	**0.024*****	**0.003**
	(0.005)	**(0.003)**	**(0.004)**
2010-2014 (Placebo test)			
After	-0.090***	0.060***	-0.029***
	(0.002)	(0.001)	(0.002)
Treatment	-0.031***	-0.033***	-0.065***
	(0.015)	(0.010)	(0.012)
After * Treatment	-0.009*	0.001	-0.008*
	(0.005)	(0.003)	(0.004)
R^2 (2014-2018)	0.16	0.06	0.21
R^2 (2010-2014)	0.23	0.22	0.18
N	3088	3088	3088

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2: Difference-in-differences estimation results and placebo tests. We analyzed the change in vote shares between 2014 and 2018 for Jobbik, Fidesz, and Jobbik and Fidesz (right-wing) together. We find a significant flow of support from Fidesz to Jobbik in treated settlements. We also report a placebo test supporting the parallel trends assumption. The regressions are run on a kernel-based propensity-score matched sample.

the right-wing's issuer-ownership of immigration rather than holding the government accountable. As a whole, the right-wing did not win more votes in exposed towns. In our context, the redistribution of votes within Hungary suggests an anti-government vote as Jobbik and Fidesz were competing with each other to take the more hardline anti-refugee position.

More broadly, the flow of votes from Fidesz to Jobbik in treated settlements between 2014 and 2018 contrasts with the national results. Nationally Fidesz gained over four percent, while Jobbik lost more than one percent. In other words, right-wing voters in settlements exposed to the crisis punished the ruling party at the polls by voting for an alternative anti-refugee party, while elsewhere Fidesz expanded its support. We keep this question in mind as we contrast individual attitudes among left and right voters in treated settlements.

5.3 Survey

Using data from a survey of the general population of Hungary in January 2016, between the peak of the crisis and the referendum, we consider how specifically contact with refugees in the crisis may have changed the political opinions and policy preferences of Hungarians. We interact treatment with respondent's party choice to see how this effect differs between left and right citizens. While we have no information on previous vote choices, citizens are asked about their current vote preference before the topic of immigration is broached in the survey.

One serious limitation of our survey analysis is that partisanship is self-reported and recorded after the crisis: it may be that exposure to refugees during the crisis moved individuals to the right, in particular those individuals who were especially influenced by their experiences. We test whether individuals in treated settlements were more likely to report support for a right-wing party and found no significant relationship. We report these results in the appendix (see Table 8). We also note that recent work on Hungary suggests that partisanship is increasingly consistent and polarized over time (Angelusz and Tardos 2011), rendering defection across the left and right camp less likely.

Table 3 shows the impact of treatment on a battery of six different attitudinal questions. Besides the first question, we group the variables into two groups: the first relates to questions about laws or policies that should be enacted in response to the crisis (models 2, 3, and 4), and the second relates to how and why the respondent worries about the potential impact of the refugees (models 5 and 6). Our translations of the questions are available in the Appendix (Table 5).

Model 1 measures which respondents are more likely to reject accepting any refugees at all, regardless of their origin. While we do not see a significant interaction effect, respondents who vote for Fidesz or Jobbik are more likely to reject all refugees. Model 2 to 4 analyze respondents' support for different policies, namely the strengthening of border protection (2), a law obliging refugees to accept Hungarian culture (3) and additional money for integration (4). For consistency, we coded the dependent variable in Model 4

	Dependent Variables: Respondent Anti-Refugee Response					
	No Refugees	L: Border	L: Culture	L: Money	W: Undoc	W: Culture
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	−0.25	0.004	−0.24	0.04	0.96**	0.19
	(0.32)	(0.33)	(0.33)	(0.33)	(0.38)	(0.31)
Right-wing	0.31*	0.43**	0.06	0.07	0.23	0.37**
	(0.17)	(0.19)	(0.17)	(0.17)	(0.19)	(0.17)
Treatment × Rw	0.27	1.52**	0.13	1.07**	1.39*	1.43**
	(0.46)	(0.70)	(0.47)	(0.52)	(0.83)	(0.58)
Border <25km	0.25	0.85**	0.14	−0.27	0.88**	1.05***
	(0.28)	(0.35)	(0.28)	(0.28)	(0.37)	(0.32)
Highschool graduate	−0.59***	−0.35*	−0.36**	−0.38**	−0.41**	−0.37**
	(0.17)	(0.19)	(0.17)	(0.18)	(0.19)	(0.18)
Precarious econ. situation	0.23	0.37*	0.15	0.24	0.28	−0.02
	(0.18)	(0.21)	(0.18)	(0.18)	(0.21)	(0.18)
Male	0.30**	−0.16	0.11	0.02	−0.05	0.01
	(0.15)	(0.17)	(0.16)	(0.16)	(0.17)	(0.16)
Constant	−0.07	0.70***	0.42*	−0.39	0.65**	0.23
	(0.23)	(0.26)	(0.24)	(0.24)	(0.25)	(0.24)
Regional FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	727	752	726	737	764	762
Log Likelihood	−485.41	−406.91	−479.17	−471.56	−408.24	−474.53
Akaike Inf. Crit.	998.81	841.82	986.34	971.11	844.48	977.05

Note: *p<0.1; **p<0.05; ***p<0.01

Table 3: Logistic regressions estimating the effect of treatment and association with the right on different anti-refugee attitudes. L indicates the dependent variable is asking about a legal or policy preference, while W indicates the question concerns general worries about impact of the refugee crisis.

as rejection rather than support of additional money for the integration of refugees. We observe a significant and positive interaction effect for border security and the refusal to allocate more money to refugee integration. Model 5 and 6 analyze to which extent respondents are worried about the arrival of undocumented immigrants (5) and immigrants who belong to a different culture (6). Uniquely, Model 5 shows that respondents who live in treated settlements are more worried about the high number of undocumented immigrants coming to Hungary regardless of party, though the effect is stronger among right-wing voters. In contrast only right-wing voters express worry that arriving refugees come from different cultures. Arguably, left-wing voters and non-partisans also worry about changes in their settlement but draw different conclusions from this.

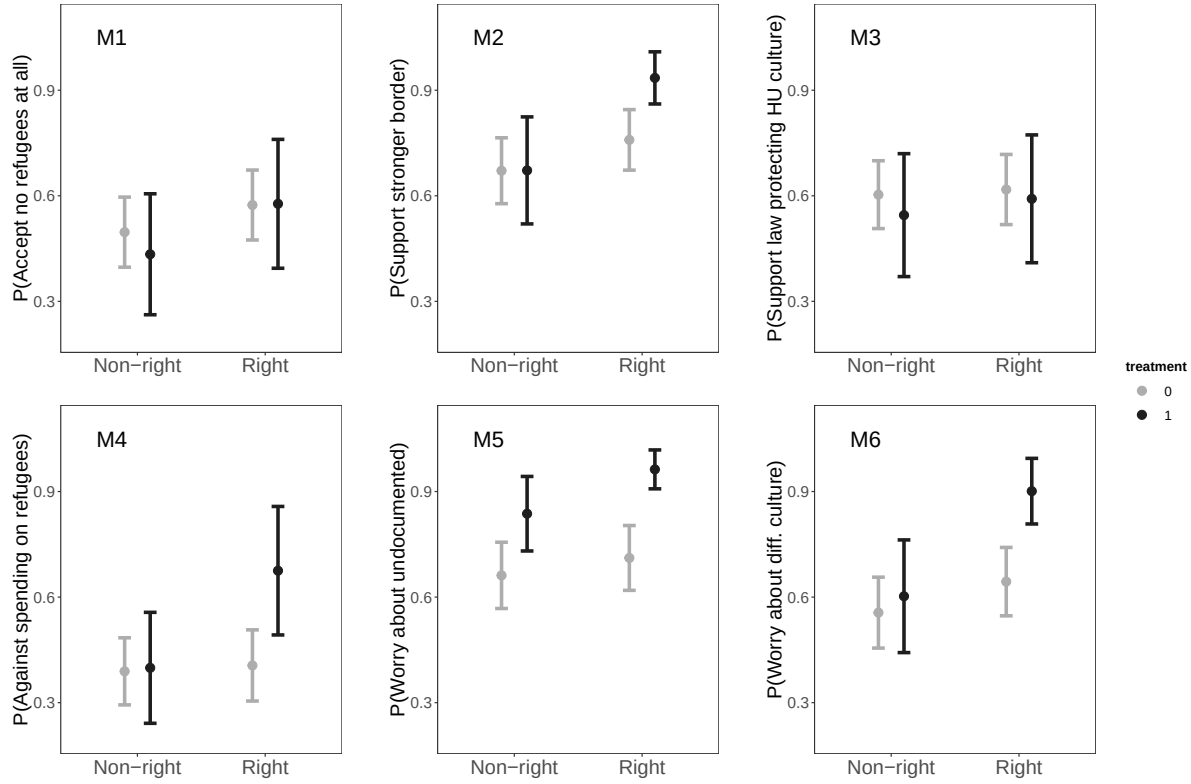

Figure 4: Conditional effects of interactions between partisanship and anti-refugee attitudes. In several models, there is a significant interaction effect between right-wing preferences and living in a settlement exposed to the refugee crisis when predicting anti-refugee policy preferences and worrying about refugees.

To ease interpretation, we plot the conditional effects of our interaction terms in Figure 4. Notably, in many of the models, the difference between treated and non-treated right-wing respondents is larger than the relatively small differences between left- and right-wing respondents in untreated settlements. We observe almost no change in model 1 and 3 which measure whether individuals reject accepting any refugees and whether they support a law that protects Hungarian culture.

Although not all interaction effects are statistically significant, we believe these results provide evidence that it was mostly right-wing citizens who hardened their position on

immigration when exposed to refugees for a short period. Together with our difference-in-differences analysis, this suggests right-wing parties mostly competed with each other to present tougher immigration policies.

6 Conclusion

In this paper we related exposure to refugees during the 2015 crisis to political outcomes in Hungary. We find that contact predicts anti-refugee voting in a national referendum on refugee quotas in 2016. Exposed settlements voted more for the far-right Jobbik party in the 2018 parliamentary elections, while the ruling Fidesz party, also right-wing and anti-refugee, lost votes. Finally, survey evidence suggests that exposure seems to galvanize anti-refugee attitudes only for right-wing partisans.

In contrast with previous work relating contact with refugees to electoral outcomes, our first dependent variable directly captures voting behavior on immigration issues. Hungary itself is also an interesting case as simultaneously one of the most xenophobic and least diverse countries in Europe. As Hungary has two significant right-wing anti-refugee parties, we can compare the effects of contact on the support for the anti-refugee right in government and in opposition in the same context.

Our findings contribute to the ongoing discussion of how contact theory applies to the European refugee crisis. A growing body of research suggests that the length and conditions of contact are decisive mediators in the formation of public opinion about refugees. We also note an interesting heterogeneity at the individual level based on partisanship. While Homola and Tavits (2017) suggest that left-wing voters become more tolerant with long-run exposure, we find that right-wing voters are significantly less tolerant after short term encounters.

These findings suggest some important policy implications. While most work on improving refugee integration outcomes focuses on the long-term (Bansak et al. 2018) and through targeted interventions (Lazarev and Sharma 2017), the finding that transient short term contact inflames anti-immigrant attitudes indicates the value of improving crisis management policy (Esses, Hamilton, and Gaucher 2017).

7 Acknowledgements

The authors wish to thank Judit Varga, Balázs Lengyel, Elias Dinas, Endre Borbáth and participants of seminars at the Hungarian Academy of Sciences and the European University Institute for their comments and suggestions. We owe special thanks to Borbála Simonovits and Blanka Szeitl for sharing survey data from TARKI, to Péter Tóth for sharing travel distance data, and to Dorottya Szalay and Bence Horváth for assistance with data collection.

References

Allport, Gordon Willard. 1954. *The nature of prejudice.* Addison-Wesley Pub. Co.

Angelusz, Róbert, and Róbert Tardos. 2011. "Régi és új törésvonalak, polarizáció, divergenciaspirál." In *Részvétel, képviselet, politikai változás,* edited by Róbert Tardos, Zsolt Enyedi, and Andrea Szabó, 347–382. Demokrácia Kutatások Magyar Központja Alapítvány.

Bail, Christopher A. 2008. "The configuration of symbolic boundaries against immigrants in Europe." *American Sociological Review* 73 (1): 37–59.

Bansak, Kirk, Jeremy Ferwerda, Jens Hainmueller, Andrea Dillon, Dominik Hangartner, Duncan Lawrence, and Jeremy Weinstein. 2018. "Improving refugee integration through data-driven algorithmic assignment." *Science* 359 (6373): 325–329.

Batory, Agnes. 2010. "Kin-state identity in the European context: citizenship, nationalism and constitutionalism in Hungary." *Nations and Nationalism* 16 (1): 31–48.

———. 2016. "Populists in government? Hungary's "system of national cooperation"." *Democratization* 23 (2): 283–303.

Bernáth, Gábor, and Vera Messing. 2016. *Infiltration of political meaning-production: security threat or humaniatarian crisis? The coverage of the refugee "crisis" in the Austrian and Hungarian media in early autumn 2015.* CMDS Working Paper. `https://cmds.ceu.edu/sites/cmcs.ceu.hu/files/attachment/article/1041/infiltrationofpoliticalmeaningfinalizedweb.pdf`.

Betz, Hans-Georg. 1994. *Radical right-wing populism in Western Europe.* Springer.

Bocskor, Ákos. 2018. "Anti-Immigration Discourses in Hungary during the "Crisis" Year: The Orbán Government's "National Consultation" Campaign of 2015." *Sociology* 52 (3): 551–568.

Bratti, Massimiliano, Claudio Deiana, Enkelejda Havari, Gianluca Mazzarella, and Elena Claudia Meroni. 2017. "What Are You Voting For? Proximity to Refugee Reception Centres and Voting in the 2016 Italian Constitutional Referendum," IZA discussion paper.

Bustikova, Lenka. 2017. "The radical right in Eastern Europe." In *The Oxford Handbook of the Radical Right,* edited by Jens Rydgren. Oxford University Press.

Cleen, Benjamin de. 2017. "Populism and Nationalism." In *The Oxford Handbook of Populism,* edited by Cristobal Rovira Kaltwasser, Paul Taggart, Paulina Ochoa Espejo, and Pierre Ostiguy. Oxford University Press.

d'Agostino, Ralph B. 1998. "Propensity score methods for bias reduction in the comparison of a treatment to a non-randomized control group." *Statistics in medicine* 17 (19): 2265–2281.

de Vries, Catherine E., Armen Hakhverdian, and Bram Lancee. 2013. "The Dynamics of Voters' Left/Right Identification: The Role of Economic and Cultural Attitudes." *Political Science Research and Methods* 1 (2): 223–238.

Dinas, Elias, Konstantinos Matakos, Dimitrios Xefteris, and Dominik Hangartner. Forthcoming. "Waking Up the Golden Dawn: Does Exposure to the Refugee Crisis Increase Support for Extreme-right Parties?" *Political Analysis.*

Dustmann, Christian, Kristine Vasiljeva, and Anna Piil Damm. 2018. "Refugee migration and electoral outcomes." *The Review of Economic Studies.*

Enos, Ryan D. 2014. "Causal effect of intergroup contact on exclusionary attitudes." *Proceedings of the National Academy of Sciences:* 201317670.

Enyedi, Zsolt, Zoltán Fábián, and Endre Sik. 2005. "Is prejudice growing in Hungary." *Budapest: TÁRKI, Social Report Reprint Series* 21.

Esses, Victoria M, Leah K Hamilton, and Danielle Gaucher. 2017. "The global refugee crisis: Empirical evidence and policy implications for improving public attitudes and facilitating refugee resettlement." *Social Issues and Policy Review* 11 (1): 78–123.

European Commission. 2016. *Eurobarometer.* GESIS Data Archive.

Fitzgerald, Jennifer, and Duncan Lawrence. 2011. "Local cohesion and radical right support: The case of the Swiss People's Party." *Electoral studies* 30 (4): 834–847.

Gessler, Theresa. 2017. "Invalid but not Inconsequential? The 2016 Hungarian Migrant Quota Referendum." *East European Quarterly. Direct Democracy Notes.* 45 (1-2): 85–97.

Gessler, Theresa, and Anna Kyriazi. Forthcoming. "A Hungarian Crisis or the Crisis in Hungary?" In *European Party Politics in Times of Crisis,* edited by Swen Hutter and Hanspeter Kriesi. Cambridge University Press.

Grande, Edgar, Tobias Schwarzbözl, and Matthias Fatke. 2018. "Politicizing immigration in Western Europe." *Journal of European Public Policy:* 1–20.

Green-Pedersen, Christoffer, and Simon Otjes. 2017. "A hot topic? Immigration on the agenda in Western Europe." *Party Politics.*

Hainmueller, Jens, and Daniel J. Hopkins. 2014. "Public Attitudes Toward Immigration." *Annual Review of Political Science* 17 (1): 225–249.

Halmai, Gábor. 2017. "From a Pariah to a Model? Hungary's Rise As an Illiberal Member State of the EU." In *European Yearbook on Human Rights,* edited by Wolfgang Benedek, Matthias C. Kettemann, Reinhard Klaushofer, Karin Lukas, and ManfredEditors Nowak. NWV.

Hangartner, Dominik, Elias Dinas, Moritz Marbach, Konstantinos Matakos, and Dimitrios Xefteris. 2018. "Does Exposure to the Refugee Crisis Make Natives More Hostile?" *American Political Science Review:* 1–14.

Harteveld, Eelco, Andrej Kokkonen, and Stefan Dahlberg. 2017. "Adapting to party lines: the effect of party affiliation on attitudes to immigration." *West European Politics* 40 (6): 1177–1197.

Hjerm, Mikael. 2001. "Education, xenophobia and nationalism: A comparative analysis." *Journal of Ethnic and Migration Studies* 27 (1): 37–60.

Homola, Jonathan, and Margit Tavits. 2017. "Contact Reduces Immigration-Related Fears for Leftist but Not for Rightist Voters." *Comparative Political Studies:* 1–32.

Hopkins, Daniel J. 2010. "Politicized Places: Explaining Where and When Immigrants Provoke Local Opposition." *American Political Science Review* 104 (1): 40–60.

Hopkins, Daniel J., John Sides, and Jack Citrin. 2018. "The Muted Consequences of Correct Information about Immigration." *The Journal of Politics.*

Ivarsflaten, Elisabeth. 2005. "Threatened by diversity: Why restrictive asylum and immigration policies appeal to western Europeans." *Journal of Elections, Public Opinion and Parties* 15 (1): 21–45.

———. 2008. "What Unites Right-Wing Populists in Western Europe?: Re-Examining Grievance Mobilization Models in Seven Successful Cases." *Comparative Political Studies* 41 (1): 3–23.

Jacoby, Wade, and Umut Korkut. 2016. "Vulnerability and Economic Re-orientation: Rhetoric and in Reality in Hungary's "Chinese Opening"." *East European Politics and Societies* 30 (3): 496–518.

Kallius, Annastiina, Daniel Monterescu, and Prem Kumar Rajaram. 2016. "Immobilizing mobility: Border ethnography, illiberal democracy, and the politics of the "refugee crisis" in Hungary." *American Ethnologist* 43 (1): 25–37.

Kaltwasser, Cristobal Rovira, Paul Taggart, Paulina Ochoa Espejo, and Pierre Ostiguy, eds. 2017. *The Oxford handbook of populism.* Oxford handbook of politics. Oxford University Press.

Krekó, Péter, and Zsolt Enyedi. 2018. "Orbán's Laboratory of Illiberalism." *Journal of Democracy* 29 (3): 39–51.

Lazarev, Egor, and Kunaal Sharma. 2017. "Brother or burden: An experiment on reducing prejudice toward Syrian refugees in Turkey." *Political Science Research and Methods* 5 (2): 201–219.

Messing, Vera, and Bence Ságvári. 2016. ""Ahogy másokhoz viszonyulunk, az tükrözi azt, amilyenek magunk vagyunk" A magyarországi idegenellenesség okairól." *SOCIO. HU: Társadalomtudományi Szemle* 2:17–37.

Mudde, Cas, and Cristóbal Rovira Kaltwasser. 2017. *Populism: A Very Short Introduction.* Very Short Introductions. Oxford University Press, February.

Nyíri, Pál. 2003. *Xenophobia in Hungary: a regional comparison. Systemic sources and possible solutions.* Technical report. Center for Policy Studies, Central European University.

Paluck, Elizabeth Levy, Seth Ariel Green, and Don Green. 2018. "The contact hypothesis re-evaluated." *Behavioural Public Policy.*

Pettigrew, Thomas F., Linda R. Tropp, Ulrich Wagner, and Oliver Christ. 2011. "Recent advances in intergroup contact theory." *International Journal of Intercultural Relations* 35 (3): 271–280.

Pirro, Andrea. Forthcoming. "Lo and Behold. Jobbik and the crafting of a new Hungarian far right." In *Radical Right Movement Parties in Europe,* edited by Manuela Caiani and Ondrej Cisar. Routledge.

Proglio, Gabriele. 2018. "Defragmenting Visual Representations of Border Lampedusa: Intersubjectivity and Memories from the Horn of Africa." In *Border Lampedusa,* 137–151. Springer.

Simonovits, Bori, Aniko Bernat, Blanka Szeitl, Endre Sik, Daniella Boda, Anna Kertesz, et al. 2016. "The social aspects of the 2015 migration crisis in Hungary." *Budapest: TÁRKI Social Research Institute* 155.

Sniderman, Paul M., Louk Hagendoorn, and Markus Prior. 2004. "Predisposing Factors and Situational Triggers: Exclusionary Reactions to Immigrant Minorities." *The American Political Science Review* 98 (1): 35–49.

Steinmayr, Andreas. 2016. "Exposure to refugees and voting for the far-right:(unexpected) results from Austria," IZA discussion paper.

Stuart, Elizabeth A, Haiden A Huskamp, Kenneth Duckworth, Jeffrey Simmons, Zirui Song, Michael E Chernew, and Colleen L Barry. 2014. "Using propensity scores in difference-in-differences models to estimate the effects of a policy change." *Health Services and Outcomes Research Methodology* 14 (4): 166–182.

Szalai, Andras, and Gabriella Göbl. 2015. *Securitizing Migration in Contemporary Hungary.* CENS Working Papers. `https://cens.ceu.edu/sites/cens.ceu.edu/files/attachment/event/573/szalai-goblmigrationpaper.final.pdf`.

UNHCR. 2018. *Global Trends. Forced Displacement in 2017.* `https://www.unhcr.org/statistics/unhcrstats/5b27be547/unhcr-global-trends-2017.html`.

Vertier, Paul, and Max Viskanic. 2018. "Dismantling the 'Jungle': Migrant Relocation and Extreme Voting in France," CESifo Working Paper.

Vidra, Zsuzsanna, and Jon Fox. 2014. "Mainstreaming of racist anti-Roma discourses in the media in Hungary." *Journal of Immigrant & Refugee Studies* 12 (4): 437–455.

8 Appendix

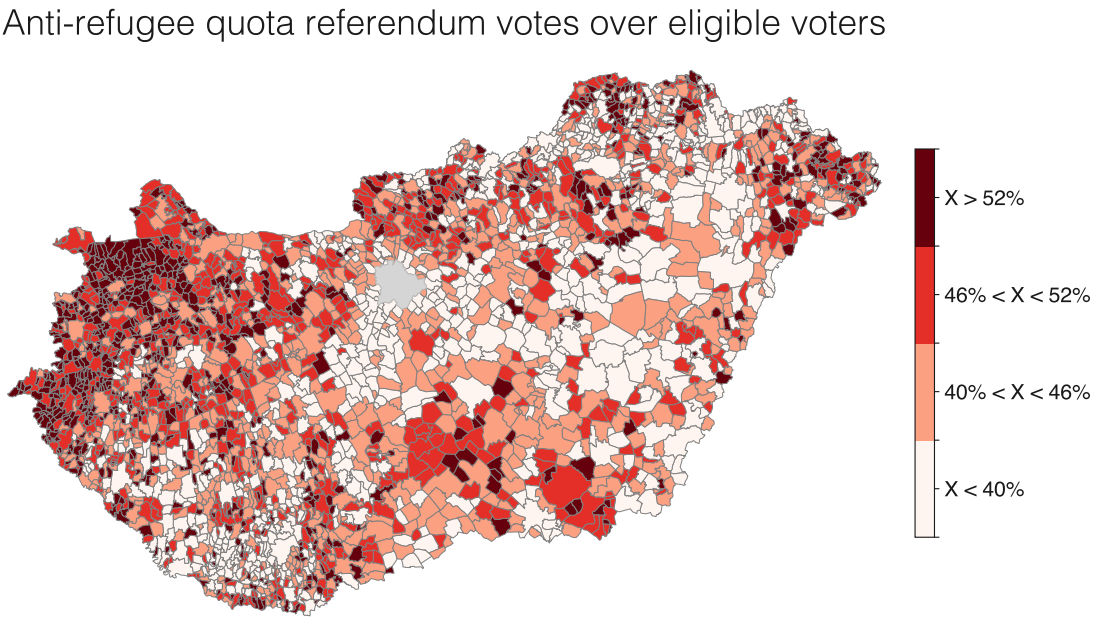

Figure 5: 2015 Referendum anti-refugee resettlement quota voting quartile outcomes by settlement. Budapest (in gray) is excluded.

	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Ref. No/Eligible	3,142	0.47	0.09	0.16	0.41	0.52	1.00
Fidesz share 2014	3,142	0.51	0.11	0.10	0.44	0.58	1.00
Jobbik share 2014	3,142	0.24	0.08	0.00	0.19	0.29	0.61
Treatment	3,142	0.02	0.13	0	0	0	1
Border $<$ 25km	3,142	0.23	0.42	0	0	0	1
Pct. Higher Edu.	3,142	7.53	5.98	0.00	3.90	9.40	58.30
PC Income (1000s HUF)	3,142	845	246	128	669	1,006	2,226
Pct. Unemployed	3,142	0.06	0.03	0.00	0.04	0.08	0.24
Population (log)	3,142	6.56	1.32	2.30	5.65	7.35	12.01
Mins. to Treatment	3,140	5.67	2.94	0.00	3.44	7.74	14.31

Table 4: Summary statistics of Hungarian settlements. Ref. No/Eligible refers to the key dependent variable in our first models: the ratio of voters voting against the EU refugee resettlement quota to the number of eligible voters in the settlement. Unless otherwise stated, all controls are taken from 2015.

Variable in Text	Question
No Refugees	Do you believe Hungary should accept every refugee, no refugees at all or some yes and others not?
L: Border	Do you agree that the Hungarian border should be strengthened?
L: Culture	Do you agree with the introduction of a law requiring immigrants to adhere to fundamental Hungarian cultural norms?
L: Money	Do you support increasing funding to refugees and immigrants living in Hungary for the purposes of integration (to facilitate their "new beginning" with residential, educational, and language-learning programs and assistance with finding work)?
W: Undoc	Are you worried that in a short period of time, many refugees and immigrants have arrived to Hungary unchecked (without documents)?
W: Culture	Are you worried that refugees and immigrants from different cultures and faiths are arriving to Hungary?
Precarious econ. situation	How would you rate your current economic situation?

Table 5: Translated TARKI survey questions, January 2016.

	N	Mean	St. Dev.
Treatment	772	0.14	0.34
Border $<$ 25km	772	0.10	0.30
Highschool Grad.	772	0.30	0.46
Precarious Econ. Sit.	768	0.27	0.45
Male	772	0.47	0.50
Right-wing	772	0.41	0.49
Left-wing	772	0.15	0.35
Support Fidesz	772	0.30	0.46
Support Jobbik	772	0.11	0.32
Want to Accept No Refugees	731	0.52	0.50
Support Stronger Border	756	0.73	0.44
Support Law Protecting HU Culture	730	0.58	0.49
Against Money for Refugee Integration	741	0.59	0.49
Worry about Undocumented Refugees	768	0.73	0.45
Worry about Cultural Differences	766	0.62	0.49
Met refugee in prev. 12 months	769	0.22	0.41
Know refugee/immigrant personally	770	0.03	0.17

Table 6: Summary statistics of survey respondents, January 2016.

Dependent variable: respondent encountered refugee in previous 12 months				
	(1)	(2)	(3)	(4)
Treatment		1.937***	1.928***	1.860***
		(0.224)	(0.230)	(0.236)
Respondent knows foreigner			2.684***	2.699***
			(0.531)	(0.533)
Border < 25km				0.365
				(0.293)
Constant	−1.282***	−1.650***	−1.765***	−1.796***
	(0.087)	(0.106)	(0.111)	(0.114)
Log Likelihood	−402.415	−364.903	−347.316	−346.563
Akaike Inf. Crit.	806.830	733.806	700.633	701.126
N	769	769	768	768

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Logistic regression models predicting whether survey respondent has encountered refugee in previous 12 months (January 2016 Survey). Individuals living settlements exposed to the 2015 refugee crisis are significantly more likely to report encountering a refugee, even when controlling for knowing a foreigner personally or living close to a border.

	Dependent variable:	
	Respondent Right-wing Voter	
	(1)	(2)
Treatment		0.068
		(0.236)
Border < 25km	−0.270	−0.285
	(0.265)	(0.270)
Highschool	−0.243	−0.247
graduate	(0.170)	(0.171)
Precarious econ.	−0.691***	−0.691***
situation	(0.178)	(0.178)
Male	0.068	0.071
	(0.151)	(0.151)
Constant	0.033	0.027
	(0.213)	(0.215)
Regional FE	Yes	Yes
Observations	768	768
Log Likelihood	−508.383	−508.342
Akaike Inf. Crit.	1,038.766	1,040.683
Note:	*p<0.1; **p<0.05; ***p<0.01	

Table 8: Logistic regressions checking if survey respondents from treated settlements are more likely to report right-wing voting intentions, with the same individual-level controls as our primary regressions. We control for regional fixed-effects.