The Ukrainian Refugee Crisis and the Politics of Public Opinion: Evidence from Hungary*

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Abstract

The 2022 Russian invasion of Ukraine is a watershed moment in European politics. The invasion prompted a massive influx of refugees into Central Europe, a region in which immigration has proven highly contentious and politically salient over the past thirty years. We study public opinion towards refugees in Hungary, a highly exclusionary political environment in which anti-migrant and anti-refugee sentiments are commonly invoked by the ruling government. Combining historical public opinion data from the past decade with original survey data collected in April 2022, we demonstrate that the Ukrainian refugee crisis was accompanied by a large increase in tolerance for refugees, reversing what had previously been one of the most anti-refugee public opinion environments in Europe. To explain this reversal, we use a series of survey experiments coupled with detailed settlement-level demographic data to investigate how conflict proximity and racial, religious, and national identity (three manifestations of what we term *civilizational* characteristics) shape openness to refugees. We find that the distinguishing feature of the 2022 refugee crisis was that refugees were mostly white European Christians driven from their home country by conflict. We discuss the implications of our argument for Hungary, for European politics in times of crisis, and for the politics of public opinion in competitive authoritarian regimes.

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1 Introduction

The 2015-16 Refugee Crisis was a watershed moment in European politics. Driven by conflict in Afghanistan, Syria, and elsewhere, nearly 1 million refugees arrived in Europe in 2015 alone (Prickett 2015). This inflow of refugees prompted a swift political backlash across Europe, leading to unprecedented new developments like internal border controls and to a sharp uptick in anti-refugee and anti-immigrant sentiments (Wagner 2015). Although the refugee crisis affected all of Europe, the political backlash was particularly noticeable in Central Europe, which lay along the overland route that many refugees followed. In Hungary, for example, the Fidesz government of Viktor Orbán capitalized on the refugee crisis to mobilize political support, characterizing refugees as an existential threat to Hungarian security—and to European civilizational identity (Juhász, Hunyadi, and Zgut 2015).[1]

Seven years later, the Russian invasion of Ukraine produced a second mass influx of millions of people into Central and Western Europe. Although most Ukrainians sought protection from conflict in the form of temporary protected status, they are described in most popular commentary as refugees—just like those who fled conflict in 2015-16.[2] The number of civilians fleeing war in Ukraine far exceeded the total from 2015: as of September 2022, 2.5 million Ukrainians had entered Hungary alone (UNHCR 2022; Erőss 2022), with millions more having fled to Hungary's neighbors.

Much popular and political commentary has described the Ukrainian refugee crisis

[1]Fidesz (Alliance of Young Democrats) has dominated Hungarian politics since its landslide victory in the 2010 national elections in alliance with the Christian Democratic People's Party (KDNP), securing enough seats to achieve a two-thirds majority in the National Assembly in 2010, in 2014, in 2018 and again in 2022. In this study, Fidesz refers to the Fidesz–KDNP allience.

[2]In Appendix A, we explain different legal concepts that are relevant for involuntary migration, distinguishing the temporary protected status sought by most Ukrainians and asylum-seekers coming from other war-torn countries. We also argue that these differences in legal status are unlikely to affect our analyses, noting that these precise legal distinctions are generally irrelevant from the perspective of mass public opinion.

as unprecedented in recent European history, but this is only true if large-scale entry of Ukrainians into Central Europe is fundamentally different from a large-scale entry of Syrian, Afghan, or others seeking refuge in Central Europe. Indeed, much critical commentary on the 2022 refugee crisis has focused on Europe's "refugee hypocrisy" (Traub 2022) and the plainly different standards to which Ukrainians have been held in comparison to non-European, non-Christian, non-white refugees from countries like Afghanistan. Yet the political implications of the Ukrainian crisis remain unknown. In highly exclusionary political environments such as Orbán's Hungary, in which anti-migrant and anti-refugee sentiments are commonly invoked by the ruling government, how are mass publics responding to large-scale influx of foreigners from a conflict on its own borders?

In this paper, we combine original survey data with detailed settlement-level demographic data to describe a dramatic change in Hungarian public opinion towards refugees following the 2022 Ukrainian refugee crisis. Comparing multiple rounds of public opinion data across the past decade with newly collected data from April and November 2022, we demonstrate that the 2022 Ukrainian crisis was accompanied by a large increase in tolerance for refugees, reversing what had previously been one of the most anti-refugee public opinion environments in Europe. To explain this difference, we combine survey experiments with data on respondents' local environments to investigate how conflict proximity and racial and religious identity shape openness to refugees. We find that the distinguishing feature of the 2022 crisis was that those arriving in Central Europe were mostly white European Christians driven from their home country by conflict. Additional descriptive information and further experimental evidence on the desired characteristics of immigrants demonstrate that the civilizational characteristics are important for explaining aggregate patterns in Hungarian public opinion towards refugees in 2022. Consistent with existing work on Hungarian politics, they are particularly important among sup-

porters of the ruling Fidesz party, and for some groups of religious voters. We find no systematic evidence that these individual patterns are explained by regional factors within Hungary, although we do find that settlement-level religious identity explains the individual-level correlation between religious identity and support for refugees.

Our findings make two main contributions to the literature on public opinion towards refugees and migrants, especially in times of crisis (Goodman 2021; Vachudova 2020; Hangartner et al. 2019; Dinas et al. 2019; Kustov, Laaker, and Reller 2021; Bansak, Hainmueller, and Hangartner 2016; Brader, Valentino, and Suhay 2008). First, we show that mass public opinion is indeed responsive to exogenous events. Ours is the most rigorous quantitative evidence yet available that the 2022 Ukrainian refugee crisis actually shifted public opinion towards refugees in a country where anti-migrant and anti-refugee sentiments were widely expressed, strongly held, and politically valuable to the incumbent government. Second, we show that this shift in public opinion is conditional on the specific nature of the refugee shock: our evidence indicates that the shift in public opinion towards refugees was driven by the specific characteristics of the refugee population in question. We argue that what we term "civilizational" factors—Ukrainians as white, Christian, European refugees—are responsible for the favorable shift in Hungarian public opinion towards refugees in 2022.

Separately, our findings also contribute new evidence on public opinion formation in Hungary, helping us to better understand contemporary politics in a country that has been a focal point for discussions of illiberal politics in Europe and around the world, including the United States (Kelemen 2015; McLaren 2022; Parton 2022; Enyedi 2018; Haggard and Kaufman 2021; Scheppele 2022). That our findings hold especially among Fidesz supporters points to the intricate relationship between mass preferences and government policy in competitive authoritarian contexts, even in the face of externally-generated crises.

2 Refugee Crises and European Politics

The 2015 European refugee crisis was a humanitarian emergency with social, economic, and political consequences for refugees fleeing conflict. It also fundamentally shaped politics in both sending and receiving countries. As our focus in this paper is on how European—and specifically Hungarian—public opinion has responded to recent refugee crises, we refer readers to existing work that explains the origins, details, and personal tragedies of the 2015 crisis (Kingsley 2016; Prickett 2015; McDonald-Gibson 2016; Barlai, Fähnrich, and Griessler 2017). The 2015 refugee crisis is nevertheless an important political milestone for European politics and society as well, as one of a series of crises that has tested European governments and Europe's supranational institutions following the Global Financial Crisis of 2008-09 (see e.g. Jones, Kelemen, and Meunier 2021).

There is abundant evidence that the 2015 refugee crisis in Europe shaped public attitudes towards refugees, migrants, and policies governing refugees, asylees, and migrants more generally (Hangartner et al. 2019; Brug and Harteveld 2021; Stockemer et al. 2020; Lutz and Karstens 2021; Peshkopia, Bllaca, and Lika forthcoming; Sik, Simonovits, and Szeitl 2016; Messing and Ságvári 2016). The refugee crisis heightened anti-immigrant attitudes among Europeans, with electoral consequences that strengthened anti-immigrant parties like Fidesz in Hungary, Golden Dawn in Greece, and Alternative für Deutschland in Germany. Although several studies have estimated the causal effects of *exposure to* refugees on anti-immigrant attitudes and voting patterns (Dinas et al. 2019; Hangartner et al. 2019), we emphasize that the refugee crisis is a contextual variable as well as an individual one. Even Europeans who never personally encountered a refugee during the crisis or in its aftermath live in countries in which the refugee crisis was a prominent news item and a subject of extensive political discourse.

In addition to the administrative, logistical, and ethical challenges that receiving coun-

tries like Hungary faced during the 2015 refugee crisis, the arrival of hundreds of thousands of refugees from the Middle East, South Asia, and Africa in Europe prompted new questions about European identity (Ammaturo 2019). Subsequent analyses focus on its implications for nationalism and national identities (Schenk 2021), for religious identity and the politics of religion (Schmiedel and Smith 2018; Peker 2022), and through a lens of racialization (Burrell and Hörschelmann 2019; Rexhepi 2018).

Given the importance attributed to race, religion, and European identity in shaping the discourse around the 2015 refugee crisis in Europe, we view the key distinction between the 2015 and 2022 crises to be the identity of those fleeing conflict. Whereas the refugees entering Europe in 2015 were not Europeans, mostly not Christians, and racialized as non-white, those fleeing Ukraine were mostly white Christian Europeans.[3] Of course, there are other differences between the refugee populations entering Central and Western Europe between 2015 and 2022, such as the nature of the conflict that drives the current crisis, and its proximity to Europe. These all might produce a more accommodating environment for Ukrainians than had been the case for Afghan refugees.

We propose that race, religion, and national identity are central to how mass publics interpret refugee crises. Although there are non-white and non-Christian Ukrainian refugees, and there are Christian Syrian refugees, we argue that it is more profitable to conceptualize race, religion, and national (or regional) identity as three manifestations of what we term *civilizational* differences between European and non-European refugees. We use this term guardedly, aware that it is also used by racists, bigots, and xenophobes to describe conflict between Europeans and non-European Others. Yet it also reflects how mass publics themselves conceptualize differences among world regions, and our usage is

[3]There are important exceptions. For example, many Black Africans fleeing Ukraine experienced systematic discrimination at the border; see e.g. Mehdi Chebil, "'Pushed back because we're Black': Africans stranded at Ukraine-Poland border," *France24*, https://www.france24.com/en/europe/20220228-pushed-back-because-we-re-black-africans-stranded-at-ukraine-poland-border.

consistent with how some political scientists conceptualize contemporary world politics (see e.g. Huntington 1993; Katzenstein 2009). We employ this term not to endorse it, but rather because it captures the essential features of the political forces that we study here. As Rogers Brubaker (2017) has argued, contemporary populist discourses in Europe should be understood not just in nationalist terms, but also in civilizational terms.

The ongoing 2022 Ukrainian crisis has not yet generated a significant body of academic research on its effects, although preliminary work has already identified some important contrasts between European responses to refugees from Ukraine versus Syria (see e.g. Paré 2022; Rosstalnyj 2022; Pratt and LaRoche 2022). Comparing general trends in public opinion requires post-February 2022 public opinion data, and key sources like the European Social Survey (https://www.europeansocialsurvey.org) have not yet released data that covers that period. Beyond the specific issue of Ukrainians in Central and Western Europe, though, early analyses have highlighted the often-surprising degree of European solidarity with Ukraine since the outbreak of the crisis (Bosse 2022; Allin and Jones 2022). They have also noted, however, that European supporters of Ukraine might not support resettlement within their own communities, implying that there are limits to such solidarity (see Clayton, Ferwerda, and Horiuchi 2022).

3 The Hungarian Case

The 2015 refugee crisis deeply affected Hungarian politics and society. Prior to the crisis, Hungary's increasingly authoritarian regime had undermined many of the pillars of liberal democracy (see Bánkuti, Halmai, and Scheppele 2012; Kelemen 2015; Krekó and Enyedi 2018; Bernhard 2021). Today, Hungary is best described as a competitive authoritarian regime (Levitsky and Way 2020). In this political context, with anti-immigrant rhetoric already a central feature of Hungarian right-wing politics (Horvath, Fox, and

Vidra 2011; Korkut 2014), the inflow of refugees was easily politicized by the incumbent Fidesz government.

Orbán and his supporters characterized refugees as threats to the Hungarian nation and to state stability (Cantat and Rajaram 2019; Stivas forthcoming). This was accomplished at the discursive level through such tactics as erecting signs *in Hungarian*—thus for a Hungarian rather than a refugee audience—that warned refugees about their obligation to respect Hungarian culture and not to take Hungarian jobs, and through push polls distributed on behalf of Orbán that contained leading questions about refugees (Marton 2017). Additionally, the government launched a broader campaign against supranational institutions such as the European Union, lambasting their unwillingness to protect European civilization and culture, and emphasizing national sovereignty to protect Hungary as a Christian European nation (Fekete 2016; Scott 2020; Majtényi, Kopper, and Susánszky 2019).

Government rhetoric also legitimized anti-immigrant public opinion. In 2018, in his annual state of the nation speech, Orbán addressed the issue of migration and claimed that *"they [Western countries in the EU] want us to adopt their policies: the policies that made them immigrant countries and that opened the way for the decay of Christian culture and the expansion of Islam. They want us to allow in migrants and to become a country with mixed populations"*.[4] A few months later, in his speech on the 170th anniversary of the Hungarian Revolution of 1848, he added that *"Europe is now under invasion...Brussels is not defending Europe and does not stop immigration, but supports and organizes the inflow of people. It wants to dilute the population of Europe and to replace it, to cast aside our culture, our way of life and everything which separates and distinguishes us, Europeans from the other peoples of the world"*.[5] Recent work has

[4]Available on the website of the *Cabinet Office of the Prime Minister* at https://miniszterelnok.hu/orban-viktor-evertekelo-beszede-2/.

[5]Available on the website of the *Cabinet Office of the Prime Minister* at https://www.miniszterelnok.hu/orban-viktor-unnepi-beszede-az-1848-49-evi-forradalom-es-szabadsagharc-170-evfordulojan/.

documented that during the election campaign in 2018, the framing of the refugee crisis made it a salient domestic issue that shaped voter opinion (Cantat and Rajaram 2019; Márton and Goździak 2018). Moreover, Hungarian settlements where refugees were present were subsequently more likely to vote for far-right candidates and to support anti-immigrant positions (Gessler, Tóth, and Wachs 2021).

Given the depth of the anti-immigrant sentiment in Hungary, a renewed influx of people from another foreign conflict might have been similarly politicized—the same government still holds power, and the 2022 Ukrainian crisis began just over a month before Hungary's 2022 elections. And yet there is no evidence of anti-refugee rhetoric following Russia's invasion of Ukraine. Following his visit to the humanitarian transit zone in March 2022, the Hungarian Prime Minister claimed that *"[f]or them [refugees from Ukraine] fleeing war is a shocking experience, a traumatic experience. After fleeing war, the first good news in their lives comes here in Budapest ... when they are provided with food and water—and also accommodation for those who need it. We are also providing special care for children, we have medical services, and soon there will be employment agency representatives. Some people—the majority—move on; but those who stay in Hungary not only need food and shelter, but they eventually need jobs. In Hungary, fortunately, today there are more jobs than people in their working age...we in Budapest offer a happier future for those in need..."*.[6] Shortly after his election victory in May 2022, the Prime Minister once again made it clear that Hungary is devoted to help refugees from Ukraine: *"In this war, Ukraine has been attacked and Russia is the aggressor. We are supporting Ukraine, and we have launched the largest humanitarian aid operation in Hungary's history. Proportionally, we have allowed in the largest number of refugees, and we are providing help for those in need. We will help Ukrainian refugees...Ukrainians can count on Hungary and on the Hungarian government"*.[7] At the outset of the crisis, this

[6] Available on the website of the *Cabinet Office of the Prime Minister* at https://miniszterelnok.hu/orban-viktor-facebook-nyilatkozata-a-humanitarius-tranzitpont-meglatogatasat-kovetoen/.

[7] Available on the website of the *Cabinet Office of the Prime Minister* at https://miniszterelnok.hu/orban-

lack of anti-refugee politicking might have been explained by the fact that some of the first refugees entering Hungary were from Ukraine's small Hungarian-speaking minority, many of whom already held Hungarian citizenship (Erőss 2022). But this number was small relative to the vast majority of refugees who were Ukrainian speakers without any ethnic, national, or linguistic connection to Hungary.

The *civilizational* differences between refugees from Europe and non-European countries were particularly emphasized by the government. Orbán claimed that assisting refugees from Ukraine is an *"elementary human, Christian instinct"* and added that one does not have to be a *"rocket scientist"* to see the difference between *"masses arriving from Muslim regions in hope of a better life in Europe"* and helping Ukrainian refugees who have come to Hungary fleeing war.[8] The Prime Minister framed the migration waves from outside of Europe as part of a *"great European population replacement programme, which seeks to replace the missing European Christian children with migrants, with adults arriving from other civilizations"* and warned the Hungarian population about the danger of people arriving from outside of Europe: *"There is a world in which European peoples are mixed together with those arriving from outside Europe. Now that is a mixed-race world. And there is our world, where people from within Europe mix with one another, travel around, work, and move to other places. So, for example, in the Carpathian Basin we are not mixed-race: we are simply a mixture of peoples living in our own European homeland ... creating [our] own new European culture... we are willing to mix with one another, but we do not want to become peoples of mixed-race"*.[9]

Hungary's experience with the 2022 Ukrainian crisis is particularly interesting because its government has proven least cooperative with NATO and the EU on issues related

viktor-beszede-a-miniszterelnoki-eskutetelet-kovetoen-2/.

[8]Available at the website of the *International Communications Office of the Cabinet Office of the Prime Minister* at https://abouthungary.hu/news-in-brief/pm-orban-every-refugee-arriving-in-hungary-from-ukraine-must-be-helped.

[9]Available on the website of the *Cabinet Office of the Prime Minister* at https://miniszterelnok.hu/orban-viktor-eloadasa-a-xxxi-balvanyosi-nyari-szabadegyetem-es-diaktaborban/.

to managing the Russian invasion.[10] Noting that Hungary's nationalist approach to migration policy will have long-term implications for the European Union's approach to migration, refugees, and asylum (Trauner and Stutz 2021), Hungary's response to the humanitarian crisis caused by Russia's invasion of Ukraine has first-order implications for migration policy across Europe.

4 Data

To study the evolution of Hungarian public opinion towards refugees over the course of the past decade, we conducted two original surveys of Hungarian voters in April 2022 (just as refugees began flowing into Hungary) and in November 2022. We partnered with the Hungarian survey firm TÁRKI (https://www.tarki.hu/eng/rolunk), one of the most well-established polling firms in Hungary. TÁRKI selects respondents via random selection sampling resulting in surveys that are representative of the Hungarian adult population.[11] Our sample included 1023 Hungarian adults in April and 1000 adults in November. We collected data on the demographic characteristics and political orientations of the survey respondents, among other variables. We merged these data with administrative data on local demographic and economic factors in order to situate our respondents in their local contexts.

We combined this original survey data with two existing sources of data on Hungarian

[10] See Krisztina Than, "Orban urges new EU strategy on Ukraine, says sanctions have failed," *Reuters* https://www.reuters.com/world/europe/hungarys-orban-calls-new-eu-strategy-ukraine-war-says-sanctions-failed-2022-07-23/.

[11] Specifically, TÁRKI uses probability samples. In each survey, a stratified random sample of Hungarian settlements is drawn. Settlements with more than 78,000 inhabitants are automatically selected, while smaller settlements are selected as a result of a randomization process. A target number of interviews is calculated for each settlement based on the actual size of adult population in the settlement. Survey respondents are selected using the method of random walk. The final sample is weighed so that the sample is representative for the Hungarian adult population in four dimensions: gender, age group, settlement type, and education of the respondent. Thus, the final sample matches the proportions of all population cells in these four dimensions in the census.

public opinion. First, we use four surveys conducted by TÁRKI in previous years that include questions about refugees. These were conducted in April 2014, January 2016, October 2016, and January 2017. The timing of these surveys allows us to compare Hungarian public opinion prior to the 2015 crisis (April 2014) with subsequent public opinion changes, culminating in our surveys that follow the Russian invasion. Second, we combine our 2022 survey results with recent survey data from ESS, which is also administered in Hungary by TÁRKI. For these analyses, we use ESS data from the previous six rounds (2010 through 2020, at two-year intervals). Again, the timing of the ESS rounds allows us to compare Hungarian public opinion prior to the 2015 crisis to subsequent survey rounds.[12]

5 Results

We begin by examining trends in Hungarian public opinion over time using the TÁRKI's data. Figure 1 shows the results for six survey waves in which respondents were asked their views about refugees. The trends are clear. Prior to the 2015 refugee crisis, a plurality of Hungarians favored admitting at least some refugees, but Hungarian public opinion trended in a steadily anti-refugee direction in subsequent years, resulting the majority of Hungarian respondents opposing *all* refugees by the end of 2016. With the onset of the war in Ukraine, public opinion towards refugees improved dramatically, with the result that nearly 90% of all respondents reported that Hungary should admit some or all refugees in April 2022. That number declined by November 2022, but still remained significantly higher than at any time in the past decade.[13]

It is helpful to compare these results to existing findings about the durability of mi-

[12] Tables A6 and A7 in Appendix B and C provide summary statistics on the main variables, while Table A8 in Appendix D presents a complete list of variable definitions.

[13] Appendix E shows that the increase in anti-immigrant sentiments by November 2022 is not explained by the decline in non-response rates between April and November.

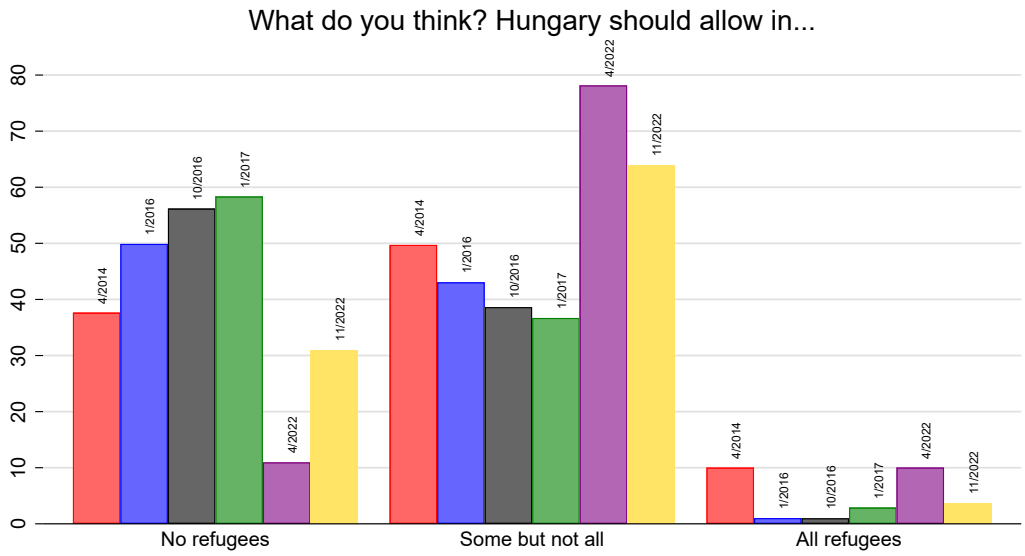

Figure 1: Trends in Public Opinion towards Refugees, 2014-2022

gration attitudes (see Kustov, Laaker, and Reller 2021). We find a major change in public opinion towards refugees in Hungary in 2022, whereas existing research based on cross-national panel data finds these attitudes to be stable.[14] Our repeated cross-sections of public opinion data do not allow us to track individual public opinion over time, but the sheer magnitude of this shift in public opinion means a substantial proportion of the Hungarian population must have changed its views about refugees between 2017 and 2022. The difference between our results may be attributed to one of three factors. First, it could be that Hungary's experience is not representative of other European contexts, owing to the sheer depth of the anti-immigrant and anti-refugee rhetoric nurtured by Orbán and Fidesz since 2015. Second, it could be that attitudes about refugees are distinct from general attitudes about migrants and migration policy. Third, perhaps the Ukrainian crisis has had a

[14] In line with the political socialization literature, Kustov, Laaker, and Reller (2021) also find that younger individuals are more likely to change their views toward immigration than the elderly cohort. To test this finding on our dataset and to see whether our results are preliminary driven by the younger generation, Figure A30 plots opponents to admitting all refugees to Hungary by their age cohort between 2006 and 2022. While we find that the standard deviation of the attitudes of the younger cohort are larger (14.4%) than of the elderly cohort (12.4%) between 2006 and 2022, the trend and the changing nature of attitudes are similar across all age cohorts. Thus, Figure A30 provides evidence that changes in immigration attitudes were not driven by the younger cohort only.

qualitatively different impact on public opinion that have previous migrant, economic, or other shocks.[15] Future research can help to disentangle these possibilities, although the November 2022 results suggest a reversion towards earlier patterns in Hungarian public opinion as Russia's war in Ukraine continues.

To what extent are these changes driven by—or conditioned by—political developments within Hungary itself? Recall that the incumbent Fidesz government prevailed in national elections in April 2022, which suggests that these swings in public opinion must have also occurred among Fidesz supporters themselves. In Figure 2, we break down opponents to admitting all refugees to Hungary by their partisan affiliation (Fidesz supporters, Opposition supporters, and other non-aligned voters).[16] These data reveal, first, that prior to the 2015 refugee crisis, Fidesz supporters were not particularly opposed to refugees; they turned decisively against refugees only after 2015. And yet even Fidesz supporters shifted decisively in a pro-refugee direction in 2022. Looking at respondents

[15]One possibility is that the Soviet occupation of Hungary between September 1944 and June 1991 had a lasting effect on Hungarian public opinion. Communists took over the country by taking control of the secret police (*Államvédelmi Hatóság*, AVH) which created a climate of fear, arresting anyone who spoke out against communism (e.g.: even something as simple as listening to "Western" music could lead to arrest). Additionally, Hungarians had no freedom of speech and the Russian language was made obligatory. Thousands of Soviet troops and officials were stationed in Hungary, draining the Hungarian economy and creating economic hardship for ordinary people. One might argue that welcoming attitudes for Ukrainians are driven by memories of the past, and that Hungarian citizens feel a strong empathy for Ukrainians because they themselves were victims of Soviet aggression. Nonetheless, Figures A6 and A7 in Appendix N show that the attitudes of the older survey respondents (who might have stronger historical consciousness) are roughly the same across different source countries. The older cohort, in general, has a slightly more welcoming attitudes towards migrants, and this holds even towards Russians (see Figures A8 and A7) suggesting that memory fades and that our results are not driven by the historical memory of the older generation.

[16]Classifying supporters of Jobbik (The Movement for a Better Hungary – Jobbik Magyarországért Mozgalom) requires care. Jobbik was the radical-right party in Hungary during the first four survey waves, but since 2016 Jobbik has moved towards a centre-right position, and in 2022 Jobbik ran with the United Opposition. Therefore, in Figure 2, Jobbik voters are in the "opposition" category. A natural concern about the trend of the opposition voters before 2022, however, is that this might be driven by strong anti-migrants attitudes of the then far-right Jobbik voters. At the same time, while attitudes of the far-right voters are in the "opposition" category before 2022, voters of the new radical right party (formed in 2018), Mi Hazánk Mozgalom (Our Homeland Movement) is in the "other" category in 2022. Figure A10 in Appendix Q shows that irrespective of the categorization, the attitudes of Fidesz voters were more welcoming prior to the refugee crisis in 2014, whereas the contrast between Fidesz voters' and the opposition voters' attitudes are even sharper during the first refugee crisis.

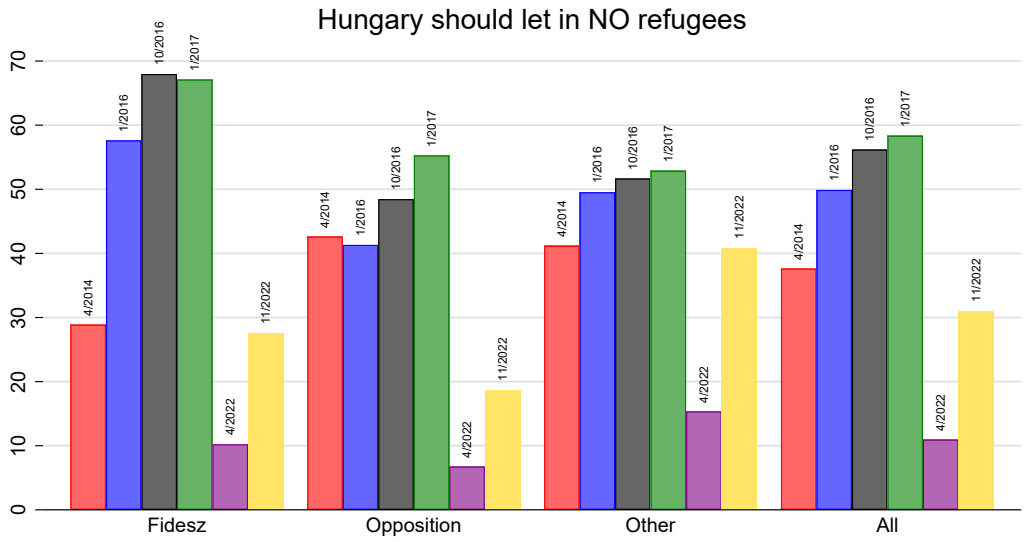

Figure 2: Opposition to Refugees by Party, 2014-2022

in the April 2022 survey only, we find that Fidesz supporters overwhelmingly supported admitting some refugees to Hungary, and were only slightly less open to admitting all refugees than were members of the opposition (see Figure 3).[17]

This shift in Hungarian public opinion is surprising. Over the last decade, Fidesz has developed close relations with Russia as part of its *Eastern Opening* policy. The Russian-financed Paks nuclear power plant and long-term gas contracts both provide evidence of close economic ties between the Fidesz government and Russia. Foreign relations are also closely linked: after Russia annexed Crimea in 2014, Hungary used its veto powers in NATO to block high-level NATO-Ukraine meetings and joint military exercises (Visnovitz and Jenne 2021). After the 2022 Russian invasion of Ukraine, Orbán described Ukrainian president Volodymyr Zelensky as his opponent, and blamed the EU's Russia policy for inflation and soaring energy prices.

Indeed, there is ample evidence that Fidesz government rhetoric has moderated the

[17]Figure A15 in Appendix U.1 breaks down respondents' opinion towards refugees by partisanship in November 2022, while Figure A16 highlights the difference between survey responses from April *versus* from November.

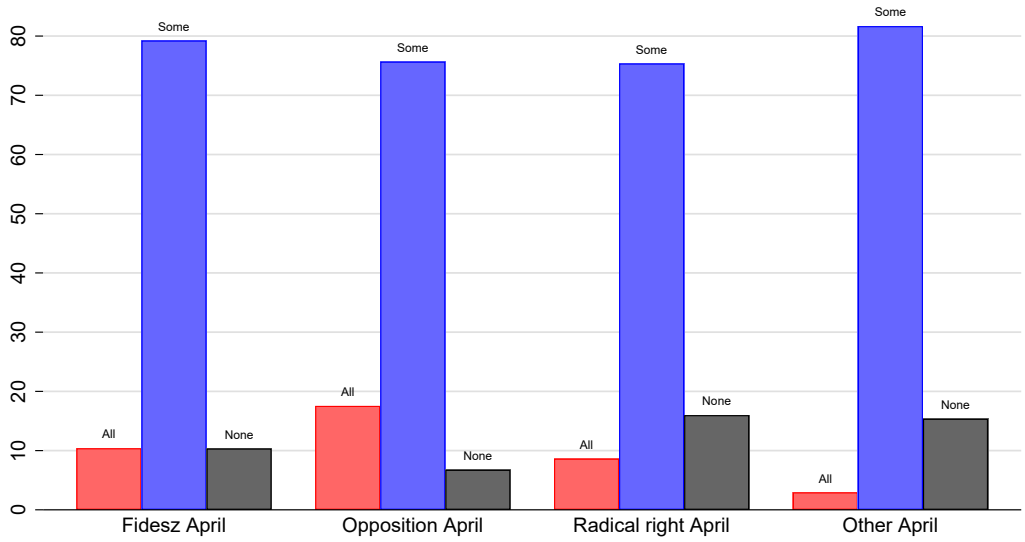

Figure 3: Public Opinion towards Refugees by Party, April 2022

public's historical aversion to Russia, with opinion polls indicating that the population's sympathy toward Russia has increased during the Fidesz era (Krekó 2016).[18] A recent survey from May 2022 also indicates that 33% of the Hungarian population claimed that Hungary should be moving closer to Russia even after its invasion of Ukraine.[19] We infer from these developments that the shift in public opinion that we have identified is not likely to be driven by popular perceptions of Russia as a security threat. If anything, a generally pro-Russian political environment should have decreased empathy for Ukrainians.[20]

We also emphasize that Ukrainians have not historically been characterized as part of Hungary's Christian, European heritage, and that Hungarian political discourse did not

[18]Using survey data from April 2014, Krekó (2016) reveals that following Russian annexation of Crimea, Hungarians were the least emphatic for Ukrainians among survey respondents from other 11 European countries. Additionally, only a small proportion of the Hungarians agreed that Russia should not be allowed to invade East Ukrainian territory; while Hungarians rather did not agree with the provision of assistance to Ukraine (relative to the rest of the survey respondents). Finally, Hungarian survey respondents were rather against any sanctions on Russia.

[19]While 83% of opposition voters would remain distanced from Russia, this ratio is only 27% among Fidesz supporters. Source: https telex.huenglish20220611research-reveals-how-hungarians-see-putin-and-other-world-leaders.

[20]In Appendix P.2, we quote Viktor Orbán himself in explaining his pro-Russian politics prior to the February 2022 invasion of Ukraine.

emphasize any cultural similarity between Ukrainians and Hungarians. Prior to February 2022, Ukraine appeared in popular media for three main reasons. The first was in discussions of EU enlargement. Hungary generally supported Ukraine's membership in the EU, although this was justified on economic rather than cultural or religious grounds.[21] The second focused on the Hungarian diaspora. In 2017, Ukraine introduced a language law that curbed minorities' access to education in their native tongues, which affected the Hungarian minority. In response, Hungary blocked Ukraine's membership in NATO until Ukraine restores ethnic Hungarian language rights.[22] The third was in the context of energy security. In September 2021, Hungary signed a 15-year natural gas supply agreement with Russia that guaranteed supplies through new routes via Serbia and Austria, bypassing Ukraine. Under this new deal, Ukraine lost millions of dollars in transit fees, leading Ukraine's foreign ministry to state that Hungary's gas deal was a "purely political, economically unreasonable decision" that was taken "to the detriment of Ukraine's national interests and Ukrainian-Hungarian relations".[23] In response, the Hungarian news media was flooded with articles claiming that Ukraine's opposition to a new gas deal with Russia threatened both Hungary's economic sovereignty and its national security.[24]

Changes in Hungarian public opinion over time remain robust when we control for survey respondents' socio-demographic characteristics. We estimate the following linear probability model for survey respondents who are opposed to admitting all refugees to Hungary on a pooled cross-section dataset between April 2014 and November 2022:

$$y_{it} = \alpha + \beta_1 Fidesz_{it} + \sum_{t=2}^{6} \beta_t Fidesz_{it} \times Wave_t + \sum_{t=2}^{6} \gamma_t Wave_t + X_{it}'\delta + \epsilon_{it}, \qquad (1)$$

[21] See selected speeches of the Prime Minister on Ukraine joining the EU in Appendix P.1.

[22] This statement is available on the website of the Permanent Delegation of Hungary to NATO https://nato-brusszel.mfa.gov.hu/news/szijjarto-peter-a-nato-kueluegyminiszterek-talalkozojan.

[23] The source is available: https://www.euronews.com/2021/09/28/ukraine-anger-as-hungary-signs-gas-supply-deal-with-russia-s-gazprom.

[24] The source is available here.

where y_{it} is a dummy variable indicating that respondent i in wave t is opposed to admitting any refugees; $Fidesz_{it}$ is a Fidesz voter dummy; $Wave_t$ are wave dummies; and X'_{it} is a vector of socio-demographic variables such as education, age, gender, settlement type, activity, and variables on religiosity (self-declared level of religiosity and frequency of participating in religious services). To understand the changing attitudes of Fidesz voters over time, we interact the Fidesz voter dummy and the wave dummies, while also allowing the wave dummies to control for time-specific factors, such as the general economic situation of the country, that could confound these relationships.

Column 1 of Table 1 shows that on average, Fidesz voters are more hostile towards migrants than non-Fidesz voters. Column 2 allows this relationship to differ across survey waves and shows that while in 2014 and in 2022 the probability that a Fidesz voter is opposed to admitting refugees was not larger than for non-Fidesz voters, during the first refugee crisis, it was significantly larger (by 11.3-17.6 percentage points). We also note that general hostility towards immigrants was particularly high in 2016-2017, when migration was a salient domestic issue in Hungary, but dropped significantly by 2022—as the wave dummies show.

Table 1 also shows that religious service participation and education are highly correlated with individuals' attitudes towards migrants. More educated people, and people who participate in religious services, are significantly less likely to oppose the entry of refugees.

To provide further evidence on changes in Hungarians' attitudes towards immigrants during the two crises, we also analyzed data from European Social Survey (ESS) between 2010 and 2020.[25] We find similar results based on the ESS dataset. Figure A3 in Appendix

[25] As noted above, the ESS surveys were conducted by TÁRKI. Here, we rely on the question of *"Hungary is made a worse or better place to live by people coming to live here from other countries"* that was also asked in our April as well as in our November 2022 surveys. In our surveys, we used the same wording as well as the same response category: a 0-10 scale, where 0 is the *much worse* and 10 is the *much better* end of the spectrum. For the sake of comparability, we re-scaled these, and all subsequent answers, to a 0-100 scale.

	Oppose migrants		Oppose migrants	
Fidesz	0.040***	(2.96)	..	..
Fidesz × (Apr 2014)	..	..	-0.115***	(-3.44)
Fidesz × (Jan 2016)	..	..	0.113***	(3.10)
Fidesz × (Oct 2016)	..	..	0.176***	(5.28)
Fidesz × (Jan 2017)	..	..	0.118***	(3.29)
Fidesz × (Apr 2022)	..	..	0.005	(0.23)
Fidesz × (Nov 2022)	..	..	-0.047	(-1.34)
Jan 2016	0.141***	(5.89)	0.069**	(2.35)
Oct 2016	0.194***	(8.33)	0.100***	(3.48)
Jan 2017	0.201***	(8.39)	0.127***	(4.27)
Apr 2022	-0.281***	(-13.97)	-0.314***	(-12.13)
Nov 2022	-0.077***	(-3.20)	-0.094***	(-3.15)
Freq serv part	-0.051**	(-2.36)	-0.048**	(-2.23)
Occ serv part	-0.074***	(-5.08)	-0.071***	(-4.90)
Secondary school	-0.081***	(-5.21)	-0.079***	(-5.12)
College / University	-0.163***	(-8.66)	-0.162***	(-8.69)
Individual controls	Yes		Yes	
Constant	0.469***	(6.08)	0.510***	(6.56)
N	5852		5852	

Notes: Robust *t* statistics in parentheses. *, ** and *** denote significance at 10%, 5% and 1% level, respectively. The dependent variable is a dummy variable indicating that respondents are opposed to admitting any refugees. Control variables are included (see Appendix D).

Table 1: Linear Probability Model Results

I shows that before the 2015 refugee crisis, Hungarians had a rather neutral opinion on whether Hungary became a worse or better place by people coming to live there, but during the first refugee crisis, Hungarian public opinion trended in an anti-refugee direction with a peak in the anti-immigrant sentiments in 2016. Following the invasion of Ukraine, public opinion towards refugees improved dramatically, especially among Fidesz supporters. Examining trends over time, we find that Fidesz voters had similar attitudes towards immigrants than non-Fidesz voters in 2010 and 2012, but were particularly opposed to admitting refugees to Hungary between 2014 and 2020. By April 2022, however, they were similar to non-Fidesz voters. While the ratio of respondents in support of immigrants declined by November, the pro-immigrants sentiments were still higher than at any time

in the past survey waves.[26]

In the remainder of this section, we focus our analysis on data from April 2022, as analyses using data from November 2022 produce substantively identical findings.[27] The exception is for analyses of gender and religion, our focus in Section 5.3 below.

5.1 Civilizational Factors and Refugee Preferences: Experimental Evidence

What explains the decisive shift in Hungarian public opinion towards refugees in 2022? On one hand, it could be that the existence of a refugee crisis within Europe has shifted Hungarian public opinion about all refugees, showing that ordinary civilians may face political conditions that are not of their own making. But on its face, this appears less plausible than an alternative interpretation—commonly invoked to explain not just Hungary's responses to the Ukrainian crisis, but those across Europe more generally (Traub 2022; Pratt and LaRoche 2022)—that the distinctive feature of Ukrainians in 2022 relative to the 2015-16 refugee crisis is that the latter involved non-white, non-European Muslims, and the former affected mostly white European Christians.

To adjudicate between these possibilities, we embedded two experiments within our April 2022 survey that asked respondents about their receptivity to refugees fleeing conflict in a particular country. In the first, respondents were randomly assigned to respond to a question about either Afghanistan or Pakistan. In the second, they were randomly assigned either Ukraine or Belarus. Answers to these questions fall on a five-point Likert scale ranging from strongly disagree to strongly agree.[28]

[26] See the estimated equations and the regression outputs in Table A15, in Appendix I.

[27] In Appendix U, all subsequent figures and tables are replicated for the November 2022 survey wave.

[28] The precise wording of the questions is included in Table A9 of Appendix F, both in English and in Hungarian, with italics highlighting the manipulation, while Table A10 presents the characteristics of randomly assigned respondents across the different questions.

The logic of our survey experiment is as follows. We suspect that one proximate driver of refugee flows is conflict, and another is what we term the *civilizational characteristics* of the refugees: their race, religion, and national identity. By asking respondents about refugees from Afghanistan versus Pakistan, we can hold roughly constant the civilizational features of refugees while allowing the presence of conflict to vary. The same is true of a comparison of refugees from Ukraine and Belarus: at the time that our survey was fielded, it was an open question whether Belarus would send its own conscripts to fight alongside Russia in Ukraine, or if Russian troops would be stationed *en masse* in Belarus, so this was not a country presently at war but a future with Belarussian refugees was conceptually possible. If respondents are equally open to all potential refugees, we may conclude that the pro-refugee shift in Hungarian public opinion is unconditional. If they are more open to refugees from Ukraine and Afghanistan than from Belarus and Pakistan, we can conclude that the existence of conflict is the key feature explaining shifts in public opinion. If they are open only to refugees from Ukraine, we can conclude that the change in preferences is driven by the fact that the 2022 crisis affected mostly white European Christians fleeing conflict.

Figure 4 shows the distribution of responses across the four categories: the Hungarian mass public is more receptive to Ukrainians than to any other refugee population.[29] To analyze these results further, we estimate an OLS regression that predicts the level of support for refugees (1 = lowest, 5 = highest) as a function of the interaction between presence or absence of conflict (present for Afghanistan and Ukraine, absent for Pakistan

[29]While the legal statuses of the people who have fled Ukraine and Afghanistan are different (see the definition in Appendix A), it is unlikely that this difference explains these results. First, the vast majority of Hungarians never personally encountered a refugee during the 2015-16 crisis given the extremely low number of people staying in Hungary (see Tables A2 and A3). Mass public opinion is led by political discourse rather than personal experience. Second, public opinion is unlikely to be driven by any meaningful difference in the social costs associated with having refugees or people with temporary protection status (see Table A5). In sum, we argue that Hungarians' attitudes are not primarily affected by individual contact or by rational cost calculus. Instead, the refugee crisis is a contextual factor that affects public opinion responses in the aggregate.

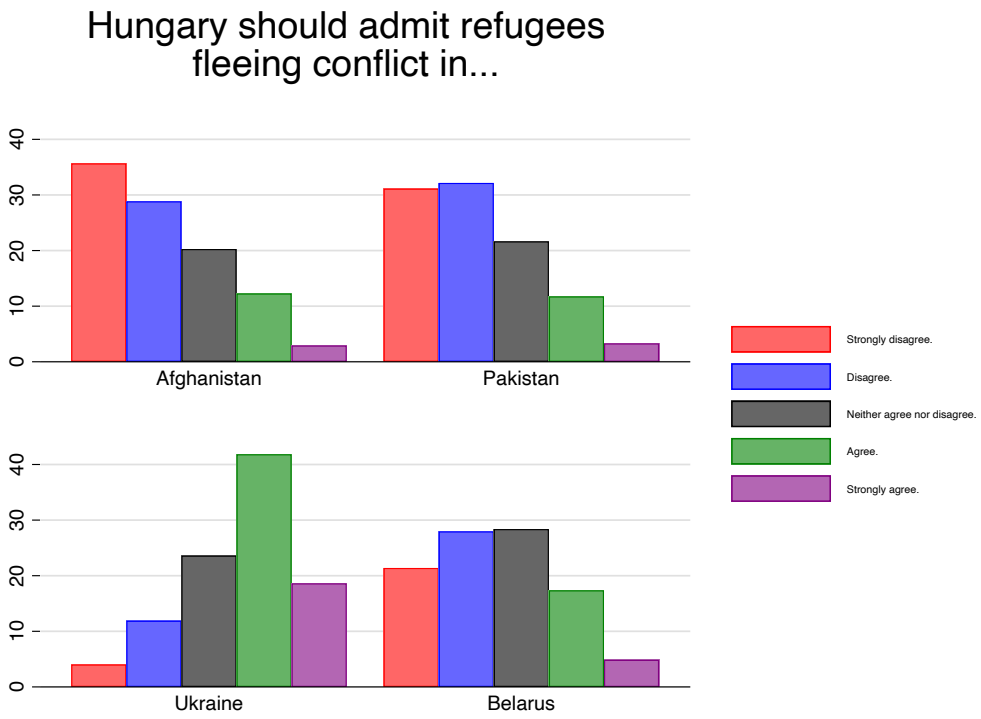

Figure 4: Public Opinion towards Refugees by Source Country, April 2022

and Belarus) and whether or not the country is in Europe. This is equivalent to a difference-in-differences design, which we estimate via

$$Support_{ij} = \alpha + \beta Europe_j + \gamma Conflict_{ij} + \delta(Europe_j \times Conflict_{ij}) + \eta_i + \epsilon_{ij} \quad (2)$$

where $Support$ measures support for admitting refugees, *Europe* takes the value of 1 for the survey question comparing Ukraine and Belarus and 0 otherwise, *Conflict* takes the value of 1 for respondents assigned Ukraine and Afghanistan and 0 otherwise, η_i are respondent fixed effects, and ϵ_{ij} is an error term, with standard errors clustered at the level of the respondent. We also estimated a fixed effects logistic regression model, where the outcome is 1 if the respondent agrees or strongly agrees that Hungary should welcome refugees from conflict in that country, and 0 otherwise.

The results appear in Table 2. The positive and highly statistically significant coefficient on *Europe* × *Conflict* signifies that respondents were far more likely to agree to welcome refugees from Ukraine relative to refugees from any other country. The OLS model estimates an increase of 1.1 (on a 5 point scale, equivalent to a full standard deviation in magnitude) in support of refugees from a European country in conflict, compared to the increased support for refugees from a non-European country in conflict. The coefficient on

	OLS		Logit	
Europe	0.324***	(3.60)	1.454***	(4.63)
Conflict	-0.0737	(-0.67)	-0.0392	(-0.10)
Europe × Conflict	1.088***	(6.91)	2.312***	(3.66)
Constant	2.247***	(35.85)		
N	1991		756	

Cluster-robust *t* statistics in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Both OLS and Logit models include respondent fixed effects.

Table 2: Difference-in-differences Results

Europe provides further evidence of the importance of civilizational factors in explaining support for refugees in 2022, showing that respondents were more supportive of refugees from a non-conflict country in Europe (Belarus) than from a non-conflict country outside of Europe (Pakistan).

To convey the magnitude of these relationships, Figure 5 plots the predicted level of support, calculated from the OLS results in Table 2, for each of the four countries as defined by the interaction of *Conflict* and *Europe*. The 2022 crisis has shifted Hungarian public opinion in favor of refugees, but overwhelmingly in favor of white Christian European refugees fleeing open conflict.

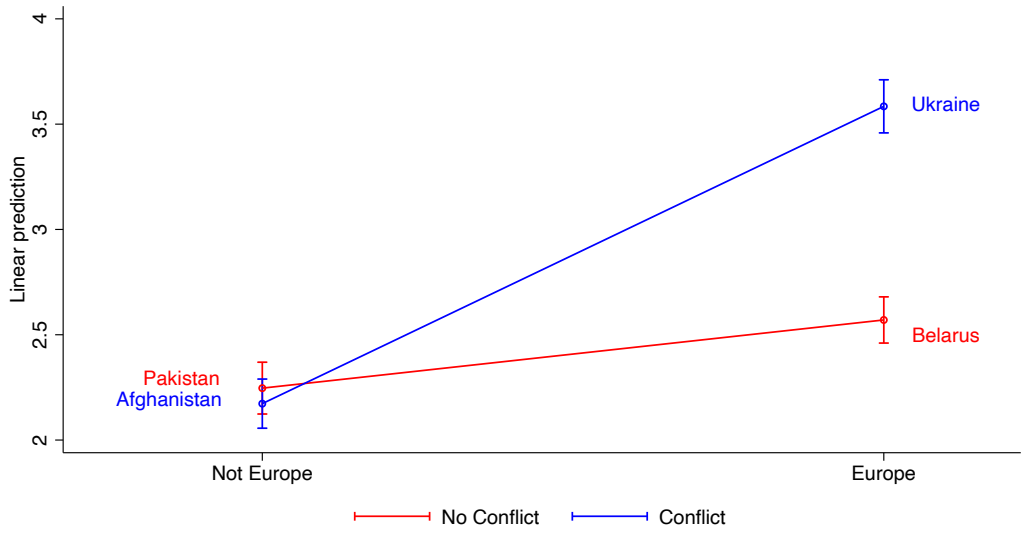

Figure 5: Predicted Support for Refugees, Difference-in-Differences Design

5.2 Civilizational Factors and Refugee preferences: Additional Evidence

In this section, we provide additional evidence that reveals how respondents' attitudes—especially Fidesz voters' attitudes—are affected by the demographic characteristics and ethnicity of the immigrants. Figure 6 shows the average support of refugees from different source countries by partisanship.[30] While Fidesz voters are more supportive towards refugees fleeing conflict in Ukraine than the population average, they are slightly less welcoming towards refugees from the other three countries.

In Appendix K, we model the relationship between respondents' socio-demographic characteristics, partisanship, religious identity, and their attitudes towards immigrants.[31] Figure 7 shows the relative support of Fidesz voters when we control for individuals' socio-demographic characteristics (thus, the bars represent the estimated coefficients of

[30]We transformed all ordinal scales to a scale of 0-100, so that we are able to compare the strength of the effects across different questions with different ordinal scales. For example, answer x on a 1-5 Likert scale is equivalent with an answer of (x-1)*25 on the 0-100 scale.

[31]See the estimated equations and the regression outputs in Appendix K.

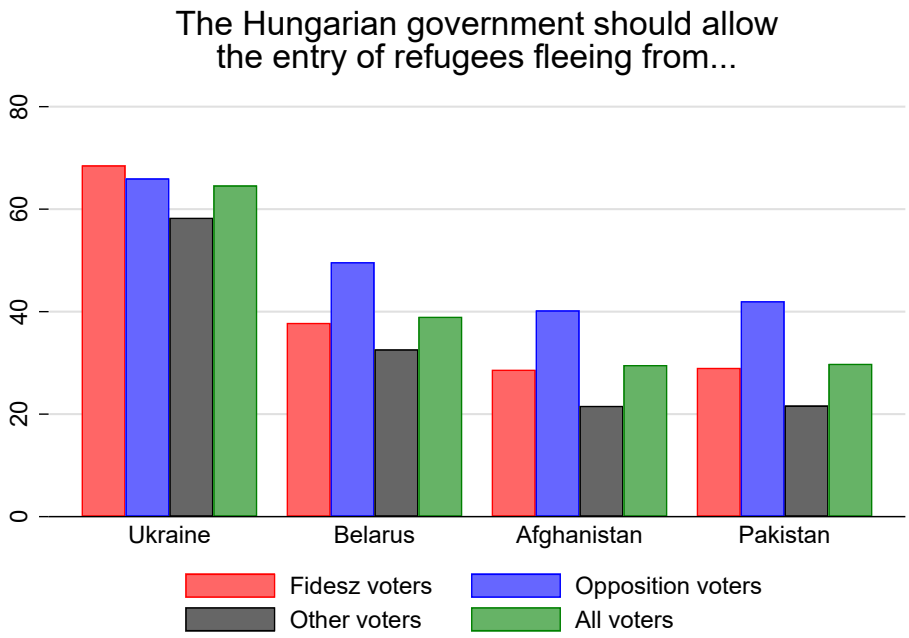

Figure 6: Public Opinion towards Refugees by Source Country and by Party, April 2022

the Fidesz voter dummy in Equation A2). To test the robustness of our estimates, panels include different sets of control variables (as in Table A16). Figure 7 reveals that Fidesz voters (relative to non-Fidesz voters) are more open – by 3.1-4.5 points on a 100-point scale, depending on the exact specification – for refugees fleeing from Ukraine, while Fidesz voters' attitude towards refugees from the other three source countries are always more negative (although insignificant).

In the April 2022 survey, we included four additional questions designed to measure the importance of various skills or civilizational characteristics in shaping Hungarian public opinion. This allows us to disentangle among the three dimensions of civilizational characteristics—race, religion, and values—that we previously treated as different manifestations of the same latent concept. To probe more deeply into how culture and its different manifestations affect respondents' opinion on migrants, we included an experimental treatment within one of these questions, to compare the importance of two

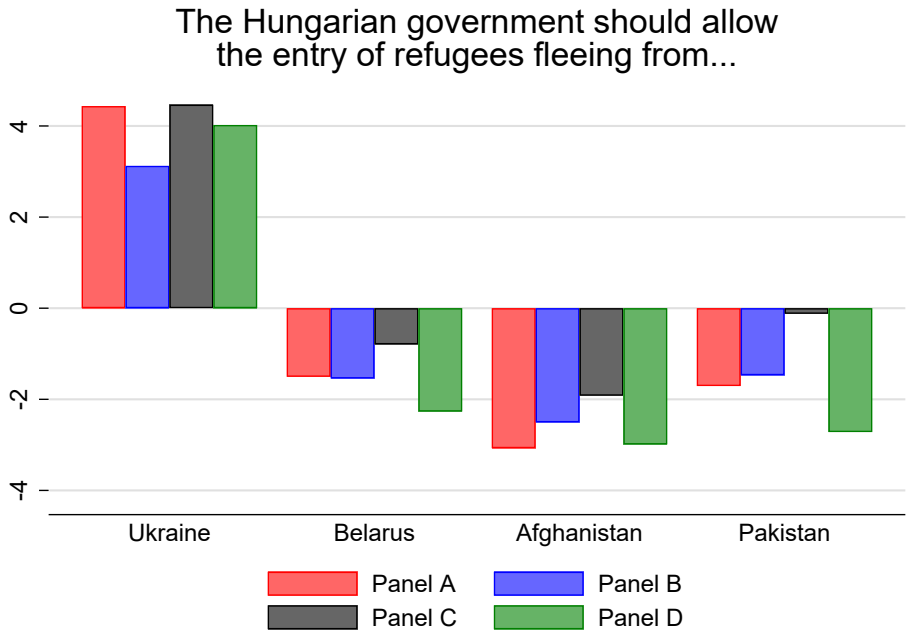

Figure 7: The Relative Support of Fidesz Voters (to non-Fidesz Voters) Towards Refugees from Different Source Countries (Estimated Coefficients), April 2022

Note: The figure visualizes the magnitude of the estimated parameters for the effect of individuals' partisanship on their attitudes for refugees from different source countries. Control variables included as explained in Appendix K and results are weighted.

manifestations of culture: values and race. This randomization allows us to test whether racial *versus* values-based explanations for support for refugees are distinct from one another. The wording of the questions was *"How important should it be for refugees to have good educational qualifications/work skills that Hungary needs/ having the same values as Hungarians do/arriving from a country with white European heritage; and being Christian?"*[32]

First, we test whether or not asking about the importance of white European heritage or common values with Hungarians affects respondents' views (see Table 3). We find

[32]Possible answers ranged on a scale of 1-4 (with 1 being "not at all important", and 4 being "very important"), which we again transform to a scale of 0-100 for the sake of comparability. The third and fourth of these options were assigned randomly, so we have a total of four questions with five outcomes. Table A11 in Appendix G lists the questions used to capture subjects' opinion on the importance of different cultural, educational and religious background of immigrants, with italics highlighting the randomized part of questions, while Table A12 provides descriptive evidence for the successful randomization.

no difference in the distribution of responses based on which of these questions we ask: $\chi^2(3) = 5.7, p = 0.13$.[33]

	White European	Same values	Total
Not important	10.77	9.76	10.24
Somewhat important	29.90	26.79	28.25
Important	29.74	36.82	33.50
Very important	29.58	26.63	28.01
Observations	488	526	1014

Notes: This table compares the distribution of responses to a question about the importance of refugees have a specific characteristic, where two options were assigned randomly to respondents: arriving from a country with white European heritage *versus* having the same values as Hungarians. Responses of "Don't know/refuse to answer" are excluded. The table shows the weighted distribution across the share of the responses.

Table 3: Experimental results comparing race and values, April 2022

This is evidence that race and values are indistinguishable from one another as explanations for Hungarian public opinion on refugees. Treating each experimental group as its own question, we then compare them to the importance of refugees being Christian, asked of all respondents (see Table 4). We find that among Hungarian respondents, views about the importance of the three civilizational characteristics that we have identified are strongly related to one another, but views about race and values are more closely aligned with one another than they are with views about religion.

Figure 8 examines how these views relate to respondents' party preferences, showing the average importance of these five characteristics across Fidesz, opposition, and other voters. We see lower importance attributed to Christianity than to race and values, a conclusion that holds across parties. Figure 8 also indicates that Fidesz voters' opinions about the importance of the necessary work skills and education do not differ from non-Fidesz voters' opinion. But Fidesz voters have a much stronger preference for immigrants with the same values as Hungarians, who come from a country with white European

[33]The null hypothesis is that the distributions of the two responses are identical, thus, with a p-value of 0.13, we fail to reject this hypothesis.

Panel A: Christian and White Heritage

	Not	Some	Important	Very	Total
Not important	35.26	6.21	0	1.38	10.80
Somewhat important	40.62	53.64	10.06	4.87	29.74
Important	16.23	23.11	65.16	10.07	29.81
Very important	7.89	17.04	24.78	83.69	29.65
Observations	108	154	127	98	487
$\chi^2(9) = 354.8, p < 0.001$					

Panel B: Christian and Same Values

	Not	Some	Important	Very	Total
Not important	44.36	3.17	0	1.38	9.80
Somewhat important	25.54	54.53	4.85	5.30	26.82
Important	21.53	31.22	70.58	6.71	36.88
Very important	8.57	11.09	24.58	86.62	26.51
Observations	99	189	148	87	523
$\chi^2(9) = 463.9, p < 0.001$					

Notes: The panels compare the distribution of responses of the importance of refugees being Christian (column variable) with the importance of coming from a country with a white heritage or the same values as Hungarians (row variables). Responses of "Don't know/refuse to answer" are excluded. Columns of the table show the weighted distributions across the share of the responses. Figure A4 shows the distribution of responses for Panel A, while Figure A5 presents the distribution for Panel B.

Table 4: Race, values, and religion compared, April 2022

heritage, and who are Christian. These results also hold in a multivariate context.[34]

Finally, we also investigate how ethnicity affects mass public opinion (and how this differs across individuals' partisanship). To this end, we added the following question to our April 2022 survey: *"Should Hungary welcome immigrants from these ethnic backgrounds, so long as they are entering the country legally and have no record of criminal activity?"*, with seven different ethnicities: Hungarian, German, Russian, Chinese, Arab, Piresian and Piresistani. The last two of these—Piresians and Piresistani—are fictional ethnic groups; we include them in order to measure the respondents' general hostility towards truly unknown people. Possible answers were on a 4-point Likert scale, with 1 corresponding

[34]See the estimated equations in Appendix L and the regression outputs in Table A17.

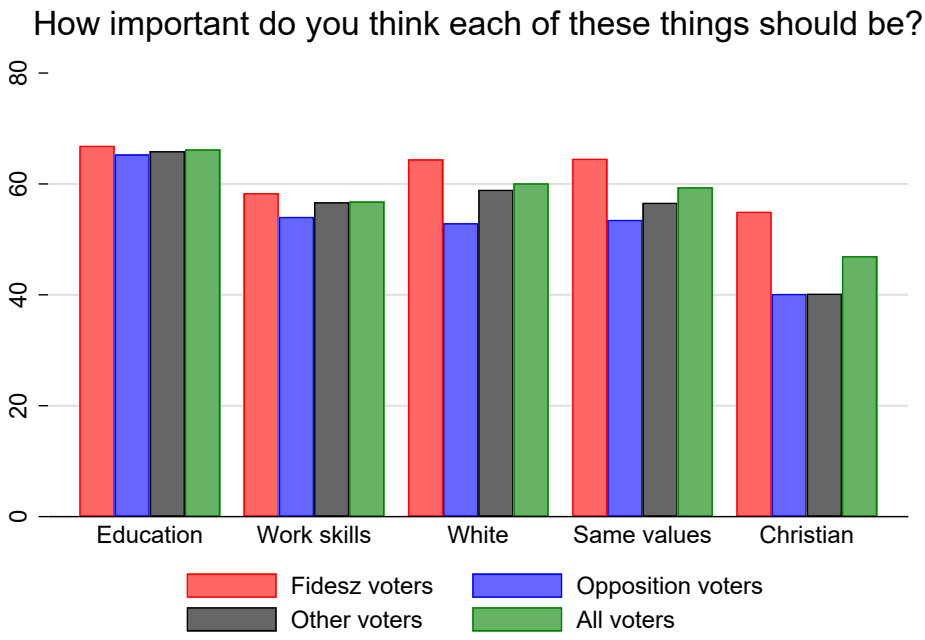

Figure 8: The Importance of Immigrants' Civilizational Characteristics and Various Skills by Party, April 2022

to "should not at all be welcome", and 4 to "should be welcome".[35]

Figure 9 shows the changing altitudes of Hungarians across immigrants' ethnicity by partisanship. Hungarians in general are very welcoming towards ethnic Hungarians and German immigrants. They are, however, rather opposed to Russians and Chinese, and mostly hostile to Arabs, Piresians, and Piresistani. Fidesz voters are more welcoming the ethnic Hungarian immigrants—who have the same civilizational characteristics by definition—than any other groups of voters and they have similar views as other voter groups towards Germans, Russians, Chinese and even Piresians, and are only more hostile (especially if we compare them with the opposition voters) towards the Arabs and the

[35]A similar question about "Piresians" was asked multiple times in previous TÁRKI survey waves over the past two decades. "Piresistani" is our invention: their ethnicity should also be unknown for the respondents, but their name sounds even less Christian than "Piresians." We note that we randomized these two questions so that a random half of our sample obtained the question with Piresians, and the other half obtained the Piresistani. Again, we transform the 4-point Likert scale to a scale of 0-100. Table A13 in Appendix H lists the questions in English and in Hungarian, while Table A14 shows that randomization was successful.

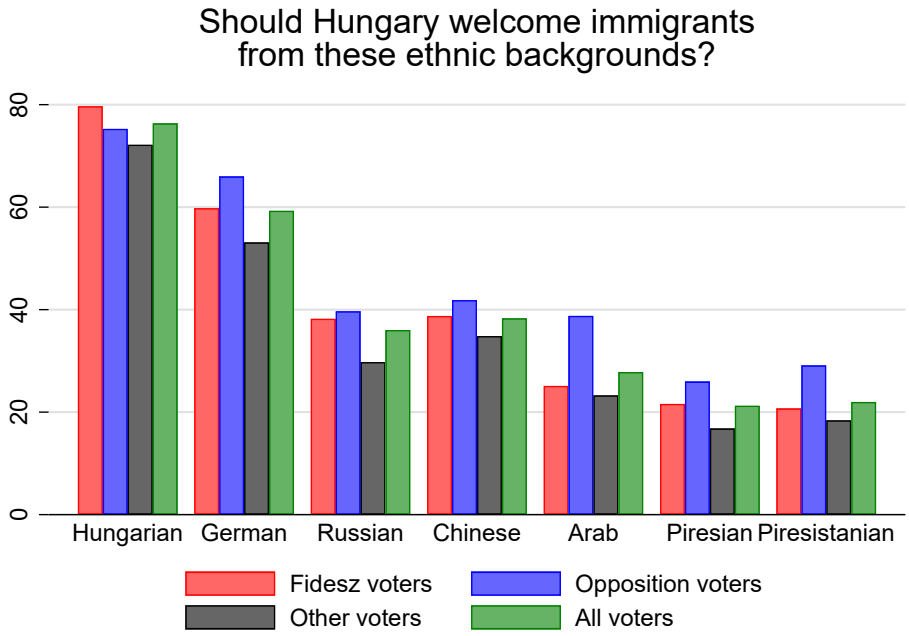

Figure 9: The Importance of Different Ethnic Background of Immigrants by Partisanship, April 2022

Piresistani. Again, these findings hold in a multivariate context.[36]

5.3 Gender and Religion: Additional Results from November 2022

As noted above, nearly all results using April 2022 data are substantively identical when using November 2022 data. There are two notable exceptions. First, our November survey contained a new item designed to adjudicate how the anticipated gender composition of refugees affects Hungarian public opinion. Second, the relationship between religion and refugee support differs dramatically between April and November. We discuss these two findings in turn.

In addition to framing refugees with reference to their civilizational characteristics, Orbán has also noted repeatedly that arriving Ukrainians are mainly women and children,

[36]See the estimated equation in Appendix M and the regression outputs in Table A18.

while refugees coming from Africa, the Middle East, and South Asia were young men. He argued that *"everyone can see the difference between the frightened women fleeing from the fighting in our neighbouring country with their bags and children, and the migrants from thousands of kilometres away besieging our borders. Hungary helps refugees, but continues to reject migration."*[37] Indeed, in 2015, Orbán claimed that 80% of immigrants are male and that *"they [male immigrants] look like an army rather than a group of refugees... even if other European countries deal with their demographic issue with allowing in young, warrior-like males, we cannot accept this..."*.[38]

Thus, a natural concern is that our results may be driven by the Hungarian government's framing of the gender composition of Ukrainian refugees.[39] If true, Hungarians are more welcoming of Ukrainian refugees than Afghan refugees because they assume that Ukrainian refugees are mostly women and children, whereas they assume that Afghan refugees are young men.

To address this concern, we designed another survey experiment in the November wave that asked respondents about their receptivity to *male* versus *female and children* refugees fleeing from *Afghanistan* versus from *Ukraine*.[40] We predict refugee attitudes as a function of refugee gender/age (males vs females/children) and the source country of refugees (Ukraine vs Afghanistan) using the following specification

$$Support_i = \alpha + \beta Female_i + \gamma Europe_i + \delta(Europe_i \times Female_i) + \omega X_i + \varepsilon_i, \quad (3)$$

[37] https://2015-2022.miniszterelnok.hu/orban-viktor-unnepi-beszede-az-1848-49-evi-forradalom-es-szabadsagharc-174-evfordulojan/

[38] https://hirado.hu/2015/10/02/interju-a-miniszterelnokkel-itt-hallgathatja-eloben

[39] Appendix Y breaks down refugees and Ukrainians with TP status staying in Hungary by their age and gender. The sheer number of accepted refugees (male and female alike) in Hungary were very low during the first refugee crisis and this rules out the concern that our results are driven by Hungarians' personal encounters with male refugees (Tables A30 and A31). It is, however, true that majority of the Ukrainians with TP status are female (66%) (Table A33).

[40] The question was worded as follows: *"To what extent do you agree or disagree with the following statement? The Hungarian government should allow the entry of [adult men]/[adult women and children] fleeing conflict in [Ukraine/ Afghanistan]"*?

where $Support$ measures support for admitting refugees, *Europe* takes the value of 1 for the survey question comparing Ukraine and 0 for Afghanistan, *Female* takes the value of 1 for respondents assigned female and children refugees and 0 for male refugees, and ϵ_i is the error term. In these regressions, X_i captures respondents' socio-demographic characteristics, their party preferences, and religiosity.

	Dependent variable: welcoming refugees (0-100 scale)					
	Without religiosity		With relig. identity		With relig. practice	
Female refugee	13.77***	11.30***	13.47***	10.68***	13.41***	10.94***
Ukrainian refugee	17.93***	15.54***	18.47***	15.78***	17.92***	15.53***
Female x Ukrainian	..	5.02	..	5.68	..	5.03
Fidesz	0.51	0.37	-0.07	-0.22	0.12	-0.04
Very religious	..	..	4.50	4.40	..	..
Somewhat rel	..	..	10.22***	10.33***	..	..
Freq serv part	..	..	..	..	5.03	5.16
Occ serv part	..	..	..	..	4.46	4.38
Observations	984	984	983	983	982	982

Notes: The dependent variable is welcoming refugees on a 0-100 scale. *, ** and *** denote significance at 10%, 5% and 1% level, respectively.

Table 5: Regression results of the role of refugee gender and source country on public opinion towards refugees.

Table 5 indicates that Hungarian respondents are significantly more welcoming towards women and children than men (a difference of 11-14 points on a 0-100 scale). But as shown in Figure 10, Hungarians are still more receptive to Ukrainians, revealing the continued importance of civilizational characteristics.

Turning now to religion, we observe a meaningful difference between April 2022 and November 2022 in how religious participation relates to refugee support.[41] To put these differences in context, we collected historical data on the anti-immigrant sentiments of

[41]Tables A16, A17 and A18 in Appendices K, L and M show that in April 2022, individual service participation did not play a significant role in anti-immigrant sentiments towards refugees with different skills and characteristics. By November, this changed dramatically: more frequent service participants were significantly more supportive towards any types of refugees, as can be seen from Tables A23, A26 and A27 of Appendix U.

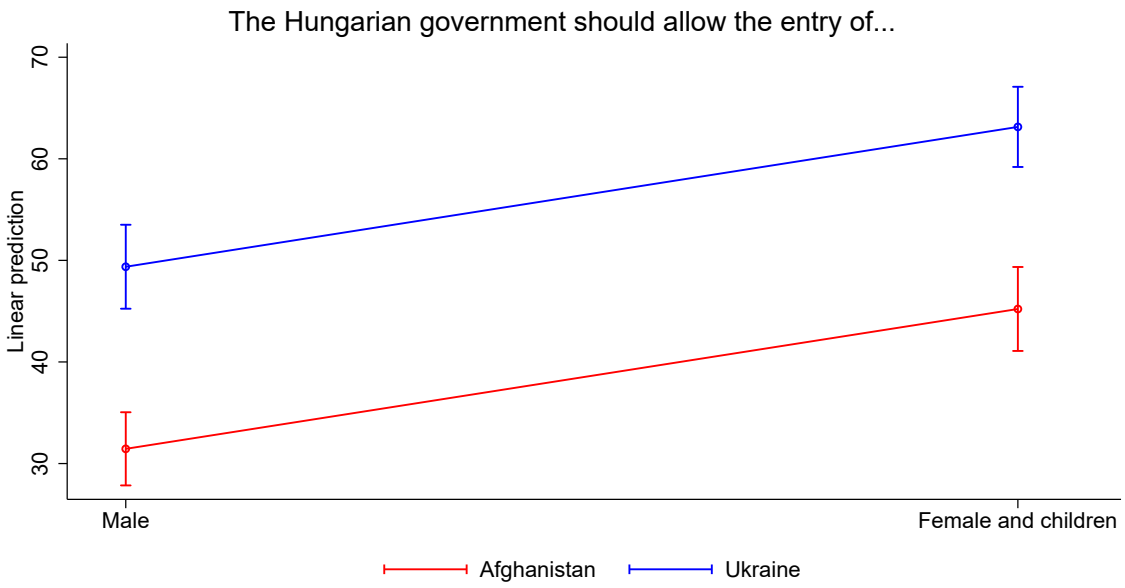

Figure 10: Predicted Support for Refugees by Source Country and by Gender, November 2022

various religious and non-religious groups from the first half of the 2010s, i.e. from a period when immigration was not an important or salient issue. Figure 11 shows the proportion of respondents who say that no immigrants should be allowed to Hungary, by the frequency of service participation, in ten survey waves between 2011 and 2022.[42]

Prior to 2015, frequent religious participation is associated with lower opposition to admitting refugees. As anti-refugee sentiment increased in 2016 and afterwards, differences in refugee support generally disappeared, suggesting that religious Hungarians were particularly receptive to rhetoric about civilizational characteristics. April 2022 saw the dramatic drop in opposition to refugees that we identified previously. But by November 2022, the rise in anti-refugee sentiments was much larger among those who never participated in religious services than among religious participants.[43]

To investigate the sources of the November 2022 changes, we model support for

[42] All survey were made by TÁRKI, and the wording of the question was exactly the same.

[43] This trend also holds for changes in public opinion towards refugees by source country (Figure A26) and by ethnicity (Figure A27).

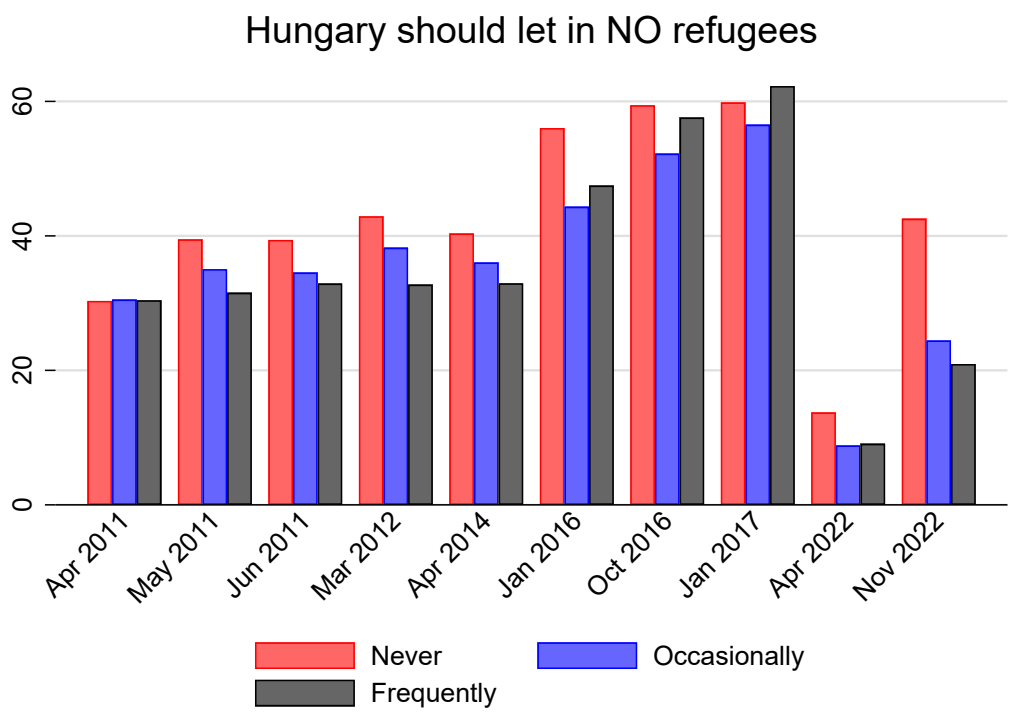

Figure 11: Opposition to Refugees by Religious Service Participation, 2011–2022

refugees as a function of the interaction between individual religiosity and survey wave.[44] Figure 12 predicts the probabilities that respondents oppose the admission of all refugees, and shows that even when we control for individual's socio-demographic characteristics, religious service participants were generally less opposed to refugees prior to the the first refugee crisis. We conclude that Russia's invasion of Ukraine generated strong support for refugees in its immediate aftermath, over time the relationship between religion and refugee support in Hungary has returned to its pre-crisis baseline pattern (see also Kustov, Laaker, and Reller 2021).

[44]Our specific model is Equation (A7) in Appendix V.

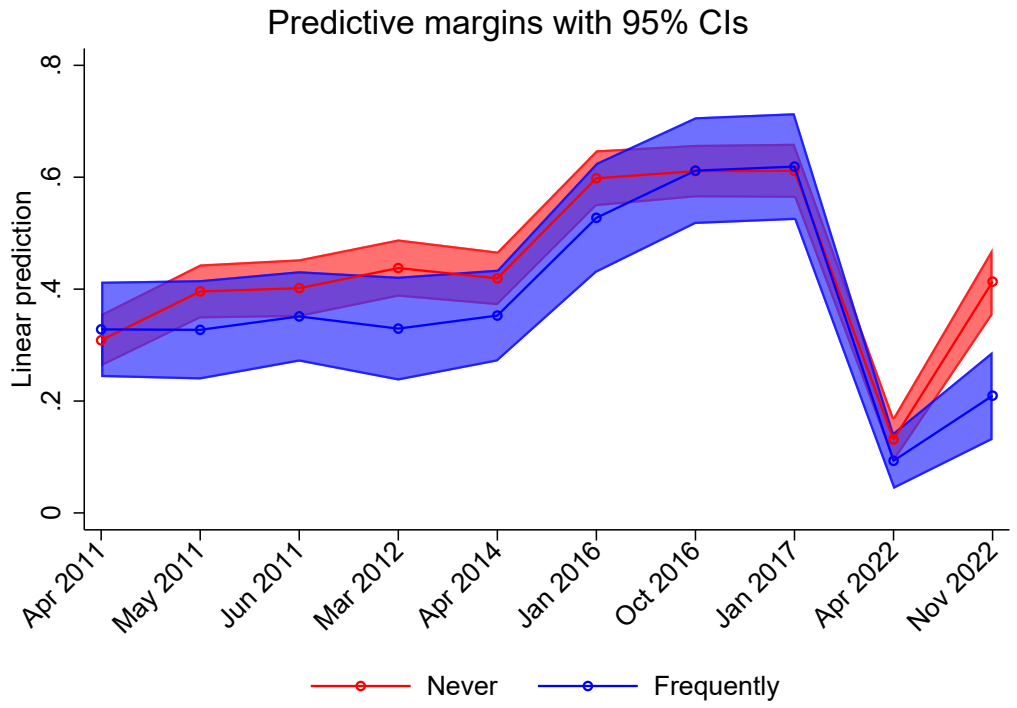

Figure 12: Opposition to Refugees by Religious Service Participation, 2011–2022

Note: The figure shows the predicted margins of responses among frequent religious service participants and among those who never participate in religious services (we estimate Equation (A7)). The dependent variable is a dummy indicating that a respondent is opposed to admitting any refugees. Control variables are included, results are weighted.

6 Contextual Factors and Refugee Support

In this section, we complement our individual-level results with additional analyses that incorporate information about respondents' local environments. This extends our argument about civilizational factors to a different level of analysis, to examine how factors such as the local strength of Fidesz and local demographic composition shape respondents' views. These analyses also allow us to test whether geographic factors or local economic conditions explain support for refugees, giving us further insights into the correlates of refugee support.

Before proceeding, we note that none of the analyses in this section overturn the

substantive conclusions we have drawn in previous sections. Although we will show that respondents' local environments explain additional variation in refugee support, our argument that civilizational characteristics explain the sharp increase in support for Ukrainian refugees in 2022 remains unchanged, as do our empirical findings about the individual-level predictors of public opinion towards refugees across survey waves.

We study the contextual determinants of public opinion by merging our April and November 2022 surveys with settlement-level data compiled from the Hungarian Central Statistical Office. Settlements are the smallest administrative units in the country; there are a total of 3177 settlements in Hungary, including the 23 districts of Budapest. In our survey, data are drawn from 81 settlements and 23 districts from Budapest in April and 82 settlements and 23 districts in November (see the map of survey respondents across Hungarian settlements in Appendix R). We collect data on local demographic factors like Christian population share, Roma population share, and income per capita, as well as other local factors such as Fidesz vote share and the distance to Hungary's border with Serbia and with Ukraine.[45]

Adopting a multilevel modeling approach (Steenbergen and Jones 2002), we begin with a simple variance decomposition (as specified in Equation A5 in Appendix T) to estimate the relative importance of settlement-level factors in explaining individual attitudes, and then model contextual factors directly using

$$\begin{aligned} y_{ij} &= \alpha_j + X'_{ij}\beta + \varepsilon_{ij} \\ \alpha_j &= \alpha_{00} + Z'_j\alpha_{01} + \alpha_{0j}. \end{aligned} \tag{4}$$

where y_{ij} is the attitudes toward immigration (on a 0-100 scale), Z'_j is a vector of settlement-level explanatory variables and X'_{ij} is a vector of individual explanatory variables, α_{00} is

[45]We also included the share of Catholics and Protestants separately, net income per capita (instead of gross), and unemployment rate, but all of these turned out to be insignificant in all specifications so we do not report them here.

the average level of support, α_{0j} is the settlement-level random error term with variance σ_α^2 and ε_{ij} is the random error term at the individual level.

Our results appear in Tables 6–9.

	Source country			
	Ukraine	Belarus	Afghanistan	Pakistan
Panel A: Variance decomposition				
Mean (α_{00})	65.87	40.19	30.85	32.48
Variance	669.74	831.83	833.18	766.09
Between variance (%)	38%	44%	43%	49%
Panel B: Simple MLM model				
Distance SRB	-0.0178	-0.0182	-0.0851**	-0.0271
Christian share	-22.83	-41.11**	-30.08*	-38.65**
Roma share	48.53	17.12	55.59	41.38
Income pc	1.67	0.70	6.71	10.54**
Individual controls	Yes	Yes	Yes	Yes
Explained between variance	14.4%	15.6%	25.6%	27.5%

Table 6: Variance Decomposition and MLM Estimation for Individuals' Attitude about Immigrants by Source Country, April 2022

	Source country			
	Ukraine	Belarus	Afghanistan	Pakistan
Panel A: Variance decomposition				
Mean (α_{00})	47.74	33.98	28.47	26.49
Variance	883.12	680.20	681.08	660.53
Between variance (%)	52%	46%	46%	46%
Panel B: Simple MLM model				
Distance SRB	-0.0440	-0.0672	-0.0867	-0.0248
Christian share	6.11	-11.27	-3.73	-11.21
Roma share	-95.01*	6.85	-61.78	-95.25**
Income pc	-15.94**	1.30	-0.11	-3.49
Fidesz vote share	-28.51	43.60	57.37	74.43**
Foreigner share	607.26	1115.18***	956.49***	1547.70***
Individual controls	Yes	Yes	Yes	Yes
Explained between variance	9.5%	20.8%	21.0%	21.7%

Table 7: Variance Decomposition and MLM Estimation for Individuals' Attitude about Immigrants by Source Country, November 2022

	Ethnicity						
	Eth. Hung.	German	Arab	Russian	Chinese	Piresian	Piresistani
Panel A: Variance decomposition							
Mean (α_{00})	76.81	59.72	28.97	38.48	40.29	24.71	22.89
Variance	583.74	946.59	852.13	953.70	993.77	871.25	742.08
Betw. var. (%)	37%	43%	32%	38%	44%	39%	41%
Panel B: Simple MLM model							
Distance SRB	-0.0034	0.0075	-0.0311	0.0548	0.0215	0.0704*	-0.0132
Christian share	-12.59	-28.31*	-24.80	-56.62***	-38.54**	-62.37***	-20.01
Roma share	-11.80	-70.07*	-19.22	-56.42	-44.80	-55.84	-16.44
Income pc	1.68	-5.99	-4.35	-9.66	-1.41	-5.81	5.32
Indiv. controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Expl. betw. var.	7.8%	9.6%	14.1%	17.8%	7.8%	19.7%	14.7%

Table 8: Variance Decomposition and MLM Estimation for Individuals' Attitude about Immigrants with Different Ethnic Background, April 2022

	Ethnicity						
	Eth. Hung.	German	Arab	Russian	Chinese	Piresian	Piresistani
Panel A: Variance decomposition							
Mean (α_{00})	68.54	52.78	21.08	31.33	33.92	19.40	21.09
Variance	788.72	951.13	756.03	919.61	916.39	783.33	891.51
Betw. var. (%)	47%	41%	37%	47%	49%	49%	54%
Panel B: Simple MLM model							
Distance SRB	-0.1305***	-0.0865*	-0.0626	-0.0887	-0.0758	-0.0646	-0.0241
Christian share	6.00	0.25	-14.11	4.17	-2.46	-24.16	-31.12
Roma share	31.14	-123.31**	-129.01***	-75.01	-155.77***	-122.92**	-160.45**
Income pc	12.58**	-17.25**	-17.31***	-10.53	-12.32*	-15.70**	-15.83*
Fidesz vote share	3.02	-11.47	76.03**	50.81	76.73**	42.00	158.84***
Foreigner share	-626	71	1107***	1461***	1462***	1002***	2130***
Indiv. controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Expl. betw. var.	22.3%	14.5%	12.5%	11.8%	15.9%	11.5%	20.9%

Table 9: Variance Decomposition and MLM Estimation for Individuals' Attitude about Immigrants with Different Ethnic Background, November 2022

Our first result is that settlement-level factors matter: a substantial proportion (32-54%) of total variation is due to variation between settlements (see last rows of each Panel A). Approximately 8-28% of this between-settlement variation is explained by the settlement-level explanatory variables that we included. We also find that, consistent with our

expectations, the settlement-level Christian population share is negatively correlated with support for non-Ukrainians (Table 6) and non-Hungarians (Table 8) in the April survey wave. By contrast, settlement-level Roma population share is negatively correlated with support for non-Ukrainians (Table 7) and non-Hungarians (Table 9) in November. We also find in November that respondents in settlements with a larger foreign population share are more welcoming of non-European refugees and immigrants.

Finally, in Appendix T we investigate whether the effect of residential exposure to religious majority is larger for religious individuals by allowing the effect of individual religiosity on attitudes towards immigrants to vary across settlements with different Christian share.[46] We find that settlement-level Christian population share explains anti-immigrant attitudes primarily among religious voters (Table A20 and Table A21).[47] Religion not only influences individual's anti-immigrant sentiments, but a religiously homogeneous context exerts stronger effect on religious individuals.[48] Table A20 and Table A21 show that the effect of settlement-level Christian population share on anti-immigrant attitudes is stronger for those supporting the incumbent government.

Although our main conclusions about the dramatic pro-refugee shift in Hungarian public opinion remain unchanged in the multilevel analysis, the results in this section further reveal how our argument about civilizational factors fares when examining individual public opinion in its local context. Respondents in settlements with large Christian majorities and large Roma populations are particularly opposed to non-European refugees, which is consistent with our argument about the primacy of civilizational factors for explaining refugee opinion. Further research can explore these and other dimensions of

[46] We estimate Equation A6 as specified in Appendix T. We only do this analysis for the April wave, when the settlement-level share of Christians is strongly significant.

[47] This heterogeneous effect is significant for attitudes towards immigrants with different ethic background except towards Ukrainians and ethnic Hungarians.

[48] Here, in asking how the effect of individual-level religiosity differs across religious settlements, we tested three aspects of individual religiosity: identity, practice and affiliation. All measures suggest similar results.

local context in shaping public opinion towards immigrants and refugees.

7 Conclusion

This paper has used new survey data from Hungary to study how the Ukrainian refugee crisis of 2022 has shaped public opinion towards refugees in a highly illiberal political environment in which anti-migrant rhetoric has been a mainstay of political discourse for over a decade. The 2022 crisis produced an overwhelming shift in public opinion in favor of accepting refugees in Hungary, countering a trend of growing anti-refugee public opinion. This finding is substantively important on its own, as it reveals the power of external events to shape public opinion on refugees in profound ways.

But our main finding is that this shift in public opinion is specifically driven by reactions to Ukrainian refugees, and does not apply generally. The Hungarian mass public remains opposed to refugees entering from countries that are outside of Europe, even those facing violent conflict that drives their citizens to seek refuge abroad. Ours is the most comprehensive quantitative evidence available that Europe's alleged "refugee hypocrisy" (Traub 2022) is widely felt among the mass public. We have also documented that civilizational factors are particularly important predictors of attitudes towards migrants among Fidesz supporters. Looking at the interaction between individual and contextual factors reveals that in general, the negative relationship between settlement-level religiosity and support for non-Ukrainian refugees and non-Hungarian immigrants is particularly strong among religious respondents and Fidesz supporters.

Future research may examine these civilizational factors in more depth. When Hungarians are asked about the desirable characteristics of refugees entering their country, views on race, values, and religion are all closely aligned with one another. In addition to exploring how these patterns vary across Europe, future research may build on these

results—following the approach of Helbling and Traunmüller (2020) and/or Adida, Lo, and Platas (2019)—to distinguish among the various facets of civilizational conflict in contemporary European politics.

Scholars of public opinion in competitive authoritarian regimes can build on our findings to characterize how public opinion shapes—and is shaped by—Fidesz's governing strategy. The Ukrainian refugee crisis of 2022 shortly preceded legislative elections that returned Fidesz to power with a strong majority, meaning that a highly anti-immigrant party won an election in the midst of a serious refugee crisis. We have shown that Fidesz voters did indeed follow other Hungarians in becoming more open to refugees in the wake of the 2022 refugee crisis, but our analysis of the civilizational foundations of Hungarian public opinion towards refugees is consistent with the Fidesz government's emphasis on European civilization as defined in racial and religious terms. These results from Hungary suggest that even as the war in Ukraine has upended politics as usual in Central Europe, it may not have fundamentally changed the logic of illiberal politics in Europe's authoritarian regimes.

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The Ukrainian Refugee Crisis and the Politics of Public Opinion: Evidence from Hungary

Supplementary Material

A Appendix: Temporary Protection versus Refugees

Temporary protection status (TPS): In February 2022, the EU introduced (for the first time) the temporary protection as an exceptional measure to provide immediate protection to people fleeing the war in Ukraine. The European Commission identified a clear risk that "*the asylum systems of EU countries would be unable to process applications within the deadlines set. This would negatively affect the efficiency of national asylum processes and adversely affect the rights of people applying for international protection*".[49] Thus, the introduction of the temporary protection status – by definition – replaced the refugee status for those fleeing from Ukraine. The temporary protection status provides free health care, education, right to reside in Hungary, state-provided accommodation and financial assistance. The TP status is the best available option for people fleeing Ukraine, as the administrative procedure itself is fast and the rights are granted to the person immediately upon application (in contrast to the lengthy refugee status procedure). Indeed, recent data from Eurostat show that no-one from Ukraine sought asylum in Hungary after the outbreak of the war.[50] [51]

Asylum-seeker: Asylum is a form of protection provided by a foreign state to an individual whose own country of origin does not provide protection. All people have the right to seek asylum, to ask for the protection of a country if they cannot return to their own country of origin or residence if they fear persecution, harm due to their race, religion, nationality, political opinion or because they belong to a certain social group.[52] In Hungary, if an asylum-seeker has successfully registered the asylum application, the immigration authority examines the application (2-3 months but often longer) and the asylum-seeker will receive one of the four decisions:

[49] This statement is available here.

[50] Data are from https://ec.europa.eu/eurostat/web/migration-asylum/asylum/database?node_code=migr_asytp.

[51] Temporary protection must be requested. Once a Ukrainian applied for the TP status, she or he is entitled for a humanitarian residence permit. The authorities are required to make a decision within 55 days.

[52] The definition is available at https://help.unhcr.org/hungary/asylum/.

1. Refugee status[53]

2. Subsidiary protection [54]

3. Humanitarian protection/tolerated status[55]

4. Rejected asylum application

While we acknowledge the differences between the temporary protected status of the Ukrainian and the refugee/subsidy protection status of Afghans and the others fleeing conflict, we argue that 1) most Hungarians personally never encountered anyone fleeing war (at least not for a long term) because only a few of them have stayed in Hungary; 2) Hungarian public opinion is unlikely to be driven by any meaningful differences in the social costs associated with having people with refugee *versus* with temporary protection status.

First, the small number of people with TP status in Hungary (see in Tables A2 and A3) underpins our argument that Hungarians' attitude are not primarily affected by individual contact, but the refugee crisis is a contextual factor that affects public opinion responses in the aggregate. Table A2 shows the number of granted temporary protected status, the number of application for TP status (that is a good measure for the intention to stay in the country) and the total number of Ukrainian crossing the Hungarian border by months. Table A2 reveals that the majority of the Ukrainians did not stay in Hungary (e.g.: a month before our survey was recorded, only 1.24% of the Ukrainians crossing the border applied for the temporary protected status with 0.28% of them receiving the TP status, while 3.7%

[53]The status falls under mandatory review every three years; the status provides the right to have an ID card, an address card and work permit. Refugees can bring their families to Hungary, and children can go to school.

[54]The status falls under mandatory review every three years. The main difference between this status and refugee status is that people with subsidiary protection can only bring their family to Hungary under special circumstances defined by the law.

[55]This is a one year status, people with this status can work in accordance with the law regulating the work permit of third-country nationals, while they cannot bring their families to Hungary.

of the Ukrainians entering the country applied for TP status and 2.29% of them received it in the month of our survey).[56]

It is equally unlikely that many Hungarians encountered a refugee during the first refugee crisis or in its aftermath. Table A1 shows data about the number of asylum seekers and the number of positive decisions between 2013 and 2021 (including the first refugee crisis).[57] The first column clearly shows that the number of applications skyrocketed in 2014-2016, with a peak in 2015. Nonetheless, only 300-500 asylum seekers received positive decision during this time period (with the exception of 2017, when there were 1290 positive decisions).

Year	Applications	Decision	Rejected	Accepted
2013	18 895	4 540	4 180	360
2014	42 775	5 445	4 935	510
2015	177 135	3 340	2 915	425
2016	29 430	5 105	4 675	425
2017	3 390	4 170	2 880	1 290
2018	670	960	590	365
2019	500	710	650	60
2020	115	475	345	130
2021	40	60	20	40

Source: Eurostat data on first instance decisions on applications and on asylum applicants

Table A1: Number of Asylum Applications and Accepted Refugees 2013–2021

In 2016, only 425 people received granted protection (154 refugee and 271 subsidiary protection status) (see Table A3), even though majority of asylum-seekers (67 %) came from war- and terror-torn countries, including 17 % from Syria, 38 % from Afghanistan, 12 %

[56]Those who already applied for temporary protection, but not yet received it have a humanitarian residence permit (for 60 days at most) that already grants some rights for the Ukrainians. Nonetheless, we assume that most Ukrainians who are planning to stay in Hungary apply for the TP status as quickly as possible as the humanitarian residence permit already grants some rights to them and decision on temporary protection status is relatively quick (no longer than 55 days). While there might be some Ukrainian who entered the country and did not apply for TP status yet with temporary residence permit (so-called 'ideiglenes tartózkodásra jogosító igazolás'), they are most likely traveling through the country and will definitely not stay in Hungary for a long time.

[57]The difference between applications and decisions is explained by the large number of withdrawn applications.

from Iraq and 1 % from Somalia.[58] Similarly in 2017, 1216 asylum-seekers were granted protection (106 refugee and 1110 subsidiary protection status) while 2880 applications were rejected. Table A4 reveals that recognition rates for those arriving from war- and terror-torn countries remain low. In 2017, the majority of asylum-seekers (83 %) came from war- and terror-torn countries, including 17% from Syria, 42% from Afghanistan, 24% from Iraq and 0,3% from Somalia.[59]

Not only very few people received protection (either a refugee status or a subsidiary protected status), but the newly introduced measures of the government made it very difficult to even seek asylum in Hungary. For instance, in July 2016, Hungary introduced a law that allows police officers to send back people detained within eight kilometres (five miles) of its southern frontier to the Serbian side of the border fence. As no more than 15 asylum-seekers were allowed to enter the transit zones per day, those pushed back are stranded for several days or weeks in the transit zones. Later in 2017, the daily limit of people admitted to enter the transit zone was reduced to 5-5 people during working days.

It comes as no surprise, that as of the beginning of 2022 (few months before our survey was recorded), very few people lived in Hungary with protection status; there were 1435 people with refugee, 1521 people with subsidiary protection and 119 people with humanitarian statuses.[60]

Second, Table A5 shows the right of people with refugee (and subsidiary protection status) and with temporary protection status that might be a rough proxy for social costs associated with both statuses (we, however, acknowledge that education, healthcare and shelter are not the only costs associated with these statuses). The table shows that people

[58]The report is available at: https://helsinki.hu/wp-content/uploads/HHC-Hungary-asylum-figures-1-January-2017.pdf.To put these number in context, Germany took in 890000 asylum-seekers in 2015 and 280000 in 2016.

[59]The report is available at: https://helsinki.hu/wp-content/uploads/HHC-Hungary-asylum-figures-1-January-2018.pdf.

[60]Data is available at: http://www.bmbah.huindex.php?option=com_k2&viewitem&layoutitem&id177&Itemid1232&lar

with both statuses have roughly the same rights and thus granting these statuses implies the same social costs (if anything, people from Ukraine might impose higher social cost), suggesting that our results are not likely to be driven by public's fear of high social costs of refugees.[61]

	2022					
	March	April	May	June	July	Aug
No of Granted TPS	1 440	7 075	6 935	5 650	2 795	1 555
No of TPS applications	6 379	11 579	4 697	2 890	1 781	1 324
Ukr. from Ukraine	27 6613	151 026	167 484	180 529	202 733	223 697
Ukr. from Romania	236 551	158 426	163 222	156 197	186 564	273 685
Total number of Ukr.	513 164	309 452	330 706	336 726	389 297	497 382

Notes: Data are from UNHCR and from the National Directorate-General for Aliens Policing. TPS is temporary protected status. "Ukr. from Ukraine/Romania" is the number of Ukrainian crossing the border from Ukraine and from Romania respectively.

Table A2: Number of Ukrainians Crossing Border and the Number of Granted Temporary Protected Status between March and August 2022

B Appendix: Summary Statistics – TÁRKI

[61] Ukrainians who already applied for TP status but have not received the status yet, are issued a humanitarian residence permit. While the authorities should make a decision within 55 days, Ukrainians with humanitarian residence permit have the right to: access Hungarian medical care; request state-provided accommodation; request free of charge translation of personal documents; work within Hungary without any special permit; schooling for children, preschools and day-care and 6 months of free meals for children; request discounted travel tickets. https://helsinki.hu/en/information-ukraine-stateless-recognized-refugees/

	2016			2017		
	Total Number	Asylum-seekers regist. in Hun.	Granted protection	Total Number	Asylum-seekers regist. in Hun.	Granted protection
Jan.	553	433	57	3 240	536	21
Feb.	2 398	2 175	57	3 399	433	13
Mar.	3 412	4 574	57	1 034	321	39
Apr.	3 946	5 812	57	191	205	28
May	3 244	4 752	12	837	247	82
Jun.	3 768	4 745	12	1 785	237	138
Jul.	4 968	1 688	38	1 735	238	123
Aug.	4 363	1 402	35	2 478	274	174
Sept.	2 506	1 118	27	2 244	234	187
Oct.	3 266	1 198	28	1 577	234	150
Nov.	2 365	728	18	2 050	228	120
Dec.	3 279	629	27	1 147	210	141
Total	38 219	29 432	425	21 717	3 397	1 216

Notes: Data are drawn from the reports of the Hungarian Helsinki Committee. "Total Number" are the number of people who crossed or tried to cross border (including blocked entries at the border fence; escorts to the external side of the border fence; irregular migrants apprehended). Granted protection includes granted refugee status and subsidiary protection status. For January – April 2016; May – June 2016; September – October 2016, only aggregated data are available for the number of granted applications. In these cases, monthly data are calculated from the aggregate number.

Table A3: Number of People Crossing Border and the Number of Granted Protected Status in 2016 and in 2017

Source Country	All in-merit decisions	Granted Protection	Refused Protection
Afghanistan	1 749	529 (20 RS, 509 SPS)	1 220
Iraq	688	178 (10 RS 168 SPS)	510
Somalia	15	12 (1 RS, 11 SPS)	3
Syria	957	384 (10 RS, 374 SPS)	573

Notes: Data are from the Hungarian Helsinki Committee.

Table A4: Number of People from War- and Terror-torn Countries and the Number of Granted Protection (Refugee Status (RS) and Subsidiary Protection Status (SPS)) in 2017

	Temporary protection	Refugee
Residency	The right to reside in Hungary until 4 March 2023	The right to reside for three years
Healthcare	Free	Free for 6 months
Education	Free	Free below the age of 21
Shelter	State-provided accommodation	Stay in the asylum reception facilities for 30 days
Financial support	HUF 22,800 per month per adult and HUF 13,700 per month per child until the start of a work contract	

Notes: Data are from UNHCR. People with subsidiary protection have the same rights, thus the social costs are the same, but they have no right to vote; they receive different travel document; they have access to citizenship after 8 years of residing in Hungary. Education refers to public education (nurseries, kindergartens, elementary and high schools).

Table A5: The Rights of People with Temporary Protection Status and with Refugee Status

	Omnibusz survey year and month					
	April 2014	January 2016	October 2016	January 2017	April 2022	November 2022
Fidesz supporter	31.25%	31.28%	32.80%	33.31%	45.50%	36.05%
	(46.38)	(46.39)	(46.97)	(47.16)	(49.82)	(48.04)
Female	53.37%	53.37%	53.37%	53.37%	53.37%	53.59%
	(49.91)	(49.91)	(49.91)	(49.91)	(49.91)	(49.89)
Primary education	50.99%	50.99%	50.99%	50.99%	50.99%	50.78%
	(50.02)	(50.02)	(50.02)	(50.02)	(50.02)	(50.02)
Secondary education	31.33%	31.33%	31.33%	31.33%	31.33%	32.58%
	(46.40)	(46.40)	(46.40)	(46.40)	(46.40)	(46.89)
Higher education	17.68%	17.68%	17.68%	17.68%	17.68%	16.64%
	(38.17)	(38.17)	(38.17)	(38.17)	(38.17)	(37.26)
Age	48.11	48.46	47.95	47.91	48.45	48.45
	(17.68)	(16.74)	(16.39)	(16.01)	(17.58)	(16.99)
Married	54.48%	49.77%	51.18%	46.98%	54.18%	56.65%
	(49.82)	(50.03)	(50.01)	(49.93)	(49.85)	(49.58)
Divorced	12.40%	14.98%	17.13%	16.05%	12.31%	13.24%
	(32.98)	(35.70)	(37.69)	(36.72)	(32.88)	(33.91)
Widowed	12.45%	12.57%	13.02%	13.72%	13.99%	11.77%
	(33.04)	(33.16)	(33.67)	(34.42)	(34.71)	(32.24)
Single	20.56%	21.37%	18.44%	22.53%	19.51%	18.33%
	(40.44)	(41.01)	(38.80)	(41.81)	(39.65)	(38.71)
Student	4.98%	3.14%	2.28%	2.42%	3.00%	0.97%
	(21.76)	(17.46)	(14.94)	(15.38)	(17.08)	(9.81)
Unemployed	7.43%	4.86%	3.70%	3.22%	2.44%	2.75%
	(26.24)	(21.51)	(18.89)	(17.66)	(15.45)	(16.37)
Retired	31.49%	29.43%	28.47%	27.02%	24.96%	24.13%
	(46.47)	(45.59)	(45.15)	(44.42)	(43.30)	(42.81)
Church attendance	15.57%	13.81%	12.23%	10.05%	14.58%	12.27%
	(36.27)	(34.52)	(32.79)	(30.07)	(35.30)	(32.82)
Very religious	14.61%	8.47%	9.36%	5.63%	10.71%	7.75%
	(35.34)	(27.85)	(29.13)	(23.06)	(30.94)	(26.74)

Notes: Data comes from TÁRKI Omnibusz surveys. Means are population weighted. Standard errors are in parentheses. Definition of variables are presented in Table A8.

Table A6: Summary Statistics (TÁRKI surveys)

C Appendix: Summary Statistics – ESS

	Survey year						
	2010	2012	2014	2016	2018	2020	2022
Fidesz supporter	35.25%	31.04%	23.71%	35.05%	30.64%	31.57%	45.48%
	(47.79)	(46.28)	(42.54)	(47.73)	(46.11)	(46.49)	(49.82)
Attitude*	41.60	44.13	40.24	34.75	39.37	40.75	43.57
	(20.92)	(21.17)	(20.18)	(21.67)	(20.14)	(19.98)	(18.08)
Female	53.36%	53.14%	53.13%	52.95%	52.87	62.94	53.36
	(49.90)	(49.91)	(49.92)	(49.93)	(49.93)	(48.31)	(49.91)
Primary education	53.73%	51.92%	53.55%	51.30%	48.05%	47.41%	50.99%
	(49.88)	(49.98)	(49.89)	(50.00)	(49.98)	(49.95)	(50.01)
Secondary education	32.27%	32.39%	29.74%	30.91%	33.11%	37.52%	31.33%
	(46.77)	(46.81)	(45.73)	(46.23)	(47.07)	(48.43)	(46.41)
Higher education	13.94%	15.40%	16.24%	17.48%	18.65%	14.51%	17.68%
	(34.65)	(36.11)	(36.89)	(37.99)	(38.96)	(35.23)	(38.17)
Age	46.39	46.65	47.72	48.05	48.64	50.55	48.45
	(18.68)	(18.57)	(18.91)	(18.82)	(19.03)	(18.64)	(17.58)
Married	47.05%	43.40%	46.34%	47.46%	44.38%	53.35%	54.18%
	(49.93)	(49.57)	(49.88)	(49.95)	(49.70)	(49.90)	(49.85)
Divorced	11.97%	13.20%	11.55%	9.50%	9.84%	9.12%	12.32%
	(32.47)	(33.86)	(31.97)	(29.33)	(29.79)	(28.80)	(32.88)
Widowed	11.22%	12.50%	12.39%	12.61%	12.72%	13.64%	13.99%
	(31.57)	(33.08)	(32.96)	(33.21)	(33.33)	(34.33)	(34.70)
Single	29.76%	30.91%	29.72%	30.43%	33.06%	23.90%	19.52%
	(45.73)	(46.22)	(45.71)	(46.03)	(47.06)	(42.66)	(39.65)
Student	9.07%	9.58%	8.42%	6.90%	8.11%	5.21%	3.00%
	(28.73)	(29.43)	(27.78)	(25.36)	(27.30)	(22.22)	(17.08)
Unemployed	6.92%	8.36%	4.36%	2.37%	2.44%	2.57%	2.44%
	(25.38)	(27.69)	(20.43)	(15.22)	(15.43)	(15.82)	(15.45)
Retired	30.48%	25.92%	26.59%	25.85%	25.55%	30.00%	24.96%
	(46.05)	(43.83)	(44.19)	(43.79)	(43.63)	(45.84)	(43.30)
Church attendance	17.25%	14.08%	14.78%	15.81%	16.34%	18.16%	14.58%
	(37.79)	(34.79)	(35.50)	(36.50)	(36.99)	(38.57)	(35.30)
Very religious	18.88%	14.14%	10.16%	12.94%	11.07%	14.78%	10.71%
	(39.15)	(34.85)	(30.22)	(33.57)	(31.38)	(35.50)	(30.94)

Notes: Data comes from ESS surveys (2010–2020) and TÁRKI Omnibusz survey (April 2022). Means are population weighted. Standard errors are in parentheses. Definition of variables are presented in Table A8. *Attitude variable is survey respondents' attitudes towards immigrants (on a 0-100 scale).

Table A7: Summary Statistics (ESS and TARKI surveys)

D Appendix: Variable Definition

Variables	Description
Fidesz supporter	Dummy equal to 1 if supported Fidesz–KDNP allience
Female	Dummy equal to 1 if individual is female
Primary education	Dummy equal to 1 if highest level of education is elementary school (általános iskola)
Secondary education	Dummy equal to 1 if highest level of education is high school (gimnázium) or vocational training school (szakmunkásképzö iskola) secondary school with matriculation (szakközépiskola)
Higher education	Dummy equal to 1 if highest level of education is a Bachelor's, Mater's or Doctoral degree
Age	Age in years
Married	Dummy equal to 1 if married
Divorced	Dummy equal to 1 if divorced
Widowed	Dummy equal to 1 if widowed
Single	Dummy equal to 1 if single
Student	Dummy equal to 1 if student
Unemployed	Dummy equal to 1 if unemployed
Retired	Dummy equal to 1 if retired
Church attendance	Dummy equal to 1 if participating in religious services at least once a month
Very religious	Dummy equal to 1 if being religious and following the teaching of the Bible

Table A8: Variable Definition for Data from TÁRKI and ESS Survey Waves

E Appendix: Analysis of Non-Response Rates – April and November 2022

It is important to think carefully about item non-response (that occurs when some measurements are present for a survey respondent, but at least one measure of interest is missing (Berinsky 2008)) and about the potential implications of these missing items on our results. Figure A1 shows the non-response rates to immigration questions in April and in November 2022, and it reveals that non-response rates to immigration questions decreased systematically from April to November.[62] For the questions on refugees from different source countries, non-response rate decreased to below 2% from the initial proportions of 3-7%.[63] Similarly, while non-response rate to immigrants' ethnicity question was around 4-5% in April, this proportion decreased to around 2% by November.[64]

Research has shown that *"do not know"* responses arise due to question wording, interviewer behavior, and respondent characteristics (Berinsky 2008). It would be, therefore, a mistake to interpret the *"do not know"* responses as an evidence for the lack of views or opinion.

To obtain an accurate picture of the public opinion, we should understand whether those who did not respond to any immigrants questions are systematically different from those who did and if so how this difference affects the conclusion we draw. Non-response bias might arise, for instance, if majority of the non-respondents in April were simply not comfortable expressing strong anti-immigrant attitudes during a then promoted "welcome culture" towards refugees. If this is true, then we systematically overestimate the

[62] We define non-response rate as the sum of the proportions of those respondents who have marked one of the following two options: "I do not know" or "Refuse to answer".

[63] Non-response rate for refugees from Ukraine, however, were remarkably small in both waves.

[64] The exception is ethnic Hungarians, where the non-response rate is only around 1% in both waves. From the non-response analysis, we omitted the questions about Piresians and Piresistani (with non-response rates between 23-30% in both waves.), as in these cases, *"do not know"* is the legitimate answer.

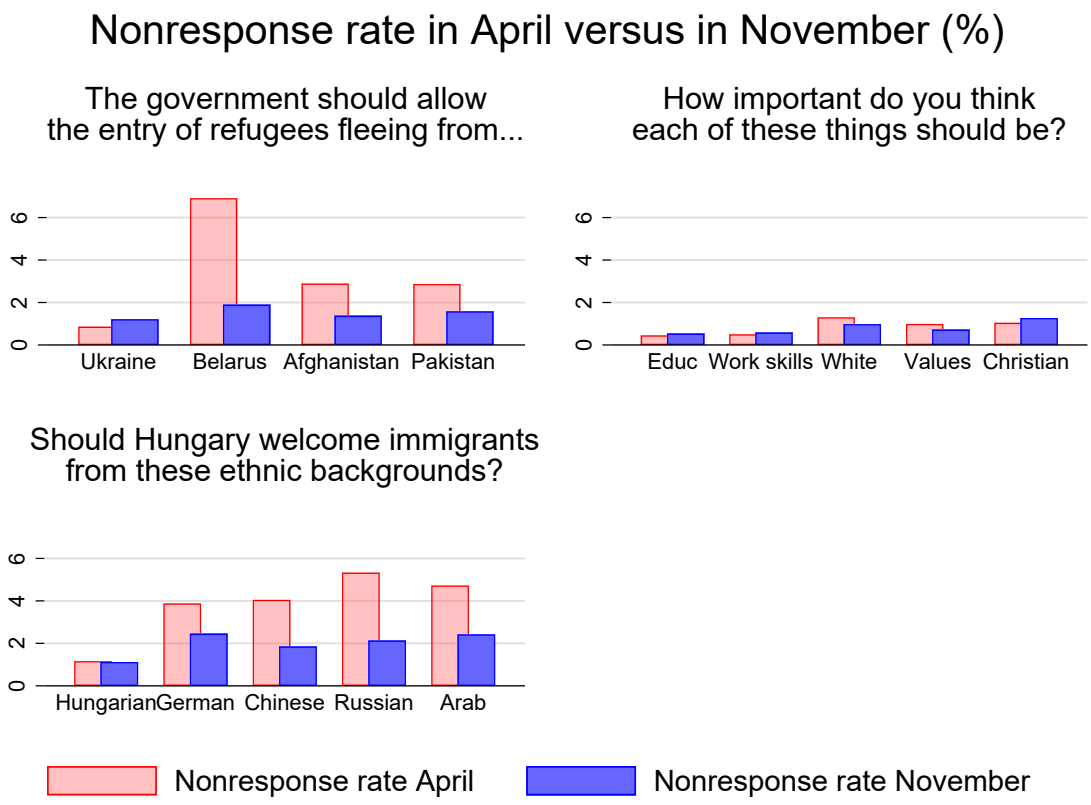

Figure A1: Non-response rate in April *versus* in November (%) to Three Types of Immigration Questions

magnitude of the change in anti-immigrant attitudes from April to November. In fact, Krosnick (2002) echoes this claim and writes that *"the vast majority of NO responses are not due to completely lacking an attitude and instead result from a decision not to reveal a potentially embarrassing attitude, ambivalence, or question ambiguity"* (p. 99). Similarly, Berinsky (2004) argues that some individuals are likely to hide their socially unacceptable opinions behind a *"do not know"* response.

Thus, to consider the meaning of the *"do not know"* responses in our surveys, we examine the answers that non-respondents give to other immigrant-related questions on the same survey. To do so, we created a group of non-respondents which consists of all

respondents who failed to answer *at least one* of the eleven immigration questions.[65] We define this group as the *non-respondent group* that includes 130 respondents in April (out of 1,023), and 91 respondents in November (out of 1,000). The distribution of the number of questions that non-respondents failed to answer showed that both in April and November, most of the non-respondents did not answer at most 4 questions (out of 11). Thus, we have a good knowledge about the general immigrant attitudes of the non-respondents, which allows us to compare the mean of the available answers of the non-respondent group with the overall mean of responses. With the aid of a close examination of the comparisons, Figure A2 reveals that the opinion of non-respondents is not much different from the population average; if anything, non-respondents have a more favourable view of migrants and refugees, both in April and November. This provides some evidence that the decision to abstain from a survey question does not mean that the respondent is devoid of relevant predilections. From these results we conclude that the systematically decreasing proportion of non-respondents, from April to November, is unlikely to contribute to the worsening of the migrant-related sentiment of the Hungarian population in November.

[65] Two questions on source countries, four questions on importance of values and five questions on immigrant's ethnicity.

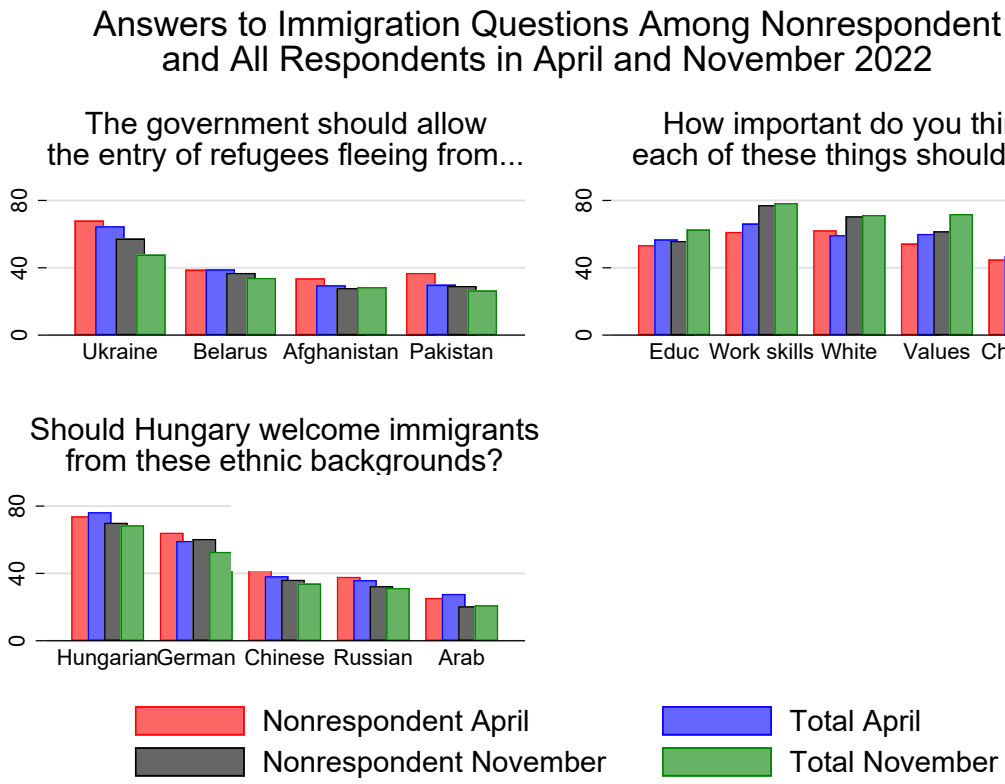

Figure A2: Public Opinion towards Immigrants among Nonrespondent and Respondent in April *versus* in November 2022

F Appendix: Experimental Approach I. – Refugees Fleeing from Different Countries

Questions in English	Questions in Hungarian
To what extent do you agree or disagree with the following statement? The Hungarian government should allow the entry of refugees fleeing *Afghanistan/Pakistan*	Ön milyen mértékben ért egyet a következő állítással? A magyar kormánynak be kellene engednie azokat a menekülteket, akik *Afganisztánból/Pakisztánból* menekülnek?
To what extent do you agree or disagree with the following statement? The Hungarian government should allow the entry of refugees fleeing *Ukraine/Belarus*	Ön milyen mértékben ért egyet a következő állítással? A magyar kormánynak be kellene engednie azokat a menekülteket, akik *Ukrajnából/Fehéroroszországból* menekülnek?

Table A9: Experimental Question Wording I.

	Afghanistan *versus* Pakistan			Ukraine *versus* Belarus		
	Afghanistan	Pakistan	t-stat.	Ukraine	Belarus	t-stat.
Fidesz supporter	46.24%	44.70%	0.42	42.14%	49.01%	-1.90
Opposition supporter	24.81%	23.12%	0.54	25.60%	22.26%	1.07
Primary education	51.48%	50.48%	0.27	50.03%	52.00%	-0.54
Secondary education	32.07%	30.57%	0.45	31.74%	30.90%	0.25
Higher education	16.45%	18.95%	-0.89	18.23%	17.10%	0.40
Female	53.72%	53.00%	0.19	52.60%	54.17%	-0.43
Age	48.42	48.49	-0.05	48.81	48.08	0.54
Married	50.20%	58.28%	-2.22	55.71%	52.56%	0.86
Divorced	14.26%	10.31%	1.80	11.85%	12.80%	-0.43
Widowed	15.02%	12.93%	0.91	13.64%	14.36%	-0.31
Single	20.52%	18.48%	0.63	18.80%	20.28%	-0.46
Roma	5.01%	3.26%	1.04	2.84%	5.53%	-1.58
Student	2.63%	3.39%	-0.55	2.64%	3.39%	-0.54
Unemployed	2.80%	2.08%	0.59	2.13%	2.78%	-0.53
Retired	24.29%	25.64%	-0.46	24.51%	25.43%	-0.32
Inactive	3.46%	3.93%	-0.34	3.16%	4.25%	-0.78
Self-employed	7.08%	5.98%	0.56	7.11%	5.93%	0.60

Table A10: Randomization – Options Afghanistan *versus* Pakistan and Ukraine *versus* Belarus

G Appendix: Experimental Approach II. – Culture

Questions in English	Questions in Hungarian
How important do you think each of these things should be in deciding whether someone born and living outside Hungary should be able to come and live here?	Ön mit gondol: a külföldön született és ott élő emberek befogadásakor az alábbi tényezők mennyire fontosak?
How important should it be for them to . . .	Mennyire fontos, hogy . . .
. . . have good educational qualifications?	. . . iskolázottak legyenek?
. . . be Christian?	. . . keresztények legyenek?
. . . be useful workforce that Hungary needs?	. . . az ország számára hasznos munkaerőt jelentsenek?
. . . come from a country with a similar cultural background *[one with white European heritage]/ [where they have the same values as Hungarians do]*	... hasonló kulturális hátterű országból érkezzenek, *[ami a fehér, európai kulturális örökség része?] [ahol a magyarokéhoz hasonló értékeket követnek?]*

Table A11: Experimental Question Wording II.

	with white European heritage	with the same values as Hungarians do	t-stat.
Fidesz supporter	44.86%	46.03%	-0.32
Opposition supporter	25.41%	22.70%	0.87
Primary education	50.28%	51.62%	-0.37
Secondary education	32.51%	30.29%	0.66
Higher education	17.22%	18.09%	-0.31
Female	57.01%	50.14%	1.86
Age	47.96	48.90	-0.70
Married	51.78%	56.30%	-1.24
Divorced	13.39%	11.36%	0.92
Widowed	14.45%	13.58%	0.38
Single	20.37%	18.76%	0.50
Roma	4.19%	4.11%	0.05
Student	2.63%	3.34%	-0.52
Unemployed	3.27%	1.71%	1.24
Retired	25.87%	24.14%	0.60
Inactive	4.47%	3.00%	1.04
Self-employed	7.79%	5.44%	1.19

Table A12: Randomization – Options "white European heritage" versus "the same values as Hungarians do"

H Appendix: Experimental Approach III. – Ethnicity

Questions in English	Questions in Hungarian
Regardless of their country of origin, immigrants may come from many different ethnic backgrounds. Should Hungary welcome immigrants from these ethnic backgrounds, so long as they are entering the country legally and have no record of criminal activity?	Függetlenül attól, hogy melyik országból érkeznek, a bevándorlók különböző nemzetiségűek lehetnek. Ha ezek a bevándorlók büntetlen előéletűek és legális úton érkeznek az országba, akkor Ön szerint Magyarországnak be kellene-e fogadnia . . .
Hungarians beyond the borders	. . . a határon túli magyarokat?
Germans	. . . a németeket?
Arabs	. . . az arabokat?
Russians	. . . az oroszokat?
Chinese	. . . a kínaiakat?
Piresian	*. . . a pirézeket?*
Piresistani	*. . . a pirézisztániakat?*

Table A13: Experimental Question Wording III.

	Piresistani	Piresian	t-stat.
Fidesz supporter	43.53%	47.36%	-1.06
Opposition supporter	24.86%	23.12%	0.55
Primary education	52.07%	49.94%	0.58
Secondary education	29.70%	32.90%	-0.95
Higher education	18.22%	17.15%	0.38
Female	52.74%	53.97%	-0.33
Age	48.54	48.38	0.12
Married	55.54%	52.86%	0.74
Divorced	12.84%	11.81%	0.47
Widowed	12.99%	14.95%	-0.85
Single	18.62%	20.38%	-0.55
Roma	5.07%	3.26%	1.07
Student	3.15%	2.86%	0.21
Unemployed	2.80%	2.10%	0.57
Retired	25.02%	24.89%	0.04
Inactive	3.09%	4.27%	-0.85
Self-employed	6.51%	6.56%	-0.03

Table A14: Randomization – Options "Piresistani" *versus* "Piresian"

I Appendix: Trends in Hungarian Public Opinion Over Time Using ESS Data

Figure A3 shows the changing tendency in respondents' migration attitude over time that are broken down by respondents' party affiliations. While survey respondents were almost neutral towards immigrants in the 2010 and 2012 waves with an average score of 43, we see a sharp uptake in anti-immigrant sentiment after the first refugee crisis, as the average score declines to 35 in 2016. This is followed by a gradual increase in support for immigrants showing that Hungarians became more welcoming towards immigrants following Russia's invasion of Ukraine. This trend is driven by Fidesz voters. Whereas Fidesz supporters were more hostile towards immigrants than non-Fidesz voters in 2016, by April 2022, Fidesz voters were just as welcoming towards foreigners as the opposition. In line with the previous findings on TARKI data, we also see some increase in anti-immigrant attitudes by November suggesting that pro-immigrant attitudes cool down by time.

To investigate the changing attitude of Hungarian voters towards migrants over time, we merged our two survey waves from 2022 with six ESS rounds (between 2010-2020) and produced a pooled cross-section dataset. We estimate a regression model—similar to the one in Equation 1—with survey respondents' attitude towards immigrants as the dependent variable, but now using previous rounds of ESS data merged with our two waves from 2022. We estimate the following equation:

$$y_i = \alpha + \beta_1 Fidesz_i + \sum_{t=2}^{8} \beta_t Fidesz_i \times Round\_t_i + \sum_{t=2}^{8} \gamma_t Round\_t_i + X_i'\delta + \epsilon_i, \qquad \text{(A1)}$$

where y_i is a scale variable capturing respondent i's opinion on whether Hungary is a

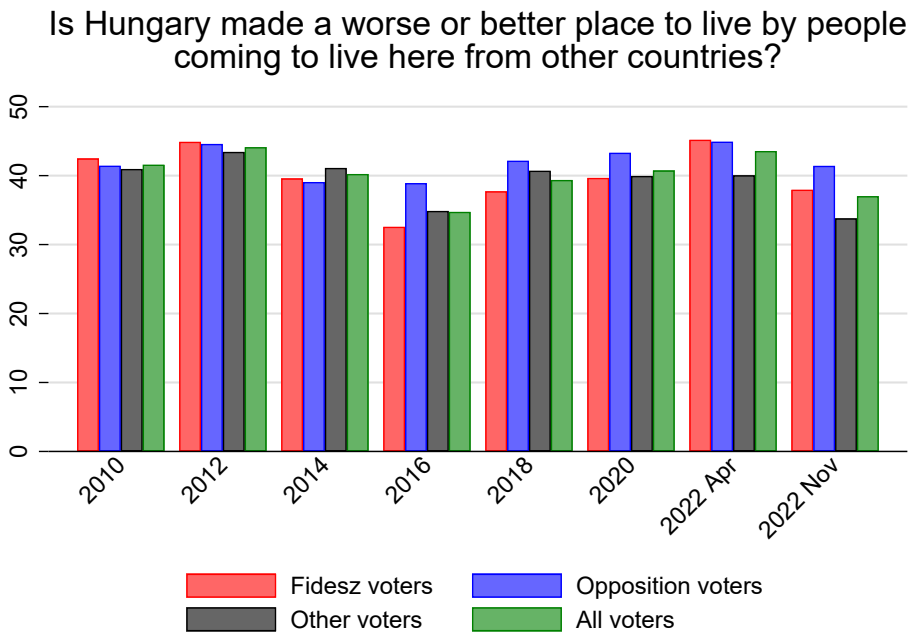

Figure A3: Changing Tendency in Respondents' Attitudes Towards Immigrants over Time and by Party (2010–2022)

worse or better place by people coming to live in Hungary from other countries.[66] We include an interaction term between Fidesz voters dummy and the round dummies to allow the effect of partisanship on migration attitudes to differ over time, while we also allow round dummies to capture any time-specific shocks to public opinion.

Column 3 in Table A15—similar to the descriptive evidence on Figure A3—shows that Fidesz voters had similar attitudes towards immigrants than non-Fidesz voters in 2010-2014, while they were particularly opposed to admitting refugees to Hungary between 2016 and 2020. By 2022, however, they again turn to be just as welcoming (if not even more welcoming) than non-Fidesz voters. We again find that the level of education and religious service attendance is strongly correlated with respondents' attitudes towards immigrants: being more educated and attending religious services more frequently both

[66]The running index t is referring to the ESS rounds: t=1 for the round in 2010, t=2 for the round in 2012, ..., and t=7 for our November survey in 2022. The round in 2010 is the omitted category.

	Worse/better place		Worse/better place	
Fidesz	-0.53	(-1.23)	..	..
Fidesz × (Round 2010)	..	..	1.00	(0.85)
Fidesz × (Round 2012)	..	..	1.05	(0.98)
Fidesz × (Round 2014)	..	..	-1.39	(-1.15)
Fidesz × (Round 2016)	..	..	-2.88**	(-2.32)
Fidesz × (Round 2018)	..	..	-2.63**	(-2.31)
Fidesz × (Round 2020)	..	..	-1.64	(-1.57)
Fidesz × (Round 2022A)	..	..	2.15	(1.57)
Fidesz × (Round 2022N)	..	..	1.18	(0.80)
Round 2012	2.85***	(3.76)	2.88***	(3.04)
Round 2014	-1.48*	(-1.87)	-0.75	(-0.78)
Round 2016	-7.10***	(-8.57)	-5.73***	(-5.47)
Round 2018	-2.77***	(-3.48)	-1.57	(-1.58)
Round 2020	-1.00	(-1.33)	-0.12	(-0.13)
Round 2022A	1.96**	(2.16)	1.23	(1.00)
Round 2022N	-4.66***	(-4.92)	-4.78***	(-3.91)
Freq serv part	4.20***	(6.75)	4.12***	(6.63)
Occ serv part	3.34***	(7.45)	3.31***	(7.38)
Secondary school	4.05***	(8.80)	4.02***	(8.74)
College / University	7.89***	(13.37)	7.87***	(13.34)
Individual controls	Yes		Yes	
Constant	41.00***	(16.14)	40.58***	(15.70)
N	11417		11417	

Robust t statistics in parentheses.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A15: Pooled OLS Estimation Results

make respondents more welcoming towards immigrants.

J Appendix: Distribution of Responses of the Importance of Refugees' Civilizational Characteristics

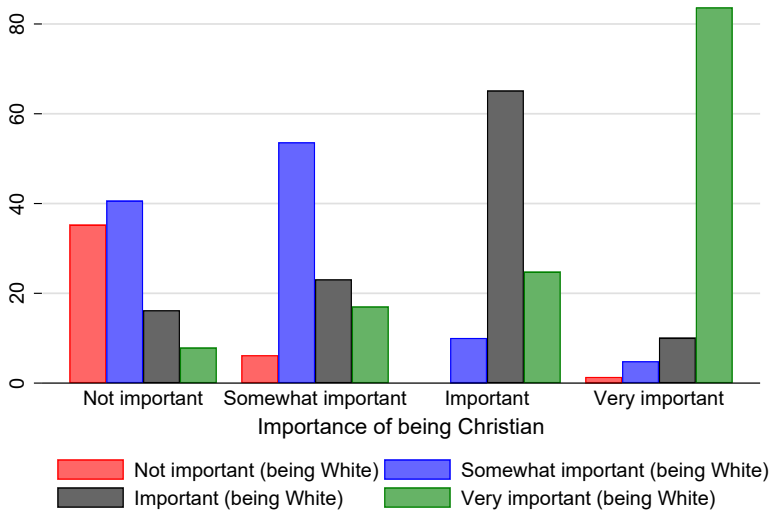

Figure A4: Distribution of Survey Responses of the Importance of Refugees being White across the Importance of being Christian

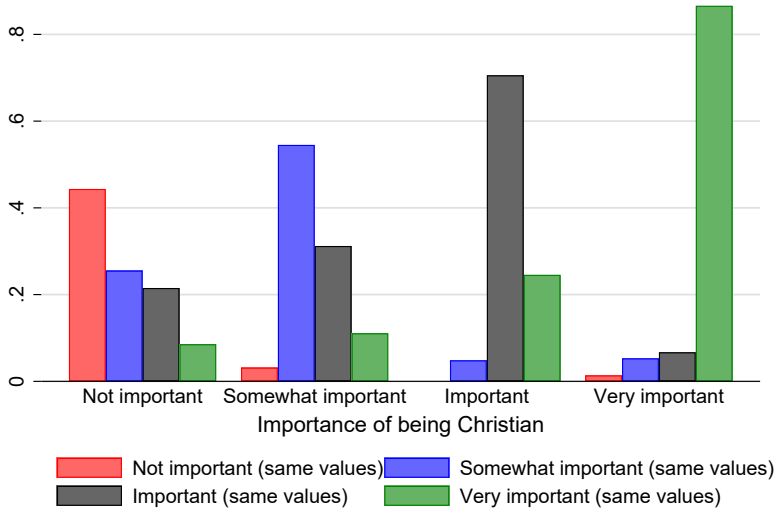

Figure A5: Distribution of Survey Responses of the Importance of Refugees having the Same Values across the Importance of being Christian

K Appendix: Regression Results – Public Opinion towards Refugees by Source Country, 2022

We model the relationships among respondents' socio-demographic characteristics, partisanship, religious identity and attitudes towards migrants using the following equation:

$$allow_i = \alpha + \beta Fidesz_i + \gamma relig_i + X_i'\delta + \epsilon_i, \tag{A2}$$

where $allow_i$ is respondent i's opinion on whether Hungary should allow the entry of refugees on a 0-100 scale, $Fidesz_i$ is a dummy variable for being a Fidesz voter, $relig_i$ is the religiosity indicator, and the vector X_i' contains socio-demographic characteristics such as age, education, settlement type, marital status, type of activity. We measure religiosity with three different indicators: self-declared degree of religiosity, frequency of participation in religious services, and self-declared religious denomination.

Table A16 reveals that Fidesz voters (relative to non-Fidesz voters) are more open – by 3.1-4.5 points on a 100-point scale – for refugees fleeing from Ukraine, while Fidesz voters' attitude towards refugees from the other three source countries are always negative (although insignificant). This result implies that in 2022, Fidesz voters were more welcoming towards Ukrainian refugees only. Another important finding is that religious voters tend to support refugees from Ukraine, but oppose refugees from Afghanistan or Pakistan, and this pattern is robust to different measurements of religiosity.

	Source country							
	Ukraine		Belarus		Afghanistan		Pakistan	
Panel A: Socio-demographic controls								
Fidesz	4.4*	(1.75)	-1.5	(-0.48)	-3.1	(-1.02)	-1.7	(-0.65)
Panel B: Degree of religiosity included								
Fidesz	3.1	(1.25)	-1.5	(-0.49)	-2.5	(-0.82)	-1.5	(-0.54)
Very relig	6.9	(1.54)	1.4	(0.23)	-4.5	(-0.75)	-4.1	(-0.86)
Somewhat relig	11.5***	(3.64)	-0.8	(-0.20)	-0.6	(-0.17)	2.1	(0.72)
Panel C: Religious service participation included								
Fidesz	4.5*	(1.79)	-0.8	(-0.24)	-1.9	(-0.64)	-0.1	(-0.04)
Freq serv part	1.2	(0.29)	-3.4	(-0.66)	-6.9	(-1.42)	-9.1**	(-2.30)
Occ serv part	7.5***	(2.66)	-1.3	(-0.32)	2.4	(0.73)	-0.8	(-0.27)
Panel D: Religious denomination included								
Fidesz	4.0	(1.55)	-2.3	(-0.73)	-3.0	(-1.01)	-2.7	(-1.02)
Catholic	6.5*	(1.74)	4.9	(1.00)	-9.9**	(-2.24)	6.1*	(1.77)
Protestant	-0.1	(-0.02)	-2.3	(-0.44)	-14.9***	(-3.37)	0.9	(0.27)

Notes: The table shows relative support of Fidesz voters and various religious groups for allowing in refugees fleeing from four source countries. Panel A shows the estimated coefficients with socio-demographic control variables only. Panels B-D present estimates whith religiosity included. The coefficients of Fidesz voters represent extra support, relative to non-Fidesz voters, on a 0-100 scale. The coefficients of various religious groups show extra support, relative to non-religious voters, on a 0-100 scale. Robust t statistics are reported in parentheses. *, ** and *** denote significance at 10%, 5% and 1% level, respectively. Graphical representation of the estimated Fidesz parameters are in Figure 7.

Table A16: OLS estimation results for different source countries, April 2022

L Appendix: Regression Results – The Importance of Immigrants' Civilizational Characteristics and Various Skills, 2022

We now estimate the effect of partisanship and other individual-level characteristics on the importance of various skills and civilizational characteristics. For the five skills and

characteristics, we estimate – for each of the five characteristics separately – the following equation:

$$importance_i = \alpha + \beta Fidesz_i + \gamma relig_i + \delta X_i + \epsilon_i, \tag{A3}$$

where $importance_i$ is respondent i's opinion about the importance of the given characteristic on a 0-100 scale, and all other explanatory variables are the same as in the previous specification.

Table A17 contains the results. Among Fidesz voters, being Christian is much more important determinant of support for accepting immigrants than for non-Fidesz voters, even if we control for individual-level religiosity: our estimates indicate that their subjective importance is 11-14 points higher, on a 100-point scale, than for non-Fidesz voters. Fidesz voters find almost equally important that immigrants should come from a country with white European heritage or should have same values as Hungarians do: their average score of importance for these characteristics is 7-11 points larger than of non-Fidesz voters, and is highly statistically significant in all specifications. On the other hand, Fidesz voters' evaluation of the importance that migrants should be well-educated and have the necessary work skills is similar to the evaluation of the rest of the society. We interpret these results as further evidence that civilizational characteristics of the refugees shape Fidesz voters' opinion about refugees in 2022.

	Skills				Civilizational characteristics					
	Education		Work skills		White		Same values		Christian	
Panel A: Socio-demographic controls only										
Fidesz	3.6*	(1.78)	0.6	(0.28)	9.6***	(2.83)	8.3***	(2.64)	14.4***	(5.96)
Panel B: Degree of religiosity included										
Fidesz	4.0*	(1.86)	-0.3	(-0.12)	9.6***	(2.64)	7.5**	(2.24)	11.6***	(4.68)
Very relig	-1.9	(-0.50)	7.9**	(2.02)	0.3	(0.05)	2.7	(0.50)	18.1***	(4.62)
Somewhat	-3.3	(-1.35)	-3.5	(-1.35)	3.2	(0.78)	4.8	(1.32)	11.1***	(3.94)
Panel C: Religious service participation included										
Fidesz	3.2	(1.47)	0.6	(0.26)	8.8**	(2.41)	7.1**	(2.19)	11.2***	(4.52)
Freq serv	2.9	(0.84)	0.1	(0.04)	4.5	(0.81)	7.3	(1.59)	19.0***	(5.20)
Occ serv	-4.7*	(-1.93)	-5.7**	(-2.35)	-1.0	(-0.23)	-3.5	(-1.05)	5.5**	(2.04)
Panel D: Religious denomination included										
Fidesz	4.2**	(1.98)	1.2	(0.57)	10.7***	(3.11)	8.1**	(2.48)	13.2***	(5.29)
Catholic	-4.9*	(-1.78)	-5.7*	(-1.94)	-6.9	(-1.55)	-1.3	(-0.28)	8.9***	(2.73)
Protestant	-3.9	(-1.23)	-6.7**	(-2.10)	-4.6	(-0.86)	-0.7	(-0.15)	9.5***	(2.63)

Notes: The table shows relative support of Fidesz voters and various religious groups for people arriving to have different skills and civilizational characteristics: have education, work skills, same values, come from a country with white European heritage or be Christian. The columns show the estimates for the different skills or characteristics. Panel A shows the estimated coefficients when only sociodemographic control variables are included. Panels B-D present estimates when explanatory variables on religiosity are additionally included. The coefficients of Fidesz voters represent extra support, relative to non-Fidesz voters, on a 0-100 scale. The coefficients of various religious groups show extra support, relative to non-religious voters, on a 0-100 scale. Robust t statistics are reported in parentheses. *, ** and *** denote significance at 10%, 5% and 1% level, respectively.

Table A17: OLS estimation results for the importance of different skills and characteristics, April 2022

M Appendix: Regression Results – The Importance of Immigrants' Ethnicity, 2022

This part of our empirical analysis examines whether immigrants' ethnic background determines Hungarians' attitude. We estimated multivariate regressions—separately for

each ethnicity—with the following specification:

$$ethnicity_i = \alpha + \beta Fidesz_i + \gamma relig_i + \delta X_i + \epsilon_i, \tag{A4}$$

where $ethnicity_i$ is respondent i's opinion about welcoming a migrant of a specific ethnicity on a 0-100 scale, and all explanatory variables are the same as in the previous specifications.

	Ethnicity													
	Hungarian		German		Russian		Chinese		Arab		Piresian		Piresistani	
Panel A: Socio-demographic controls only														
Fidesz	6.0***	(3.63)	1.1	(0.47)	3.8*	(1.69)	0.5	(0.21)	-5.4**	(-2.49)	1.0	(0.31)	-3.5	(-1.00)
Panel B: Degree of religiosity included														
Fidesz	5.0***	(2.95)	1.9	(0.82)	4.7**	(2.04)	0.9	(0.37)	-4.1*	(-1.88)	2.2	(0.72)	-3.9	(-1.07)
Veryrel	6.4*	(1.91)	-6.8	(-1.63)	-7.6*	(-1.86)	-5.2	(-1.31)	-9.4***	(-2.64)	-8.7*	(-1.68)	2.5	(0.41)
Somewhat	3.9*	(1.85)	-1.1	(-0.43)	-0.3	(-0.12)	2.1	(0.71)	-2.3	(-0.89)	-4.2	(-1.12)	6.0*	(1.70)
Panel C: Religious service participation included														
Fidesz	5.2***	(3.07)	1.9	(0.81)	4.6*	(1.94)	1.6	(0.63)	-4.3*	(-1.87)	1.8	(0.56)	-3.9	(-1.04)
Freqserv	4.4	(1.61)	-5.6	(-1.58)	-4.3	(-1.25)	-6.4*	(-1.85)	-6.7**	(-2.15)	-4.6	(-1.04)	3.3	(0.60)
Occserv	3.4*	(1.79)	-0.1	(-0.06)	-2.0	(-0.83)	-1.4	(-0.54)	-2.8	(-1.24)	-3.3	(-0.95)	4.8	(1.45)
Panel D: Religious denomination included														
Fidesz	5.7***	(3.40)	1.3	(0.55)	2.2	(0.96)	-0.7	(-0.28)	-5.3**	(-2.39)	0.3	(0.09)	-4.2	(-1.20)
Catholic	4.5**	(2.04)	1.7	(0.57)	10.3***	(3.32)	7.9**	(2.40)	-0.2	(-0.05)	3.9	(0.86)	6.9	(1.52)
Prot	-1.7	(-0.63)	-4.0	(-1.13)	-3.1	(-0.96)	-6.5*	(-1.85)	-8.3***	(-2.68)	-7.0	(-1.61)	6.0	(1.29)

Notes: The table shows relative support of Fidesz voters and various religious groups for immigrants with different ethnicities: Hungarians, Germans, Russians, Chinese, Arabic, Piresians and Piresistani. Panel A shows the estimated coefficients with sociodemographic control variables. Panels B-D present show estimated results with variables on religiosity included. The coefficients of Fidesz voters represent extra support, relative to non-Fidesz voters, on a 0-100 scale. The coefficients of various religious groups show extra support, relative to non-religious voters, on a 0-100 scale. Robust t statistics are reported in parentheses. *, ** and *** denote significance at 10%, 5% and 1% level, respectively.

Table A18: OLS estimation results for the relative support for different ethnicities, April 2022

Table A18 provides additional evidence that Fidesz voters are especially welcoming ethnic Hungarian immigrants, while the estimated parameters of the Fidesz voters are insignificant for German, Chinese and Piresian immigrants, and negative for Arabs and Piresistani (albeit insignificant in the latter case, probably due to the smaller sample size). This is another piece of evidence that the opinions of Fidesz voters—whose opinion influences the overall sentiment of Hungarians towards refugees to a large degree—are particularly sensitive to the civilizational characteristics of immigrants.

N Appendix: Cohort Analysis of the Attitudes I.

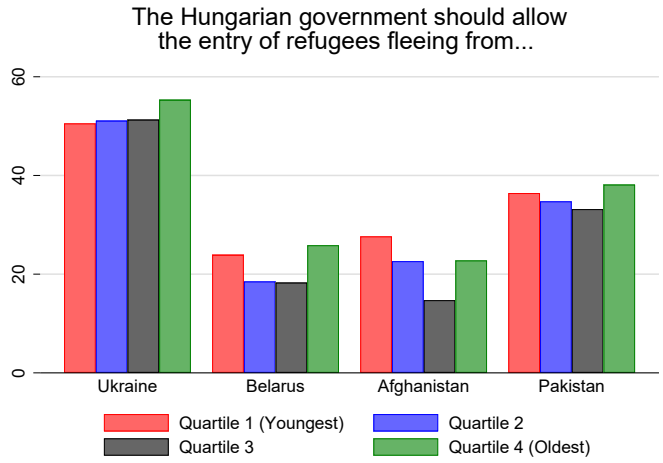

Figure A6: Public Opinion towards Refugees by Source Country and by Age Quartiles, 2022

Note: The figure visualizes the magnitude of the estimated parameters for the effect of age cohort on attitudes towards refugees. Control variables are included (as in App. D) and results are weighted.

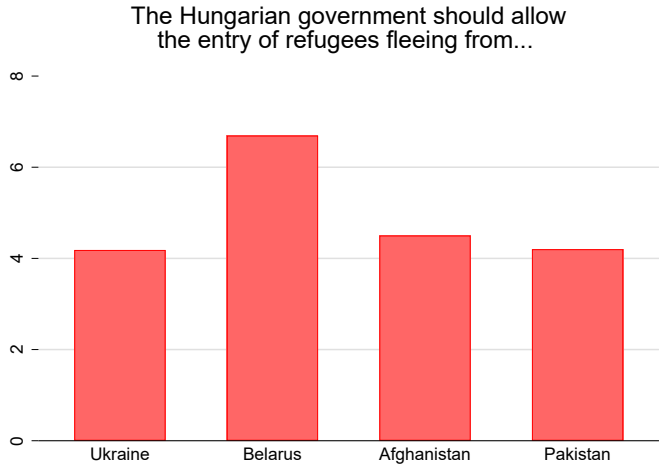

Figure A7: The Extra Score by the Oldest Age Quartile (63+ years) – Public Opinion towards Refugees by Source Country, 2022

Note: The figure visualizes the magnitude of the estimated parameters for the effect of age cohort on attitudes towards refugees. Control variables are included (as in App. D) and results are weighted.

O Appendix: Cohort Analysis of the Attitudes II.

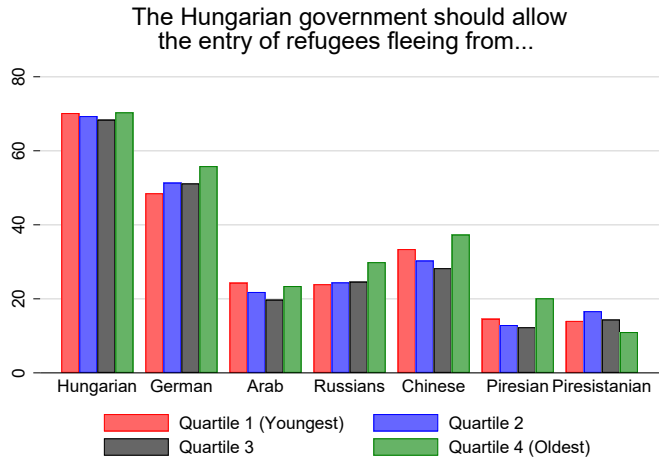

Figure A8: Public Opinion towards Refugees with Different Ethnic Background by Age Quartiles, 2022

Note: The figure visualizes the magnitude of the estimated parameters for the effect of age cohort on attitudes towards refugees. Control variables are included (as in App. D) and results are weighted.

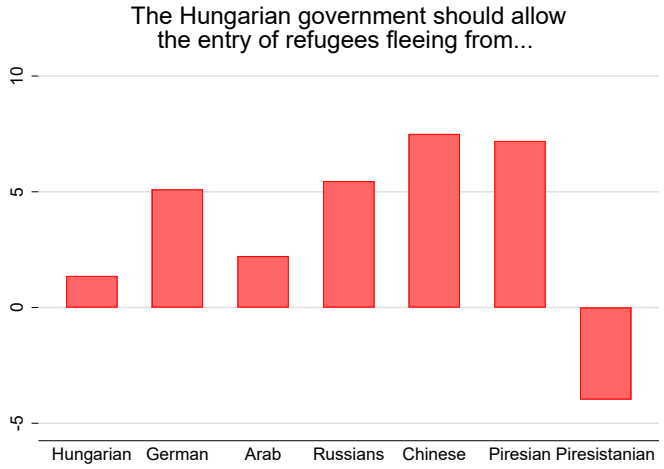

Figure A9: The Extra Score by the Oldest Age Quartile (63+ years) – Public Opinion towards Refugees with Different Ethnic Background, 2022

Note: The figure visualizes the magnitude of the estimated parameters for the effect of age cohort on attitudes towards refugees. Control variables are included (as in App. D) and results are weighted.

P Appendix: Selected Speeches

P.1 The Political Discourse on Ukraine's EU Membership

Prime Minister Viktor Orbán supported the accession of Ukraine to the European Union but mainly due to economic considerations, as emphasised by Orbán himself on the 25th of November, 2016 at the Hungarian-Ukrainian Business Forum: *"I am convinced that Ukrainian-Hungarian friendship will flourish in the longer run, because we support Ukraine's strategic goals, as we have publicly declared. We respect Ukraine's territorial sovereignty and as long as Ukraine stands up for this, we too shall stand up for it... we are a country which is not afraid to say out loud that the goal is Ukraine's accession to the European Union. Today this seems to be impossible ... as the European Union is struggling with its own problems, and has lost its ambition, desire, ability and passion towards the process of enlargement. Nevertheless ... we strongly support the accession of Ukraine to the European Union in the medium term. The European Union will lag behind in the global economic competition unless it has access to new resources. And in fact, Ukraine is not a problem, but a resource, which can also be a resource for the European Union.*[67]

P.2 On the pro-Russian Politics

On the 21st of December 2021, in a rare press conferences, the Prime Minister was asked about the conflict between Ukraine and Russia and in light of this conflict whether Hungary's pro-Russian can cause tension in Europe.

Viktor Orbán claimed that *"we've always sought to keep our policy on Russia separate from that on Ukraine ... and we'll continue to do so: we support Ukraine's independence, but we're not at all happy about the sanctions against Russia. We believe that Ukraine has the right to its own national existence, while Hungary has the right to maintain reasonable relations with Russia. It's not always easy to coordinate these two, but so far we've succeeded. To do so, it is tremendously*

[67] Available at https://miniszterelnok.hu/orban-viktor-beszede-a-magyar-ukran-gazdasagi-forumon/

helpful that I am able to maintain personal relations with Russian leaders. Somewhere in Russia at the beginning of next year, there will be a Russia-Hungary summit between President Putin and myself."[68]

[68] Available on the website of the *Cabinet Office of the Prime Minister* at https://miniszterelnok.hu/orban-viktor-valaszai-a-felmerult-ujsagiroi-kerdesekre-2/.

Q Appendix: Opposition to Refugees by Party with the Far-Right Jobbik in the "Other" Category

In Figure A10, we chart the proportion of voters who are opposed to admitting all refugees to Hungary by their partisanship, however, this time, Jobbik voters are in the "other" category before the 2022 survey.

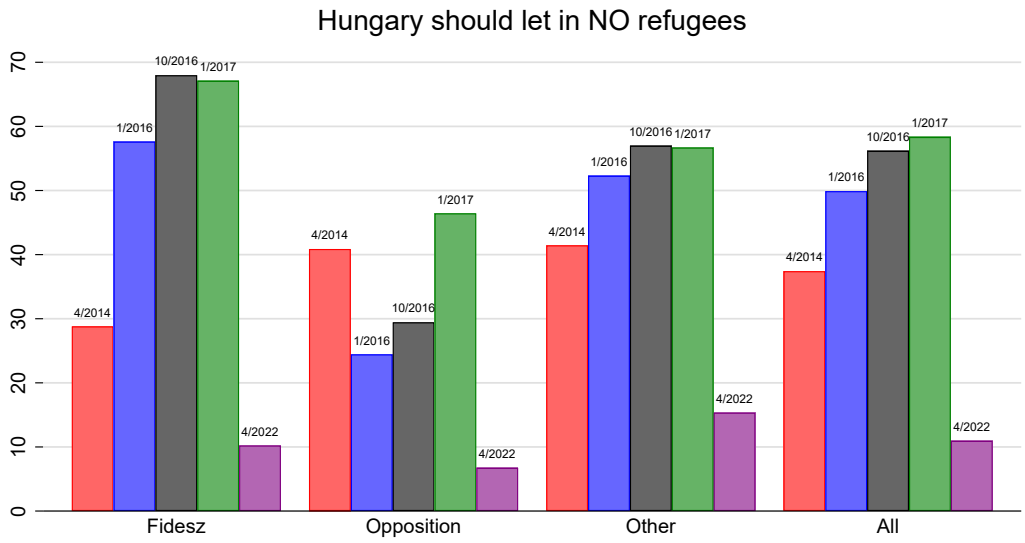

Figure A10: Opposition to Refugees by Party with Jobbik in the Other Category before 2022

R Appendix: Number of Survey Respondents in April and in November 2022

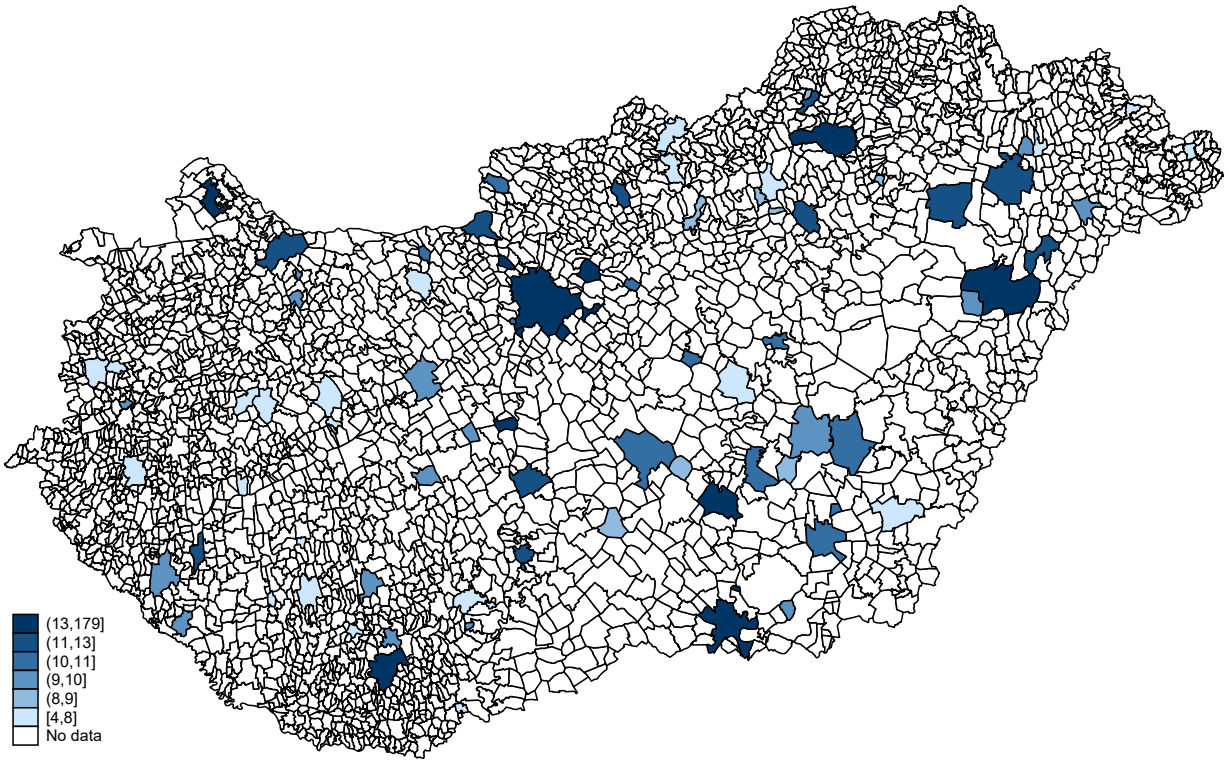

Figure A11: Number of Survey Respondents across Hungarian Settlements in April 2022

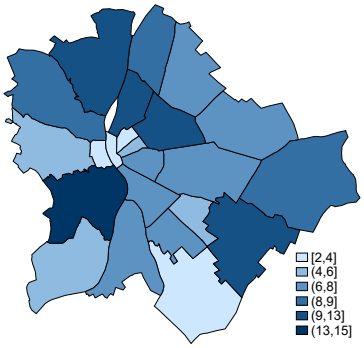

Figure A12: Number of Survey Respondents across Districts in Budapest in April 2022

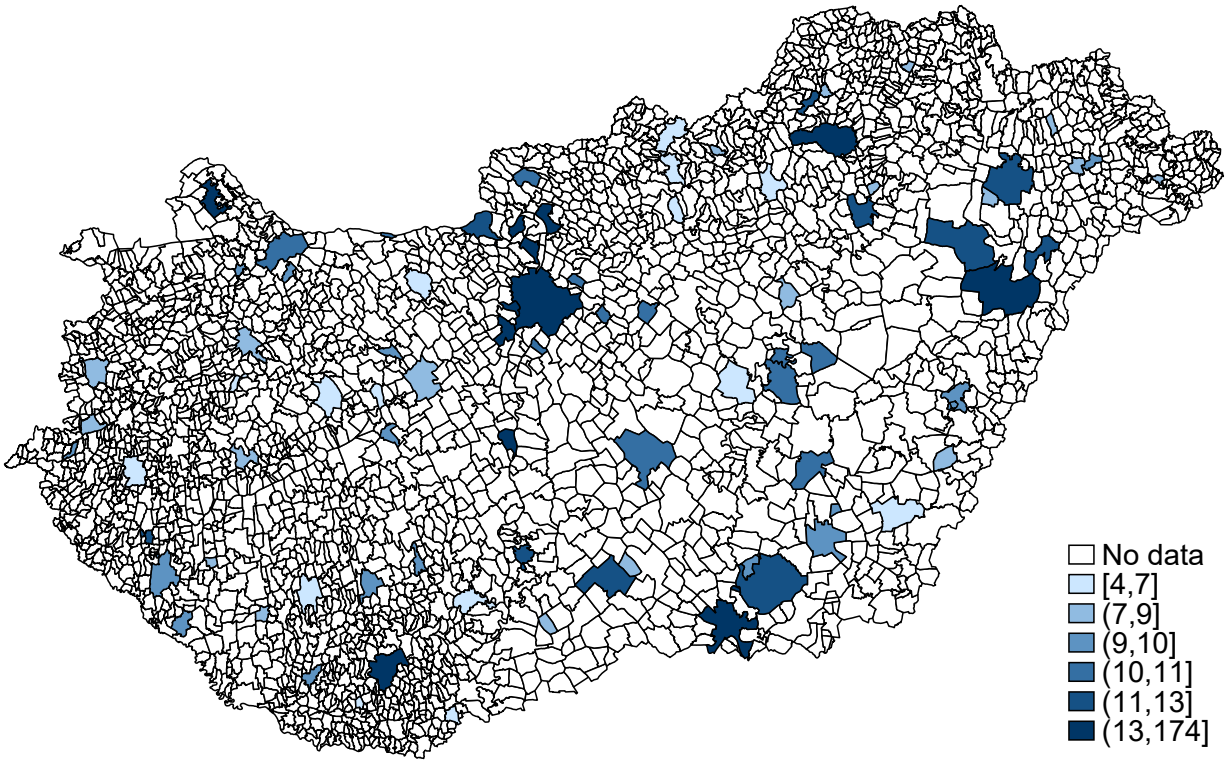

Figure A13: Number of Survey Respondents across Hungarian Settlements in November 2022

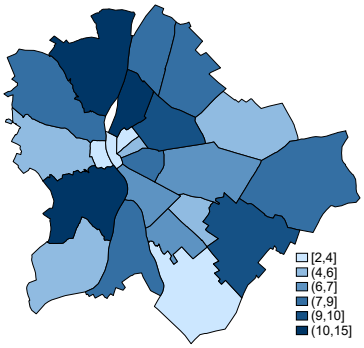

Figure A14: Number of Survey Respondents across Districts in Budapest in November 2022

S Appendix: Summary Statistics and Variables Definition – Settlement Level Characteristics

Definition and source of the variables used at settlement-level:

	Mean	Median	Standard Deviation	Observation
Share of Christian Population	0.538	0.506	0.146	1023
Share of Catholic Population	0.407	0.374	0.161	1023
Share of Protestant Population	0.131	0.103	0.111	1023
Share of Foreigners	0.003	0.002	0.004	1023
Share of Roma	0.032	0.013	0.045	1023
Gross Income per Capita (in million HUF)	1.679	1.690	0.425	1023
Net Income per Capita (in million HUF)	1.432	1.461	0.346	1023
Share of Public Workers	0.013	0.004	0.023	1023
Share of Unemployed	0.038	0.029	0.028	1023
Share of Long-term Unemployed	0.014	0.011	0.013	1023

Notes: Data comes from TEIR dataset. Means are population weighted.

Table A19: Summary Statistics (Settlement-level Data)

Religion (source: 2011 Microcensus)

1. Share of Christian population
    - (No of Catholic + Orthodox + Protestant + Evangelist)/Population 2011
2. Share of Catholic population
3. Share of Protestant population

Ethnicity (source: 2011 Microcensus)

1. Share of Roma people
2. Share of foreigners
    - (No of Arab + Chinese + Russian + Ukrainian + Vietnamese)/ Population 2011

Income (source: 2020 Teir)

1. Gross per capita income (in million HUF) [69]

[69]This is a gross measure and it shows well the economic activity in a settlement. The net per capita income measure, on the other hand, shows the disposable income in a settlement. The net measure, nonetheless, might be endogenous. For example, as a result of Fidesz family support scheme, families enjoy large reduction in their personal income tax rate.

- Total personal income tax base in a given settlement in 2020 to population in 2020

2. Net per capita income (in million HUF)

    - Income after taxation in a given settlement in 2020 to population in 2020.

Unemplyoment (source: 2022 Teir)

1. Share of unemployed in April 2022 (monthly, settlement-level data)

    - Number of individuals registered as unemployed to the size of the working age population (the number of permanent residents between the ages of 18 and 59)

2. Share of long-term unemployed in April 2022 (monthly, settlement-level data) – Unemployed for at least 180 days

    - Number of individuals registered as unemployed for at least 180 days to the size of the working age population (the number of permanent residents between the ages of 18 and 59)

Public workers (source: 2022 Teir)

1. Share of public workers in April 2022 (monthly, settlement-level data)

    - Number of public workers to the size of the working-age population (the number of permanent residents between the ages of 18 and 59)

Distance to the Borders

1. Distance from the Ukrainian border (from the main border-crossing from Ukraine, from Beregsurány) in kilometre

2. Distance from the Ukrainian border (from the main border-crossing from Ukraine, from Beregsurány) in minutes

3. Distance from the Serbian border (from the main border-crossing from Serbia, from Röszke) in kilometre

4. Distance from the Serbian border (from the main border-crossing from Serbia, from Röszke) in minutes

T Appendix: Contextual Factors and Refugee Support

We calculate a simple variance decomposition using the following specification

$$\begin{aligned} y_{ij} &= \alpha_j + \varepsilon_{ij} \\ \alpha_j &= \alpha_{00} + \alpha_{0j} \end{aligned} \tag{A5}$$

where i indexes individuals, j indexes settlements, y_{ij} is the attitudes toward immigration (on a 0-100 scale), α_{00} is the average level of support, α_{0j} is the settlement-level random error term with a variance of σ^2_α that is the between-settlement variation, and ε_{ij} is the random error term at the individual level with a variance of σ^2_ε indicating the within-settlement variation.

As a final analysis, we investigate whether the effect of primarily residential exposure to religious majority is larger for religious individuals using an extended specification:

$$\begin{aligned} y_{ij} &= \alpha_j + X'_{ij}\beta + \gamma_j relig_{ij} + \varepsilon_{ij} \\ \alpha_j &= \alpha_{00} + Z'_j\alpha_{01} + Christ\_sh_j\alpha_{02} + \alpha_{0j} \\ \gamma_j &= \gamma_{00} + \gamma_1 Christ\_sh_j + \delta_{0j} \end{aligned} \tag{A6}$$

This specification allows the effect of individual religiosity on attitudes towards immigrants to vary across religious settlements.[70] Tables A20 and A21 report the results.

[70] Following from this specification, the effect of settlement-level share of Christian population is $\alpha_{02} + \gamma_1 relig_{ij}$, which means that it will be different for religious and non-religious respondents.

	Fleeing conflict in...			
	Ukraine	Belarus	Afghanistan	Pakistan
Effect of settlement-level share of Christians				
Average effect	-23.46	-40.04**	-28.77*	-38.97**
... effect among non-religious	-39.56	-22.69	-4.30	-50.22***
... effect among religious	-10.85	-55.34**	-44.06**	-30.81*
Significance of difference	-	*	**	-
... effect among non-Fidesz voters	-26.80	-23.16	-14.81	-40.22**
... effect among Fidesz voters	-20.19	-63.43***	-51.06***	-34.56*
Significance of difference	-	**	**	-

Table A20: MLM estimation of support for different source countries, with heterogeneous effect of the settlement-level share of Christian population

	Ethnicity of refugees						
	Hungarian	German	Arabic	Russian	Chinese	Piresian	Piresistani
Effect of settlement-level share of Christians							
Average effect	-12.04	-29.15*	-24.85	-57.29***	-38.53**	-61.48***	-20.00
... among non-religious	-10.63	-19.44	-4.00	-45.14**	-34.89	-57.61**	-13.16
... among religious	-13.10	-37.96**	-37.45**	-66.10***	-46.43**	-61.49***	-24.46
Significance of difference	-	-	**	-	-	-	-
... among non-Fidesz	-8.83	-19.81	-26.24	-44.48**	-34.67*	-61.67**	-25.80
... among Fidesz	-17.21	-36.15**	-35.10**	-75.64***	-49.58**	-69.01***	-4.41
Significance of difference	-	-	*	-	-	-	-

Table A21: MLM estimation of support for different ethnicities, with heterogeneous effect of the settlement-level share of Christian population

We find that the settlement-level Christian population share explains anti-refugee (Table A20) and anti-immigrant (Table A21) attitudes primarily among religious voters and among Fidesz supporters. Taking into account the regional context of Hungarian public opinion thus reveals the nuanced relationships between individual and contextual factors in shaping public opinion towards refugees.

U Appendix: Replicating Earlier Results using Data from November 2022

U.1 Public Opinion towards Refugees by Party, November 2022

Similar to Figure 3, we break down respondents' view about refugees by partisanship in November 2022. Figure A15 suggests that supporters of all parties turned to a more anti-immigrant direction: while 10.25% of Fidesz supporters opposed admitting refugees in April, this ratio increased to 28.14% by November 2022. The trend is the same among supporters of other parties; while 8.43% of the opposition voters in April opposed admitting refugees, this ration was 18.67% in November. Figure A16 clearly shows that both Fidesz supporters and Opposition supporters turned against refugees by November and this trend was not driven by the supporter of one particular party.

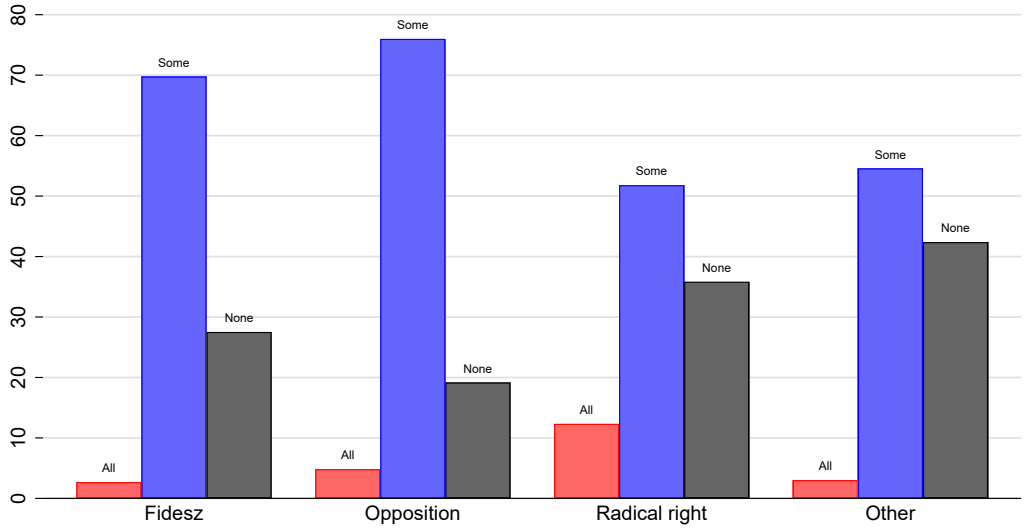

Figure A15: Public Opinion towards Refugees by Party, November 2022

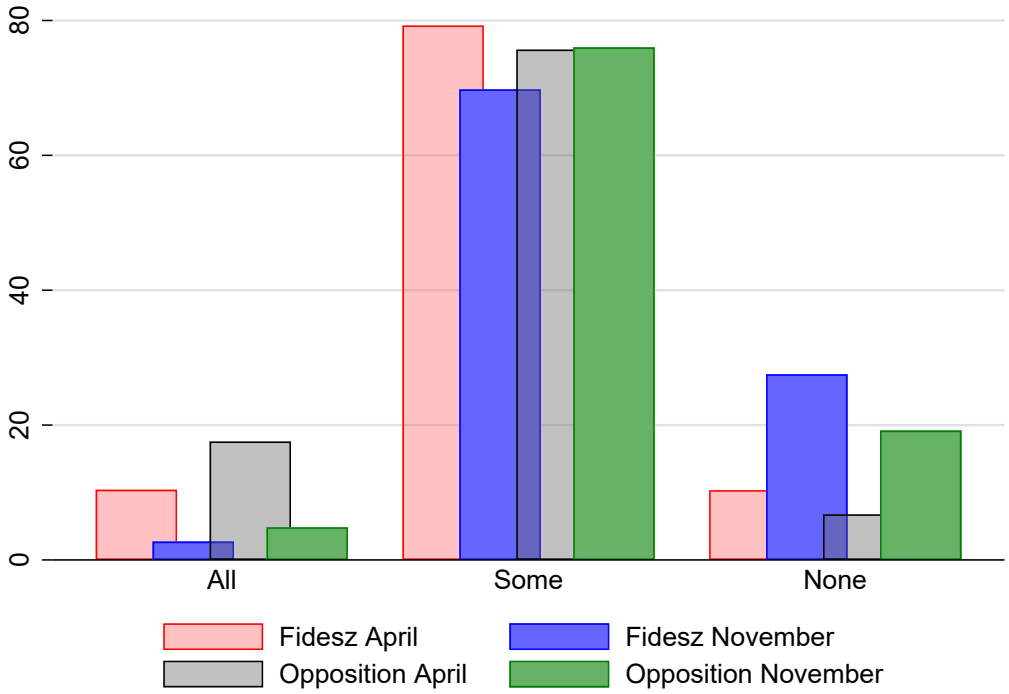

Figure A16: Public Opinion towards Refugees by Party, in April versus in November 2022

U.2 Civilizational Factors and Refugee Preferences: Experimental Evidence from November 2022

Following our practice in Section 5.1, we repeated our experimental design from April 2022 and embedded two experiments in the November wave that asked respondents about their receptivity to refugees fleeing conflict from a particular country. We asked this question twice and first randomized the options of *Ukraine* vs *Belarus*; and then the options of *Afghanistan* vs *Pakistan*. In Figure A17, we show the distribution of responses across the four categories. The distribution of responses clearly indicate that the Hungarian mass public is more receptive to white, European refugees. However, while Hungarians are still more welcoming refugees from European countries and they are still leaning towards Ukrainians, their support for Ukrainians is somewhat weaker in November than it was in

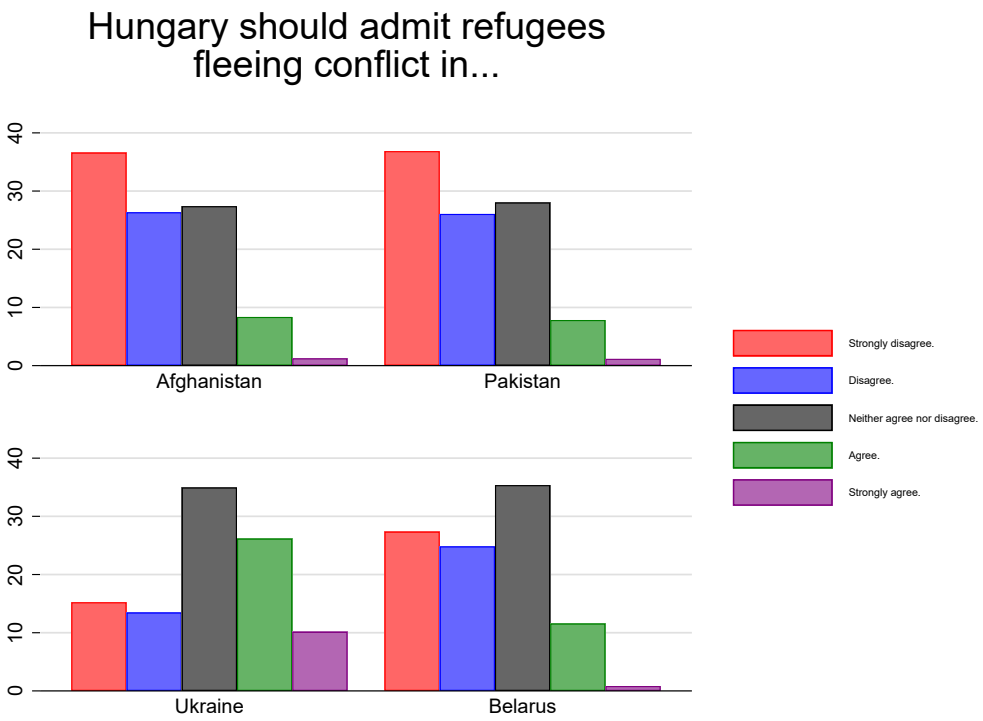

Figure A17: Public Opinion towards Refugees by Source Country, November 2022

April.

Using our November survey, we re-estimate Equation (2). Following the specifications and the difference in differences design outlined in Section 5.1, Table A22 presents the main results using data data from November. The results are very similar to our April survey (in Table 2), the positive and statistically significant coefficient on *Europe* × *Conflict* provides evidence that respondents were far more likely to agree to welcome immigrants from Ukraine relative to migrants from any other country. The positive and statistically significant coefficient on *Europe* signifies the importance of civilizational factors in explaining support for refugees, showing that respondents were more supportive of refugees from a non-conflict country in Europe (Belarus) than from a non-conflict country outside of Europe (Pakistan).

To better convey how the magnitude of these relationships changed from April to

	OLS		Logit	
Europe	0.160**	(2.37)	0.688**	(2.51)
Conflict	-0.063	(-0.68)	-0.601	(-1.47)
Europe × Conflict	0.816 ***	(6.51)	3.108***	(4.59)
Constant	2.141***	(42.49)		
N	1975		594	

Cluster-robust t and z statistics in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Both OLS and Logit models include respondent fixed effects.

Table A22: Difference-in-differences results, November 2022

November, Figure A18 plots the predicted level of support in April (on the left) and in November (on the right). This figure clearly shows a decline in the pro-immigrant attitudes from April to November and provides evidence that the reception of immigrants in the midst of the crisis is generally very warm at first, but it somewhat cools off by time. Nonetheless, it is also clear that respondents were still far more likely to agree to welcome migrants from Ukraine relative to migrants from any other country and that they are still in favor of white Christian European refugees fleeing open conflict.

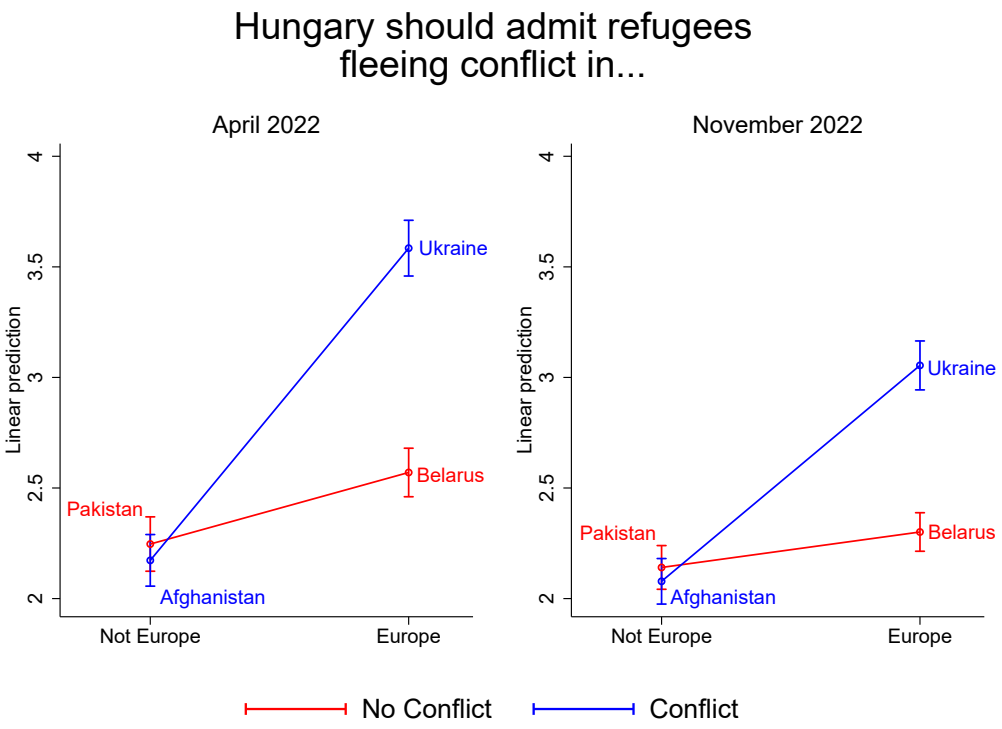

Figure A18: Predicted Support for Refugees, Difference-in-Differences Design – April versus November 2022

U.3 Civilizational Factors and Refugee preferences: Additional Evidence from November 2022

In this section, using data from November 2022, we provide additional descriptive as well as experimental evidence that respondents' attitudes are affected by the civilizational characteristics of the immigrants. Figure A19 shows the average support of refugees from different source countries by partisanship in November 2022. While Fidesz voters are more supportive towards refugees fleeing conflict in Ukraine than the population average (51.7 *versus* 47.7), they have, however, roughly the same attitudes towards refugees from the other three countries (36.4 *versus* 33.9 for Belarus, and 29.4 *versus* 28.5 for Afghanistan and 25.7 *versus* 26.5 for Pakistan). Further, Figures A20 and A21 present respondents' attitudes in April vs in November. The Figures show that the slight anti-immigrant turn

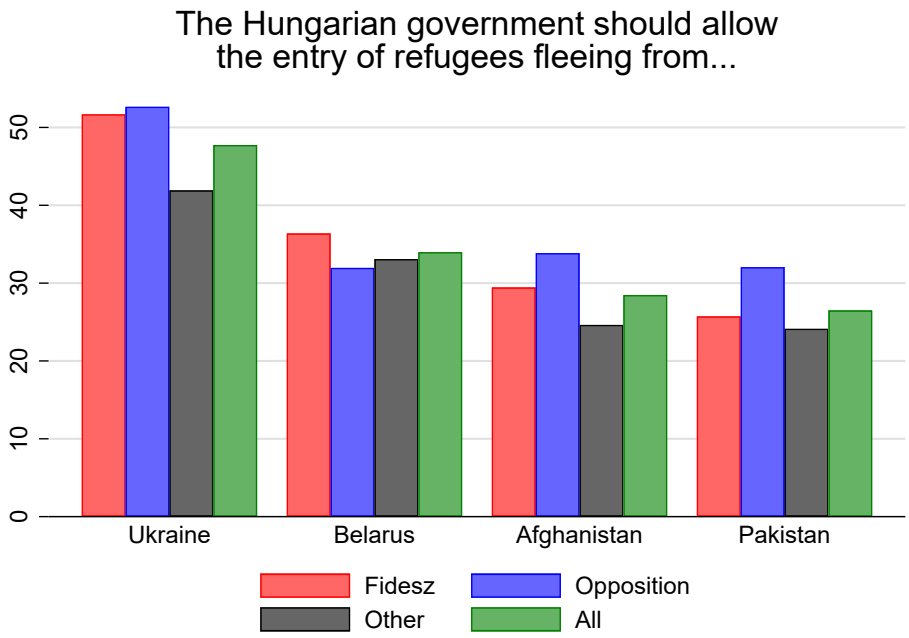

Figure A19: Public Opinion towards Refugees by Source Country and by Party, November 2022

from April to November was a general trend across all respondents irrespective of their partisanship. Table A23 shows the results in a multivariate context.

We now test – following our April survey experiment – whether the three dimensions of civilizational characteristics (race, religion, and values) are different manifestations of the same latent concept. First, to test whether racial versus values-based explanations for support for refugees are distinct from one another, we randomly asked survey respondents about the importance of refugees having *white European heritage* or *common values with Hungarians*. This randomization allows us to test whether racial versus values-based explanations for support for refugees are distinct from one another.[71]

We test whether or not asking about the importance of white European heritage or common values with Hungarians affects respondents' views (see Table A24). Similar to our previous results, we find no difference in the distribution of responses based on which

[71]We rely on the same question wording as in April 2022.

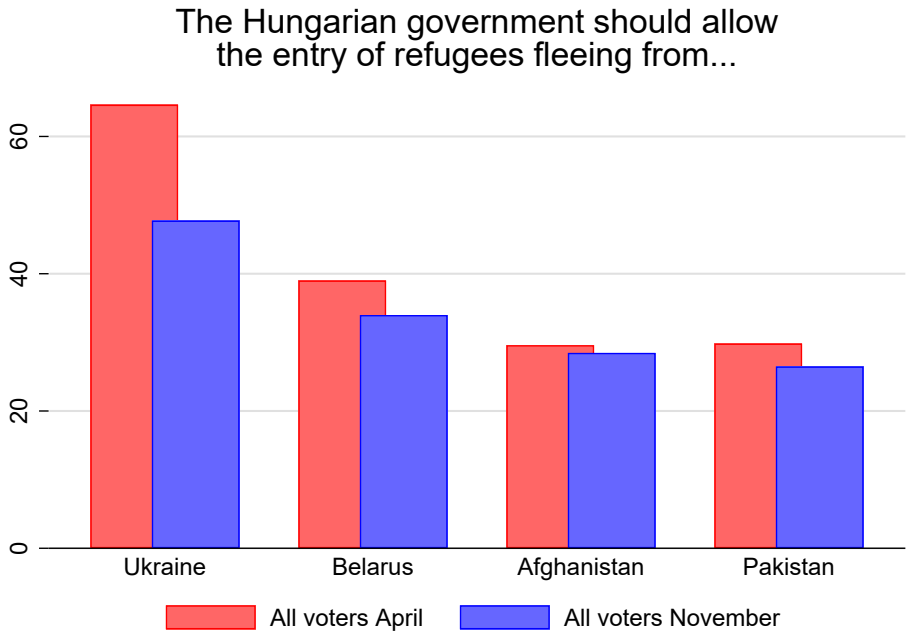

Figure A20: Public Opinion towards Refugees by Source Country, April and November 2022

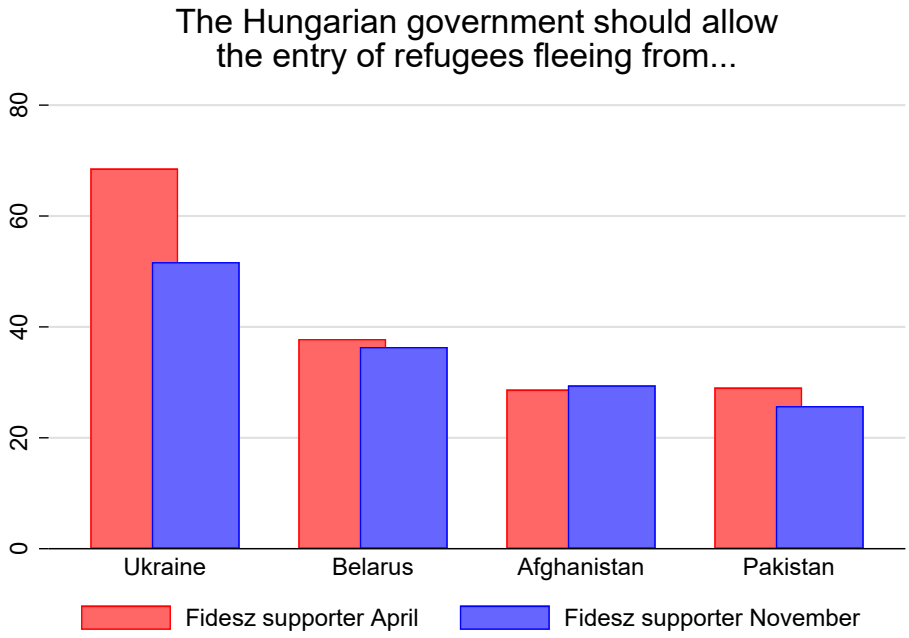

Figure A21: Public Opinion of Fidesz Supporters towards Refugees by Source Country, April and November 2022

	Source country							
	Ukraine		Belarus		Afghanistan		Pakistan	
Panel A: Socio-demographic controls								
Fidesz	6.8**	(2.10)	2.2	(0.79)	2.2	(0.76)	-1.6	(-0.62)
Panel B: Degree of religiosity included								
Fidesz	5.3	(1.62)	1.4	(0.50)	2.1	(0.70)	-3.5	(-1.32)
Very relig	10.7*	(1.78)	8.4*	(1.78)	1.3	(0.27)	13.7***	(2.68)
Somewhat relig	11.4***	(2.69)	8.2***	(2.73)	1.2	(0.33)	8.6***	(3.15)
Panel C: Religious service participation included								
Fidesz	5.7*	(1.74)	1.8	(0.65)	2.6	(0.89)	-3.5	(-1.27)
Freq serv part	13.5***	(2.60)	5.7	(1.27)	-2.1	(-0.46)	15.8***	(3.40)
Occ serv part	2.4	(0.63)	7.3**	(2.03)	-2.2	(-0.59)	8.4***	(2.98)

Notes: The table shows relative support of Fidesz voters and various religious groups for allowing in refugees fleeing from four source countries. Panel A shows the estimated coefficients with socio-demographic control variables only. Panels B-C present estimates whith religiosity included. The coefficients of Fidesz voters represent extra support, relative to non-Fidesz voters, on a 0-100 scale. The coefficients of various religious groups show extra support, relative to non-religious voters, on a 0-100 scale. Robust t statistics are reported in parentheses. *, ** and *** denote significance at 10%, 5% and 1% level, respectively. Graphical representation of the estimated Fidesz parameters are in Figure 7.

Table A23: OLS Estimation for Public Opinion towards Refugees by Source Country, November 2022

of these questions we ask: $\chi^2(3) = 4.1, p = 0.25$.[72] This finding buttresses our argument that race and values are indistinguishable from one another as explanations for Hungarian public opinion on refugees.

We now compare the two experimental groups (one with the *white European heritage* and the other one with the *common values with Hungarians* questions) based on their responses to the importance of refugees being Christian (asked of all respondents). We test whether the distributions of these responses are independent. Table A25 compares the distribution of responses to a question about the importance of refugees have a specific characteristic,

[72]The null hypothesis is that the distribution of the two responses are identical, thus, with a p-value of 0.25, we fail to reject this hypothesis.

where two options were assigned randomly to respondents: having the same values as Hungarians *versus* arriving from a country with white European heritage. The table supports our earlier findings and provides additional evidence that race, religion, and values are the manifestation of the same latent variable.

	White European	Same values	Total
Not important 2.58	1.71	2.14	
Somewhat important	19.35	22.26	20.84
Important	39.65	34.63	37.08
Very important	38.41	41.40	39.94
Observations	484	508	992

Notes: This table compares the distribution of responses to a question about the importance of refugees have a specific characteristic, where two options were assigned randomly to respondents: having the same values as Hungarians *versus* arriving from a country with white European heritage. Responses of "Don't know/refuse to answer" are excluded. The table shows the weighted distribution across the share of the responses.

Table A24: Experimental results comparing race and values in November 2022

Panel A: Christian and White Heritage

	Not	Some	Important	Very	Total
Not important	21.72	0.54	0.00	0.00	2.60
Somewhat important	28.79	51.37	7.56	0.00	19.07
Important	39.36	35.13	66.88	13.78	39.92
Very important	10.13	12.96	25.55	86.22	38.41
Observations	55	124	160	142	481
$\chi^2(9) = 373.1, p < 0.001$					

Panel B: Christian and Same Values

	Not	Some	Important	Very	Total
Not important	13.24	1.03	0.00	0.00	1.73
Somewhat important	49.48	53.00	7.52	0.00	21.95
Important	25.39	36.46	56.50	8.12	34.66
Very important	11.89	9.51	35.98	91.88	41.66
Observations	56	132	180	138	505
$\chi^2(9) = 356.3, p < 0.001$					

Notes: The panels compare the distribution of responses of the importance of refugees being Christian (column variable) with the importance of coming from a country with a white heritage or the same values as Hungarians (row variables). Responses of "Don't know/refuse to answer" are excluded. Columns of the table show the weighted distribution across the share of the responses.

Table A25: Race, values, and religion compared in November 2022

Figures A22 and A23 show the importance attributed to various characteristics of refugees by survey respondents' partisanship. In line with the finding that Hungarians turned to be less pro-immigrant by November, we see an increase in the scores across the various characteristics of immigrants. This indicates that in general, people think that more conditions shall apply to foreigners to stay in Hungary. Figures show that Fidesz voters have stronger preference than non-Fidesz voters for immigrants who are Christian. These results also hold in a multivariate context (Table A26).

Finally, Figure A24 shows survey respondents' views about the importance of refugee's ethnic background by respondents' party preferences, while Figure A25 shows changes in attitudes from April to November. Similar to our April results, Hungarians are very wel-

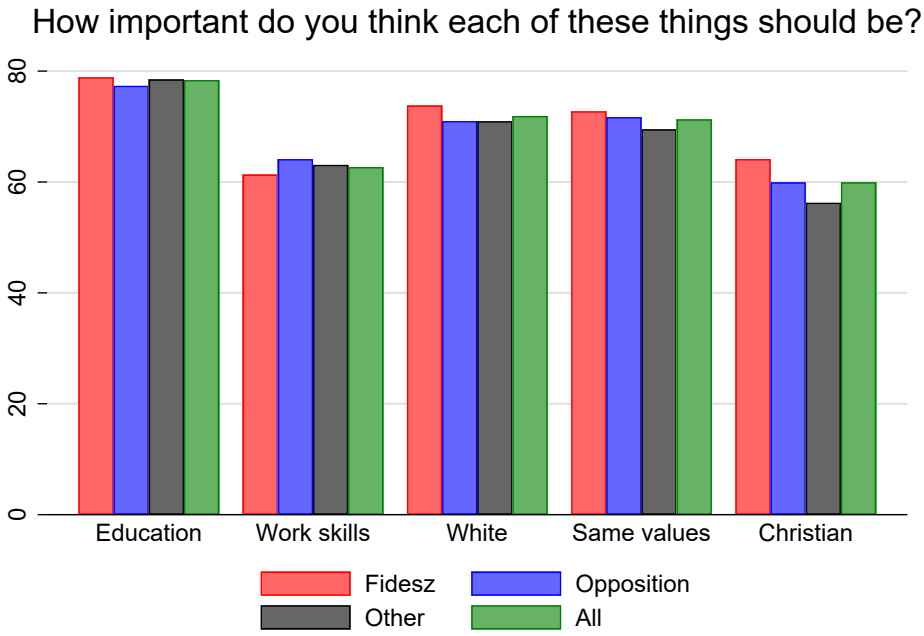

Figure A22: The Importance of Immigrants' Civilizational Characteristics and Various Skills by Party, November 2022

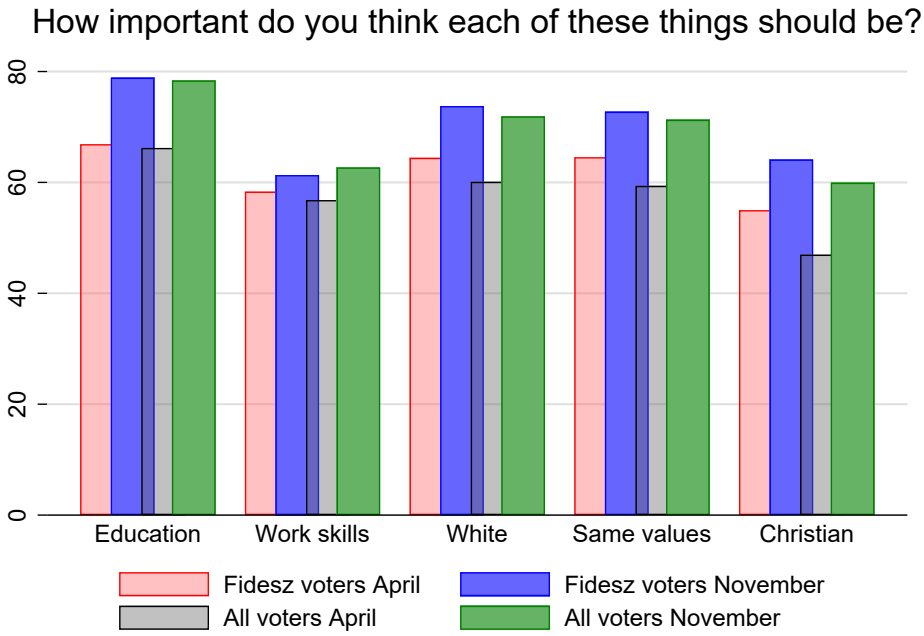

Figure A23: The Importance of Immigrants' Civilizational Characteristics and Various Skills by Party, April and November 2022

	Skills				Civilizational characteristics					
	Education		Work skills		White		Same values		Christian	
Panel A: Socio-demographic controls only										
Fidesz	-1.5	(-0.74)	1.0	(0.51)	3.7	(1.27)	1.9	(0.63)	5.8**	(2.35)
Panel B: Degree of religiosity included										
Fidesz	-1.8	(-0.83)	0.9	(0.48)	3.4	(1.07)	1.2	(0.41)	3.8	(1.51)
Very relig	2.8	(0.64)	0.02	(0.01)	2.3	(0.39)	0.5	(0.09)	21.2***	(4.88)
Somewhat	2.4	(0.99)	2.0	(0.01)	2.6	(0.73)	6.1*	(1.81)	17.4***	(5.73)
Panel C: Religious service participation included										
Fidesz	-2.1	(-1.02)	1.2	(0.63)	3.7	(1.21)	2.1	(0.71)	4.9*	(1.96)
Freq serv	3.9	(1.31)	-3.2	(-1.15)	-2.3	(-0.55)	-2.3	(-0.47)	8.3**	(2.38)
Occ serv	-0.0	(-0.02)	-1.8	(-0.95)	-2.8	(-0.91)	0.0	(0.02)	9.4 ***	(3.47)

Notes: The table shows relative support of Fidesz voters and various religious groups for people arriving to have different skills and civilizational characteristics: have education, work skills, same values, come from a country with white European heritage or be Christian. Panel A shows the estimated coefficients when only sociodemographic control variables are included. Panels B-D present estimates when explanatory variables on religiosity are additionally included. The coefficients of Fidesz voters represent extra support, relative to non-Fidesz voters, on a 0-100 scale. The coefficients of various religious groups show extra support, relative to non-religious voters, on a 0-100 scale. Robust t statistics are reported in parentheses. *, ** and *** denote significance at 10%, 5% and 1% level, respectively.

Table A26: OLS Estimation for the Importance of Different skills and Characteristics, November 2022

coming towards ethnic Hungarians and German immigrants. They are, however, rather opposed to Arabs. Again, these findings hold in a multivariate regression specification (Table A27).

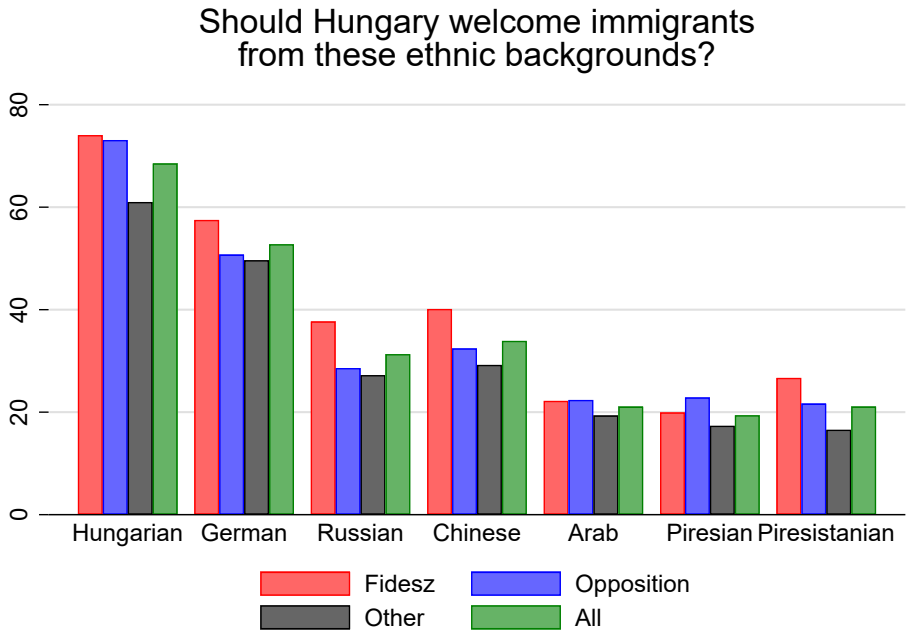

Figure A24: The Importance of Different Ethnic Background of Immigrants by Partisanship, November 2022

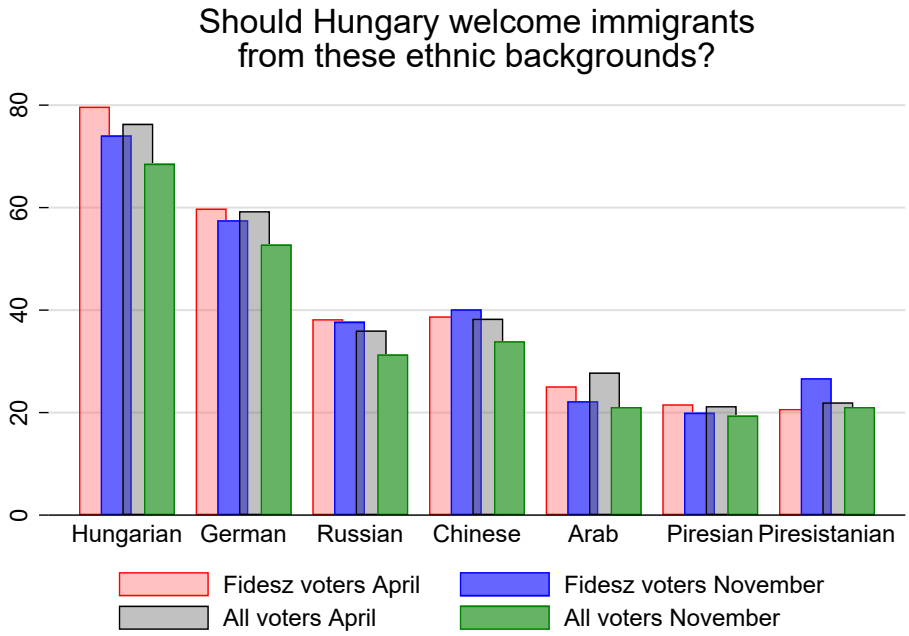

Figure A25: The Importance of Different Ethnic Background of Immigrants by Partisanship, April versus November 2022

	Ethnicity													
	Hungarian		German		Russian		Chinese		Arab		Piresian		Piresistani	
Panel A: Socio-demographic controls only														
Fidesz	8.6***	(3.95)	7.1***	(2.98)	9.8***	(4.18)	9.7***	(4.16)	1.6	(0.73)	0.6	(0.16)	8.7**	(1.99)
Panel B: Degree of religiosity included														
Fidesz	6.8***	(3.17)	6.0**	(2.50)	8.6***	(3.58)	8.3***	(3.53)	1.3	(0.59)	-1.3	(-0.36)	6.7	(1.45)
Veryrel	15.8***	(4.73)	13.1***	(3.38)	15.1***	(3.31)	17.9***	(4.01)	3.9	(0.91)	15.0***	(2.58)	20.3**	(2.45)
Somewhat	13.6***	(5.05)	4.2	(1.45)	9.8***	(3.63)	12.0***	(4.54)	1.0	(0.39)	11.9***	(3.47)	10.1***	(2.61)
Panel C: Religious service participation included														
Fidesz	7.8***	(3.58)	6.4***	(2.65)	8.0***	(3.38)	8.1***	(3.42)	0.2	(0.09)	-2.4	(-0.69)	7.2	(1.55)
Freqserv	9.1***	(2.63)	4.6	(1.16)	16.4***	(4.42)	14.6***	(4.20)	9.2**	(2.34)	21.3***	(3.46)	11.9	(1.56)
Occserv	10.4***	(4.40)	-1.0	(-0.39)	7.9***	(3.24)	6.4***	(2.61)	-0.8	(-0.36)	7.6**	(2.25)	4.2	(1.12)

Notes: The table shows relative support of Fidesz voters and various religious groups for immigrants with different ethnicities: Hungarians, Germans, Russians, Chinese, Arabic, Piresians and Piresistani. Panel A shows the estimated coefficients with sociodemographic control variables. Panels B-C present show estimated results with variables on religiosity included. The coefficients of Fidesz voters represent extra support, relative to non-Fidesz voters, on a 0-100 scale. The coefficients of various religious groups show extra support, relative to non-religious voters, on a 0-100 scale. Robust t statistics are reported in parentheses. *, ** and *** denote significance at 10%, 5% and 1% level, respectively.

Table A27: OLS Estimation for the Relative Support for Immigrants with Different Ethnicities, November 2022

V Appendix: The Changing Role of Individual Religiosity 2011 and 2022

Figures A26 and A27 compares the estimated regression coefficients on the extra support of religious respondents towards immigrants in April *versus* in November.[73] While in the April 2022, individual religiosity negatively affected survey respondent's attitudes towards immigrants, in November religious respondents turned to be more pro-immigrant than their non-religious fellows.

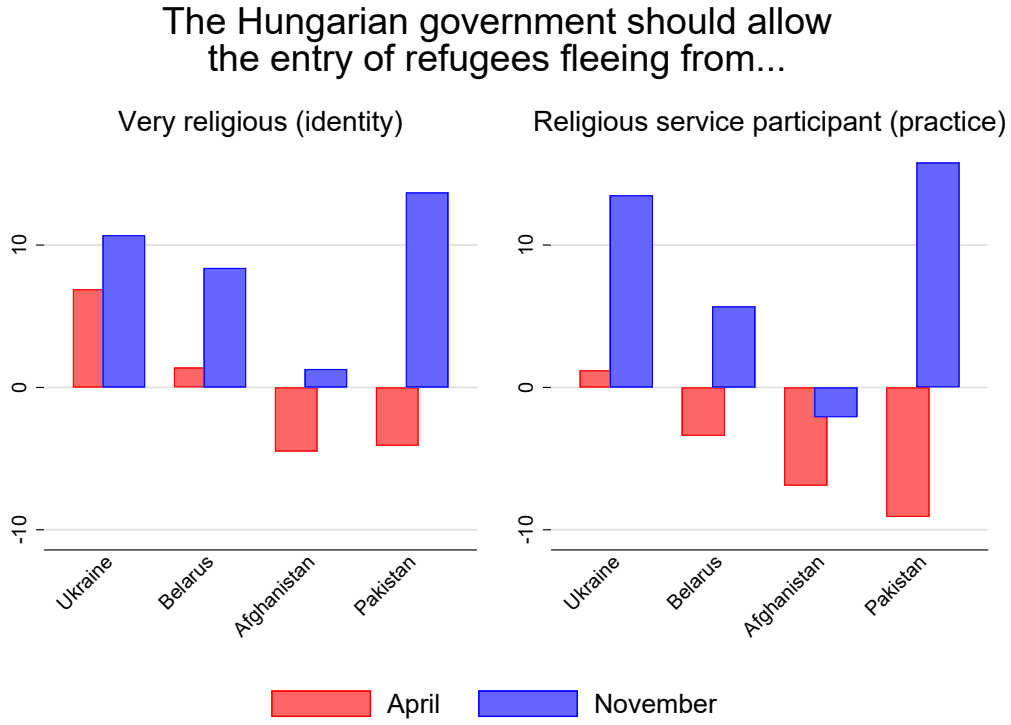

Figure A26: Changes of the Estimated Parameters of Religious Survey Respondent (April and November 2022) – Public Opinion towards Refugees by Source Country

One possible concern is that the relative support of religious respondents as compared to non-religious respondents might increase even if the absolute support of religious

[73]These coefficients were reported earlier in panels B and C of Tables A16 and A18 for the April wave, and in Panels B and C of Tables A23 and A27 for the November wave.

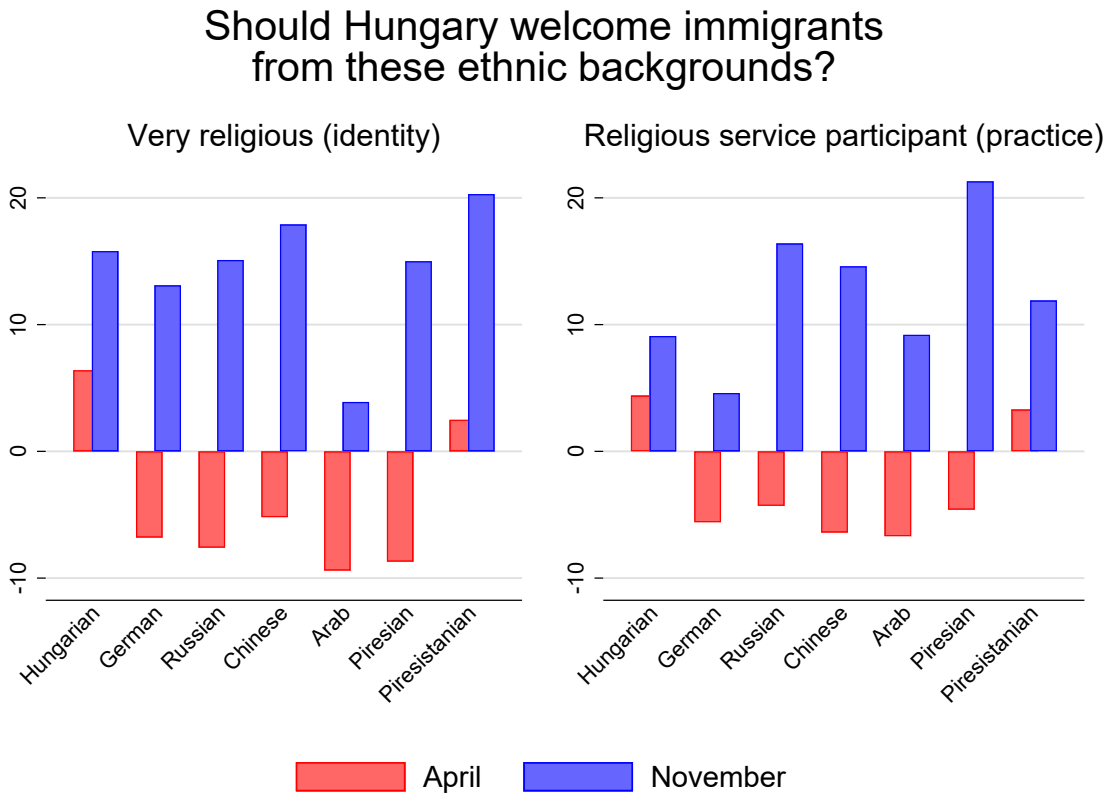

Figure A27: Changes of the Estimated Parameters of Religious Survey Respondent (April and November 2022) – Public Opinion towards Refugees by Ethnicity

respondents decreases (this might be the case when the the support of non-religious participants drops by a larger magnitude). Figures A28 and A29 mitigate this concern and show that religious respondents absolute support towards immigrants has even increased by November, despite the general declining trend in attitudes towards immigrants.

To estimate the heterogeneous effect of individual religiosity over time, we estimate the following linear probability model for survey respondents who are opposed to admitting all refugees to Hungary on a pooled cross-section dataset between April 2011 and November 2022:

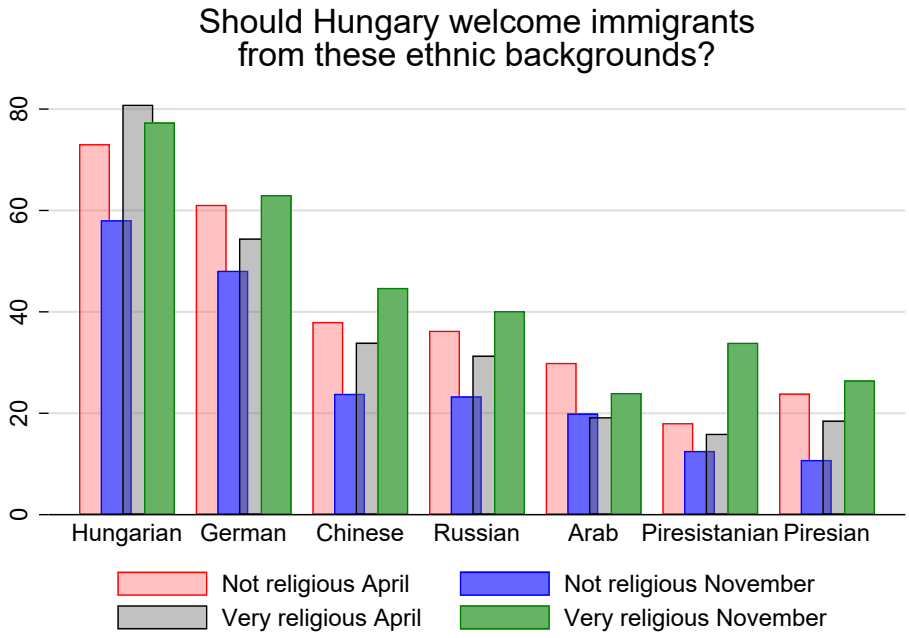

Figure A28: The Importance of Different Ethnic Background of Immigrants by Religious Identity, April versus November 2022

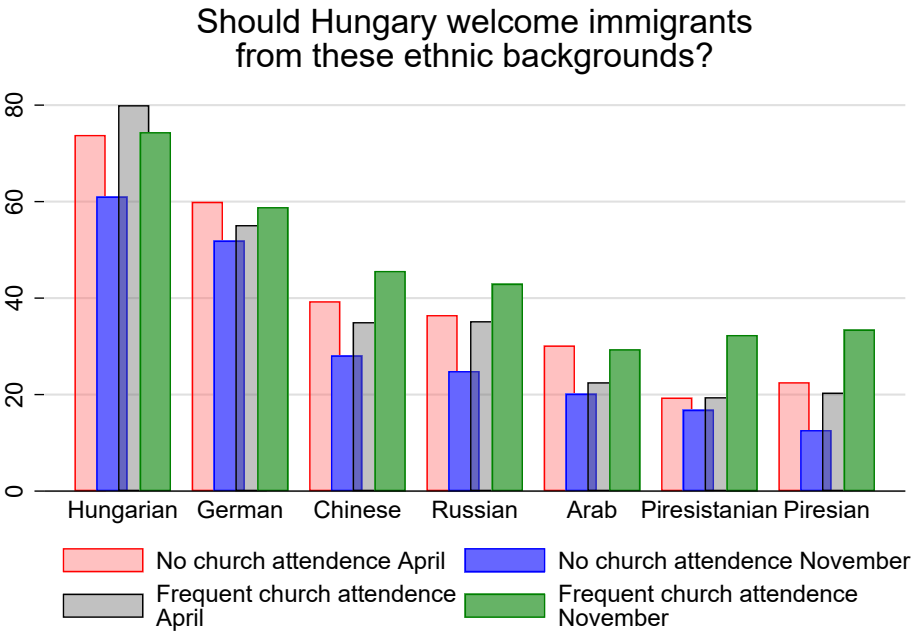

Figure A29: The Importance of Different Ethnic Background of Immigrants by Religious Practice, April versus November 2022

$$y_{it} = \alpha + \beta_1 Religiosity_{it} + \sum_{t=2}^{10} \beta_t Religiosity_{it} \times Wave_t + \sum_{t=2}^{10} \gamma_t Wave_t + X'_{it}\delta + \epsilon_{it}, \quad \text{(A7)}$$

where y_{it} is a dummy variable indicating that respondent i in wave t is opposed to admitting any refugees; $Religiosity_{it}$ measures the frequency of participating in religious services (with a value of 1 if survey respondent never attends any religious services and a value of 3 if a survey respondent frequently attends religious services); $Wave_t$ are wave dummies; and X'_{it} is a vector of socio-demographic variables such as education, age, gender, marital status and activity. To understand the changing attitudes of individual religiosity over time, we interact individual's religiosity and the wave dummies, while also allowing the wave dummies to control for time-specific factors, such as the general economic situation of the country, that could confound these relationships.

	Oppose migrants		Oppose migrants	
Fidesz	-0.001	(-0.08)	-0.001	(-0.06)
Jan 2016	0.161***	(8.39)	0.204***	(7.36)
Oct 2016	0.213***	(11.77)	0.222***	(8.45)
Jan 2017	0.220***	(11.65)	0.212***	(7.91)
Apr 2022	-0.258***	(-18.69)	-0.260***	(-11.08)
Nov 2022	-0.059***	(-3.10)	0.022	(0.67)
Freq serv part	-0.056***	(-3.39)	..	..
Freq serv × (before 2015)	..	..	-0.052**	(-2.29)
Freq serv × (Jan 2016)	..	..	-0.067	(-1.19)
Freq serv × (Oct 2016)	..	..	-0.001	(-0.02)
Freq serv × (Jan 2017)	..	..	0.016	(0.29)
Freq serv × (Apr 2022)	..	..	-0.038	(-1.14)
Freq serv × (Nov 2022)	..	..	-0.203***	(-4.03)
Occ serv part	-0.057***	(-5.12)	..	..
Occ serv × (before 2015)	..	..	-0.032**	(-2.06)
Occ serv × (Jan 2016)	..	..	-0.134***	(-3.56)
Occ serv × (Oct 2016)	..	..	-0.068*	(-1.94)
Occ serv × (Jan 2017)	..	..	-0.025	(-0.66)
Occ serv × (Apr 2022)	..	..	-0.031	(-1.24)
Occ serv × (Nov 2022)	..	..	-0.161***	(-4.21)
Secondary school	-0.088***	(-7.35)	-0.086***	(-7.24)
College / University	-0.191***	(-13.39)	-0.191***	(-13.39)
Constant	0.502***	(8.51)	0.485***	(8.21)
N	9760		9760	

Robust t statistics in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A28: Linear Probability Model Results with Time-varying Parameters for Religious Service Participation Frequencies

W Appendix: Political Socialization

When are immigration attitudes likely to develop? The question of when individuals form their attitudes and how persistent these attitudes are still debated in the literature. While some studies argue that early experiences persist throughout one's life and thus, attitudes are stable (Kustov, Laaker, and Reller 2021), others claim that people consistently change their beliefs in response to contextual factors and current events (Goldstein and Peters

2014). Other work argues that younger adults are more likely to change their attitudes toward immigration than the elderly population as they have limited political experience and they are in the midst of developing their core political beliefs.

To test whether our results are merely driven by the younger cohort, in Figure A30, we break down opponents to admitting all refugees by their age cohort. The figure clearly reveals that changes in younger adults' anti-immigrant attitudes are larger than changes in attitudes of the elderly population. In particular, the standard deviation of the attitudes of the younger cohort is 14.4%, of the middle-aged cohort is 13.3% and of the elderly cohort is 12.4%. Nonetheless, Figure A30 also clearly shows that the general trend in public opinion is the same across the age cohort and that our findings are not driven by those in their "impressionable years".

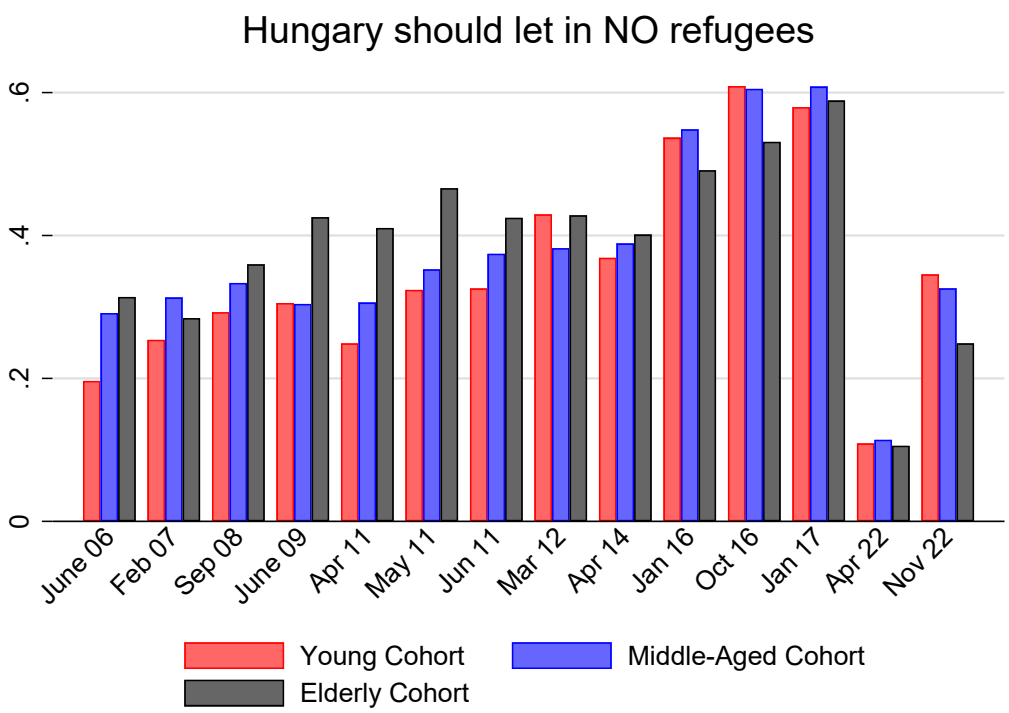

Figure A30: Opposition to Refugees by Age Cohort, 2006–2022

Note: Means are population weighted. Survey respondents between 18 and 34 are in the young cohort, between 35 and 64 are in the middle-aged cohort and survey respondents 65 years of age and older are in the elderly cohort.

X Appendix: The Changing Importance of Settlement Level Roma Share and Christian Share – 2011-14 versus 2022

In Section 6, we show that in 2022, the settlement-level share of Christians and the settlement-level Roma share are significant determinants of individuals' anti-immigrant sentiments.

To test whether and up to what degree respondents' local environment affected survey respondents' anti-immigrant attitudes *prior* to the refugee crises, we test the effect of settlement-level variables on individuals' attitudes between 2011 and 2014. We do this to learn more about changes in the effect of respondents' local environment on their views

about refugees over time. We rely on five additional rounds of survey data (April 2011, May 2011, June 2011, March 2012 and April 2014). These surveys were conducted by TARKI applying the same sampling procedures as before, however, in the earlier survey waves, respondents were asked their views about refugees with different ethnic background for Ethnic Hungarians living abroad, Arabs, Chinese and Piresian only. Additionally, survey respondents were only asked their views about refugees *if* their earlier answers to the general anti-immigration question was that some immigrants should be allowed in, while some others should not. Another difference between these earlier surveys and our surveys is the response category; in the earlier survey waves, respondents were either in support of or against allowing in refugees (thus it was a yes or no answer category).[74]

We re-estimate our multi-level regression models of Equation 4 as in Section 6. The dependent variable is not a scale variable on a 0-100 interval, but a dummy variable which equals 1 if the respondent agrees to allow in an immigrant with different ethnic background.[75] The estimated parameters appear in Table A29.

Figure A31 shows the estimated parameters of the settlement-level share of Roma population for survey respondents' view on immigrants with different ethnic background between 2011 and 2014. Results indicate that the estimated parameters of the settlement-level Roma share are almost always significant and negative. Thus, respondents who live in settlements with higher share of Roma population are in general more anti-immigrant.

Figure A32 shows the estimated parameters of the settlement-level Christian share, for individuals' view about immigrants with different ethnic background. There is no clear pattern in this case: estimated parameters are sometimes negative, sometimes positive, but mostly insignificant.[76] This result is similar to our findings in November 2022 (in Table 9), but contradicts our April 2022 results (in Table 8).

[74] In April and November 2022, respondents had to choose on a scale of 1-4.
[75] Hence, positive estimated parameters imply that respondents are generally more pro-immigrants.
[76] Only 3 out of the 20 estimated parameters are significant at the 10% level.

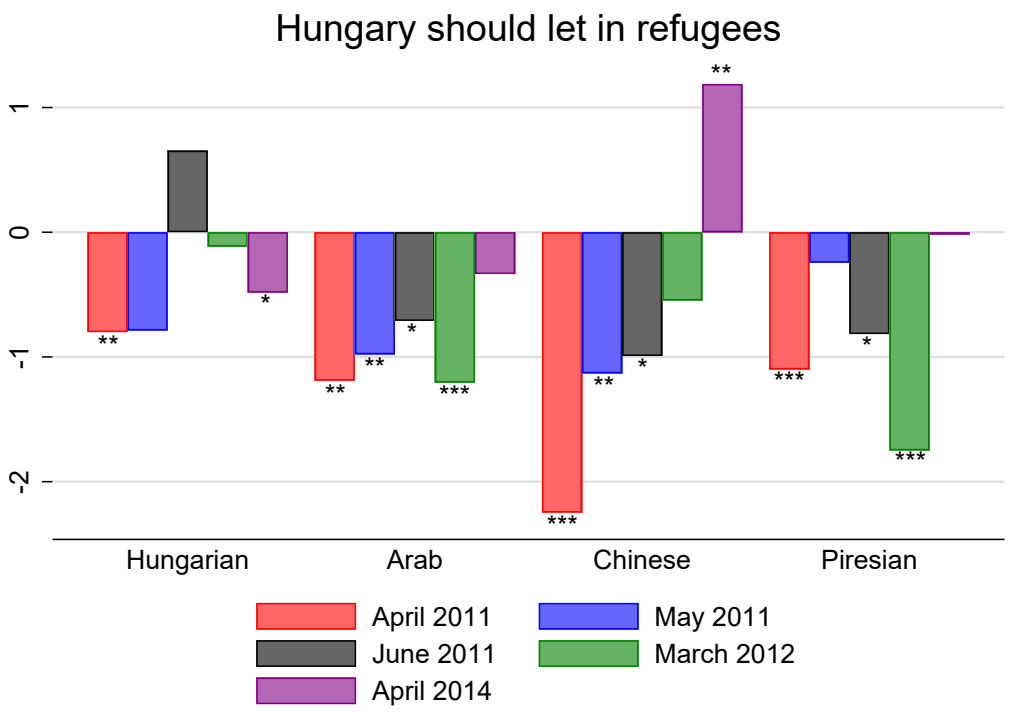

Figure A31: The Effect of Settlement-level Roma Share on Survey Respondents' Immigrant Attitudes, 2011–2014

Note: The dependent variables are dummy variables equal to 1 if survey respondents would allow in immigrants with different ethnic background and zero if they would not. *, ** and *** denote significance at 10%, 5% and 1% level, respectively.

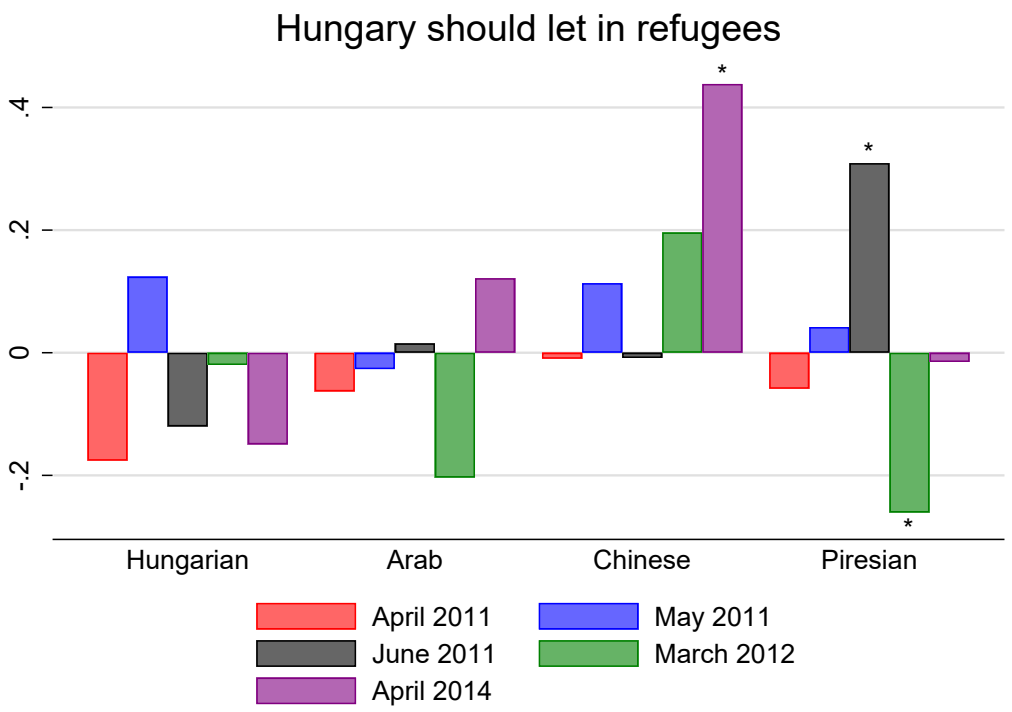

Figure A32: The Effect of Settlement-level Christian Share on Survey Respondents' Immigrant Attitudes, 2011–2014

Note: The dependent variables are dummy variables equal to 1 if survey respondents would allow in immigrants with different ethnic background and zero if they would not. *, ** and *** denote significance at 10%, 5% and 1% level, respectively.

	Ethnicity			
	Eth. Hungarian	Arab	Chinese	Piresian
Panel A: April 2011				
Christian share	-0.1760	-0.0631	-0.0098	-0.0587
Roma share	-0.8016**	-1.1903**	-2.2476***	-1.1006***
Income pc	-0.0001*	-0.0001	-0.0004**	-0.0002*
Fidesz vote share	0.1724	-0.1487	-0.7990	-0.4267
Foreigner share	1.4753	-9.9554	-7.2227	-21.4602**
Panel B: May 2011				
Christian share	0.1242	-0.0268	0.1135	0.0419
Roma share	-0.7876	-0.9789**	-1.1312**	-0.2443
Income pc	-0.0001	0.0000	0.0001	0.0001
Fidesz vote share	-0.0956	-0.9364**	-1.8610***	-0.4452
Foreigner share	25.1413*	6.5500	23.8482	0.7995
Panel C: June 2011				
Christian share	-0.1202	0.0153	-0.0086	0.3092*
Roma share	0.6541	-0.7109*	-0.9923*	-0.8168*
Income pc	0.0001	-0.0000	-0.0001	0.0000
Fidesz vote share	0.2859	-0.9731**	-1.1916**	-0.7888***
Foreigner share	-10.2302	22.4046	18.2065	39.0289
Panel D: March 2012				
Christian share	-0.0200	-0.2036	0.1962	-0.2606*
Roma share	-0.1150	-1.2061***	-0.5470	-1.7488***
Income pc	-0.0002**	-0.0004**	-0.0005*	-0.0007***
Fidesz vote share	0.1561	0.3374	0.3606	0.5989
Foreigner share	5.9863	13.2556	29.5774	26.6472
Panel E: April 2014				
Christian share	-0.1495	0.1216	0.4384*	-0.0151
Roma share	-0.4841*	-0.3356	1.1893**	-0.0184
Income pc	-0.0001	-0.0002	0.0001	-0.0000
Fidesz vote share	0.2862	0.1763	-0.0202	0.0710
Foreigner share	-14.3409	33.6786*	20.3430	9.1639
Indiv. controls	Yes	Yes	Yes	Yes

Notes: *, ** and *** denote significance at 10%, 5% and 1% level, respectively. The dependent variable is a dummy variable which equals 1 if the respondent agrees to allow in an immigrant with different ethnic background and zero otherwise.

Table A29: MLM Estimation for Individuals' Attitude about Immigrants with Different Ethnic Background, 2011 – 2014

Y Appendix: Sociodemographic Characteristics of Refugees

Year	Accepted	Males	Females	% Male
2013	360	285	75	72.9%
2014	510	405	105	79.2%
2015	425	350	75	82.4%
2016	430	330	105	76.7%
2017	1290	750	540	58.1%
2018	365	215	155	58.9%
2019	60	40	20	66.7%
2020	130	65	65	50.0%
2021	40	20	20	50.0%

Source: Eurostat data on first instance decisions on applications

Table A30: Gender Distribution of Immigrants with Positive Decision, 2013–2021

Table A30 shows the gender distribution of asylum seekers who received positive decisions (and thus, it provides a good estimate of the gender composition of refugees staying in Hungary).[77] While the share of male refugees staying in Hungary was higher between 2013 and 2016 than the share of female refugees, in absolute term, the number of male refugees is very small ruling out the concern that our results are driven by the opinion of Hungarians who have personally encountered *male* refugees during the first refugee crisis.

Tables A31 and A32 show the distribution of refugees by age categories and citizenship. Here, we focus on 2017 with its relatively high number of positive decisions when 1290 asylum seekers received a refugee status (or any other status following a positive decision). Two important conclusions can be drawn from these tables. First, Table A31 reveals that the majority of asylum seekers who received a positive decision were children under the age of 18. Second, while Table A32 shows that in 2017, most of the accepted refugees were from countries with different *"civilizational"* background (e.g.: 90% of all refugees

[77] The table shows the gender composition of those who received positive decisions of *any* kind, including refugee status, subsidiary protection, humanitarian protection/tolerated status.

came from either Afghanistan, Syria or Iraq), the low number of accepted people once again provides evidence that it is very unlikely that many of our survey respondents had personal encounters with a refugee, let alone had daily contact with them.

Age cohort	Accepted	Males	Females	% Male
Less than 18 years	645	385	260	59.7%
18-34 years	430	240	195	55.2%
35-64 years	205	120	85	58.5%
More than 65 years	10	5	0	100.0%
Total	1290	750	540	58.1%
% 0-17 years	50.0%	51.3%	48.1%	
% 18-34 years	33.3%	32.0%	36.1%	
% 35-64 years	15.9%	16.0%	15.7%	

Source: Eurostat data on first instance decisions on applications

Table A31: Distribution of Immigrants with Positive Decision by Age and Gender, 2017

Citizenship	Accepted	Males	Females	% Male
Afghanistan	580	335	245	57.8%
Syria	385	230	155	59.7%
Iraq	190	105	85	55.3%
Iran	35	25	15	62.5%
Unknown	25	10	10	50.0%
Pakistan	10	10	0	100%
Other	65	35	30	53.8%
Total	1290	750	540	58.1%
% Afghanistan	45.0%	44.7%	45.4%	
% Syria	29.8%	30.7%	28.7%	
% Iraq	14.7%	14.0%	15.7%	

Source: Eurostat data on first instance decisions on applications

Table A32: Distribution of Immigrants with Positive Decision by Gender and Citizenship, 2017

We now turn to the descriptive analysis of the gender composition of refugees during the second refugee crisis. Table A33 shows the gender and age distribution of Ukrainian refugees staying in Hungary with a temporary protection status (between February 24 and December 31, 2022). While the share of accepted Ukrainian children is similar to the

share of accepted children refugees during the first refugee crisis, 66% of the Ukrainian immigrants with TP status are female. This ratio is even higher among the adult cohort, 82.5% of the Ukrainian adults with TP status are women. Nonetheless, results of our experimental design in Section 5.3 clearly show that Hungarians are more welcoming of Ukrainian refugees in general and this is not exclusively driven by their assumption that Ukrainian refugees are mostly women and children, whereas Afghan refugees are young men.

Age cohort	Accepted	Males	Females	Unknown	% Male
Less than 18 years	14019	7197	6772	50	51.5%
18-64 years	14148	2469	11659	20	17.5%
More than 65 years	1452	373	1073	6	25.8%
Total	29619	10039	19504	76	34.0%
% 0-17 years	47.3%	71.7%	34.7%	65.8%	

Source: National Directorate-General for Aliens Policing of Hungary.

Table A33: Distribution of Ukrainians with Temporary Protected Status by Age and Gender, 2022

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