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Where Would Ukrainian Refugees Go if They Could Go Anywhere?

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Abstract: We present estimates of the number of refugees expected to flee Ukraine and to which countries they are expected to migrate based on migration preferences data from the Gallup World Poll. This is important in terms of both immediate refugee assistance efforts and long-term integration policies. Our key finding is that as many as twelve million people may want to leave Ukraine permanently and that refugee policies in potential destination countries are likely to have a substantial impact on the distribution of Ukrainian refugees between different countries. More specifically, international solidarity in response to the migration crisis would significantly reduce the refugee flows to EU countries, incur a limited burden on non-EU countries, and, at the same time, better take the preferences of the Ukrainians into account.

Keywords: Ukraine, Refugees, Migration preferences

JEL codes: F22, J15, O15

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On February 24, 2022, Russia launched its full-scale invasion of Ukraine, a country with forty-four million inhabitants. The United Nations Refugee Agency (UNHCR) announced at an early stage that about four million people were expected to flee Ukraine. However, that number has already been surpassed by far. Six months after the invasion, the European Union (EU) and neighboring countries have already sustained an influx of almost 13 million Ukrainian refugee border crossings according to UNHCR (2022a). More than six million people have entered Poland and almost four million have fled to Hungary, Romania, Slovakia, and Moldova. Almost three million people are also estimated to have entered Russia. At the same time, almost six million people have returned to Ukraine, leaving the net number of Ukrainian refugees recorded across Europe at approximately seven million people (UNHCR 2022a). In addition, another seven million people are believed to be internally displaced within Ukraine (UNHCR 2022b). The situation is changing rapidly and the uncertainty as to how the conflict will develop makes it hard to predict how many will leave the country or become internally displaced and when they will be able to return to their homes permanently—if they ever want to return.

Before the outbreak of the war, Ukraine was already one of the poorest countries in Europe with a PPP-adjusted GDP per capita of only USD 14,000 in 2021 (World Bank 2022). Poverty was widespread and almost three million people needed humanitarian support in 2021. In addition, the threat from Russia also contributed to conflict and insecurity for many years. As of 2021, more than 850,000 Ukrainians were displaced within Ukraine (UNHCR 2022b). The full-scale invasion has made this situation and living conditions in Ukraine even worse, forcing many Ukrainians to leave their homes (UNHCR 2022a).

The purpose of this essay is to present estimates of the number of refugees expected to flee Ukraine and to which countries they are expected to migrate. In order to do so, we utilize recent

empirical migration research using data on migration aspirations to identify potential migrants and predict migration flows (Docquier, Peri, and Ruysen 2014; Migali and Scipioni 2019; Tjaden, Auer, and Laczko 2019; Milasi 2020). According to the aspiration/ability model (Carling 2002; Carling and Schewel 2018), migration is an outcome of i) migration aspirations and ii) the ability to realize such aspirations. Migration aspirations may be caused by external factors, such as war, poverty, and climate change, or by personal sentiments, such as life aspirations and ambitions. Whether or not migration aspirations translate into actual migration depends on the individual's ability to overcome the hurdles associated with migration. Factors such as social networks of past migrants and cultural proximity to the destination country also represent important determinants (Xiang and Lindquist 2014). While those with sufficient resources become voluntary migrants, those with aspirations but without sufficient resources become involuntary non-migrants (Carling 2002).

We present estimates of the number of refugees expected to flee from Ukraine, as well as their preferred destination countries, based on migration preferences and aspirations data from the global survey Gallup World Poll (GWP). We consider two different scenarios. In the first one, we assume that the Ukrainian refugees will move to EU countries only. This is in line with what we have seen so far following the Temporary Protection Directive (TPD), which offers Ukrainian refugees temporary residence and working permits within the EU. In the second scenario, we consider what would happen if comparable refugee policies were enacted globally and Ukrainians could move to any countries in the world. We believe that these estimates have important implications not only in terms of immediate refugee assistance programs but also for more long-term integration policies in transit and destination countries. Compared to other predictions and forecasts concerning Ukrainian refugee flows, which are usually based on historical migration flows data, we base our estimations on survey data asking about: 1) stated

aspirations to emigrate and 2) destination country preferences among the Ukrainian population. We find that more than a quarter of the Ukrainian population wanted to leave their country permanently before the war and that refugee policies in potential destination countries are likely to have a substantial impact on the distribution of Ukrainian refugees across different countries.

1. Migration preferences in the Gallup World Poll

In order to predict Ukrainian refugee flows and their preferred destination countries, we use data on Ukrainian migration aspirations collected by the GWP prior to the full-scale war.¹ The GWP conducts yearly surveys on attitudes and behaviors in 160 countries around the world, corresponding to 99 percent of the world's adult population (Gallup 2021). The annual sample of each country consists of at least 1,000 randomly selected individuals who are nationally representative of the resident population above the age of 15. Surveys are conducted face-to-face or by telephone. In our analysis, we use the GWP data for Ukraine between 2007 and 2021. The motivation for using multiple years, rather than a single one, is that this gives us a larger sample size, which we believe gives more reliable empirical estimates. To make the sample representative of the entire Ukrainian population, we apply sampling weights as recommended by the GWP (Gallup 2021). However, following Russia's annexation of Crimea in 2014, the GWP has excluded the Crimea region as well as some areas of the Donetsk and Luhansk regions. Hence, it is reasonable to assume that the GWP results are mostly representative of ethnic Ukrainians, rather than of ethnic Russians living in Ukraine.²

¹ This paper is based on and expands upon results first presented in a recent policy brief (Elinder, Erixson, and Hammar 2022).

² According to the latest Ukrainian census, conducted in 2001, Ukrainians constitute the majority ethnic group in the country (78 percent), followed by Russians (17 percent). Other ethnic groups each constitute less than one percent of the population.

In order to measure migration aspirations (that is, the wish to migrate), we use the following survey question in the GWP: “*Ideally, if you had the opportunity, would you like to move permanently to another country, or would you prefer to continue living in this country?*”³ Furthermore, in order to measure destination country preferences, we use the follow-up question (posed only to those responding that they would like to move to another country): “*To which country would you like to move?*” Note that the respondents are only able to select one preferred destination country.

This approach of using migration aspirations to predict migration flows is in line with previous research (Docquier, Peri, and Ruysen 2014; Migali and Scipioni 2019; Tjaden, Auer, and Laczko 2019; Milasi 2020), which has mainly focused on migration to developed countries. For recent discussions on the limitations of this approach and data, see, for example, Carling (2017) and Huber *et al.* (2022). A major caveat with regard to using migration aspirations to predict migration flows is that having a wish to migrate is not necessarily the same thing as acting upon it (Carling 2017). For instance, migration regulations or lack of access to information, social networks, resources, or other types of migration infrastructure may prevent turning migration aspirations into actual migration. As such, migration intentions (that is, migration plans and preparations) may represent a better measure than aspirations when it comes to predicting actual migration (Esipova, Ray, and Srinivasan 2011). Nevertheless, we believe that the question regarding migration aspirations offers valuable information on the proportion who, in light of the current crisis in Ukraine, would seek refuge in another country, if possible, as well as for understanding to which countries people would like to migrate. This is also in line with previous and recent experiences from, for example, Syria. Between 2008 and 2011, on average 30 percent of the Syrian population responded in the GWP that they would like to move

³ The proportion of people who would like to leave their country if they had the opportunity varies greatly across the world, from 3 percent in Indonesia to 64 percent in Sierra Leone.

permanently to another country. Since 2011, approximately 31 percent of Syrians have left the country as refugees (UNHCR 2022c). Moreover, the reason for using migration aspirations, rather than intentions, is also due to data availability, as questions about the latter have not been asked in the GWP since 2015. Finally, it should also be noted that the GWP question asks respondents about permanent migration and, as such, neglects potential migrants who only aspire to migrate temporarily (Huber *et al.* 2022).

2. Estimating the total number of Ukrainian refugees

Analyzing the GWP data regarding migration aspirations from 2007 to 2021, we find that even before the war, one in four Ukrainians (26 percent) wished to move permanently to another country if they could.⁴ How do we translate these 26 percent into predicting the total number of Ukrainian refugees? First, we assume that everyone who wanted to move before the war will move now. Second, we assume that the GWP is representative of the entire Ukrainian population and that individuals who wish to emigrate live in households of the same size as those who do not wish to emigrate. Based on these assumptions, this corresponds to almost twelve million individuals who we predict will leave Ukraine.⁵ Of course, exactly how many Ukrainians will eventually leave the country depends on many different factors; above all, how the war develops. It is also possible that the current situation has boosted Ukrainian nationalism and, as such, reduced aspirations to emigrate permanently from the country. Nevertheless, we believe that twelve million refugees is a reasonable estimate, possibly an underestimation, given that living conditions in Ukraine have deteriorated substantially and that the chances of obtaining at least a temporary residence permit have improved in many countries. In other

⁴ This is an average for the full 2007–2021 sample, which includes 13,036 respondents (excluding those who responded “*Don’t know*” or “*Refused*”). Due to COVID-19, no surveys including this question were conducted in Ukraine in 2020 (Gallup 2021).

⁵ More precisely, 11.6 million individuals, calculated as the share wishing to emigrate (26.2 percent) times the Ukrainian population in 2020 (44.1 million).

words, push factors have made it more urgent to leave Ukraine at the same time as pull factors have made it easier to move to many destination countries. However, as discussed above, using migration aspirations instead of intentions may bias the results in the opposite direction; that is, overestimate the migration flows. In our destination country analyses, we assume that the net effect of these opposite biases is zero.

Analyzing changes in Ukrainian migration aspirations over time, we find some volatility between years and that the number of people who would like to leave Ukraine permanently seem to have increased somewhat following the Russian annexation of Crimea in 2014: between 2007 and 2013, the average share of Ukrainians wanting to move permanently to another country was 24 percent; between 2014 and 2021, it was 29 percent; and in 2021, it was 35 percent—corresponding to 10, 13, and 16 million people, respectively. Figure A1 in the Appendix shows the 2007–2021 trend for Ukrainian migration aspirations over time, as well as upper and lower bounds of these estimations by either assuming that i) all or ii) none of the missing and “don’t know” respondents wanted to emigrate, respectively.

Table 1 presents some basic demographic characteristics of the Ukrainian survey respondents, categorized according to those who preferred to continue living in Ukraine and those who wanted to move permanently to another country. Among those who would like to emigrate, half were females and half were males, the average age was 37, half of them were married, and four out of ten had children under the age of 15. Four out of ten lived in cities, a quarter had tertiary education, two-thirds were employed, and the average annual income was USD 5,700. Finally, four out of ten were religious and one in four suffered from health problems. Compared with those who would like to stay in Ukraine, the Ukrainians with migration aspirations were on average younger, more often male, less likely to be married but more likely to have children,

more likely to live in cities, more often employed, more educated, less religious, and had a higher income and better health. If we were to adjust our predicted number of Ukrainian refugees based on the fact that those wishing to emigrate on average had more children than those wanting to stay, the estimated number of refugees would become somewhat higher.

[Table 1 about here]

3. The EU distribution of Ukrainian migration preferences

Several policies aimed at aiding refugees from Ukraine have been enacted in various countries. The most prominent policy is the TPD⁶ adopted by the EU, which was activated on March 4, 2022. The TPD decrees that refugees from Ukraine be offered temporary residence and working permits in any EU country for one year, with the possibility of being granted an extension of two additional years. The TPD also grants Ukrainian refugee children access to schooling and health care. The features of the TPD make it more attractive for Ukrainians to seek refuge in the EU than elsewhere. This is confirmed by the refugee flows observed during the first months of the war, which have primarily been to the EU: among the seven million Ukrainian refugees recorded across Europe, four million have been registered in accordance with the TPD (UNHCR 2022a). The actual distribution of Ukrainian refugees recorded across Europe, as of September 13, 2022, is presented in Table 2. Moreover, this is also in line with the locations of the pre-war Ukrainian diaspora: in 2020, six million Ukrainians lived outside the country, five million of whom lived in Europe (UNHCR 2022a).

[Table 2 about here]

⁶ Council Directive 2001/55/EC.

However, information regarding to which EU countries Ukrainians will move permanently remains uncertain. We shed light on this issue by predicting the distribution of refugees across the 27 EU member states by using the GWP survey data on which countries Ukrainians prefer as destinations. Overall, we use the same data and methodology as above (including, for example, using average values between 2007 and 2021, applying GWP sampling weights, and excluding missing responses). The distribution of refugees is predicted by calculating the number of Ukrainians wanting to move to each EU country as a share of the total number of people wanting to move from Ukraine to the EU times the total number of predicted Ukrainian refugees (11.6 million). In other words, we here assume that all Ukrainian refugees would move to the EU and that the EU destination country preferences of those who preferred an EU country are representative also for those who preferred another country.

The results, as illustrated in Table 3, show that Germany is the most preferred country in the EU. Assuming that twelve million Ukrainians flee to the EU without restrictions, Germany would receive an estimated 4.1 million Ukrainians. Poland is the second most preferred country and would receive an estimated 1.8 million refugees. As a robustness check of these results, we have also tried using the GWP data on destination country preferences from different years, where we find very similar results.⁷ Relative to its population size, Czechia would receive the largest number of Ukrainian refugees (7.6 percent), followed by Luxembourg (6.8 percent), Germany (5.0 percent), and Poland (4.7 percent).

[Table 3 about here]

⁷ Using average destination country preferences from 2014 to 2021 instead of the entire period of 2007–2021, the ten most preferred EU countries are the same, but in a slightly different order: Germany, Poland, Czechia, Italy, Spain, France, Austria, Netherlands, Sweden, and Denmark.

We also find that Germany, Poland, and Czechia would receive approximately twice as many refugees if Ukrainian migrants were to follow their own destination country preferences, compared to a scenario in which Ukrainian refugees are proportionally distributed according to the population size of the different EU countries (see Figure A2 in the Appendix). In the latter case, each EU country would experience a 2.6-percent increase in population size. Notably, other large countries such as France, Spain, and Romania are less popular among Ukrainians, which is why they are estimated to receive significantly fewer refugees if Ukrainian preferences are the determining factor rather than proportional distribution. However, it remains uncertain whether the EU will implement a proportional distribution or accept a *laissez-faire* distribution and compensate countries financially (European Commission 2022).

4. A global distribution of Ukrainian refugees

Another possibility is that more countries will enact temporary protection policies to aid Ukrainian refugees. For example, different versions of such initiatives have been put forward by Canada, Norway, Switzerland, the United Kingdom, and the United States. In this section, we extend and characterize the distribution of Ukrainian refugees under the hypothetical scenario that non-EU countries implement migration policies that are comparable to the EU's TPD. More specifically, we present estimates of how many refugees would move to different countries under the assumption that they could go anywhere in the world. Here, the distribution of refugees is predicted by calculating the share of Ukrainians with migration aspirations wishing to emigrate to each destination country, multiplied by the total number of predicted Ukrainian refugees (11.6 million).⁸

⁸ Same data and estimation methods as above. Average values between 2007 and 2021.

[Table 4 about here]

The global results are presented in Table 4 (for a geographic illustration, see Figure A3 in the Appendix). Naturally, in this scenario, all EU countries would receive fewer refugees than if all Ukrainian refugees moved to the EU. Once again, however, Germany is the most popular country among Ukrainians, followed by the United States, Russia, and Poland. In this scenario, Germany would receive 1.9 million refugees, instead of 4.1 million as in the scenario where all Ukrainians seek refuge in EU countries. For Poland, the corresponding number would be 840,000 refugees instead of 1.8 million. The United States and Russia would receive 1.7 and 1.5 million Ukrainian refugees, respectively. Also, Canada and the United Kingdom are countries outside the EU in which many Ukrainians would like to live: 680,000 and 540,000 people, respectively.⁹

A special comment is warranted regarding Russia. Our analysis shows that Russia was a relatively popular destination country among Ukrainians before the invasion. For many Ukrainians, Russia is likely no longer a preferred option. However, as 2.6 million Ukrainians have entered Russia according to estimations by UNHCR (2022a), the empirical reality supports the notion that Russia may still be among the main destination countries for Ukrainians. In the case of forced deportations, however, this is intrinsically different from the migration aspirations and destination country preferences we study here. According to a recent statement by the US Secretary of State, Antony J. Blinken, between 900,000 and 1.6 million Ukrainians, including 260,000 children, may have been forcibly deported from their homes to Russia (US Department of State 2022).

⁹ Using 2014–2021 (instead of 2007–2021) average destination country preferences, the ten most preferred countries are the following: Germany, United States, Poland, Russia, Canada, Czechia, Italy, Switzerland, United Kingdom, and Spain.

The last column in Table 4 presents the number of Ukrainian refugees relative to the population size of the destination country. As shown, apart from the European microstates of Liechtenstein and Monaco, Czechia would still experience the largest increase in population size (3.6 percent), followed by Luxembourg (3.2 percent), Belarus (3.0 percent), and Switzerland (2.7 percent). The United States (0.5 percent), Russia (1.1 percent), Canada (1.8 percent), and the United Kingdom (0.8 percent) would all receive refugees amounting to less than two percent of their current populations. In comparison, if all refugees were distributed proportionally within the EU, each EU country would increase its population by 2.6 percent. Note that in the long run, such population increases may very well be beneficial for some EU countries, especially the ones experiencing negative population growth without immigration. In the short run, however, population shocks of such magnitudes are likely to come with substantial challenges.

These results suggest that international solidarity in response to the refugee crisis would significantly ease the burden for EU countries, impose relatively limited costs on non-EU countries, and, at the same time, better take the preferences of the Ukrainians into account.

Finally, as a preliminary check of our methods and assumptions, we compare our predicted migration flows with the actual net migration flows presented in Table 2. Comparing the number of refugees in our global distribution estimations with the current recorded number of Ukrainian refugees across Europe, we see that our predictions seem to do a relatively good job (see Figure A4 in the Appendix). The pairwise correlation for the world distribution is 82 percent ($n = 44$), and for the EU distribution, it is 81 percent ($n = 26$). On average, our predicted number of refugees is still somewhat higher than the actual number. Note, however,

that these were the numbers of Ukrainian refugees recorded as of September 13, 2022, and for most destination countries, these numbers are still increasing. For some countries, notably Poland and Russia, the recorded numbers are higher than our predictions, suggesting that many of the refugees currently residing in these countries may either want to return to Ukraine or move on to other preferred destination countries. For other countries, such as Germany, our predictions are higher than the current number of refugees, suggesting that more Ukrainians may still want to move to these countries.

5. Final remarks

While the estimates presented here are based on a representative sample of Ukrainian responses in the GWP, those who flee from the war in Ukraine are not necessarily representative of those who wanted to leave the country before the war. For example, primarily women and children are currently leaving Ukraine, not least since working-age men are not allowed to leave the country. Based on the demographic characteristics of the survey respondents (see Table 1), we know that women were more common among those preferring to stay in Ukraine. If anything, this suggests that even more people might be leaving the country once adult men are also allowed to leave. Moreover, respondents with children were overrepresented among those wanting to leave Ukraine, which is in line with the characteristics of the current refugee flows (EU 2022).

However, the survey questions we analyze concern preferences for leaving the country permanently. As such, these results should be thought of as post-war outcomes rather than reflecting the more temporary short-term migration flows. Currently, and possibly as long as the war continues, the actual migration flows are still increasing. In the short to medium run, however, many of those who only wished to migrate temporarily are likely to return to Ukraine,

which will reduce the net actual migration flows relative to our predictions. Yet, in the longer run, we find it likely that, if permitted, many of those aspiring to leave Ukraine permanently will remain in their preferred destination countries in line with our predictions.

In addition, it is not certain that migration preferences regarding destination countries, measured before the war, mirror those in the current crisis. Yet, it is likely that countries ranked high as preferred migration destinations before the outbreak of the war represent countries where many Ukrainians still believe that they could find a better life. If, for example, this is due to family reunifications or opportunities to improve their standards of living, these are factors that ought to be important for people fleeing the war as well. It is also likely that countries deemed attractive if given the choice of voluntary migration remain attractive in cases of forced migration. In reality, however, both immigration policies in destination countries and available resources for migrants may limit the available set of destination countries. Moreover, refugees often have more restricted choices, particularly in times of crisis. It should also be noted that our analysis does not tell us anything about the reasons for these migration aspirations and preferences. In other words, the various factors affecting Ukrainian migration preferences are beyond the scope of this study. This would be an interesting topic for future research.

Finally, exactly how many Ukrainians will eventually seek refuge in other countries is inherently difficult to predict. First, the number of people who will leave Ukraine depends a great deal on how the situation in the country develops. Moreover, the countries where Ukrainians seek refuge will depend on policies adopted by the potential destination countries as well as many other factors, such as the experiences and country choices of earlier refugees—especially relatives and friends. However, factors that have not changed all that much since the respondents were surveyed, such as distance to different destination countries, language

barriers, and economic and political conditions in destination countries, were likely already taken into account by the potential migrants when expressing their preferred destination country. Currently, many EU countries are attractive destination countries. It remains to be seen if other preferred countries, such as the United States, Canada, and the United Kingdom, will also become equally feasible alternatives for the Ukrainian refugees.

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Tables

Table 1. Demographic characteristics of survey respondents.

Individual characteristics	Would like to stay	Would like to move
Female	58%	50%
Age (years)	50	37
Married	57%	52%
Children below 15	28%	39%
Urban	35%	43%
Higher education	16%	23%
Employed	57%	67%
Income (USD)	5,200	5,700
Religious	52%	41%
Health problems	41%	25%
Number of observations	9,618	3,418

Note: This table shows the average characteristics of the Ukrainian respondents in the Gallup World Poll 2007–2021, separated between those who preferred to remain in Ukraine versus those that wanted to move permanently to another country. The married category includes domestic partner. Respondents are classified as urban if they live in a large city or in a suburb of a large city. Higher education is defined as having completed four years of education beyond high school and/or received a 4-year college degree. Employed includes self-employment and part-time employment. Income refers to per capita annual income in international dollars. Respondents are classified as religious if they respond that religion is an important part of their daily life. Health problems are defined as any health problems preventing the respondents from doing any of the things people in their age group are normally able to do.

Table 2. Individual refugees from Ukraine recorded across Europe (September 13, 2022).

Rank	Country	Number of refugees
1	Russia	2,593,000
2	Poland	1,379,000
3	Germany	1,003,000
4	Czechia	431,000
5	Italy	160,000
6	Türkiye	145,000
7	Spain	142,000
8	United Kingdom	123,000
9	France	101,000
10	Slovakia	93,000
11	Moldova	91,000
12	Austria	81,000
13	Romania	81,000
14	Netherlands	77,000
15	Bulgaria	67,000
16	Lithuania	65,000
17	Switzerland	61,000
18	Belgium	55,000
19	Estonia	55,000
20	Portugal	50,000
21	Sweden	47,000
22	Ireland	46,000
23	Finland	39,000
24	Latvia	38,000
25	Denmark	35,000
26	Hungary	29,000
27	Norway	27,000
28	Georgia	26,000
29	Montenegro	24,000
30	Belarus	23,000
31	Serbia and Kosovo	19,000
32	Greece	19,000
33	Croatia	18,000
34	Cyprus	14,000
35	Slovenia	8,000
36	Luxembourg	7,000
37	North Macedonia	5,000
38	Azerbaijan	5,000
39	Albania	3,000

40	Iceland	2,000
41	Malta	1,000
42	Armenia	<1,000
43	Liechtenstein	<1,000
44	Bosnia and Herzegovina	<1,000
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	Total	7,279,000

Note: UNHCR statistics as of September 13, 2022, compiled mainly from data provided by government agencies. Data reporting date may differ between countries. Numbers rounded to nearest 1,000.

Source: UNHCR (2022a).

Table 3. Estimated distribution of Ukrainian refugees within the EU.

EU rank	Country	Number of refugees	Share of population (%)
1	Germany	4,121,000	5.0
2	Poland	1,787,000	4.7
3	Italy	1,266,000	2.1
4	France	840,000	1.2
5	Czechia	811,000	7.6
6	Spain	614,000	1.3
7	Netherlands	337,000	1.9
8	Austria	334,000	3.7
9	Sweden	290,000	2.8
10	Denmark	191,000	3.3
11	Portugal	167,000	1.6
12	Greece	161,000	1.5
13	Slovakia	109,000	2.0
14	Hungary	88,000	0.9
15	Finland	80,000	1.4
16	Belgium	58,000	0.5
17	Croatia	49,000	1.2
18	Romania	45,000	0.2
19	Estonia	45,000	3.4
20	Luxembourg	43,000	6.8
21	Bulgaria	39,000	0.6
22	Lithuania	29,000	1.0
23	Latvia	24,000	1.2
24	Cyprus	17,000	1.4
25	Ireland	14,000	0.3
26	Slovenia	14,000	0.7
27	Malta	4,000	0.7
	Total	11,574,000	2.6

Note: This table shows the EU distribution of Ukrainian refugees under the assumption that all Ukrainian refugees would move to the EU and distribute themselves according to their destination country preferences. Share of population refers to the percentage of estimated Ukrainian refugees relative to the population of the destination country in 2020. Calculations are based on migration aspirations and destination country preferences from the GWP 2007–2021 and country populations in 2020 from the World Development Indicators (World Bank 2022). Numbers rounded to nearest 1,000.

Table 4. A global distribution of Ukrainian refugees.

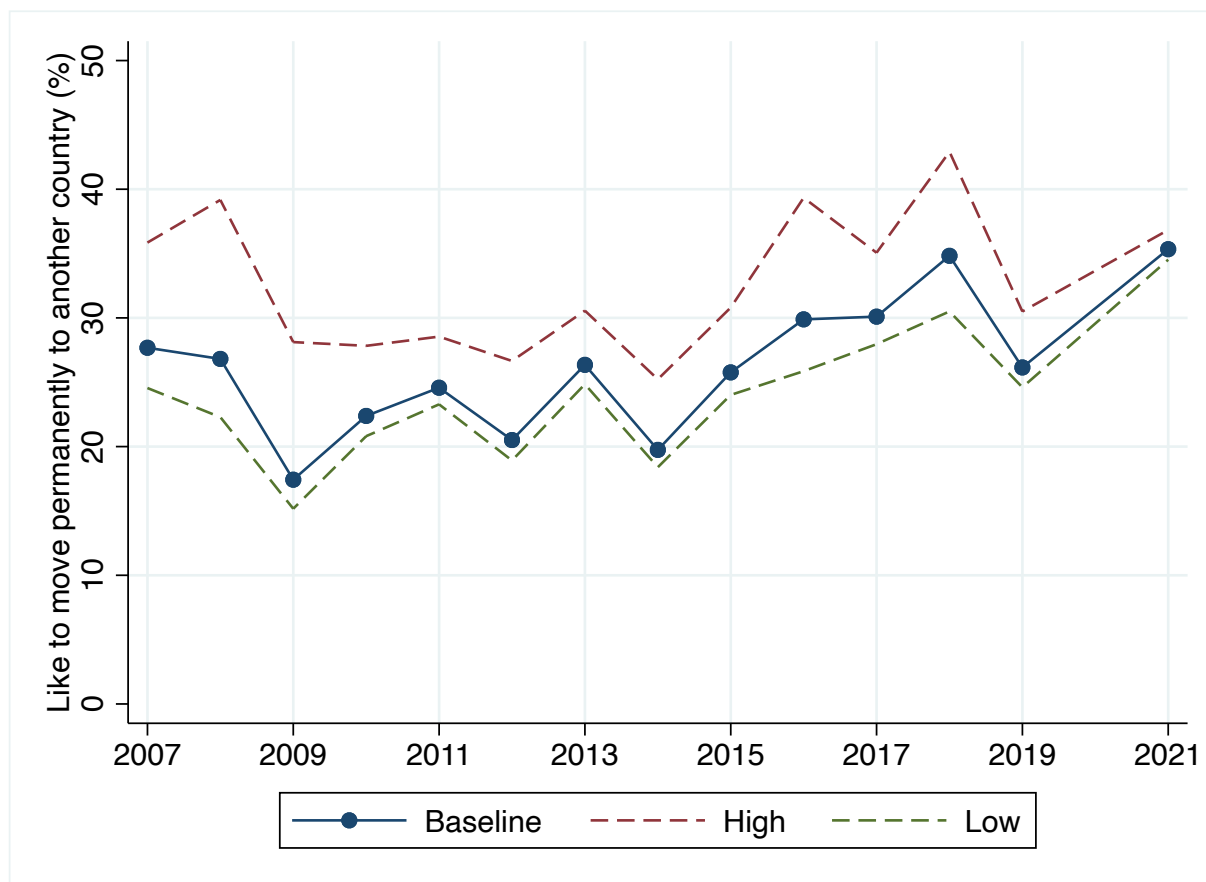
World rank	Country	Number of refugees	Share of population (%)
1	Germany	1,936,000	2.3
2	United States	1,704,000	0.5
3	Russia	1,519,000	1.1
4	Poland	840,000	2.2
5	Canada	682,000	1.8
6	Italy	595,000	1.0
7	United Kingdom	542,000	0.8
8	France	395,000	0.6
9	Czechia	381,000	3.6
10	Spain	289,000	0.6
11	Belarus	277,000	3.0
12	Switzerland	235,000	2.7
13	Israel	206,000	2.2
14	Netherlands	158,000	0.9
15	Austria	157,000	1.8
16	Australia	142,000	0.6
17	Sweden	136,000	1.3
18	Denmark	90,000	1.5
19	Norway	83,000	1.5
20	Portugal	78,000	0.8
21	Greece	76,000	0.7
22	Slovakia	51,000	0.9
23	Hungary	41,000	0.4
24	Türkiye	41,000	<0.1
25	Finland	37,000	0.7
26	Georgia	34,000	0.9
27	Japan	32,000	<0.1
28	Belgium	27,000	0.2
29	Croatia	23,000	0.6
30	Egypt	23,000	<0.1
31	Thailand	23,000	<0.1
32	Romania	21,000	0.1
33	Estonia	21,000	1.6
34	Luxembourg	20,000	3.2
35	Bulgaria	19,000	0.3
36	United Arab Emirates	17,000	0.2
37	New Zealand	17,000	0.3
38	Argentina	17,000	<0.1
39	China	16,000	<0.1

40	Moldova	14,000	0.5
41	Armenia	14,000	0.5
42	Lithuania	14,000	0.5
43	North Korea	11,000	<0.1
44	Latvia	11,000	0.6
45	Kuwait	11,000	0.3
46	Jordan	8,000	0.1
47	Vietnam	8,000	<0.1
48	Cyprus	8,000	0.6
49	Saudi Arabia	8,000	<0.1
50	India	7,000	<0.1
51	Ireland	7,000	0.1
52	Brazil	7,000	<0.1
53	Slovenia	7,000	0.3
54	Algeria	6,000	<0.1
55	Iceland	5,000	1.4
56	Trinidad and Tobago	5,000	0.4
57	Ghana	5,000	<0.1
58	South Africa	4,000	<0.1
59	Montenegro	3,000	0.6
60	Burkina Faso	3,000	<0.1
61	Liechtenstein	3,000	7.3
62	Colombia	3,000	<0.1
63	Cuba	3,000	<0.1
64	Cameroon	2,000	<0.1
65	Malta	2,000	0.3
66	Azerbaijan	2,000	<0.1
67	Myanmar	2,000	<0.1
68	Monaco	2,000	3.9
69	Dominican Republic	1,000	<0.1
70	Botswana	1,000	0.1
71	Turkmenistan	1,000	<0.1
72	Mexico	1,000	<0.1
73	Syria	1,000	<0.1
74	Albania	1,000	<0.1
Other countries		384,000	<0.1
Total		11,574,000	0.1

Note: This table shows the global distribution of Ukrainian refugees under the assumption that they could move to any country in the world and distribute themselves according to their destination country preferences. Share of population refers to the percentage of estimated Ukrainian refugees relative to the population of the destination country in 2020. Calculations are based on migration aspirations and destination country preferences from the GWP 2007–2021 and country populations in 2020 from the World Development Indicators (World Bank 2022). Numbers rounded to nearest 1,000.

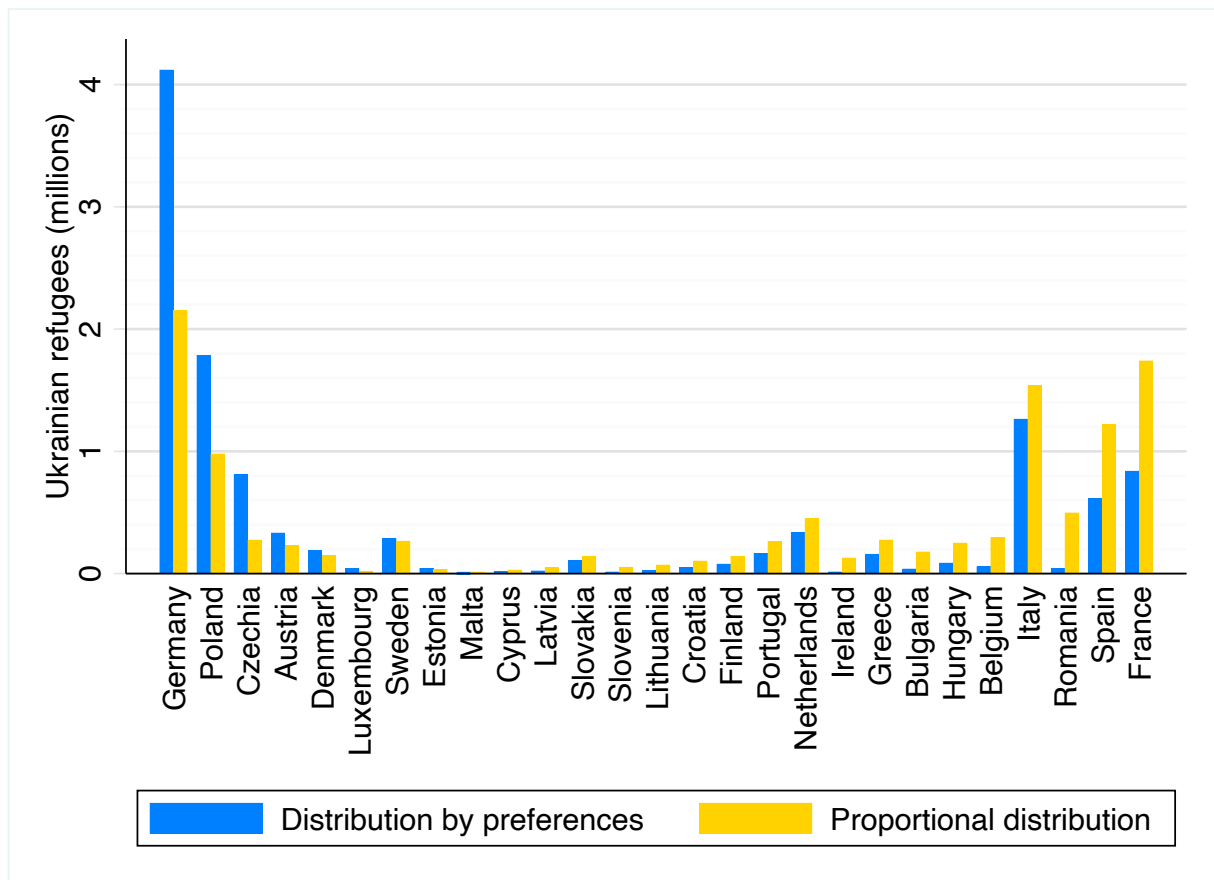
Appendix figures

Figure A1. Migration aspirations in Ukraine, 2007–2021.



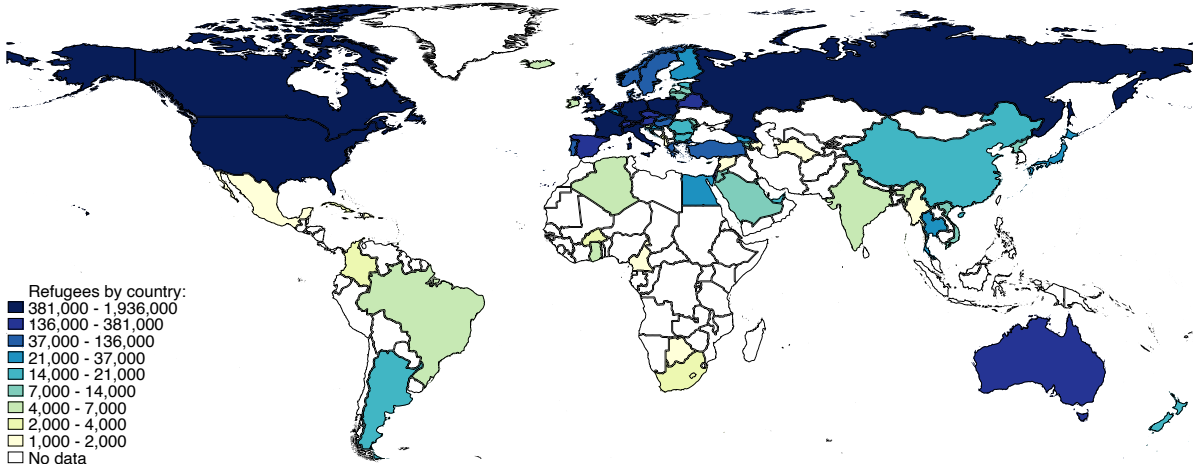
Note: This figure shows the share of Ukrainians responding in the GWP 2007–2021 that they would like to move permanently to another country if they had the opportunity. Baseline (blue solid line) excludes “don’t know” and refused answers. The upper bound (red dashed line) assumes all missing and “don’t know” respondents wanted to emigrate, while the lower bound (green dashed line) assumes that all of them preferred to continue living in Ukraine. In 2020, no surveys with this question were conducted in Ukraine (due to COVID-19).

Figure A2. The EU distribution of Ukrainian refugees: preferences versus proportional distribution.



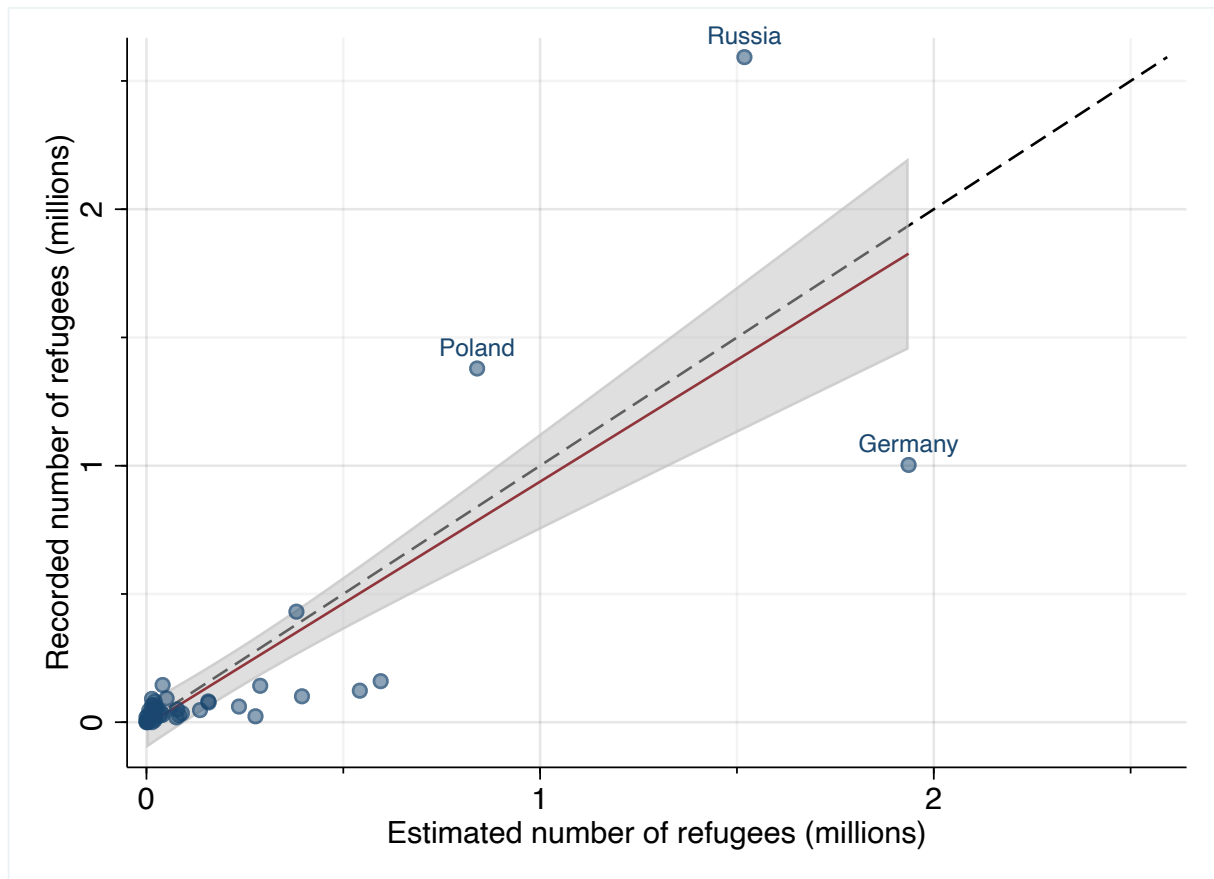
Note: This figure shows the EU distribution of Ukrainian refugees under the assumption that all Ukrainian refugees would move to the EU and (i) distribute themselves according to their destination country preferences (blue) or (ii) be proportionally distributed according to the destination country populations (yellow). Countries on the x-axis are ranked according to the difference between the number of refugees in the case of following their preferences and the case of a proportional distribution. Calculations are based on migration aspirations and destination country preferences from the GWP 2007–2021 and country populations in 2020 from the World Development Indicators (World Bank 2022).

Figure A3. A global distribution of Ukrainian refugees.



Note: This map shows the global distribution of Ukrainian refugees under the assumption that they could move to any country in the world and distribute themselves according to their destination country preferences. Calculations are based on migration aspirations and destination country preferences from the GWP 2007–2021.

Figure A4. A comparison between the estimated and recorded number of Ukrainian refugees.



Note: The x-axis shows our predicted number of Ukrainian refugees across destination countries in the global case where Ukrainian refugees could go anywhere (see Table 4). The y-axis shows the actual number of Ukrainian refugees recorded across Europe according to UNHCR (2022a) as of September 13, 2022 (see Table 2). Each point represents a destination country. The dashed line shows the 45-degree line where the predicted and the actual number of refugees are the same: observations above that line are countries where the current number of recorded refugees is higher than the predicted number, while observations below the line are countries where the predicted number of refugees is higher than the actual number. The red line shows a linear fit prediction with 95 percent confidence intervals.