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Will Ukraine's refugees go home?

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Policy Contribution
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Will Ukraine's refugees go home?

Uri Dadush and Pauline Weil

Executive summary

ABOUT 15 PERCENT percent of the population has fled Ukraine since the start of the Russian aggression in February 2022. Nearly 4 million Ukrainians have already registered in European Union countries. Based in part on evidence that few refugees return voluntarily to poor countries once they settle in rich countries, even once security is re-established at home, it can be expected that large numbers of Ukrainian refugees are likely to remain in European host countries, and will likely be joined by others, including many men that remained to fight when the conflict is over.

UKRAINE ALREADY HAS a long history of emigration. Its shattered economy, the likelihood of a protracted conflict and significant uncertainty with regard to its final status reinforce the argument that most refugees will not return and many more will join them outside Ukraine. EU nations must prepare for this situation. There will be large short-term costs and long-term economic gains from Ukrainian immigration in Europe. The best way to help Ukraine, and to moderate the likely outflow of its people, will be to assist in the country's reconstruction, and not to place artificial impediments on the immigration of individuals who have already suffered greatly.

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1 Introduction

About 15 percent of Ukraine's population of over 40 million have fled the country since Russia's invasion in February 2022. According to the United Nations Refugee Agency (UNHCR), 13 million Ukrainians are stranded in areas affected by the conflict, 8 million are internally displaced and another 6.8 million are refugees in third countries[1]. Of those refugees, most of whom have gone to neighbouring countries, about 4 million are officially registered in European Union countries. The UN also monitors border crossings: by 19 July 2022, 11.5 million Ukrainians had crossed the border out of Ukraine and 5 million into Ukraine. However, many of these movements represent back-and-forth movements instead of exile or return.

The intake of Ukrainian refugees is the largest recorded into European countries over a short period. Unlike recent waves of refugees from the Middle East, Ukrainians have been largely welcomed and accommodated. The inflow has unique characteristics. For example, it consists mainly of women, children and older men, since men between the ages of 18 and 60 remain to fight. Refugee interviews conducted by UNHCR showed that the adult refugee population was 86 percent women and that 84 percent were of working age (aged 18-59) (UNHCR, 2022). Many are well educated, as more than 90 percent of young adults in Ukraine completed at least upper-secondary education in 2020, compared with 84 percent in the EU[2]. Strikingly, 65 percent of Ukrainian women aged 30-34 have completed upper secondary education, compared to 46 percent in the EU. UNHCR interviews conclude that 49 percent of Ukrainian refugees hold higher-level degrees.

For countries hosting refugees there are pressing questions: will most of those who have fled Ukraine return, or will families eventually be reunited abroad, possibly implying an even greater inflow of Ukrainians into Europe and elsewhere when the war is over? What are the implications for Ukraine and for receiving countries?

We make the following assessment[3]:

- Even if the war ends soon and even if Ukraine emerges without a large loss of territory compared to before the 24 February invasion, many Ukrainian refugees would likely settle abroad permanently, and many would be joined by men returning from the war. Long before the war, Ukrainians exhibited a pronounced propensity to emigrate. This propensity will probably be greater still after the war. The longer the conflict goes on, the greater Ukraine's loss of territory and the greater the uncertainties that prevail about Ukraine's final status, the larger will this new Ukrainian diaspora become.
- Ukraine's population has been in sharp decline over the last 30 years because of emigration and low birth rates. It peaked at over 52 million in the early 1990s. Just before the invasion, including Crimea and all the Donbas, parts of which were outside Ukrainian government control, the population was estimated at 43 million in January 2022, although it may have been even lower[4]. Because of the war and the surge of refugees that has already occurred, a further permanent large loss of population is likely. Consequently, Ukraine will emerge as both a smaller economy and a war-devastated economy. If, moreover, the territorial gains made by Russia in the east and south hold, Ukraine will be deprived of

1 See UNHCR data, 'Situation Ukraine Refugee Situation', available at https://data.unhcr.org/en/situations/ukraine#_ga=2.159929405.1617438038.1655286099-1240663990.1655108913.

2 See Eurostat, 'European Neighbourhood Policy - East - education statistics', January 2022, available at https://ec.europa.eu/eurostat/statistics-explained/index.php?title=European_Neighbourhood_Policy_-_East_-_education_statistics.

3 The situation in and around Ukraine is of course fluid. Our analysis is speculative and is intended to be predictive rather than to express a judgement. Uncertainty about the duration of the conflict and the final status of Ukraine when the conflict ends make it especially difficult to predict how many refugees will return. It is nevertheless important to prepare for plausible outcomes and to understand their implications.

4 See Michał Kozak, 'The Ukraine's population is even lower than previously believed', *Observator Finansowy*, 29 June 2022, https://www.obserwatorfinansowy.pl/in-english/the-ukraines-population-is-lower-than-previously-believed/.

more population, large parts of its industrial capacity, some of its most productive agricultural land, and several of its outlets to the sea.

- Large inflows of Ukrainian refugees have created significant strain on social services, labour markets and government budgets, especially in neighbouring countries such as Poland. However, provided Ukrainians are free to move and work across the EU, with time they are likely to settle where they are most needed and welcomed. In 2019, the total working-age population of Ukraine was less than 28 million and that of the EU (including the United Kingdom) was about 327 million, down from 334 million in 2010. Thus, even were a quarter of Ukrainian workers to migrate to the EU and the UK, they would just about compensate for the workforce decline over the last decade or so. The long-term economic gains accruing to EU nations from absorbing Ukrainian refugees will likely outstrip the short-term costs.
- The main policy implication is that EU members should prepare for the permanent establishment of a large Ukrainian diaspora. This means strengthening mechanisms to support countries large Ukrainian populations and, most important, progressively allowing Ukrainians to move and work more freely within the EU (Darvas, 2022). A large and settled Ukrainian diaspora in Europe and elsewhere, including the newly arrived, will help absorb the migrants, contain the humanitarian crisis and assist in the reconstruction of Ukraine through remittances to families who stay at home (Van Houte and Davids, 2014). To mitigate the outflow of people from Ukraine and for humanitarian and security reasons, EU members and their NATO allies should prepare to assist in large-scale reconstruction of Ukraine. Ukraine's EU accession process establishes a framework within which the reconstruction of Ukraine, the refugee crisis and the eventual integration of the Ukrainian labour market with that of the European Union can be managed.

If Ukrainians are free to move and work across the EU, with time they are likely to settle where they are most needed and welcomed

2 Large scale return of Ukrainian refugees is unlikely

2.1 Pre-war, many Ukrainians migrated to richer neighbouring countries

The voluminous literature on refugee flows shows that few refugees return from rich to poor countries, even after security situations have stabilised. This is far from the case in Ukraine, where Russian forces are estimated to control about 20% of the territory and much of the Ukrainian economy's productive potential. The security situation in Ukraine is likely to remain precarious for a long time. Even if the war ends with a clear Ukrainian victory, the threat from Russia and from separatists will remain. An analysis of Syrian refugees concluded that of 5.6 million who left since 2011, just 1.8 percent had returned to Syria voluntarily by 2018 (Beaman, 2022). According to UNHCR, of over 82 million refugees worldwide in 2021, 430,000 returned to their country of origin, or about 0.5 percent. The vast majority of refugees who returned in 2021 were displaced to other poor neighbouring countries in inhospitable environments. Ukraine is a poor economy at the border of the far-richer EU. Like other refugees, most Ukrainians want to return, but they will have to weigh economic and security concerns in their decisions when the time comes. There might be a high proportion of "*pendulum*" Ukrainian migrants, working in the EU but spending time (and money) in Ukraine when work obligations allow (Górny and Kindler, 2016).

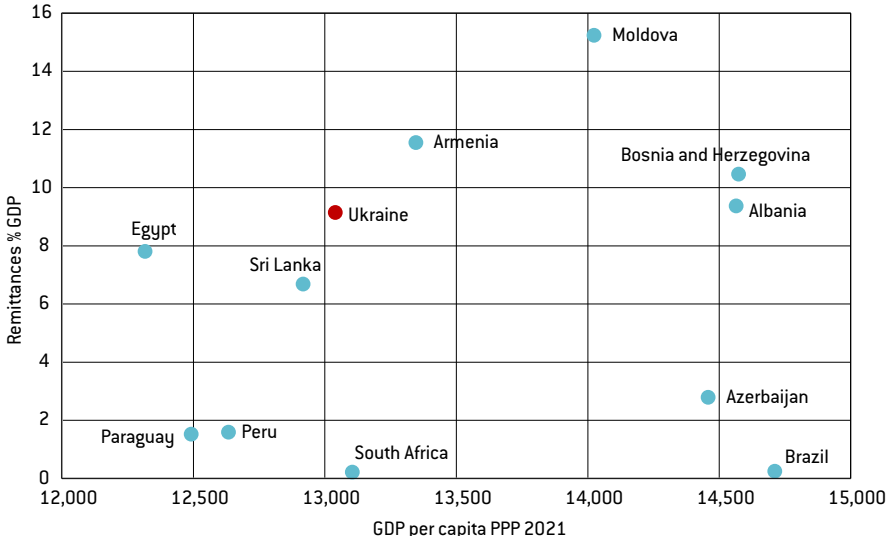
It should be noted that large transfers of populations to Russia could also be expected. Many Ukrainian refugees are recorded in Russia (Table 2), resulting from voluntary and forced

transfer[5]. And regions controlled by Russia or targeted by Russia are home to 20 percent of the Ukrainian population (over 4 million people live in Donetsk, 2.3 million in Luhansk and 2 million in Crimea).

Even before the security imperatives created by the war, Ukrainians exhibited a high propensity to emigrate. In 2020, the Ukrainian diaspora represented 14 percent of the population, a high share among a sample of developing countries, and close to five times higher than the share for other lower-middle income countries. Only a few small-population nations in the European periphery, such as Albania, had a much higher share. Accordingly, Ukraine is highly dependent on migrant remittances, which represent 9.2 percent of its GDP, twice that of other lower-middle-income countries (Figure 1). Based on the distribution of its diaspora and its remittances, Ukrainians abroad are distributed overwhelmingly among the nations in its wider neighbourhood, and in the United States (Table 1). Historically, Russia has been the recipient of by far the largest number of Ukrainian migrants, although its importance as a source of remittances has declined and the flow of Ukrainian migrants to Russia slowed markedly after the invasion of Crimea in 2014.

Poland has been a destination of choice for Ukrainians because of its demand for labour and its favourable regulations. The close formal and informal links with Poland's labour market allowed many Ukrainians to engage in temporary or seasonal work in Poland (Duszczyk and Kaczmarczyk, 2022). Poland is the source of over a third of remittances to Ukraine even though, before the war, it officially hosted fewer than 300,000 Ukrainians (Table 1); 1.35 million Ukrainians were estimated to be working in Poland. One can presume that Russia will not remain a first country of choice for Ukrainians in the foreseeable future, so even greater demand will be placed on Poland and other countries nearby to absorb refugees and economic migrants. Emigration to other European countries will be supported by existing diaspora networks. Even before the war, Ukraine was the third nationality of non-EU residence permits in the EU, after Morocco and Turkey. If one estimates of temporary migrant workers are included, Ukraine would probably move to first place[6].

Figure 1: Remittances as a share of GDP in Ukraine are high compared to countries with similar GDP *per capita*



Source: Bruegel based on Ratha and Kim (2022) and World Bank national accounts data.

5 As reported by Lori Hinnant, Cara Anna and Sarah El Deeb, '"The mouth of a bear": Nearly 2 million Ukrainian refugees sent to Russia,' *Los Angeles Times*, 20 July 2022, https://www.latimes.com/world-nation/story/2022-07-20/ukrainian-refugees-sent-to-russia.

6 Eurostat, 'Residence permits - statistics on stock of valid permits at the end of the year,' November 2021, available at https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Residence_permits_-_statistics_on_stock_of_valid_permits_at_the_end_of_the_year&oldid=546073.

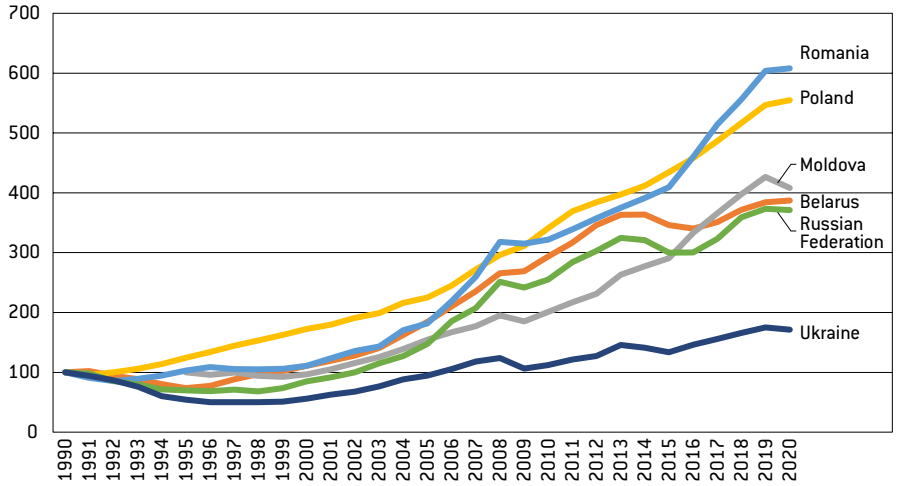
Table 1: Ukrainians living abroad as of mid-2020

	Stock of Ukrainians	As a share of Ukrainian population	Remittances to Ukraine in 2021 (% total)*
Russian Federation	3,268,000	7%	6% (from 26% in 2015)
United States	370,000	1%	11%
Kazakhstan	356,000	1%	n.a.
Germany	290,000	1%	4%
Poland	273,000	1%	33%
Italy	248,000	1%	4%
Belarus	222,000	1%	n.a.
Total	**6,139,000**	**14%**	

Source: Bruegel based on UN Population Division data and National Bank of Ukraine. Note: * = Remittances from country as % of total remittances to Ukraine.

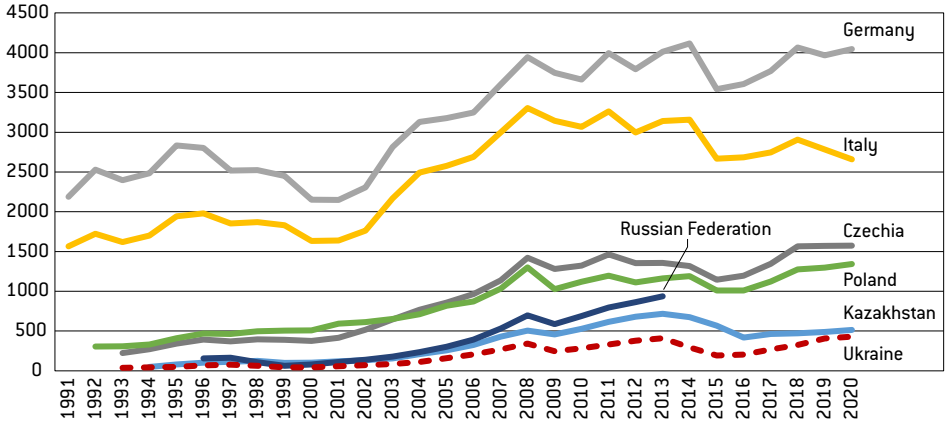
The historical propensity of Ukrainians to emigrate can be explained mainly in terms of economic incentives. Ukraine's economy grew relatively slowly in the post-Soviet era compared to other countries in eastern Europe (Figure 2). In 2020, wages in Ukraine were three to four times below those of Czechia and Poland (Figure 3). Ukraine's *per-capita* income before the war was about one-quarter that of Germany and about one third that of the EU (Table 2).

Figure 2: Ukraine did not grow as much as neighbours after the dislocation of the USSR



Source: World Bank Development Indicators.

Figure 3: Gross average monthly salaries in Ukraine and main migration destinations pre-war, US$ at current exchange rate



Source: UNECE Statistical Database.

Table 2: Ukraine's income gap relative to main host countries of Ukrainian refugees

Country	2021 GDP *per capita* PPP constant prices	Ukraine's income gap	Ukrainian refugees (thousands)*
Germany	53,138	308%	971
European Union	44,374	240%	4,037
Poland	34,395	164%	1,338
Hungary	33,796	159%	29
Slovakia	32,280	148%	91
Romania	30,689	135%	87
Russian Federation	28,081	115%	2,309
Belarus	19,743	51%	12
Moldova	14,023	8%	91
Ukraine	13,040	0%	

Source: Bruegel based on IMF *World Economic Outlook* April 2022 and UNHCR. Note: the United Nations High Commissioner for Refugees relies on figures provided by authorities. * = as of 23 August 2022.

According to the International Labour Organisation (ILO), for example, the poor business environment in Ukraine accounts for the failure to create jobs, encouraging people to migrate, regardless of their educational achievements (Vakhitova and Coupe, 2013). Ukraine was ranked 64 in the World Bank Doing Business Ranking for 2019, compared to 49 for Belarus, 48 for Moldova and 40 for Poland[7]. Ukraine is ranked 122 out of 180 by Transparency International on the corruption perceptions index[8]. Ukraine remains much less developed than its neighbours (Figure 2) and its shadow economy may represent as much as 40 percent of GDP (Polese *et al*, 2022).

Hyperinflation afflicted Ukraine in the wake of the dissolution of the Soviet Union. The Ukrainian economy, like that of Russia, failed to diversify and continued to rely mainly on agriculture and mining. Unlike Russia, however, Ukraine has few domestic energy resources, and has continued to rely on cheap Russian gas. The Ukrainian manufacturing sector, which accounts for just 10 percent of GDP, compared to 21 percent in other low and middle- income

7 See World Bank, 'Ease of doing business rank', available at https://data.worldbank.org/indicator/IC.BUS.EASE.XQ?locations=UA.

8 See Transparency International Ukraine profile, https://www.transparency.org/en/countries/ukraine.

countries according to the World Bank, has remained in the grip of connected oligarchs. Foreign direct investment (FDI) was scarce and was directed mainly into the finance and real-estate sectors – one reason Ukraine was hit hard by the 2009 global financial crisis. Between 2013 and 2016, the value of the FDI stock in Ukraine decreased by around 60 percent (Saha *et al*, 2018). The annexation of Crimea and separatist movements in the east forced Ukraine to divert resources to military spending; military spending increased from 1.6 percent of GDP in 2013 to 4 percent in 2020[9].

Institutional and governance weaknesses, internal divisions, and external threats help explain Ukraine's lacklustre economic performance over a long period (Dabrowski, 2017), despite the nation's abundance of agricultural and mineral resources and the relatively high educational attainment of its people compared to their income level (Table 3). Interestingly, despite the difficulties, Ukraine attracted immigrants, mainly from other parts of the former Soviet Union, some of whom are of Ukrainian ethnicity. In 2020, the equivalent of 11 percent of Ukraine's population was from foreign countries, mostly from Russia (8 percent) and Central Asian countries (3 percent)[10].

Table 3: Ukraine ranks high in years of schooling to compared to other lower-middle-income countries, data for 2019, in descending order

	Expected years of schooling	Mean years of schooling
Brazil	15	8
Ukraine	15	11
Peru	15	10
Albania	15	10
Sri Lanka	14	11
High human development countries	14	8
Bosnia and Herzegovina	14	10
South Africa	14	10
Egypt	13	7
Armenia	13	11
Azerbaijan	13	11
Paraguay	13	9
Moldova	12	12

Source: Bruegel based on UNDP (2020).

While the incentives for Ukrainians to emigrate were high even before the Russian invasion, the war has added immensely to the pressures because of the risks to personal security, uncertainties associated with possible Russian control over large parts of the country and the collapse of the Ukrainian economy.

9 Amy Mackinnon, 'Ukraine's Military Has Come a Long Way Since 2014', *Foreign Policy*, 23 December 2021, https://foreignpolicy.com/2021/12/23/ukraine-russia-military-buildup-capabilities/.

10 See data from the Migration Policy Institute 'Immigrant and Emigrant Populations by Country of Origin and Destination', available at: https://www.migrationpolicy.org/programs/data-hub/charts/immigrant-and-emigrant-populations-country-origin-and-destination.

2.2 The Ukrainian economy is shattered

Ukraine's economy is highly dependent on international trade; the blockade in the Black Sea is immensely damaging

According to World Bank projections, Ukraine's GDP will fall by 45 percent in 2022[11]. In September 2022, the Ukrainian Economy Ministry estimated a lesser but still dramatic contraction of 33 percent for 2022[12]. Ukraine's economy is highly dependent on international trade (80 percent of GDP) and 70 percent of its trade was conducted through the Black Sea, three quarters of which was handled by the port of Odessa[13]. The blockade in the Black Sea, the only economically viable outlet for Ukraine's export of grain and other bulk commodities, is immensely damaging. Indeed, it is difficult to imagine a viable Ukrainian economy without its freedom to navigate those waters. Ukraine's GDP and trade growth had already decelerated following the annexation of Crimea. The severe damage to transport infrastructure which has already occurred, and with more likely to come, is bound to depress trade further. Land and river routes to the west are entirely insufficient to accommodate trade volumes commensurate to those pre-war, and only at far higher cost[14]. For instance, transporting the goods through Poland adds 1,000 kilometres to the journey and costs four times more[15].

Agriculture represents 9 percent of Ukraine's GDP and 40 percent of exports (OECD, 2021). Maps of cereal production in Ukraine show that regions that came under Russian occupation since the February invasion account for a significant part of Ukraine's pre-war agriculture production[16]. In 2016-2020, Kherson Oblast and Zaporizhzhia Oblast in the south-east of Ukraine, and Odessa in the south, together accounted for 19 percent of Ukraine's barley production, 16 percent of sunflower seeds, 20 percent of rapeseed and 20 percent of wheat. The damage inflicted on the agriculture sector, including by disrupting its logistics, is a threat to Ukraine's food security and to countries in Africa and the Middle East that depend on imports from Ukraine.

The two other major sectors of the economy are metal and mineral production, which combined represent 30 percent of exports. The Dnieper-Donetsk and the Black Sea shores regions, occupied or targeted by Russia, contain 80 percent of Ukraine's mineral reserve[17]. The metal industry is also vulnerable because of its reliance on infrastructure. The damage already incurred in the port of Odessa is expected to take at least two and a half year to restore, while de-mining in the Black Sea could take six months[18]. The Donetsk region targeted by Russia in this phase of the war is the most populous of Ukraine, home to over 4 million people in 2021[19].

11 Arup Banerji, 'A Dynamic, Competitive Private Sector and an EU Orientation Should Be the Driving Force in Ukraine's Recovery', *Opinion* - World Bank, 28 June 2022, https://www.worldbank.org/en/news/opinion/2022/06/28/a-dynamic-competitive-private-sector-and-an-eu-orientation-should-be-the-driving-force-in-ukraines-recovery.

12 See Volodymyr Verbyany, 'Ukrainian Economy Devastated With 37% Slump in Second Quarter', *Bloomberg*, 8 September 2022, available at https://www.bloomberg.com/news/articles/2022-09-08/ukraine-economy-devastated-with-37-slump-in-second-quarter#xj4y7vzkg.

13 Brendan Murray, 'Ukraine's Ports Brace for More Economic Hardship in Russia Conflict' *Bloomberg*, 27 January 2022, https://www.bloomberg.com/news/newsletters/2022-01-27/supply-chain-latest-ukraine-s-ports-brace-for-more-economic-hardship.

14 Jen Kirby, 'Why grain can't get out of Ukraine', Vox, 20 June 2022, https://www.vox.com/23171151/ukraine-grain-wheat-russia-black-sea-odesa-food-crisis.

15 Marc Champion and Daryna Krasnolutska, 'Ukraine's Fight to Rebuild in Face of Unrelenting War', *Bloomberg*, 27 July 2022, https://www.bloomberg.com/features/2022-russia-war-impact-ukraine-global-trade-goals/.

16 See maps by the USDA, 'Ukraine, Moldova and Belarus - Crop Production Maps', https://ipad.fas.usda.gov/rssiws/al/up_cropprod.aspx.

17 Murray Brewster, 'Natural gas, rare earth minerals: What's at stake for Ukraine in the territory Russia is trying to conquer', *CBC*, 27 May 2022, https://www.cbc.ca/news/politics/natural-resources-ukraine-war-1.6467039.

18 Maytaal Angel, 'Ukraine grain exports capped at 2 million tonnes/month if ports remain blocked', *Reuters*, 7 June 2022, https://www.reuters.com/article/uk-igc-grains-conference/ukraine-grain-exports-capped-at-2-million-tonnes-month-if-ports-remain-blocked-idUKKBN2NO17H.

19 Statista based on State Statistics Service of Ukraine 'Total population of Ukraine as of January 1, 2021, by region', available at https://www.statista.com/statistics/1295222/ukraine-population-by-region/.

3 With appropriate policies, the EU will derive significant benefits from the settling of Ukrainian refugees

3.1 Temporary protection status

In contrast to previous – and much smaller – waves of refugees from Syria and Iraq, for example, Ukrainian refugees have been largely welcomed across Europe. The EU Temporary Protection Directive (2001/55/EC), triggered for the first time on 4 March 2022, permits any Ukrainian national who fled the war to choose an EU country where they will be granted automatically a residence permit[20] (Kerneïs 2022). Persons residing in Ukraine under an international protection status are also eligible (European Commission, 2022). The residence permit grants basic rights including education, health, housing and a basic allocation if needed. Countries have discretion to go beyond EU requirements by extending, for instance, eligibility, duration or amounts of allocation (eg the allocation is €426 per month in France, €64 euros per month in Poland)[21][22].

Refugees are granted these rights only in the country where they are registered. However, they can avail themselves of the visa regime in effect before the war in other EU countries, which allows for 90-day visa-free-travel. Ukrainian refugees are allowed to re-register in an EU country other than that of first registration, thereby forfeiting their rights in the latter. Via a 'Solidarity Platform', EU countries are meant to share information on their hosting capacities and on refugees registration. Through this platform, a country tells others that a refugee has registered with them. The country of first registration then has to de-register the refugee, limiting the administrative burden[23]. As such, although Ukrainians do not have the same access as EU citizens to the single market, they can benefit from considerable flexibility in pursuing their preferences and opportunities.

The status is granted for one year, and can be extended by a decision of the Council of the EU for up to three years. If the temporary protection ends, Ukrainians would *de facto* return to their pre-war status in Europe – including limited access to the labour market and return policies.

3.2 Short-term costs

The political context in Ukraine and the EU would probably allow for future extensions of the Temporary Protection Directive. However, the costs of absorbing large inflows of Ukrainian refugees in a short time are high, placing strain on budgets, health and education systems, and housing. These costs are highest in countries neighbouring Ukraine where the surge of refugees is greatest and occurred faster. In April 2022, by drawing on several studies, Darvas (2022) estimated the annual fiscal cost at €15,000 per refugee. Assuming that of the 6.1 million refugees registered, only two-thirds require help, the annual fiscal cost could reach €61 billion, with the burden falling most heavily on Poland, Romania, Moldova and Hungary. For the 3.7 million refugees present in EU countries, the annual cost would be €37 billion. This would represent a fiscal burden below 1 percent of GDP for most countries, except for two of the

20 See Council of the EU press release, 'Ukraine: Council unanimously introduces temporary protection for persons fleeing the war', 4 March 2022, https://www.consilium.europa.eu/en/press/press-releases/2022/03/04/ukraine-council-introduces-temporary-protection-for-persons-fleeing-the-war/.

21 See European Union Agency for Asylum, https://whoiswho.euaa.europa.eu/Pages/Temporary-protection.aspx

22 See European Website on Integration, 'Poland: Parliament adopts law on assistance to Ukrainian refugees', 18 March 2022, available at https://ec.europa.eu/migrant-integration/news/poland-parliament-adopts-law-assistance-ukrainian-refugees_en.

23 See Eleni Karageorgiou and Gregor Noll, 'Receiving Ukrainian Refugees in the EU: A Case of Solidarity?' 7 June 2022, ASILE project, https://www.asileproject.eu/receiving-ukrainian-refugees-in-the-eu-a-case-of-solidarity/.

main recipients, Poland (1.7 percent of GDP) and Moldova (6 percent of GDP). The EU financially supports member states in their hosting efforts. The Cohesion's Action for Refugees in Europe (CARE) reallocates EU funds from other budget lines amounting to around €17 billion (in line with Regulation (EU) 2022/562[24]).

The fiscal cost is only one aspect of the strain caused by the arrival of large numbers of refugees. For example, as early as 8 March 2022, two weeks after the Russian invasion, 1.2 million people arrived in Poland, or the equivalent of 1.5 times the population of the country's second city, Krakow (UNHCR data). At the end of April, the mayor of Warsaw flagged that the city was at "*capacity*". Across the country, strained services, full schools and lack of adequate housing were reported[25]. Rents increased by over 30 percent from February to end April in Warsaw, as the city's population jumped by 15 percent. Polish education minister Przemysław Czarnek said that more than 190,000 Ukrainian children had registered in Polish schools, and that number could grow to as many as 700,000 students[26]. Even before the war, Poland was reported as facing a teacher shortage.

Job market mismatch is a defining characteristic of large refugee inflows, even in relatively healthy economies, and Poland is no exception. For example, since the vast majority of Ukrainian refugees are women and children, many women compete for a small number of jobs that can accommodate childcare needs. Consequently, of the 500,000 refugees added to the labour force in Poland, many will struggle to find jobs, especially those who do not speak Polish or English. However, refugees – most of which have few means – have a strong tendency to adapt and take jobs that natives do not want, and at lower pay[27]. It is worth noting that employers' associations in Poland – where labour markets are very tight – expressed confidence that they can absorb the new labour force. Labour markets are also tight in Czechia and Germany, two other host countries for significant numbers of Ukrainian refugees. The OECD estimated that Ukrainian refugees will increase the EU labour force by 0.5 percent by the end of 2022 (OECD, 2022).

Job market mismatch is a defining characteristic of large refugee inflows

3.3 Long-term considerations

Numerous studies have explored the long-term fiscal implications of absorbing refugees[28]. Their main message is that, given time (a decade) and the opportunity to work, the present value of the fiscal cost of receiving a refugee is minimal, and will be positive if the refugee is early in his or her working life. This is because the direct and indirect contribution to government revenues of an extra worker offsets the initial hosting costs and the provision of social services over a refugee's lifetime. Older refugees have a higher net fiscal cost, assuming they are allowed to receive similar benefits as natives, which is often not the case.

There are two important implications of this. The first is that, given time, refugees who are permitted to work and move behave like economic migrants, and eventually resemble native worker in terms of their economic impact. The second is that refugees who return to their country of origin after they have been settled imply a large net cost for the host economy – the cost of settling (and sometimes resettling) has been incurred without deriving the benefits of their employment in the longer term.

The literature has also addressed widely the more complex issue of the overall impact of refugees on the economy and on the welfare of natives, some of whom compete with migrants

24 Available at https://eur-lex.europa.eu/eli/reg/2022/562.

25 Anna Liminowicz, 'Poland's resources running dry as Ukrainian refugee crisis continues', *NBC News*, 31 April 2022, https://www.nbcnews.com/news/world/polands-resources-running-dry-ukrainian-refugee-crisis-continues-rcna25991.

26 See from *TVP World*, 'Nearly 200,000 children from Ukraine in Polish education system', 4 May 2022, https://tvpworld.com/59993463/nearly-200000-children-from-ukraine-in-polish-education-system.

27 Anna Rzhevkina, 'Ukrainian refugees fill gaps in Polish labour market but risk getting stuck in low-skilled jobs', *Notes from Poland*, 1 June 2022, https://notesfrompoland.com/2022/06/01/ukrainian-refugees-fill-gaps-in-polish-labour-market-but-risk-getting-stuck-in-low-skilled-jobs/.

28 For a literature review, see Dadush (2018).

in the labour market. The International Monetary Fund's April 2020 *World Economic Outlook* presented an econometric panel analysis of large migration episodes in rich countries, concluding that a 1 percentage point increase in the ratio of the immigrant flow relative to total employment increases GDP by almost 1 percent by the fifth year (IMF, 2020). About two-thirds of this increase is attributed to an increase in labour productivity and the remaining one-third to employment growth. There is no change in the growth rate of native employment.

Strzelecki *et al* (2022) studied the economic effect of Ukrainian migration to Poland from 2013 to 2018. During this period, the authors estimated that Ukrainian migration added over 1 million workers to the Polish labour, amounting to 0.8 percent additional GDP growth a year. Using a growth accounting model, they concluded that this new workforce contributed by 0.5 percentage points to annual GDP growth (Strzelecki *et al*, 2022). A comprehensive analysis of the effects of migration on the native population was carried out by a World Bank team using a computable general equilibrium model of the global economy (World Bank, 2006). The Bank's simulations have some bearing on the Ukrainian case because they assume movement of population from developing countries (Ukraine in this case) to rich countries (the EU plus the UK in this case), which boost the labour force of the rich countries by 3 percent. That would be equal to 9.8 million working age people moving from Ukraine to the EU plus UK. Since about two-thirds of the Ukrainian population is of working age, the exodus from Ukraine, including families, would be 14.4 million people. This is an extreme but not entirely implausible scenario, given the war's devastating impact on the Ukrainian economy and the possibility of an indefinite stand-off.

From 2013 to 2018, Ukrainian migration added over 1 million workers to the Polish labour, amounting to 0.8 percent additional GDP growth a year

Insofar as the World Bank simulation exercise can be applied to the movement of Ukrainians into the EU, the income of EU natives would increase by 0.4 percent once a new steady state is achieved. This result arises because: a) the expansion of the labour force boosts the return to capital and increases the size of the economy, and b) natives gain from the presence of immigrant workers by taking on higher value-added and better-paid jobs. Though some natives compete directly with the newly arrived workers and may see somewhat lower wages, the assumption built into the model is that there is imperfect substitution between natives and migrants, so this effect is small. The assumption that immigrant workers and natives are not perfect substitutes is justified by the fact that migrants do not speak the language, have different types of skills, are less networked and have lower expectations.

The result of this highly stylised comparative statistics exercise suggests that the ongoing income accruing to natives from large inflows of Ukrainian refugees could easily outweigh the initial cost of absorbing Ukrainian refugees. For example, if one assumes that it takes five years for Ukrainian workers to be fully integrated into the EU labour force, and a real discount rate of 5 percent, the present value of the gains to natives would equal about 6 percent of GDP. This would compare to the initial fiscal cost of absorbing the refugees, which based on the calculations presented in the previous section, would amount to less than 1 percent of the EU's GDP.

4 Conclusion

Even in the best scenarios, large numbers of Ukrainian refugees will settle in the EU. The devastation wrought by the war on the Ukrainian economy is such that even larger numbers could be expected in the future. Ukraine will require massive assistance to rebuild, and countries receiving the largest numbers of refugees will require assistance during the settlement process. By far the most important step to facilitate the transition is to ensure that Ukrainians understand and use their freedom to work and move to wherever they are needed. The Ukrainian diaspora will help in reconstruction and in sustaining families back home.

In crisis, there is risk, but there is also opportunity. Natives in the countries receiving Ukrainian refugees may well derive significant economic gains from their arrival, expanding the size of markets, boosting investment, and enabling many natives to engage in higher paid work.

On 23 June 2022, the European Council granted Ukraine EU candidate status, conditional on reforms. This establishes an essential framework within which to manage the reconstruction of Ukraine, the refugee crisis and the eventual integration of the Ukrainian labour market with that of the EU. The best way to moderate the outflow of Ukrainians into the European Union is to help in the reconstruction of Ukraine, not to place obstacles in the way of people seeking a better life.

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