

## Arrival dynamics in three phases

Temporary collective protection for displaced persons from Ukraine in Norway

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By 30 November 2023, 67,909 displaced persons from Ukraine had applied for temporary collective protection (TCP) in Norway. In this policy brief, we describe the displaced from Ukraine who have travelled this far, their family composition, when they arrived and what areas in Ukraine they come from. To do this we analyse arrival registration data collected by the Norwegian Directorate of Migration.

#### Short summary

In the first weeks after the full-scale invasion of Ukraine, the number of displaced from Ukraine seeking TCP was not as high in Norway (even relative to population size) as in most other European countries. In subsequent months, the share of TCP holders seeking protection in Norway has gradually increased. From the second to the third quarter of 2023, the numbers of TCP applications granted in Norway increased by 63 percent, while the number of new applications in the EU/Schengen area at large was relatively stable (down by 1 percent). Although other countries saw an increase in TCP applications in this period, only Norway and Luxembourg saw increases above 60 percent.

While women and children dominated among the persons asking for TCP in the first two months after the full-scale invasion, men made up a larger share in later arrival phases. The gender distribution throughout 2023 has been similar to the gender distribution in Ukraine prior to the war. Households with at least one child make up less than half (44 percent) of all households on TCP in Norway.

One in five TCP holders in Norway have been outside of Ukraine for three months or more before seeking TCP in Norway (secondary movers). If we look only at applications submitted in 2023, one in three are secondary migrants. The share who has left Ukraine less than 3 months before they apply for TCP in Norway (direct movers) has been relatively stable throughout 2023. In September and October when arrival numbers were particularly high, persons coming directly from Ukraine still made up 70 (September) and 69 (October) percent of weekly TCP applications. We do not know what countries the secondary movers have stayed in before coming to Norway, as data on place of residence before coming to Norway has not been collected in a systematic manner. Analysis of data on previous residence permits and travel routes suggests that the majority of secondary movers have stayed in Poland or other neighbouring countries before coming to Norway. 14 percent of the secondary movers report having been in Southern Europe or West European countries one normally does not travel through to reach Norway from Ukraine.

Of the TCP holders in Norway, 57 percent are from currently occupied areas or areas close to the current frontline (November 2023). Another 22 percent of TCP holders in Norway come from areas that were previously occupied or close to the frontline. Among secondary movers, 70 percent are from currently occupied areas or areas currently close to the frontline.

## **Explanations of concepts used**

TCP: Temporary Collective Protection – Regulated under the European Union (EU) Temporary Protection Directive (Directive 2001/55/EC).

Direct movers: Used here to refer to displaced persons who have left Ukraine less than 3 months before they apply for TCP in Norway.

Secondary movers: Used here to refer to displaced persons who have stayed more than 3 months outside of Ukraine before they apply for TCP in Norway.

## Three phases of arrivals

For our analysis we distinguish between three different phases of arrivals of displaced persons from Ukraine in Norway, based on variation in weekly arrival numbers/the number of applications for TCP submitted. The number of applications was highest in the initial phase, averaging 1,800 per week in March and April 2022. In the secondary phase (May 2022 to June 2023), numbers stabilized at around 540 applications per week before arrival numbers gradually increased from July 2023. In the period July to October 2023 (recent phase), the number of applications per week averaged 884, reaching a peak in the last week of September when 1,147 TCP applications were submitted. Towards the end of the recent phase, in October and November 2023, the number of applications gradually decreased.

The highest weekly numbers of applications for TCP were submitted in the weeks immediately following the full-scale invasion of Ukraine on 24 February 2022. But compared to many other European countries, arrival numbers in Norway were relatively low (only about 0.5 percent of all TCP applications

## This policy brief analyses data on all persons who have received temporary, collective protection in Norway.

Our analysis is based on arrival registration data for persons who applied for protection between 24 Feb 2022 and 1 Nov 2023. The data originate from two separate sources, both administered by the Norwegian Directorate of Immigration (UDI). The first source is the arrival registration data in the DUF database. This constitutes information about 64,113 persons including gender, date of birth, nationality, date of decision on the first and last applications for protection, address abroad and date of settlement in municipality, as well as their registered language. The second source of data is the Start self-registration system, filled in by adults as part of the initial registration after arrival in Norway. The start database has information about travel routes, residence permits in other countries, marital status, date for leaving Ukraine. Of the 64 113 persons in the DUF database, 35,982 have registered in Start.

More information on the data used is provided at the end of this document.

The population in all tables is persons who have been granted temporary collective protection in Norway, or who have handed in an application that they are still waiting for an answer to. Table 1 Three phases of refugee arrivals in Norway. Number of TCP applications per monh.

	TCP applications	Average per month	Percentage of all TCP holders (1 Nov 2023)
Initial phase February–April 22 2 months	14,898	7,431	23
Secondary phase May 22–June 23 14 months	33,343	2,382	52
Recent phase July–October 23 4 months	15,872	3,932	25
Total 20 months	64,113	3,206	100

in the EU/Schengen area were submitted in Norway in the first two months).<sup>1</sup> After this, the share of applications in the EU/Schengen area that were submitted in Norway has gradually increased and by the end of October, the ratio of TCP applications submitted per 1,000 citizens in Norway was 11.1 per 1,000 citizens, slightly above the European average of 9.5.<sup>2</sup> At the end of October 2023, the ratio of Norway TCP holders per 1,000 inhabitants was still below countries like Germany (14.4 per 1,000) Poland and Estonia (26.14) and the Czech Republic (33.7). The level was similar to Finland (11.11 per 1,000) but lower than in neighbouring Denmark 6.0 per 1,000) and Sweden (4.04 per 1,000).

Since the arrival numbers in the first months after the full-scale invasion were relatively low in Norway,

	TCP per 1000 persons
Czechia	33.66
Estonia	26.25
Poland	26.14
Ireland	18.73
Germany	14.41
Finland	11.24
Norway	11.11
EU average	9.45
Iceland	9.32
Netherlands	7.84
Switzerland	7.5
Denmark	6.02
Sweden	4.04

Table 2 Number of TCP applications in selected European countries. Per 31. Oct 2023

<sup>1</sup> The population of Norway makes up about 1.2 percent of the population of the EU/Schengen area.

<sup>2</sup> Eurostat: Temporary protection for persons fleeing Ukraine -

monthly statistics. Data extracted on 8 December 2023, from https://ec.europa.eu/eurostat/statistics-explained.







the contrast in arrival numbers between the first and subsequent months has not been as marked in Norway as in many other European countries. In some other West-European countries (including Sweden, France, Switzerland and Belgium) almost half of all current TCP holders arrived in the two first months following the full-scale invasion.<sup>3</sup> As the graph in Figure 1 illustrates, the number of TCP applications in Norway was stable at 2,000–3,000 per month for 14 months, and then increased from July 2023. In Norway, more applications for temporary collective protection were submitted in the four months from July to October 2023 than in the first two months after the full-scale invasion. In this period, the number of TCP applications in the EU was relatively stable, with a reduction of 1 percent in the number of new applications from the second to the third quarter of 2023. Several other Western European countries had an increase from the second to the third quarter of 2023 (the number of new applications in the Netherlands increased by 30 percent, in Belgium by 24 and in Ireland by 11), but only Norway and Luxembourg had increases of more than 60 percent. The other Nordic countries all had a decrease in arrivals from the second to the third quarter of 2023.<sup>4</sup>

## No longer mainly women

Ukrainian refugees are often referred to as a refugee population consisting mainly of women and children. This is true if we look at the total population of Ukrainian displaced in Europe—men make up only about 30 percent of the adult population over 18 who were under TCP in the EU by the end of October 2023.<sup>5</sup>

The strong overrepresentation of women was, however, mainly the case in the initial phase of displacement. In these first two months after the fullscale invasion, women made up 84 percent of the adults getting TCP in Europe at large. In the autumn of 2023, the share of women among adults seeking TCP in Europe had fallen to 61 percent.<sup>6</sup> If we look at the population in Ukraine before the war, women were slightly overrepresented at 54 percent.<sup>7</sup> When we look at the arrival data for Norway, we find the same tendency (see Table 3). In the initial phase, the adults were mainly women, but in the secondary phase the share of men gradually increased, resulting in a more even gender distribution that is close to the gender distribution for the Ukrainian population before the war. If we look at the adult population of TCP holders in Norway in isolation, we find a slight overrepresentation of women. This is levelled out by boys aged 15-18 being significantly overrepre-

Table 3 Gender distri	bution among T(	CP holders in Norw	ay for the th	nree phases of	<sup>f</sup> arrival. Percent.
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	Share women in adult TCP population (EU - Eurostat)	Share women in adult TCP population (Norway)	Share women in total TCP po- pulation including children (Norway)	N (arrivals in Norway)
Initial phase	84	83	69	12,591
Secondary phase	66	59	56	22,237
Recent phase	61	57	54	12,967
Total	70	63	59	64,113

<sup>3</sup> Eurostat numbers calculated for 1 November 2023.

<sup>4</sup> Eurostat: Temporary protection for persons fleeing Ukraine monthly statistics. Data extracted on 8 December, from https:// ec.europa.eu/eurostat/statistics-explained.

<sup>5</sup> Eurostat: Temporary protection for persons fleeing Ukraine monthly statistics. Data extracted on 8 December, from https:// ec.europa.eu/eurostat/statistics-explained.

<sup>6</sup> Calculations based on Eurostat data on monthly numbers of persons getting temporary collective protection by gender and age.
<sup>7</sup> State Statistics Service of Ukraine (2019). Statistical Yearbook of Ukraine. Kyiv



Figure 2 Share who are female among TCP holders, by age and month of arrival. Percent.



sented, in particular in secondary and recent arrival phases (see Figure 2).

#### Families without children in majority

In Norway, applicants for asylum/TCP are registered with a family ID. The code is the same for all family members, even if the family members do not arrive at the same time. We have used this family ID to analyse family composition, based on the numbers of adults in each family and if there are children in the household or not. We do not know the exact relationship the family members have to each other, as a household with two adults may be a couple, two adult siblings, or a parent with a child over 18. For this analysis we distinguish between "single adult with child(ren)", "other family with child(ren)", "family of one or two adults", and "other families". The families here classified as other are mainly families with at least one person above 55, and no children, or families with 3 or more adults. We have

Initial 24.1 phase Secondary phase Recent 16.2 phase Total Single adult with child(ren) Other family One or two adults 🗌 Other with child(ren)

Figure 3 Family composition of TCP holders in Norway, by arrival

phase. Percent.

defined adults as persons aged 18-55.<sup>8</sup> Thus a family with one person aged 35 and one aged 60 will be coded as "other".

Families with children were in a slight majority in the initial arrival phase, but when we look at the population of TCP holders at large, families *without* children are in the majority. Households with one or two adults without children are the most common, making up about one third of all TCP holders in Norway. 4.6 percent of TCP households are threegeneration households (part of the group "other families with child(ren) in the figure). The share of three-generation households was larger in the initial phase of arrivals at 7.6 percent, while threegeneration households were 3.8 percent in the secondary phase, and 3.5 in the recent phase.

## Most temporary protection holders in Norway originate from the frontline or occupied areas

To understand the mechanisms that shape current and former migration flows out of Ukraine, as well as the likelihood of future return migration, it can be useful to take a closer look at what areas in Ukraine the temporary protection holders come from.

All provinces of Ukraine are marked by the war. Regular missile and drone attacks in random cities across Ukraine mean that even residents who live far from the frontline experience insecurity. In our qualitative interviews, displaced persons from northern and western parts of the country often express fears that Belarus will join the war and initiate an attack closer to their homes. Energy shortages and attacks on energy infrastructures reduce quality of life as well as forcing some businesses to close or reduce their activity. This in turn has consequences for incomes and employment for those who remain in Ukraine, even if they are far from the frontline. As a consequence, people from all over Ukraine are seeking protection in Europe.

Those living close to the frontline and in occupied areas face severe risks of economic deprivation, political persecution and physical violence. In Russian-controlled areas, pressures to adopt Russian citizenship are strong, and the propaganda against and crack-down on opposition is immense.<sup>9</sup> According to our qualitative interviews with some of the refugees who have left occupied areas or frontline

<sup>&</sup>lt;sup>8</sup> The age limit of 55 is because TCP holders 55 and older do not have the right to integration courses or integration benefits in Norway. <sup>9</sup> https://www.hrw.org/report/2022/09/01/we-had-no-choice/filtration-and-crime-forcibly-transferring-ukrainian-civilians



#### Table 4 Displaced from Ukraine in Norway and Poland by area of origin. Percent.

	Occupied or partly occupied 6 provinces	Formerly occupied/ formerly frontline 4 provinces	Frontline (incl. some formerly occupied areas) 4 provinces	Other areas 13 provinces	Total 27 provinces	N
TCP holders in Norway November 2023	27	22	30	21	100	58,290
Newly arrived (after full scale invasion) Ukrainians in Poland summer 2022	11	27	25	38	100	4,752 (sample)

Source: Ukrainian Research Panel, Centre of Migration Research/Centre for Excellence in Social Sciences, University of Warsaw 2022.

cities, it can be difficult to access specialised medical services because many of the highly educated have fled. Some say they had to leave to access necessary medical assistance. Respondents originating from areas along the frontline say that businesses, schools and other public institutions in these most affected areas are often closed, making everyday life particularly challenging. But most importantly, many live with the constant threat of physical violence from the fighting, and occupation, in addition to being within reach of more missile attacks.

For the purpose of this analysis we have classified the 27 Ukrainian provinces (oblasts) into one of four categories:<sup>10</sup> currently occupied/annexed; currently frontline; formerly occupied/frontline; and other provinces. The classification is based on maps of where the military fronts are in November 2023. The provinces claimed to be annexed by Russia in September 2022 are classified as occupied or partly occupied. Provinces where less than 20 percent of the territory is currently occupied are classified as frontline. Provinces neighbouring an occupied territory are classified as frontline.

Among the TCP holders in Norway, 79 percent come from one of the 14 provinces that are or have been particularly strongly affected by war. A share of 22 percent come from Kyiv (city or oblast) or one of the two provinces north of Kyiv<sup>11</sup>, from where the Russian forces withdrew in March 2022. Thus, 59 percent of Norwegian TCP holders come from areas that are either under occupation, are close to, or at the frontline of current fighting.

We know little of areas of origin for Ukrainian refugees published for other countries. We have been given access to data on area of origin for Ukrainian refugees in Poland surveyed in a non-probability survey conducted in the summer of 2022. This indicates that in Poland, displaced persons from formerly occupied areas in and around Kyiv have been overrepresented, and that a larger share of refugees from areas less affected by war remain in Poland and do not move on to other countries. These numbers do not include Ukrainians who were already in Poland before the war, although some had previous migration experience.

In the initial phase, refugees from Kyiv (oblast' and city) and the two provinces north of Kyiv (formerly occupied/formerly frontline) made up almost one third of the refugees who sought protection in Norway. In the secondary and recent phases, refugees from these areas have made up less than 20 percent, reflecting a reduction in the threat to personal security as the Russian forces withdrew from northern Ukraine.

Refugees from currently occupied areas in the east made up only 15 percent of the refugees who sought protection in Norway in the initial phase. We assume this reflects the rapid onset of Russian forces—within a few weeks Russian forces had secured or taken control of almost a quarter of the Ukrainian territory. Fleeing from these areas appears to have been more challenging. The population in eastern parts of Ukraine are also less likely to have networks in Western Europe or to have previously migrated to Europe (Tyldum 2015). There is a higher share of refugees from occupied areas in the secondary and recent phases.



<sup>&</sup>lt;sup>10</sup> Occupied or partly occupied areas: Autonomous Republic of Crimea, Donetsk Oblast, Kherson Oblast, Luhansk Oblast, Sevastopol, Zaporizhzhia Oblast.Formerly occupied areas/formerly frontline: Chernihiv Oblast, Kyiv, Kyiv Oblast, Sumy Oblast

Frontline (some also formerly occupied): Dnipropetrovsk Oblast, Kharkiv Oblast, Mykolaiv Oblast, Odesa Oblast

Other: Cherkasy Oblast, Chernivtsi Oblast, Ivano-Frankivsk Oblast, Khmelnytskyi Oblast, Kirovohrad Oblast, Lviv Oblast, Poltava Oblast, Rivne Oblast, Ternopil Oblast, Vinnytsia Oblast, Volyn Oblast, Zakarpattya Oblast, Zhvtomyr Oblast.

<sup>&</sup>lt;sup>11</sup> Chernihiv Oblast and Sumy Oblast

	Occupied or partly occupied	Formerly occupied areas/ frontline	Frontline	Other regions	Total	n
Initial phase	15	32	30	23	100	12,824
Secondary phase	32	19	30	19	100	32,012
Recent phase	25	17	33	24	100	13,454
Total	27	22	30	21	100	58,290

#### Table 6 TCP holders in Norway, by area of origin and date of arrival. Percent.

## One in five temporary protection holders in Norway have stayed more than three months outside Ukraine before seeking protection in Norway

Most of the refugees who seek temporary collective protection in Norway are "direct movers"; they come to Norway without staying more than a couple of days in other countries. There are, however, some who seek protection in Norway several months after leaving Ukraine. As Figure 4 illustrates, there is a substantial group of TCP holders who left Ukraine in March, but who did not apply for protection before later.

By 1 November 2023, 19 percent of all temporary protection holders have reported leaving Ukraine more than three months before seeking protection in Norway. However, as we illustrate in figure 5, the number of secondary movers remained relatively low throughout 2022, averaging 8.5 percent of all applicants for temporary collective protection. In 2023, the share of secondary movers averaged 31 percent, with a peak of 38 percent in April.

The increase in applications for temporary collective protection has been assumed by some to be an increase in secondary movements from other coun-



Figure 4 TCP holders in Norway by time of leaving Ukraine and time of applying for protection in Norway.

tries in Europe. Our analysis show that the share of applicants coming from other countries has remained stable at around 30 percent throughout the summer and autumn of 2023. Thus, as the overall arrival numbers have increased, there has been an increase in secondary movers as well. However, the majority of those seeking protection in Norway are still direct movers coming directly from Ukraine.

We do not know in what countries the TCP holders have lived before they come to Norway, but we have information on what countries they have travelled through on their way. This can give an indication of what areas the secondary movers have stayed in before seeking protection in Norway. While only 1 percent of the direct movers report traveling through a Southern European country, this is the case for 7 percent of secondary movers. Similarly, 7.6 percent of secondary movers report traveling through a Western European country not en route to Norway from Ukraine<sup>12</sup>, compared to 1.7 percent of direct movers. This suggests that there is not much resettlement of displaced persons from Ukraine from Southern or Western Europe to Norway. The majority of secondary movers report having been in only neighbouring countries to Ukraine, or countries en route to Norway.

Figure 5 Share of TCP holders in Norway who have stayed more than 3 months outside Ukraine before applying. Percent.



<sup>12</sup> France, Belgium, Netherlands, UK, and Switzerland.



Qualitative data suggest that there are several reasons why some refugees choose to move on after first having stayed in other countries. Some have remained in neighbouring areas or in the first country of refuge for some time, with a hope that the war will soon end and that it will soon be possible to return. As the war continues, some lose faith in this idea that return will soon be possible, and start looking for long-term solutions (Kjeøy and Tyldum 2022). Those who have stayed with family or friends, or in shelters or temporary housing start looking for a place to stay of their own, and those who have been okay with working a low-paid, physically demanding job because it was temporary, start looking for a job which they believe offers them long-term prospects or is more in line with their qualifications or skills. Some can find such long-term solutions in their first country of refuge, while others need to move on.

We have information about province of origin in Ukraine for secondary movers as well. Among the secondary movers, 70 percent come from currently occupied areas or areas that are currently close to the frontline in Ukraine. In other words, secondary movers are more likely to come from those areas most harshly affected by the war. We assume this is a reflection of those persons originating from the most harshly affected areas in Ukraine increasingly giving up on the idea of an immediate return to their home. Some have remained in Poland and other neighbouring areas, hoping that return will soon be possible-in spite of limited opportunities and many obstacles to long-term integration in Poland and other neighbouring countries<sup>13</sup> (Kjeøy and Tyldum 2022).

Among the direct movers, the share who come from less affected areas has increased slightly in the recent phase to 27 percent from 21 percent in the secondary phase. This can be an indication of more people leaving Ukraine due to economic hardship caused by the war, and wanting to avoid the hardship of living with power cuts and attacks on civilian infrastructure across the country this winter (if Russia continue its strategy from last winter). It is also possible that some internal refugees originating from occupied areas have given other areas in Ukraine as their last permanent address, giving an appearance of an increase in arrivals from safe areas.

#### About the data used for the analysis

Data used in this policy brief originate from two separate sources, both administered by the Norwegian Directorate of Immigration (UDI).

The first data source is the arrival registration data in the DUF database. Upon arriving in Norway, persons applying for collective protection or asylum, are registered in DUF, with basic demographic information such as gender, date of birth, nationality, date of application and decision of application for protection, address abroad and date of settlement in municipality, as well as their registered language. The registration data include people who applied for protection between 24 Feb 2022 and 1 Nov 2023. Not all the displaced had received a decision on the application for protection by the time of our analysis: 2,822 persons have not yet been given a decision in on their application, but are still included in our analysis. Most people who have no decision registered related to their application for protection have arrived after August 2023.

The second data source is the self-registration system used by UDI to obtain information about per-

# Table 7 Response rate to the Start register by arrival month and age group. Percent.

	Age at time		
	18-54	55+	Total
February 2022	43.5		35.7
March 2022	75.0	66.4	72.8
April 2022	81.3	72.5	79.3
May 2022	85.1	80.9	84.3
June 2022	71.1	70.1	70.9
July 2022	75.2	69.2	74.1
August 2022	78.7	71.3	77.4
September 2022	81.2	71.1	79.3
October 2022	86.0	75.4	84.1
November 2022	88.8	79.3	86.7
December 2022	94.5	85.5	92.6
January 2023	96.2	90.2	95.1
February 2023	96.6	91.5	95.7
March 2023	97.8	91.3	96.7
April 2023	95.4	92.1	94.8
May 2023	97.0	93.7	96.4
June 2023	96.6	95.1	96.3
July 2023	98.2	94.0	97.4
August 2023	98.5	96.9	98.2
September 2023	97.9	97.3	97.8
October 2023	16.6	13.7	16.1
Total	82.5	76.5	81.3

 $<sup>^{13}</sup>$  Kjeøy, I. and G. Tyldum (2022). «Assessing future migration among Ukrainian refugees in Poland and Norway.»



sons applying for protection. The registration system is an important part of the arrival registration at the National Arrival Center. Through Start, applicants receive information about rights and obligations as asylum seekers in addition to providing information about themselves. The information is used in the processing of their application for protection. From 2020, asylum seekers have been encouraged to complete the Start register when submitting their application for protection, however the system was not in use during the COVID-19 pandemic. The Start register was launched for Ukrainian refugees (translated to Ukrainian) from 4 March 2022. Altogether, 35,982 persons listed in our data have completed the registration. Table 7 presents the share of TCP who have registered in Start, by arrival month and age group. The response rate was relatively low in the initial arrival phase, but for the adult population at large it is 81.3 percent. Children under 18 are not asked to register in Start, and for them and others with missing Start data we have imputed values from family members on key variables (see below).

#### The population included in our analysis

For the analysis, we include persons who have been given temporary collective protection, or an extension of temporary protection, as well as persons who have applied for TCP and not yet received a decision on this first application. Altogether, 64,113 people are included in the analysis. We excluded 689 people whose applications were rejected/protection was not granted.

#### Family ID and family composition

In the registration data, people from the same family are assigned the same Family ID. Altogether, 30,138 families are registered and 673 people are not assigned a family ID. Our analysis of family composition is based on the family IDs.

#### Date leaving Ukraine

In the Start register, 36,439 persons have given information about when they left Ukraine. These data have been cleaned to improve data quality. For dates that were obviously wrong (such as leaving Ukraine 100 years before the war) adjustments were made. If the problem cannot be solved and the data is apparently inaccurate, we set the date to missing. Altogether 35,458 people have registered a valid date for when they left Ukraine (28,655 cases missing).

#### About the project

The policy brief is commissioned by the Norwegian Directorate of Immigration (UDI), and is the third of four policy briefs analysing the migration patterns of Ukrainian refugees in Norway and Europe.

#### **About Fafo**

Fafo is an independent social science research foundation (established in 1982) based in Oslo, Norway. Fafo produces policy relevant research on social welfare and trade policy, labour and living conditions, migration and integration. Then, we did imputations in two rounds. For persons missing information about the date they left Ukraine but who had family members arriving within a 10-day period of themselves, we impute the family member's date for leaving Ukraine. Secondly, as the question of data for leaving Ukraine was not added to the Start register before 24 June 2022, if the date of the first application is before 24 June 2022, we impute date for leaving Ukraine to be the same as the application date (7,984 people are imputed). Since this variable is only used here to identify those who left Ukraine more than 3 months before applying in Norway this has no consequences for the analysis.

After imputation we have information about date leaving Ukraine for 56,576 persons, and 4,725 people missing.

#### Province of residence

In the Start register, 33,743 persons registered the province ('oblast') in Ukraine where they lived before the war. For those missing information about their address in Ukraine, we have imputed this from family members as long as they are assigned the same family ID. Then, if the province variable is missing from the Start register, we use the address information from the DUF register. Based on the postcode, province name and city/village names, we were able to secure information about province of origin for 58,483 persons (5,630 people missing province of origin information, either because information is missing in both DUF registration and Start data, or the address information registered is unrecognizable).

#### **Travel routes**

Information on travel routes was also imputed from other household members who have registered the countries they travelled through and have a similar application date (within 10 days). After imputation, 13,011 people are missing information about countries travelled through.

#### Residence permits from other countries

We impute information related to residence permits from other countries from other household members who have registered this information and have a similar application date (within 10 days). After imputation, 13,126 people are missing information related to residence permits from other countries.

#### About the authors

**Guri Tyldum** is a sociologists and research professor Fafo Research Foundation. Her research interests are in dynamics of migration flows and migration aspiration, as well as refugees encounters with immigration and integration systems as well as labour markets in Norway. She speaks Russian well and wrote her doctoral thesis on migration in Ukraine in 2015.

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