# Forced displacement within and outside of Ukraine: how do key characteristics explain distance travelled?

Brienna Perelli-Harris, University of Southampton

Orsola Torrisi, New York University in Abu Dhabi

Russia's invasion of Ukraine on February 24, 2022 produced the largest population displacement in Europe since World War II. The bombing campaign led around 14 million people to flee their homes, either remaining within Ukraine or leaving Ukraine altogether. These different responses raise questions about how the experience of violence impacts distance travelled and decisions to cross an international border, and whether this differs by key characteristics, such as education and family structure.

To answer these questions, we use a rapid health-needs survey administered via Facebook from April-July 2022. The survey targeted Ukrainians over age 18 who had left home since February 2022. In total, 8400 participants – 40.9% IDPs and 59.1% refugees – completed the survey. We use multi-nomial logit models to analyse 5 categories of distance moved, including abroad to a bordering or non-bordering country, and long, middle, and short distances moved within Ukraine.

Preliminary results indicate key factors for understanding distance moved. Those with less education were more likely to move abroad to a bordering country or stay within the same macro-region. Those who moved with vulnerable adults were less likely to move abroad, and those moving only with children were less likely to stay in their same macro-region or the Centre of the country, and more likely to move to a neighbouring country. Finally, those who witnessed a blast explosion were less likely to move abroad or make a long distance move, suggesting that those most exposed to violence have become IDPs, rather than refugees.

**Introduction**

Russia's invasion of Ukraine has produced one of the largest human displacement crises in the world today (UNCHR 2023). As of October 2023, 6 million refugees have been recorded globally (UNHCR 2023) – a population larger than the entire country of Norway. Even more people – 7.6 million -- have been displaced internally (Internally Displaced Persons, or IDPs) (IOM 2023). This massive population movement has resulted in the largest humanitarian crisis in Europe since World War II.

Without a doubt, Ukrainians who left their homes were forcibly displaced, or "obliged to flee or to leave their homes… as a result of or in order to avoid the effects of armed conflict or situations of generalized violence…" (OHCHR 2023). Nonetheless, individuals experienced a variety of responses to attack and ended up in a range of locations (Leasure et al 2023). Some left immediately after Russia's invasion and travelled to Western parts of Ukraine. Others became refugees, crossing into Europe (or Russia) and settling near the Ukrainian border, or moving onwards to other countries, even outside of Europe. However, some who were forced to leave their homes stayed closer to the conflict, moving to the middle of the country or staying in the same macro-region. These different migration flows raise questions as to why some displaced persons fled further, even crossing international borders, while others stayed closer to home.

Although theoretically, forced displacement implies lack of agency, researchers are recognising that people often make their own decisions about whether to move and how far. People also have their own resources, human capital, and ingenuity that allows them to negotiate their migration route. Thus, selection processes may operate during conflict events, resulting in stratification of outcomes. One of the key proxies for human capital and endowments is education. Across Europe, refugees who have fled conflict are more likely to have secondary and tertiary education compared to irregular economic migrants (Aksoy and Poutvaara 2021, Welker 2022). However, selection processes may operate differently depending on origin of the refugees, and for internally displaced persons who do not cross international borders (Welker 2022).

Stratification processes of forced migration are also defined by age, gender and family status. After the Russian-backed separatist conflict in the east of Ukraine in 2014, internally displaced persons tended to settle close to the Conflict line, especially if they were disabled or pensioners (Mykhnenko 2022). Families with children and those with employment prospects headed to Western Ukraine and often settled in cities.

Finally, the concept of forced displacement often hinges on violence, or the threat of violence. When Russia started the war on February 24, 2022, all of Ukraine was at risk of bombing attacks, but some regions were more at risk of invasion. As the war continued and Russia's armies were forced to withdraw from North and Central regions, the conflict intensified in the Eastern and Southern regions. Because of the differential threat across the country at different points in time, it is important to recognise that not all displaced persons witnessed the same level of violence. Thus, one of our key indicators is personally witnessing a blast or explosion.

In this study, we compare how far displaced persons fled after Russia's invasion. By using the Facebook advertising platform, we were able to conduct a unique survey of respondents who fled within Ukraine or to any country within Europe (excluding Russia). This survey was rapidly deployed within the first few months of the crisis. Although the survey is not representative of the Ukrainian displaced population, no other data source is able to compare Ukrainian refugees with IDPs, particularly so soon after the war broke out. Our survey allows us to examine stratification processes of migration and indicates that the most vulnerable displaced persons are more likely to remain closer to the warzone.

**Data**

The data for this paper comes from the survey "Health Needs of Ukrainian Refugees and Internally Displaced Persons," (https://www.the-ciru.com/resin-ukraine). The survey went live in early April 2022 and was open until July 2022. No incentives were offered for completion of the survey. The survey was disseminated on social media, predominantly via Facebook advertising. The advert targeted Ukrainian speakers over the age of 18 who normally lived in Ukraine and who, due to recent events, were now

currently either abroad or in Ukraine, but not where they used to reside. The survey targeted all European countries apart from Russia. Besides direct advertising, the survey was disseminated via snowball methods, for example the Facebook post was shared by over 1400 people.

Because respondents were not selected based on a sampling framework, the survey is not representative of the Ukrainian population, and we urge caution when generalising the results. Facebook use in Ukraine is biased towards middle aged women who are better educated and live in Western or Central oblasts (Leasure et al. 2022). Because the survey was advertised as a health survey, those with health problems may have been more likely to respond. Respondents also had to have access to an electronic device and the internet had to be stable enough to complete the survey.

Approximately 60% (*n* = 5,279*)* of our respondents were refugees and 40% (*n* = 3,523) were IDPs. Far more  respondents were female (89%, *n* = 7,814) compared to male  (11%, *n* = 988). Note that the Facebook algorithm typically targets people who are more likely to click on the advert link (i.e. women). However, once we identified an imbalance of women and men, approximately 3 weeks after the survey launch, we created a separate Facebook advert which targeted men only to gather more male responses.

**Methods**

We use multi-nomial logit models to examine the distance people moved using a five category dependent variable. We have detailed information about location at the time of the survey, but origin was only recorded at the oblast (state) level. Thus, we were unable to calculate a precise linear measure of the settlement location or distance moved. Instead, we focus on two major conceptual distinctions: whether the respondent moved abroad and became a refugee, or stayed within the country as an IDP. For those who moved abroad, we distinguish between 1) countries which border Ukraine (e.g. Poland or Romania) or 2) countries which do not border Ukraine (e.g. the UK or Germany). For those who remained within the country, we distinguish between the distance of their move from origin to destination: 3) a long-distance move from East/South (where most of the fighting has occurred) to the West; 4) a middle-distance from Centre to West or East/South to Centre; or 5) staying within the same macro-region where the fighting is still occurring, including a move from East to South. Although these categories are crude, they represent the major decisions made about how far to move.

Our main independent variables capture the concepts of stratification, family structure, and exposure to violence. Education was originally asked as a question with seven response categories, but then collapsed into basic or complete secondary school; vocational, technical, and incomplete higher education; and higher education. Marital status was coded as married; separated/divorced/widowed; or never married. We asked respondents about who moved with them and recoded this variable into the following categories: only with children; with other adults and children; or only with vulnerable adults. Finally, we asked whether the respondent had witnessed a blast explosion. Note that about 80% of IDPs and 60% of refugees witnessed a blast explosion.

We also included standard control variables such as age, gender, type of residence at origin (urban/rural) and month of interview (April-July 2022). Unfortunately, we do not have a precise measure of the date they fled their homes, which would have provided a better understanding of why they moved relative to the location of the main atrocities.

**Preliminary Results**

Our results provide evidence for selection processes operating during the crisis of forced displacement in Ukraine. All four figures present average marginal effects with confidence intervals from models that include all main independent variables and controls. First, figure 1 shows that those who had lower levels of education were much less likely to flee to countries that did not border Ukraine. Instead, we find that the least and middle educated were more likely to stay in the same macro-region or become refugees in neighbouring countries. The most highly educated persons, on the other hand, can draw on their

own resources, human capital, and networks to move further away from Ukraine, potentially because of better educational and employment opportunities (Kohlenberger et al 2022).

Second, we find that family structure often matters for distance moved. Relative to those who have never married, those who were married or separated, divorced, or widowed were less likely to move to countries further away from Ukraine (Figure 2). Married individuals were more likely to make a middle-distance move or even stayed within the same macro-region, while separated or widowed individuals were more likely to move to nearby countries. Given that martial law prohibits most men from leaving the country, these results are not surprising. Couples want to remain close to each other, or if women do move abroad they do not want to go far in order to stay near their families.

Figure 3 shows results for the variable indicating with whom the respondent left home. Relative to those who fled on their own, those who left with only children were much more likely to move to neighbouring countries and less likely to remain in the Centre of the country or the same macro-region they lived in at the outbreak of the war. This finding reflects the massive out-migration of mothers with children to countries such as Poland and Romania, which took the bulk of refugees, especially early in the war. The response is not surprising, since mothers would have wanted to move their children out of harm's way, but also remain closer to their families in Ukraine. Those who moved with vulnerable adults, on the other hand, were much less likely to move further abroad and instead remain within Ukraine, although the confidence intervals indicated few significant differences between regions. Again, this reflects the desire for vulnerable, often older adults to remain closer to home, as was seen after the Russian-backed separatist conflict in 2014 (Mykhnenko et al 2022).

Finally, figure 4 shows that those who witnessed a blast explosion were more likely to stay within Ukraine. This result is counter-intuitive, as exposure to violence should lead people to flee further from the conflict and often produces massive refugee flows. However, keep in mind the progression of the war and the composition of the migrant flows in and from Ukraine. Initially, Kyiv, Kharkiv, and the Northern regions of Ukraine were under attack. People from these regions may have had additional resources and networks with which to flee abroad, and they may have been able to leave Ukraine during the initial period of Russia's invasion, even before many missiles were fired. As the war continued, the eastern regions of Ukraine were targeted more extensively, and many people evacuated who did not initially intend to leave. Even though these people were more at risk of harm, they were also more reluctant to leave their homes and did not want to go far. Thus, displaced persons in Eastern and Southern Ukraine were more likely to have witnessed armed aggression but continue to live nearer to the conflict. In our next steps, we will test interactions and other model specifications to better understand these preliminary results.
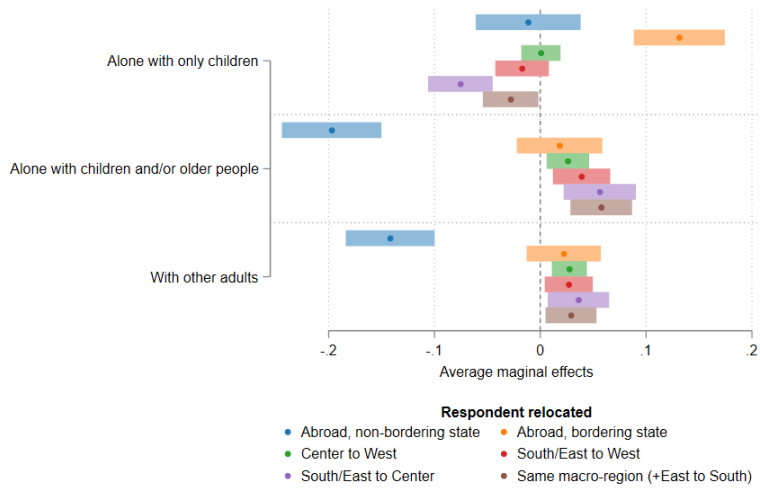
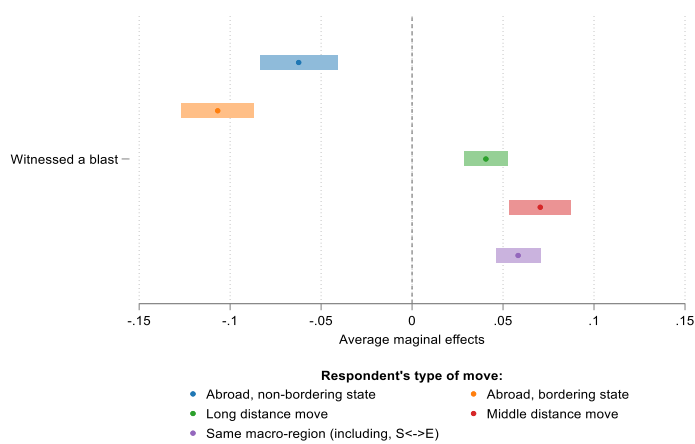**Figure 1. Distance moved by educational level. Reference group: higher education.**
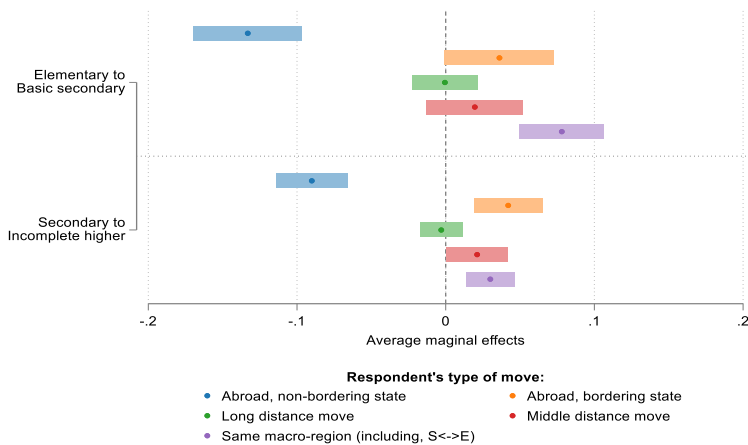
**Figure 2: Distance moved by partnership status. Reference group: Never married.**
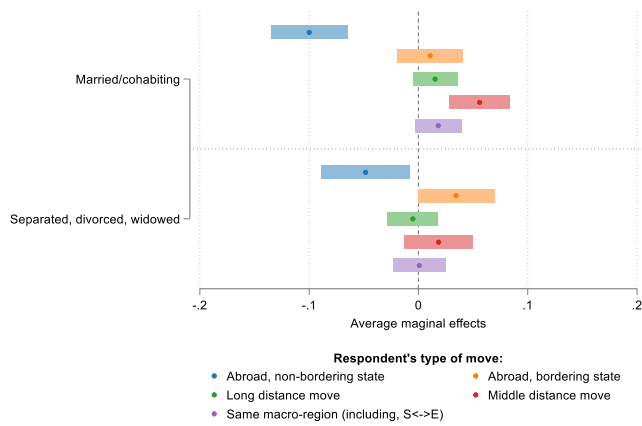


**Figure 3: Distance moved by family structure. Reference group: Moved alone.**



**Figure 4: Distance moved by witnessing a blast explosion**

**References:**

Aksoy, C. G., & Poutvaara, P. (2021). Refugees' and irregular migrants' self-selection into Europe. *Journal of Development Economics*, *152*, 102681.

Kohlenberger, J., Pędziwiatr, K., Rengs, B., Riederer, B., Setz, I., Buber-Ennser, I., ... & Nahorniuk, O. (2022). What the self-selection of Ukrainian refugees means for support in host countries. *LSE European Politics and Policy (EUROPP) blog*.

Leasure, D. R., Kashyap, R., Rampazzo, F., Dooley, C. A., Elbers, B., Bondarenko, M., ... & Mills, M. C. (2023). Nowcasting daily population displacement in Ukraine through social media advertising data. *Population and Development Review*.

Mykhnenko, V. (2020). Causes and Consequences of the War in Eastern Ukraine: An Economic Geography Perspective. *Europe-Asia Studies*, *72*(3), 528–560.

OHCHR. 2023. About internally displaced persons. Special Rapporteur on the human rights of internally displaced persons. https://www.ohchr.org/en/special-procedures/sr-internally-displaced-persons/about-internally-displaced-persons#:~:text=According%20to%20the%20Guiding%20Principles,avoid%20the%20effects%20of%20armed

UNHCR Ukraine (2022). Internally Displaced Persons. https://www.unhcr.org/ua/en/internally-displaced-persons

Welker, J. (2022). Relative education of recent refugees in Germany and the Middle East: Is selectivity reflected in migration and destination decisions?. *International Migration*, *60*(2), 65-80.