

ORIGINAL ARTICLE



Return intentions among Ukrainian refugees in Europe: A Cross-National Study

Frank van Tubergen^{1,2} | Gusta G. Wachter¹ | Yuliya Kosyakova^{3,4} | Irena Kogan⁵

¹Netherlands Interdisciplinary Demographic Institute (NIDI), KNAW/University of Groningen, The Hague, The Netherlands

²Utrecht University, Utrecht, The Netherlands

³University of Bamberg, Bamberg, Germany

⁴The Institute for Employment Research (IAB), Nuremberg, Germany

⁵University of Mannheim, Mannheim, Germany

Correspondence

Frank van Tubergen, Department of Migration & Migrants, The Netherlands Interdisciplinary Demographic Institute (NIDI), KNAW/University of Groningen, The Hague, The Netherlands.
Email: tubergen@nidi.nl

Abstract

This study examines the return intentions of Ukrainian refugee women who fled to various European countries following the Russian invasion of Ukraine in 2022. By analysing data from the cross-national *OneUA* survey, which included over 18,000 respondents in eight European countries, this research investigates the interplay of contextual, compositional, and cross-level interaction effects on their intentions to return to Ukraine. Our findings reveal notable country differences in return intentions, with Ukrainian women in the Netherlands and Germany displaying the lowest intentions to return, while those in Moldova and Romania showing the highest. Individual-level effects, encompassing factors such as level of education, language skills, partnership status, and region of origin play a significant role in shaping return intentions, yet do not explain the observed country variations. Furthermore, we find that individual-level effects are remarkably consistent across different European countries, suggesting that country- and individual-level conditions independently shape return intentions. Overall, this study enhances our understanding of the complexities underlying refugees' return intentions, shedding light on both the broad influences of country context and the significance of individual characteristics.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2024 The Author(s). *International Migration* published by John Wiley & Sons Ltd on behalf of International Organization for Migration.

INTRODUCTION

On 24 February 2022, Russian military forces invaded Ukraine, causing a large-scale exodus of Ukrainians who fled to other parts in their country as well to countries abroad in search of safety. By June 2022, the United Nations High Commissioner for Refugees (UNHCR) recorded around 5.5 million Ukrainian refugees dispersed across Europe (UNHCR, 2022a). Many of them settled in Poland (1.2 million) and other neighbouring countries. However, also more-distant countries, such as Germany (over 800,000), attracted sizable numbers of Ukrainians who escaped the war (UNHCR, 2022b). Since the outbreak of the war until June 2022, authorities reported more than 3.1 million movements back into Ukraine (UNHCR, 2022a), suggesting that many Ukrainian refugees decided to return. It is, however, unclear what drives refugees' return intentions back to a country in which an active war is taking place. The current study addresses this question, by examining the return intentions of Ukrainians who left their country after the outbreak of the war and who settled across European countries.

Understanding refugees' remigration intentions is relevant to both society and migration research. In terms of societal relevance, return intentions are important for the future of the country left behind, in this case Ukraine. Which socio-demographic groups (e.g., by level of education or age) are more likely to return will impact the demographic, political and socio-economic development of their origin country. Moreover, return intentions may also have implications for integration processes in the receiving country as evidenced by research linking stronger intentions to return to lower investments in second-language acquisition (Kosyakova et al., 2022; Wachter & Fleischmann, 2018), post-migration schooling (Damelang & Kosyakova, 2021; Van Tubergen & Van de Werfhorst, 2007), and reduced interethnic contacts (Martinovic et al., 2015; Wachter & Fleischmann, 2018). Hence, from a policy perspective, it might be important to implement policies that are sensitive to refugees' return intentions.

Our research enriches the existing literature on return intentions among immigrants and refugees (Caron, 2020; De Haas & Fokkema, 2011; De Vroome & Van Tubergen, 2014; Di Saint Pierre et al., 2015; Ghosn et al., 2021; Kaya & Orchard, 2020; Kayaoglu et al., 2022; Özkan et al., 2023) in two ways.

First, the group of Ukrainian refugees in our study differs in many respects from the immigrant and refugee groups examined before. Prior work has mainly studied groups that are predominantly male and – in case of refugees – groups that originate from developing countries like Syria, Afghanistan, and Eritrea (for an exception, see Brücker et al. (2023)). These refugee groups have been in the host country for a longer time, after having been subject to protracted asylum processes that strongly restricted their opportunities to work (De Vroome & Van Tubergen, 2010; Hainmueller et al., 2016). Moreover, these groups have been discriminated against and experienced antagonistic attitudes among the ethnic majority population – sentiments that often link to group differences in religion and skin colour (Bansak et al., 2016; Gorodzeisky & Semyonov, 2016). By contrast, the refugee group we study largely consists of women who originate from a European country, who recently arrived, who were granted access to the labour market upon entry, and who were largely positively welcomed by citizens of European countries (De Coninck, 2022).

Second, we study return intentions among refugees from a cross-national perspective. Earlier work has relied on single-country designs to examine the prevalence and individual-level determinants of return intentions among immigrants and refugees (Caron, 2020; Kaya & Orchard, 2020; Massey & Espinosa, 1997). This also pertains to the study of Brücker et al. (2023), who examined return intentions among Ukrainian refugees in Germany. To date, little is known about the extent to which refugees' return intentions vary between receiving countries. Relatedly, the importance of individual-level characteristics, such as host-country language skills, in determining return intentions might vary across receiving countries, but such cross-level interaction effects have not been addressed before.

In this study, we take an exploratory approach to examine country differences in the return intentions of Ukrainian refugees. We use data from the *OneUA* project, which surveyed Ukrainian refugees between 14th July and 18th August 2022. More than 18,000 Ukrainian women residing in eight European countries participated in

this survey: Poland, Germany, Czech Republic, Italy, Netherlands, Romania, Hungary, and Moldova. The focus is on women, who make up a significant proportion of Ukrainian refugees, as most men were banned from leaving the country and potentially conscripted for military service.

CONCEPTUAL FRAMEWORK

Kuhlman (1991) and Ghosn et al. (2021) argued that, to understand the integration process of refugees and their migration preferences, it is important to consider a variety of factors. This includes, according to these scholars, “pre-flight characteristics” (e.g., demographics), “flight-related factors” (e.g., social ties), and “host-country related factors” (e.g., employment opportunities). We integrate these ideas in our conceptual framework that could explain country differences in refugees' return intentions. It consists of three types of effects. First, country differences in return intentions could be driven by *contextual effects*, i.e., host-country related factors that impact refugees' intentions to return – irrespective of their individual characteristics. Second, country differences in return intentions can also be entirely driven by *compositional effects*. In that case, countries are differently composed in terms of refugee characteristics (e.g., demographics), which are related to return intentions, while country conditions as such do not affect return intentions. Third, country differences can be shaped by *cross-level interaction effects*, which happens when the effects of refugee characteristics on return intentions vary across receiving countries.

We combine this conceptual framework with theoretical mechanisms of return intentions. The literature suggests that three core motives play a role in the decisions to (re)migrate: social attachment motives, economic motives, and security motives. Specifically, *social attachment motives* relate to the assumption that humans have a basic need to be close to their family, friends, and other loved ones, and to feel accepted by the groups and society they are part of (Baumeister, 1991). When migrants have stronger attachments to their country of origin than to their receiving country, they are more likely to return (De Haas et al., 2015; Di Saint Pierre et al., 2015). *Economic motives* focus more on the (monetary) costs and benefits of staying in the receiving country vis-à-vis the origin country, and the costs of remigration (Borjas, 1987; Borjas & Bratsberg, 1996; Constant & Massey, 2002). *Security motives* are about the perceived life-threatening risks when remigrating, a factor, which is particularly important in the case of refugees. We integrate these micro-level motives into our conceptual framework. Importantly, the different motives (attachment, economic, security) do not necessarily align. For example, attachment motives may push some refugees towards remigration, whereas economic motives lead them to stay in their receiving country.

Country differences: contextual effects

We argue that country differences in the return intentions of Ukrainian refugees can arise due to contextual effects. If this is the case, country-level conditions affect return intentions, regardless of the characteristics of Ukrainian refugees. While the countries we examine in our study differ in numerous ways, we believe that a distinction can be made between two country clusters: on the one hand, the countries nearby (Poland, Hungary, Czech Republic, Moldova, and Romania), and on the other hand the more distant countries (Germany and the Netherlands). As we will argue, the characteristics of the countries nearby score more favourably in terms of *social attachment*, whereas the more distant countries might be more attractive to stay for *economic reasons*. Thus, opposite expectations can be formulated on return intentions, depending on how strongly each of these motives are weighted.

To begin, one could argue that, based on *social attachment* motives, Ukrainian refugee women who settled in the nearby countries of Poland, Hungary, Czech Republic, Moldova, and Romania are less likely to return than those who moved to the Netherlands and Germany. One reason for this has to do with the pre-established communities in these countries nearby. Larger immigrant communities have a more developed co-ethnic infrastructure

and are more equipped to organize social activities and co-ethnic organizations. Being part of a larger community of co-ethnics fosters feelings of social attachment to the receiving country (Özkan et al., 2023), making it more likely that refugees intend to settle there.

Countries in Eastern and Central Europe, such as Poland, have attracted sizable numbers of Ukrainians (mainly labour migrants) since the 1990s (Brunarska et al., 2016). In Poland and the Czech Republic, Ukrainians for example make up the largest migrant group. In 2021, prior to the outbreak of the full-scale war, Poland was home to more than 650,000 Ukrainians and the Czech Republic close to 200,000. These figures relate to Ukrainians holding a valid residence permit. Because of irregular (circular) migration, the actual numbers are likely to be higher, especially in the neighbouring countries (Brunarska et al., 2016). Based on the *social attachment* motive, one would argue that, due to the lack of such a well-established community in the Netherlands and Germany, Ukrainian refugees who settled in these countries might be more strongly inclined to remigrate.

The language spoken in the host country is another condition that makes the countries nearby a more attractive place to stay in terms of social attachment. As a Slavic language, Ukrainian resembles other Slavic languages, like Polish and Czech (Melitz & Toubal, 2014). Hence, Ukrainian refugees who do not speak other languages besides Ukrainian can reasonably communicate with ethnic majority members in Poland and the Czech Republic. Furthermore, the Russian language is a lingua franca in Moldova and is spoken in the Southern parts of Ukraine from which the bulk of refugees to this country came. By contrast, the absence of a common or linguistically similar language – as is the case for Ukrainians living in Germany and the Netherlands – can lead to social isolation and undermine feelings of national belonging. The lack of *social attachments*, in turn, could increase return intentions.

One could, however, also bring in *economic motives* that lead to opposite expectations on country-level differences. From this perspective, it could be argued that particularly the Netherlands and Germany are attractive places to settle given their economic development. The Czech Republic, Poland, Hungary, Romania, and Moldova are economically less prosperous countries than the Netherlands and Germany. To illustrate, the GDP per capita in 2022 of the Netherlands (€ 43,310) and Germany (€ 35,860) are higher than in the Czech Republic (€ 18,470), Poland (€ 14,560), Hungary (€ 14,360), Romania (€ 10,110) and Moldova (\$ 5230; 2021) (Eurostat, 2022; WorldBank, 2021). The implications of these economic differences are manifested in many ways, such as the quality of housing, schooling, and wages.

In summary, the countries nearby Ukraine have in common that they score favourably on various characteristics that could foster *social attachment* among Ukrainian refugees: the existence of pre-established co-ethnic communities and similarity in language. While these factors may also facilitate finding employment and getting ahead, we assume that, given their higher economic development, the more distant countries (Netherlands and Germany) are economically more attractive to stay – therefore scoring higher on *economic motives*. Thus, conflicting motives (attachment vs economic) may arise, and we examine empirically which of the two weights most.

It should be emphasized that in between these two clusters, Italy probably holds a position in the middle. Italy, too, has been traditionally a popular destination country for Ukrainians. It is estimated that over 230,000 Ukrainians resided within its borders before February 2022 (Eurostat, 2023). On the other hand, however, there are no linguistic similarities with Ukrainian. Economically, Italy (€ 27,870) is a more attractive country than other countries nearby, such as Moldova, yet at the same time, it is less economically developed than the Netherlands and Germany. In short, with respect to both social attachment and economic motives, Italy falls in between the two country clusters.

Therefore, we derive opposite hypotheses, focussing on the two opposite country clusters. First, based on the *social attachment* argument, we hypothesize that refugees in the countries nearby Ukraine indicate to be *less* likely to return:

H1a. Ukrainian refugees who reside in Poland, Hungary, Czech Republic, Moldova, and Romania are *less* likely to indicate that they intend to return to Ukraine than those in the Netherlands and Germany (main driver: *social attachment motives*).

On the other hand, *economic motives* would increase the likelihood of return among Ukrainian refugees in the countries nearby:

H1b. Ukrainian refugees who reside in in Poland, Hungary, Czech Republic, Moldova, and Romania are **more** likely to indicate that they intend to return to Ukraine than those in the Netherlands and Germany (main driver: *economic motives*).

Country differences: composition effects

It could also be the case that return intentions of Ukrainian refugees vary across European countries because of composition effects. These effects occur when two conditions hold: (1) there are significant country differences in the composition of refugees' characteristics, and (2) these individual-level characteristics affect return intentions.

Evidence suggests that condition (1) holds for Ukrainian refugees. Van Tubergen et al. (2023), drawing on the *OneUA data*, studied self-selection patterns among female Ukrainian refugees in Europe. They report significant differences across countries in the composition of this group, which appear to be related to the refugees' place of living before the outbreak of the war, partnership status, age, education level, pre-migration financial status, and English language skills. For example, the study finds that Ukrainian refugees who had a better pre-migration financial position, higher level of education and who have better command of the English language were more likely to settle in Germany and the Netherlands than in Poland (Van Tubergen et al., 2023).

In this study, we hypothesize that condition (2) also holds, i.e., that refugee characteristics influence their intentions to return. Some of the characteristics correspond quite straightforwardly to a single motive, whereas for other characteristics, diverse – and possibly conflicting – motives may be involved.

To begin, we argue that the region of living before the war is linked to *security motives*. Recent work suggests how important events unfolding in the region of origin can be for integration outcomes among refugees (Keita & Schewe, 2021; Sønderskov et al., 2021; Van Tubergen et al., 2023; Van Tubergen, Kosyakova, & Kanas, 2023), and possibly also affect return intentions. Life-threatening conditions in the region of origin, such as conflict-induced violence, poverty, lack of basic health facilities, violation of human rights and being at risk of persecution may lower intentions to ever return (Kaya & Orchard, 2020). Safety in the origin region may therefore be an important prerequisite for intending to return home. Regarding the present study, the war in Ukraine was still ongoing during the survey period, thereby becoming a factor to all refugees. However, a significant consideration is the varying intensity of the conflict across different regions in Ukraine. In the regions most affected by the war (e.g., Donbas), there are not only direct life-threatening risks (e.g., shelling), but also indirect threats to one's health due to the destruction of housing and the lack of basic facilities. As these latter factors of unsafety can endure for a long time, the contemporaneous regional situation in Ukraine may also affects refugees' longer-term intentions to return. Hence, we hypothesize the following:

H2a. The higher the conflict intensity in refugees' region of origin in Ukraine, the less likely they are to indicate that they intend to return to Ukraine.

We also suspect that partner status affects return intentions, as it is clearly related to *social attachment* motives. Many Ukrainian women who escaped the war, had to leave their partner behind in Ukraine. For some, however, this was not the case – either because they were single, or because they were able to flee with their partner. While it is possible that the partner, after the war, could emigrate from Ukraine, we believe that for many women

having left behind their partner in Ukraine during a war is emotionally stressful and that they would be willing to return. Therefore, we predict that:

H2b. Ukrainian refugees who do not have a partner living in Ukraine are less likely to intend to return to Ukraine.

We also expect that English language skills plays a role in the return intentions of Ukrainian refugees. It is well known that second-language proficiency is an important determinant of refugees' performance in the labour market (De Vroome & Van Tubergen, 2010), and speaking English – as a shared second language across Europe – can help in the integration process. Speaking a common language facilitates social integration and the development of ties with ethnic majority members. It is easier to find your way in a new country, and to integrate, study and work, when you can communicate in the same language. Thus, not only for *economic motives*, but also for *social attachment* reasons, speaking English can be an important ingredient in their decision to stay in the host country. We therefore hypothesize the following:

H2c. Ukrainian refugees who have better English language skills are less likely to intend to return to Ukraine.

With respect to the remaining compositional differences in the Ukrainian refugee populations in Europe (i.e., age, education level, pre-migration financial status), it is more difficult to argue how they relate to the attachment, economic and security motives, and therefore to hypothesize about their effects on return intentions. For example, prior work has shown that immigrants who arrived at a younger age, more-easily acquire the language of the host country (Kosyakova et al., 2022) and develop more social ties with ethnic majority members (Martinovic et al., 2015). Possibly, these integration processes may increase attachment with the host country and make return wishes less prominently. On the other hand, younger people are generally more mobile and in better health, making it also easier for them to return to Ukraine. Instead of formulating hypotheses, we therefore explore the effects of age, education, and pre-migration financial status on return intentions.

Cross-level interaction effects

A third possibility that we explore in this study is that the effects of refugee characteristics on return intentions vary across receiving countries. We expect that such cross-level interactions apply to English language skills because the value of English proficiency increases with the number of English speakers in the host country. It is well known that, among the general population, English language proficiency (as a second language) varies strongly across European countries. Among the countries we study, English language proficiency is higher in the more distant countries of the Netherlands and Germany than it is in countries near Ukraine, such as Poland (Gerhards, 2014). In European countries in which English is spoken well by large segments of the population, refugees who speak English can expect to profit much more from their English skills. Hence, based on these arguments, one might expect that:

H3. The higher the share of the population in the receiving country that is proficient in English, the stronger the negative effect of good English-language skills on intentions to return among Ukrainian refugees.

DATA, MEASURES AND METHODS

Data

This study is based on data from the cross-national *OneUA* survey (Kogan et al., 2022). The data were collected around 5–6 months after the outbreak of the war, between 14 July and 18 August 2022, via self-administered computer-assisted web interviews. All Ukrainians who lived in Ukraine on 23 February 2022, were considered part of the target population. The survey then targeted Ukrainians within Ukraine who were still residing in their pre-war places of residence, internally displaced persons (IDPs) within Ukraine and Ukrainian refugees in eight other European countries (Poland, Germany, Czech Republic, Italy, Netherlands, Romania, Hungary, and Moldova). However, already under the best of circumstances, it is difficult to find sampling frames that simultaneously cover the mobile part of a national population and migrants in specific target countries (Andreß & Careja, 2018; Reichel & Morales, 2017).

In the context of an armed conflict and forced migration this is even more the case as otherwise available sampling frames might not be usable at particular points in time due to damages to the infrastructure or fighting, or because of the recent nature of the target population's mobility which might mean that they are not (yet) included in national population registers, even where they exist and could otherwise be used for sampling purposes. Due to these restrictions, target advertisements on the Meta platforms Facebook, Instagram and Facebook messenger were used to recruit *OneUA* respondents. Furthermore, a snowball element was implemented to broaden the survey's reach beyond users of the mentioned social networking sites. This approach allowed us to employ an identical sampling procedure across countries.

Using Meta's advertisement manager, we created advertisements that allowed us to display advertisements to all users within Ukraine and Ukrainian and Russian speaking users in the other targeted countries (see Section A in Appendix S1 for details on the targeting and (Pötzschke et al., 2023) for general information on this type of targeting method). These advertisements contained a link which guided users to our externally hosted survey. Alternatively, potential respondents were able to reach the survey through a link included on the project's Facebook page or after being invited by previous respondents (snowball element).

While targeting Ukrainian and Russian speakers, the advertisements on Meta's platforms were created in the Ukrainian language only. This approach was taken to reduce interference from Russian trolls. Despite a significant portion of Ukrainian citizens considering Russian as their mother tongue, the prevalence of proficiency in the Ukrainian language is high enough that Ukrainian citizens are capable of responding to the questionnaire in Ukrainian (Kulyk, 2016). We consider only (1) respondents with Ukrainian citizenship, (2) those with reported birth years between 1942 and 2004, and (3) those with non-missing information on the questions defining the research population. Next, we exclude respondents who reported to live outside of Ukraine on 23 February 2022 (or living place was missing), those living in Ukraine at the time of the survey, and those reporting residence in countries not sampled with the survey (or whose country of residence was missing). Finally, we kept only female respondents due to general mobilization and the emigration ban for men aged 18 to 60 in the Ukraine and corresponding selectivity of male respondents in our survey (see Section B in Appendix S1 for details on sample selections). This sample includes 21,464 women. For the empirical analyses, we further restricted the sample to those with non-missing information on the variables of interest (for details, see Section Empirical strategy). Our corresponding analytical sample includes 18,134 Ukrainian refugee women.

Measures

Our dependent variable is whether or not Ukrainian women indicate that they intend to return to Ukraine. *Return intentions* are measured with the following question: "Are you intending to return to and live in Ukraine?"

Respondents could answer with (a) 'yes,' (b) 'no,' or (c) 'don't know.' Descriptively, we find that 71% of the Ukrainian refugee women in our data indicate to return to Ukraine, whereas 4% intend to stay in the host country and 25% mention that they don't know. In the analysis, we contrast those who answer 'yes' (a) with those answering (b) or (c). An advantage of this simplification is that it facilitates the presentation of the findings. In additional analyses, we show that the categories (b) and (c) show very similar patterns, thereby validating our decision to take these together (See [Table D1](#) in Appendix S1).

To test country differences in return intentions we include *self-reported country of residence* at the moment of taking the survey. Compositional differences were taken into account using several variables. The variable *region of origin* prior to the interview is constructed with information on respondents' region of living in Ukraine at the outbreak of the war. Based on the development of the war up to the period of the fieldwork (July–August 2022), we grouped oblasts (counties) into the following regions. We differentiate between (1) the capital Kyiv, (2) Northern-Eastern front, excluding the city of Kyiv (which were de-occupied by July–August 2022), (3) Kharkiv (which was still occupied by July–August 2022), (4) the Donbas (encompassing parts of the Donetsk and Luhansk oblast, which were under the Ukrainian control on 23 February 2022), (5) Zaporizia (largely occupied), (6) Kherson (largely occupied), (7) Mykolaiv (partly occupied), (8) Odessa (not occupied) (9) Central region and (10) Western regions. In this classification, the most affected regions in the period between February and August 2022 were the Donbas and Kharkiv, whereas the Western regions were less affected.

To capture *educational attainment*, we include a binary variable indicating whether the respondent has finished a Bachelor degree or higher (1) or not (0). To measure *financial situation* prior to leaving Ukraine, we rely on the question "How would you estimate your financial situation in summer 2021 compared to the financial situation of other people in Ukraine?" This question could be answered on a five-point scale ranging from 1 "well below average" to 5 "well above average" and was included as a continuous variable. Whether or not someone has a *partner in Ukraine* was measured by combining information about their marital status and information about where the partner lived. We contrast (1) those who have a partner living in Ukraine (married or unmarried) at the time of the survey with (0) those not having a partner at all or a partner living outside of Ukraine. We also included *English language proficiency*, a self-assessed measure of speaking English. The scale ranges from 1 "not at all" to 5 "very well" and we include this as a continuous variable. Age: to capture possibly non-linear effects, we include a categorical variable for age (i.e., age 18–25, 26–35, 36–45, 46–55, 55+).

We include several control variables. These are a dummy variable for *having children* (1) or not (0), and for *being born in Ukraine* (1) or not (0), as well as categorical variables for *survey week* (the week of survey completion with five categories: ranging from week 28 to week 32/33) and for *survey type* (the way people enrolled in the survey with three categories: Instagram, Facebook, and other). Descriptive statistics for all variables are presented in [Table 1](#).

Empirical strategy

We analyse the dichotomous dependent variable (i.e., intention to return intentions 0/1) using logistic regression models with robust standard errors. To facilitate the interpretation of the results, compare models, and gauge effect sizes, we present Average Marginal Effects (AME) and Predicted Probabilities (PP).

To test cross-level interaction effects, multi-level models are commonly used. However, when the number of countries is below 30 (as in our case), estimates are prone to bias (Bryan & Jenkins, 2016). Therefore, we opt for a meta-analysis technique (Liefbroer & Zoutewelle-Terovan, 2021) to test whether the effects of individual-level characteristics vary across countries. We fit separate regressions for each country and save country specific AMEs. We then perform a meta-analysis with random effects using the *metan* commands in Stata 17 to test whether individual-level effects on return intentions differ across receiving countries (Harbord & Higgins, 2008).

TABLE 1 Summary statistics.

Variable	% missing	Mean/proportion	SD	Min/max
Dependent variable				
Intention to return	6.02	0.71		0/1
Independent variables				
Tertiary education	7.18	0.60		0/1
Financial situation before the war	8.36	2.90	0.85	1–5
Partner in Ukraine	0.98	0.36		0/1
English language proficiency	6.75	2.30	1.18	1–5
Age	0			
18–25		0.22		0/1
26–35		0.29		0/1
36–45		0.29		0/1
46–55		0.12		0/1
55+		0.08		0/1
Region of residence before the war	0			
Kyiv		0.12		0/1
North-east front		0.14		0/1
Kharkiv		0.16		0/1
Donbas		0.06		0/1
Zaporizhia		0.06		0/1
Mykolaiv		0.05		0/1
Kherson		0.03		0/1
Odessa		0.07		0/1
Center		0.19		0/1
West		0.12		0/1
Country of residence	0			
Poland		0.30		0/1
Germany		0.35		0/1
Netherlands		0.07		0/1
Czech Republic		0.13		0/1
Italy		0.09		0/1
Romania		0.03		0/1
Hungary		0.02		0/1
Moldova		0.01		0/1
Control variables				
Having children	1.00	0.73		0/1
Born in Ukraine	3.37	0.94		0/1
Survey week	0			
28		0.26		0/1
29		0.07		0/1

(Continues)

TABLE 1 (Continued)

Variable	% missing	Mean/proportion	SD	Min/max
30		0.11		0/1
31		0.49		0/1
32/33		0.08		0/1
Social media platform	0			
Facebook		0.42		0/1
Instagram		0.55		0/1
Other		0.02		0/1

Note: The % missing values in column 1 is based on the sample prior to listwise deletion ($N=21,464$). Column 2 and 3 are based on the analytical sample ($N=18,134$).

The proportion of missing data is 0%–1% for the variables capturing region of origin, partnership, and age. With respect to education (7%), financial status (8%) and English language skills (7%) the share of missingness is higher (see Table 1). We used listwise deletion, which gives valid inferences for logistic regression models under a broad set of conditions (Allison, 2001). The final analytical sample consists of 18,134 respondents.

As a robustness check, we replicated the logistic regression models using multiple imputation with chained equations in Stata (Royston & White, 2011). We constructed 20 imputed data sets that use all available information from the full models. We additionally relied on information on the participants' country based on the IP address and detailed information on return intentions, including the answer options “yes,” “no,” and “don't know.” Estimates based on 20 imputed datasets lead to the same conclusions as when using listwise deletion (see Table E1 in Appendix S1).

RESULTS

Contextual effects

We formulated opposite hypotheses (H1a and H1b) on return intentions among refugees. To test these hypotheses, we estimated a logit model without ('unconditional model') and with ('conditional model') individual-level and control variables. Figure 1 presents the results as the average predicted probabilities (PP) of return-intentions per Ukrainian refugees' receiving country (for the corresponding table, see Table C1 in Appendix S1, and see Table 3 for the full models).

The hypotheses focused on two clusters of countries: on the one hand the more distant countries (the Netherlands and Germany) and on the other hand the countries nearby Ukraine (Poland, Hungary, Czech Republic, Moldova, and Romania). In line with H1b, which stressed the role of economic motives (and contradicting H1a, which emphasized social attachment), we find that return intentions among Ukrainian refugees are lowest in the more distant countries: Germany and the Netherlands. In the unconditional model, the PP of the intention to return to Ukraine is 0.65 for Germany and the Netherlands. Note that, within the countries nearby, there are substantial differences in return intentions. They are particularly prevalent among Ukrainian refugee women in Moldova (PP=0.87) and Romania (PP=0.83) – two relatively less-developed countries – while less so in Poland and Czech Republic.

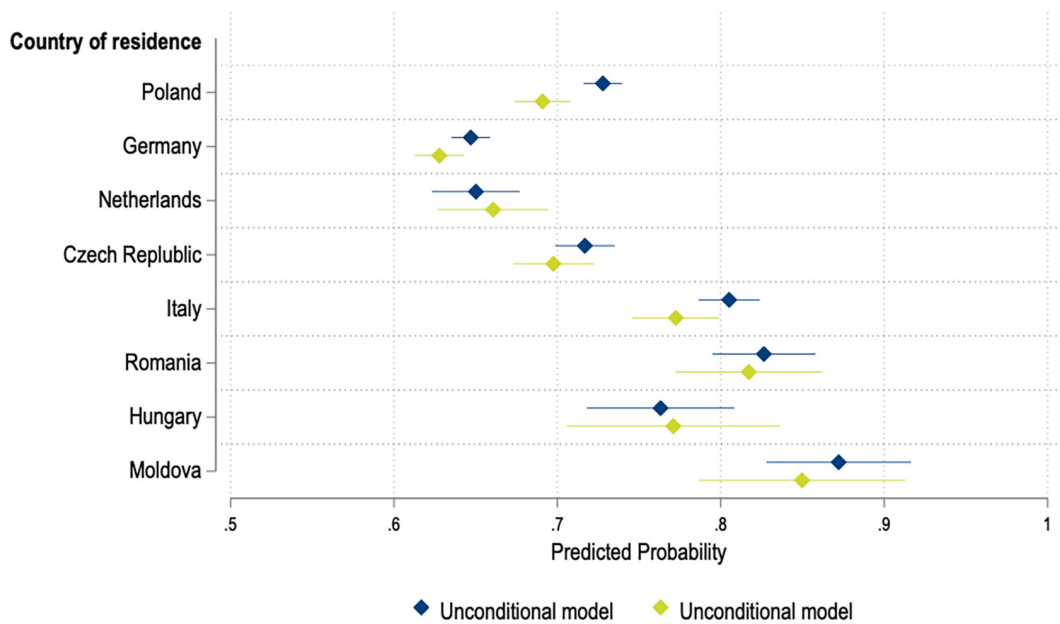


FIGURE 1 Predicted probabilities of the intention to return to Ukraine (rather than no intention to return/being unsure about the intention), with 95% CIs. Results from logistic regressions, in Table C1 in the Appendix S1.

Composition effects

It was argued that country differences in the return intentions of Ukrainian refugees could also be driven by composition effects. As mentioned, these effects arise when refugee characteristics differ across countries, and when these characteristics affect return intentions. We first examine whether there are compositional differences across receiving countries (Table 2). We find that differences between countries are particularly pronounced regarding education. The share of Ukrainian women with tertiary or higher education ranges from 78.7 in Romania to 53.5 in Hungary and Poland. At the same time, there is also clear variation in age structure and region of origin. In Germany, 21 percent for example originate from Kharkiv whereas this is only 7 percent among Ukrainian women in Romania. Thus, our study confirms that self-selection patterns are significant, and that there are substantial differences in the composition of Ukrainian female refugees across European countries (see also Van Tubergen et al., 2023).

With respect to individual-level effects, it was hypothesized (H2a) that refugees who are from the most conflict-intense areas in Ukraine, are the least likely to intend to return. Our findings indicate that Ukrainian women who lived in the Donbas – the region most heavily affected by the war – are indeed the least likely to indicate that they plan to return (Table 3). In line with H2b, we find that those whose partner stays in Ukraine have higher return intentions. Furthermore, our results indicate that those who with better English language proficiency appear to be less likely to intend to return, confirming H2c.

Regarding the remaining individual-level characteristics, we find that those who are higher educated have a lower probability to indicate that they plan to return to Ukraine. By contrast, those who had a relatively better financial situation before the war are more likely to intend to return. We also find age differences in remigration intentions. Compared to the youngest age group (18–25), those in the middle three age categories are less likely to indicate the intention to return. No difference was found between the youngest and the oldest age category.

TABLE 2 Composition of female Ukrainian refugees per receiving country (Mean or %).

Variable	PL	DE	NL	CZ	IT	RO	HU	MD
Tertiary education (%)	53.54	64.64	67.33	55.95	62.89	78.66	53.51	61.19
Financial situation before the war	2.81	2.98	2.98	2.81	2.89	3.10	2.78	3.07
Partner in Ukraine (%)	37.56	36.26	30.03	35.29	39.85	38.16	23.68	32.42
English language proficiency	2.00	2.45	2.76	2.17	2.36	2.82	2.50	2.22
Age (%)								
18–25	22.46	22.45	21.86	24.38	20.13	11.93	24.27	15.53
26–35	29.51	27.12	26.98	31.05	28.62	37.07	30.12	37.90
36–45	27.98	29.32	28.88	28.53	31.53	35.99	26.61	31.51
46–55	12.56	12.48	13.37	9.71	9.83	7.96	12.87	7.31
55+	7.48	8.63	8.91	6.33	9.89	7.05	6.14	7.76
Region of origin (%)								
Kyiv	7.72	14.70	17.41	9.58	11.34	10.49	11.11	7.31
North-east front	11.67	15.79	18.32	10.48	14.60	11.03	15.20	5.48
Kharkiv	14.75	20.53	15.84	17.96	8.61	6.87	12.87	6.39
Donbas	5.90	7.30	7.34	7.10	4.30	3.07	7.31	3.65
Zaporizhi	7.72	5.54	4.62	4.66	3.96	1.27	7.89	1.83
Mykolaiv	4.99	4.31	4.54	4.62	5.24	11.57	3.22	20.09
Kherson	5.08	2.46	1.16	2.99	2.44	2.17	1.75	3.65
Odessa	3.86	7.80	7.10	4.88	5.41	41.77	3.51	44.75
Center	25.45	16.19	15.68	18.73	18.91	7.05	21.05	5.02
West	12.87	5.37	8.00	18.99	25.19	4.70	16.08	1.83

Note: PO=Poland (N=5493), DE=Germany (6258), NL=Netherlands (1212), CZ=Czech Republic (2338), IT=Italy (1719), RO=Romania (553), HU=Hungary (342), MD=Moldova (219).

Do country differences in return intentions change when taking these compositional differences into account? The conditional models in Figure 1 include all covariates and show very similar patterns compared to the unconditional models (see also corresponding Table C1 in Appendix S1). Thus, we find evidence to suggest that, when comparing Ukrainian refugee women with the same background characteristics (e.g., age, education, origin region) across receiving countries in Europe, those who settled in Germany and the Netherlands indicate less often that they intend to return to Ukraine. Note that the differences between Germany and the Netherlands are not statistically significant ($p=0.095$). Compositional effects do not explain much of the country differences in return intentions and Germany and the Netherlands remain the countries in which Ukrainian refugees are least likely to indicate that they want to return to Ukraine.

Cross-level interaction effects

Finally, we examine whether the effects of individual-level characteristics on return intentions vary across European countries. For each country, we therefore estimated the conditional models again, using the full sample of respondents. To gauge cross-country heterogeneity in effect sizes, we use the I^2 index, which indicates the proportion of total variation attributable to between-country heterogeneity (rather than due to sampling error).

TABLE 3 Average marginal effects on the probability of the intention to return to Ukraine.

	Unconditional model		Conditional model	
	AME	SE	AME	SE
Tertiary education			−0.02*	(0.01)
Financial situation before the war			0.03***	(0.00)
Partner in Ukraine			0.10***	(0.01)
English language proficiency			−0.03***	(0.00)
Age categories (ref = 18–25)				
26–35			−0.08***	(0.01)
36–45			−0.11***	(0.01)
46–55			−0.09***	(0.01)
55+			−0.01	(0.02)
Region of origin (ref = Kyiv)				
North-Eastern Front			−0.01	(0.01)
Kharkiv			−0.04**	(0.01)
Donbas			−0.11***	(0.02)
Zaporizhia			−0.04**	(0.02)
Mykolaiv			0.02	(0.02)
Kherson			−0.04	(0.02)
Odessa			−0.01	(0.02)
Center			−0.06***	(0.01)
West			−0.01	(0.01)
Country of residence (ref = Poland)				
Germany	−0.08***	(0.01)	−0.07***	(0.01)
Netherlands	−0.08***	(0.01)	−0.05**	(0.01)
Czech Republic	−0.01	(0.01)	−0.00	(0.01)
Italy	0.08***	(0.01)	0.08***	(0.01)
Romania	0.10***	(0.02)	0.11***	(0.02)
Hungary	0.04	(0.02)	0.06**	(0.02)
Moldova	0.14***	(0.02)	0.14***	(0.02)
N	18,134		18,134	

Note: Refugees: . The conditional model further controls for having children, born in Ukraine, survey week, social media platform. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed tests).

The I^2 is regarded low between 0.25 and 0.50, moderate between 0.50 and 0.75 and high above 0.75 (Higgins et al., 2003). The results are presented in Table 4.

We hypothesized that cross-level interaction effects would (at least) appear for the effect of English language proficiency. Specifically, we expected a more negative relationship in countries with a larger share of English language speakers (H3). In the countries we study, this would mean the Netherlands and Germany. As can be seen in Table 4, the estimates for English proficiency on return intentions vary between −0.02 for Poland and Czech Republic to −0.04 (Netherlands) and −0.05 (Hungary, Moldova). The meta-analysis reveals that these cross-country differences in the effect of English language proficiency are not statistically significantly different from each other ($I^2 = 0.0$, $p = 0.459$). In other words, English skills are rather uniformly related to return intentions across countries. Hence, we find no support for H3.

TABLE 4 Average marginal effects on the probability of the intention to return to Ukraine: results per country of residence.

	English language proficiency		Partner in Ukraine		Financial situation before the war		Tertiary education	
	AME	SE	AME	SE	AME	SE	AME	SE
Poland	-0.02**	(0.01)	0.07***	(0.01)	0.03***	(0.01)	-0.02	(0.01)
Germany	-0.03***	(0.01)	0.13***	(0.01)	0.02**	(0.01)	-0.02	(0.01)
Netherlands	-0.04**	(0.01)	0.13***	(0.03)	0.05**	(0.02)	-0.04	(0.03)
Czech Republic	-0.02*	(0.01)	0.09***	(0.02)	0.02	(0.01)	-0.07**	(0.02)
Italy	-0.03***	(0.01)	0.10***	(0.02)	0.01	(0.01)	0.01	(0.02)
Romania	-0.03*	(0.01)	0.05*	(0.03)	0.03	(0.02)	-0.01	(0.04)
Hungary	-0.05**	(0.02)	0.14**	(0.05)	0.06*	(0.02)	0.04	(0.05)
Moldova	-0.05**	(0.02)	0.02	(0.06)	0.06	(0.03)	-0.05*	(0.05)
I^2	0.0		60.1*		13.2		32.8	

Note: Models include all predictors and control variables as in Table 3.

This is illustrative for a more general pattern we find in our data: individual-level effects on return migration are remarkably robust across receiving countries. For example, we find that the effect of having tertiary education ($I^2=32.8$, $p=0.166$), or pre-war financial situation ($I^2=13.2$, $p=0.327$) do not vary across countries either. The only exception to this overall pattern of cross-country similarity relates to partnership status. We find moderately strong variation in the effect of having a partner in Ukraine on return intentions across receiving countries ($I^2=60.1$, $p=0.014$). The effect of having a partner in Ukraine was relatively strong in Hungary (AME=0.134), Germany (AME=0.134) and the Netherlands (AME=0.126) and low in Romania (AME=0.045) and Moldova (AME=0.015).

CONCLUSIONS

This paper studied the disparities across eight European receiving countries in the return intentions of Ukrainian refugee women who fled their country following the outbreak of the Russia's aggressive invasion of Ukraine in 2022. Utilizing data from the cross-national *OneUA* survey, collected approximately 5–6 months after the start of the full-scale Russian invasion, our analysis explored the interplay between contextual, compositional, and cross-level interaction effects on these return intentions. The study encompasses over 18,000 Ukrainian female refugees in Poland, Germany, Czech Republic, Italy, Netherlands, Romania, Hungary, and Moldova. From these analyses, four main conclusions can be drawn.

First, our findings underscore significant country differences in intentions to return to Ukraine. Specifically, among the eight countries included in the study, Ukrainian refugee women in the Netherlands and Germany (Predicted Probability (PP) to return=0.65) exhibited the lowest intentions to return to Ukraine. Conversely, those residing in countries nearby Ukraine, and then in particular Romania (PP=0.83) and Moldova (PP=0.87), were most likely to report return intentions. These findings lend some support to the notion that return intentions tend to diminish in more economically prosperous countries (Germany, Netherlands), as compared to less developed countries (Romania, Moldova). Moreover, these findings suggest that economic motives are given more weight than social attachment motives – as this would favour staying in the countries nearby Ukraine, which have more established co-ethnic communities and share linguistic similarities. At the same time, however, these conclusions are tentative and not so straightforward as there are considerable differences in return intentions between

countries nearby Ukraine. Furthermore, it may be the that refugees who have less intention to returning in the first place migrate to less distant countries.

Second, we also find that individual-level characteristics are significantly related to return intentions. In line with our expectations, we find that return intentions are lower among Ukrainian refugees who are more proficient in the English language and who lived in a region in Ukraine that is more-heavily affected by the war (e.g., Donbas), while they are higher among those who have a partner still residing in Ukraine. In addition, our study shows that return intentions are lower among those with higher educational levels and who had a worse financial situation before the war.

Third, our findings suggest that the differences in return intentions across European societies are only marginally driven by composition effects. There is evidence for self-selection, resulting in country differences in demographic characteristics of refugees. We find, for example, that the refugee groups are differently composed in terms of education, with some countries having a larger share of higher educated female refugees than other countries. However, even with these compositional differences and individual-level effects accounted for, country disparities in return migration are not explained away. Thus, we still find that Ukrainian women in Germany and the Netherlands are the least inclined to express intentions to return to Ukraine.

Fourth, our results reveal remarkable consistency of the individual-level effects on return intentions across European countries. We had hypothesized that, at the very least, the effect of English language skills would vary across European countries – such that its negative effect on return intentions is especially pronounced in countries in which English is widely spoken as a second language (e.g., Netherlands). However, we do not find any difference in the effect of English language on return intentions across European countries. Likewise, for the other individual characteristics, we find that the results are very similar between countries.

This study also has limitations, which provide avenues for follow-up research. One is that we studied return intentions, while we have no information on how these intentions are related to actual (re)migration patterns. Another is that, with only eight countries, the findings and interpretations of our study should be regarded as tentative. Further research including more countries and country-level variables is encouraged to validate the patterns we observe and disentangle the mechanisms behind country differences more rigorously. Also, our analyses are based on non-probability samples, and therefore studies replicating ours using representative surveys are highly recommended. Reassuringly, our findings strongly align to that of Brücker et al. (2023), who examined return intentions among Ukrainian refugees in Germany. While they did not study all the individual-level characteristics in our study, they did include partnerships status, second language skills and education. They find, like we do, that having a partner abroad reduces the intentions to settle in Germany. And, similar to our findings on English language skills – as a proxy for communicating with the ethnic majority population – they find that speaking German well increases settlement intentions. Finally, they do not find educational differences, as we do, which might be due to their study including mediating variables possibly associated with education (e.g., contacts with Germans, labour market position in Germany).

These potential limitations notwithstanding, our study suggests that both host-country conditions and individual-level characteristics independently influence return intentions of Ukrainian refugees in Europe. The results of our study thus not only contribute to the literature on return intentions (which have focused on labour migrants), but have significant policy relevance as well. How many Ukrainian refugees intend to return, and especially which socio-demographic groups (e.g., by level of education), will impact both the demographic, political and socio-economic development in Ukraine, but also have significant consequences for the integration processes of Ukrainian refugees across European countries. Our study has shed more light on these pressing issues.

ACKNOWLEDGEMENTS

Kogan, Van Tubergen, and Wachters would like to thank the Netherlands Interdisciplinary Demographic Institute (NIDI), the Sustainable Cooperation program (SCOOP), Institutions for Open Societies (IoS) at Utrecht University, and Mannheim University for funding the OneUA survey. Our heartfelt thanks go to Grace Caroline Olzinski, University of

Mannheim, for her help in programming the survey. Kosyakova gratefully acknowledges the support of the Deutsche Forschungsgemeinschaft (DFG—German Research Foundation) within the project 'Longitudinal Study of Ukrainian Refugees (SUARE). Refugee migration and Labor Market Integration' (project number—519020285).

CONFLICT OF INTEREST STATEMENT

The authors declare no competing interests.

DATA AVAILABILITY STATEMENT

Replication codes for data preparation and analyses are available at <https://osf.io/8qexy/>. Information about the OneUA project can be found at: <https://osf.io/tmgcd/>.

ETHICAL APPROVAL

This study is approved by the Ethics Committee of the Faculty of Social and Behavioural Sciences of Utrecht University (file number 22-0226). Respondents have given their written informed consent to participate in the study.

CONSENT FOR PUBLICATION

All authors approved the version to be published.

ORCID

Frank van Tubergen  <https://orcid.org/0000-0002-6415-2877>

Gusta G. Wachter  <https://orcid.org/0000-0002-1046-7355>

Yuliya Kosyakova  <https://orcid.org/0000-0002-9621-1755>

Irena Kogan  <https://orcid.org/0000-0002-2841-1296>

REFERENCES

- Allison, P.D. (2001) *Missing data*. London: Sage Publications.
- Andreß, H.-J. & Careja, R. (2018) Sampling migrants in six European countries: how to develop a comparative design? *Comparative Migration Studies*, 6(1), 1–21.
- Bansak, K., Hainmueller, J. & Hangartner, D. (2016) How economic, humanitarian, and religious concerns shape European attitudes toward asylum seekers. *Science*, 354(6309), 217–222.
- Baumeister, R.F. (1991) *Meanings of life*. New York, NY: The Guilford Press.
- Borjas, G.J. (1987) Self-selection and the earnings of immigrants. *American Economic Review*, 77, 531–533.
- Borjas, G.J. & Bratsberg, B. (1996) Who leaves? The outmigration of the foreign-born. *The Review of Economics and Statistics*, 78, 165–176.
- Brücker, H., Ette, A., Grabka, M.M., Kosyakova, Y., Niehues, W., Rother, N. et al. (2023) Ukrainian refugees: nearly half intend to stay in Germany for the longer term. *DIW Weekly Report*, 13(28), 203–214. Available from: https://doi.org/10.18723/diw_dwr:2023-28-1
- Brunarska, Z., Kindler, M., Szulecka, M. & Toruńczyk-Ruiz, S. (2016) Ukrainian migration to Poland: a “local” mobility? In: Fedyuk, O. & Kindler, M. (Eds.) *Ukrainian migration to the European Union: lessons from migration studies*. Cham: Springer International Publishing, pp. 115–131.
- Bryan, M.L. & Jenkins, S.P. (2016) Multilevel modelling of country effects: a cautionary tale. *European Sociological Review*, 32(1), 3–22.
- Caron, L. (2020) An intergenerational perspective on (re) migration: return and onward mobility intentions across immigrant generations. *International Migration Review*, 54(3), 820–852.
- Constant, A. & Massey, D.S. (2002) Return migration by German guestworkers: neoclassical versus new economic theories. *International Migration*, 40(4), 5–38.
- Damelang, A. & Kosyakova, Y. (2021) To work or to study? Postmigration educational investments of adult refugees in Germany—evidence from a choice experiment. *Research in Social Stratification and Mobility*, 73, 100610.
- De Coninck, D. (2022) The refugee paradox during wartime in Europe: how Ukrainian and Afghan refugees are (not) alike. *International Migration Review*, 57, 578–586.
- De Haas, H. & Fokkema, T. (2011) The effects of integration and transnational ties on international return migration intentions. *Demographic Research*, 25(24), 755–782.

- De Haas, H., Fokkema, T. & Fihri, M.F. (2015) Return migration as failure or success? The determinants of return migration intentions among Moroccan migrants in Europe. *Journal of International Migration and Integration*, 16(2), 415–429.
- De Vroome, T. & Van Tubergen, F. (2010) The employment experience of refugees in The Netherlands. *International Migration Review*, 44(2), 376–403.
- De Vroome, T. & Van Tubergen, F. (2014) Settlement intentions of recently arrived immigrants and refugees in The Netherlands. *Journal of Immigrant & Refugee Studies*, 12(1), 47–66.
- Di Saint Pierre, F., Martinovic, B. & De Vroome, T. (2015) Return wishes of refugees in The Netherlands: the role of integration, host national identification and perceived discrimination. *Journal of Ethnic and Migration Studies*, 41(11), 1836–1857.
- Eurostat. (2022) *Real GDP per capita*. Online data code: SDG_08_10.
- Eurostat. (2023) *Ukrainian citizens in the EU*. Available from: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Ukrainian_citizens_in_the_EU [Accessed 1st February 2023].
- Gerhards, J. (2014) Transnational linguistic capital: explaining English proficiency in 27 European countries. *International Sociology*, 29(1), 56–74.
- Ghosn, F., Chu, T.S., Simon, M., Braithwaite, A., Frith, M. & Jandali, J. (2021) The journey home: violence, anchoring, and refugee decisions to return. *American Political Science Review*, 115(3), 982–998.
- Gorodzeisky, A. & Semyonov, M. (2016) Not only competitive threat but also racial prejudice: sources of anti-immigrant attitudes in European societies. *International Journal of Public Opinion Research*, 28(3), 331–354.
- Hainmueller, J., Hangartner, D. & Lawrence, D. (2016) When lives are put on hold: lengthy asylum processes decrease employment among refugees. *Science Advances*, 2(8), e1600432.
- Harbord, R.M. & Higgins, J.P. (2008) Meta-regression in stata. *The Stata Journal*, 8(4), 493–519.
- Higgins, J.P., Thompson, S.G., Deeks, J.J. & Altman, D.G. (2003) Measuring inconsistency in meta-analyses. *BMJ*, 327(7414), 557–560.
- Kaya, S. & Orchard, P. (2020) Prospects of return: the case of Syrian refugees in Germany. *Journal of Immigrant & Refugee Studies*, 18(1), 95–112.
- Kayaoglu, A., Şahin-Mencütek, Z. & Erdoğan, M.M. (2022) Return aspirations of Syrian refugees in Turkey. *Journal of Immigrant & Refugee Studies*, 20(4), 561–583.
- Keita, S. & Schewe, P. (2021) Out of sight, out of mind? Terror in the home country, family reunification options, and the well-being of refugees. *World Development*, 146, 105562.
- Kogan, I., Van Tubergen, F. & Pötzschke, S. (2022) *OneUA: online survey of Ukrainians*. <https://doi.org/10.17605/OSF.IO/TMGCD>
- Kosyakova, Y., Kristen, C. & Spörlein, C. (2022) The dynamics of recent refugees' language acquisition: how do their pathways compare to those of other new immigrants? *Journal of Ethnic and Migration Studies*, 48(5), 989–1012.
- Kuhlman, T. (1991) The economic integration of refugees in developing countries: a research model. *Journal of Refugee Studies*, 4(1), 1–20.
- Kulyk, V. (2016) Language and identity in Ukraine after Euromaidan. *Thesis Eleven*, 136(1), 90–106.
- Liefbroer, A.C. & Zoutewelle-Terovan, M. (2021) Meta-analysis and meta-regression: an alternative to multilevel analysis when the number of countries is small. In: Liefbroer, A.C. & Zoutewelle-Terovan, M. (Eds.) *Social background and the demographic life course: cross-National comparisons*. Cham: Springer International Publishing, pp. 101–123.
- Martinovic, B., Van Tubergen, F. & Maas, I. (2015) A longitudinal study of interethnic contacts in Germany: estimates from a multilevel growth curve model. *Journal of Ethnic and Migration Studies*, 41(1), 83–100.
- Massey, D.S. & Espinosa, K.E. (1997) What's driving Mexico-US migration? A theoretical, empirical, and policy analysis. *American Journal of Sociology*, 102, 939–999.
- Melitz, J. & Toubal, F. (2014) Native language, spoken language, translation and trade. *Journal of International Economics*, 93(2), 351–363.
- Özkan, Z., Eryılmaz, A. & Ergün, N. (2023) Intentions to return and migrate to the third countries: a socio-demographic investigation among Syrians in Turkey. *Journal of International Migration and Integration*, 24, 1571–1587. Available from: <https://doi.org/10.1007/s12134-023-01031-x>
- Pötzschke, S., Weiß, B., Beuthner, C., Daikeler, J. & Silber, H. (2023) *A guideline on how to recruit respondents for online surveys using Facebook and Instagram: using hard-to-reach health workers as an example*.
- Reichel, D. & Morales, L. (2017) Surveying immigrants without sampling frames—evaluating the success of alternative field methods. *Comparative Migration Studies*, 5(1), 1–22.
- Royston, P. & White, I.R. (2011) Multiple imputation by chained equations (MICE): implementation in Stata. *Journal of Statistical Software*, 45, 1–20.
- Sønderskov, K.M., Dinesen, P.T., Hansen, B.T., Østergaard, S.D. & Danckert, B. (2021) Terrorism in the country of origin is linked to deterioration in the mental health of refugees. *Nature Human Behaviour*, 5, 1555–1561.

- UNHCR. (2022a) *Lives on hold: profiles and intentions of refugees from Ukraine*. U. R. B. F. Europe. [Accessed 1st February 2024].
- UNHCR. (2022b) *Refugee data finder*. <https://www.unhcr.org/refugee-statistics/download/?url=v5D5zP>
- Van Tubergen, F., Kogan, I., Kosyakova, Y. & Pötzschke, S. (2023) Self-selection of Ukrainian refugees and displaced persons in Europe. *Journal of Refugee Studies*, 37, 72–96. Available from: <https://doi.org/10.1093/jrs/fead089>
- Van Tubergen, F., Kosyakova, Y. & Kanas, A. (2023) Religious responses to existential insecurity: conflict intensity in the region of birth increases praying among refugees. *Social Science Research*, 113, 102895.
- Van Tubergen, F. & Van de Werfhorst, H. (2007) Postimmigration investments in education: a study of immigrants in The Netherlands. *Demography*, 44(4), 883–898.
- Wachter, G.G. & Fleischmann, F. (2018) Settlement intentions and immigrant integration: the case of recently arrived EU-immigrants in The Netherlands. *International Migration*, 56(4), 154–171.
- WorldBank. (2021) *GDP per capita (current US\$) – Moldova*. <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=MD>

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: van Tubergen, F., Wachter, G.G., Kosyakova, Y. & Kogan, I. (2024) Return intentions among Ukrainian refugees in Europe: A Cross-National Study. *International Migration*, 62, 181–198. Available from: <https://doi.org/10.1111/imig.13291>