

Own or public? Later livelihoods of Ukrainian war migrant households in Poland

Katarzyna Kochaniak¹  | Anna M. Korzeniowska²  |
Michał Bernard Pietrzak³ 

¹Krakow University of Economics, Krakow, Poland

²Maria Curie-Skłodowska University in Lublin, Lublin, Poland

³Gdańsk University of Technology, Gdańsk, Poland

Correspondence

Katarzyna Kochaniak, Krakow University of Economics, 27 Rakowicka Street, Krakow 31-510, Poland.

Email: katarzyna.kochaniak@uek.krakow.pl

Funding information

Narodowa Agencja Wymiany Akademickiej, Grant/Award Number: BPN/GIN/2022/1/00058/U/00001

Abstract

This paper presents empirical research on the livelihood resources of Ukrainian households that fled to Poland due to the Russian invasion and reside there long term. Using a nationwide sample of these households and an accurate econometric framework, we investigate the factors influencing the role of income from work, other private resources and public assistance in covering their living costs in exile. Our findings confirm the importance of public assistance addressed to professional activation and childcare for households' self-reliance. Assistance from employers, housing conditions, intentions to settle permanently in Poland and financial responsibility for relatives in Ukraine are also among the decisive factors. However, sufficient monetary aid hinders households' self-reliance, along with health problems, language barriers and a lack of professional qualifications. Household composition is also significant, as those with children face the most adverse outcomes. Based on our results, we provide recommendations for public authorities responsible for migration policy.

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

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

INTRODUCTION

Following Russia's invasion of Ukraine in February 2022, a significant number of Ukrainians fled to Poland, primarily women of working age with children. Nearly two million people decided to stay long term (NBP, 2023). Apart from the right to an 18-month stay and work, migrants were initially granted substantial humanitarian public assistance (Act of March 12, 2022), which, after a four-month stay, was gradually reduced for the vast majority, primarily regarding accommodation and food (Act of April 8, 2022; Act of January 13, 2023). This shift aimed to encourage migrants to become self-reliant, i.e., capable of meeting their social and economic needs, by reducing dependence on humanitarian aid and increasing their activity as employees or entrepreneurs (Easton-Calabria & Omata, 2018; UNHCR, 2005).

However, studies thus far highlight the complexities and prolonged nature of professional activation, especially for humanitarian migrants (Bevelander, 2020; Bonfanti & Xenogiani, 2014; Dumont et al., 2016; Efendic et al., 2022; Lundborg, 2013). Various factors contribute to this situation, including mental health issues (Bogic et al., 2015; Cebulla et al., 2010; Kiliç et al., 2015; OECD, 2016), a lack of preparation for living and working abroad (Dumont et al., 2016), limited access to professional and social networks (Eisnecker & Schacht, 2016) and insufficient language skills and a lack of human capital (Cheung & Phillimore, 2014; Eggenhofer-Rehart et al., 2018). These challenges often restrict their job opportunities to second-segment positions that do not align with their education and skills (Panchenko, 2022; Tijdens & van Klaveren, 2011). Notably, female migrants face particular challenges in this regard (Kofman, 2000).

The objective of this paper is to provide empirical findings on the role of specific livelihoods among Ukrainian war immigrant households staying in Poland long enough to experience limited access to humanitarian assistance. Given the expectations for migrants to achieve self-reliance over time, our study focuses on the significance of their incomes from work in Poland, other private resources, such as savings and income from abroad, and public assistance. We primarily aim to examine whether, 1 year after the onset of the war, public assistance and the characteristics of Ukrainian households, including their personal composition, motivations, needs and limitations, affect the overall structure of their livelihoods in the host country. Therefore, we test the following research hypothesis: The subsequent degree of self-reliance of Ukrainian war immigrant households in Poland results from a complex interplay of socio-demographic and economic factors.

To verify the hypothesis, the answers to the research questions have proven to be useful.

- Does the lesser dependence of Ukrainian households on state aid mean their greater reliance on income from work in Poland or other private livelihoods?
- Which forms of early public assistance are decisive for households' degree of self-reliance?
- For which forms of public assistance does limited availability later on have a detrimental effect on households' degree of self-reliance?
- Apart from public assistance, which socio-demographic and economic characteristics of households are significant for the role of considered livelihoods?

We utilize data from 1113 households of Ukrainian war immigrants, obtained from a nationwide survey conducted 1 year after the onset of the full-scale Russian-Ukrainian war. The application of the fractional multinomial logit model (Buis, 2008; Mullahy, 2015; Murteira & Ramalho, 2016) allows us to infer the relationships between specific resources of livelihood and identify the factors that determine them during households' prolonged stays in Poland.

Our paper contributes to the nascent literature on Ukrainian war migrants. Only a few studies thus far have discussed the issues related to their professional activation in host countries (Duszczuk & Kaczmarczyk, 2022; Jauhainen & Erbsen, 2023; OECD, 2023; Panchenko, 2022). Moreover, to the best of our knowledge, none of them relate to the degree of their later self-reliance. Our study is the first to comprehensively address the role

of alternative livelihoods for Ukrainian households, including private resources and public assistance, based on rigorous empirical testing in this regard. Furthermore, regarding the overall studies on mass migrations, we fill the research gap concerning the substitutability and complementarity of particular livelihood resources for migrant households.

Since the return of Ukrainian war immigrants to their homeland is unlikely to occur in the near future, the issue we analyse is of high importance for understanding the extent to which public assistance supports their longer term self-reliance and how much it is influenced by the immigrants themselves. The findings from our study provide valuable insights for public authorities regarding the effects of public assistance and the directions for its further modification, as we identify the existing gaps in access to selected means that significantly decrease households' self-reliance. We use the obtained results to formulate recommendations in this regard.

The paper is structured as follows. Section 2 presents the literature review related to migrants' labour market participation and the significance of public assistance and personal composition for migrant households' self-reliance. Section 3 describes the context of the study, the data and the methods used. Section 4 presents and discusses the results obtained. Finally, conclusions are drawn, along with recommendations to public authorities.

LITERATURE

Migrants' labour market participation and wage gaps

The existing literature finds professional activation of migrants more likely among those with language skills and competences (Johns, 2013; Koopmans, 2016; Rodríguez-Planas & Farré, 2016), access to social networks (Kanas et al., 2011) and employment plans or strategies (Martiniello & Rea, 2014). It is also influenced by the host country's conditions, especially the extent to which the social system is supportive of migrants (Kang, 2021) and the opportunities they have for residence (Brzozowska, 2022). However, gender gaps in labour market participation are widely identified, with lower rates attributed to migrant women (Fleischmann & Höhne, 2013; Fossati et al., 2022).

Moreover, when considering humanitarian migrant women, their rapid integration into the labour market is essential for their social integration in the host country (Brell et al., 2020). However, they often face a double disadvantage resulting from both gender and immigrant status (Solmone & Frattini, 2022). They are more likely to be employed in low-skilled occupations (Carranza et al., 2019; Peri et al., 2013). Their frequent lack of proficiency in the host-country language acts as a barrier to finding jobs in their trained occupation (Rajman & Semyonov, 1997). Furthermore, despite working long hours, their income levels are relatively low (Fasani, 2020). It should be noted that socio-demographic factors explain only a marginal part of their income differential. However, it is worth noting that in the EU, their education levels are significantly higher than those of migrant men (Solmone & Frattini, 2022).

Selected studies examine the wage gaps between migrant and native workers, which, according to the International Labour Organization (2020), have been globally increasing in recent years. In the study by Dossche et al. (2022), these wage gaps are identified as common during the initial stages of migrants' integration into the labour markets in selected EU countries. Interestingly, they persist throughout the life cycle, with demographic factors playing a minor role in their determination. In the study by Brell et al. (2020), which specifically focuses on the wage gaps between humanitarian migrants and native workers, it is found that they gradually and consistently decrease but do not disappear in the long term, even when compared to economic migrants.

The role of public assistance

In the case of mass migrations, the main concern of destination countries is how to facilitate the process and the means by which migrants can become self-reliant. Public assistance, if not properly designed, whether too limited or too generous, may diminish the chance of professional activation, trapping migrants in poverty or long-term dependence on state and international aid (Auer & Fossati, 2019; Butschek & Walter, 2014; Kofman, 2000). Special attention in this regard is drawn to refugees, who need legalized status, access to education, healthcare, livelihood opportunities and labour markets (Battisti et al., 2019). All these enable them to utilize their skills and capacities in the labour market, invest in human capital, achieve self-reliance and develop transferable skills (UN, 2016).

Despite the significant role of means directly addressing professional activation for migrants' self-reliance, existing studies assign primary importance in this regard to migrants' access to healthcare, as health issues are fundamental to all aspects of their lives, including integration into the labour market (Cebulla et al., 2010).

Furthermore, selected measures such as training programmes, job search assistance, counselling with skills and analysis of work opportunities are fundamental, as they directly impact migrants' inclusion in the labour market (Åslund & Johansson, 2011; Flechner et al., 2022). Language courses and subsidized job placements should also be highlighted (Becker & Ferrara, 2019; Psinos, 2007). Studies so far have found that improving the match quality between migrants' pre-existing skills and the training offered can significantly enhance their professional activation (Beckman et al., 2021; Sarvimäki & Hämäläinen, 2016). However, it should be noted that the effects of the above-mentioned means are gender-dependent. The participation of migrant women in vocational training is recognized to be lower than that of migrant men, especially when children participate in migration. The number and age of children, as well as the availability and cost of childcare, may matter in this regard (Becker, 1991; Friedman et al., 1994; Liefbroer, 2005).

The significance of the above-mentioned childcare assistance for professional activation is ambiguous when comparing migrants to natives. Some studies find that migrants are less likely than natives to take advantage of public daycare schemes (Gambaro et al., 2017), while others find their use to be similar (Rendall et al., 2010). However, Kesler (2006) identifies this form of assistance as potentially significant for migrant women's employment. Furthermore, access to formal education for youths, especially those who are humanitarian migrants, not only improves their living standards (Shamieh et al., 2020) but also significantly increases their chances of securing better-paid jobs in the future (Ludolph, 2023).

The existing literature also explores the role of welfare provisions in the labour market integration of migrants, but its outcomes lead to ambiguous conclusions. Some studies provide evidence that welfare provisions strongly impact migrants' decisions about their destination country (Balcilar & Nugent, 2019; Raijman & Semyonov, 1997), while others find the impact to be weak in this regard (Giulietti et al., 2013). Borjas (1999) argues that countries with more generous welfare systems attract immigrants who otherwise would not have immigrated. Additionally, Brücker et al. (2002) conclude that welfare provisions primarily attract low-skilled workers, while countries with lower social spending are more likely to be chosen by highly skilled individuals due to favourable tax regulations. Consequently, welfare generosity may lead to the selection of migrants. According to Heinesen et al. (2013), in a country where migrants initially have greater access to generous welfare benefits compared to natives, their labour market participation rate decreases over time. In the case of refugees with specific human capital, such as education, monetary aid has significant effects on their self-reliance (LoPalo, 2019).

The role of household composition

The existing literature relates to the impact of the composition of migrant households on the labour market prospects of their members. The presence of children is acknowledged as an important factor (Seibel & Hedegaard, 2017), conditioned by the gender of adult members, as mothers are likely to work fewer hours and

opt for part-time employment (Ala-Mantila & Fleischmann, 2018; Fleischmann & Höhne, 2013). On the other hand, Fullin and Reyneri (2010) confirm the significance of the presence of both life partners in a household. In such cases, the professional activation of women is lower compared to women living alone, especially when they have children. Additionally, Cangiano (2014) finds this limitation more likely for humanitarian migrant women than for economic migrant women and native women, when controlled for household characteristics, age, human capital, language skills and duration of stay. Selected studies find the situation of female-headed migrant households from developing countries difficult in this regard and classify them as vulnerable due to a high poverty risk (Chant, 2003).

Empirical studies highlight that not only marital status and the number of children, but also the economic standing of a household (Schieckoff & Sprengholz, 2021) and preferences regarding family and work, as well as living circumstances (Khoudja & Fleischmann, 2017), are the factors that determine the participation of migrant women in the labour force. In households with other sources of income, women may not contribute monetarily. Timmerman (2006) notes that first-generation migrant women tend to be more passive in the labour market due to various reasons, including traditional gender roles. According to Huh (2018), gender norms from home countries influence not only women's labour force participation but also their wages upon migration.

DATA AND METHOD

Context of the study

The Assistance Act (Act of March 12, 2022) served as a legal basis for the residence of Ukrainian war immigrants in Poland, providing them with public assistance such as:

- Monetary aid, primarily for children and families with children, along with social welfare benefits.
- Healthcare support, encompassing medical and nursing care, as well as psychological counselling.
- Benefits in kind, such as accommodation and collective catering on a full-board basis.
- Access to the labour market and economic activity.
- Assistance in professional activation, including finding employment, recognition of diplomas, improving qualifications and career counselling.
- Access to higher education institutions and language courses.
- Access to nurseries, kindergartens and schools.
- Free public transportation.
- Administrative and legal counselling.

The conditions outlined above were modified by an amendment to the Assistance Act (Act of April 8, 2022), which limited Ukrainian war immigrants' access to accommodation with full board subsidized by public funds in private homes of Poles to 120 days. A subsequent amendment (Act of January 13, 2023) imposed an obligation on Ukrainian war migrants to co-finance the costs of their stay in collective accommodation facilities. However, these restrictions did not apply to individuals in particularly difficult situations, including those with disabilities, retirees, pregnant women and those raising at least two children or a child up to 1 year of age.

Thus, both aforementioned limitations were related to accommodation and food, transferring these key, large expenses onto migrant households. Despite their significant impact on household budgets, there is an evident lack of knowledge about the degree of self-reliance among those who stay longer.

Data source

In this study, a household of Ukrainian war immigrants in Poland is defined as a group of persons who arrived after February 23, 2022, obtained identification numbers (PESEL), live together and support each other for more than 120 days. It also applies to individuals who arrived after February 23, 2022, obtained an identification number (PESEL) and rely solely on themselves for more than 120 days. In their case, possessing PESEL numbers is a condition for accessing public support, including the right to a long-term stay and work. In turn, the length of stay criterion allows for focusing on households that might have experienced a lack of access to free accommodation and food.

Due to the inherent variability of migrant populations and the consequent lack of reliable official data, the adoption of representative sampling for research purposes is often hindered (Jacobsen & Landau, 2003). In such cases, non-probability-based approaches are considered appropriate and convenient (Gorny & Napierała, 2016).

As the above limitation pertains to the population of Ukrainian war immigrants, the design of our cross-sectional study aimed to obtain a purposive research sample of their households that met all the criteria indicated in the adopted definition. Individual data from 1113 households were collected through a nationwide survey conducted between February 24 and April 3, 2023, 1 year after the onset of the war. The survey period provided us with insight into various characteristics of the households, including aspects of their lives in Ukraine prior to the war and their experiences in Poland.

To ensure diversity among the households surveyed, we established quotas related to their place of residence in Poland and personal composition. Quotas for households living in various-sized localities were based on information from the PESEL database regarding the spatial distribution of the Ukrainian war migrant population. Certain minimum sample sizes were also set for specific types of households, including singles and multi-person households. For the latter, quotas were introduced based on their composition, such as those with children, life partners, or other adult members (including those aged 65+). Additionally, their diversity was ensured by avoiding the so-called snowball effect, i.e., not surveying households that lived in the same unit or knew each other.

The survey was conducted by a reputable survey agency in Poland through direct contact with respondents (persons who had comprehensive knowledge about their households), based on the consent of the Ethics Committee for Research of the Krakow University of Economics (no. KEBN/71/0044/D17/2023). It utilized the Pen-and-Paper Personal Interviewing (PAPI) technique to ensure the inclusion of households without mobile phones with SIM cards from Polish operators and without internet access.

It should be emphasized that the survey was conducted with special attention to the possibility that respondents might belong to vulnerable groups due to forced displacement and traumatic war events. Therefore, all participants were informed that their contributions were anonymous and voluntary, and the information they provided would be used solely for scientific purposes. They were also informed that they could withdraw from the survey at any time during the process, making their participation a conscious choice. All of the aforementioned information was verbally conveyed by the interviewers and included on the first page of the questionnaire.

Based on the collected data, we can conclude that the average length of stay in Poland for surveyed Ukrainian households was 299 days, with a median of 322 days. The majority of them (68.1%) perceived their standard of living in Poland as equal to or better than in Ukraine before the war. On average, their living costs were covered by 48% of their income in Poland and 39% by public assistance. Therefore, other financial resources, such as savings and incomes from abroad, were rather supplementary.

Method

Based on survey data, our objective was to identify the determinants of the structure of the livelihoods of Ukrainian war immigrant households, including the strength and direction of their impact, during a later stage of

their stay in Poland. In the study, we distinguished three main funding sources of Ukrainian households, for which the percentage shares in the total cost of living were reported by respondents. Consequently, the dependent variable adopted for the study related to the structure of livelihood resources and was defined as the set of variables Y_1, Y_2, Y_3 , representing the shares of:

- Income from work in Poland (y_1),
- Public assistance comprising monetary aid, primarily conditioned by the presence of children in a household (y_2),
- Remaining private resources, such as savings and incomes from abroad (y_3).

For the dependent variable so defined, we applied the fractional multinomial logit model (Buis, 2008; Mullahy, 2015; Murteira & Ramalho, 2016), described as follows:

$$E[y_j | \mathbf{X}] = \frac{\exp(\mathbf{X}\beta_j)}{\left[\sum_{m=1}^J \exp(\mathbf{X}\beta_m) \right]} \quad (1)$$

where y_j - j -th dependent variable (financial source), $j=1, 2, \dots, J$; \mathbf{X} - vector of independent variables; and β_j - vector of structural parameters for y_j equation.

The model reflects the bounded nature of each individual share (i.e. $0 \leq y_{ij} \leq 1$ for $j=1 \dots J$) as well as the fact that shares add up to unity (i.e. $\sum_{j=1}^J y_{ij} = 1$, $i = 1, 2, \dots, N$), where N is the number of economic objects (Ukrainian war migrant households). This implies that the resulting predicted shares from the model should also lie between 0 and 1 (i.e. $E[y_{ij} | \mathbf{X}] \in (0, 1)$ for $j=1 \dots J$) and add up to one (i.e. $\sum_{j=1}^J E[y_{ij} | \mathbf{X}] = 1$).

The estimation of the conditional mean for all the shares jointly was based on the quasi-maximum likelihood estimator for the multinomial logit specification (Mullahy, 2015; Murteira & Ramalho, 2016). The value of the individual likelihood function is as follows:

$$L_i(\beta) = \prod_{j=1}^J E[y_{ij} | \mathbf{X}]^{y_{ij}} \quad (2)$$

The sum of the individual log-likelihoods is maximized to obtain the estimator for β :

$$\hat{\beta} = \operatorname{argmax}_{\beta} \sum_{i=1}^N \log L_i(\beta) \quad (3)$$

All independent variables were isolated from the survey questionnaire as a collection of facts, phenomena and actions related to Ukrainian war immigrant households, aimed at supporting the research questions. Based on the existing literature and the specific context of Ukrainian war migration to Poland, we initially identified 73 variables related to households' socio-demographics as well as the material and financial aspects of their lives in Ukraine and Poland. These variables were considered to potentially influence the structure of households' livelihoods in Poland at a later stage.

Following the above, we implemented a two-stage restrictive procedure based on Kendall's tau-b correlation coefficients to refine their final set. In the first stage, this set was narrowed down to 35 independent variables that were statistically significantly correlated with the dependent variable (y_1 - y_3). In the second stage, further reduction was necessary due to the large number of highly statistically significant correlations among the remaining variables. Importantly, as we aimed to consider diverse household characteristics in this study (i.e., socio-demographic and economic aspects; related to pre-war living in Ukraine and wartime living in Poland), striving for a single set of independent variables was an inappropriate solution. This approach would lead to a radical

reduction in its informational content. Therefore, we formed five subsets, each ensuring a relatively large number of independent variables that provided a wide range of information for understanding the analysed phenomenon.

Consequently, five multinomial fractional logit models were employed in the study, incorporating a total of 25 independent variables (Table 1). It should be noted that models 1–2 primarily aimed to verify the significance of public assistance and employment-related aspects (Table 2), while models 3–5 focused on the role of diverse household characteristics, such as composition in Poland, main migration motive, further plans of stay and selected aspects of living in both Ukraine and Poland (Table 3).

The adopted approach for modelling particularly enabled us to compare the strength of the impact of variables from a specific thematic area, such as public assistance or household composition, on the dependent variable (y_1 – y_3). As our study was the first to address the problem of the self-reliance of Ukrainian households in exile,

TABLE 1 Independent variables adopted for models 1–5 (N = 1113).

Dummy variables (1–yes; 0–no)		N (1–yes/0–no)	% (1–yes/0–no)
x_1	Personal composition the same as in Ukraine	606/505	54/46
x_2	Immigrated alone	102/1011	9/91
x_3	Immigrated both life partners	333/780	30/70
x_4	Immigrated with children	564/549	51/49
x_5	Migration motive – security	735/378	66/44
x_6	Migration motive – public assistance	76/1037	7/93
x_7	Planning to settle in Poland	536/577	48/52
x_8	Female respondent	920/193	83/17
x_9	Respondent proficient in the Polish language	235/878	21/79
x_{10}	Public (monetary) assistance assessed as sufficient relative to needs	599/514	54/46
x_{11}	Received public assistance related to professional activation	392/721	35/65
x_{12}	Received support from employers	113/1000	10/90
x_{13}	Public assistance related to professional activation needed but unavailable	167/946	15/85
x_{14}	Public assistance in the form of subsidized transportation needed but unavailable	275/838	25/75
x_{15}	Public assistance in the form of childcare needed but unavailable	148/965	13/87
x_{16}	Public assistance in the form of medical/psychological services needed but unavailable	376/737	34/66
x_{17}	Health problem/old age limits employment	226/887	20/80
x_{18}	Lack of knowledge of Polish limits employment	145/968	13/87
x_{19}	Lack of education/certificate limits employment	129/984	12/88
x_{20}	Financially supporting relatives in Ukraine	375/738	34/66
x_{21}	Accommodation available long term	622/491	56/44
x_{22}	Accommodation standards better than in Ukraine	194/919	17/83
x_{23}	Member working in Poland before the war	267/846	24/76
x_{24}	Stable incomes in Ukraine before the war	994/119	89/11
Quantitative variable		Value	
x_{25}	Unemployed members in Poland	0, 1, 2, 3...	

Source: Authors' elaboration.

TABLE 2 Average structure of livelihood resources and its discrete changes (models 1 and 2).

Variables	Average structure of responses for independent variables ^a			Average marginal effects (pp) ^b		
	y_1	y_2	y_3	y_1	y_2	y_3
MODEL 1						
x_{11}	0.3495	0.4930	0.1573	0.2750 (0.000)	-0.2027 (0.000)	-0.0722 (0.000)
x_{14}	0.5279	0.3599	0.1121	-0.0829 (0.000)	0.0622 (0.003)	0.0207 (0.129)
x_{15}	0.5393	0.3522	0.1084	-0.2730 (0.000)	0.1980 (0.000)	0.0750 (0.000)
x_{13}	0.5214	0.3651	0.1133	-0.2057 (0.000)	0.1637 (0.000)	0.0420 (0.018)
x_{16}	0.5261	0.3733	0.1004	-0.0548 (0.008)	-0.0009 (0.963)	0.0556 (0.000)
x_{23}	0.4284	0.4303	0.1412	0.1256 (0.000)	-0.0765 (0.001)	-0.0492 (0.000)
x_{12}	0.4497	0.4164	0.1338	0.2372 (0.000)	-0.1468 (0.000)	-0.0904 (0.000)
x_{25}	0.5927	0.3015	0.1056			
1				-0.1793 (0.000)	0.1777 (0.000)	0.0016 (0.908)
2				-0.2463 (0.000)	0.2101 (0.000)	0.0362 (0.094)
3				-0.3170 (0.000)	0.3053 (0.000)	0.0117 (0.808)
4				-0.2218 (0.020)	0.0981 (0.415)	0.1237 (0.097)
Log-likelihood function = -884.1102						
MODEL 2						
x_{17}	0.5171	0.3723	0.1106	-0.1155 (0.000)	0.0593 (0.006)	0.0561 (0.000)
x_{18}	0.5067	0.3808	0.1125	-0.0553 (0.058)	0.0004 (0.988)	0.0548 (0.012)
x_{19}	0.5155	0.3676	0.1168	-0.1552 (0.000)	0.1189 (0.000)	0.0363 (0.057)
x_{23}	0.4284	0.4303	0.1412	0.1378 (0.000)	-0.0719 (0.001)	-0.0659 (0.000)
x_{10}	0.7738	0.1486	0.0775	-0.4502 (0.000)	0.4018 (0.000)	0.0484 (0.000)
x_7	0.3832	0.4655	0.1511	0.0727 (0.000)	-0.0499 (0.006)	-0.0229 (0.076)
x_{12}	0.4497	0.4164	0.1338	0.1708 (0.000)	-0.0850 (0.007)	-0.0858 (0.000)
Log-likelihood function = -868.34093						

Source: Authors' elaboration.

^aThe shares of livelihoods in the group of households with the independent variable taking a value of zero.

^bChanges in the shares of livelihoods in the group of households with the independent variable taking a value of one.

including its determining factors, the ability to make the aforementioned comparisons increased its added value and allowed for recommendations to public authorities.

It is worth adding that we also incorporated selected independent variables from other thematic areas into the models, which were not in correlation conflict with those primarily assigned, to ensure consistency in the direction of their impact on the dependent variable across the study.

RESULTS AND DISCUSSION

The results obtained from models 1-2 primarily confirmed the significance of early (x_{11}) and subsequent (x_{13}) availability of public assistance related to professional activation, i.e., finding employment, improving qualifications, career counselling and the recognition of diplomas, for households' self-reliance. Considering the extent of the

TABLE 3 Average structure of livelihood resources and its discrete changes (models 3–5).

Variables	Average structure of responses for independent variables ^a			Average marginal effects (pp) ^b		
	y_1	y_2	y_3	y_1	y_2	y_3
MODEL 3						
x_9	0.4253	0.4385	0.1361	0.1756 (0.000)	-0.1327 (0.000)	-0.0430 (0.001)
x_{24}	0.2731	0.5419	0.1849	0.2051 (0.000)	-0.1478 (0.000)	-0.0573 (0.013)
x_1	0.3196	0.5291	0.1511	0.1885 (0.000)	-0.1537 (0.000)	-0.0348 (0.006)
x_2	0.4595	0.4139	0.1266	0.1726 (0.000)	-0.1603 (0.000)	-0.0123 (0.615)
x_{22}	0.4348	0.4292	0.1359	0.1932 (0.000)	-0.1355 (0.000)	-0.0578 (0.000)
x_{20}	0.3472	0.5058	0.1469	0.3192 (0.000)	-0.2696 (0.000)	-0.0496 (0.000)
x_6	0.4998	0.3698	0.1302	-0.1598 (0.000)	0.2654 (0.000)	-0.1056 (0.000)
Log-likelihood function = -927.23754						
MODEL 4						
x_8	0.7202	0.1982	0.0815	-0.1509 (0.000)	0.1384 (0.000)	0.0124 (0.505)
x_9	0.4253	0.4385	0.1361	0.1752 (0.000)	-0.1370 (0.000)	-0.0382 (0.003)
x_{24}	0.2731	0.5419	0.1849	0.1554 (0.000)	-0.1064 (0.001)	-0.0490 (0.034)
x_3	0.4035	0.4571	0.1392	0.1680 (0.000)	-0.1292 (0.000)	-0.0388 (0.004)
x_{21}	0.2746	0.5562	0.1691	0.2722 (0.000)	-0.2156 (0.000)	-0.0566 (0.000)
x_6	0.4998	0.3698	0.1302	-0.2056 (0.000)	0.3099 (0.000)	-0.1040 (0.000)
x_7	0.3832	0.4655	0.1511	0.0886 (0.000)	-0.0601 (0.002)	-0.0284 (0.028)
Log-likelihood function = -940.2622						
MODEL 5						
x_9	0.4253	0.4385	0.1361	0.2079 (0.000)	-0.1712 (0.000)	-0.0366 (0.007)
x_{24}	0.2731	0.5419	0.1849	0.2220 (0.000)	-0.1776 (0.000)	-0.0444 (0.046)
x_4	0.6649	0.2334	0.1016	-0.3181 (0.000)	0.2926 (0.000)	0.0255 (0.048)
x_{22}	0.4348	0.4292	0.1359	0.1893 (0.000)	-0.1375 (0.000)	-0.0518 (0.000)
x_5	0.5823	0.3406	0.0770	0.0159 (0.484)	-0.0607 (0.003)	0.0448 (0.000)
x_7	0.3832	0.4655	0.1511	0.1273 (0.000)	-0.0928 (0.000)	-0.0345 (0.005)
Log-likelihood function = -929.39932						

Source: Authors' elaboration.

^aSee Table 2.

^bSee Table 2.

impact of this form of assistance (both its use thus far and later absence) on the degree of self-reliance of Ukrainian war migrants, it should be recognized as one of the most decisive factors. Those who initially benefited from this aid (x_{11}) showed a contribution of income from work that was, on average, nearly twice as high as those who did not receive it. Since there was a persistent demand for this form of aid over time, its lack of access at a later stage of stay tended to reinforce households' dependence on public assistance (x_{13}). The ongoing importance of this form of assistance is recognized in previous studies, which describe the inclusion of humanitarian migrants in the labour market as an exceptionally long process, lasting years (Bevelander, 2020; Bonfanti & Xenogiani, 2014; Dumont et al., 2016; Lundborg, 2013).

The study results indicated equally significant negative consequences of the subsequent lack of childcare assistance (x_{15}), including nursery, kindergarten and school. This can be explained by the composition of Ukrainian

households, with children often being members (EWL, 2023; NBP, 2023). Thus, following Kesler (2006), we confirm that experiencing limitations in this regard makes public assistance a predominant source of livelihood. Additionally, the study recognized the consequences of later limitations in accessing other forms of public assistance, such as subsidized public transportation (x_{14}) and specialized medical and psychological care (x_{16}). However, these limitations were found to have a lesser impact on households' degree of self-reliance. Regarding the latter, despite health issues being recognized in the literature as fundamental to migrants' integration into the labour market (Cebulla et al., 2010), the needs of Ukrainian war migrants in this regard do not appear to be a substantial barrier to their self-reliance.

Moreover, it should be noted that the lack of later access to childcare (x_{15}), health (x_{16}) and professional activation services (x_{13}) within public assistance made other own resources of migrants, which are uncertain and limited over time (DeVoretz et al., 2004), such as savings and income from abroad, more important for their continuous, longer term stay in Poland.

In turn, for households that did not experience problems accessing all the aforementioned forms of assistance, income from work in Poland became the predominant source of livelihood. This result should be assessed as satisfactory, considering the overall experiences of European countries with the professional activation of humanitarian migrants (Dumont et al., 2016).

Public assistance for Ukrainian migrants also included various monetary benefits available on the same basis as for native citizens (Act of March 12, 2022). Since welfare provisions can influence households' decisions regarding the choice of a destination country (Borjas, 1999; Giulietti et al., 2013; Rajman & Semyonov, 1997) and consequently affect the labour market outcomes of their adult members, our study also addresses this issue. The results we obtained led us to conclude that households that perceived their monetary assistance as sufficient (x_{10}) demonstrated a limited reliance on income from work in Poland later on. These beneficiaries, on average, covered only 32% of their living costs with earnings from employment. Conversely, households that did not receive such extensive aid stood out at that time with the ability to cover, on average, 77% of their living costs with this income. The potentially demotivating aspects of vast public assistance are worth noting, as the presence of just one economically inactive individual in a household reduced its share of income from Poland by 18 percentage points, perpetuating reliance on public assistance (x_{25}). Furthermore, this problem was found to intensify with each additional economically inactive adult person.

It is worth noting that certain connections with Polish enterprises, such as having worked for them before the war (x_{23}) and receiving their support in organizing lives immediately after fleeing to Poland (x_{12}), favoured migrants' efforts to become self-reliant through work. Similarly, previous studies confirm the significance of these factors among migrants in other countries (Boese, 2015; de Vroome & van Tubergen, 2010). Furthermore, the intention to permanently settle in the host country (x_7) also served as an incentive for self-reliance. It should be added that all these factors not only reduced long-term reliance on public assistance but also diminished the significance of vulnerable household resources.

The study also confirmed the impact of specific limitations of household members on the structure of livelihood resources, such as insufficient documentation of education and professional qualifications (x_{19}), health issues and advanced age (x_{17}) and a lack of knowledge of the Polish language (x_{18}). These findings align with previous studies that have identified these factors as decreasing migrants' labour market participation rates (Johns, 2013; Koopmans, 2016; Rodríguez-Planas & Farré, 2016). According to our results, such households have relied more on public assistance and vulnerable funding from outside Poland. Moreover, the absence of educational and skill certifications (x_{19}), along with health and age-related barriers (x_{17}), has resulted in the predominance of these resources.

In turn, the results from models 3–5 confirmed the significance of factors beyond those associated with public assistance and the labour market in determining the degree of subsequent self-reliance among households. Notably, a strong motivating factor in this regard was the financial responsibility for relatives remaining in Ukraine (x_{20}). In such cases, the proportion of income from work used to cover living expenses averaged nearly

67%, almost twice as high as in households without such an obligation. Moreover, significantly better outcomes in striving for self-reliance in Poland were observed among those whose members had stable employment in Ukraine prior to the war (x_{24}). Thus, pre-existing work experience might be supportive in this regard (Sarvimäki & Hämäläinen, 2016). Furthermore, those proficient in the Polish language (x_9) primarily relied on income from work in Poland.

The living conditions in Poland also proved to be important. Households benefiting from stable accommodation (x_{21}) were more financially independent, covering a significantly larger portion of their living costs with income from work – nearly twice as much. Additionally, those accommodated in better conditions than in Ukraine (x_{22}) already covered over 60% of their living costs with this income. It should be noted that securing stable and decent accommodation can simplify arrangements for other aspects of living, including stable and legal employment (Dahrendorf, 1993; Duracz-Walczyk, 2007; Kaźmierczak-Katuźna, 2015; Olech, 2006). Since accommodation provided through public assistance was temporary and failed to ensure privacy or security, Ukrainian war immigrants rapidly engaged with the rental real estate market in Poland (Deloitte, 2022; Trojanek & Gluszak, 2022). Their early ability to rent accommodation primarily stemmed from having legalized status in Poland, confirmed by PESEL numbers, alongside maintained access to private resources in Ukrainian banks (Cashless, 2022) and the receipt of generous UNHCR monetary assistance. Additionally, the specifics of the Polish rental real estate market have eased their position, as there was no custom of making rental agreements dependent on the tenants' employment or financial credibility. Instead, a primary role in this regard was played by a security deposit and regular monthly fees paid in advance to landlords. In addition to the above, certain provisions of the Act of March 12 (2022), mitigated the risks associated with rental agreements for landlords.

Regarding the conclusions drawn from models 1 and 2 about the significance of monetary aid for migrants' professional activation, it should be added that for a portion of the households, public assistance became the primary motivation for migrating to Poland (x_6). Interestingly, their situation differed from those who primarily migrated due to security reasons (x_5), as the former continued to rely mainly on public assistance. Conversely, the latter required less public assistance, relying more on their savings and income from outside Poland.

Finally, consistent with previous studies (Cangiano, 2014; Seibel & Hedegaard, 2017), our results confirm the importance of personal composition for the degree of Ukrainian households' self-reliance. Notable constraints were identified in female-headed households (x_8) and households with dependent children (x_4). It is worth adding that their particularly challenging situation was also reflected in their average monthly employment income per person. In households with children, it stood at PLN 505.36, whereas in households without children, it was PLN 2039.30. Meanwhile, in female-headed households, the average monthly income per person was PLN 1069.95, while in male-headed households, it was PLN 2177.44. Thus, in their case, transitioning from public assistance to living on income from employment emerged as a difficult and prolonged process. In turn, single-person households (x_2) fared better, as did multi-person households whose composition did not change during migration (x_1), including those with both life partners (x_3).

CONCLUSIONS AND POLICY IMPLICATIONS

The results of the study have shown that during the prolonged stay of Ukrainian households, the substitutability of their livelihood resources mainly involved income from work in Poland and public assistance. The remaining, more vulnerable private resources from outside Poland should be considered complementary at that time. In the context of the ongoing Russian-Ukrainian war, the successful employment of households' members emerges as critically important for their financial independence. It should be emphasized that the outcomes thus far for Ukrainians are surprisingly positive in this regard when compared to other migrants participating in previous mass movements to Europe.



Referring to the initial public assistance scheme, which, in principle, was focused on humanitarian aid, the adoption of additional forms aimed at supporting professional activation at that time should be assessed as appropriate for Ukrainian households' subsequent degree of self-reliance. However, later difficulties recognized in accessing these forms of aid move them back towards dependence on public assistance.

Detrimental consequences also emerged due to subsequent limitations in access to childcare within public assistance, introducing an additional layer of challenges for households with dependent children striving for self-reliance in exile. All these challenges led to the diminished capacity of earned incomes to cover living expenses in Poland, resulting in a low average monthly income per person.

It should be noted that the above limitations relate to public assistance, which was supposed to be provided to migrants on a continuous basis, according to the law (Act of April 8, 2022; Act of January 13, 2023; Act of March 12, 2022). This emphasizes the urgency of verifying their actual availability within the country by public authorities, with the recognition of localities with gaps in this regard. An argument in favour of lifting unequal access to these forms of support is also the fact that households not facing such restrictions were able to cover, on average, more than half of their living costs with income from work in Poland.

The study results also shed light on another important issue related to the distributional aspects of public assistance. Some households perceived the monetary aid they received as sufficient relative to their needs, which discouraged them from becoming self-reliant. In certain cases, the aid became even the primary motivation for immigrating, resulting in their long-term dependence on public assistance. Therefore, it is justifiable to recommend that public authorities review the current accessibility conditions of various forms of assistance to prevent their accumulation in households capable of achieving self-reliance over time.

The aforementioned recommendations do not apply to households with elderly members and those experiencing health problems, as the barriers to their self-reliance are clearly evident. Additionally, the insufficient provision of medical assistance to these households has forced them to rely more on savings and income from abroad, including modest pensions, to cover their cost of living in Poland. As the public assistance programme becomes more restricted, it is reasonable to advocate for maintaining broader support for them. Additionally, modifications to public assistance affecting households with children should be introduced with particular caution, as their level of independence has been alarmingly low thus far. In their case, further restrictions on assistance should be preceded by a thorough examination of their individual situations. The vulnerable position of both aforementioned household types raises concerns due to the uncertainty surrounding their continued stay abroad, despite the ongoing war.

The research findings confirmed the need for the continuation of public assistance related to professional activation and in the form of language courses. The gaps in this regard have been identified as limiting the opportunities for achieving self-reliance through work at a later stage of stay.

Finally, it should be emphasized that the success of immigrants' self-reliance does not solely depend on the actions of public authorities, including the implementation of the assistance scheme. Certain household characteristics play a crucial role in this regard, notably their stable composition during migration or being single, efforts made towards employment and housing inclusion, financially supporting relatives in Ukraine and non-randomly choosing Poland as a destination country, as confirmed by members' pre-war work experience there, Polish language proficiency and intentions of permanent residency. This encourages further research focused on specific types of households, including their so-far relations with Poland.

To sum up, the study results highlight the diversity of circumstances under which Ukrainian households strived for self-reliance abroad, as well as the factors decisive for their success or failure in this regard. Therefore, in reference to the research hypothesis, which states that "the subsequent degree of self-reliance of Ukrainian war immigrant households in Poland results from a complex interplay of socio-demographic and economic factors", we found no basis for rejecting it.

FUNDING INFORMATION

This work was supported by the Polish National Agency for Academic Exchange under the NAWA Urgency Grants Program [Agreement No. BPN/GIN/2022/1/00058/U/00001, 2022].

CONFLICT OF INTEREST STATEMENT

The authors declare that they have no competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

PEER REVIEW

The peer review history for this article is available at <https://www.webofscience.com/api/gateway/wos/peer-review/10.1111/imig.13287>.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Katarzyna Kochaniak  <https://orcid.org/0000-0002-0680-9922>

Anna M. Korzeniowska  <https://orcid.org/0000-0001-9809-5260>

Michał Bernard Pietrzak  <https://orcid.org/0000-0002-9263-4478>

REFERENCES

- Act of April 8. (2022) On the change of the act on assistance to Ukrainian citizens in connection with the armed conflict on the territory of this state. *Journal of Laws*, 1–30. 2022 item 830.
- Act of January 13. (2023) On the change of the act on assistance to Ukrainian citizens in connection with the armed conflict on the territory of this state. *Journal of Laws*, 1–26. 2023 item 185.
- Act of March 12. (2022) On assistance to Ukrainian citizens in connection with the armed conflict on the territory of this state. *Journal of Laws*, 1–46. 2022 item 583.
- Ala-Mantila, M. & Fleischmann, F. (2018) Gender differences in labour market integration trajectories of recently arrived migrants in The Netherlands. *Journal of Ethnic and Migration Studies*, 44(11), 1818–1840. Available from: <https://doi.org/10.1080/1369183x.2017.1382340>
- Åslund, O. & Johansson, P. (2011) Virtues of SIN: can intensified public efforts help disadvantaged immigrants? *Evaluation Review*, 35(4), 399–427. Available from: <https://doi.org/10.1177/0193841x11419282>
- Auer, D. & Fossati, F. (2019) Compensation or competition: bias in immigrants' access to active labour market measures. *Social Policy & Administration*, 54(3), 390–409. Available from: <https://doi.org/10.1111/spol.12532>
- Balcilar, M. & Nugent, J.B. (2019) The migration of fear: an analysis of migration choices of Syrian refugees. *The Quarterly Review of Economics and Finance*, 73, 95–110. Available from: <https://doi.org/10.1016/j.qref.2018.09.007>
- Battisti, M., Giesing, Y. & Laurentyeva, Y. (2019) Can job search assistance improve the labour market integration of refugees? Evidence from a field experiment. *Labour Economics*, 61, 101745. Available from: <https://doi.org/10.1016/j.labeco.2019.07.001>
- Becker, G.S. (1991) *A treatise on the family*. Cambridge, MA: Harvard University Press.
- Becker, S.O. & Ferrara, A. (2019) Consequences of forced migration: a survey of recent findings. *Labour Economics*, 59, 1–16. Available from: <https://doi.org/10.1016/j.labeco.2019.02.007>
- Beckman, M., Esteban, L. & Rowe, F. (2021) The occupational trajectories and outcomes of forced migrants in Sweden. Entrepreneurship, employment or persistent inactivity? *Small Business Economics*, 56(2), 963–983. Available from: <https://doi.org/10.1007/s1187-019-00312-z>
- Bevelander, P. (2020) Integrating refugees into labor markets. *IZA World of Labor*, 269. Available from: <https://doi.org/10.15185/izawol.269.v2>
- Boese, M. (2015) The roles of employers in the regional settlement of recently arrived migrants and refugees. *Journal of Sociology*, 51(2), 401–416. Available from: <https://doi.org/10.1177/1440783314544994>

- Bogic, M., Njoku, A. & Priebe, S. (2015) Long-term mental health of war-refugees: a systematic literature review. *BMC International Health and Human Rights*, 15(29), 1–41. Available from: <https://doi.org/10.1186/s12914-015-0064-9>
- Bonfanti, S. & Xenogiani, T. (2014) Migrants' skills: use, mismatch and labour market outcomes—a first exploration of the international survey of adult skills (PIAAC). In: Scarpetta, S. & Fischer, G. (Eds.) *Matching economic migration with labour market needs*. Paris: OECD Publishing, pp. 249–312. Available from: <https://doi.org/10.1787/9789264216501-11-en>
- Borjas, G.J. (1999) Immigration and welfare magnets. *Journal of Labor Economics*, 17(4), 607–637. Available from: <https://doi.org/10.1086/209933>
- Brell, C., Dustmann, C. & Preston, I. (2020) The labor market integration of refugee migrants in high-income countries. *Journal of Economic Perspectives*, 34(1), 94–121. Available from: <https://doi.org/10.1257/jep.34.1.94>
- Brücker, H., Epstein, G.S., McCormick, B., Saint-Paul, G., Venturini, A. & Zimmermann, K.F. (2002) Managing migration in the European welfare state. In: Boeri, T., Hanson, G.H. & McCormick, B. (Eds.) *Immigration policy and the welfare state*. Oxford: Oxford University Press, pp. 1–39.
- Brzozowska, A. (2022) 'All is not yet lost here.' The role of aspirations and capabilities in migration projects of Ukrainian migrants in Poland. *Journal of Ethnic and Migration Studies*, 49(9), 2373–2390. Available from: <https://doi.org/10.1080/1369183x.2022.2157804>
- Buis, M.L. (2008) *FMLOGIT: Stata module fitting a fractional multinomial logit model by quasi maximum likelihood*. Statistical software components. Boston, MA: Boston College Department of Economics. Available from: <https://econpapers.repec.org/software/bocbocode/s456976.htm> [Accessed 20th April 2023].
- Butschek, S. & Walter, T. (2014) What active labour market programmes work for immigrants in Europe? A meta-analysis of the evaluation literature. *IZA Journal of Migration*, 3(48), 1–18. Available from: <https://doi.org/10.1186/s40176-014-0023-6>
- Cangiano, A. (2014) Migration policies and migrant employment outcomes. *Comparative Migration Studies*, 2, 417–443. Available from: <https://doi.org/10.5117/cms2014.4.cang>
- Carranza, E., Das, S. & Kotikula, A. (2019) *Gender-based employment segregation: understanding causes and policy interventions*. Washington DC: World Bank. Available from: <https://documents1.worldbank.org/curated/en/483621554129720460/pdf/Gender-Based-Employment-Segregation-Understanding-Causes-and-Policy-Interventions.pdf> [Accessed 10th April 2023].
- Cashless. (2022) *IT Card zarządza siecią Planet Cash, drugą największą siecią bankomatów w Polsce*. Available from: <https://www.cashless.pl/11472-it-card-bankomaty-ukraincy> [Accessed 2nd January 2024].
- Cebulla, A., Daniel, M. & Zurawan, A. (2010) *Spotlight on refugee integration: findings from the survey of new refugees in the United Kingdom*. Home Office Research Report No. 37. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/116062/horr37-report.pdf [Accessed 1st March 2023].
- Chant, S. (2003) Female household headship and the feminisation of poverty: facts, fictions and forward strategies. *Gender Institute New Working Paper Series*, 9, 1–65.
- Cheung, S.Y. & Phillimore, J. (2014) Refugees, social capital, and labour market integration in the UK. *Sociology*, 48(3), 518–536. Available from: <https://doi.org/10.1177/0038038513491467>
- Dahrendorf, R. (1993) *Nowoczesny konflikt społeczny. Esej o polityce wolności*. Warszawa: Czytelnik.
- de Vroome, T. & van Tubergen, F. (2010) The employment experience of refugees in The Netherlands. *International Migration Review*, 44(2), 376–403. Available from: <https://doi.org/10.1111/j.1747-7379.2010.00810.x>
- Deloitte. (2022) *Refugees from Ukraine in Poland. Challenges and potential for integration*. Issue October. Available from: https://www2.deloitte.com/content/dam/Deloitte/pl/Documents/Reports/pl_ENG_Report_Refugees_from_Ukraine_in_Poland.pdf [Accessed 20th January 2024].
- DeVoretz, D.J., Pivnenko, S. & Beiser, M. (2004) The economic experiences of refugees in Canada. *SSRN Electronic Journal*. Available from: <https://doi.org/10.2139/ssrn.526022>
- Dossche, M., Kolndrekaj, A., Propst, M., Perez, J.R. & Slacalek, J. (2022) *Immigrants and the distribution of income and wealth in the Euro area: First facts and implications for monetary policy*. ECB Working Paper, 2719. <https://doi.org/10.2139/ssrn.4219401>
- Dumont, J.C., Liebig, T., Peschner, J., Tanay, F. & Xenogiani, T. (2016) *How are refugees faring on the labour market in Europe*. EC/OECD Working Paper, 1, 1–43.
- Duracz-Walczak, A. (Ed.). (2007) *Bezrobocie jako problem bezdomnych polskich*. Warszawa: Fundacja Inicjatyw Społeczno-Ekonomicznych.
- Duszczak, M. & Kaczmarczyk, P. (2022) The war in Ukraine and migration to Poland: outlook and challenges. *Intereconomics*, 57(3), 164–170. Available from: <https://doi.org/10.1007/s10272-022-1053-6>
- Easton-Calabria, E. & Omata, N. (2018) Panacea for the refugee crisis? Rethinking the promotion of 'self-reliance' for refugees. *Third World Quarterly*, 39(8), 1458–1474. Available from: <https://doi.org/10.1080/01436597.2018.1458301>



- Efendic, A., Kovac, D. & Shapiro, J.N. (2022) Exposure to conflict, migrations and long-run education and income inequality: evidence from Bosnia and Herzegovina. *Defence and Peace Economics*, 34(8), 1003–1017. Available from: <https://doi.org/10.1080/10242694.2022.2100572>
- Eggenhofer-Rehart, P.M., Latzke, M., Pernkopf, K., Zellhofer, D., Mayrhofer, W. & Steyrer, J. (2018) Refugees' career capital welcome? Afghan and Syrian refugee job seekers in Austria. *Journal of Vocational Behavior*, 105, 31–45. Available from: <https://doi.org/10.1016/j.jvb.2018.01.004>
- Eisnecker, P. & Schacht, D. (2016) Half of the refugees in Germany found their first job through social contacts. *DIW Economic Bulletin*, 6(34/35), 414–421.
- EWL. (2023) *Uchodźcy wojenni z Ukrainy. Rok w Polsce. Badanie sondażowe*. Available from: https://ewl.com.pl/wp-content/uploads/2023/02/RAPORT_UCHODZCY_ROK_W_POLSCE_POL_WWW-1.pdf [Accessed 15th June 2023].
- Fasani, F. (2020) *Immigrant key workers in Europe: The COVID-19 response that comes from abroad. Europe in the Time of Covid-19*, VOXEU/CEPR. Available from: <https://cepr.org/voxeu/columns/immigrant-key-workers-europe-covid-19-response-comes-abroad> [Accessed 10th March 2023].
- Flechner, T.K., Neels, K., Wood, J. & Biegel, N. (2022) Exploring Women's uptake of active labour market Programmes: the role of household composition across migrant origin groups. *Social Inclusion*, 10(2), 117–131. Available from: <https://doi.org/10.17645/si.v10i2.4931>
- Fleischmann, F. & Höhne, J. (2013) Gender and migration on the labour market: additive or interacting disadvantages in Germany? *Social Science Research*, 42(5), 1325–1345. Available from: <https://doi.org/10.1016/j.ssresearch.2013.05.006>
- Fossati, F., Knotz, C., Liechti, F. & Otmani, I. (2022) The gender employment gap among refugees and the role of employer discrimination: experimental evidence from the German, Swedish and Austrian labor markets. *International Migration Review*, 58(1), 1–26. Available from: <https://doi.org/10.1177/01979183221134274>
- Friedman, D., Hechter, M. & Kanazawa, S. (1994) A theory of the value of children. *Demography*, 31(3), 375–401. Available from: <https://doi.org/10.2307/2061749>
- Fullin, G. & Reyneri, E. (2010) Low unemployment and bad jobs for new immigrants in Italy. *International Migration*, 49(1), 118–147. Available from: <https://doi.org/10.1111/j.1468-2435.2009.00594.x>
- Gambaro, L., Liebau, E., Peter, F.H. & Weinhardt, F. (2017) Viele Kinder von Geflüchteten besuchen eine Kita oder Grundschule: nachholbedarf bei den unter Dreijährigen und der Sprachförderung von Schulkindern. *DIW Wochenbericht*, 84(19), 379–386.
- Giulietti, C., Guzi, M., Kahanec, M. & Zimmermann, K.F. (2013) Unemployment benefits and immigration: evidence from the EU. *International Journal of Manpower*, 34(1), 24–38. Available from: <https://doi.org/10.1108/01437721311319638>
- Gorny, A. & Napierała, J. (2016) Comparing the effectiveness of respondent-driven sampling and quota sampling in migration research. *International Journal of Social Research Methodology*, 19(6), 645–661. Available from: <https://doi.org/10.1080/13645579.2015.1077614>
- Heinesen, E., Husted, L. & Rosholm, M. (2013) The effects of active labour market policies for immigrants receiving social assistance in Denmark. *IZA Journal of Migration*, 2(15), 1–22. Available from: <https://doi.org/10.1186/2193-9039-2-15>
- Huh, Y. (2018) Family typology and gender empowerment: the labour market performance of married immigrants. *Journal of Population Research*, 35(3), 237–288. Available from: <https://doi.org/10.1007/s12546-018-9208-9>
- International Labour Organization. (2020) *The migrant pay gap: Understanding wage differences between migrants and nationals*. Available from: https://www.ilo.org/global/topics/labour-migration/publications/WCMS_763796/lang-en/index.htm [Accessed 20th May 2023].
- Jacobsen, K. & Landau, L.B. (2003) The dual imperative in refugee research: some methodological and ethical considerations in social science research on forced migration. *Disasters*, 27(3), 185–206. Available from: <https://doi.org/10.1111/1467-7717.00228>
- Jauhiainen, J. & Erbsen, H. (2023) Multilevel governance in the temporal protection and integration of Ukrainians within the European Union: the case of Estonia. *Journal of European Integration*, 45(3), 413–430. Available from: <https://doi.org/10.1080/07036337.2023.2190109>
- Johns, M. (2013) Post-accession polish migrants in Britain and Ireland: challenges and obstacles to integration in the European Union. *European Journal of Migration and Law*, 15(1), 29–45. Available from: <https://doi.org/10.1163/15718166-12342022>
- Kanas, A., Van Tubergen, F. & Van der Lippe, T. (2011) The role of social contacts in the employment status of immigrants. *International Sociology*, 26(1), 95–122. Available from: <https://doi.org/10.1177/0268580910380977>
- Kang, Y.D. (2021) Refugee crisis in Europe: determinants of asylum seeking in European countries from 2008–2014. *Journal of European Integration*, 43(1), 33–48. Available from: <https://doi.org/10.1080/07036337.2020.1718673>

- Każmierczak-Kałużna, I. (2015) Bezdolność jako forma wykluczenia społecznego w świetle wybranych aktów prawnych oraz dokumentów strategicznych i programowych. *Opuscula Sociologica*, 2(12), 19–36.
- Kesler, C. (2006) Social policy and immigrant joblessness in Britain, Germany and Sweden. *Social Forces*, 85(2), 743–770. Available from: <https://doi.org/10.1353/sof.2007.0013>
- Khoudja, Y. & Fleischmann, F. (2017) Labor force participation of immigrant women in The Netherlands: do traditional partners hold them Back? *International Migration Review*, 51(2), 506–541. Available from: <https://doi.org/10.1111/imre.12228>
- Kılıç, C., Magruder, K.M. & Koryürek, M.M. (2015) Does trauma type relate to posttraumatic growth after war? A pilot study of young Iraqi war survivors living in Turkey. *Transcultural Psychiatry*, 53(1), 110–123. Available from: <https://doi.org/10.1177/1363461515612963>
- Kofman, E. (2000) The invisibility of skilled female migrants and gender relations in studies of skilled migration in Europe. *International Journal of Population Geography*, 6(1), 45–59. Available from: [https://doi.org/10.1002/\(sici\)1099-1220\(200001/02\)6:1<45::aid-ijpg169>3.0.co;2-b](https://doi.org/10.1002/(sici)1099-1220(200001/02)6:1<45::aid-ijpg169>3.0.co;2-b)
- Koopmans, R. (2016) Does assimilation work? Sociocultural determinants of labour market participation of European Muslims. *Journal of Ethnic and Migration Studies*, 42(2), 197–216. Available from: <https://doi.org/10.1080/1369183x.2015.1082903>
- Liefbroer, A.C. (2005) The impact of perceived costs and rewards of childbearing on entry into parenthood: evidence from a panel study. *European Journal of Population/Revue européenne de Démographie*, 21(4), 367–391. Available from: <https://doi.org/10.1007/s10680-005-2610-y>
- LoPalo, M. (2019) The effects of cash assistance on refugee outcomes. *Journal of Public Economics*, 170, 27–52. Available from: <https://doi.org/10.1016/j.jpubeco.2018.11.004>
- Ludolph, L. (2023) The value of formal host-country education for the labour market position of refugees: evidence from Austria. *Economics of Education Review*, 92, 102334. Available from: <https://doi.org/10.1016/j.econedurev.2022.102334>
- Lundborg, P. (2013) Refugees' employment integration in Sweden: cultural distance and labor market performance. *Review of International Economics*, 21(2), 219–232. Available from: <https://doi.org/10.1111/roie.12032>
- Martiniello, M. & Rea, A. (2014) The concept of migratory careers: elements for a new theoretical perspective of contemporary human mobility. *Current Sociology*, 62(7), 1079–1096. Available from: <https://doi.org/10.1177/0011392114553386>
- Mullahy, J. (2015) Multivariate fractional regression estimation of econometric share models. *Journal of Econometric Methods*, 4(1), 71–100. Available from: <https://doi.org/10.1515/jem-2012-0006>
- Murteira, J.M. & Ramalho, J.J. (2016) Regression analysis of multivariate fractional data. *Econometric Reviews*, 35(4), 515–552. Available from: <https://doi.org/10.1080/07474938.2013.806849>
- NBP. (2023) Sytuacja życiowa i ekonomiczna migrantów z Ukrainy w Polsce – wpływ pandemii i wojny na charakter migracji w Polsce. Raport z badania ankietowego. Available from: https://nbp.pl/wp-content/uploads/2023/04/Sytuacja-zyciowa-i-ekonomiczna-migrantow-z-Ukrainy-w-Polsce_raport-z-badania-2022.pdf [Accessed 1st July 2023].
- OECD. (2016) *Making integration work: refugees and others in need of protection*. Paris: OECD Publishing. Available from: <https://doi.org/10.1787/9789264251236-en> [Accessed 15th February 2023].
- OECD. (2023) *What we know about the skills and early labour market outcomes of refugees from Ukraine*. Available from: <https://www.oecd.org/ukraine-hub/policy-responses/what-we-know-about-the-skills-and-early-labour-market-outcomes-of-refugees-from-ukraine-c7e694aa/> [Accessed 15th June 2023].
- Olech, P. (2006) *Aktywizacja zawodowa osób bezdomnych*. Warszawa: Fundacja Inicjatyw Społeczno-Ekonomicznych.
- Panchenko, T. (2022) Prospects for integration of Ukrainian refugees into the German labor market: results of the ifo online survey*. *CESifo Forum*, 23(4), 67–75.
- Peri, G., Romiti, A. & Rossi, M. (2013) *Immigration, elderly care and labour-force participation: can immigration help women retire later?* VOXEU/CEPR. Available from: <https://cepr.org/voxeu/columns/immigration-elderly-care-and-labour-force-participation-can-immigration-help-women> [Accessed 20th April 2023].
- Psinos, M. (2007) Exploring highly educated refugees' potential as knowledge workers in contemporary Britain. *Equal Opportunities International*, 26(8), 834–852. Available from: <https://doi.org/10.1108/02610150710836163>
- Rajzman, R. & Semyonov, M. (1997) Gender, ethnicity, and immigration: double disadvantage and triple disadvantage among recent immigrant women in the Israeli labor market. *Gender & Society*, 11(1), 108–125. Available from: <https://doi.org/10.1177/089124397011001007>
- Rendall, M.S., Tsang, F., Rubin, J.K., Rabinovich, L. & Janta, B. (2010) Contrasting trajectories of labor-market integration between migrant women in Western and southern Europe. *European Journal of Population/Revue européenne de Démographie*, 26(4), 383–410. Available from: <https://doi.org/10.1007/s10680-010-9214-x>

- Rodríguez-Planas, N. & Farré, L. (2016) Migration, crisis and adjustment in an enlarged EU: the Spanish perspective. In: Kahanec, M. & Zimmermann, K. (Eds.) *Labor migration, EU enlargement, and the great recession*. Berlin: Springer, pp. 163–183. Available from: https://doi.org/10.1007/978-3-662-45320-9_8
- Sarvimäki, M. & Hämäläinen, K. (2016) Integrating immigrants: the impact of restructuring active labor market programs. *Journal of Labor Economics*, 34(2), 479–508. Available from: <https://doi.org/10.1086/683667>
- Schieckoff, B. & Sprengholz, M. (2021) The labor market integration of immigrant women in Europe: context, theory, and evidence. *SN Social Sciences*, 1(276). Available from: <https://doi.org/10.1007/s43545-021-00279-3>
- Seibel, V. & Hedegaard, T.F. (2017) Migrants' and natives' attitudes to formal childcare in The Netherlands, Denmark and Germany. *Children and Youth Services Review*, 78, 112–121. Available from: <https://doi.org/10.1016/j.childyouth.2017.05.017>
- Shamieh, J.M., Sawalha, I.H. & Madanat, H.M. (2020) Vulnerability and capacity assessment for refugee education crises. *International Journal of Emerging Markets*, 17(1), 253–276. Available from: <https://doi.org/10.1108/IJOEM-04-2019-0321>
- Solmone, I. & Frattini, T. (2022) *The labour market disadvantages for immigrant women*. VOXEU/CEPR. Available from: <https://cepr.org/voxeu/columns/labour-market-disadvantages-immigrant-women> [Accessed 16th March 2023].
- Tijdens, K.G. & van Klaveren, M. (2011) Over- and underqualification of migrant workers. Evidence from WageIndicator survey data. *IAS Working Paper*, 11(110), 1–48.
- Timmerman, C. (2006) Gender dynamics in the context of Turkish marriage migration: the case of Belgium. *Turkish Studies*, 7(1), 125–143. Available from: <https://doi.org/10.1080/14683840500520642>
- Trojanek, R. & Gluszek, M. (2022) Short-run impact of the Ukrainian refugee crisis on the housing market in Poland. *Finance Research Letters*, 50, 103236. Available from: <https://doi.org/10.1016/j.frl.2022.103236>
- UN. (2016) *New York declaration for refugees and migrants* (United Nations General Assembly resolution 71/1). Available from: http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/71/1 [Accessed 10th February 2023].
- UNHCR. (2005) *Handbook for self-reliance*. Available from: <https://www.unhcr.org/sites/default/files/legacy-pdf/44bf7b012.pdf> [Accessed 17th March 2023].

How to cite this article: Kochaniak, K., Korzeniowska, A.M. & Pietrzak, M.B. (2024) Own or public? Later livelihoods of Ukrainian war migrant households in Poland. *International Migration*, 00, 1–18. Available from: <https://doi.org/10.1111/imig.13287>