

Kosyakova, Yuliya et al.

Research Report

Labour market integration of Ukrainian refugees: An international perspective

IAB-Forschungsbericht, No. 16/2024en

Provided in Cooperation with:

Institute for Employment Research (IAB)

Suggested Citation: Kosyakova, Yuliya et al. (2024) : Labour market integration of Ukrainian refugees: An international perspective, IAB-Forschungsbericht, No. 16/2024en, Institut für Arbeitsmarkt- und Berufsforschung (IAB), Nürnberg, <https://doi.org/10.48720/IAB.FB.2416EN>

This Version is available at:

<https://hdl.handle.net/10419/301260>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-sa/4.0/deed.de>



INSTITUTE FOR EMPLOYMENT
RESEARCH
The Research Institute of the Federal Employment Agency

IAB RESEARCH REPORT

Results from the project work of the IAB

16|2024en Labour market integration of Ukrainian refugees: An international perspective

Yuliya Kosyakova, Kseniia Gatskova, Theresa Koch, Davit Adunts, Joseph Braunfels, Laura Goßner, Regina Konle-Seidl, Silvia Schwanhäuser, Marie Vandenhirtz

ISSN 2195-2655



Labour market integration of Ukrainian refugees: An international perspective

Yuliya Kosyakova (IAB, University of Bamberg)

Kseniia Gatskova (IAB)

Theresa Koch (IAB)

Davit Adunts (IAB)

Joseph Braunfels (IAB)

Laura Goßner (IAB)

Regina Konle-Seidl (IAB)

Silvia Schwanhäuser (IAB)

Marie Vandenhirtz (IAB)

The IAB Research Reports (IAB-Forschungsberichte) series publishes larger-scale empirical analyses and project reports, often with heavily data- and method-related content.

In der Reihe IAB-Forschungsberichte werden empirische Analysen und Projektberichte größeren Umfangs, vielfach mit stark daten- und methodenbezogenen Inhalten, publiziert.

In brief

- This report examines the labour market integration of Ukrainian refugees in various European countries, including numerous EU states, the UK, Switzerland and Norway, from Q4 2022 to Q1 2024. Due to a lack of uniform data sources, the analysis relies on a database created specifically for this purpose on the basis of administrative and survey data.
- The employment rates across different European countries vary widely. As of the first quarter of 2024, Germany, with an employment rate of just under 27 percent, is in the middle of the European spectrum.
- Multivariate analyses reveal a significant impact of the demographic composition of the newcomers and the institutional framework conditions in the destination countries on the labour market integration of Ukrainian refugees.
- Countries with a high demand for low-skilled labour exhibit higher employment rates. Conversely, employment rates tend to be lower in countries where the unemployment growth rate is positive and the labour market is tightly regulated.
- Employment rates are positively associated with the presence of an expanded childcare infrastructure and comprehensive access to healthcare services.
- Social transfers, measured by the share of average expenditure per refugee relative to GDP per capita, show a small and statistically insignificant effect on the employment rate of Ukrainian refugees.
- Social networks and proficiency in English among the population of the destination country also play crucial roles, as they clearly aid communication and thereby facilitate integration into the labour market.
- A higher average age of refugees and a greater number of children per woman of working age are linked with lower employment rates of Ukrainian refugees in the respective countries.
- According to regression results, comprehensive integration approaches that promote long-term human capital formation, such as extensive language and integration courses, initially reduce employment rates due to lock-in effects among others. However, previous experiences with other refugee groups indicate that these measures enhance the likelihood of employment and the sustainability of labour market integration in the medium and long term.
- As the duration of stay increases, employment rates improve because the barriers to labour market integration appear to be gradually diminishing.
- Germany's experience with refugees who arrived between 2013 and 2019 demonstrates that, compared to other countries, it can achieve high employment rates among refugees over the long term due to its sustainability-oriented integration strategy.

Contents

In brief	3
Contents	4
Summary	6
1 Introduction	11
2 Country-specific determinants of the labour market integration of refugees	14
2.1 Demographic composition	15
2.2 Labour market situation	16
2.3 Social infrastructure: childcare, social benefits, healthcare	17
2.4 Co-ethnic networks and social attitudes	18
2.5 Language barriers	19
2.6 Integration policy.....	19
3 Data and methods	21
3.1 Employment rates by country	21
3.2 Indicators at country level	24
(A) Demographic composition	24
(B) Labour market situation	25
(C) Social infrastructure.....	25
(D) Social networks and welcoming culture	26
(E) Language barriers.....	27
(F) Integration policy	27
3.3 Method	28
4 Empirical results	29
4.1 Employment rates in a European comparison	29
4.2 Correlations between employment rates of Ukrainian refugees and various indicators 30	
4.3 Multivariate analyses of the factors influencing the employment of Ukrainian refugees	44
4.4 Trade-off between speed and sustainability	48
5 Limitations	49
6 Conclusion	51
References	54

Appendix	63
Imprint	0

Summary

This research report investigates the labour market integration of Ukrainian refugees across various European countries, including many EU member states as well as the UK, Switzerland, and Norway, in the period from Q4 2022 to Q1 2024. Comparing the employment rates of Ukrainian refugees across different countries presents challenges due to the absence of a uniform database, such as the European Labour Force Survey (LFS). To address this, we constructed a comprehensive database that harmonizes employment data from comparable time points and employs consistent definitions for calculating rates. Employment data were obtained from administrative records in countries where available, and from various surveys conducted at different times in other nations. Additionally, this study compiles indicators currently recognized in research as having an influence on labour market integration, using comparable data and definitions to enhance the robustness of the analysis.

From the end of 2022 to early 2024, the employment rates of Ukrainian refugees in Europe showed significant variation. By the first quarter of 2024, Germany's employment rate had reached nearly 27 percent, placing it in the European midfield. At the end of 2022, countries such as the UK, the Netherlands, and Lithuania had employment rates exceeding 50 percent, while Croatia, Norway, Romania, Slovenia, Switzerland, and Spain reported rates below 15 percent. Germany also reported a mid-field rate of 20 percent at the end of 2022. Throughout 2023, Denmark, Austria, France, Poland, and Lithuania saw modest increases in employment rates. However, this upward trend did not persist; some countries experienced stagnation, while others, including Romania, saw declines. Conversely, Slovenia, Switzerland, Finland, Spain, and Estonia witnessed slight increases. The UK consistently maintained its high employment rate across the period. In Germany, beyond the influence of seasonal fluctuations, there was a steady annual increase in employment rates, culminating in 27 percent by early 2024.

To investigate the reasons behind the varying employment rates of Ukrainian refugees across different European countries, this report delves into the relationships between employment rates and various socio-demographic, institutional, and economic factors. Our objective is to achieve a preliminary, yet more comprehensive understanding of the factors that drive labour market integration of refugees and to assess the impact of these factors. It is important to note that the analyses conducted are descriptive in nature, not causal. They are intended to provide an initial insight into the correlations, helping to identify potential areas for more in-depth, causal research in the future.

Multivariate analyses underscore the crucial impact of the demographic composition of newcomers and the institutional and economic conditions in the destination countries on the labour market integration of Ukrainian refugees. Countries with a higher demand for low-skilled labour – measured by the size of the low-status labour market segment or employees in low-skilled occupations – tend to have higher employment rates for these individuals. This may be attributed to the fact that such jobs often have fewer language requirements and other qualifications, allowing for quicker job placements. Additionally, there is a negative correlation between strict labour market regulations, such as enhanced job security measures, and the likelihood of Ukrainian refugees finding employment. Furthermore, a negative correlation exists

between the growth rate of unemployment and the employment of Ukrainian refugees, suggesting that newcomers are less likely to secure jobs in countries with increasing unemployment.

Social infrastructure significantly impacts the labour market integration of Ukrainian refugees, many of whom are women with children. Consequently, our regression analysis shows that the availability of childcare is correlated with refugees' employment rate. Countries with better childcare facilities tend to see higher employment rates among refugees, as this infrastructure supports the ability of parents, particularly mothers, to enter the workforce. Similarly, comprehensive access to health services also correlates with higher employment rates, as it ensures that refugees are physically and mentally able to work. Interestingly, the relationship between social transfer payments, measured by the ratio of costs for caring for Ukrainian refugee per capita to the gross domestic product per capita of the respective host country, and employment rates is small and statistically insignificant. While it is often assumed that transfer payments play a central role in employment, this hypothesis is not confirmed in our analysis. However, social networks play a critical role in the employment integration of refugees. Countries with a larger Ukrainian community often report higher employment rates among Ukrainian refugees. Additionally, a strong command of English within the destination-country population positively correlates with employment rates, probably because it facilitates better communication and with that integration into the labour market.

The integration policy strategies across EU member states and other European countries vary significantly. Some nations adopt a "work first" approach, prioritizing immediate employment without initial preparatory measures such as language courses or qualification measures. This strategy aims at quick job placement but often overlooks the need for the development of comprehensive skill. In contrast, other countries focus on the long-term, sustainable integration into the labour market. These nations implement comprehensive language programs, qualification measures, and targeted job placements that align more closely with the refugees' qualifications. Although this approach may result in so-called "lock-in" effects, where refugees might experience a delayed entry into the labour market, it is more likely to lead to stable employment relationships, jobs that match the refugees' skills, and higher earnings over time. Scandinavian studies underscore these differences in outcomes. Countries that emphasize the "work first" model tend to show higher employment rates for refugees in the short term. However, nations that invest in education and language acquisition demonstrate better integration results in the medium and long term. This success extends beyond mere employment rates and earnings to include broader aspects of social inclusion and quality of life for refugees. Such findings highlight the importance of tailored integration policies that consider both immediate employment needs and long-term societal benefits.

The multivariate analyses further confirm the significant impact of demographic factors, particularly family constellation, on labour market integration. There is a statistically significant negative correlation between employment rates and older age and having more children per working-age woman. Finally, the data reveals a positive time trend: employment rates for all demographic groups tend to increase with the length of their residence. This suggests that many of the initial barriers to employment faced by refugees diminish over time, indicating that with

longer stays, refugees are more likely to overcome these initial challenges and secure employment.

Overall, this report underscores that Germany, with its comprehensive long-term integration strategies, is well-positioned to significantly enhance the employment rates of Ukrainian refugees over the medium to long term. Insights from refugees who arrived between 2013 and 2019 validate this potential, with employment rates reaching 68 percent eight years after arrival. These findings emphasize the necessity of continually reassessing and refining integration strategies to effectively promote the integration of refugees. Such adjustments are crucial not only for improving the immediate economic prospects of refugees but also for contributing to the broader economy, ultimately yielding substantial long-term benefits.

Zusammenfassung

Dieser Forschungsbericht untersucht die Arbeitsmarktintegration ukrainischer Geflüchteter in verschiedenen europäischen Ländern, darunter viele EU-Mitgliedsstaaten sowie Großbritannien, die Schweiz und Norwegen, im Zeitraum vom 4. Quartal 2022 bis zum 1. Quartal 2024. Ein direkter Vergleich der Beschäftigungsquoten ukrainischer Geflüchteter zwischen verschiedenen Ländern wird aufgrund der fehlenden Verfügbarkeit einer harmonisierten Datenquelle wie der europäischen Arbeitskräfteerhebung (Labour Force Survey, LFS) erschwert. Für diese Studie wurde daher eine umfassende Datenbank geschaffen, die die Beschäftigungsdaten zu vergleichbaren Zeitpunkten und basierend auf denselben Definitionen harmonisiert. In den Ländern, wo diese zur Verfügung stehen, werden administrative Beschäftigungsdaten genutzt. In den übrigen Ländern beruhen die Beschäftigungsdaten hingegen auf unterschiedlichen Befragungen, die zu verschiedenen Zeitpunkten erhoben wurden. Darüber hinaus wurden Indikatoren, die nach dem bisherigen Forschungsstand die Arbeitsmarktintegration beeinflussen, ebenfalls auf der Grundlage vergleichbarer Daten und Definitionen zusammengestellt.

Die Beschäftigungsquoten ukrainischer Geflüchteter in Europa weisen im Beobachtungszeitraum erhebliche Unterschiede auf. Am Ende des Beobachtungszeitraums im ersten Quartal 2024 lag Deutschland mit einer Beschäftigungsquote von knapp 27 Prozent im europäischen Mittelfeld. Ende 2022 lagen die Quoten in Ländern wie Großbritannien, den Niederlanden und Litauen bei über 50 Prozent, wohingegen sie sich in Kroatien, Norwegen, Rumänien, Slowenien, der Schweiz und Spanien auf unter 15 Prozent beliefen. Mit einer Beschäftigungsquote von 20 Prozent positionierte sich Deutschland Ende 2022 ebenfalls im europäischen Mittelfeld. Im Untersuchungszeitraum zwischen dem vierten Quartal 2022 und dem ersten Quartal 2024 sind die Beschäftigungsquoten in der Mehrzahl der untersuchten Länder mehr oder weniger deutlich gestiegen. Auch in Deutschland haben sich die Quoten, sieht man von Saisoneffekten ab, kontinuierlich auf 27 Prozent erhöht.

Um die Gründe für die unterschiedlichen Beschäftigungsquoten ukrainischer Geflüchteter zu ergründen, analysiert dieser Bericht die Zusammenhänge zwischen den Beschäftigungsquoten und verschiedenen demografischen, institutionellen und wirtschaftlichen Faktoren. Das Ziel der Analyse ist es, einen ersten umfassenderen Überblick über die Determinanten der

Arbeitsmarktintegration von Geflüchteten zu zeichnen und herauszufinden, welchen Einfluss diese Faktoren tatsächlich haben. Es handelt sich allerdings nicht um kausale, sondern um deskriptive Analysen, die nur einen ersten Eindruck von den Zusammenhängen vermitteln können.

Den multivariaten Analysen zufolge bestehen zwischen den Beschäftigungsquoten ukrainischer Geflüchteter auf der einen und der demografischen Zusammensetzung der Neuankömmlinge sowie den institutionellen und wirtschaftlichen Rahmenbedingungen in den Zielländern auf der anderen Seite starke statistische Zusammenhänge. So verzeichnen Länder mit höherer Nachfrage nach gering qualifizierten Arbeitskräften – gemessen am Anteil der Beschäftigten in Berufen mit niedrigem Qualifikationsniveau – höhere Beschäftigungsquoten. Dies könnte darauf zurückzuführen sein, dass diese Jobs an geringere sprachliche, rechtliche und sonstige Voraussetzungen gebunden sind und entsprechend schneller besetzt werden können. Ein negativer Zusammenhang besteht zwischen der Beschäftigungswahrscheinlichkeit von ukrainischen Geflüchteten und einer starken Arbeitsmarktregulierung wie z. B. einem stärkeren Kündigungsschutz. Zudem besteht ein negativer Zusammenhang zwischen dem Wachstum der Arbeitslosigkeit im Vergleich zum Vorjahr und der Beschäftigung von ukrainischen Geflüchteten. Das deutet darauf hin, dass in den Ländern mit steigender Arbeitslosigkeit die Chancen für Neuankömmlinge, eine Anstellung zu finden, besonders gering sind.

Die soziale Infrastruktur spielt ebenfalls eine Rolle: Da die meisten ukrainischen Geflüchteten Frauen mit Kindern sind, hängt die Beschäftigungsquote der Geflüchteten in hohem Maße auch von der Verfügbarkeit einer Kinderbetreuung ab. Daher geht eine bessere Kinderbetreuungsinfrastruktur mit einer höheren Beschäftigungsquote einher. Ein umfassender Zugang zu Gesundheitsleistungen erhöht ebenfalls die Beschäftigungsquoten.

Interessanterweise ergab sich nur ein kleiner, statistisch nicht signifikanter Zusammenhang zwischen Beschäftigungsquoten und sozialen Transferleistungen – gemessen am Verhältnis der Kosten für ukrainische Geflüchtete pro Kopf zum Bruttoinlandsprodukt pro Kopf. Während häufig vermutet wird, dass die Transferleistungen eine zentrale Rolle für die Beschäftigung spielen, wird diese Hypothese in unserer Analyse nicht bestätigt. Bedeutsam sind jedoch soziale Netzwerke: Länder mit einem höheren Anteil ukrainischer Staatsangehöriger an der Bevölkerung weisen höhere Beschäftigungsquoten auf. Zudem beeinflussen ausgeprägte Englischkenntnisse in der Bevölkerung die Beschäftigungsquoten positiv, wahrscheinlich weil sie die Kommunikation und damit auch die Integration in den Arbeitsmarkt erleichtern.

Die untersuchten Länder verfolgen auch unterschiedliche integrationspolitische Strategien. So verfolgt ein Teil der Länder einen „work first“-Ansatz, der auf die kurzfristige Aufnahme von Beschäftigungsverhältnissen ohne vorbereitende Maßnahmen wie Sprachkurse, Qualifizierungsmaßnahmen u. ä. setzt. Demgegenüber setzen andere Länder auf eine langfristige, nachhaltig angelegte Integration in den Arbeitsmarkt, u. a. durch Sprach- und Qualifizierungsprogramme sowie eine zielgerichtete Arbeitsvermittlung, um längerfristige und der Qualifikation eher entsprechende Beschäftigungsverhältnisse zu schaffen. Letztgenannte Strategie kann kurzfristig zu sogenannten „Lock-in“-Effekten führen, aber langfristig eher zu stabileren Beschäftigungsverhältnissen, einer qualifikationsadäquaten Beschäftigung und höheren Verdiensten führen. Skandinavische Studien zeigen, dass Länder, die auf „work first“-Ansätze setzen, zwar kurzfristig höhere Beschäftigungsquoten von Geflüchteten aufweisen, aber

Länder, die anfangs gezielt in Bildung und Spracherwerb investieren, mittel- und langfristig bessere Integrationsergebnisse erreichen. Das gilt nicht nur für die Beschäftigungsquote und Verdienste, sondern auch die soziale Eingliederung insgesamt und die Lebensqualität der Geflüchteten.

Des Weiteren zeigen die multivariaten Analysen, dass demografische Faktoren und vor allem die Familienkonstellation eine zentrale Rolle spielen. So besteht ein statistisch signifikanter negativer Zusammenhang zwischen Alter und Kinderzahl pro Frau im erwerbsfähigen Alter und Beschäftigungsquoten.

Die Beschäftigungsquoten steigen für alle Gruppen über die Zeit. Dies deutet darauf hin, dass ein erheblicher Teil der anfänglichen Hürden mit zunehmender Aufenthaltsdauer überwunden werden können.

Insgesamt zeigt dieser Bericht, dass Deutschland durch seine langfristig angelegten Integrationsstrategien mittel- bis langfristig gute Chancen hat, die Beschäftigungsquoten ukrainischer Geflüchteter noch erheblich zu steigern. Die positiven Entwicklungen bei den 2013 bis 2019 eingewanderten Geflüchteten untermauern diese Einschätzung: Acht Jahre nach ihrer Ankunft sind 68 Prozent der 2013 bis 2019 eingewanderten Geflüchteten im Durchschnitt erwerbstätig. Die Ergebnisse unterstreichen die Notwendigkeit, Integrationsstrategien kontinuierlich zu evaluieren und gegebenenfalls anzupassen, um die Integration effektiv zu fördern. Davon profitieren langfristig sowohl die Geflüchteten als auch deren Gastland.

1 Introduction

The Russian attack on Ukraine on February 24, 2022, and the ongoing conflict have precipitated one of the largest refugee movements since the end of World War II. According to the latest UNHCR estimates, approximately 6.4 million Ukrainians had fled to other countries by March 2024, with Europe being the primary destination. However, the distribution within European countries varies significantly. Germany has received the most refugees, with 1,152,000 people, followed by Poland with 956,000, and the Czech Republic with 339,000 (UNHCR 2024).¹ The United Kingdom, Spain, Italy, Moldova, Slovakia, the Netherlands, and Ireland have each welcomed over 100,000 refugees. In contrast, other European countries are hosting fewer than 100,000 Ukrainian refugees each.

In general, integrating refugees into the labour market presents distinct challenges. Refugees are often forced to leave their home countries abruptly, without the opportunity to prepare, unlike other migrant groups. This lack of preparation results in significantly less favorable conditions for successful labour market integration (Brell et al. 2020; Kosyakova and Kogan 2022). Upon arrival, refugees face multiple simultaneous challenges: (i) limited or no knowledge of the national language and the institutional, social, and cultural context of the destination country, (ii) a lack of personal networks, and (iii) a scarcity of available jobs and apprenticeships. Additionally, psychological stress from traumatic experiences, legal barriers such as employment bans or uncertain recognition procedures, and uncertainties in the asylum process and residency status further complicate access to the labour market (Hainmueller et al. 2016; Kosyakova and Brenzel 2020). Residency requirements also pose significant obstacles (Brücker et al. 2020a). Empirical studies indicate that refugees' integration into the labour market is considerably slower than that of other migrant groups, with employment rates often below 20 percent in the first two years after arrival. However, these rates typically increase over time, eventually aligning with those of other migrant groups or the native population (Brell et al. 2020; Fasani et al. 2022).

The Ukrainian refugees arriving since February 2022 exhibit distinct socio-demographic characteristics compared to previous refugee groups (Kosyakova and Brücker 2024). Primarily, this cohort from Ukraine largely comprises women, children, and older people, a direct result of the general mobilization within Ukraine and a travel ban affecting men of military age (Brücker et al. 2023). This contrasts sharply with the refugee demographics between 2013 and 2016, which mainly consisted of young men (Brücker et al. 2020c). Secondly, the level of formal education among Ukrainian refugees is notably high, with the majority possessing significant work experience: in 2022, 82 percent of working-age Ukrainian refugee women held vocational or academic qualifications, and 85 percent had work experience (Brücker et al. 2023). This is in stark contrast to the period between 2013 and 2019, where only a quarter of refugees had attended universities, colleges, or vocational training institutions, and although two-thirds were employed prior to their arrival in Germany, the proportion was much lower among women (39 percent compared to 75 percent of men; Brücker et al. 2020b). Thirdly, the ongoing uncertainty regarding

¹ Looking at the number of Ukrainian refugees relative to the total population at the end of 2022, the Czech Republic (4.1 percent), Estonia (2.9 percent), Poland (2.6 percent), Lithuania (2.3 percent) and Latvia (1.9 percent) took in the most refugees (Eurostat 2023a).

the war's outcome and future prospects could negatively influence refugees' willingness to invest in language skills, education, and networks (Cortes 2004; Damelang and Kosyakova 2021). Lastly, concerns about family members left behind significantly impact the mental health of Ukrainian refugees (Brücker et al. 2023), further complicating their integration challenges.

The activation of the EU Directive on Temporary Protection for Displaced Persons in 2022 ("Mass Influx Directive" 2001/55/EC) grants Ukrainian refugees comparatively favorable legal conditions. They are exempt from employment bans and are guaranteed a residence permit until at least March 2026. Additionally, they are entitled to appropriate accommodation, a work permit, access to social benefits and medical care, as well as to the education system. Despite these provisions, integration in host countries remains a significant challenge. This is largely due to the vast number of arrivals and the varied economic and political structures across host countries. Specifically, integration into local labour markets shows considerable variation, prompting ongoing debates about the effectiveness of integration strategies. Moreover, the actual implementation of the "mass influx directive" differs significantly across countries in legal, financial, and policy terms, further fueling discussions on the efficacy of various integration approaches.

When analyzing and comparing employment rates between countries, it is crucial to consider institutional and contextual factors to explain differences (Phillimore 2021). Local labour market conditions, such as the unemployment rate or the size of the labour market, significantly influence integration outcomes (Åslund and Rooth 2007; Azlor et al. 2020; Bevelander and Lundh 2007; Godøy 2017; Schilling and Stillman 2024). Additionally, institutional factors like social infrastructure play a key role. These include the availability of childcare (Cheung and Phillimore 2017; Goßner and Kosyakova 2021; Kosyakova et al. 2021) and healthcare services (Buchcik et al. 2023; Walther et al. 2020), which are essential components that facilitate successful integration.

In addition, research identifies various factors that can influence the employment rate of refugees: (i) social support from co-ethnic networks (Battisti et al. 2022; Granovetter 1973; Martén et al. 2019); (ii) the attitude of the host population towards refugees (Aksoy et al. 2023; Mestheneos and Ioannidi 2002; Schilling and Stillman 2024); (iii) integration policy measures such as language courses (De Vroome and van Tubergen 2010; Kanas and Kosyakova 2023); (iv) the recognition of qualifications (Damelang et al. 2020; Mergener and Maier 2019); (v) active labour market policies (Fossati and Liechti 2020; Kasrin and Tübbicke 2022; Ortlieb et al. 2020); and (vi) the socioeconomic composition of incoming refugees (Lichtenstein and Puma 2019; Liebig and Tronstad 2018; Mestheneos and Ioannidi 2002; Solheim and La Parra-Casado 2019). Another important predictor of labour market integration for refugees is their previous employment experience in the host countries (Brell et al. 2020; Hernes et al. 2019).

Even in countries with similar political, social, cultural, and economic conditions, significant differences exist in the speed of labour market integration for refugees. Hernes et al. (2022a) demonstrate that varying policy measures and underlying integration philosophies in Denmark, Sweden, and Norway result in distinct employment outcomes. They discuss the general dilemma of whether to prioritize rapid or sustainable labour market integration.

Against this backdrop, this research report addresses two central questions: (1) How do the employment rates of Ukrainian refugees vary across different European countries? (2) What are the possible reasons for these variations in employment rates among Ukrainian refugees in

individual countries? Conducting a comparative analysis of employment rates across different European countries presents complexities. Previous research exploring labour market integration of Ukrainian refugees in Germany and other European nations (e.g., IQ 2024; MIDEM 2022; Thränhardt 2023), have faced limitations including reliance on qualitative evidence, inclusion of only a few countries, and the use of non-standardized comparative indicators². Gathering standardized data across countries poses significant challenges. Given the difficulty in obtaining standardized individual data on the employment situation of Ukrainian refugees across various countries,³ this report adopts a macro perspective, focusing on available macro data that illustrates measurable national contexts and framework conditions potentially influencing employment rates.

The foundation for analyzing the labour market integration of refugees is a comprehensive database that encompasses the employment rates of Ukrainian refugees from the fourth quarter of 2022 through the first quarter of 2024 across 26 European countries, along with various demographic and economic indicators. These indicators, essential for understanding labour market integration, are rooted in integration research theories. They include the demographic composition of the refugee population within each host country, the local labour market structure and conditions, key aspects of the social infrastructure such as childcare facilities and financial support mechanisms for refugees, co-ethnic networks, the general attitudes of the population towards refugees, and other pertinent factors.

This study examines the causes of varying employment rates among refugees in different countries using statistical-descriptive methods, as well as regression analysis. In the first step, the relationship between various indicators and the current employment rates of Ukrainian refugees is analyzed in detail. These descriptive analyses consider the following factors: (i) demographic composition; (ii) labour market situation; (iii) social infrastructure, including childcare, social benefits, and healthcare; (iv) social networks and the welcoming culture of the host community; (v) language barriers; and (vi) integration policy. In the second step, the regression model is introduced, incorporating these critical indicators as explanatory variables to further explore their impact on employment outcomes.

The report is structured as follows: Chapter 2 is based on previous research findings and discusses factors that potentially influence the labour market integration of Ukrainian refugees at the country level. By analyzing the necessary conditions and prerequisites for the labour market integration of refugees, differences between the individual countries become apparent. Chapter 3 presents the collected data on the employment situation of Ukrainian refugees and macro-indicators that, based on theoretical considerations, can influence labour market

² For instance, standardized indicators are not used consistently across countries when comparing employment rates. Typically, the employment rate is defined as the ratio of employed individuals to the total number of persons of working age (15-64 years)—for example, as seen in the statistics provided by the Federal Employment Agency of Germany (2024). In contrast, Denmark employs an alternative calculation method, where the employment rate is measured as the share of employed individuals relative to those “job-ready” (Danish Agency for Labour Market and Recruitment 2024). For example, in March 2024, only 67 percent of Ukrainian refugees of working age in Denmark were classified as “job-ready,” while 33 percent were deemed as not ready for a job (Danish Agency for Labour Market and Recruitment 2024). Such discrepancies in calculation methods can lead to significant variations in reported employment rates, which must be carefully considered in direct comparisons between countries.

³ Data such as the Labour Force Survey (LFS) do not offer the possibility of specifically identifying Ukrainian nationals, as information on country of origin or nationality is only provided in aggregated form for country groups in the microdata. This limits the targeted analysis of Ukrainian refugees.

integration. Chapter 4 is devoted to the presentation and discussion of the results from the bivariate and multivariate analyses, which identify the main factors influencing employment rates. Additionally, the significance of the respective integration strategies for the differing development of the employment rates of Ukrainian refugees in Sweden and Norway is examined based on a current qualitative study. Chapter 5 addresses the limitations of the study. Chapter 6 concludes the report with a summary and discusses the implications and approaches for future research.

2 Country-specific determinants of the labour market integration of refugees

The integration of immigrants into the labour market is a pivotal area of migration research, significantly influencing economic performance in host countries as well as the social integration of immigrants and their descendants (Kogan 2007). Studies indicate that migrants in most OECD countries face higher unemployment rates and are underrepresented in the workforce (OECD 2023). Compared to their native counterparts, migrants often receive lower wages, are more likely to be overqualified for their jobs, and experience poorer job quality (Kogan 2016). These labour market challenges are especially acute for refugees (Brell et al. 2020; Fasani et al. 2022; Kosyakova and Kogan 2022), varying significantly from one country to another, shaped by both employers' decisions and refugees' work preferences within specific institutional contexts (e.g., Brell et al. 2020; Kanas and Steinmetz 2021; Platt et al. 2022).

Factors contributing to labour market disparities include differences in resources between migrants and native populations (Kalter 2008) and the varying conditions of host countries (Kogan 2006). At an individual level, successful labour market integration depends largely on the resources migrants bring with them, notably human capital (such as education and labour market experience), cognitive and non-cognitive skills (such as motivation), language proficiency, and social resources, particularly connections within the host society (cf. Kogan and Kalter 2020). Migrants often find themselves at a disadvantage in many of these areas, partly due to unfavorable selection processes during migration or challenges in transferring their skills and qualifications to the new country (Kalter 2008).

Refugees are distinct from other migrant groups due to their unique migration motives and the circumstances of their displacement, often fleeing war zones or persecution based on politics, religion, or ethnicity. These factors typically leave them with fewer directly transferable resources and expose them to considerable stress and health issues, all of which hinder their ability to enter the job market (see Phillimore 2011). The way refugees are received, the duration and complexity of asylum procedures, the type of asylum accommodation provided, and the legal residency status they receive are all crucial to their integration process (cf. Bakker et al. 2014; Brücker et al. 2024a; 2024b; Hainmueller et al. 2016; Kosyakova and Brenzel 2020).

At the contextual level, beyond legal requirements, the features, structures, and systems of host societies—including labour markets, education systems, and social infrastructure—are vitally important for labour market integration (see Kogan 2007; Reitz 1998). Childcare facilities, for

instance, play a critical role in enabling migrant and refugee women to participate in the workforce (Gambaro et al. 2021; Kosyakova et al. 2023; Kosyakova and Salikutluk 2023). Additionally, the broader societal climate—how welcoming a society is and the degree of prejudice and discrimination newcomers face—significantly affects their integration (cf. Aksoy et al. 2023).

The upcoming section delves deeper into the discussion of the socio-demographic profiles of newcomers and the institutional characteristics, particularly regarding the labour market, educational systems, integration policies, and cultural aspects of host countries. It also discusses how these factors contribute to the specific labour market challenges faced by newcomers, especially refugees.

2.1 Demographic composition

When analyzing employment rates, it is crucial to consider the demographic factors of the group of newcomers, as these can significantly influence the integration trajectories of refugees at the individual level. Differences in these characteristics within the refugee populations of individual countries can also lead to varied labour market outcomes at the national level.

It has been demonstrated that the age of refugees significantly determines their integration trajectories. Younger refugees tend to integrate more quickly into the labour markets of their host countries, likely due to their greater adaptability, flexibility, and potentially better language skills (Lichtenstein and Puma 2019; Mestheneos and Ioannidi 2002; Solheim and La Parra-Casado 2019). If the age structure of Ukrainian refugees varies across different countries, this could contribute to different employment rates.

Integration outcomes also vary by gender, as female refugees face specific challenges (Liebig and Tronstad 2018; Kosyakova et al. 2023; Kosyakova and Salikutluk 2023). Firstly, women's previous work experience is often more difficult to transfer to other labour markets, especially if they have worked in regulated occupations (such as within the education or health sectors) that require formal recognition of qualifications (Kosyakova et al. 2021; Kosyakova et al. 2023). Secondly, care responsibilities may limit their access to employment opportunities (Kosyakova et al. 2021; Kosyakova et al. 2023; Liebig and Tronstad 2018). Regardless of gender, it is important to consider the overall family composition of arriving refugees, as those with care responsibilities for elderly or disabled family members may face challenges in finding and retaining employment. In summary, differences in the gender structure and care work, i.e., the higher number of children or elderly people, among Ukrainian refugees can play an important role for employment in different countries.

However, demographic factors within the host society must also be considered. For example, the share of refugees in the total population of a host country is also important for integration processes. Countries with a relatively small refugee population can often offer more targeted and accessible integration programs and support services. Conversely, a large influx of refugees entering the labour market simultaneously can trigger displacement effects that slow down employment integration, especially if concentrated in a few labour market segments. At the same time, countries with a higher share of refugees often have established and effective integration structures. These countries have typically made significant investments in social and labour

market policy systems specifically designed to support newcomers. With the cumulative experience of previous migration waves, existing networks of NGOs, community organizations, and public services can provide more efficient and better-tailored assistance to meet the needs of refugees. A high share of refugees can also foster increased social awareness and improved policymaking, which ultimately benefits all new arrivals. The heightened need for integration measures in these countries can also lead to a stronger political and financial commitment to develop and implement effective integration programs, which in turn can enhance the overall quality of support for refugees. Therefore, differences in the shares of refugees in the overall population may contribute to variations in the employment rate of Ukrainian refugees in the respective countries.

2.2 Labour market situation

When comparing integration progress across different countries, it is essential to consider potential differences in the labour market conditions encountered by refugees. Existing research highlights that local labour demand significantly influences integration outcomes (Azlor et al. 2020; Fleischmann and Dronkers 2010). For instance, Åslund and Rooth (2007) show in Sweden that a high unemployment rate at the place of arrival negatively impacts the labour market integration of refugees. Similar findings have been reported for Denmark (Azlor et al. 2020), Norway (Godøy 2017), and Germany (Schilling and Stillman 2024). Some of these studies indicate that these effects are long-term, affecting income and employment status over several years (Azlor et al. 2020; Godøy 2017). Fleischmann and Dronkers (2010) observed that in EU countries, migrants' employment rates were higher in countries with a greater share of low-skilled jobs, higher immigration rates, and a higher gross domestic product (GDP) per capita. This suggests that differences in labour demand between countries also contribute to variations in the employment rates of Ukrainian refugees.

Different conditions for the integration of migrants into the labour market also arise concerning the existing segmentation of the labour market and the corresponding demand for highly or low-skilled workers. Kogan (2006) demonstrates that the probability of employment for migrants is higher in countries with a high demand for low-skilled workers (see also Fleischmann and Dronkers 2010). This is because workers in these occupations are less reliant on signaling their productivity, a requirement often challenging to meet with qualifications and work experience gained abroad. As countries differ in the composition of their labour market structure by skill or job requirements, this could explain the diverse employment rates of Ukrainian refugees across countries.

Significant differences that shape the integration conditions for incoming migrants also exist concerning the regulation of the labour market and the associated flexibility or rigidity. Platt et al. (2022) find that labour market rigidity is negatively associated with the professional success of immigrants. Kogan (2006) indicates that flexible labour markets facilitate access for immigrants by minimizing the costs of hiring mistakes for employers. However, other studies have found divergent results (Fleischmann and Dronkers 2010; Heath 2007). Further research, such as that by Corrigan (2015), suggests that labour market regulation influences professional success rather than market access. The study's results show a correlation between market rigidity and occupational status and suggest that rigid labour markets may push immigrants into less

attractive job segments without fundamentally blocking access to work. The existing research underscores that the relationship between labour market regulation and immigrant integration is complex and influenced by various local conditions, which in turn can explain different employment rates of Ukrainian refugees.

2.3 Social infrastructure: childcare, social benefits, healthcare

European countries exhibit significant variations in their social infrastructures and service offerings, particularly in terms of childcare availability. Significant national differences in access, quality, and affordability have been documented (Gromada et al. 2021). Given that a large share of Ukrainian refugees are (single) mothers with children (Brücker et al. 2023; van Tubergen et al. 2023; UNHCR 2022), it is crucial to consider these differences in childcare provision when analyzing employment rates. Previous studies on the labour market integration of refugee women have identified care responsibilities as one of the largest barriers (Cheung and Phillimore 2017; Kosyakova et al. 2021; Kosyakova et al. 2023). Additionally, family responsibilities can impact not only labour market participation but also investments in language acquisition by refugee women (Bernhard and Bernhard 2022; Cheung and Phillimore 2017; Rottmann and Nimer 2021). In Germany, studies have shown that children with a refugee background are significantly less likely to be in external childcare compared to children without a refugee background (Brücker et al. 2020d), with the unavailability of childcare services being a main structural reason (Goßner and Kosyakova 2021). Therefore, differences in childcare infrastructure across countries could help explain variations in the employment rates of Ukrainian refugees.

Minimum social support such as asylum seeker benefits, social assistance, or unemployment benefits are integral parts of social infrastructure aimed at preventing destitution and promoting social inclusion. Most host countries offer Ukrainian refugees financial support to cover basic needs, though the type and scope can vary considerably at the national level (OECD 2022a). The impact of different social benefits on the labour market integration of refugees is a subject of intense political debate. An earlier study from Denmark examined the effects of a 50 percent cut in social benefits for refugees in 2002 (Dustmann et al. 2024a). The authors found that while the reform had the desired employment effect for refugee men in the short term (the employment rate rose from 10 percent to 19 percent), the overall income level of refugees was permanently reduced (by 40 percent). Furthermore, the positive employment effect was no longer visible after five years. For women, no significant employment effect, instead increased risk of leaving the workforce was found (Dustmann et al. 2024a).

Additionally, the reform had negative consequences for individuals and their families, such as an increase in property crime and negative effects on human capital acquisition for children. Dustmann et al. (2024a; 2024b) further showed that the welfare cut reduced disposable income by an average of 30 percent in the first five years and that children of recognized refugees affected by the cut during preschool and school years had lower grades, lower well-being, and lower general educational attainment. Youths who were in their teens at the time of the cut were much more likely to be convicted of violent and property offenses. Together, these findings suggest that there may be a short-term relationship between employment and a welfare benefits size (although the medium- and long-term effects are unclear), which in turn may reflect differences in employment rates among Ukrainian refugees in different countries.

As Ukrainian refugees are fleeing war and conflict, which are associated with specific health risks, ensuring access to healthcare is a key aspect of social infrastructure. Mental health risks are well documented for previous refugee cohorts. For example, the prevalence rate of mental health problems among refugees who arrived in Germany between 2013 and 2016 was estimated at 41 percent (Walther et al. 2020). There are only a few studies documenting the health status of Ukrainian refugees, but these highlight the need for healthcare: a study by Buchcik et al. (2023) reports that 46 percent of female refugees in Germany suffer from severe psychological distress and 45 percent from moderate to severe symptoms of depression and anxiety. While all EU member states provide some level of access to healthcare for Ukrainian refugees, the differences between full access and only emergency care are significant (OECD 2022a). Good health and access to healthcare are fundamental prerequisites for active participation in the labour market (Chatterji et al. 2011; Frijters et al. 2014; Pelkowski and Berger 2004). Differences in healthcare could therefore also help to explain differences in the national employment rates of Ukrainian refugees.

2.4 Co-ethnic networks and social attitudes

Favorable conditions for refugees' labour market integration are heavily influenced by social support from the local population in the host country. Previous research has highlighted the importance of co-ethnic networks as a key factor facilitating labour market integration. Martén et al. (2019) provided evidence from Switzerland showing that refugees integrate faster into the labour market when they settle in areas with a high concentration of co-ethnics (see also Edin et al. 2003 for Sweden; Damm 2009 for Denmark). These networks facilitate the exchange of information about employment opportunities, thereby enhancing labour market integration. Similar results have been observed in Germany, where immigrants are more likely to find employment within three years of their arrival if they live in regions with extensive co-ethnic networks (Battisti et al. 2022). Other studies also indicate that these network effects are particularly pronounced among refugees. These findings align with Granovetter's (1973) sociological theory of "weak ties," which emphasizes the importance of broader contacts, not just close relationships, as they enable access to new information from more distant networks.

In Europe, co-ethnic networks of Ukrainian refugees are unevenly distributed. For instance, before the onset of the war, the share of Ukrainians living abroad was particularly high in countries like Poland, Italy, and the Czech Republic (UNHCR 2024), potentially facilitating the labour market integration of newly arrived Ukrainians. Therefore, existing networks could also lead to different employment rates for Ukrainian refugees across different countries.

Social support can also depend on the attitudes of the population in the host countries. How are refugees received in the host society? Does the local population support their integration, or do anti-immigration sentiments dominate? Schilling and Stillman (2024) found that refugees in Germany are less socially integrated in communities with a higher share of right-wing voters. Their research also indicates that strong support for right-wing parties correlates with less volunteering and generally less support for refugees from locals. The effects on the economic integration of refugees are not yet clear: Aksoy et al. (2023) used geocoded Twitter data to show that anti-immigration sentiment can affect the employment of refugees in Germany, while other studies find no effect of such sentiment on labour market integration (Jaschke et al. 2022;

Schilling and Stillman 2024). A qualitative study by Mestheneos and Ioannidi (2002), which conducted biographical interviews with refugees across the EU, shows that discrimination and negative attitudes are significant barriers to integration. Ethnic discrimination is one of the most common forms of discrimination in European labour markets (Lippens et al. 2023). However, surveys of Ukrainian refugees in various host countries found that the majority felt welcome upon arrival (Brücker et al. 2023) and have experienced little discrimination to date (IOM 2023).

2.5 Language barriers

To facilitate the integration of refugees and other migrants, governments have introduced various policy measures, with a key focus on acquiring the host country's language, as sufficient language skills are crucial for employment in most labour markets. Given that refugees often flee their country of origin without adequate preparation, they frequently lack these language skills upon arrival (Kosyakova et al. 2022; Kristen et al. 2022). This is also true for Ukrainian refugees, for instance, only about four percent of whom arrived in Germany with good or very good German language skills, while the majority had no prior knowledge of German (Brücker et al. 2023).

The complexity of language acquisition varies depending on the linguistic proximity to Ukrainian. Slavic languages such as Polish or Czech, for example, are more similar to Ukrainian than languages from other language families (Grenoble 2010). There are also differences in how the governments of host countries promote language acquisition. While most European countries, such as Germany, Switzerland, and Norway, offer publicly funded language courses, other countries like Finland, Greece, and the Netherlands do not (OECD 2022a). Previous studies have shown that targeted language training enhances both language acquisition and labour market integration (De Vroome and van Tubergen 2010; Kanas and Kosyakova 2023; Kosyakova et al. 2022). Therefore, differences in employment rates between countries may also be influenced by the proximity of the national language to Ukrainian.

The English language skills of the local population can also play a significant role in overcoming language barriers in communication with international refugees, as English is the most widely spoken second language in EU member states (Rubio and Lirola 2010). The share of English speakers varies greatly among EU member states: for instance, it exceeds 80 percent in the Netherlands and Sweden, while it falls below 30 percent in Italy and Spain (Rubio and Lirola 2010). The empirical literature clearly indicates that knowledge of English—especially proficient English—increases the likelihood of employment in European countries (Gazzola et al. 2019; Gazzola and Mazzacani 2019). Thus, the level of English proficiency both in the countries of arrival and among Ukrainian refugees can also help explain differences in the employment rates of Ukrainian refugees in various countries.

2.6 Integration policy

Integration is a complex process, which complicates the comparison of different integration approaches across countries. However, some standardized measures of integration have been developed to enable international comparisons. One such measure is the Migrant Integration Policy Index (MIPEX 2020), which evaluates various areas of integration policy, including labour market mobility, family reunification options, access to education, health services, long-term

residency, political participation, citizenship access, and anti-discrimination measures. This index allows for categorizing countries from those with comprehensive integration strategies ensuring full equality, opportunities, and security for immigrants and citizens, to those promoting immigration without integration. In the latter, immigrants may settle long-term but without support for basic rights or equal opportunities to participate in society.

The differences in active labour market policies and integration course offerings are shaped by these diverse integration approaches, focusing either on language acquisition or rapid labour market integration. Countries adopting a “language first” strategy aim for sustainable integration based on qualifications, while those with a “job first” philosophy prioritize rapid labour market integration, often at the expense of language skills. A Danish study found that the “job first” approach leads to higher employment rates in the short term but achieves rates comparable to the “language first” strategy in the medium term and may result in lower average incomes long-term due to job-quality mismatches (Arendt and Bolvig 2023).

Economically, language courses are investments with high short-term opportunity costs due to the lock-in effect, as they limit labour market availability. However, in the long term, enhanced language skills provide access to higher-skilled and better-paid jobs. Studies indicate that in Scandinavia, quick placement in bottleneck occupations can lead to short-term employment success, while long-term language acquisition enhances employment rates and incomes by facilitating access to more demanding and communication-intensive jobs (Foged et al. 2022; Hernes et al. 2022a). These findings illustrate that the employment rates of refugees and other migrants can be influenced by country-specific integration approaches, which may account for differences in the employment rates of Ukrainian refugees.

Noteworthy, the MIPEX index is not without issues. It measures a country’s overall integration policy rather than specific measures taken for Ukrainian and other refugees. For instance, Germany, which MIPEX lists as having a temporary integration strategy, is actually implementing a strategy for Ukrainian refugees that emphasizes language support. Conversely, Sweden, according to MIPEX, pursues a comprehensive integration approach but grants Ukrainian refugees very limited rights. They are not registered as residents and hence do not receive a Swedish social security number, only a coordination number. Moreover, their medical care is restricted to emergency treatment, and they lack access to the standard introductory programs and language courses available to other refugees. We explore the impact of these specific approaches for Ukrainian refugees in each country in a supplementary analysis (see chapter 4.3 and model 6 in Table A3 in the appendix).

Many countries implement active labour market policies that include measures such as job-finding support, specific training offers, or indirect employment incentives. Studies from Germany indicate that these measures can positively affect refugee labour market participation, depending on program design (Bonin et al. 2021; Kasrin and Tübbicke 2022). Austrian studies show similar positive outcomes, especially when programs provide training rather than merely information (Ortlieb et al. 2020). Fossati and Liechti (2020) note that the effectiveness of these measures also hinges on employers' positive attitudes toward refugees. Ukrainian refugees receive support from public employment services in most European countries, but the level of assistance and access to programs vary (OECD 2022a). These variations may also help explain differing employment rates of Ukrainian refugees across Europe.

3 Data and methods

3.1 Employment rates by country

To empirically investigate the labour market integration of Ukrainian refugees across their host countries, a comprehensive database was assembled from various sources. This database covers data on 26 countries from the 4th quarter of 2022 to the 1st quarter of 2024. It comprises a panel dataset with varying numbers of longitudinal observations for each country, totaling 100 observations spread across up to six time points per country. The countries included in the analysis are Austria, Belgium, Switzerland, the Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, Hungary, Ireland, Italy, Croatia, Lithuania, Luxembourg, Latvia, the Netherlands, Norway, Poland, Portugal, Romania, Sweden, Slovenia, Slovakia, and the United Kingdom.⁴ Details of the datasets for these countries are summarized in Table 1.

The employment rates of Ukrainian refugees were primarily gathered through a standardized survey by the European Public Employment Service Network (PES Network). The PES members were requested to provide detailed information, including:

1. Number of employed persons with Ukrainian citizenship who moved to their current country after February 24, 2022.
2. Number of employed persons with Ukrainian citizenship, regardless of their year of arrival.
3. Total number of persons with Ukrainian citizenship of working age (15-64 or 18-64) who moved to their current country after February 24, 2022.
4. Total number of persons with Ukrainian citizenship of working age (15-64 or 18-64), regardless of their year of arrival.

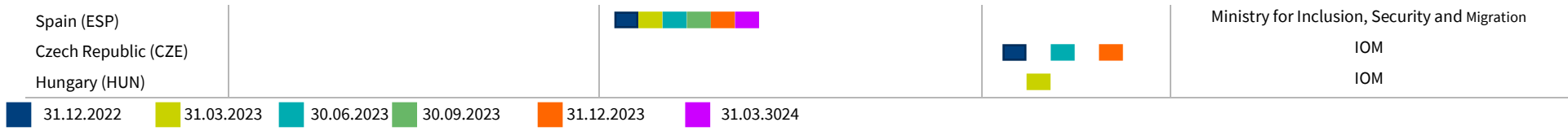
The objective was to determine the employment rates of Ukrainian refugees, defined as the ratio of employed individuals with Ukrainian citizenship who arrived after February 24, 2022, to the total number of working-age individuals with Ukrainian citizenship who also arrived after this date. In instances where specific data on persons arriving after February 24, 2022, was unavailable, general data on persons with Ukrainian citizenship were utilized, irrespective of their year of arrival.

The results of this data request are presented in Table 1 and are color-coded according to the timing of their measurement. These surveys were conducted systematically and continuously as part of the project, totaling six times at quarterly intervals, starting in the 4th quarter of 2022 and concluding in the 1st quarter of 2024. This methodological approach ensures continuous and up-to-date coverage of the labour market situation of Ukrainian refugees across the participating European countries.

⁴ In the multivariate analyses, France (with 5 observation points) and Hungary (with 1 observation point) were excluded. France does not collect data on the number of refugee children from Ukraine. Hungary does not provide any information on the demographic composition of Ukrainian refugees.

Table 1: Overview of questions and survey dates

	Number of employed persons with Ukrainian citizenship		Number of people of working age with Ukrainian citizenship (15-64 or 18-64)		Employment rates of Ukrainian refugees	Sources
	moved in after 24.02.2022	regardless of the year of arrival	moved in after 24.02.2022	regardless of the year of arrival		
Belgium (BEL)						CEDEFOP
Denmark (DEN)						Employment Agency Denmark
Germany (GER)						IAB Immigration Monitor
Estonia (EST)						PES network survey
Finland (FIN)						VATT data room dashboard
France (FRA)						PES network survey
Great Britain (GBR)						Office for National Statistics
Ireland (IRL)						PES network survey
Italy (ITA)						UNHCR
Croatia (CRO)						AIDA (ecre)
Latvia (LVA)						IOM
Lithuania (LTU)						PES network survey
Luxembourg (LUX)						RTL Today
Netherlands (NED)						Central Statistical Office
Norway (NOR)						Central Statistical Office
Austria (AUT)						Austrian Health Insurance Fund
Poland (POL)						PES network survey
Portugal (PRT)						PES network survey
Romania (ROU)						PES network survey
Sweden (SWE)						IOM
Switzerland (SUI)						PES network survey
Slovakia (SVK)						PES network survey
Slovenia (SVN)						PES network survey



Source: see in the appendix; own compilation.

For countries from which no direct information from the PES surveys was available, additional data sources were consulted (see Table 1). In some instances, representative survey data from individual countries was also utilized. Detailed information on the employment rates by quarter is available in Table A1 in the appendix.

Given the diversity and heterogeneity of the data sources used, our empirical analyses, while providing significant insights, should be interpreted with a degree of caution.

3.2 Indicators at country level

To elucidate the differences in employment rates between countries, the analysis incorporates indicators from six categories: (A) demographic composition, (B) labour market situation, (C) social infrastructure, (D) social networks and welcoming culture, (E) language barriers, and (F) integration policy (discussed in Chapter 2).

(A) Demographic composition

Three specific indicators were developed to analyze the demographic composition of Ukrainian refugees and the host country: (1) *the share of people of retirement age (65 years or older) in the total number of adult refugees* (2) *the number of children per woman of working age⁵*, and (3) *the share of refugees in 2021*.

Typically, higher values for indicators (1) and (2) correlate with a lower probability of employment. Furthermore, a high share of elderlies and children often entails extensive, mostly unpaid care responsibilities, which present additional challenges for labour market integration. Data for these indicators were sourced from monthly reports by Eurostat (2023a), which detail recipients of temporary protection by nationality, age, and gender at the end of each month. To calculate the share of people of retirement age, the number of individuals aged 65 and over is expressed as a percentage of the total population aged 18 and over. To determine the number of children per woman of working age, the number of children of Ukrainian refugees in a given host country is compared to the number of women aged 18 to 64.⁶

As outlined in Chapter 2, the total number of refugees (indicator (3)) in the host country may significantly impact integration. For this analysis, the share of refugees in 2021, as reported by UNHCR (2024), is compared to the total population in that year. This ratio is calculated by dividing the number of refugees by the total population size, sourced from census data and Eurostat for the year 2021 (Eurostat 2023b). The year 2021 is chosen as the reference year because it represents conditions prior to the war, thus providing an undistorted baseline for analysis.

⁵ The number of refugee children is not recorded for France. The analysis is robust for the inclusion of this variable and also for the exclusion of France (see Model 3 in the Table A3 in the appendix). No data on the socio-demographics of Ukrainian refugees are available for Hungary. It is therefore not included in the corresponding analysis.

⁶ A comprehensive analysis of childcare needs ideally requires detailed information on the share of children of pre-school and primary school age, as the amount of childcare required varies with the age of the children. However, such data is not consistently available at macro level for the respective countries.

(B) Labour market situation

Three key indicators illuminate various aspects of the labour market: (1) the *growth rate of unemployment in the previous year*, (2) the *index of labour market regulation*, and (3) the *size of the low-status labour market segment*.

The growth rate of unemployment in the previous year is calculated on the basis of Eurostat data on annual unemployment rates (Eurostat 2024a). This rate measures the relative change in unemployment rates between two consecutive years by relating the difference in rates to the initial value.

To assess the role of labour market rigidity, the index of labour market regulation from the Fraser Institute's "Economic Freedom of the World" report is used, which classifies the density of regulation in labour markets (Gwartney et al. 2023). This index, derived from employer surveys, covers several dimensions of labour market regulation including (i) labour regulations, (ii) minimum wage, (iii) hiring and firing regulations, (iv) flexible wage setting options, (v) working time regulations, (vi) cost of firing workers, (vii) military conscription, and (viii) foreign labour regulations. The index is presented on a scale from 0 to 10, where 0 indicates very heavily regulated and 10 very lightly regulated. For our analysis, we invert the index by multiplying it by -1, so a low level of regulation corresponds to a high negative value and a high level of regulation corresponds to a low negative value. For instance, the more liberal UK is rated -8.2, whereas the more restrictive Norway is rated -5.8.

For the third indicator, which measures the size of the low-status labour market segment, data from the 2021 Labour Force Survey (LFS) is used (Eurostat 2021a). This indicator quantifies the share of employees working in low-skilled occupations, characterized by simple and routine tasks that require low skill levels. The share is calculated as the percentage of all employees working in these occupations according to the ISCO classification (ISCO-1 digits 80 and 90) relative to the total number of employees.

(C) Social infrastructure

To evaluate the role of social infrastructure in the labour market integration of refugees, three indicators are considered: (1) *share of costs for the care of Ukrainian refugees*, (2) *childcare infrastructure*, and (3) *full access to the healthcare system for Ukrainian refugees*.

Social security systems and associated state support can play crucial roles in the labour market integration of refugees. Specifically, the level of transfer payments can influence work incentives and opportunities for language learning, acquiring additional human capital, and job seeking. However, the absolute level of transfer payments is only partially comparable across countries.⁷ As an internationally comparable measure (see OECD 2022b, among others), the per capita care costs for Ukrainian refugees are related to the GDP per capita of each host country. These costs include direct financial support and housing, as well as education and healthcare. The costs of

⁷ When comparing transfer payments, it is important to recognize that benefit systems vary significantly between countries, complicating direct comparisons. Furthermore, data on payments in many countries often lack transparency. In some instances, options related to benefits can vary based on household composition, potentially yielding different outcomes. Additionally, benefit levels may vary within a single country. As a result, certain benefits may not be fully captured in internationally available sources, potentially leading to a distorted representation of the actual level of benefits.

care were considered per capita, as the countries have taken in different numbers of refugees, so that the absolute costs of the respective country increase with the number of refugees taken in. In addition, these per capita costs were set in relation to the average per capita income (GDP per capita), as this also varies considerably between countries in addition to the standard of living and purchasing power. The calculation of this indicator is based on data from the OECD (2022b), which records the care costs in the individual countries in 2022, supplemented by Eurostat data (2023c) on the GDP per capita of the countries and World Bank data (2024a) on the GDP per capita of the United Kingdom in 2022.

A crucial factor in the labour market integration of Ukrainian refugees, particularly women with children, is the availability of childcare, as this group constitutes a significant portion of the refugee population (Brücker et al. 2022; Kosyakova et al. 2023). Adequate access to childcare is essential for their participation in the labour market. To evaluate childcare infrastructure, a specific index was created that incorporates several parameters. This index includes the enrollment of children aged 3 to 5 in educational institutions, reflecting the availability of pre-school education, based on OECD data (2024). It also accounts for the share of children aged 1 to 2 who are not in public childcare and those under 3 who are exclusively cared for by their parents, according to Eurostat (2021b). Additionally, the index considers the employment rate of women with three or more children, as per Eurostat (Eurostat 2024b), where a high rate indicates an accessible childcare system. Another component is the childcare gap, measuring the difference between the end of paid childcare leave and the availability of a guaranteed place in childcare facilities or mandatory primary education, based on a survey by the European Commission (2019). These parameters are standardized to a mean of 0 and a standard deviation of 1 and aggregated into an overall index with robust internal consistency (Cronbach's $\alpha=0.76$), confirming its reliability.

The availability of the healthcare system is also a critical factor. An indicator has been developed to measure full access to healthcare for Ukrainian refugees: full access is scored as 1, while basic and emergency care is scored as 0. This data is sourced from the OECD (2022a). The healthcare system can significantly influence the composition of refugees and, consequently, their integration into the labour market. A robust healthcare system can serve as an incentive for older individuals and those with young children by providing better coverage. This, however, might lead to lower employment rates as these groups often face more significant challenges in the labour market. Conversely, comprehensive access to healthcare can facilitate labour market integration by enabling the timely treatment of health issues that might otherwise impair work capability. Moreover, good health bolsters mental and physical resilience, which are crucial for maintaining stability and enhancing productivity at work.

(D) Social networks and welcoming culture

To better understand the role of social networks and welcoming culture in integration, two specific indicators are utilized: (1) *co-ethnic networks* and (2) *solidarity and support for Ukraine*. Co-ethnic networks are pivotal for labour market integration. The analysis incorporates data on the number of Ukrainian citizens living in each host country prior to the war in 2021, relative to the total population. This data is sourced from Eurostat (2024c) and the 2021 Census for the

United Kingdom, along with additional statistics from Eurostat (2023b) and the World Bank (2024b).

Furthermore, solidarity and support are quantified based on humanitarian, military, and financial aid provided to Ukraine. Although crucial, it is important to recognize that solidarity remains a “fuzzy concept” (Rusu 2012), subject to various interpretations and challenging to quantify accurately. For this analysis, a country’s support for Ukraine is examined through the lens of humanitarian, military, and financial contributions, aligning with the definition by De Beer and Koster (2009), who describe solidarity as “the willingness to help others or support the group to which one belongs without immediately receiving something in return.” The data used here originates from the Ukraine Support Tracker of the Kiel Institute for Economic Research and is quantified as a share of GDP in 2021 (Antezza et al. 2024).

(E) Language barriers

Two indicators address language barriers: (1) *linguistic proximity index*, and (2) *English proficiency in the host country*.

Linguistic proximity between Ukrainian and the language of the host country can significantly impact employment rates. For this analysis, an index of linguistic proximity, developed by Melitz and Toubal (2014), is employed. This index was crafted by ethnolinguists and ethnobiologists and assesses proximity based on language trees that map the connections between languages. In nations with multiple official languages, the two most widely spoken languages are considered and weighted accordingly. Linguistic proximity is then calculated using these language trees and their respective branches. The scale used in this index ranges from 0 to 4, where 4 indicates a perfect match between languages, and 0 indicates no linguistic proximity.

English proficiency in the host country is gauged using the 2019 Education First English Proficiency Index (EF EPI), which posits that advanced English skills can facilitate labour market integration by easing language barriers. However, it is crucial to acknowledge some limitations of this index. The EF EPI's sample is not representative of the entire population of any given country or region. Instead, it includes only individuals who are either interested in learning English or in assessing their English skills, potentially skewing the results either higher or lower. Moreover, since the tests are conducted online, individuals without internet access or the skills to use online platforms are excluded. This exclusion can be particularly significant in areas with low internet penetration. Despite these limitations, the EPI is widely used internationally as an indicator of adult English proficiency.

(F) Integration policy

Two specific indicators are utilized to assess integration policy: (1) *MIPEX integration approach*, and (2) *job search support*.

The MIPEX (Migrant Integration Policy Index) classifies the integration approaches of different countries into four categories based on three core areas: basic rights, equal opportunities, and secure future (MIPEX 2020). Basic rights concern whether migrants enjoy the same rights as nationals, including labour, education, health rights, and protection from discrimination. Equal opportunities assess whether immigrants receive support that offers opportunities comparable

to those of nationals, such as in education and healthcare. The area of secure future evaluates whether immigrants can achieve permanent settlement and have certainty about their future in the country, for instance through family reunification or acquiring citizenship. The four MIPEX categories are: (i) “Comprehensive integration”, which ensures equal rights, opportunities, and security; (ii) “Equality on paper”, where immigrants have equal rights and long-term security but lack equal opportunities; (iii) “Temporary integration”, offering basic rights and equal opportunities but lacking long-term security; and (iv) “Immigration without integration”, where immigrants are denied both basic rights and equal opportunities, even if they can settle long-term.

Other integration policy measures include job search support services. This data originates from a joint project by the OECD and the European Migration Network, focusing on assisting refugees in their job search (European Migration Network 2024). The approaches to job search support vary considerably by host country. In some countries, training programs are provided or funded (e.g., Spain, Germany, Switzerland), while other countries offer direct job placement into positions that do not require additional qualifications or language training (e.g., Denmark) (European Migration Network 2024). However, this report only considers the presence or absence of employment support programs.

3.3 Method

The primary purpose of this report is to identify cross-national determinants of employment rates for Ukrainian refugees. The underlying empirical analysis utilizes a linear regression model, formulated as follows:

$$emp_rate_{j,t} = \alpha_0 + \beta Xk_{j,t} + \varepsilon_{j,t}$$

where j denotes the respective European destination countries and t represents the quarters observable in the data. $emp_rate_{j,t}$ is the employment rate of Ukrainian refugees in destination country j at time t , serving as the central dependent variable. The matrix $Xk_{j,t}$ includes the k explanatory variables described in the previous section. $\varepsilon_{j,t}$ denotes the error term.

To mitigate potential biases from small sample sizes, this analysis employs a bootstrap method for estimating the standard errors, involving 1,000 bootstrap replications. Conventional standard error estimates rely on the assumption of large sample sizes, which are not always achievable and can result in inaccuracies in the estimation of standard errors and statistical significance. Bootstrapping, a resampling method where samples are repeatedly drawn from the data, generates an empirical distribution of the statistic of interest, typically the mean or variance. This technique does not depend on asymptotic properties, allowing for a more accurate reflection of the true variability in estimates. Bootstrapped standard errors thus enhance the reliability of statistical inferences, providing a more precise and robust approach than traditional regression techniques, especially in the absence of specific distributional assumptions (Hesterberg 2011).

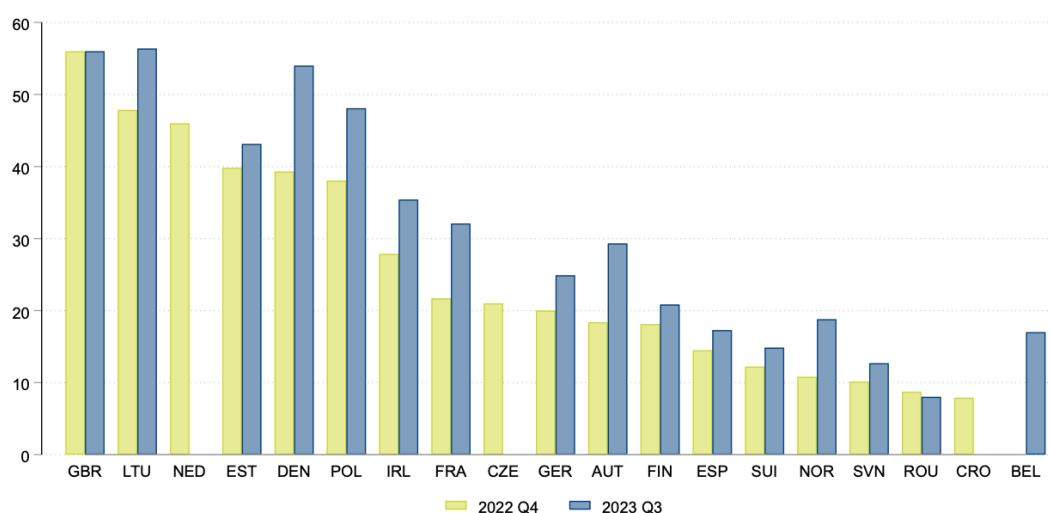
4 Empirical results

4.1 Employment rates in a European comparison

Figure 1 displays the employment rates of Ukrainian refugees across various European countries for Q4 2022 and Q3 2023. Detailed data for other periods are available in Table A1 in the appendix. This visualization highlights significant variations in employment rates between countries, as well as changes over time.

Figure 1: Employment rates of Ukrainian refugees in selected European countries and the UK, 4th quarter 2022 and 3rd quarter 2023

Percentage of people of working age (18 to 64 years)



Note: For exact figures see Table A1 in the appendix. Countries sorted in descending order by employment rate in the 4th quarter of 2022.

Sources: See Table A2 in the appendix for the compilation of sources for the individual countries; own presentation.

Looking back to the Q4 of 2022, the UK boasted the highest employment rate among Ukrainian refugees at 56 percent. Lithuania followed with 48 percent, the Netherlands with 46 percent, Estonia with 40 percent, Denmark with 39 percent, and Poland with 38 percent. In stark contrast, Croatia (8 percent), Romania (9 percent), Slovenia (10 percent), Norway (11 percent), Switzerland (12 percent), and Spain (14 percent) registered the lowest rates. Germany positioned itself in the mid-range with a 20 percent rate.

By 2023, several countries witnessed significant increases in employment rates. Denmark, for instance, saw a notable rise of 15 percentage points, though a detailed examination in Table A1 of the appendix reveals a moderation in this increase since the Q2 of 2023, with rates plateauing at 53 percent by the Q4 of 2023. Austria, France, Poland, Lithuania, Norway, and Ireland also experienced substantial improvements ranging from 8 to 11 percentage points. Conversely, Austria and France observed a slight decline of 2 percentage points by the Q4 of 2023. During the Q1 of 2024, employment rates in Poland and Norway remained stable, whereas Ireland's rate

dipped below its Q4 of 2022 level. Germany's employment rates climbed by five percentage points by the Q4 of 2023, and by an additional two percentage points in the Q4 of 2024, maintaining its mid-range position.

However, countries like Slovenia, Switzerland, Finland, Spain, and Estonia saw only marginal increases of about 3 percentage points from the Q4 of 2022 to the Q3 of 2023. The UK maintained its high rate of 56 percent, but Romania experienced a decline of one percentage point. Subsequent periods saw stagnant rates in Spain and Switzerland, while rates in Finland, Slovenia, and Romania either stagnated further or declined.

These figures underscore the varied trajectories and challenges in labour market integration for Ukrainian refugees across Europe, showcasing both significant advancements and areas with minimal progress from 2022 to 2024.

4.2 Correlations between employment rates of Ukrainian refugees and various indicators

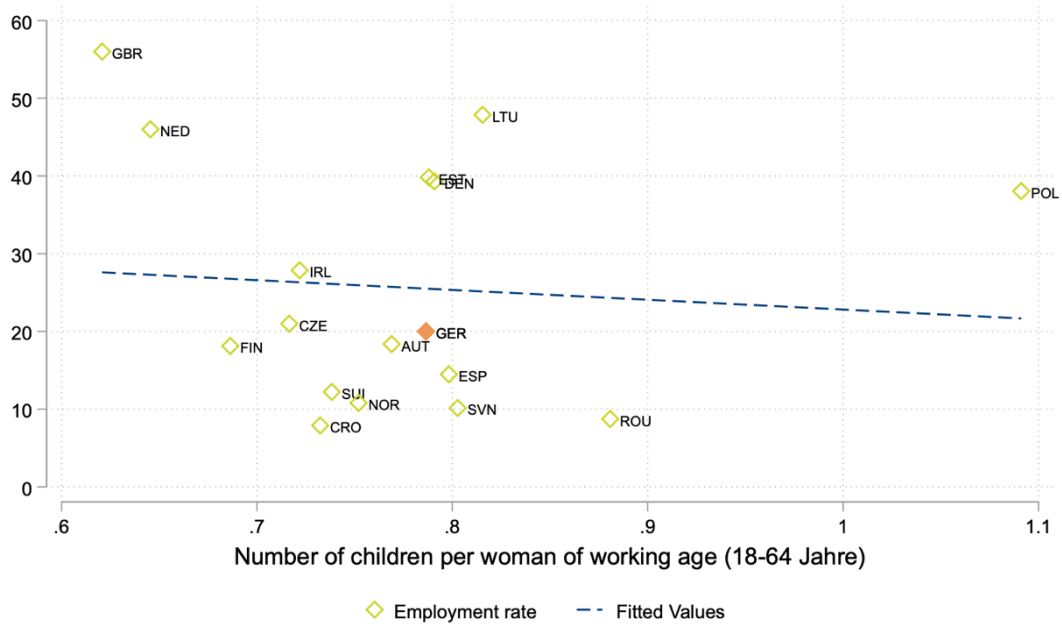
Our correlation analysis explores potential connections between employment rates in various countries and the indicators described in Chapter 3. Bivariate correlations for the Q4 of 2022⁸ are illustrated graphically, with data points for each country represented as diamonds. The estimated trend line, depicted as a dashed line, demonstrates the relationship between the employment rate of Ukrainian refugees and the respective macro indicator. Furthermore, the results of the Spearman correlation test between the employment rate and the respective indicator are presented, using data from all available time points. Correlation coefficients are interpreted as follows: an absolute value from 0.0 to 0.19 indicates a very weak correlation, from 0.2 to 0.39 a weak correlation, from 0.40 to 0.69 a moderate correlation, and values of at least 0.70 suggest a strong correlation.

The first two graphs present correlation analyses concerning the demographic composition of Ukrainian refugees. Figure 2 displays the relationship between the employment rate of refugees in the Q4 of 2022 and the number of children per woman of working age (18-64 years) among Ukrainian refugees in different European countries. The Spearman correlation test reveals a weak negative and statistically significant correlation between the two variables ($Rho = -0.26$; $p\text{-value} = 0.01$). The estimated blue dashed trend line shows that countries with a higher number of children per woman tend to have lower employment rates, highlighting the challenges of labour market integration for parents, especially mothers. The employment rate is highest in the UK at 56 percent, coinciding with a comparatively low number of children per woman at approximately 0.6. In contrast, countries like Romania and Slovenia, with higher numbers of children per woman (0.9 and 0.8, respectively), exhibit lower employment rates. Poland is also notable, where an above-average employment rate of nearly 40 percent occurs despite having the highest average number of children per woman at 1.1. With about 0.8 children per woman, Germany's employment rate stands at 20 percent, positioning it in the middle of the spectrum.

⁸ The time point selected is for illustrative purposes. However, all available points in time were included for the Spearman correlation tests and the multivariate analysis.

Figure 2: Correlation between the employment rate of Ukrainian refugees and the number of children per woman of working age among Ukrainian refugees

Percentage of people of working age (18 to 64 years), Q4 2022



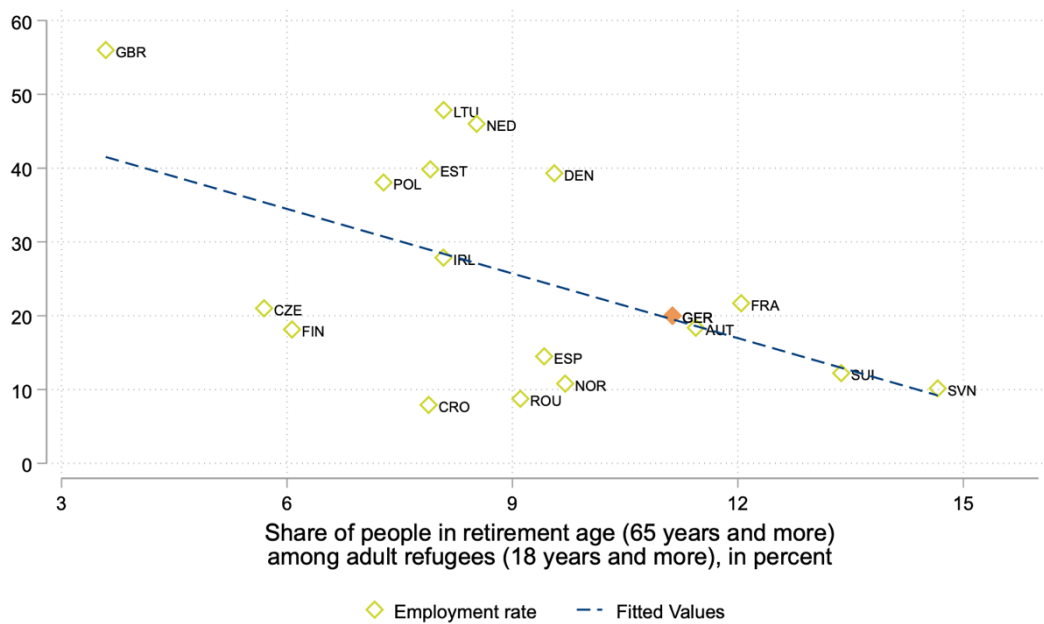
Sources: Table A2 in the appendix (employment rates); Eurostat 2023a (number of children per woman of working age); own presentation.

Figure 3 demonstrates the correlation between the employment rates of Ukrainian refugees and the share of people of retirement age (65 years and older) within the adult population (18 years and older) across various European countries. The analysis reveals that countries with a higher share of older adults among Ukrainian refugees tend to exhibit lower employment rates (Spearman correlation test: $Rho = -0.32$; $p\text{-value} = 0.00$). Notably, the UK stands out with an employment rate of approximately 56 percent and a relatively low share of people of retirement age at 3.6 percent. Lithuania and the Netherlands also show similarly high employment rates, which correspond with comparably low shares of older individuals (8.1 percent and 8.5 percent, respectively). Conversely, countries like Slovenia, Switzerland, France, as well as Germany and Austria, display lower employment rates alongside higher shares of pensioners (14.7 percent, 13.4 percent, 12 percent, 12 percent, and 11 percent respectively).

The insights from Figure 2 and Figure 3 suggest that the demographic composition of refugees can significantly influence labour market integration. A lower number of children per woman of working age and a smaller share of older individuals are associated with higher employment rates.

Figure 3: Correlation between the employment rate of Ukrainian refugees and the share of people in retirement age (65+ years) among refugees

Percentage of people of working age (18 to 64 years), Q4 2022

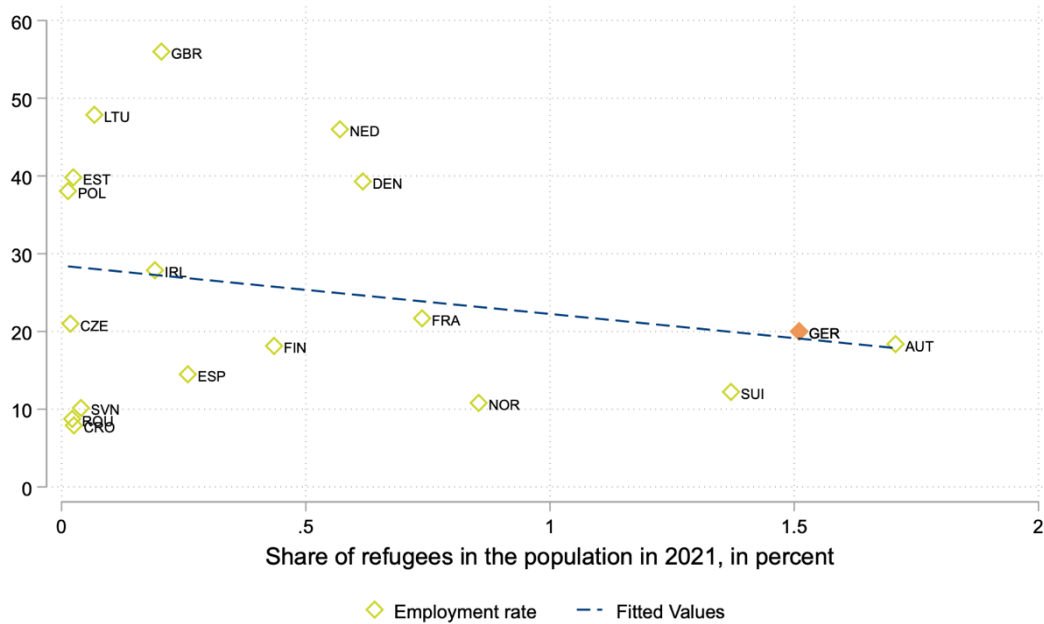


Sources: Table A2 in the appendix (employment rates); Eurostat 2023a (share of people of retirement age); own presentation.

Figure 4 explores the statistical correlation between the share of refugees (regardless of origin) in the total population of the destination country in 2021 and the employment rates of Ukrainian refugees. The findings reveal a negative correlation: as the share of refugees in the total population of the destination country increases, the employment rates of refugees tend to decrease. Notably, Austria (approximately 1.7 percent), Germany (approximately 1.5 percent), and the Czech Republic (approximately 1.4 percent) have particularly high shares of refugees in their populations—countries that consistently exhibit lower employment rates. However, the Spearman correlation test indicates that this correlation is weak and not statistically significant ($Rho = -0.09$; $p\text{-value} = 0.40$).

Figure 4: Correlation between the employment rate of Ukrainian refugees and the share of refugees in the population of the destination country

Percentage of people of working age (18 to 64 years), employment rate: Q4 2022, population of the target country: 2021



Sources: Table A2 in the appendix (employment rates); UNHCR 2024 (share of refugees in 2021); own presentation.

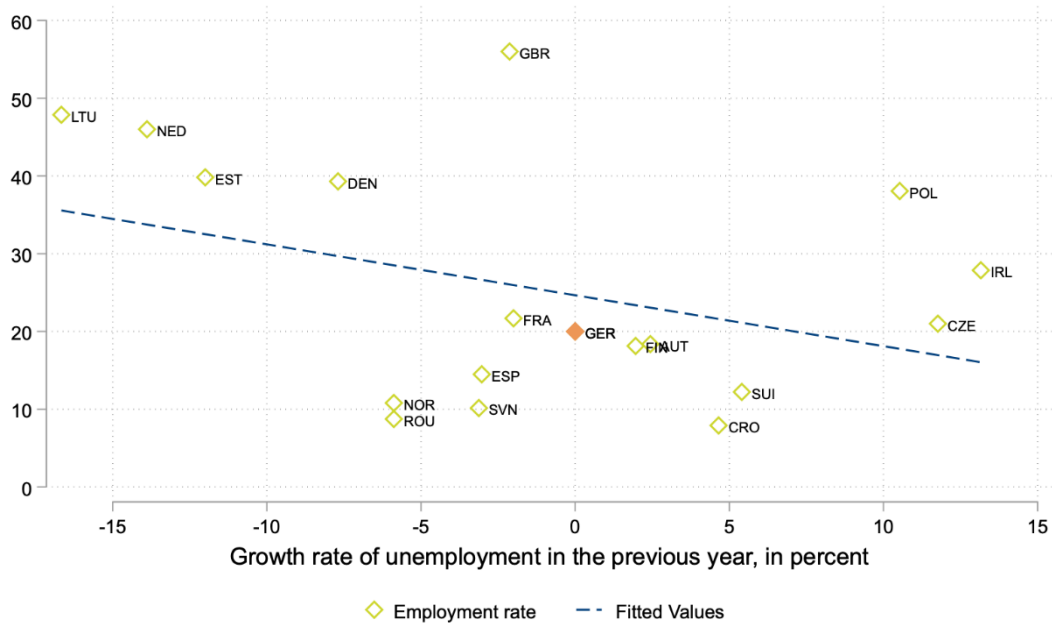
Subsequently, factors describing the labour market situation and structure of host countries are examined: the country’s unemployment growth rate (Figure 5), an index classifying labour market regulation (Figure 6), and the size of the low-status labour market segment (Figure 7).

The analysis reveals that countries with a positive labour market development, indicated by a decrease in the unemployment growth rate, generally exhibit higher employment rates among Ukrainian refugees (see Figure 5).⁹ This observation aligns with the theoretical premise that dynamic labour markets are more capable of integrating newcomers. Supporting research indicates that during economic downturns, migrants are more likely to lose jobs (Fairlie et al. 2020; Montenegro et al. 2022) and face greater challenges in securing employment if previously unemployed (Forsythe and Wu 2021). Nevertheless, the correlation between unemployment growth rate and refugee employment rates is relatively weak, and the Spearman correlation test does not show a statistically significant relationship ($Rho = -0.14$; $p\text{-value} = 0.17$).

⁹ A further analysis shows that the level of unemployment in a country in the previous year is also negatively correlated with the employment rates of Ukrainian refugees (see Figure A1 in the appendix), but the correlation is very weak. The Spearman correlation test shows no significant correlation ($Rho = -0.03$; $p\text{-value} = 0.74$). This is also confirmed by the multivariate analyses (see Model 5 in Table A3 in the Appendix).

Figure 5: Correlation between the employment rate of Ukrainian refugees and the growth rate of unemployment in the previous year

Percentage of people of working age (18 to 64 years), Q4 2022

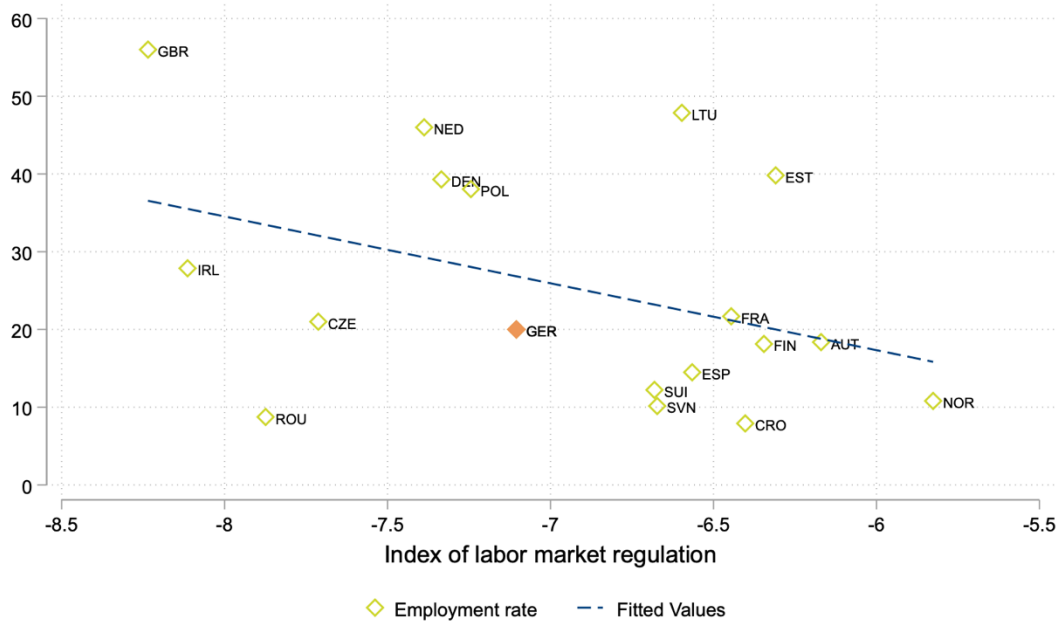


Sources: Table A2 in the appendix (employment rates); Eurostat 2024 (growth rate of unemployment in the previous year); own presentation.

Figure 6 illustrates the correlation between labour market regulation and the employment rate of refugees. Countries with stricter labour market regulations, exemplified by Norway with a regulation index of -5.8, show lower employment rates (11 percent). Conversely, the United Kingdom, with a less stringent regulation index of -8.2, exhibits a high employment rate (56 percent). This relationship is supported by existing research (Kogan 2007; Lee et al. 2020), highlighting how regulatory environments can impact labour market access for refugees. Nonetheless, the Spearman correlation test indicates that the relationship between labour market regulation and employment rates of Ukrainian refugees is weak and falls short of statistical significance ($Rho = -0.19$; $p\text{-value} = 0.06$).

Figure 6: Correlation between the employment rate of Ukrainian refugees and the labour market regulation index

Percentage of people of working age (18 to 64 years), Q4 2022

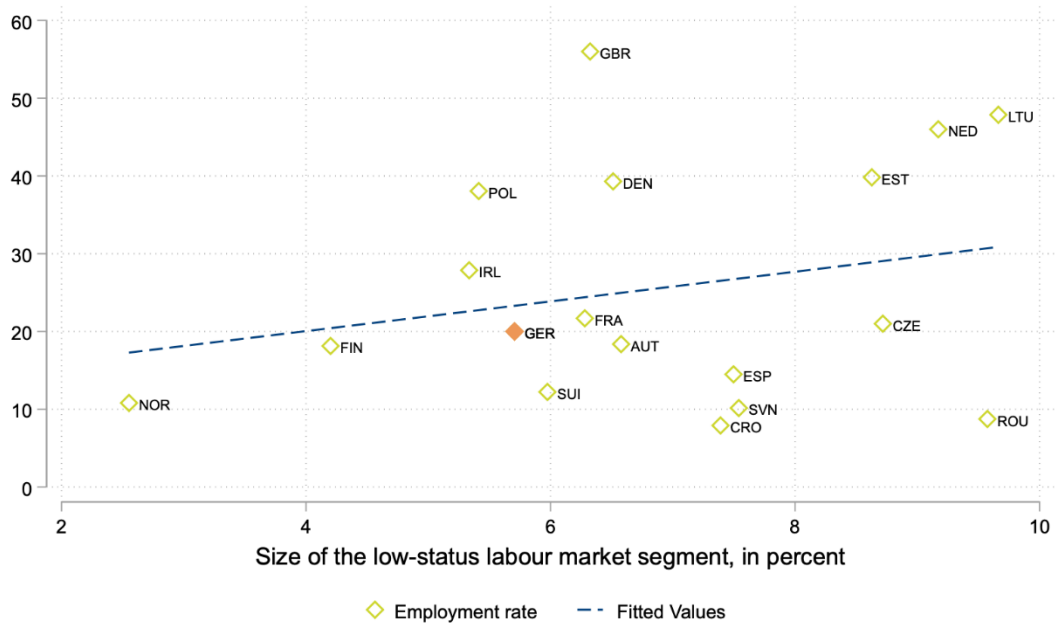


Sources: Table A2 in the appendix (employment rates); Gwartney et al. (2023) (index of labour market regulation); own presentation.

Figure 7 illustrates that a high share of employment in low-qualification labour market segments is positively correlated with higher employment rates of Ukrainian refugees. This trend suggests that countries with significant demand for low-skilled labour are more likely to employ migrants, as positions in this sector often require fewer educational qualifications as a productivity signal (Fleischmann and Dronkers 2010; Kogan 2006). Additionally, search and information costs are likely higher in segments requiring higher qualifications, potentially delaying the job matching process and thus labour market integration. For instance, Norway, where the low-qualification labour market segment is small, also shows low employment rates for Ukrainian refugees. Conversely, countries like Lithuania and the Netherlands, which have a substantial portion of their labour market in low-qualification segments, show higher employment rates. However, there are exceptions, such as Romania, which, despite a high share of low-qualification jobs, has a low refugee employment rate. Germany positions itself in the middle of these trends. Nevertheless, the Spearman correlation test indicates only a weak correlation ($Rho = -0.09$; $p\text{-value} = 0.38$).

Figure 7: Correlation between the employment rate of Ukrainian refugees and the share of employees working in the low-status labour market segment

Percentage of people of working age (18 to 64 years), Q4 2022



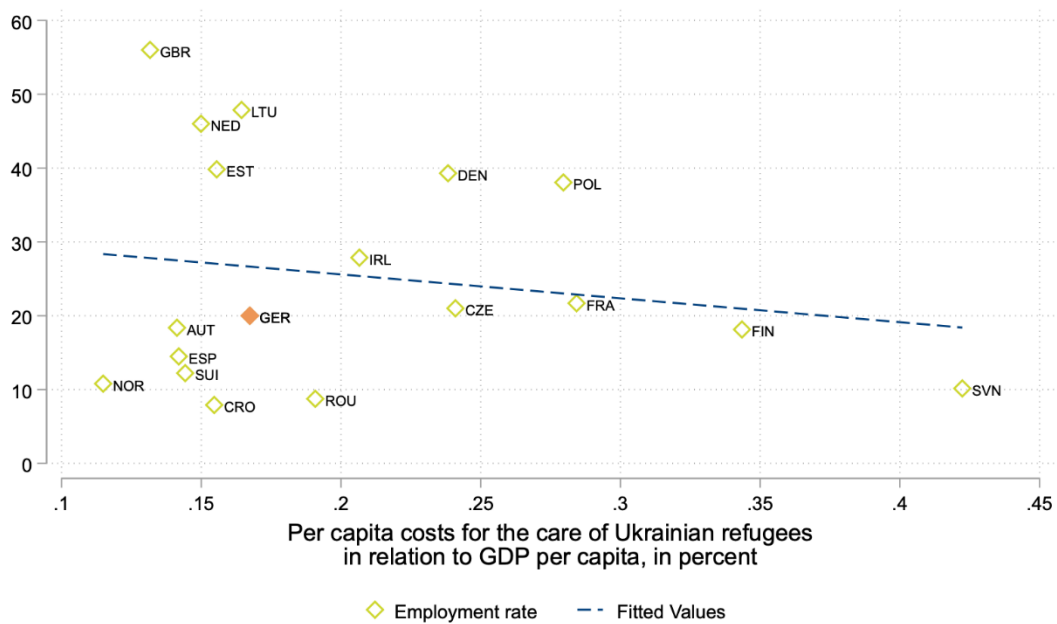
Sources: Table A2 in the appendix (employment rates); Eurostat (2021a) (scope of the low-status labour market segment); own presentation.

The discussion about the influence of the level of social benefits on labour market integration is a central topic in academic research as well as in political and public debates. It is often assumed that lower transfer payments might enhance work incentives, thus potentially boosting employment. However, insufficient transfer payments may also impede investments in human capital and job searching, leading to ambiguous or even adverse effects on employment outcomes. Empirical research indicates that insufficient social benefits can lead to unintended, long-term negative impacts such as decreased educational participation among refugee children and increased crime rates (Dustmann et al. 2024a; 2024b). These studies also reveal that while benefit reductions may temporarily raise labour market participation and employment rates, these effects do not persist in the medium to long term.

As Figure 8 illustrates, there is a weak negative relationship between transfer payments, measured in terms of per capita costs of the care of refugees in relation to the GDP per capita of the destination country, and the employment rates of Ukrainian refugees. Figure 8 suggests that countries allocating a higher share of GDP per capita to care for Ukrainian refugees tend to have lower employment rates. However, the Spearman correlation test indicates that this relationship is very weak and not statistically significant ($Rho = -0.00$; $p\text{-value} = 0.96$).

Figure 8: Relationship between the employment rate of Ukrainian refugees and per capita of costs for the care of Ukrainian refugees in relation to GDP per capita (in percent)

Percentage of people of working age (18 to 64 years), Q4 2022

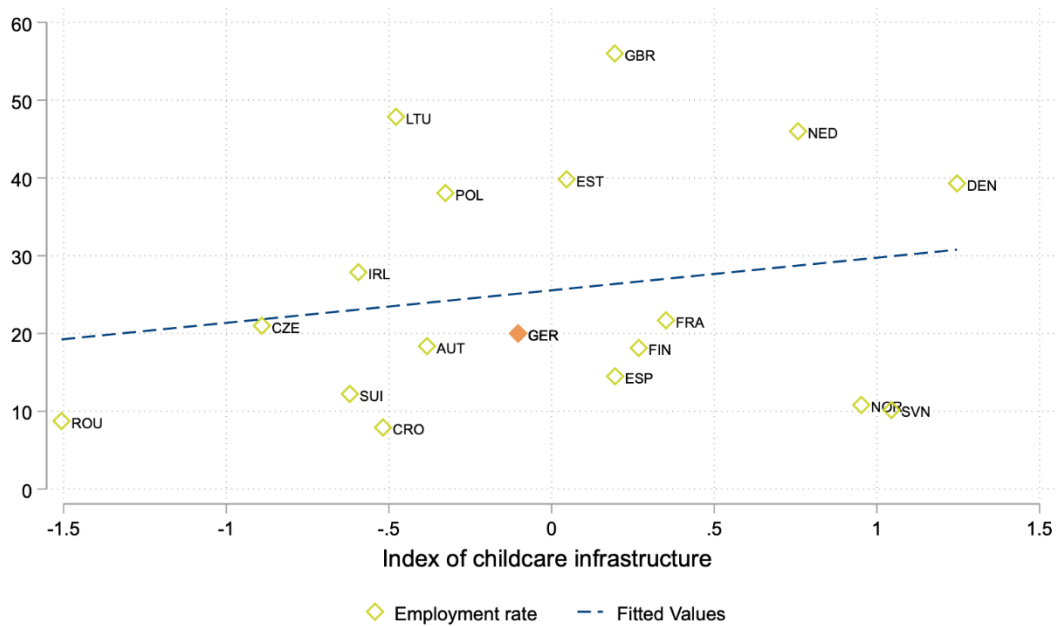


Sources: Table A2 in the appendix (employment rates); OECD (2022b) (cost of care per capita of refugees); Eurostat (2023c) and World Bank (2024a) (GDP per capita); own presentation.

Figure 9 illustrates the positive influence of well-developed childcare infrastructure on the employment rate of refugees, which is particularly relevant for Ukrainian refugees—many of whom are women with underage children and often single parents. A robust childcare system allows these refugees to use childcare hours for further education and intensified job searches, supporting their labour market integration (see Gambaro et al. 2021, Drange and Telle 2015). However, the results of the Spearman correlation test indicate only a weak and statistically insignificant correlation ($Rho = 0.12$; $p\text{-value} = 0.25$).

Figure 9: Correlation between the employment rate of Ukrainian refugees and the childcare infrastructure index

Percentage of people of working age (18 to 64 years), Q4 2022



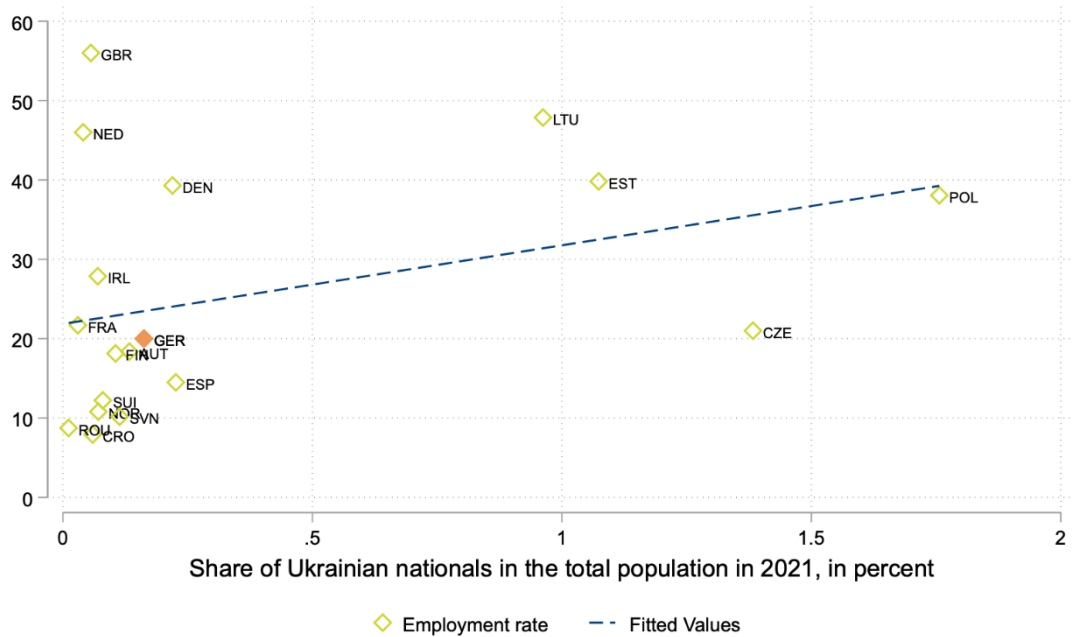
Sources: Table A2 in the appendix (employment rates); European Commission (2019), Eurostat (2021b; 2024b), OECD (2024) (childcare infrastructure index); own presentation.

Destination countries providing full access to their healthcare system for Ukrainian refugees demonstrate higher employment rates compared to those offering only basic and emergency care. This relationship is supported by a Spearman correlation test result (no figures; Spearman correlation test: $Rho = 0.29$; p -value = 0.00). The link between comprehensive healthcare access and employment rates is attributable to the role of good health in facilitating labour market integration by maintaining physical and mental well-being (Chatterji et al. 2011; Frijters et al. 2014; Kosyakova and Brücker 2024; Pelkowski and Berger 2004).

Figure 10 examines the correlation between the employment rate of Ukrainian refugees and the presence of Ukrainian communities within the host countries. The Spearman correlation test shows a strong and statistically significant positive correlation ($Rho = 0.35$; p -value = 0.00), indicating that a higher share of the Ukrainian population in a country is associated with higher employment rates for Ukrainian refugees. This trend is particularly evident in countries with substantial Ukrainian populations before 2022, such as Poland. The literature extensively supports the positive influence of co-ethnic networks on labour market integration, highlighting the benefits of direct recommendations and information exchange within these networks (Battisti et al. 2022; Damm 2009; Edin et al. 2003; Martén et al. 2019). Additionally, a more significant presence of Ukrainians in destination countries may help reduce prejudices and encourage employers to hire Ukrainian refugees, drawing on positive prior experiences.

Figure 10: Correlation between the employment rate of Ukrainian refugees and the share of Ukrainian nationals in the total population in 2021

Percentage of people of working age (18 to 64 years), Q4 2022

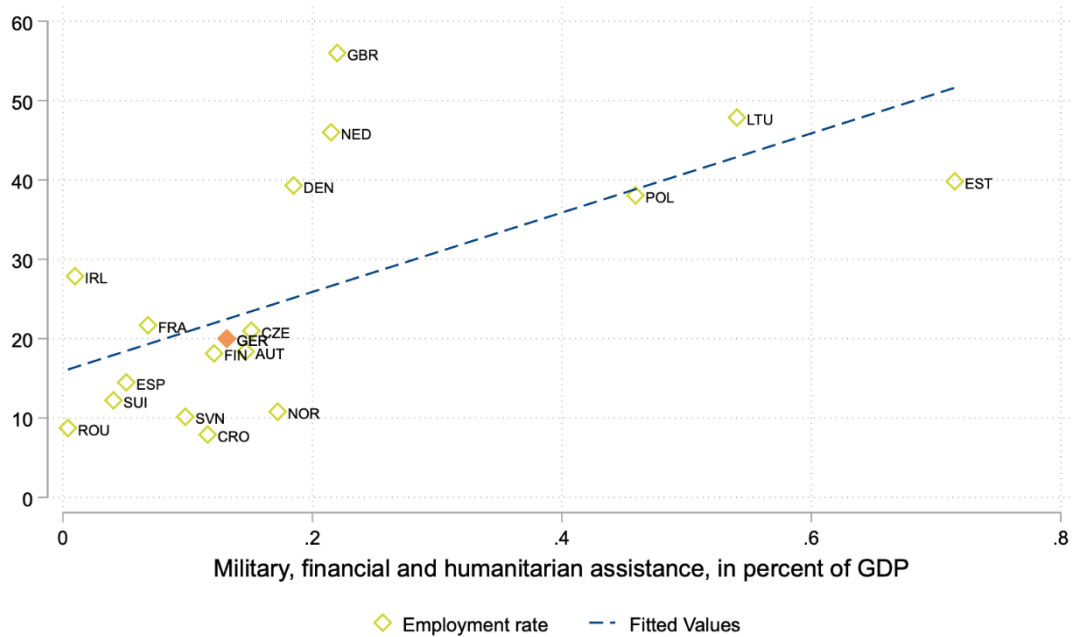


Sources: Table A2: Sources for the employment rates in the Annex (employment rates); Census (2021), Eurostat (2023b; 2024c), World Bank (2024b) (share of Ukrainian nationals in 2021); own presentation.

Furthermore, Figure 11 reveals a pronounced positive correlation between the levels of military, financial, and humanitarian support for Ukraine—measured as a percentage of the host country's GDP—and the employment rates of refugees (Spearman correlation tests: $Rho = 0.60$; $p\text{-value} = 0.00$). However, notable exceptions exist. For instance, Estonia displays an above-average support level (0.78 percent of GDP) but only a moderate employment rate for refugees. Conversely, Romania, which provides the lowest level of support, also has one of the lowest employment rates, less than 10 percent, as of the Q4 of 2022.

Figure 11: Relationship between the employment rate of Ukrainian refugees and the share of military, financial and humanitarian assistance to Ukraine (as a share of GDP)

Percentage of people of working age (18 to 64 years), Q4 2022

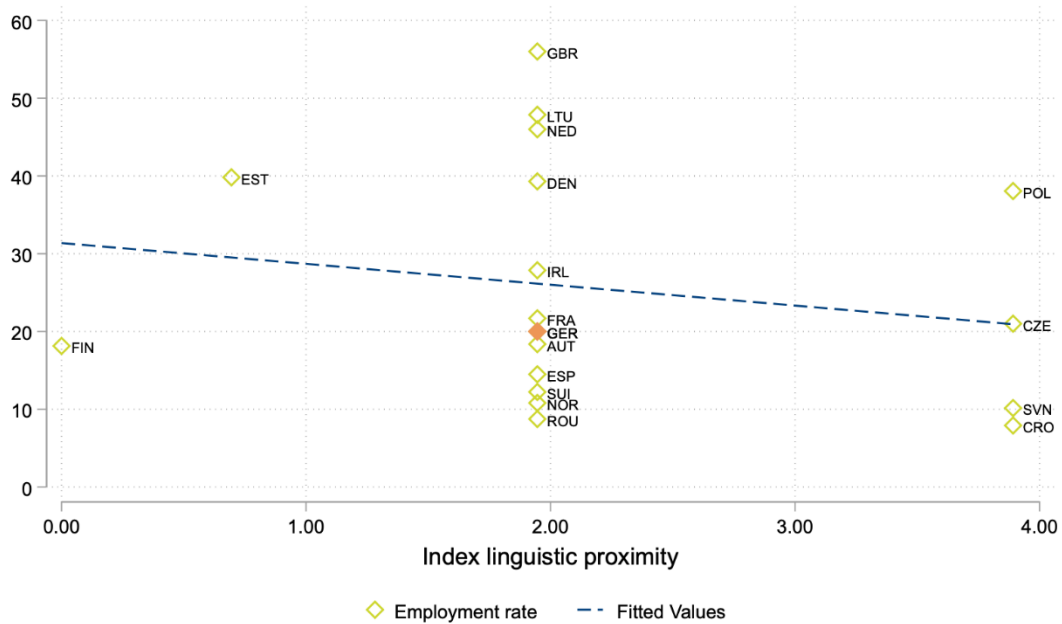


Sources: Table A2 in the appendix (employment rates); Antezza et al. (2024) (share of military, financial and humanitarian support for Ukraine); own presentation.

Figure 12 illustrates the relationship between the employment rates of Ukrainian refugees and an index of linguistic proximity. Surprisingly, countries whose official language is similar to Ukrainian show a slightly negative correlation with employment rates. Slavic languages such as Polish and the languages of the Finno-Ugric language family such as Finnish are particularly noteworthy here. However, due to the limited range of the index, these results should be interpreted with caution. Additionally, the Spearman correlation test reveals a weak and statistically insignificant correlation ($Rho = -0.01$; $p\text{-value} = 0.91$).

Figure 12: Correlation between the employment rate of Ukrainian refugees and the linguistic proximity index

Percentage of people of working age (18 to 64 years), Q4 2022

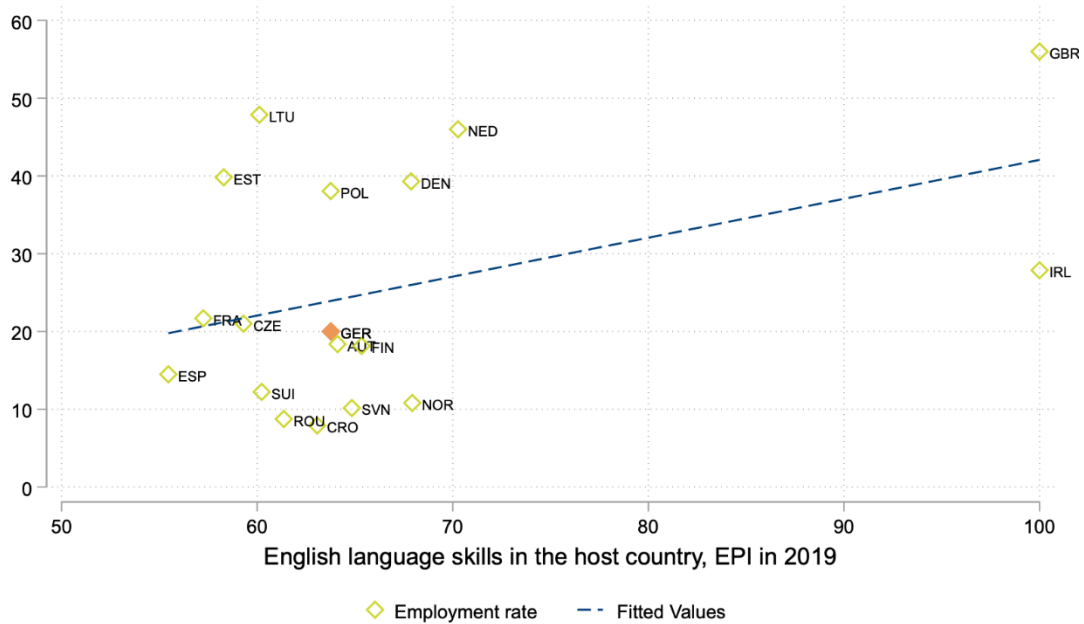


Sources: Table A2 in the appendix (employment rates); Melitz and Toubal (2014) (index of linguistic proximity); own presentation.

Figure 13 displays the correlation between the employment rates of Ukrainian refugees and the English language skills present in the host countries. Overcoming language barriers is crucial for successful labour market integration (Lee et al. 2020; Kosyakova and Kogan 2022). Countries with widespread English proficiency facilitate labour market access for refugees, who often already possess English skills before arrival, saving them significant time and effort in language acquisition. The analysis indicates that in countries with a high English Proficiency Index (EPI), such as England and Ireland—where English is not only the official language but also the native language in most households (EPI=100)—there is a significantly higher employment probability for refugees. Conversely, countries with a lower EPI, like Spain (EPI=55) and France (EPI=56), exhibit lower employment rates. The Spearman correlation test shows a weak positive and statistically insignificant correlation ($Rho = 0.19$; $p\text{-value} = 0.06$).

Figure 13: Correlation between the employment rate of Ukrainian refugees and English language skills in the host country in 2019

Percentage of people of working age (18 to 64 years), Q4 2022

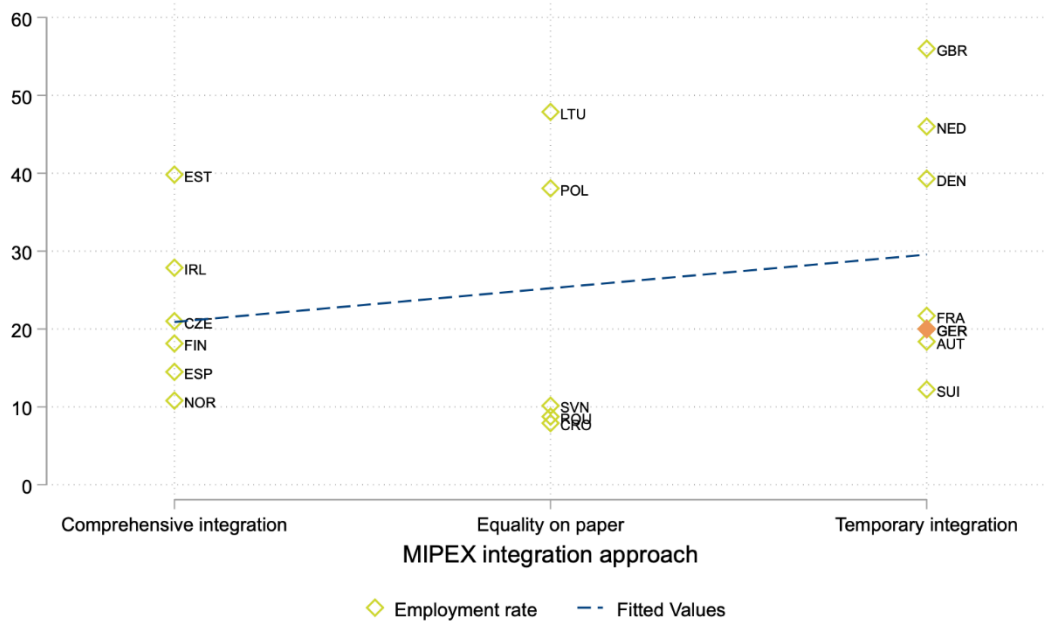


Sources: Table A2 in the appendix (employment rates); EF EPI (2019) (English language skills in the host country); own presentation.

Figure 14 illustrates the relationship between employment rates and the comprehensiveness of a country's integration policy, as measured by the Migrant Integration Policy Index (MIPEX 2020), which summarizes various integration policies, legal equality, and anti-discrimination measures (for more details, see section 3.2).

The analysis shows a negative correlation: countries with comprehensive integration strategies that ensure equal rights, opportunities, and security tend to have lower employment rates, while countries with less comprehensive policies exhibit higher employment rates, at least in the short term (Spearman correlation test: $Rho = -0.20$; p -value = 0.05). Approaches like “equality on paper”, which ensure equal rights and long-term security without providing equal opportunities, and “temporary integration”, offering basic rights and opportunities without long-term security, demonstrate a positive correlation with employment rates. This finding aligns with research indicating a trade-off between the speed and sustainability of integration processes (Arendt and Bolvig 2023). However, the observation period is too short to assess the medium- and long-term effects of different integration strategies effectively.

Figure 14: Correlation between the employment rate of refugees and the MIPEX integration approach
 Percentage of people of working age (18 to 64 years), Q4 2022



Sources: Table A2 in the appendix (employment rates); MIPEX (2020) (MIPEX integration approach); own presentation.

In the final step, the analysis explores the relationship between country-specific active labour market policies—specifically, support provided to Ukrainian refugees in their job search—and the employment rates of Ukrainian refugees. These measures are designed to reduce costs for both employees and employers, potentially increasing the likelihood of successful labour market integration. The data indicate a strong positive correlation between the support provided to Ukrainian refugees in their job search and their employment rates (Spearman correlation test: $Rho = 0.37$; $p\text{-value} = 0.00$).

The correlations highlighted between specific characteristics and the employment rates of Ukrainian refugees across European countries demonstrate how various country-specific conditions and integration approaches can impact labour market integration. It is evident that countries not only differ significantly in the demographic composition of the newly arrived refugees but also in aspects such as labour market conditions and regulation, social infrastructure like childcare, the extent of social transfer payments, social networks and welcoming culture, as well as the impact of language barriers and integration strategies. This diversity underscores the complexity of the factors influencing labour market integration. Therefore, an exclusively bivariate analysis is merely a preliminary step in illustrating potential correlations. Interdependencies among different macro-indicators, which often correlate with each other, are not adequately addressed by these bivariate analyses. Consequently, multivariate analyses are crucial to precisely delineate the specific contributions of individual factors and to understand how these interdependencies can shape integration processes at the macro level.

4.3 Multivariate analyses of the factors influencing the employment of Ukrainian refugees

In the subsequent step, a regression analysis was conducted, with the employment rate serving as the dependent variable and the macroeconomic indicators discussed in the prior section as independent variables. The results derived are intended for descriptive purposes and should not be construed as causal interpretations. To facilitate direct comparisons of the explanatory contributions of the independent variables, the macroeconomic factors were standardized to have a mean of zero and a standard deviation of one. This normalization enables comparisons across different scales and measurement units. For instance, a regression coefficient of two implies that an increase of one standard deviation in the macroeconomic factor leads to an average increase of two percentage points in employment rate. The descriptive statistics for each variable can be found in Table A4 in the appendix.

The regression analysis results, depicted graphically in Figure 15 (see also Model 2 in Table A3 in the appendix for standard errors), highlight the significant impact of the demographic structure and family constellation of Ukrainian refugees on employment rates. Specifically, an increase in the number of children per woman of working age by one standard deviation correlates with a four percentage point decrease in employment rates across different countries. The average value of this indicator is 0.75, with one standard deviation equaling 0.12 or 16 percent of the average value (see Table A4 in the appendix). This implies that if the number of children per woman of working age in a destination country is 16 percent higher than the average value in the sample, the employment rate of Ukrainian refugees decreases by four percentage points. Similarly, a 30 percent higher proportion of people of retirement age is associated with a five percentage point decrease in employment rates (mean: 9.25; standard deviation: 2.66; see Table A4 in the appendix). These findings illustrate that families with underage children and older adults face significant hurdles in labour market integration.¹⁰

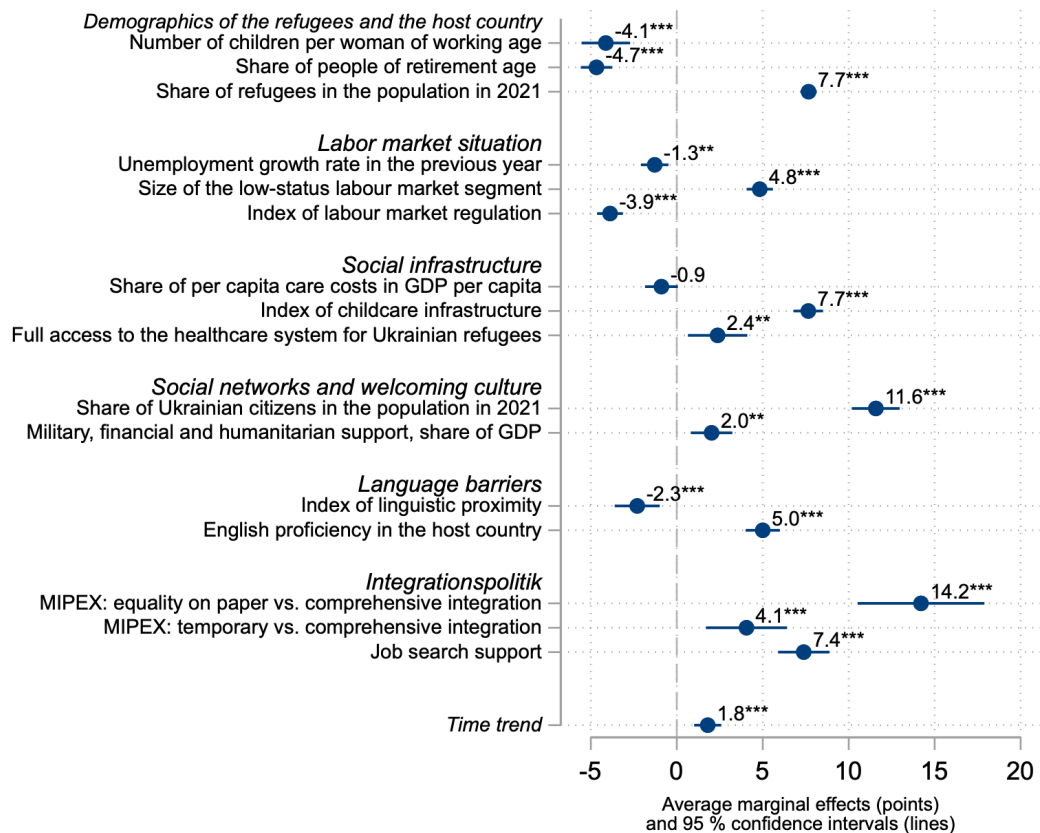
Additionally, a high share of refugees, measured as a percentage of a country's total population in 2021, shows a positive correlation with the employment rate of Ukrainian refugees. This correlation may suggest the presence of a well-established integration infrastructure and could also reflect generally open and welcoming societal attitudes towards refugees.

The labour market structure significantly impacts the labour market integration of Ukrainian refugees. Specifically, the growth rate of unemployment in the previous year has a substantial negative influence on the employment rates of Ukrainian refugees, indicating that Ukrainian refugees face lower chances of finding employment in countries with increasing unemployment rates.

¹⁰ To further investigate the age aspect, in a supplementary analysis the share of people of retirement age is replaced by the share of younger adults (18-34 years; data not available for United Kingdom) among adult Ukrainian refugees (see Model 4 in Table A3 in the appendix). The results show that a higher share of younger people leads to a higher employment rate, which underlines the importance of the age structure.

Figure 15: Relationship between macro indicators and employment rates of Ukrainian refugees

Dependent variable: employment rate. Average marginal effects with 95 percent confidence intervals



Notes: ***, **, * significant at the 0.1, 1 and 5 percent level. Standard errors grouped at country level (bootstrap method). The continuous macro indicators were standardized by normalizing them to a mean of 0 and a standard deviation of 1.

Legend: If the number of children per working-age woman among Ukrainian refugees increases by one standard deviation, the employment rate is 4.1 percentage points lower.

Sources: see Table A1 and Table A2 in the appendix (employment rates); see chapter 3.2 (indicators); own presentation.

Moreover, a high demand for low-skilled labour, indicated by a large share of the labour market in low-status or low-qualification occupations, significantly correlates with higher employment rates of Ukrainian refugees. Specifically, an increase by one standard deviation in this labour market segment—equivalent to 30 percent of the mean value of the countries in the sample—results in a five percentage point increase in the employment rate of Ukrainian refugees (mean: 6.60; standard deviation: 1.97; see Table A4 in the appendix). This relationship highlights that jobs requiring lower qualifications can provide refugees with quicker access to the labour market, often due to limited local language proficiency or unrecognized qualifications. Additionally, a strong demand for low-skilled labour may shape the type of refugee migration, such as seasonal work in agriculture, influencing the aggregated employment rates as more refugees may pursue immediate employment opportunities.

The regulation of the labour market also exhibits a negative correlation with the employment rate of Ukrainian refugees. Stricter labour market regulations, such as comprehensive protection

against dismissal, can complicate access to the labour market for newly arrived Ukrainian refugees by raising the barriers to entry for employers.

Although there is a negative correlation between per capita expenditure on care (transfer payments, education expenditure, etc.) for Ukrainian refugees and the per capita GDP in the host country, this correlation does not reach statistical significance at the conventional 5 percent level. Compared to other factors examined, the quantitative impact of this variable is the weakest. In quantitative terms: A reduction in expenditure per capita relative to GDP per capita by one standard deviation, which corresponds to 40 percent of the mean value of the countries in the sample, is associated with an increase in the employment rate of one percentage point (the mean value in the sample is 0.20, the standard deviation 0.08, Table A4 in the appendix). This means that per capita expenditure would have to decrease by 41 percent to achieve a one percentage point increase in the employment rate. However, this effect is not statistically significant, indicating that the null hypothesis – that this indicator of transfer payments and other welfare state expenditures has no effect on employment – cannot be rejected. Like all other results in this report, this finding is descriptive and should not be interpreted causally.

A well-developed childcare infrastructure is linked to a significantly higher employment rate among Ukrainian refugees. An improvement in the childcare infrastructure index by one standard deviation is associated with an increase in the employment rate by approximately 8 percentage points. This positive correlation suggests that robust childcare infrastructure particularly enables women refugees to balance work and family responsibilities more effectively. This finding emphasizes the importance of investing in childcare facilities as a strategic approach to enhancing labour market integration for newcomers, which could also bolster their economic inclusion, social integration and overall well-being (refer to Gambaro et al., 2021; Goßner and Kosyakova, 2021).

Additionally, comprehensive access to the healthcare system positively correlates with higher employment rates among Ukrainian refugees, highlighting the dual importance of healthcare not only for humanitarian reasons but also as a crucial factor in enhancing employability and labour productivity (see Chatterji et al., 2011; Frijters et al., 2014; Pelkowski and Berger, 2004).

Social networks have emerged as the most significant positive factor for the labour market integration of Ukrainian refugees. Extensive literature indicates that social networks are an effective channel for job placement, with refugees who establish extensive contacts within their host society significantly more likely to find employment. This study's analysis supports this, showing that countries with a higher proportion of Ukrainian nationals prior to the war exhibit higher employment rates for Ukrainian refugees.

Furthermore, support in the form of military, financial, and humanitarian aid to Ukraine, measured as a percentage of the host country's GDP in 2021, significantly influences the employment outcomes of Ukrainian refugees. This suggests that a host country's pronounced commitment to Ukraine may be associated with higher employment rates among Ukrainian refugees.

In our multivariate analysis, the index of linguistic proximity between Ukrainian and the languages of the host countries shows a negative correlation with the employment rates of Ukrainian refugees when controlling for other relevant macro factors. This result is

counterintuitive, as knowledge of the national language generally facilitates labour market integration. However, linguistic similarities alone may not sufficiently enable labour market integration. In contrast, a positive statistical correlation exists between the prevalence of English in the host country and employment rates. Since many Ukrainian refugees possess English language skills, the widespread use of English in business significantly aids their entry into the labour market. Particularly in Germany, language barriers present a substantial obstacle, and efforts to enhance German language proficiency are among the most common support requests from employable Ukrainian refugees (see Brücker et al., 2023; Gatskova and Kosyakova, 2024). This highlights the critical need for focused language support programs.

A country's fundamental approach to integration, as assessed by the MIPEX index, significantly influences the labour market integration of refugees. Our analysis indicates that comprehensive integration models, which ensure complete rights, opportunities, and security, may initially correlate with lower employment rates. Conversely, temporary integration models, which provide basic rights and participation opportunities but lack long-term security prospects, and especially models that ensure full rights and security without actual equality of opportunity ("equality on paper"), tend to show higher initial employment rates. However, the observation period is too brief to conclusively evaluate the medium- and long-term effects of these different integration strategies. Comprehensive strategies focused on long-term human capital investments, such as language courses, may cause initial lock-in effects that delay immediate labour market entry but can lead to more sustainable integration and superior outcomes over time compared to strategies that prioritize rapid labour market integration.

As noted in Chapter 3.2, the integration approaches measured by MIPEX do not always align with the specific strategies a country employs for Ukrainian refugees. For instance, Germany is categorized by MIPEX as adopting a "temporary integration" approach but has implemented a language-first strategy for Ukrainian refugees. The MIPEX integration approach variable is therefore presented in Model 6 of Table A3 in the appendix, along with an indicator for the "job-first approach", reflecting whether a country has opted for immediate labour market entry over a language-based or mixed approach. As expected, a job-first approach correlates with higher short-term employment rates for Ukrainian refugees. Further discussion on this is available in Chapter 4.4.

Labour market policy measures, particularly job search support, are crucial for enhancing employment rates. Effective programs that provide targeted job search assistance considerably boost the likelihood of refugees finding employment quickly and integrating into the labour market more efficiently.

The dataset spans a relatively short integration period from the Q4 of 2022 to the Q1 of 2024. During this time, there is a noticeable positive trend: the proportion of employed refugees increases across all countries as time progresses. This trend aligns with numerous studies indicating that refugees' employment rates improve with longer stays in the host country (Brücker et al., 2024a; 2024b; Kosyakova et al., 2023; Kosyakova and Brücker, 2024).

4.4 Trade-off between speed and sustainability

Our multivariate analysis underscores the significant impact of a country's integration policy on the labour market integration of refugees: Different policy approaches lead to varied integration outcomes. European countries' integration policies generally fall into two categories based on their focus: "work first" or "language first".

Countries like Germany, Switzerland, and Norway provide publicly funded language courses for Ukrainian refugees, adhering to the "language first" approach. Conversely, Denmark, Finland, Greece, and the Netherlands lack such support, distinguishing their integration strategies (OECD 2022a). Sweden adopts a "work first" approach for Ukrainian refugees, excluding them from the usual integration programs offered to recognized refugees or other municipal adult education programs (for example, 24-month integration programs offered to recognized refugees or other municipal education programs for adults).

Comparing the Nordic countries with Germany reveals that while "work first" approaches like those in Denmark facilitate quick labour market entry in the short term, they do not necessarily yield higher long-term employment rates or incomes. Studies indicate that such strategies, implemented in Denmark since 2016, provide initial benefits but are not sustainable, often resulting in lower long-term incomes (Arendt 2022; Arendt and Bolvig 2023; Hernes et al. 2022a). The "work first" approach may lead to precarious employment situations with fewer working hours and fixed-term contracts that often underutilize the refugees' qualifications. This approach also potentially hampers language acquisition, jeopardizing long-term integration policy goals.

A study by Tyldum et al. (2023) observed that many Ukrainian refugees in Sweden found work relatively quickly, particularly in sectors like cleaning, construction, and agriculture. However, these jobs typically offer low pay and are often temporary, part-time positions. Limited state support and lack of access to integrative measures like language courses increase the risk of exploitation and social marginalization. The "work first" strategy in Sweden, therefore, poses long-term societal risks, potentially leading to more social inequality and an increase in the "working poor", placing additional pressure on Sweden's social security systems and potentially incurring higher societal costs. Tyldum et al. (2023) argue that a short-term employment policy that does not focus on sustainable integration could ultimately be more expensive than initially assumed.

In turn, empirical research suggests that in countries employing a "language-first" approach, employment rates steadily increase with the duration of stay and often surpass those in "work-first" countries within ten years. For instance, refugees who moved to Germany between 2013 and 2019 had an employment rate of 68 percent eight years after their arrival (Brücker et al. 2024a; 2024b). In Denmark, employment rates for the 2008 to 2019 refugee cohort reached only 55 percent for men and 45 percent for women eleven years post-immigration (Hernes et al. 2022a). Norway and Sweden, which emphasize human capital acquisition in refugee integration, exhibit nearly 10 percent higher employment rates for this cohort (Hernes et al. 2022b). The refugee cohort from Syria, Iran, and Afghanistan granted status in the Netherlands in 2014 reached an employment rate between 36 percent and 44 percent five and a half years post-status (Centraal Bureau voor de Statistiek 2021), while in Austria, 51 percent of the 2015 refugee cohort were employed by mid-2021 (Public Employment Service Austria 2021).

The balance between achieving short-term integration success in low-skilled, unstable jobs and investing in education and language for more stable labour market trajectories (De Vroome and van Tubergen 2010; Kanas and Kosyakova 2023) depends crucially on Ukrainian refugees' long-term stay intentions. Historical data and surveys indicate that individuals who speak the host country's language and are employed in roles that match their qualifications are more likely to desire long-term residence (Willott and Stevenson 2013). This underscores that the choice of integration policy approach may directly shape refugees' long-term settlement prospects and intentions.

5 Limitations

Although the results presented provide initial insights into the varied labour market integration of refugees across different countries, our study is subject to limitations. Due to constraints in data availability, key influencing factors can only be approximated through proxies, and some variables could not be included at all. In order not to leave these important influencing factors for the labour market integration of refugees unmentioned, the subsequent chapter will discuss these elements, leaving room for future research to explore their impact more thoroughly.

For instance, the data available does not completely capture the actual (direct or indirect) transfer payments to Ukrainian refugees, such as costs for housing or healthcare, which may influence the reservation wage and thus the motivation to quickly take up (non-qualified) work. Additionally, factors like the amount of permissible additional earnings or regulations that terminate eligibility for free accommodation upon employment commencement can be pivotal. To maintain comparability across countries, we have used country per capita costs for care of Ukrainian refugees relative to GDP per capita as a proxy for transfer payments.

Moreover, there are four areas where data is unavailable, meaning these could not be factored into our analysis or were only approximated through other variables: (i) vocational or school education and its recognition, (ii) access to housing benefits, (iii) the possibility of becoming self-employed, (iv) the frequency with which job advertisements are published in English. Despite these data limitations, it is crucial to outline these conditions to provide a comprehensive view of the factors that significantly influence labour market integration, which will be detailed in the following sections.

Many Ukrainian refugees bring high qualifications and valuable work experience (Kosyakova et al. 2023). As education is a decisive factor for labour market integration, the chances of employment vary depending on previous education and the education systems of the host countries. Previous literature shows that the level of education of refugees has a significant influence on which countries they migrate to. Cerna (2019), for example, shows that highly qualified refugees tend to migrate to countries with better economic opportunities and higher requirements for skilled workers. A UNESCO study supports these observations and emphasizes that well-educated refugees tend to choose countries that offer them opportunities to continue their academic and professional careers. Countries with established higher education systems are particularly attractive (Martin and Stulgaitis 2022). However, due to the lack of microdata on

the education level of Ukrainian refugees across all countries, it is difficult to directly correlate refugee education with employment rates.

Recognition of foreign educational qualifications also plays a critical role in labour market integration, particularly for obtaining positions commensurate with one's training (IQ 2024; MIDEM 2022; Thränhardt 2023). For instance, in Germany, having a recognized qualification significantly boosts employment prospects (Brücker et al. 2021; Damelang et al. 2020). The EU facilitates the recognition of foreign qualifications through legal frameworks like the European Qualifications Framework (EQF) and the European Credit Transfer and Accumulation System (ECTS), which help harmonize qualifications across different educational systems (European Commission 2024). Despite these frameworks, the harmonization of recognition procedures is challenging due to varying national regulations. In light of the influx of Ukrainian refugees, some countries, including Spain, Italy, and Lithuania, have eased formal recognition requirements in certain professions to accommodate the new arrivals (OECD 2022a; Thränhardt 2023).

Access to housing subsidies and the nature of accommodation are closely linked to financial benefits. In the initial months following their arrival, EU countries have predominantly used reception centers or private households to house Ukrainian refugees (MIDEM 2022; Thränhardt 2023). Additionally, many countries provide rent subsidies and, in some instances, financial support for accommodations in private households (OECD 2022a). Previous research has examined the effects of shared accommodation, identifying negative impacts on health and subjective well-being (Ambrosetti et al. 2021; Porter and Haslam 2005), as well as on the transition rates to first employment (Bevelander et al. 2019). Consequently, both the type and level of financial support and the accommodation format are important factors to consider when evaluating the varied employment rates of refugees.

Refugees face varying opportunities for self-employment across different countries, contributing to cross-national differences in employment rates. These variations arise from diverse legal frameworks, access to financing, support programs, and the socio-economic conditions of the host countries. In nations offering comprehensive integration programs and access to microfinance, it is generally easier for refugees to start their own businesses and become economically active. Conversely, in countries where such support is limited or bureaucratic obstacles are significant, refugees find it much more challenging to become self-employed (Abebe 2023). Although this report does not provide specific data on self-employment among refugees due to data limitations, understanding the role of self-employment is crucial for analyzing work integration differences across countries.

This report highlights that proficiency in English positively influences the labour market integration of refugees. Another contributing factor to differing employment rates across countries could be the frequency with which job advertisements are published in English. In nations where job ads are commonly available in English, refugees who speak English have better access to the labour market, as they can more readily understand and respond to job opportunities (Mahjoub and Kruey 2021). Conversely, in countries where job advertisements are primarily in the local language, refugees lacking these language skills face greater challenges in locating and successfully applying for suitable jobs. These language barriers, therefore, significantly affect refugee employment rates. Unfortunately, due to the absence of specific data

on the frequency of English-language job advertisements, this report cannot provide further details on this aspect.

6 Conclusion

Since the onset of Russia's war of aggression against Ukraine, Europe has witnessed the largest refugee movement since World War II. According to the United Nations High Commissioner for Refugees (UNHCR 2024), approximately 6.4 million individuals had fled Ukraine by March 2024, with Germany hosting the largest number in Europe, receiving over 1.1 million refugees (UNHCR 2024). Integrating these refugees into the labour market poses significant challenges. Most refugees arrive lacking crucial resources such as language skills, local market knowledge, and professional networks, compounded by the psychological stress from war and displacement. The demographic profile of Ukrainian refugees, predominantly composed of women who often arrive in Germany as single parents – due to conscription bans on men – and an older average age compared to other refugees and migrants, adds further complexity to the integration process.

Previous studies have highlighted significant variations in the employment rates of Ukrainian refugees across Europe, pointing to potential country-specific factors influencing labour market integration (IQ 2024, MIDEM 2022, Thränhardt 2023). This study aims to investigate the importance of various factors at the country level that could explain these observable differences in employment rates among Ukrainian refugees. However, the direct comparison of these rates between countries is constrained by data availability, as there is no uniform data source that covers all countries comprehensively and consistently over time, such as the European Labour Force Survey (LFS). To address this, a comprehensive database was established for this analysis, covering employment rates for 26 countries from the fourth quarter of 2022 to the first quarter of 2024.

The employment rates of Ukrainian refugees across various European countries from late 2022 to early 2024, derived from multiple sources, highlight significant disparities in labour market integration. The UK led with a remarkable 56 percent employment rate at the end of 2022, closely followed by Lithuania and the Netherlands with similarly high rates. Conversely, countries like Croatia, Norway, Romania, Slovenia, Switzerland, and Spain, with rates below 15 percent, faced substantial integration challenges. Germany, with a 20 percent rate, positioned itself in the middle of the European spectrum. Through 2023, Denmark, Austria, France, Poland, and Lithuania saw modest increases in employment rates, which later plateaued, slightly rose, or even declined. Slovenia, Switzerland, Finland, Spain, and Estonia saw minor gains, whereas Romania experienced a decrease. The UK maintained its high rate, while Germany exhibited incremental but consistent growth, achieving a 27 percent rate by early 2024, keeping it mid-range in Europe. This diverse progress underscores the variety of integration policies, economic conditions, and social frameworks affecting the labour market integration of Ukrainian refugees. Differences extend beyond demographic profiles to include labour market capacities, financial supports, social networks, welcoming cultures, and the impact of language barriers and strategic integration approaches.

Our multivariate analysis underscores the critical influence of the institutional framework on the labour market integration of Ukrainian refugees. For instance, a robust demand for low-skilled labour positively correlates with higher employment rates, especially as it often provides entry-level positions that do not necessitate extensive language proficiency or recognized qualifications. Conversely, a high unemployment rate and stringent labour market regulations hinder integration. Furthermore, a well-developed childcare infrastructure and comprehensive access to healthcare services show a clear positive correlation with employment rates. However, the relationship between employment rates and per capita care costs for Ukrainian refugees, measured as a percentage of GDP, is small and not statistically significant. Effective labour market policies, particularly job search support programs, are linked to higher employment rates among Ukrainian refugees, highlighting the necessity of well-structured support systems to enhance integration and long-term societal inclusion. Social networks emerge as the most significant factor for successful integration; countries with substantial Ukrainian populations prior to the conflict exhibit higher employment rates, emphasizing the role of established communities and social support. Additionally, proficiency in English is a decisive factor in labour market integration, facilitating entry into the job market due to its widespread use.

Our analysis corroborates the view that long-term integration strategies emphasizing education and language training might initially slow down labour market integration. This pattern is supported by research from Scandinavian countries like Sweden, Denmark, and Norway, which utilize harmonized, administrative longitudinal data on an individual basis (Arendt 2022; Arendt and Bolvig 2023; Hernes et al. 2022a). These studies illustrate a trade-off between rapid employment in low-skilled jobs and sustainable integration strategies that foster stable labour market involvement. For cross-national policy learning, it is beneficial to balance the immediate success of employment strategies with the longer-term approaches that ensure more durable integration. While initial delays in labour market entry can be a consequence of focusing on education and language skills, these investments typically yield more sustainable outcomes over time.

Our findings indicate that the demographic composition of newly arrived refugees significantly impacts their labour market integration. Specifically, older ages and higher numbers of children per working-age woman are particularly associated with lower employment rates, highlighting the unique challenges faced by families and older refugees. Additionally, our results demonstrate a positive trend over time in labour market integration. This supports the notion that although initial employment rates may be low upon arrival, they typically improve as refugees spend more time in the host country (e.g., Brell et al. 2020; Brücker et al. 2024a; 2024b). This trend is consistent with prior research, which shows a gradual increase in employment rates following arrival.

Germany, with a current employment rate for Ukrainian refugees at 27 percent, occupies a middle position in Europe but is committed to fostering more sustainable labour market integration over the long term, primarily through a “language first” approach.¹¹ Sustainable integration strategies should, according to the results presented, quickly establish legal and

¹¹ Even the “job turbo” introduced in 2023 does not change the fundamental “language-first approach” in Germany, because refugees still have to complete a BAMF integration course first and are only placed in the labour market once they have acquired basic German language skills (Federal Ministry of Labour and Social Affairs 2024).

planning certainty for Ukrainian refugees as well as for employers, by providing clear conditions under which longer-term residence, work, or settlement permits can be obtained. Additionally, refugees require early access to integration and language programs to accelerate language acquisition. A pertinent policy question is whether these language and integration courses should be offered solely on a full-time basis or whether they could be more effectively combined with work experience. Drawing inspiration from Norway's approach – where a 6-12-month introductory program for Ukrainians is offered on a part-time basis to balance work and program participation – Germany could also consider more flexible arrangements for its integration courses. This adaptation could potentially enhance the practical integration of refugees by allowing them to gain work experience simultaneously with language training, thereby promoting quicker and more effective integration into the labour market.

Consideration should also be given to more closely integrating refugee children into the existing childcare infrastructure, such as offering integration courses alongside childcare. Additionally, the pursuit and recognition of educational and vocational qualifications should be encouraged, and the process accelerated. Once qualifications are obtained or recognized, refugees require support in securing employment commensurate with their training. In this sense, job placement services should be further enhanced. Financial incentives for companies to hire refugees could also have a positive impact. Integrating children and young people into the educational system and providing comprehensive childcare services for young children are crucial for sustainable integration and fostering long-term residency intentions.

Given its strategy for sustainable integration, Germany is well-positioned to significantly boost the employment rates of Ukrainian refugees in the medium to long term. Unlike many other countries, Germany is specifically investing in long-term initiatives such as comprehensive language courses and qualification recognition programs. These investments are expected to yield stable and enduring integration into the labour market, as has been the case with previous refugee groups (Brücker et al. 2024a; 2024b; Kosyakova et al. 2022). Despite temporary setbacks during the COVID-19 pandemic, there was notable improvement in 2021 and 2022: employment rates for refugees who arrived in 2015 climbed to about 64 percent, and even higher to 68 percent for those residing for eight years (Brücker et al. 2024a; 2024b). Additionally, two-thirds of these employees now hold permanent contracts, and three-quarters are employed in skilled positions. This significant progress is partly due to targeted integration measures, including BAMF integration courses, job-related language support, and labour market and career advice from job centers and employment agencies. Given these developments, Germany could offset the initially average employment rates of Ukrainian refugees by fostering stronger, long-term ties to the labour market and achieving higher employment rates. This approach underscores the understanding that thoughtful and comprehensive support benefits not only the refugees but also the broader economy by fully activating and utilizing their potential.

In conclusion, the success of integration does not solely depend on the efforts of the refugees themselves but is significantly influenced by the institutional framework conditions, support from the local population, political integration measures, educational opportunities, and volunteer efforts. Integration is a two-way process, the success of which relies heavily on the active participation and acceptance from both the newcomers and the host community.

References

- Abebe, S. A. (2023): Refugee entrepreneurship: systematic and thematic analyses and a research agenda. In: *Small Business Economics*, 60(1), p. 315–350.
- Aksoy, C. G.; Poutvaara, P.; Schikora, F. (2023): First time around: Local conditions and multi-dimensional integration of refugees. In: *Journal of Urban Economics*, 137, 103588.
- Ambrosetti, E.; Dietrich, H.; Kosyakova, Y.; Patzina, A. (2021): The impact of pre-and postarrival mechanisms on self-rated health and life satisfaction among refugees in Germany. In: *Frontiers in Sociology*, 6, 693518.
- Antezza, A.; Bushnell, K.; Dyussimbinov, Y.; Frank, A.; Frank, P.; Franz, L.; Kharitonov, I.; Kumar, B.; Rebinskaya, E.; Trebesch, C.; Schramm, S.; Weiser, L.; Schade, C. (2024): *Ukraine Support Tracker Data*. Kiel: Kiel Institute for the World Economy.
- Arbeitsmarktservice Österreich (2021): *Daten und Fakten zur Arbeitsmarktsituation von Geflüchteten. Spezialthema zum Arbeitsmarkt, Juli 2021*.
- Arendt, J. N. (2022): Labour market effects of a work-first policy for refugees. In: *Journal of Population Economics*, 662.
- Arendt, J. N.; Bolvig, I. (2023): Trade-offs between work-first and language-first strategies for refugees. In: *Economics of Education Review*, 92, 102353.
- Åslund, O.; Rooth, D.-O. (2007): Do When and Where Matter? Initial Labour Market Conditions and Immigrant Earnings. In: *The Economic Journal*, 117(518), p. 422–448.
- Azlor, L.; Damm, A.P.; Schultz-Nielsen, M. L. (2020): Local labour demand and immigrant employment. In: *Labour Economics*, 63, 101808.
- Bakker, L.; Dagevos, J.; Engbersen, G. (2014): The importance of resources and security in the socio-economic integration of refugees. A study on the impact of length of stay in asylum accommodation and residence status on socio-economic integration for the four largest refugee groups in the Netherlands. In: *Journal of International Migration and Integration*, 15, p. 431–448.
- Battisti, M.; Peri, G.; Romiti, A. (2022): Dynamic effects of co-ethnic networks on immigrants' economic success. In: *The Economic Journal*, 132(641), p. 58–88.
- Bernhard, S.; Bernhard, S. (2022): Gender Differences in Second Language Proficiency—Evidence from Recent Humanitarian Migrants in Germany. In: *Journal of Refugee Studies*, 35 (1).
- Bevelander, P.; Lundh, C. (2007): Employment integration of refugees: The influence of local factors on refugee job opportunities in Sweden. In: *IZA Discussion Paper*, 2551.
- Bevelander, P.; Mata, F.; Pendakur, R. (2019): Housing policy and employment outcomes for refugees. In: *International Migration*, 57(3), p. 134–154.
- Bonin, H.; Boockmann, B.; Brändle, T.; Bredtmann, J.; Brussig, M.; Demir, G.; Kamb, R.; Frings, H.; Glemser, A.; Haas, A.; Höckel, L.; Huber, S.; Kirchmann, A.; Kirsch, J.; Klee, G.; Krause-Pilatus, A.; Kühn, J.; Kugler, P.; Kusche, M.; Maier, A.; Rinne, U.; Rossen, A.; Scheu, T.; Schilling, K.; Teichert, C.; Zühlke, A.; Wolf, K.; Wapler, R. (2021): *Begleitevaluation der arbeitsmarktpolitischen Integrationsmaßnahmen für Geflüchtete. Schlussbericht*. In: Bundesministerium für Arbeit und Soziales. Forschungsbericht 587, Berlin.

- Brell, C.; Dustmann, C.; Preston, I. (2020): The labour market integration of refugee migrants in high-income countries. In: *Journal of Economic Perspectives*, 34(1), p. 94–121.
- Brücker, H.; Ehab, M.; Jaschke, P.; Kosyakova, Y. (2024a): Arbeitsmarktintegration von Geflüchteten: Verbesserte institutionelle Rahmenbedingungen fördern die Erwerbstätigkeit. In: IAB-Kurzbericht, 10/2024. IAB: Nürnberg.
- Brücker, H.; Ehab, M.; Jaschke, P.; und Kosyakova, Y. (2024b). Institutionelle Hürden beeinflussen Umfang und Qualität der Erwerbstätigkeit von Geflüchteten. In: IAB-Forschungsbericht, 12/2024. IAB: Nürnberg.
- Brücker, H.; Ette, A.; Grabka, M. M.; Kosyakova, Y.; Niehues, W.; Rother, N.; Spieß, C.K.; Zinn, S.; Bujard, M.; Cardozo, A.; Décieux, J.P.; Maddox, A.; Milewski, N.; Naderi, R.; Sauer, L.; Schmitz, S.; Schwanhäuser, S.; Siegert, M.; Tanis, K. (2022): Geflüchtete aus der Ukraine in Deutschland. Flucht, Ankunft und Leben. In: IAB-Forschungsbericht 24/2022. IAB: Nürnberg.
- Brücker, H.; Ette, A.; Grabka, M. M.; Kosyakova, Y.; Niehues, W.; Rother, N.; Steinhauer, H. W. (2023): Geflüchtete aus der Ukraine in Deutschland: Ergebnisse der ersten Welle der IAB-BiB/FReDA-BAMF-SOEP Befragung. In: IAB-Forschungsbericht 02/2023. IAB: Nürnberg.
- Brücker, H.; Fendel, T.; Guichard, L.; Gundacker, L.; Jaschke, P.; Keita, S.; Kosyakova, Y.; Vallizadeh, E. (2020d): Fünf Jahre "Wir schaffen das"-Eine Bilanz aus der Perspektive des Arbeitsmarktes. In: IAB-Forschungsbericht 11/2020. IAB: Nürnberg.
- Brücker, H.; Glitz, A.; Lerche, A.; Romiti, A. (2021): Integration von Migrantinnen und Migranten in Deutschland: Anerkennung ausländischer Berufsabschlüsse hat positive Arbeitsmarkteffekte. In: IAB-Kurzbericht, 2/2021. IAB: Nürnberg.
- Brücker, H.; Hauptmann, A.; Jaschke, P. (2020a): Beschränkungen der Wohnortwahl für anerkannte Geflüchtete: Wohnsitzauflagen reduzieren die Chancen auf Arbeitsmarktintegration. In: IAB-Kurzbericht 02/2020. IAB: Nürnberg.
- Brücker, H.; Kosyakova, Y.; Schuß, E. (2020b): Fünf Jahre seit der Fluchtmigration 2015: Integration in Arbeitsmarkt und Bildungssystem macht weitere Fortschritte. In: IAB-Kurzbericht 04/2020. IAB: Nürnberg.
- Brücker, H.; Kosyakova, Y.; Vallizadeh, E. (2020c): Has there been a “refugee crisis”? In: *Soziale Welt*, 71(H. 1/2), p. 24–53.
- Buchcik, J.; Kovach, V.; Adedeji, A. (2023): Mental health outcomes and quality of life of Ukrainian refugees in Germany. In: *Health and quality of life outcomes*, 21(1), p. 23.
- Census (2021): Office for National Statistics – UK (März 2022). [Census 2021: CT21_0001v4 - Selected countries of birth based on Census 2021 responses](#). [last accessed: 12.06.2024]
- Centraal Bureau voor de Statistiek (2021): Cohortonderzoek asielzoekers en statushouders Asiel en integratie 2021. Den Haag/Heerlen/Bonaire.
- Cerna, L. (2019). [Refugee education: Integration models and practices in OECD countries](#). In: OECD Education Working Paper No. 203, [last accessed: 02.07.2024]
- Chatterji, P.; Alegria, M.; Takeuchi, D. (2011): Psychiatric disorders and labour market outcomes: Evidence from the National Comorbidity Survey-Replication. In: *Journal of Health Economics* 30, p. 858–868.

- Cheung, S. Y.; Phillimore, J. (2017): Gender and refugee integration: A quantitative analysis of integration and social policy outcomes. In: *Journal of Social Policy*, 46(2), p. 211–230.
- Corrigan O. (2015): Conditionality of Legal Status and Immigrant Occupational Attainment in Western Europe. In: *Policy & Politics* 43(2), p. 181–202.
- Cortes, K. E. (2004): Are refugees different from economic immigrants? Some empirical evidence on the heterogeneity of immigrant groups in the United States. In: *Review of Economics and Statistics*, 86(2), p. 465–480.
- Damelang, A.; Ebensperger, S.; Stumpf, F. (2020): Foreign credential recognition and immigrants' chances of being hired for skilled jobs—evidence from a survey experiment among employers. In: *Social Forces*, 99(2), p. 648–671.
- Damelang, A.; Kosyakova, Y. (2021): To work or to study? Postmigration educational investments of adult refugees in Germany – Evidence from a choice experiment. In: *Research in Social Stratification and Mobility*, 73, 100610.
- Damm, A. P. (2009): Ethnic Enclaves and Immigrant Labour Market Outcomes: Quasi-Experimental Evidence. In: *Journal of Labour Economics*, 27(2), p. 281–314.
- Danish Agency for Labour Market and Recruitment (2024): [Monitorering af fordrevne personer fra Ukraine](#) [last accessed: 02.07.2024]
- De Beer, P.; Koster, F. (2009): Sticking together or falling apart? Solidarity in an era of individualization and globalization. In: Amsterdam University Press.
- De Vroome, T.; Van Tubergen, F. (2010): The employment experience of refugees in the Netherlands. In: *International Migration Review*, 44(2), p. 376–403.
- Drange, N.; Telle, K. (2015): Promoting integration of immigrants: Effects of free child care on child enrollment and parental employment. In: *Labour Economics*, 34, p. 26–38.
- Dustmann, C.; Landersø, R.; Andersen, L. H. (2024a): Refugee benefit cuts. In: *American Economic Journal: Economic Policy*, 16(2), p. 406–441.
- Dustmann, C.; Landersø, R.; Andersen, L. H. (2024b): Unintended Consequences of Welfare Cuts on Children and Adolescents. In: *American Economic Journal: Applied Economics* (Forthcoming).
- Edin, P.-A.; Fredriksson, P.; Åslund, O. (2003): Ethnic Enclaves And The Economic Success Of Immigrants - Evidence From A Natural Experiment. In: *The Quarterly Journal of Economics*, 118(1), p. 329–357.
- EF EPI (2019): EF EPI, EF English Proficiency Index: Eine Rangliste von 100 Ländern und Regionen nach Englischkenntnissen. EF Education First Ltd.
- Europäische Kommission (2024): [Europäisches System zur Übertragung und Akkumulierung von Studienleistungen \(ECTS\)](#) [last accessed: 07.06.2024]
- European Migration Network (EMN) (2024): Labour market integration of beneficiaries of temporary protection from Ukraine: Joint EMN-OECD inform.
- Eurostat (2021a) Labour Force Sample Survey 2021, Luxembourg: SOEC
- Eurostat (2021b): EU statistics on income and living conditions (SILC Survey)

- Eurostat (2023a): [Beneficiaries of temporary protection at the end of the month by citizenship, age and sex - monthly data](#). [last accessed: 31.05.2024]
- Eurostat (2023b): [Population by broad age group](#). [last accessed: 31.05.2024]
- Eurostat (2023bc): [Bruttoinlandsprodukt zu Marktpreisen](#), [last accessed: 31.05.2024].
- Eurostat (2024a): [Total unemployment rate](#). [last accessed: 31.05.2024]
- Eurostat (2024b): [Employment rate of adults by sex, age groups, educational attainment level, number of children and age of youngest child \(%\)](#). [last accessed: 31.05.2024]
- Eurostat (2024c): [Population on 1 January by age group, sex and citizenship](#). [last accessed: 31.05.2024]
- Fairlie, R. W.; Couch, K.; Xu, H. (2020): The impacts of COVID-19 on minority unemployment: First evidence from April 2020 CPS microdata (No. w27246). In: National Bureau of Economic Research.
- Fasani, F.; Frattini, T.; Minale, L. (2022): (The Struggle for) Refugee integration into the labour market: evidence from Europe. In: *Journal of Economic Geography*, 22(2), S: 351–393.
- Federal Ministry of Labour and Social Affairs (2024): [Job-Turbo zur Arbeitsmarktintegration von Geflüchteten](#) [last accessed: 01.07.2024]
- Fleischmann F.; Dronkers J. (2010): Unemployment among Immigrants in European Labour Markets: An Analysis of Origin and Destination Effects. In: *Work, Employment and Society*, 24(2), p. 337–54.
- Foged, M.; Hasager, L.; Peri, G.; Arendt, J. N.; Bolvig, I. (2022): Language Training and Refugees' Integration. In: *The Review of Economics and Statistics*, p. 1–41.
- Forsythe, E.; Wu, J.-C. (2021): Explaining Demographic Heterogeneity in Cyclical Unemployment. In: *Labour Economics*, Elsevier, vol. 69(C).
- Fossati, F.; Liechti, F. (2020): Integrating refugees through active labour market policy: A comparative survey experiment. In: *Journal of European Social Policy*, 30(5), p. 601–615.
- Frijters, P.; Johnston, D.W.; Shields, M.A. (2014): The effect of mental health on employment: Evidence from Australian panel data. In: *Health Economics* 23, p. 1058–1071.
- Gambaro, L.; Neidhöfer, G.; Spieß, C. K. (2021): The effect of early childhood education and care services on the integration of refugee families. In: *Labour Economics*, 72, 102053.
- Gatskova, K.; Kosyakova, Y. (2024). Das Arbeitskräftepotenzial ukrainischer Geflüchteter im deutschen Gesundheitssektor. In: IAB-Forum, 17 April 2024.
- Gazzola, M.; Mazzacani, D. (2019): Foreign language skills and employment status of European natives: evidence from Germany, Italy and Spain. In: *Empirica*, 46(4), p. 713–740.
- Gazzola, M.; Wickström, B.-A.; Templin, T. (2019): Language skills, the labour market, and socioeconomic integration. In: *Empirica*, 46, p. 617–623.
- Godøy, A. (2017): Local labour markets and earnings of refugee immigrants. In: *Empirical Economics*, 52(1), p. 31–58.

- Goßner, L.; Kosyakova, Y. (2021): Integrationshemmnisse geflüchteter Frauen und mögliche Handlungsansätze-eine Übersicht bisheriger Erkenntnisse. In: IAB-Forschungsbericht 08/2021. IAB: Nürnberg
- Granovetter, M. S. (1973): The strength of weak ties. In: American journal of sociology, 78(6), p. 1360–1380.
- Grenoble, L. A. (2010): Contact and the development of the Slavic languages. In: The handbook of language contact, p. 581–597.
- Gromada, A.; Richardson, D.; UNICEF (2021). Where do rich countries stand on childcare? Anna Gromada, Dominic Richardson; UNICEF Office of Research Innocenti.
- Gwartney J.; Lawson R.; Hall J.; Murphy R. (2023): Economic Freedom of the World: 2023 Annual Report. Fraser Institute.
- Hainmueller, J.; Hangartner, D.; Lawrence, D. (2016): When lives are put on hold: Lengthy asylum processes decrease employment among refugees. In: Science advances, 2(8), e1600432.
- Heath, A. (2007): Crossnational Patterns and Processes of Ethnic Disadvantage. In: Unequal Chances: Ethnic Minorities in Western Labour Markets, edited by Heath A., Cheung S. Y., p. 639–95. Oxford, United Kingdom: Oxford University Press.
- Hernes, V.; Arendt, J. N.; Andersson, J. P.; Tronstad, K. R. (2019): Nordic integration and settlement policies for refugees: A comparative analysis of labour market integration outcomes. Nordic Council of Ministers.
- Hernes, V.; Arendt, J. N.; Andersson, J. P.; Tronstad, K. R. (2022a): Rapid or long-term employment? A Scandinavian comparative study of refugee integration policies and employment outcomes. In: Journal of European Public Policy, 29(2), p. 238–258.
- Hernes, V.; Bolvig, I; Liljeberg, L. (2022b): Scandinavian Integration Policies for Refugees. Nordic Council of Ministers.
- Hesterberg, T. (2011): Bootstrap. In: Wiley Interdisciplinary Reviews: Computational Statistics, 3(6), 497–526.
- IOM - International Organization for Migration (2023): DTM Poland -Surveys with Refugees from Ukraine: Needs, Intentions, and Integration Challenges (Jan-Mar 2023). IOM: Poland
- IQ Fachstelle Einwanderung und Integration (2024): [Geflüchtet um zu bleiben? Ein Beitrag zu der aktuellen Diskussion zur Arbeitsmarktintegration von ukrainischen Geflüchteten in Deutschland und Europa – Teil 3](#). Kurzbericht 01/2024. [last accessed: 27.05.2024]
- Jaschke, P.; Sardoschau, S.; Tabellini, M. (2022): Scared straight? Threat and assimilation of refugees in Germany. In: Nber working paper, 30381.
- Kalter, F. (2008): Stand, Herausforderungen und Perspektiven der empirischen Migrationsforschung. In: Frank Kalter (Hrsg.), Migration und Integration. Kölner Zeitschrift für Soziologie und Sozialpsychologie, Sonderheft 48/2008. Wiesbaden: VS Verlag für Sozialwissenschaften, p. 11–36.
- Kanas, A.; Kosyakova, Y. (2023): Greater local supply of language courses improves refugees' labour market integration. In: European Societies, 25(1), p. 1–36.

- Kanas, A.; Steinmetz, S. (2021): Economic outcomes of immigrants with different migration motives: The role of labour market policies. In: *European Sociological Review*, 37(3), p. 449–464.
- Kasrin, Z.; Tübbicke, S. (2022): Which Active Labour Market Policies Work for Male Refugees? Evidence from Germany–CORRIGENDUM. In: *Journal of Social Policy*, 1–2.
- Kogan, I. (2006): Labour markets and economic incorporation among recent immigrants in Europe. In: *Social Forces*, 85(2), p. 697–721.
- Kogan, I. (2007): *Working Through Barriers Host Country. Institutions and Immigrant Labour Market Performance in Europe*. Dordrecht, Netherlands: Springer.
- Kogan, I. (2016): Arbeitsmarktintegration von Zuwanderern. In: Heinz Ulrich Brinkmann/Martina Sauer (Hrsg.), *Einwanderungsgesellschaft Deutschland*. Wiesbaden: Springer Fachmedien Wiesbaden, p. 177–99.
- Kogan, I.; Kalter, F. (2020): An empirical–analytical approach to the study of recent refugee migrants in Germany. In: *Soziale Welt*, 71(H. 1/2), p. 3–23.
- Kosyakova, Y.; Brenzel, H. (2020): The role of length of asylum procedure and legal status in the labour market integration of refugees in Germany. In: *Soziale Welt*, 71(H. 1/2), p. 123–159.
- Kosyakova, Y.; Brücker, H. (2024): Zur Arbeitsmarktintegration von Geflüchteten aus der Ukraine: Eine Simulationsstudie. In: *IAB-Forschungsbericht 09/2024*. IAB: Nürnberg.
- Kosyakova, Y.; Gundacker, L.; Salikutluk, Z.; Trübswetter, P. (2021): Arbeitsmarktintegration in Deutschland: Geflüchtete Frauen müssen viele Hindernisse überwinden. In: *IAB-Kurzbericht 08/2021*. IAB: Nürnberg
- Kosyakova, Y.; Kogan, I. (2022): Labour market situation of refugees in Europe: The role of individual and contextual factors. In: *Frontiers in Political Science*, 4, 977764.
- 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? In: *Journal of Ethnic and Migration Studies*, 48(5), p. 989–1012.
- Kosyakova, Y.; Salikutluk, Z. (2023): Gender gap dynamics among refugees and recent immigrants: Different start, similar patterns? In: *IAB-Discussion Paper, 11*. IAB: Nürnberg
- Kosyakova, Y.; Salikutluk, Z.; Hartmann, J. (2023): Gender employment gap at arrival and its dynamics: The case of refugees in Germany. In: *Research in Social Stratification and Mobility*, 87(August), 100842.
- Kristen, C.; Kosyakova, Y.; Spörlein, C. (2022): Deutschkenntnisse entwickeln sich bei Geflüchteten und anderen Neuzugewanderten ähnlich – Sprachkurse spielen wichtige Rolle. In: *DIW-Wochenbericht*, 5.
- Lee, E. S.; Szkudlarek, B.; Nguyen, D. C.; Nardon, L. (2020): Unveiling the canvas ceiling: A multidisciplinary literature review of refugee employment and workforce integration. In: *International Journal of Management Reviews*, 22(2), S: 193–216.
- Lichtenstein, G.; Puma, J. E. (2019): The refugee integration survey and evaluation (RISE): results from a four-year longitudinal study. In: *Journal of Refugee Studies*, 32(3), p. 397–416.
- Liebig, T.; Tronstad, K. R. (2018): Dreifach benachteiligt. Ein erster Überblick über die Integration weiblicher Flüchtlinge. In: *OECD Social, Employment and Migration Working Papers No.216*.

- Lippens, L.; Vermeiren, S.; Baert, S. (2023): The state of hiring discrimination: A meta-analysis of (almost) all recent correspondence experiments. In: *European Economic Review*, 151, 104315.
- Mahjoub, A., & Krueger, P. M. (2021): Efficient recruitment with effective job advertisement: an exploratory literature review and research agenda. In: *International Journal of Organization Theory & Behavior*, 24(2), p. 107–125.
- Martén, L.; Hainmueller, J.; Hangartner, D. (2019): Ethnic networks can foster the economic integration of refugees. In: *Proceedings of the National Academy of Sciences*, 116(33), 16280–16285.
- Martin, M.; Stulgaitis, M. (2022): Refugees' access to higher education in their host countries: Overcoming the 'super-disadvantage.'. In: *International Institute for Educational Planning (UNESCO)*.
- Melitz, J.; Toubal, F. (2014): Native Language, Spoken Language, Translation and Trade. In: *Journal of International Economics*, 92(2), S: 351–363
- Mergener, A.; Maier, T. (2019): Immigrants' chances of being hired at times of skill shortages: results from a factorial survey experiment among German employers. In: *Journal of International Migration and Integration*, 20, p. 155–177.
- Mestheneos, E.; Ioannidi, E. (2002): Obstacles to refugee integration in the European Union member states. In: *Journal of refugee studies*, 15(3), p. 304–320.
- MIDEM (2022): Europa und die Fluchtmigration aus der Ukraine. Jahresstudie, In: *Mercator Forum Migration und Demokratie*, hrsg. von Hans Vorländer, Dresden.
- Migrant Integration Policy Index, MIPEX (2020): <https://www.mipex.eu/> und <https://www.mipex.eu/key-findings>. [last accessed: 02.07.2024]
- Montenovo, L.; Jiang, X.; Lozano-Rojas, F.; Schmutte, I.; Simon, K.; Weinberg, B. A.; Wing, C. (2022): Determinants of disparities in early COVID-19 job losses. In: *Demography*, 59(3), p. 827–855.
- OECD (2022a): *Rights and Support for Ukrainian Refugees in Receiving Countries*. OECD-Publishing.
- OECD (2022b): [International Migration Outlook 2022](#), OECD Publishing, Paris.
- Organisation for Economic Co-operation and Development, OECD (2023), *International Migration Outlook 2023*, OECD Publishing, Paris, [last accessed: 02.07.2024]
- Ortlieb, R.; Eggenhofer-Rehart, P.; Leitner, S.; Hosner, R.; Landesmann, M. (2020): Do Austrian programmes facilitate labour market integration of refugees? In: *IOM, International Migration*.
- Pelkowski, J.M.; Berger, M.C. (2004): The impact of health on employment, wages, and hours worked over the life cycle. In: *The Quarterly Review of Economics and Finance* 44, p. 102–121.
- Phillimore, J. (2011): Refugees, acculturation strategies, stress and integration. In: *Journal of Social Policy*, 40, p. 575–593.
- Phillimore, J. (2021): Refugee-integration-opportunity structures: Shifting the focus from refugees to context. In: *Journal of Refugee Studies*, 34(2), p. 1946–1966.

- Platt, L.; Polavieja, J.; Radl, J. (2022): Which Integration Policies Work? The Heterogeneous Impact of National Institutions on Immigrants' Labour Market Attainment in Europe. In: *International Migration Review*, 56(2), p. 344–375.
- Porter, M.; Haslam, N. (2005): Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: a meta-analysis. In: *Jama*, 294(5), p. 602–612.
- Reitz, J. G. (1998): *Warmth of the Welcome: The Social Causes of Economic Success for Immigrants in Different Nations and Cities*. Westview Press.
- Rottmann, S.; Nimer, M. (2021): Language learning through an intersectional lens: Gender, migrant status, and gain in symbolic capital for Syrian refugee women in Turkey. In: *Multilingua*, 40(1), p. 67–85.
- Rubio, F.; Lirola, M. M. (2010): English as a foreign language in the EU: Preliminary analysis of the difference in proficiency levels among the member states. In: *European Journal of Language Policy*, 2(1), p. 23–39.
- Rusu, H. (2012): Measuring social solidarity. Some research notes. In: *Social Change Review*, 10(1), p. 71–90.
- Schilling, P.; Stillman, S. (2024): The impact of natives' attitudes on refugee integration. In: *Labour Economics*, 87, 102465.
- Solheim, E. F.; La Parra-Casado, D. (2019): Identifying Refugees and Other Migrant Groups in European Large-scale Surveys: An Explorative Analysis of Integration Outcomes by Age Upon Arrival, Reasons for Migration and Country-of-birth Groups Using the European Union Labour Force Survey 2014 Ad Hoc Module. In: *Journal of Refugee Studies*, 32 (Special_Issue_1), p. i183–i193.
- Statistik der Bundesagentur für Arbeit (2024): [Methodische Hinweise zum Thema Beschäftigung](#) [last accessed: 01.07.2024]
- Thränhardt, D. (2023): [Mit offenen Armen – die kooperative Aufnahme von Kriegsflüchtlingen aus der Ukraine in Europa: Eine Alternative zum Asylregime?](#) In: FES diskurs 02/2023, [last accessed: 27.05.2024]
- Tyldum, G.; Kjeøy, I.; Lillevik, R. (2023): Different policies, different outcomes. The reception of Ukrainian refugees in Sweden and Norway. In: Fafo, August 2023. Second edition
- UNHCR (2022): [Lives on hold. Intentions and perspectives of refugees from Ukraine. Regional Intentions Report #2](#). [last accessed: 02.07.2024]
- UNHCR (2024): [Operational Data Portal, Ukraine Refugee Situation](#). [last accessed am 08.05.2024].
- van Tubergen, F.; Kogan, I.; Kosyakova, Y.; Pötzschke, S. (2023): Self-selection of Ukrainian refugees and displaced persons in Europe. In: *Journal of Refugee Studies*, September, p. 1–19.
- Walther, L.; Kröger, H.; Tibubos, A. N.; Ta, T. M. T.; Von Scheve, C.; Schupp, J.; Hanhn, E.; Bajbouj, M. (2020): Psychological distress among refugees in Germany: a cross-sectional analysis of individual and contextual risk factors and potential consequences for integration using a nationally representative survey. In: *BMJ open*, 10(8), e033658.

Weltbank (2024a): [World Bank national accounts data, and OECD National Accounts data files](#).
[last accessed: 07.06.2024]

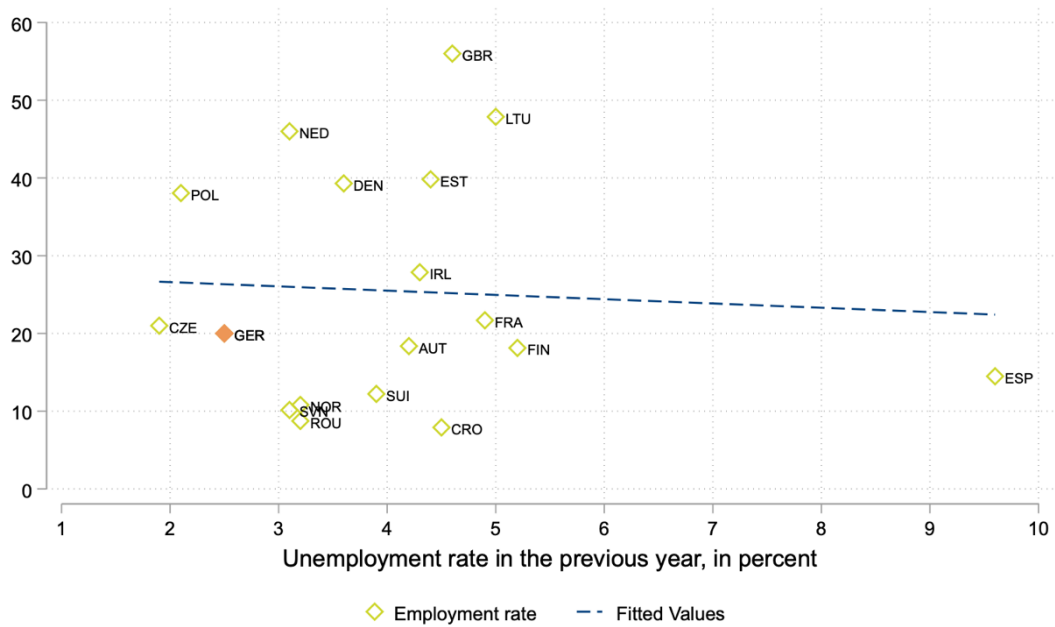
Weltbank (2024b): [World Bank data, United Kingdom](#). [last accessed: 07.06.2024]

Willott, J.; Stevenson, J. (2013): Attitudes to employment of professionally qualified refugees in the United Kingdom. In: *International Migration*, 51(5), p. 120–132.

Appendix

Figure A1: Correlation between the employment rate of Ukrainian refugees and the unemployment rate in the previous year

Percentage of people of working age (18 to 64 years), Q4 2022



Sources: Table A2 in the appendix (employment rates); Eurostat 2024 (unemployment rate in the previous year); own presentation.

Table A1: Employment rates in European countries by survey date

Country	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024
Belgium (BEL)		15.40		17.00		
Denmark (DEN)	39.30	43.00	51.00	54.00	53.00	53.00
Germany (GER)	20.00	21.50	23.80	24.90	25.20	26.50
Estonia (EST)	39.82	41.78	44.30	43.13		
Finland (FIN)	18.13	18.38	27.60	20.84	16.68	17.85
France (FRA)	21.69	24.69	31.06	32.09	30.37	
Great Britain (GBR)	56.00	61.00	52.00	56.00		
Ireland (IRL)	27.87	29.31	33.32	35.41	36.51	25.98
Italy (ITA)		19.16				
Croatia (CRO)	7.91					
Latvia (LVA)			20.00			
Lithuania (LTU)	47.87	50.72	54.16	56.37	56.78	57.24
Luxembourg (LUX)					39.47	
Netherlands (NED)	46.00		50.00		55.00	
Norway (NOR)	10.80	10.70	15.50	18.80	18.60	19.20
Austria (AUT)	18.37	24.66	30.51	29.32	27.46	29.53
Poland (POL)	38.05	44.42	45.21	48.09	48.48	48.29
Portugal (PRT)					30.94	34.25
Romania (ROU)	8.74	8.85	8.36	8.03	7.33	6.94
Sweden (SWE)		56.00				
Switzerland (SUI)	12.22	12.79	14.21	14.86	14.40	
Slovakia (SVK)					29.26	29.06
Slovenia (SVN)	10.15	10.85	12.37	12.69	11.76	
Spain (ESP)	14.49	15.94	17.55	17.29	17.35	18.44
Czech Republic (CZE)	21.00		48.00			
Hungary (HUN)		18.00				

Sources: see Table A2 in the appendix. Own compilation.

Table A2: Sources for the employment rates

Country	Sources	
Belgium	CEDEFOP	https://www.cedefop.europa.eu/en/news/ukrainian-refugees-brussels-and-walloon-labour-markets-one-year-later (Retrieved on 14.05.2024)
Denmark	Employment Agency Denmark	https://jobindsats.dk/rapportbank/monitoring-af-arbejdsmarkedet/monitoring-af-fordrevne-personer-fra-ukraine/ (Retrieved on 14.05.2024)
Germany	IAB Immigration Monitor	https://iab.de/daten/zuwanderungsmonitor/ (Retrieved on 14.05.2024)
Estonia	PES network survey	Ministry of Social Affairs and Ministry of Economic Affairs and Communications, queried by PES; 24.05.2024.
Finland	VATT data room dashboard	https://datahuone.shinyapps.io/dataholvi/#tyomarkkinat/ukrainalaiset . (Retrieved 20.06.2024)
France	PES network survey	Employment Agency France, queried by PES; 24.05.2024.
Great Britain	Office for National Statistics	https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/bulletins/visaholdersenteringtheukundertheukrainehumanitarianschemes/17octoberto7november2022#main-points (Q4 22) (Retrieved 05/14/2024); https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/bulletins/visaholdersenteringtheukundertheukrainehumanitarianschemes/27februaryto13march2023 (Q1 23) (Retrieved 05/14/2024); https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/bulletins/visaholdersenteringtheukundertheukrainehumanitarianschemes/27aprilto15may2023#labour-market (Q2 23) (Retrieved 05/14/2024); https://www.fes.de/themenportal-flucht-migration-integration/artikelseite-flucht-migration-integration/die-zukunft-der-ukrainischen-kriegsfluechtlinge-in-europa (Q3 23) (Retrieved 05/14/2024).
Ireland	PES network survey	Central Statistical Office Ireland, queried by PES; 24.05.2024
Italy	UNHCR	UNHCR Intention Survey.
Croatia	AIDA (ecre)	https://asylumineurope.org/wp-content/uploads/2023/06/AIDA_HR_Temporary-Protection_2022.pdf (Retrieved on 14.05.2024)
Latvia	IOM	https://dtm.iom.int/reports/latvia-surveys-refugees-ukraine-needs-intentions-and-integration-challenges-april-june-2023 (Retrieved on 14.05.2024).
Lithuania	PES network survey	Lithuanian Employment Agency - Užimtumo tarnyba, queried by PES; 24.05.2024.
Luxembourg	RTL Today	https://today.rtl.lu/news/luxembourg/a/2169417.html#:~:text=Just%20977%20o%20of%20roughly,by%20the%20end%20of%202023 (Abgerufen am 14.05.2024).
Netherlands	Central Statistical Office	Central Bureau of Statistics Netherlands, queried by PES; 02.04.2024.
Norway	Central Statistical Office	https://www.ssb.no/arbeid-og-lonn/sysselsetting/statistikk/antall-arbeidsforhold-og-lonn/artikler/hvor-mange-ukrainere-jobber-i-norge (Retrieved on 29.05.2024).
Austria	Austrian Health Insurance Fund	https://ec.europa.eu/eurostat/databrowser/view/migr_asytpsm_custom_10824024/default/table?lang=en (accessed on 15.5.2024) & Austrian health insurance fund (direct query).
Poland	PES network survey	Social Insurance Institution Poland, queried by PES; 24.05.2024.
Portugal	PES network survey	PES network survey; 24.05.2024.
Romania	PES network survey	Employment Agency and Ministry of Labour, queried by PES; 05/24/2024

Country	Sources	
Sweden	IOM	https://dtm.iom.int/reports/sweden-ukrainians-and-third-country-nationals-under-temporary-protection-executive-summary (last accessed 14.05.2024).
Switzerland	PES network survey	State Secretariat for Migration, queried by PES; 14.05.2024.
Slovakia	PES network survey	PES network survey; 24.05.2024.
Slovenia	PES network survey	Central Statistical Office Slovenia, queried by PES; 24.05.2024
Spain	Ministry for Inclusion, Security and Migration	https://www.inclusion.gob.es/documents/2178369/2280852/Nota_Ucranianos.pdf/ (last accessed 14.05.2024).
Czech Republic	IOM	https://dtm.iom.int/reports/czechia-displacement-surveys-refugees-ukraine-and-tcns-annual-report-15-jun-31-dec-2022 (Q4 22) (last accessed 05/14/2024); https://dtm.iom.int/reports/czechia-surveys-refugees-ukraine-needs-intentions-and-integration-challenges-april-june (Q2 23) (last accessed 05/14/2024); https://dtm.iom.int/sites/g/files/tmzbd1461/files/reports/DTM_Czechia_Socio-economic_condition_Ukrainian_refugees_JAN-JUN_2023.pdf (Q2 23) (last accessed 05/14/2024).
Hungary	IOM	https://dtm.iom.int/reports/hungary-surveys-refugees-ukraine-needs-intentions-and-integration-challenges-jan-mar-2023M (last accessed 05/14/2024)

Source: Own compilation.

Table A3: Correlation between macro indicators and employment rates of Ukrainian refugees: Robustness analysis

Dependent variable: employment rate. Average marginal effects

	Model 1 OLS Coef. (SE)	Model 2 Coef. (SE)	Model 3 Coef. (SE)	Model 4 Bootstrap Coef. (SE)	Model 5 Coef. (SE)	Model 6 Coef. (SE)
Number of children per woman of working age	-4.13*** (1.09)	-4.13*** (0.72)	Empty cell	-5.86*** (0.73)	-4.13*** (0.72)	-2.68** (0.87)
Share of people of retirement age	-4.67*** (1.21)	-4.67*** (0.47)	-4.88*** (0.47)	Empty cell	-4.64*** (0.47)	-2.54*** (0.47)
Share of refugees in the population in 2021	7.67*** (1.82)	7.67*** (0.24)	5.62*** (0.25)	8.09*** (0.43)	7.68*** (0.24)	5.77*** (0.27)
Unemployment growth rate in the previous year	-1.28* (0.58)	-1.28** (0.41)	-1.34** (0.41)	-1.57*** (0.39)	-1.29** (0.42)	-1.07 (0.61)
Scope of the labour market segment with low status	4.83*** (1.11)	4.83*** (0.39)	5.60*** (0.42)	3.78*** (0.59)	4.81*** (0.40)	5.09*** (0.34)
Index of labour market regulation	-3.88** (1.31)	-3.88*** (0.38)	-1.74*** (0.39)	-3.65*** (0.45)	-3.90*** (0.35)	-0.53 (0.40)
Per capita care costs as a percentage of GDP per capita	-0.89 (0.77)	-0.89 (0.49)	0.17 (0.50)	-0.12 (0.63)	-0.90 (0.49)	-0.77 (0.50)
Childcare infrastructure index	7.65*** (1.38)	7.65*** (0.44)	6.18*** (0.56)	6.86*** (0.62)	7.65*** (0.43)	5.36*** (0.33)
Full access to the healthcare system for Ukrainian refugees	2.37 (2.07)	2.37** (0.88)	3.84*** (1.02)	2.71** (0.89)	2.31* (0.95)	2.22** (0.74)
Share of Ukrainian nationals in the population 2021	11.58*** (1.66)	11.58*** (0.71)	7.66*** (0.46)	12.24*** (0.70)	11.62*** (0.70)	8.62*** (0.99)
Military, financial and humanitarian support, share of GDP	2.02 (1.37)	2.02** (0.62)	3.69*** (0.75)	2.48*** (0.60)	2.05*** (0.62)	4.45*** (0.67)
Index of linguistic proximity	-2.30 (1.27)	-2.30*** (0.67)	-0.97 (0.89)	-3.19*** (0.71)	-2.28*** (0.65)	0.11 (0.38)
English language skills in the host country	5.00*** (1.05)	5.00*** (0.51)	5.38*** (0.50)	6.05*** (0.57)	5.04*** (0.60)	5.11*** (0.51)
MIPEX: Equality on paper vs. extensive integration	14.21*** (3.01)	14.21*** (1.88)	8.03** (2.66)	17.56*** (2.10)	14.21*** (1.89)	Empty cell Empty cell
MIPEX: Temporary vs. extensive integration	4.06 (3.22)	4.06*** (1.20)	6.91*** (1.18)	4.13** (1.36)	4.10** (1.28)	Empty cell Empty cell
Support in finding a job	7.38** (2.13)	7.38*** (0.76)	8.43*** (0.78)	6.86*** (1.19)	7.26*** (0.77)	4.16*** (0.51)
Time trend	1.80* (0.73)	1.80*** (0.40)	1.84*** (0.46)	1.27** (0.43)	1.81*** (0.41)	1.16** (0.42)
Share of adults aged 18-34 years	Empty cell	Empty cell	Empty cell	4.62*** (0.55)	Empty cell	Empty cell
Unemployment rate in the previous year	Empty cell	Empty cell	Empty cell	Empty cell	0.11 (0.40)	Empty cell
Integration approach of Ukrainian refugees: job-first approach vs. language-first or mixed approach) ¹	Empty cell	Empty cell	Empty cell	Empty cell	Empty cell	9.26*** (0.84)
Constant	17.68*** (1.78)	17.72*** (1.10)	17.20*** (1.21)	16.52*** (1.16)	17.77*** (0.98)	20.34*** (0.83)
Observations	94	93	99	90	94	94

Notes: ***, **, * significant at the 0.1, 1 and 5 percent level. Standard errors grouped at country level (bootstrap method). ¹ For this variable, information on the assumption of costs for language courses or the obligation to attend language courses, among other things, was compiled. Based on expert assessments, the approach was then classified as job-first, language-first or mixed.

Legend: If the number of children per working-age woman among Ukrainian refugees increases by one standard deviation, the employment rate is 4.1 percentage points lower (model 2).

Sources: see Table A1 and Table A2 in the appendix (employment rates); see chapter 3.2 (indicators); own presentation.

Table A4: Descriptive statistics of the macro indicators

	Mean value	Standard deviation	Minimum	Maximum
Number of children per woman of working age	0.75	0.12	0.55	1.16
Share of people of retirement age	9.25	2.66	3.59	15.49
Share of refugees in the population in 2021	0.01	0.01	0.00	0.02
Unemployment growth rate in the previous year	-9.74	9.93	-25.58	15.63
Scope of the labour market segment with low status	6.6.	1.97	1.02	9.66
Index of labour market regulation	-6.97	0.68	-8.23	-5.83
Per capita healthcare costs as a share of GDP per capita	-0.02	0.74	-1.51	1.25
Childcare infrastructure index	0.20	0.08	0.03	0.42
Share of Ukrainian nationals in the population 2021	0.35	0.50	0.01	1.76
Military, financial and humanitarian support, share of GDP	0.35	0.36	0.00	1.41
Index of linguistic proximity	2.11	0.97	0.00	3.89
English language skills in the host country	66.85	12.06	55.31	100.00
Observations	94	Empty cell	Empty cell	Empty cell

Sources: see chapter 3.2own presentation.

Imprint

IAB Research Report 16|2024en

Date of publication

August 2, 2024

Publisher

Institute for Employment Research
of the Federal Employment Agency
Regensburger Straße 104
90478 Nuremberg

Rights of use

This publication is published under the following Creative Commons license: Attribution - ShareAlike 4.0 International (CC BY-SA 4.0) <https://creativecommons.org/licenses/by-sa/4.0/deed.de>

Download of this IAB-Research Report

<https://doku.iab.de/forschungsbericht/2024/fb1624en.pdf>

All publications in the series „IAB-Research Report“ can be downloaded from

<https://www.iab.de/de/publikationen/forschungsbericht.aspx>

Website

<https://iab.de/en>

ISSN

2195-2655

DOI

[10.48720/IAB.FB.2416EN](https://doi.org/10.48720/IAB.FB.2416EN)

Corresponding author

Professor Dr Yuliya Kosyakova

Phone: +49 (911) 179 3643

E-Mail: Yuliya.Kosyakova@iab.de