

Does the “beaten path” break? Spatial distribution of Ukrainian immigrants and refugees

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Abstract

The full-scale invasion of Ukraine in February 2022 has led to unprecedented consequences, making millions of people internally displaced and seeking safety in the European Union (EU) countries. This unprecedented since the World War II movement of refugees in Europe raises relevant questions related to their integration, spatial allocation and whether such geographical presence coincides or diverges from established Ukrainian diasporas in hosting countries.

The literature on international migration and its spatial patterns is well-established, offering a wide range of approaches to explain people’s cross-border movements. Moving beyond the “purely” economic push-pull mechanisms, more recent studies have highlighted the role of *network effects*, namely the influence of pre-existing immigrant population from the same origin country residing at a destination country. Empirical evidence confirms a significant role of such networks: once a certain threshold is reached, international migration flows, connecting specific origins with destinations, tend to become self-reinforcing (Bertoli and Ruysen, 2018; Bachmeier, 2013; Beine and Salomone, 2013; Beine et al., 2011; Pedersen et al., 2008). This phenomenon, also known as “beaten tracks”, indicates persistent spatial patterns in international migration.

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While the importance of migrant networks is more established in the context of international voluntary migration, less is known about whether similar mechanisms operate in case of forced migration. Most studies on refugees have traditionally focused on integration-related outcomes, such as labour market participation, language skills acquisition, housing conditions etc. However, refugees' spatial presence, especially within destination countries, has received comparatively less attention. Recent contributions show that network effects outperform economic factors in predicting country-level destination choices of asylum seekers (Di Iasio and Wahba, 2024). At the subnational level, a growing number of studies investigate refugees' internal or secondary mobility after initial placement, broadly confirming that co-nationals' concentration plays a role for relocation decisions of refugees (de Hoon et al., 2021; Mossaad et al., 2020). However, evidence on refugees' spatial allocation and the impact of pre-existing migrant networks for this process remains scarce. Limited research on this topic might be related to the government-led allocation policies defining initial placement of refugees. Moreover, secondary mobility of refugees is often reported to be relatively low in Europe (Vogiazides and Mondani, 2021), suggesting that government allocation policies have long-lasting effects.

The arrival of Ukrainian refugees following the full-scale invasion of Ukraine constitutes a distinct case compared to the earlier cohorts of refugees in Europe. In fact, Ukrainian refugees were not subject to allocation policies and could choose their initial location freely. This unrestricted mobility was further facilitated by visa-free entry available for Ukrainian citizens and the immediate border between Ukraine and some EU Member States.

Evidence on the within-country spatial distribution of Ukrainian refugees remains scarce though. Wiśniewski et al. (2024) shows that refugees from Ukraine settled in metropolitan areas and in the western regions of Poland. Although authors do not empirically analyze it, this pattern might be broadly consistent with the spatial presence of pre-war Ukrainian immigrants in Poland. One of the first attempts to investigate the role of existing immigrants' geographies for spatial patterns of refugees was done by Sauer et al. (2023) for Germany, who show that spatial presence of Ukrainian refugees mostly reflects the location of established immigrant communities from Ukraine. Despite this evidence, little is known on the spatial allocation of Ukrainian refugees and the role of network effects for this process. Hence, this is calling for a better understanding of Ukrainian refugees' spatial allocation and the role of established Ukrainian immigrant community for these patterns.

Italy offers an interesting context for the aim of our paper. Over the past decades, it has become a popular destination for international immigrants: already in 2011, the number of foreigners in Italy almost approached 4 million people (Colucci, 2019). Ukrainian citizens are among the largest

foreign-born nationalities residing in Italy (Michelangeli et al., 2019). Early cohorts of Ukrainian immigrants began arriving after Ukraine proclaimed its independence. According to the available administrative data, the number of Ukrainian citizens residing in Italy exceeded 8,000 individuals in 2001, which increased steadily in the following two decades⁴. Consequently, Italy hosts a sizeable and well-established Ukrainian immigrant community, reaching approximately 220,000 individuals as of January 2021. Following the outbreak of the full-scale invasion in 2022, around 170 000 Ukrainian citizens were granted temporary protection status as of May 2025⁵, placing Italy among the top recipients of Ukrainian refugees in the EU.

Spatial asymmetries are also observed regarding the subnational presence of foreign-born populations. The settlement of immigrants is highly unequal across space as foreign residents are mostly concentrated in Northern and Central Italy (Benassi and Naccarato, 2018). Besides this macro-level pattern, place- and nationality-specific clustering is also pronounced. In particular, immigrants from the same origin country tend to form spatial clusters, with Ukrainians being among the highly spatially clustered immigrant groups in Italy (Michelangeli et al., 2019). At the neighborhood scale, Ukrainian community is found to be highly concentrated in Naples urban agglomeration, where it represents one of the largest foreign communities (Strozza et al., 2016).

With this paper we aim to contribute to the literature by analysing the within-country allocation of Ukrainian refugees in Italy. By using province-level (NUTS 3) administrative data, we explore spatial presence of Ukrainian refugees and compare it to the one of Ukrainian immigrants, who settled in Italy before the invasion. By doing so, we offer new evidence on network effects in the context of forced migration, when allocation constraints are largely eliminated.

We retrieve data on the number of residence permits held by Ukrainian citizens as of January 2021 from the Italian National Institute of Statistics (ISTAT). These data are available at provincial (NUTS 3) level and allow us to identify the location of established Ukrainian immigrant communities at a finer geographical scale. The number of applications for temporary protection made by Ukrainian citizens are obtained from the Italian Civil Protection Department and cover all applications for temporary protection submitted by Ukrainian citizens between 24 February 2022 and 19 January 2023.

⁴ According to the historic series available from ISTAT. Retrieved from (last accessed in January 2026): https://seriestoriche.istat.it/index.php?id=1&no_cache=1&tx_usercento_centofe%5Bcategoria%5D=2&tx_usercento_centofe%5Baction%5D=show&tx_usercento_centofe%5Bcontroller%5D=Categoria&cHash=5dc94093f50e10c9e55a034d4c6ba123

⁵ According to the data from Eurostat. Retrieved from (last accessed in January 2026): https://ec.europa.eu/eurostat/databrowser/view/migr_asytpsm_custom_19168926/default/table

We complement the administrative data evidence with the analysis of primary data. In particular, we collected primary data targeting adult Ukrainian refugees (aged 18 and older) in Italy through a self-administrated online survey. To further explore the mechanism behind refugees' location, we rely on the question, which asked the respondents to assess the importance of the following factors for their decision to settle down in the region: other Ukrainians, family and/or friends, job opportunities, institutional assistance. The first two factors are related to network-driven motives for refugees' allocation.

Our findings show that the subnational presence of Ukrainian refugees is related to, but does not fully coincide with, the geography of Ukrainian voluntary immigrants, suggesting that the so called "beaten path", being a typical feature of self-reinforcing voluntary migration, is not necessarily reflected in case of forced migration. Moreover, refugees preferred to settle in some provinces of Northern and Central Italy yet being relatively less attracted by large metropolitan areas. By investigating further refugees' decisions related to settlement, we confirm that this is a complex decision-making process. In addition to network-related motives, respondents report job opportunities, study-related purposes, and safety considerations.

Keywords: forced migration; displaced persons; Ukrainian refugees; network effects

References

- Bachmeier, J. D. (2013). Cumulative causation, coethnic settlement maturity and Mexican immigration to U.S. metropolitan areas, 1995-2000. *Social Forces*, 91(4), 1293–1317. <https://doi.org/10.1093/sf/sot038>
- Beine, M., and Salomone, S. (2013). Network effects in international migration: Education versus gender. *The Scandinavian Journal of Economics*, 115(2), 354–380. <https://doi.org/10.1111/j.1467-9442.2012.01733.x>
- Beine, M., Docquier, F., and Özden, Ç. (2011). Diasporas. *Journal of Development Economics*, 95(1), 30–41. <https://doi.org/10.1016/j.jdeveco.2009.11.004>
- Bertoli, S., and Ruysen, I. (2018). Networks and migrants' intended destination. *Journal of Economic Geography*. <https://doi.org/10.1093/jeg/lby012>
- Colucci, M. (2019). Foreign immigration to Italy: Crisis and the transformation of flows. *Journal of Modern Italian Studies*, 24(3), 427–440. <https://doi.org/10.1080/1354571x.2019.1605721>

- De Hoon, M., Vink, M., and Schmeets, H. (2021). On the move again? Residential trajectories of refugees after obtaining asylum in the Netherlands. *Population, Space and Place*, 27(2). <https://doi.org/10.1002/psp.2386>
- Di Iasio, V., and Wahba, J. (2024). The determinants of refugees' destinations: Where do refugees locate within the EU? *World Development*, 177(106533), 106533. <https://doi.org/10.1016/j.worlddev.2024.106533>
- Michelangeli, A., Pontarollo, N., and Vittucci Marzetti, G. (2019). Ethnic minority concentration: A source of productivity growth for Italian provinces? *Papers in Regional Science: The Journal of the Regional Science Association International*, 98(1), 17–35. <https://doi.org/10.1111/pirs.12327>
- Mossaad, N., Ferwerda, J., Lawrence, D., Weinstein, J., and Hainmueller, J. (2020). In search of opportunity and community: Internal migration of refugees in the United States. *Science Advances*, 6(32), eabb0295. <https://doi.org/10.1126/sciadv.abb0295>
- Pedersen, P. J., Pytlikova, M., and Smith, N. (2008). Selection and network effects—Migration flows into OECD countries 1990–2000. *European Economic Review*, 52(7), 1160–1186. <https://doi.org/10.1016/j.eurocorev.2007.12.002>
- Sauer, L., Ette, A., Steinhauer, H. W., Siegert, M., and Tanis, K. (2023). Spatial patterns of recent Ukrainian refugees in Germany: Administrative dispersal and existing ethnic networks. *Comparative Population Studies*, 48. <https://doi.org/10.12765/cpos-2023-11>
- Strozza, S., Benassi, F., Ferrara, R., and Gallo, G. (2016). Recent demographic trends in the major Italian urban agglomerations: The role of foreigners. *Spatial Demography*, 4(1), 39–70. <https://doi.org/10.1007/s40980-015-0012-2>
- Vogiazides, L., and Mondani, H. (2021). Geographical trajectories of refugees in Sweden: Uncovering patterns and drivers of inter-regional (im)mobility. *Journal of Refugee Studies*, 34(3), 3065–3090. <https://doi.org/10.1093/jrs/feaa074>
- Wiśniewski, R., Szejgiec-Kolenda, B., Duma, P., Maruniak, E., and Komornicki, T. (2024). Refugees from Ukraine in Poland—Differentiation of spatial distribution and impact on demographic structures. *Population, Space and Place*, 30(4). <https://doi.org/10.1002/psp.2748>