

PRESS RELEASE

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Ukraine: Population loss endangers reconstruction

- *20% decline in population, pre-war level out of reach*
- *Labour force massively shrinking*
- *Labour shortage threatens reconstruction and economic recovery*
- *New forecasting model on demographic projections closes research gap*

What are the consequences of the war for population development in Ukraine and what does this mean for the reconstruction and economic future of the country? These are the questions addressed in a new study by the Vienna Institute for International Economic Studies (wiiw), which fills a gap in current research. Major conclusions: The war has radically exacerbated the demographic crisis Ukraine has faced since independence in 1991 and is likely to lead to a massive labour shortage after hostilities end. Regardless of how long the war lasts and whether or not there is further military escalation, Ukraine is unlikely to recover demographically from the consequences of the war. Even in 2040 it will have only about 35m inhabitants, around 20% fewer than before the war (2021: 42.8m) and the decline in the working-age population is likely to be the most severe and far-reaching.

Acute labour shortage looms

This could have a very problematic impact on reconstruction. There will simply be a lack of people to enable Ukraine to recover from the destruction and to get the economy going again. The problem will be particularly severe in the Eastern and Southeastern regions of the country most affected by the war. Above all, a massive outflow of well-educated women of working and childbearing age, who make up about 70% of the adult refugees, is likely to sustain the population loss for a long time. In addition, many children and young people have left the country, as they constitute about a third of refugees. *'Many of them will no longer be there when it comes to rebuilding the war-torn country. We assume that more than 20% of the refugees will not return to Ukraine,'* says Maryna Tverdostup, Economist at wiiw and author of the study.

New scientific territory

Owing to the great uncertainties regarding the further course of the war, only a few studies so far have tried to forecast the future trajectory of Ukraine's population. In particular, there has been no comprehensive forecasting model that takes into account migration scenarios including ageing and gender-specific aspects of the population. With this study, Tverdostup closes this research gap and enters new scientific territory. She projects the future demographic development of Ukraine with a microsimulation model by looking at various scenarios regarding the duration and military escalation of the war. In doing so, the development of age-specific fertility, age- and gender-specific mortality, age- and gender-specific refugee outmigration rates, and age- and gender-specific return rates in the population are modelled for four scenarios and incorporated in the stochastic population growth model.

Population remains below pre-war level

In the best-case scenario, the war ends this year and there is no further military escalation. Even in this case, the number of refugees who have fled Ukraine would be around 8.3m by the end of 2023, according to the study. In the best case, the country's population is likely to increase again from 2024 and reach its post-war peak of 37.8m in 2030. Even so, it would never return to its pre-war level (2021) of around 42.8m and would be around 36m in 2040, about 17% below its pre-war level. The working-age population (18- to 60-year-olds) would decline to 19.9m, down by 22.6% from 2021. The birth rate would recover faster, fewer people would die and refugees would return earlier than in the other scenarios. If the war ended this year, but with further military escalation, the population would fall to 34.2m this year (a 21% decline from 2021). Thus, in the event of intensified military action, Ukraine would lose another 1.7m people even if the war ended this year.

The worst-case scenario, on the other hand, assumes an escalation of the war that lasts until 2025. In this scenario, Ukraine would lose around 7m people between 2022 and 2025, and even in the 2030s the population would not return to the level of 2022. In this scenario, fertility would remain lower, mortality higher, refugee outmigration high and the number of returnees limited. The projected number of refugees would be particularly dramatic here: the total would rise to 14m by the end of 2025 in the worst-case scenario, with a large proportion of them assumed to return, which is why the total population loss between 2022 and 2025 would be 7m people. In 2035, a post-war peak population of only 35.2m would be reached (19% less than before the war), followed by a decline to 34.6m in 2040 (21% less than in 2021). The resulting loss of the working-age population would be even more worrying, as it would shrink to 19.2m by 2040, 25% below the 2021 level.

Dramatic challenge

'In any of the scenarios, Ukraine faces a dramatic demographic challenge, similar to Europe after World War II,' concludes study author Tverdostup. *'The bloodletting of the population due to the war will severely affect the country's reconstruction and economic recovery for years to come,'* she adds. The study therefore recommends a package of measures to the Ukrainian government and its international partners to keep the population loss in check and economic development opportunities intact. Encouraging as many refugees as possible to return and creating the necessary living conditions, providing adequate housing and employment, and ensuring access to well-functioning health care and education are the top priorities. Incentives to boost immigration and increase the very low birth rate are other essential steps. Particular attention must also be paid to the divergence across Ukrainian regions, as these have suffered differently from destruction, internal displacement and outward migration, and this will have a persistent effect on demography over the long run.

[The full study is available for download here.](#)

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About the Vienna Institute for International Economic Studies (wiiw)

For 50 years, wiiw has been an economic think tank that produces economic analyses and forecasts for currently 23 countries in Central, Eastern and South-Eastern Europe. In addition, wiiw conducts research in the areas of macroeconomics, trade, competitiveness, investment, the European integration process, regional development, labour markets, migration and income distribution.
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