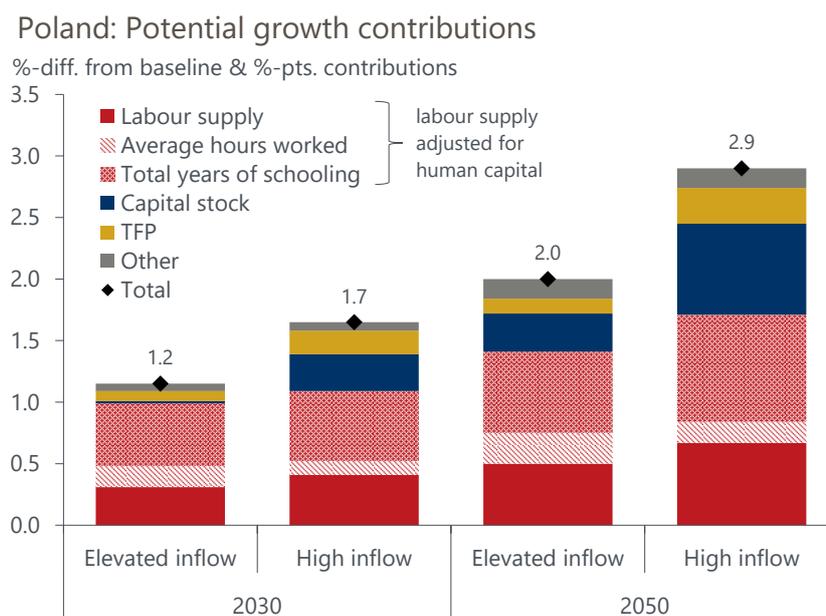


Research Briefing | Poland

Refugees will lift economy's potential, but challenges remain

- Around 3.2mn Ukrainian refugees, over half of the total number, have escaped to Poland since the start of the Russian invasion. Some of them are expected to become permanent residents of the country, which will boost the labour supply, employment, and the potential output of the economy. Although we estimate that these impacts will be tangible, we think that the inflow of refugees is unlikely to solve the long-standing demographic challenges the Polish economy faces.
- Given the scale of uncertainty clouding the issue, we have turned to our in-house Global Economic Model to build two alternative scenarios on top of our baseline, which currently assumes that 250k refugees will settle permanently in Poland: an "elevated inflow", assuming a total of 650k refugees remain in the country, and a "high inflow" scenario, where 1mn refugees stay. The results indicate that the impact on the long-term potential of the Polish economy will be tangible, with potential output 1.7%-2.9% higher (growing 0.06%-0.1% p.a. faster) until 2050.
- Modelling such an impact is fraught with difficulties. The exact number of Ukrainian refugees currently residing in Poland is uncertain, given that those continue further West are untracked. Furthermore, the population structure of the refugees is very different to what was witnessed in the past, with women and children under 14 accounting for over 90% of the total inflow. Hence, family reunions and childcare provision will be key to assess the impact on labour supply.
- Although recent polls suggest that most refugees want to go back to Ukraine when the war abates, favourable government policy, cultural and language similarities, a tight labour market, and high wage growth all increase the chances that a significant share of the refugees will stay. On the other hand, access constraints to housing and public services may limit the scale.
- But even if a fairly large proportion of refugees stay, it would only partially ease the strained labour market and would not be a long-term solution to the long-term demographic issues that Poland faces, such as a growing dependency ratio and low participation rates of older cohorts.

Chart 1: Recent inflow of Ukrainian refugees could noticeably boost potential of the Polish economy



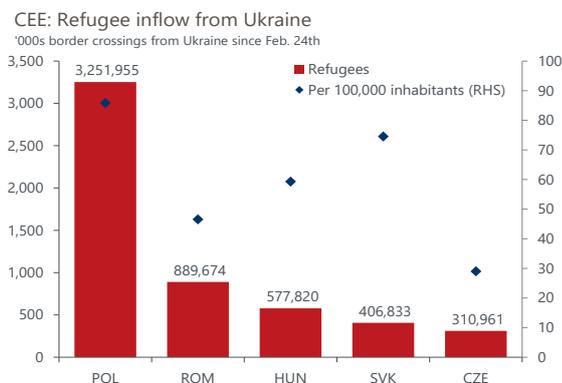
Source: Oxford Economics/Haver Analytics

An estimated 1.25mn-1.75mn Ukrainian refugees currently reside in Poland

Russia's invasion of Ukraine in late February has forced millions of Ukrainians to flee their homes, triggering an unprecedented refugee crisis in the region. According to official statistics, as many as 12mn people have escaped the endangered areas, with around 6mn refugees leaving the country. As we have previously noted, CEE countries have received a disproportionate number of refugees, with more than half (3.2mn, or 54%) fleeing to Poland alone (Chart 2).

However, despite reliable border crossing data, the number of refugees currently residing in Poland can only be approximated because data on the further movements of Ukrainians, such as to other EU countries, is not available. In addition, movements across the border happen in both directions, with around 1.2mn Ukrainians, mostly men, having returned to their home country (as of May 12th).

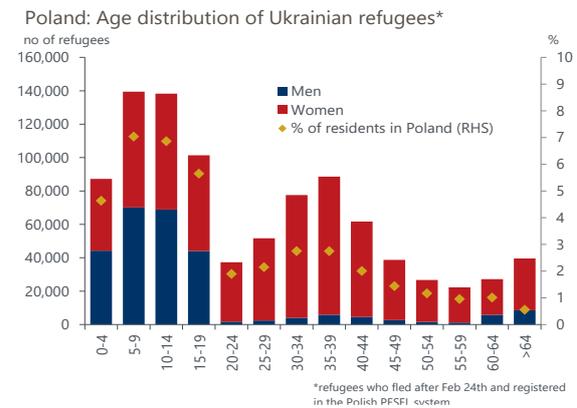
Chart 2: Poland has received the biggest number of refugees from Ukraine



Source: Oxford Economics/UNHCR

A few days after the onset of Russia's invasion of Ukraine, the Polish parliament passed a law allowing the refugees to obtain a personal ID registry number (PESEL), which is required to access a number of social security and labour market services and benefits. As of April 18th, close to 1mn PESELS were granted to Ukrainian refugees, and the process is ongoing. We therefore think that, despite over [3mn border crossings from Ukraine into Poland since the start of the war](#), 1.25mn-1.75mn (3.2%-4.5% of Poland's population) is a more likely range for the number of refugees currently staying in the country.

Chart 3: Women and children dominate the age and gender structure of Ukrainian refugees in Poland



Source: Oxford Economics/Haver Analytics

The data on PESELS confirm what could be observed in the various broadcasts from the Polish-Ukrainian border and what can be seen on the streets of Polish cities: that the vast majority of refugees have been adult women (46.1% of total) and children (38.9% of total have been children under the age of 14) (Chart 3).

This age and gender structure stands in stark contrast to most refugee crises in the past, such as the 2015-2016 European crisis, where young men aged 18-34 constituted the largest group (around 35%-40%). This complicates the modelling of the long-run impact of the refugee influx, given the unknown scale of family reunions (especially men rejoining their families in Poland) and uncertainty about whether the increased demand for childcare could be met if families stay separated, with particular consequences for women's labour market participation.

In the short-run, refugee inflow will trigger additional spending, which will raise the fiscal deficit but also boost consumption

The inflow of refugees has been met with overwhelming societal response in Poland as citizens, firms and NGOs have worked together to provide basic necessities for the newcomers. On March 12, the government passed a number of [regulations](#) aimed at helping the refugees settle in Poland, including the right of residence and to work (for 18 months), access to the healthcare and social security systems, and social benefits, including the childcare benefit (worth PLN500, or EUR110/month).

Refugees will lift economy's potential, but challenges remain

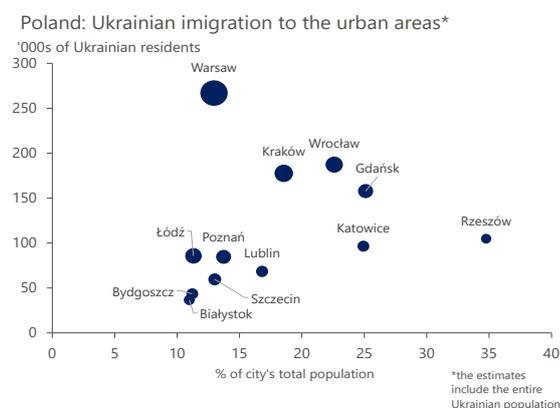
As we have previously signalled, both private spending and government transfers will support consumption in 2022, likely preventing consumer spending in real terms from falling later this year. However, the budget deficit will likely surpass 4% of GDP and will remain elevated next year due to higher military-related spending, social transfers, and tax cuts.

The current refugee inflow will cause the government to incur higher fiscal costs, boosting expenditures by at least 1.5% of GDP this year (note that this estimate exceeds the range of 0.1%-0.9% of per annum GDP costs reported by European countries during the 2015-2016 refugee inflow). But as the refugees integrate and join the labour market, they will benefit the Polish economy in the medium and long term. However, the scale of benefit will crucially depend on the proportion of refugees settling permanently in Poland.

Most refugees state they are willing to return to Ukraine, but there are reasons for them to stay in Poland

According to anecdotal evidence and small-sample polls, most refugees state they are willing to return to Ukraine when the war de-escalates and it is safe to go back. But the favourable societal attitudes and "open door" policy pursued by the government, alongside a host of cultural and pecuniary factors, may incentivize more refugees to settle in Poland for good.

Chart 4: Most Ukrainians currently reside in the biggest cities, boosting their populations



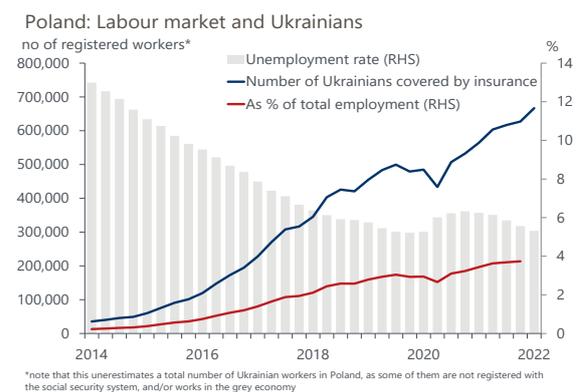
Source: Oxford Economics/Unia Metropolii Polskich

First, granting refugees instant access to the labour market seems particularly sensible, given the evidence from other European countries that even a temporary ban on joining the workplace

[reduces future employment probability by as much as 15%](#). In addition, the lack of forced relocation plans mean that most refugees will settle in the main urban centres (the biggest 12 metropolitan areas are currently hosting around 2/3 of all Ukrainians, see Chart 4), where unemployment rates are the lowest and demand for labour is the largest. This will benefit refugees through better job opportunities and higher wages, but also allow them to build connections with fellow Ukrainians and other foreigners, aiding integration (see [here](#)).

Furthermore, Ukrainians have become a vital part of the Polish labour market since the Russian annexation of Crimea and parts of Eastern Ukraine in 2014. During the following seven years, the number of workers coming from Ukraine that were insured in the Polish social security system rose 17-fold to 630k by end-2021 (Chart 5). However, given that a noticeable proportion of workers from Ukraine remained unregistered, the boost to the labour supply could have been larger, with estimates ranging from 800k-1.2mn. Importantly, due to cultural and language similarities, their integration into the Polish labour market was relatively seamless. Given the considerable emigration ahead of the war, labour market integration for the current wave of refugees should prove to be easier than it would have otherwise been, which could encourage more refugees to stay.

Chart 5: Ukrainians formed an increasingly vital part of the Polish labour market before the war



Source: Oxford Economics/Haver Analytics

But there are pivotal risks to and uncertainties about this outlook as well. First, the supply of housing is inelastic in the short term and it has already shown signs of strain given the surge in input prices and limited rental market. Furthermore, underfunded public services,

primarily healthcare and education, may fail to accommodate the needs of the refugees if most decide to settle in Poland permanently.

Ukrainian refugees will noticeably boost the Polish economy's potential in the medium and long term

Overall, it is extremely challenging to estimate the final number of refugees that will likely settle in Poland. Hence, in order to gauge the range of possible medium and long-term impacts of this migration flow on the Polish economy, we have turned to our in-house Global Economic Model (GEM) to build alternative scenarios that assume different numbers of refugees settle in Poland permanently.

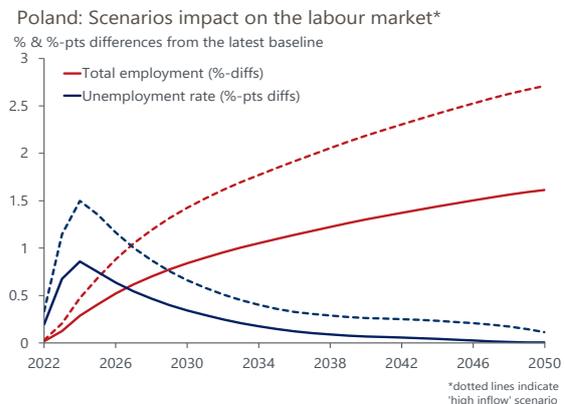
The scenarios build upon our current baseline projection, which assumes that 250k refugees stay in Poland. We have constructed two alternative scenarios: (1) an 'elevated inflow', assuming a total of 650k refugees settle in Poland, and (2) a 'high inflow', where 1mn refugees stay in the country. Given the caveats listed before, we consider the 'elevated inflow' scenario to be more realistic, although the 'high inflow' scenario's probability would increase if Russia continued to prolong the war and destabilize Ukraine. Importantly, our analysis includes the long-term impact of the inflow of refugees on population changes. A detailed description of our scenario assumptions can be found in Table 1 at the end of the document.

The results indicate that the economic impact of the ongoing refugee inflow will likely prove tangible in the long term. This is primarily due to a boost to the labour supply, which is 210k (1.2%) higher in the 'elevated inflow' scenario and 370k (2.1%) in 'high inflow' by 2030. In addition, higher production capacity translates into more investment outlays, which boosts the capital stock, especially in the long-term (1%-2.1% by 2050). Finally, given that incoming refugees constitute a new pool of talents, which in a decade or so will likely spur new start-ups and technologies, we have incorporated a small but noticeable impact on long-term total factor productivity (TFP) (Chart 7).

Overall, the combined influence of these factors lifts potential GDP by 1.7%-2.9% by 2050, depending on the scenario (Chart 1). This order of magnitude is in line with the findings of [Strzelecki et al. \(2021\)](#), who showed that

Ukrainian immigration to Poland in 2013-2018 boosted the size of the economy by around 13%.

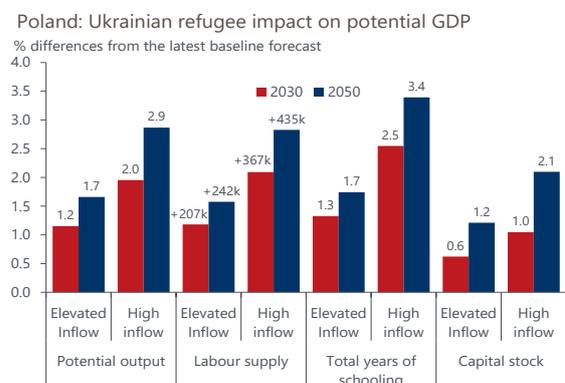
Chart 6: Unemployment rates will rise in the short term in both scenarios



Source: Oxford Economics/Haver Analytics

Also, it is important to note that the support to the supply side of the economy will prove disinflationary, especially in the medium to long term, because higher expenditures will work in the opposite direction in the short term. More specifically, we can expect inflation to be 0.1%-0.2% p.a. lower on average until 2050.

Chart 7: Labour supply could grow by as much as 3% in the high inflow scenario by 2050



Source: Oxford Economics/Haver Analytics

But it's not all good news. For one, despite the acute labour shortage, the labour market will struggle to absorb such a large inflow of refugees in a short span of time due to skill mismatches and a looming slowdown of GDP growth. Therefore, we expect unemployment to pick up temporarily, but to decrease over time as refugees integrate. This factor is more relevant to the 'high inflow' scenario, where unemployment peaks around 1.5ppts higher in H2 2023, before gradually decreasing (Chart 6).

In general, and as signalled above, interpretation of these results should consider the high degree of uncertainty about the future evolution of the war. Beyond that, our modelling assumes that age and gender distribution are largely in line with historical patterns, not such a skewed one as presented in Chart 3. Therefore, the realized impact on the labour force crucially depends on family reunions and providing women with ample childcare services. The less of that we see, the less positive the probable impact becomes on the Polish economy.

Refugees will not solve long-standing structural demographic challenges

But even if the inflow of Ukrainian refugees offers a welcome respite to the strained labour market amid robust nominal wage growth, it will not be large enough to solve the structural issues that Poland faces on the demographic side.

This primarily includes a gradual worsening of the dependency ratio, an issue exacerbated by the lowering of the retirement age in the mid-2010s,

which prompted a wave of early retirements. Although the participation rates in the older cohorts have been increasing gradually since (largely due to wages growing faster than pensions), they are still at levels much below the EU average.

On one hand, this calls for the continuation of policies aimed at attracting as many Ukrainians as possible to settle in Poland and take up employment in the country. But in the absence of a coordinated effort aimed at incentivizing natives to remain in or (re)join the labour force, new pension and healthcare-related spending that is unmatched by tax revenues will begin to exert an increasingly unrelenting pressure on public finances. The latter may be especially dangerous for an economy that already faces a large fiscal bill for the transformation of its energy sector and CO2 neutrality ambitions.

Table 1: Scenario assumptions

	Settlement	Lab. market	Avg. hours worked	Employment	Capital	TFP
Baseline	250k Ukrainian refugees settle in permanently	participation rate of refugees gradually increases to 70%	unchanged	in line with past employment patterns	rises endogenously in line with higher investment spending	unchanged
Elevated inflow	650k Ukrainian refugees settle in permanently	participation rate of refugees gradually increases to 65%	increase by around 0.6% in the economy by end-2023	model-determined in both short and long run	rises endogenously in line with higher investment spending	TFP impact is delayed and limited
High inflow	1mn Ukrainian refugees settle in permanently	participation rate of refugees gradually increases to 60%	increase by around 0.9% in the economy by end-2023	model-determined in both short and long run	rises endogenously in line with higher investment spending	TFP impact is delayed, and slightly larger

Source: Oxford Economics