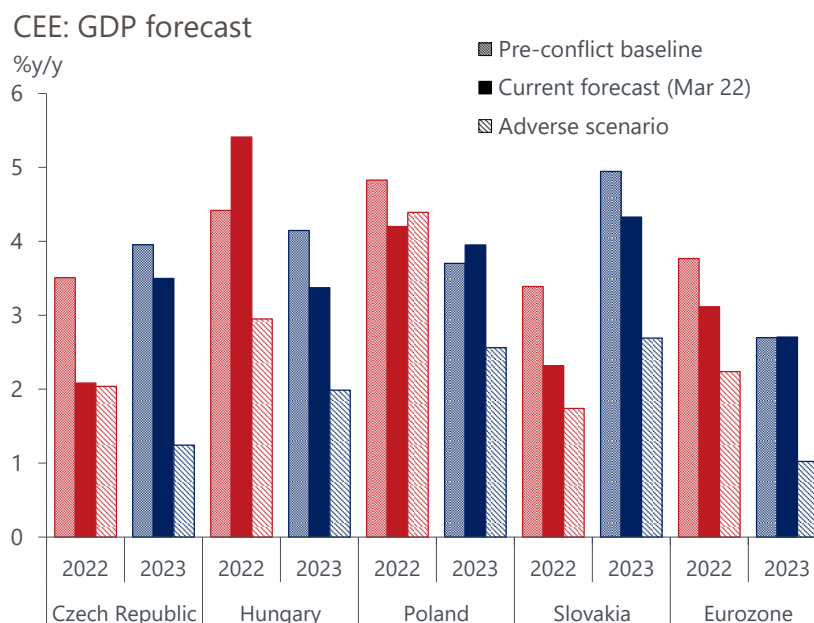


Research Briefing | Europe

Russia's invasion of Ukraine is sending tremors through CEE

- Russia's invasion of Ukraine is being felt throughout the global economy, but few places are as exposed to its impact as the Central and Eastern European (CEE) countries. In addition to surging energy prices, CEE economies will be hurt by renewed supply shortages in manufacturing, loss of access to Russian markets, currency depreciation, and the refugee crisis. As a result, we have cut our growth forecast by around 1ppt this year and 0.5ppt in 2023. But the situation remains very volatile, and given the CEE's exposure, the risks are tilted heavily to the downside.
- The chief culprit has been soaring commodity prices pushing inflation ever higher. Double-digit inflation arrived in Czech Republic in February, and other countries are likely to soon follow suit. Rising prices will put a dent real incomes and erode the value of households' savings, weighing on consumption. Tight labour markets should cushion some of the blow to wages. But reliance on Russian imports of oil, gas, coal, and nuclear material makes CEE countries very vulnerable.
- While the trade exposure of CEE countries to Russia and Ukraine is limited, it's not insignificant. The impact will be mainly borne by the manufacturing sector. Although Russia and Ukraine are only partly integrated in the European supply chains, they supply a number of key inputs (such as nickel and neon). And both countries represent big export markets for the CEE automotive sector.
- Already-elevated inflation will be further exacerbated by depreciating currencies as investors move to safety. This is of particular concern to the CEE economies. The central banks of the Czech Republic, Hungary, and Poland have begun intervening in the FX market to prop up their currency. But sell-off pressures are likely to continue despite the rate differential to the eurozone.
- A factor that is yet hard to quantify is the humanitarian cost. About 85% of Ukrainian refugees (some 2.4 million out of 2.8 million) have sought refuge in the CEE. Given the geographical and cultural links, most will stay until the end of hostilities, if not beyond. The refugees will boost CEE consumption and should manage to integrate well, however there will be a high fiscal cost.

Chart 1: CEE countries are vulnerable to economic damage from the war



Source: Oxford Economics/Haver Analytics

Mateusz Urban - Economist - murban@oxfordeconomics.com

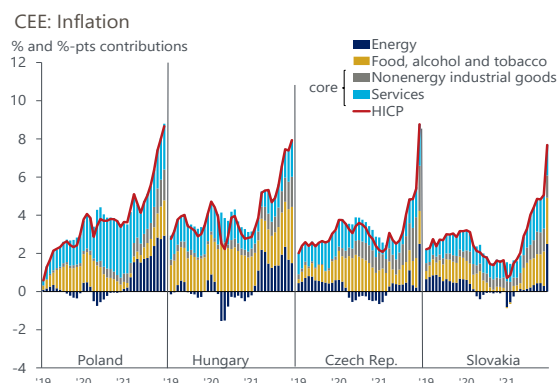
Tomas Dvorak - Senior Economist - tdvorak@oxfordeconomics.com

Russia's invasion of Ukraine is sending tremors through CEE

The war will boost near-term inflation,

Inflation in the CEE continues to surprise to the upside (**Chart 2**). And the Russian invasion of Ukraine, primarily through its impact on commodity prices, has only added fuel to the fire, further aggravating the position of central banks in the region.

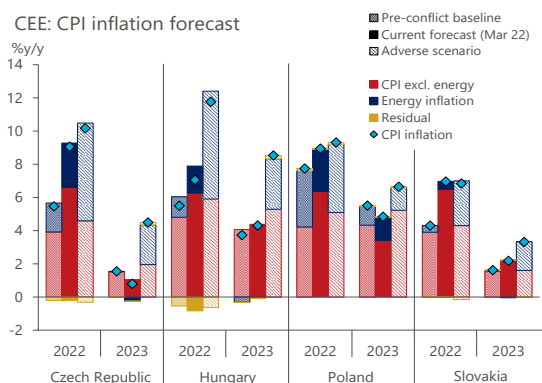
Chart 2: Energy prices will boost 2022 CEE inflation rates



Source: Oxford Economics/Haver Analytics

Energy prices are only one part of the story, however. The conflict will curb supply of precious metals (such as palladium, of which Russia is a key producer), exacerbating input shortages and leading to renewed pressure on producer prices. Plus, food price inflation is likely to pick up throughout the year, as wholesale prices of grains and fertilizers are driven higher by sanctions and export/import bans. This means inflation in the CEE will rise beyond record-high levels seen at the turn of the year. More specifically, we expect CPI inflation in 2022 to approach double-digit levels in Poland (9.9%, up 2.2ppts from the

Chart 3: We revised our inflation forecasts up with further risks to the upside

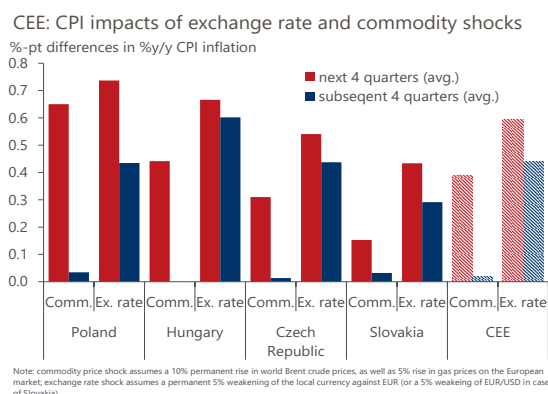


Source: Oxford Economics/Haver Analytics

pre-war forecast) and Czech Republic (9.1%, up 3.6ppts), and slightly lower readings for Hungary and Slovakia, at 7.1% and 7%, respectively (**Chart 3**).

Importantly, given the extreme volatility in FX and commodity markets since the start of the war, the uncertainty around these forecasts is large and crucially dependent on the evolution of the conflict and the performance of CEE currencies. Indeed, the impact of commodity prices and the exchange rate on CEE inflation is substantial, especially in the case of Poland and Hungary, making them more vulnerable to a sudden escalation in the conflict or a prolonged increase in oil prices. More specifically, we estimate that a 10% (permanent) rise in global oil and gas prices – roughly a third of the price increase seen since the onset of Russian invasion – will push up inflation in the region by 0.4ppts on average over the following year with Poland seeing the largest pickup (0.7ppts). On the other hand, a permanent weakening of the currency by 5% (roughly half of the peak conflict impact to date) raises CEE inflation by 0.6ppts, with Hungary and Poland seeing stronger CPI impacts of around 0.7ppts, compared to 0.4ppts-0.5ppts for the Czech Republic and Slovakia (**Chart 4**). The elevated inflation rates will weigh on consumer spending, which was supposed to be the main engine of economic growth in 2022. Price pressures will put a dent in real incomes and erode the purchasing power of any excess household savings accrued over the pandemic. As a result, we have cut our 2022 consumption forecast by around 1.2ppts to 3.2%.

Chart 4: Poland and Hungary are vulnerable to energy prices and weaker currencies



Note: commodity price shock assumes a 10% permanent rise in world Brent crude prices, as well as 5% rise in gas prices on the European market; exchange rate shock assumes a permanent 5% weakening of the local currency against EUR (or a 5% weakening of EUR/USD in case of Slovakia).

Source: Oxford Economics/Haver Analytics

Russia's invasion of Ukraine is sending tremors through CEE

CEE central banks are in a tough spot

The stagflationary shock coming from the conflict puts the regions' central banks in a difficult position, as they need to strike a fine balance between their willingness to curb inflation while limiting the impact of tightening on economic activity. But, and in a stark contrast to the Western EU economies, a robust wage growth shields households' real incomes in CEE, supporting consumer spending and increasing the monetary "policy space" for central banks. We therefore expect the CEE central banks, [in line with recent NBP's actions](#), to stay hawkish, putting increasingly more weight on communication and FX interventions relative to interest rate hikes, but continuing preannounced monetary tightening, with terminal rates slightly higher than the ones seen pre-war. But given that the impact of monetary policy usually comes with a substantial lag, the current central bank actions will largely be felt only in 2023 and 2024, with a limited impact on the ongoing inflationary surge.

In addition, the outlined policy approach of CEE central banks could prove increasingly hard to maintain – especially if CEE currencies remain under pressure, fiscal policies remain overly loose, and tight labour markets (coupled with elevated inflation expectations) continue to support fast nominal wage growth, keeping an upward pressure on core inflation. In the case of such a perfect storm of pro-inflationary forces, a monetary-induced hard landing would likely become the last viable policy option to curb inflation.

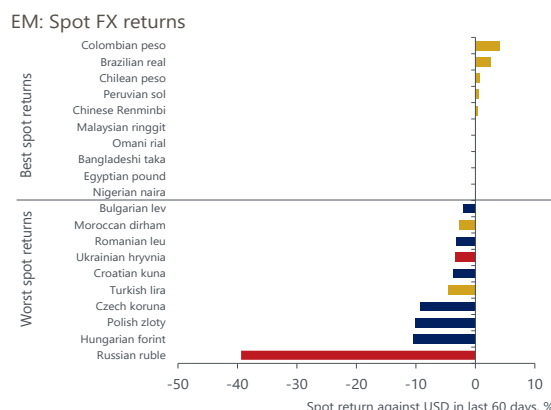
CEE currencies will suffer

While periods of geopolitical instability tend to lead to EM sell-off and a flight to safe havens, CEE currencies are taking a disproportionate hit at present. The Czech koruna, the Hungarian forint, and the Polish zloty all lost over 10% against the dollar after the news of the invasion before the respective central banks intervened in FX markets in support of their currencies ([Chart 5](#)).

We see the CNB as best placed in this regard, with a strong track record of FX interventions including orderly exits and large accumulated FX

reserves. The MNB has been mired in a precarious position of managing both the FX and

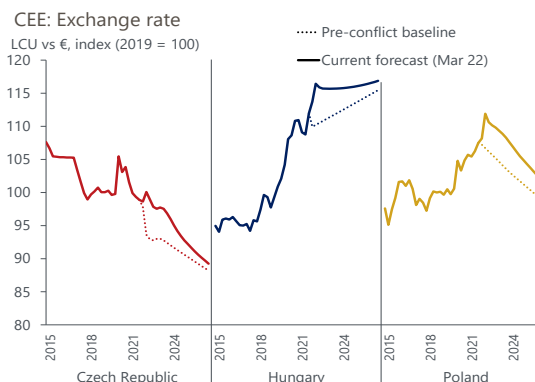
Chart 5: The CEE currencies were hit hard by the sell-off



Source: Oxford Economics/Haver Analytics

long-term interest rates for a while and with the added pressures has had to navigate a tricky path. The NBP has been caught behind the curve and has already responded with an above-consensus 75bp hike to 3.5%. We expect all three central banks to enact further rate hikes in the coming months, but even the increased rate differential is unlikely to fully offset the current depreciation pressures, as the CEE currencies are subject to the whim of market sentiment and the news flow from Ukraine. This will exacerbate the current inflation pressures for the CEE countries with via higher import prices. We expect the fundamentals-driven appreciation will only resume in H2 and potentially even later in the event of a protracted conflict. However, playing in CEE currencies' favour is the increased rate differential, as the ECB is likely to push rate hikes further back ([Chart 6](#)).

Chart 6: Central banks' FX interventions should stabilise currencies



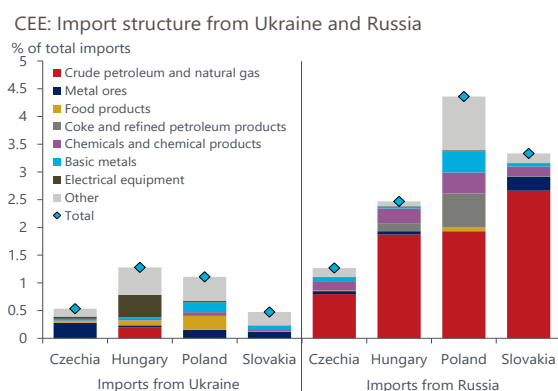
Source: Oxford Economics/Haver Analytics

Russia's invasion of Ukraine is sending tremors through CEE

Trade exposure is low but not negligible

The CEE countries' trade with Russia and Ukraine makes up only a fraction of both total exports and imports (around 5% and 4% combined, respectively), and the overall damage from the war and sanctions (and possible retaliations) is likely to be limited. That doesn't mean there will be no damage: Despite being only partially integrated in the European supply chain, Russia and Ukraine provide some key manufacturing inputs. These are concentrated primarily in raw materials and low value-added products: oil and petroleum, metal ores, basic metals, lumber, and wood products (**Chart 7**).

Chart 7: CEE manufacturers source some key inputs from both Russia and Ukraine...



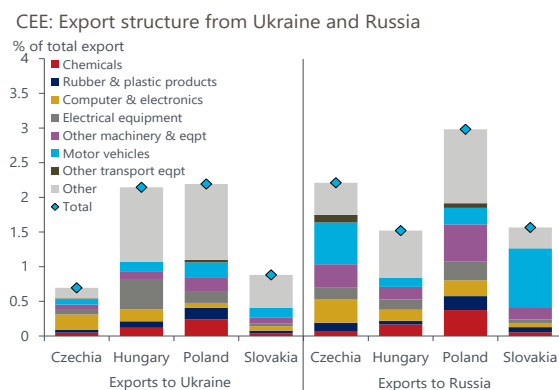
Source: Oxford Economics/Eurostat

The impact of supply disruptions has already been felt by the automotive sector, with some car manufacturers limiting or shutting down production last week due to a shortage of cable harnesses. In addition, Ukraine is a key producer of nickel (used in electric vehicle batteries), palladium (used in catalytic converters), and neon (used in lasers for the manufacture of microchips) – shortages of these inputs will weigh in the near term on CEE automotive production, which accounts for around 5% of the region's GDP and total employment. Retaliation on sanctions by Russia has also disrupted land freight from southeast Asia, which has been used in recent months as a substitute due to disruptions and high costs in container shipping.

On the export side, the exposure is limited, with exports to both Russia and Ukraine making up about 1%-3% of total exports for the CEE countries. But again, some manufacturing sectors

will bear a disproportionate brunt of the war, the sanction regime, and the retaliatory measures.

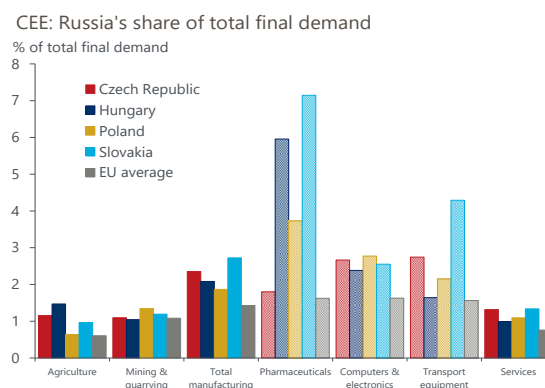
Chart 8: ...while both countries are also important export markets for some sectors



Source: Oxford Economics/Eurostat

This again applies primarily to the automotive sector, for which Russia is a relatively important export market at around 3% of total exports (**Chart 8**). Other sectors impacted include manufacturing transport equipment, electrical equipment, and chemicals, where around 2%-3% of total exports in the sector go to Russia and 1%-2% to Ukraine. On top of further supply disruptions, soaring energy costs will also weigh on the CEE's energy-intensive manufacturing sectors, with a double whammy for those sectors where natural gas is also used as a production input (such as chemicals, pharmaceuticals, or glass production). Our latest forecast sees CEE industrial production growing around 3.5% this year, 0.7ppts below our pre-conflict baseline, but the risks tilt clearly to the downside. Should our adverse scenario materialise, this would cut a further 0.3ppts from industrial production and 1.6ppts in 2023.

Chart 9: High value-added exports are exposed



Source: Oxford Economics/OECD

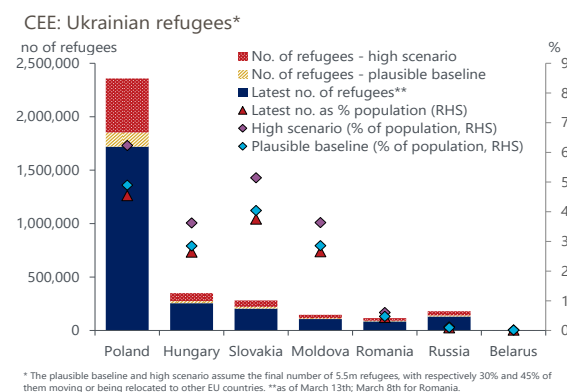
Refugees will boost region's population and labour supply

The Russian invasion of Ukraine has forced many Ukrainians to flee from their homes. As of March 13, more than 2.8 million Ukrainian refugees have escaped the war-stricken country (around 140k/day), according to UNHRC data. Escapees have sought refuge mainly in the neighbouring countries, primarily Poland, where over 1.7mn (61%) have fled to date, with Hungary (300k, 9%) and Slovakia (200k, 7%) being the other main targets. Although the final number of refugees is highly uncertain and dependent on the evolution of the war, most estimates suggest that the total number may reach 5-6 million, with some reports quoting figures as high as 8 million refugees (18% of Ukraine's population). But, even if we assume that the lower threshold of the range is more realistic, this would still translate into a substantial boost in the number of refugees that the CEE countries have taken in, with the final numbers roughly equal to 2-5% of the host countries' populations (**Chart 10**). This would further exacerbate the logistical challenges associated with the refugee inflow, likely necessitating pecuniary and reallocation assistance from the EU on top of the domestic fiscal efforts.

Granted, it's reasonable to expect some Ukrainians will go back home once the war stops, and that a fair proportion will move further West to other European countries, which so far have attracted around 305k refugees (11% of total). That said, given geographical vicinity, cultural similarities, and an already large and active Ukrainian diaspora as well as friendly labour laws for Ukrainians in the region (especially in Poland, which has relaxed its laws even more in the wake of invasion), we expect a fair proportion of war refugees to settle permanently in CEE. This would pose a series of unprecedented near-term challenges for the region's countries, which will aim to provide Ukrainians with access to already stretched and underfunded public utilities, with education and healthcare to the fore, as well as cover Ukrainians with their social safety nets and ensure their accommodation needs are met.

What poses a challenge today, however, may be a blessing tomorrow, particularly once the refugees take up work in the host countries. But it's important to bear in mind that, to date, a fair proportion of the refugees have been children, mothers, and elderly people. That said, as the refugees assimilate, more childcare is provided, and men re-join their families, CEE countries' are likely to see a boost to labour supply as Ukrainians start to seek employment. Any precise calculations of the final impact are premature given the vast uncertainty about the evolution of the conflict, individual states' capacity to host refugees, and the latter's preferences about their final destinations. However, our back-of-the-envelope calculations indicate that, even with conservative assumptions, this process may add between 2.2% (Hungary) and 4% (Poland) to the main CEE destinations' labour forces. We will analyse the impact of migration on the EU countries in a future research note.

Chart 10: Refugee inflow will boost CEE countries' populations, and, with time, labour supply



Source: Oxford Economics/Haver Analytics