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Europe's exposure to Russian gas

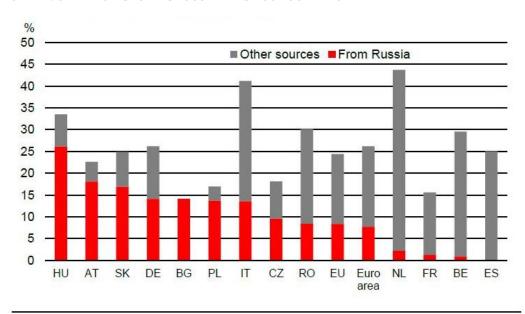
Abstract from *Chart of the Week* UniCredit Research

Conflict between Russia and Ukraine has driven energy costs higher and exposed Europe's reliance on Russian energy, particularly natural gas. In addition to the negative effects of higher prices, the security of supply has come into sharper focus. Our *Chart of the Week* indicates the exposure of European countries to Russian gas supply, proxied by the share of Russian gas in gross energy consumption. It gives an indication of how European countries would be affected if Russia were to cut gas supplies.

Overall, Russian natural gas accounts for around 8% of gross inland energy consumption in the EU and the euro area. Italy has a high share of gas in gross energy consumption, but it sources a lot of its gas from outside Russia, notably from North Africa, so its dependency on Russian gas is about the same as in Germany, at around 14% of gross energy consumption. France, due to its high share of nuclear power and gas sourced from Norway and LNG (liquefied natural gas), is hardly dependent on Russian gas supplies, and Spain not at all because it gets gas from other sources (LNG and North Africa). Austria has a lower share of gas in gross energy consumption, but with 80% coming from Russia, its dependency on Russian gas is relatively high. Some countries in CEE have a high share of Russian gas in gross energy consumption, especially Hungary with 26% and Slovakia with 17%.

A sudden stop of Russian gas to Europe (not our baseline) would represent a measurable shock, although the impact would be mitigated by a seasonal decline in demand. Alternative sources of gas and energy, and possibly some redistribution within the EU of gas in storage might also help to reduce the impact. But the most exposed countries are unlikely to be able to fully substitute for the loss of supply of Russian gas, probably requiring some rationing. Higher gas prices will deliver some of the adjustment in demand, but not all.

CHART: SHARE OF GAS IN GROSS ENERGY CONSUMPTION



Note: We use the consumption of natural gas in 2020 published by Eurostat and express it as a percent of total gross inland energy consumption. Data on the share of natural gas imported from Russia comes from the Bruegel paper "Preparing for the first winter without Russian gas | Bruegel". Bruegel used a complex input-output matrix for calculating the share of gas imported from Russia, instead of traditional import/export data on gas because the latter do not always reflect the country from which gas supply originates.

Source: Eurostat, Bruegel, UniCredit Research