

Domino effects of the war

The war Russia unleashed on Ukraine has global repercussions, beyond the death toll and the human tragedy in Ukraine itself, and the resulting refugee flows and wider destabilising effects on Europe's east. This infographic depicts some of the economic consequences of the war, for Europe, but also the rest of the world.

Amongst the effects most directly felt by Europeans are rising energy prices. For years, Russia has been Europe's largest supplier of coal, oil and gas. The war sent prices rising as Russia stopped supplying some Member States with gas, leading Europe to search for supplies elsewhere and forcing Europeans to pay more for their petrol and household heating. Higher energy prices are also a challenge for industry, which consumes large quantities of Russian gas.

Food prices have also risen since the outbreak of the war due to both Russia and Ukraine being amongst the largest producers of wheat and other commodities. The impact is felt directly by European consumers. Russia's position as an important commodity exporter also impacts on supply chains for raw materials used by European industry, some of which are listed in these infographics. Rising prices for energy, food and commodities fuel inflation in Europe, and are a daily reminder of the impact of this war of aggression far beyond the borders of Ukraine and the conflict itself.

The consequences of the war are not limited to the European continent. Many countries in North Africa and the Middle East depend on wheat exports from Russia or Ukraine. Ukrainian exports are particularly affected, with Russia occupying parts of south-eastern Ukraine's coastline, as well as attacking and blockading the remaining Ukrainian ports. Russia, in turn, has deliberately restricted some of its food exports in retaliation against the sanctions that have been imposed. The combined effect of reduced Russian and Ukrainian agricultural products means that the countries dependent on them - especially on wheat exports - will suffer directly as a consequence of the war unleashed by Russia. The combination of declining food exports and higher food prices poses a major risk for food security in some of the most vulnerable societies and

countries in the world, further aggravating a situation which had already deteriorated due to pandemic- related food supply issues The World Food Programme estimates that acute hunger could rise to affect an additional 47 million people in the 81 countries it monitors, as a result of Russia's war on Ukraine.

What these infographics demonstrate is that this is not a localised conflict which can be ignored by the global community. Russia's war of aggression was not only an assault on the world order. It also directly impacts on millions of people all over the world – on their food supply, the price they pay for their energy, and the industries in which they are employed. These 'domino effects' of the war will have far-reaching implications, not only for the EU's internal policies and its own resilience, but also for its external action and development policy.



DOMINO EFFECTS OF THE WAR

The war Russia launched against Ukraine not only has a devastating impact on Ukraine, its population, its production capacity and infrastructure, but also has multiple domino effects on other countries and/or sectors. These negative effects, as a boomerang, also hit Russia.

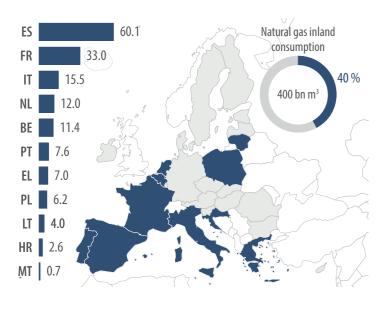
Energy EU dependency on Russia in gross available energy



The EU and its Member States are all net importers of energy, with more than half of the EU's energy needs met by imports. Russia was the <u>leading supplier</u> of the main fossil fuels to the EU (oil, gas, coal) over the 2010-2020 period. Europe's dependency on Russian supplies of oil and gas is harder to break than coal, especially in those Member States whose energy infrastructure is almost entirely set up to receive supplies from Russia. Natural gas is more difficult to transport and store than crude oil, so diversifying gas supplies is one of the biggest hurdles the EU has to face in the coming years.

LNG import terminals

Annual capacity in billion m³ per year

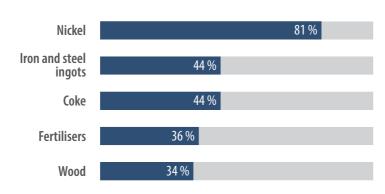


One of the main ways that the EU can reduce its dependency on Russian gas is to import higher volumes of liquefied natural gas (LNG), alongside other measures such as increasing the share of renewable energy, increasing the energy efficiency of products, and maximising gas storage capacities.

Spain is the country with the most LNG supplies, but it cannot easily export this to the rest of the EU because of the lack of interconnection capacity with France. A better geographical distribution of LNG terminals and improved interconnection capacity between Member States are a prerequisite for strengthening Europe's security of gas supply, while diversifying the source of pipeline supplies can also contribute towards energy security.

Key products dependency

EU import dependency on Russia



Russia is the largest country in the world. The country is richly endowed with natural resources and its economy has followed a commodity-based growth model. Russia plays a crucial role in global commodity markets, in the food, energy, minerals and materials sectors.

In 2021, it was the world's third biggest nickel producer, mining 250 000 tonnes (9 % of global production). Nickel is used for many products (mainly stainless steel, a range of alloys, electroplating and the fast-growing electric vehicle battery market). Coke and iron ore are used in steelmaking. Moreover, in 2021 Russia was the world's top exporter of nitrogen fertilisers (produced using natural gas), and ranked second for phosphorous and potassium fertilisers. Furthermore, Russia is, by far, the world's most forested country, hosting 20 % of the global forest area.

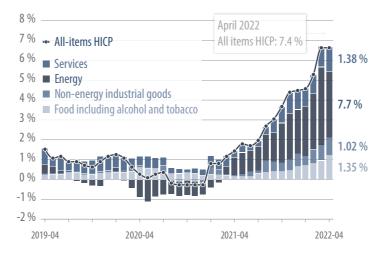
Agriculture EU import dependency on cereal

Ukraine 22 % Russia 4 %

The EU is largely self-sufficient for key food products, including wheat (for which the EU is an overall net exporter), maize and sugar. In the basket of imported cereals, a considerable percentage originates from Ukraine, while the proportion of Russian cereals is minimal.

Euro area inflation

Harmonised index of consumer prices, (HICP) in percentage points



After several years of inflation rates significantly below the inflation target, the ECB faces consumer price increases not seen since the euro was launched. In April 2022, inflation rates hit an annual rate of 7.4 % in the euro area. Although headline inflation stabilised compared to the previous month, underlying price pressure is broadening. Half of the price increase is due to high energy prices, which are to a large extent explained by the war in Ukraine. In order to tackle inflation concerns, the ECB has prepared the conditions for policy rate increases once asset purchases end. However, at the same time economic conditions are tightening which puts the ECB in a difficult position.

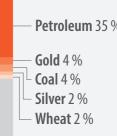
Aviation Air passenger traffic in Europe

Sierra Leone

Ukraine 3.3 % Russia 5.7 %

In February 2022, the EU (along with other countries, such as the US, Canada and the UK) refused access to EU airports for Russian carriers of all kinds and banned them from overflying EU airspace. Russia has in turn banned airlines of those countries from entering or flying over Russia. Consequently, movements by air of roughly 3.3 % of air passenger traffic in Europe have stopped, in addition to the passenger flights between Russia and Europe, which accounted for 5.7 % of total European traffic in 2021.

Top 5 products exported by Russia worldwide



War-related disruptions to supply of Russia's top exports and their soaring prices affect crucial economic sectors in the EU and worldwide. Importantly, the EU is Russia's top energy client, having imported 27 % of its oil and 46 % of its coal from the country in 2021. Since Russia and Ukraine provide over a third of global wheat exports, the war poses a serious risk of a food crisis in many regions of the world, which also exacerbates the rise of global inflation. Shortages of gold and silver may affect

many industrial sectors such as electronics, batteries, automotive and machinery.

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Exports of wheat by Russia and Ukraine

Russia and Ukraine are key agricultural players which, combined, export nearly 12 % of the food calories traded globally, and are major providers of basic agro-commodities, including wheat, maize

Bangladesh 6 % and sunflower oil. Together, they supply around 90 % of cereal imports in eastern Africa countries, and over 50 % in North Africa and the Middle East

- Pakistan 5 % (analysis of EU Commission — see global food security - cereal imports). Although EU sanctions imposed on Russia and Belarus do not target

these agricultural commodities, global food supply is negatively affected by a significant reduction of cereal exports from the countries at war.

Change in cost of food basket Sudan +506% Syria +360% Yemen +101% Ethiopia +86%

Russia's war on Ukraine has led to disruptions in food exports from Ukraine, Russia, and a number of other countries implementing policies to preserve their national food security. Compounded with previous rises in prices due to the coronavirus impacts and climate shocks, the FAO Food Price Index reached an all-time high in March 2022 and was still in April 2022 nearly 30 % above its April 2021 value. Eastern African countries which import 90 % — and Middle Eastern and North African countries over 50 % — of their cereals from Ukraine and Russia are among the most impacted. Higher prices and shortages also seriously affect food assistance to fragile countries.

Further information

Energy: EU dependency on Russia in gross available energy

This is an indicator of how the EU is reliant on energy imports from Russia. It is the share of imports in gross available energy in 2020. Gross available energy means the overall supply of energy for all activities on the territory; it includes primary production, recovered and recycled products, imports minus exports and change in stock.

Data source: Eurostat.

LNG import terminals: Annual capacity in billion m³ per year

The LNG map provides information on existing and operational LNG terminals in the EU. Data come from the Gas Infrastructure Europe (GIE), the association representing European gas infrastructure operators. Data provided on this map are for information purposes and to be treated as indicative only. There are 11 EU Member States with operating at LNG terminals, with an annual capacity of 160 billion m³.

Looking ate <u>natural gas consumption</u> in the EU, it has been flat over the last ten years, reaching 400 billion cubic metres (bn m³) in 2020. Looking at the two figures together, the EU could satisfy 40 % of consumption with the actual storage capacity.

Data source: Gas Infrastructure Europe (GIE), Eurostat and authors' calculations.

Key product dependency: EU import dependency on Russia and Ukraine

Data refer to the Standard International Trade Classification (SITC) using the three digit codes of the categorisation. The value represents the share of products imported into the EU coming from Russia and Ukraine in 2021. The EU imports €6.2 billion of Iron and steel ingots worldwide, of which €2.8 billion (or 44.3 % of the total) comes from Russia and €1.8 (28.0 % of the total) from Ukraine.

Data source: Eurostat and authors' calculations.

Agriculture: EU import dependency on cereal

Data refer to the Standard International Trade Classification (SITC), chapter 04 "cereals and cereal preparations". It is composed of the following products: wheat, meslin, barley and maize un-milled; rice; meal and flour of wheat and other cereal preparations. The value represents the share of cereals imported into the EU coming from Russia and Ukraine in 2021. The EU imports €8.5 billion of cereals worldwide, of which €1.8 billion comes from Ukraine and €0.3 from Russia.

Data source: Eurostat and authors' calculations.

Euro area inflation: In percentage points

The harmonised index of consumer prices (HICP) measures the changing cost of a fixed basket of goods and services over time. It is a 'pure price index', meaning that only changes in prices are reflected. It is calculated according to harmonised definitions providing the best statistical basis for international comparisons of consumer price inflation from the euro area perspective. It is the key indicator of price stability recognised by the European Central Bank and the European System of Central Banks. The graph presents the overall index broken down by sectors and per month. An index of 7.4 %, means that for €100 spent in April 2021 on a representative basket of goods and services, to buy the same basket a year later in April 2022 one had to spend €107.4.

Data source: Eurostat.

Aviation: Air passenger traffic in Europe

The indicator shows the percentage that Ukrainian and Russian air passenger traffic represents in total European traffic. Data refer to 2021. International air traffic to and from Russia accounted for 5.7 % of total European traffic; to and from Ukraine, 3.3 %.

Data source: The International Air Transport Association (IATA).

Top 5 products exported by Russia worldwide

Data refer to the Standard International Trade Classification (SITC) using the three digit codes of the categorisation. The value represents the share of selected products exported from Russia to the world in 2020. Russia exported about €300 billion of merchandise worldwide, of which €103 billion is petroleum, representing 35 % of total Russian exports. Data source: UN ComTrade and authors' calculations.

Exports of wheat by Russia and Ukraine

Data refer to the Standard International Trade Classification (SITC)), chapter 041 'Wheat (including spelt) and meslin, unmilled'. It shows the top 5 buyers of Russian and Ukrainian exports of wheat. The two countries together exported, in 2020, about €10 billion worth of wheat worldwide. Egypt is the first partner, buying about one fifth of their wheat (€2.1 billion).

Data source: UN ComTrade and authors' calculations.

Cost of a food basket

The cost of a food basket shows the percentage change in the cost of a basic food basket against the previous year. The indicator shows variation from 2021 to 2022, considering the cost as an average of the period of three months (January to March). It assumes a basket that provides 2 100 Kcal a day. Sudan is the country showing the most severe increase in the cost of a food basket worldwide. Looking at this indicator, together with the exports of wheat by Russia and Ukraine, the three biggest partners, Egypt, Turkey and Bangladesh faced increases in the cost of a food basket of 18 %, 75 % and 18 % respectively.

Data source: World Food Programme (WFP).

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