

A HEATMAP OF THE DEPENDENCE OF EUROPEAN COUNTRIES ON RUSSIAN AND UKRAINIAN IMPORTS

Hélène Baudchon, Stéphane Colliac, Guillaume Derrien (with the contribution of Elias Krief, intern, and Romane Surel, apprentice).

Countries neighbouring Russia and Ukraine are more exposed than those in Western Europe. Among the latter, there are differences, with Germany and Italy being more dependent on Russian gas than France, Spain or Portugal.

The countries that import the most from Russia are also the most dependent on Ukrainian imports.

The exposure of European countries to Russia and Ukraine, and their vulnerabilities to the economic repercussions of the war between these two countries, result primarily from the high weight of their imports of Russian energy supplies and Ukrainian food and agricultural products.

European countries are exposed to and penalized by the rise in prices of these products (caused by the conflict, which is a source of additional inflation), the slowdown in trade and the risk of supply disruption.

INTENSITY OF EXPOSURE TO RUSSIA



This chart shows the average position of each country on each of the 23 indicators of exposure to Russia. The higher this position, the greater the exposure for the country. Note: there is no data for the UK.

CHART 1

SOURCE: EUROSTAT, INTERNATIONAL TRADE CENTRE, BNP PARIBAS

In this article, we will examine the links between Russia, Ukraine and various European countries in order to evaluate the latter's exposure to the economic repercussions of Russia's military offensive in Ukraine since 24 February. To do so, we look at imports of goods from Russia and Ukraine and the weight of energy and food components in the consumer price index¹. The first series of indicators on imports gives us an assessment of the direct trade exposure of European countries, particularly when it comes to energy and food products, which are widely imported from Russia and Ukraine. The second series, examining the weight of energy and food in consumer spending, offers insight into the potential inflationary effects from the price shocks on the global commodities markets, which the war has amplified.

¹ Other indicators could be used to define the intensity of trade relationships with Russia and Ukraine, such as the number of tourist visits to the related countries, or the stock of foreign direct investment. However, we have not included them in our analysis, as they are often not significant. With the exception, for instance, of Cyprus, where Russian tourists account for 17.5% of the total number and which attracted Russian foreign direct investment worth 584% of its GDP in 2019 (this high figure reflects the preponderance of "Special-Purpose Vehicles" in the country), the low level of these ratios at the EU level (0.8% of total tourist numbers in 2019 came from Russia; with Russian FDI accounting for only 2.03% of EU-27 GDP) reflects the limited total exposure of European countries in these areas.

ECONOMIC RESEARCH



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INTENSITY OF EXPOSURE TO UKRAINE



This chart shows the average position of each country on each of the 23 indicators of exposure to Ukraine. The higher this position, the greater the exposure for the country. Note: no data is available for the UK.

CHART 2

SOURCE: EUROSTAT, INTERNATIONAL TRADE CENTRE, BNP PARIBAS

By presenting these indicators in the form of a heatmap, we can easily compare the level of exposure to Russia and Ukraine of all European countries. Where the data is available, we have also included the US, UK and China. Some indicators are broken down into sub-components to refine the comparison. For the six categories of trade in goods², we distinguish between (i) the share of a given product in total imports from Russia or Ukraine and (ii) the share of a country's total imports of a given product which comes from Russia or Ukraine. Linking these two variables allows us, for example, to analyse the weight of energy in trade between Russia and European countries: in 2019, 75% of EU imports from Russia were energy products, whilst 19% of total EU energy imports came from Russia.

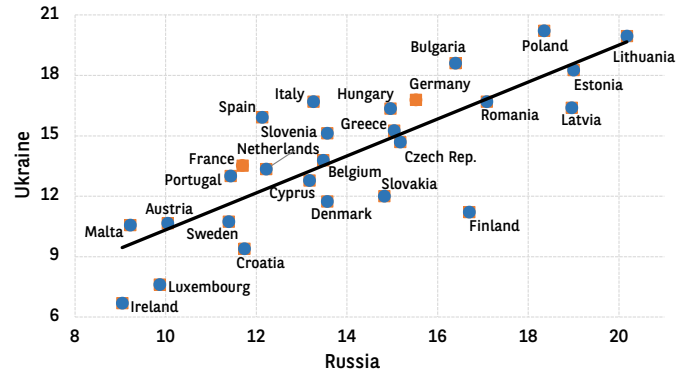
Within the table we also break down the "energy products" line by identifying the energy mix: the share of gross domestic energy consumption contributed by each of the three main fossil fuel types—natural gas, oil and coal. We also show the share of each fuel type imported by a country and the share that comes from Russia. These two complementary measures allow us to compare the dependence on imports of a specific energy source and its significance for the energy mix of a given country. A country that is both a heavy gas user and a big customer of Russian gas will be significantly more exposed than others. This is the case for Latvia and Slovakia, where gas makes up more than a quarter of the energy mix and all of it is imported from Russia. Conversely, in some countries, including Austria, Denmark and Croatia, gas makes up a non-negligible share of the energy mix, but it is not imported from Russia³.

We carried out a similar analysis for Ukraine. Unlike Russia, which is a major supplier of energy products, Ukraine mainly supplies the EU with agricultural and food products, which represented nearly one third of the EU's imports from Ukraine in 2019. We look at three major groups of agricultural products imported by the EU from Ukraine: cereals (corn, wheat, barley, oats, etc.), grains (soy, peanuts, rapeseed, sunflower, etc.), and animal and vegetable proteins. For these three product groups, we distinguish between (i) the share of a given product

² Food, raw materials, energy products, chemicals, machinery and equipment, and other manufactured goods (Glossary: Standard international trade classification (SITC) - Statistics Explained (europa.eu) ; the seventh category, "Other", in the table covers all goods not otherwise classified.

³ However, this observation needs to be taken in context as most of the countries listed purchase gas from Germany and Hungary, which are big importers of Russian gas: in 2019, 73.5% of Denmark's gas imports came from Germany, whilst in Croatia 70.1% of gas imports came from Hungary.

INTENSITY OF EXPOSURE TO RUSSIAN & UKRAINIAN IMPORTS



On this chart is represented on the abscissa (ordinate) the average position of each country in the 23 indicators of exposure to Russia (Ukraine). The higher the position, the greater the exposure for the country.

CHART 3

SOURCE: EUROSTAT, INTERNATIONAL TRADE CENTRE, BNP PARIBAS

in total imports from Ukraine and (ii) the share of a country's total imports of the product which comes from Ukraine.

With regards to the weight of energy and food in the consumer price index – indicative of the inflationary impact – Romanian, Latvian, Slovak, Bulgarian, Hungarian and Lithuanian households' purchasing power is the most exposed (30% of consumption goes on these basic items).

To establish a final ranking of the level of exposure of EU member states to Russia and Ukraine, we calculated an average of the positions for a given country for each of the 23 variables studied. The higher up the ranking a country is, the more dependent it is on Russia or Ukraine. This composite indicator confirms the significant exposure of countries close to Russia and Ukraine (Lithuania, Latvia, Estonia, Bulgaria, Finland, Poland [see charts 1 and 2]). It is also important to highlight the double exposure of the Baltic States to both Russia and Ukraine: a country heavily dependent on Russia is also dependent on Ukraine (see chart 3). Western European countries have less exposure, although there are significant differences, with Germany and Italy being more dependent on Russian gas than France, Spain or Portugal.

The exposure of European countries to Russia and Ukraine results primarily from their imports of Russian energy supplies and Ukrainian food and agricultural products. European countries' dependence on Russian gas, coal and oil contributes significantly to the EU's trade deficit with Russia (EUR49 billion in 2019). European countries are exposed and penalized, on the one hand, by the rise in prices of these products (caused by the conflict which is a source of additional inflation) and, on the other hand, by the slowdown in trade and the risk of supply disruption on primary products critical to domestic production. It remains to be seen how much growth will be affected by these issues.

helene.baudchon@bnpparibas.com

stephane.colliac@bnpparibas.com

guillaume.a.derrien@bnpparibas.com



William De Vijlder
Chief Economist

+33 1 55 77 47 31

william.devijlder@bnpparibas.com

OECD ECONOMIES AND STATISTICS

Hélène Baudchon

Head - Eurozone, Germany - Climate

+33 1 58 16 03 63

helene.baudchon@bnpparibas.com

Guillaume Derrien

Southern Europe, Japan - International trade

+33 1 55 77 71 89

guillaume.a.derrien@bnpparibas.com

Stéphane Colliac

France

+33 1 42 98 43 86

stephane.colliac@bnpparibas.com

Veary Bou, Patrick Capeillère, Tarik Rharrab
Statistics

ECONOMIC PROJECTIONS, RELATIONSHIP WITH THE FRENCH NETWORK

Jean-Luc Proutat

Head - United States, United Kingdom

+33 1 58 16 73 32

jean-luc.proutat@bnpparibas.com

BANKING ECONOMICS

Laurent Quignon

Head

+33 1 42 98 56 54

laurent.quignon@bnpparibas.com

Céline Choulet

+33 1 43 16 95 54

celine.choulet@bnpparibas.com

Thomas Humblot

+33 1 40 14 30 77

thomas.humblot@bnpparibas.com

EMERGING ECONOMIES AND COUNTRY RISK

François Faure

Head - Argentina

+33 1 42 98 79 82

francois.faure@bnpparibas.com

Christine Peltier

Deputy Head - Greater China, Vietnam, South Africa

+33 1 42 98 56 27

christine.peltier@bnpparibas.com

Stéphane Alby

Africa (French-speaking countries)

+33 1 42 98 02 04

stephane.alby@bnpparibas.com

Stéphane Colliac

Turkey, Ukraine, Central European countries

+33 1 42 98 26 77

stephane.colliac@bnpparibas.com

Pascal Devaux

Middle East, Balkan countries

+33 1 43 16 95 51

pascal.devaux@bnpparibas.com

Hélène Drouot

Korea, Thailand, Philippines, Mexico, Andean countries

+33 1 42 98 33 00

helene.drouot@bnpparibas.com

Perrine Guérin

Africa (English-speaking countries)

+33 1 42 98 43 86

perrine.guerin@bnpparibas.com

Salim Hammad

Latin America

+33 1 42 98 74 26

salim.hammad@bnpparibas.com

Johanna Melka

India, South Asia, Russia, CIS

+33 1 58 16 05 84

johanna.melka@bnpparibas.com

CONTACT MEDIA

Mickaëlle Fils Marie-Luce

+33 1 42 98 48 59

mickaëlle.filsmarie-luce@bnpparibas.com





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Published by BNP PARIBAS Economic Research

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 Internet: www.group.bnpparibas.com - www.economic-research.bnpparibas.com

Head of publication : Jean Lemierre / Chief editor: William De Vijlder



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