

## European Union export dependencies and vulnerabilities

By the conceptual team of Global Arena Research Institute

### Working and conceptual paper no. 35

“Working and conceptual papers” are analytical reviews of existing resources, including academic literature, think tank analyses, and inputs from formal institutions such as the World Bank, European Commission, and OECD. They are not intended to present original research but rather to build a background for developing research concepts used in data-driven analytics. Originally intended as internal working material, these papers are published when they are deemed to be of broader public interest. This paper is part of a series of “conceptual papers” produced as part of a project supported by the International Visegrad Fund and Konrad Adenauer Stiftung in Prague.

### Introduction

The European Union (EU) holds a significant and influential role in global trade, marked by its status as one of the largest players in the international market. The EU accounts for approximately [14% of the world's trade in goods](#), making it one of the largest global players in international trade. With a GDP per head of [€25,000 for its 440 million consumers](#), the EU stands as the largest economy and the world's largest trading bloc. It serves as the biggest export market for around 80 countries.

The EU is one of the key players in the World Trade Organization (WTO). Its trade policy is centred on increasing trading opportunities for European companies by removing barriers like tariffs and quotas, and ensuring fair competition. These policies are vital for the European economy, affecting growth and employment, with more than [36 million jobs](#) in the EU dependent on exports outside the European Union. The EU actively engages with countries and regional groupings to negotiate trade agreements, providing mutually beneficial market access and enabling EU companies to grow their businesses and export products more easily.

Since the UK's departure from the EU, there has been a reshaping of trade relationships both within the EU and with external partners. The full implications of this change are still unfolding and are an important aspect of the EU's current trade dynamics. [Trade dynamics](#) have also shifted, with China overtaking the USA as the EU's main trading partner in goods by 2021.

A substantial portion of the EU's GDP is driven by its active participation in international trade. In 2021, the EU was the second-largest exporter and importer of goods globally, with extra-EU trade accounting for a significant portion of global exports and imports. This position was shaped by the EU's strategic position in global trade, proactive trade policies aimed at economic growth and employment, and its open single market.

The [value of goods exported outside the EU since 2008](#), has risen more rapidly than the value of goods imported into the EU. This shift led to significant changes in the EU's trade balance, from a

deficit in 2008 to a surplus in subsequent years. However, in 2020, both imports and exports fell sharply due to the COVID-19 pandemic, and in 2022, a large growth in imports turned the trade surplus into a deficit. In spite of the resilience observed, the dependency on exports for economic growth can be vulnerable to external shocks and global market fluctuations, as seen during the [financial crisis](#) and the COVID-19 pandemic.

The objective of this paper is to give an overview of the EU's growing dependence on exports to drive economic growth and the vulnerability of it. It has been argued that the [EU needs to go further in connecting economic and foreign policy](#) in light of the Russian-Ukraine war and the Covid-19 effects. Looking at insights shared, there may arise a situation that an EU member state seeks external help when facing a crisis in the future. Given that the EU member states are becoming more dependent on exports for growth, the non-EU states are more likely to have more leverage over EU member states, and this will affect the EU integration progress and strategies. Thus, one needs to understand the changing structure of the EU's exports and the vulnerability that comes with it.

The European Union dependencies on exports is a bit complex given that the EU is one of the largest economic blocs in the world. Its export sector is highly diversified and spans a wide range of industries. The Covid-19 pandemic did test the EU's economy and despite the disruptions the economy showed remarkable resilience. In spite of the resilience observed, there is vulnerability and there came a need to get a better grip on where Europe's current and possible future strategic dependencies lie.

The amount of exports has been increasing among the EU member states from 1999. Notably, Poland and Czechia have seen their export sectors boom since joining the EU in 2004, with Poland overtaking Spain to become the fifth largest exporter in late 2021. Along with Hungary, these 'eastern enlargement' countries have been successful in attracting investment from Western European companies, who seek to 'near-shore' their manufacturing to Central & Eastern Europe to take advantage of the relatively low wages, skilled populations, and lack of export/import barriers compared with 'off-shoring' production to regions such as South-East Asia ([link](#) to a visual presentation of the total monthly exports from Austria, Czechia, Hungary, Spain, and Poland to other European Union member states from 1999 to 2023).

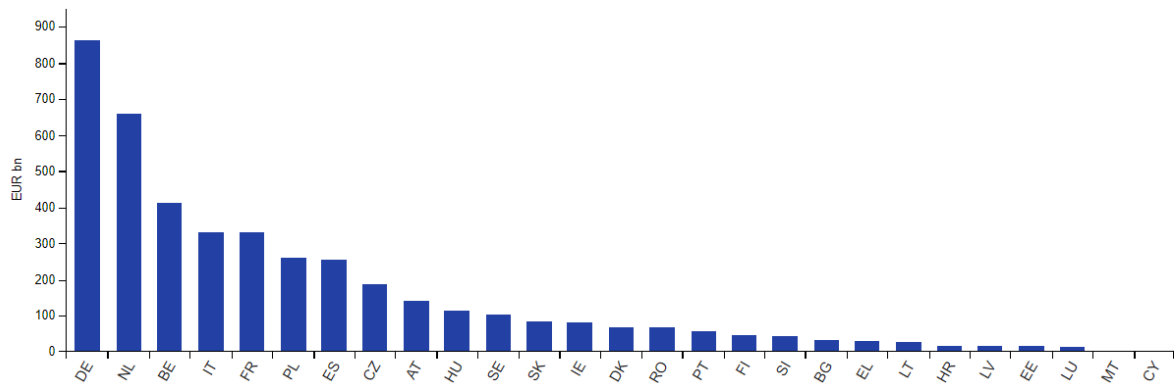
From the third quarter of 2022, the EU has been experiencing a decline in its exports. In the third quarter of 2023, the EU exports decreased by 1.2% compared to the previous quarter. However, despite this decline there is a long-term significant growth of exports within the European single market ([quarterly visualization of the decline in exports](#)).

[Intra-EU](#) trade in goods, refers to the transactions occurring within the EU. The amount of exports by EU member states to their fellow member countries had taken a sharp dive due to Covid-19 pandemic but it started rising again from April 2020. Between January 2002 and December 2022

exports of goods increased from €120 billion to €363 billion, which was well above the pre-pandemic level.

There is a wide variation in the value of exports by member states to partners within the EU. Germany is taking the lead, with a mark up of €863 billion, in the amount of exports towards other European member states while Cyprus has just over €1 billion. There were seven Member States (Germany, Netherlands, Belgium, Italy, France, Poland and Spain) whose exports of goods to partners in the EU were more than €200 billion in 2020, accounting for 73 % of the total value of intra-EU exports of goods. Between 2002 and 2022, the value of exports of goods to partners in the EU increased more than 10 % annually on average in four countries: Latvia (11.9 %), Lithuania (11.5 %), Bulgaria (11.3 %) and Poland (10.8 %). In 13 of the remaining 23 Member States annual average growth was between 5 % and 10 % and in 10 below 5 %. Member States in Eastern Europe tended to have higher growth rates.

Exports of goods to other Member States, 2022

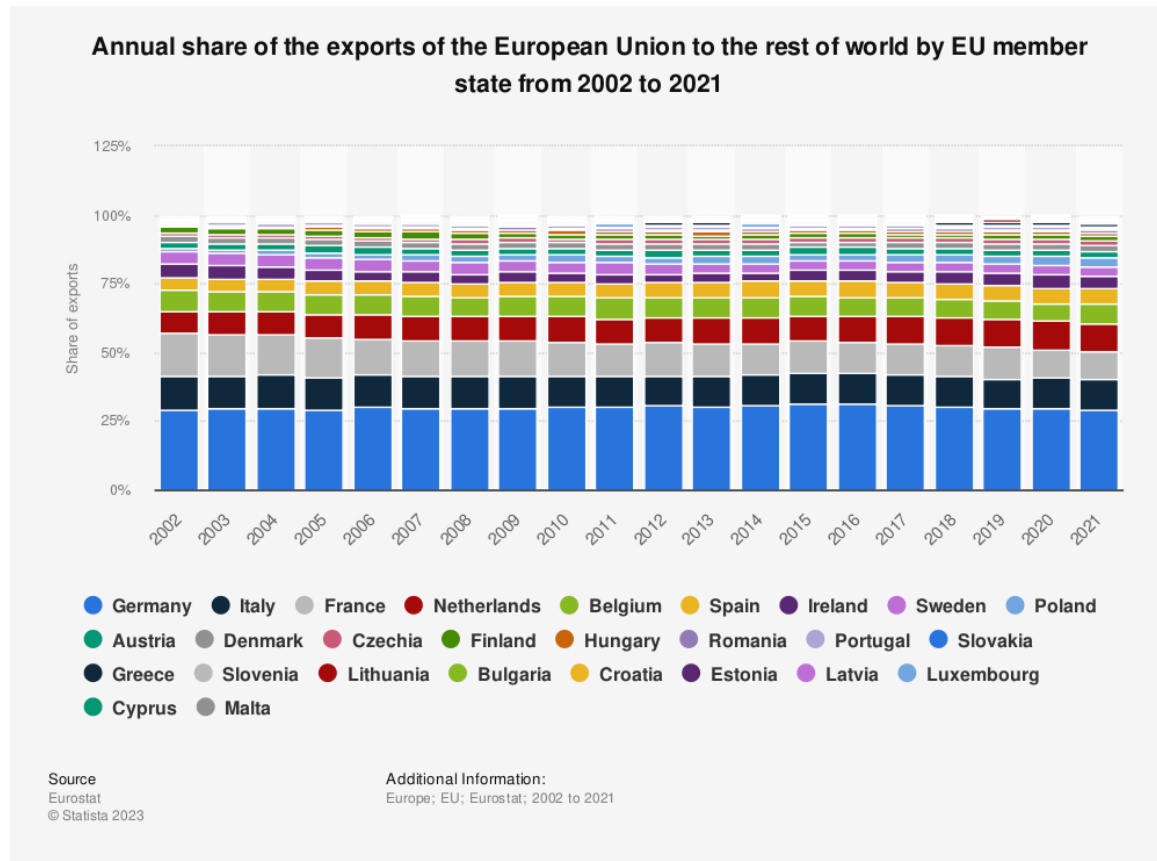


Source: Eurostat (online data code: DS-018995)

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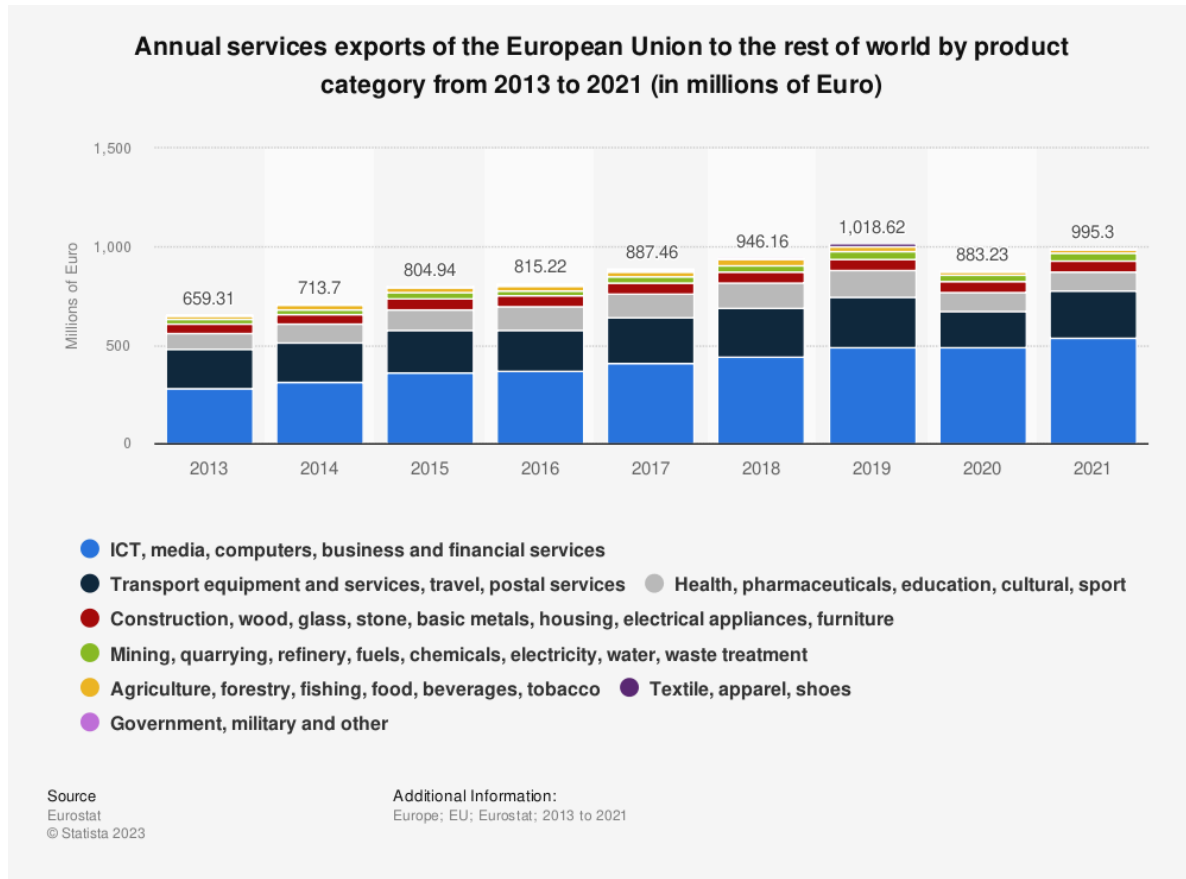
and

Extra-EU trade in goods, refers to transactions with all countries outside of the EU, that is, except the European Union member states.



From the figure above, one can observe that the extra-EU trade is dominated by a few member countries, Germany being on the forefront. Germany together with Italy, France and Netherlands make up more than half of the EU exports. Other countries that make significant contributions are Belgium, Spain, Ireland, and Sweden. Looking at the post-communist countries who have been a part of the EU since 2004, Poland and Czechia have been increasing their share of contribution in the extra-EU export.

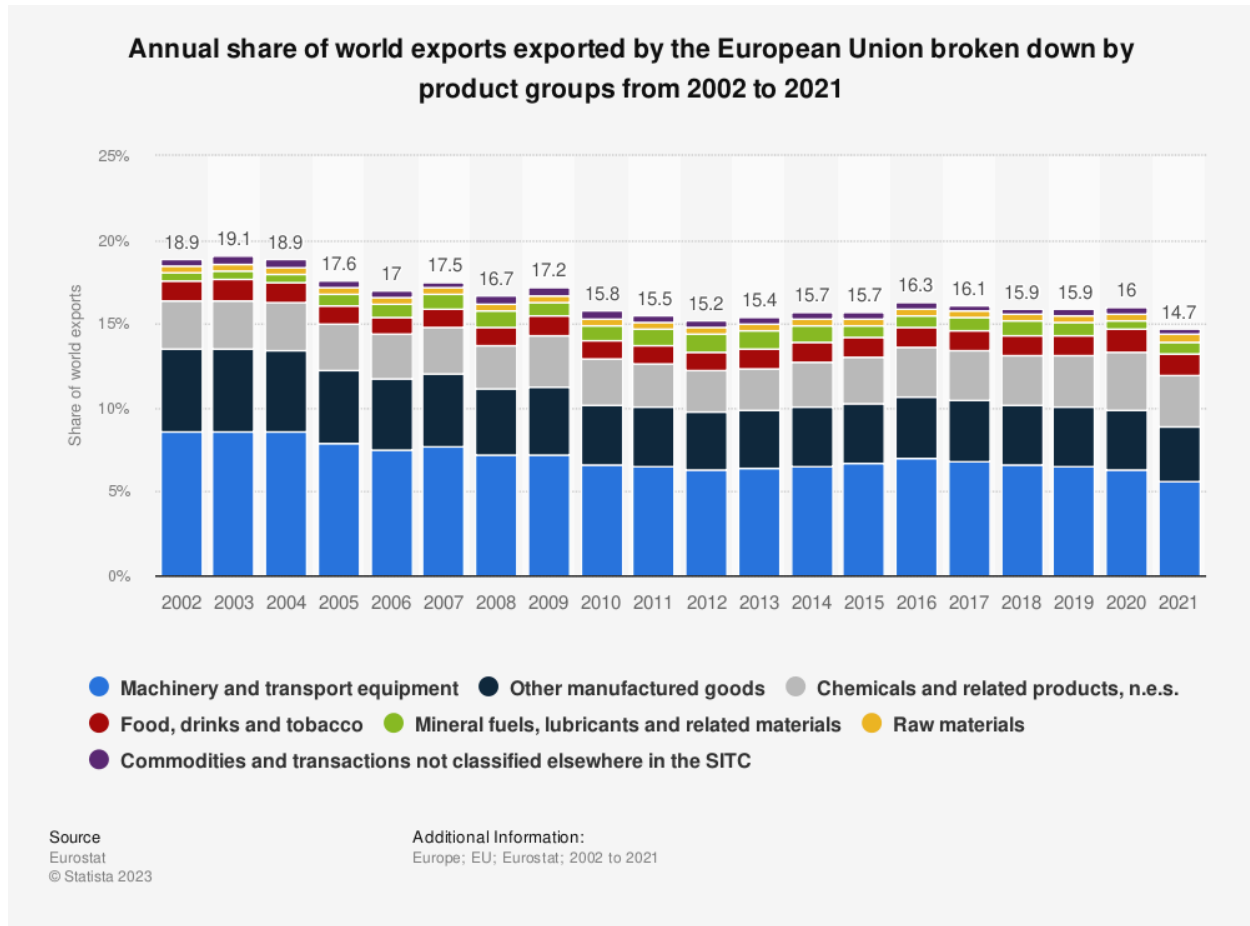
## Exports by product category



The [share of services in global trade](#) has been rapidly growing, placing the US and China on the forefront. The EU has been one of the leading exporters of services and it's well positioned in respect to this trend. The largest share of these exports for each year came from the 'ICT, media, computers, business and financial services' category. This was affected by COVID-19 pandemic, for there was a decrease in the demand for services; it rebounded in 2021, growing to 880 million euro, while still being below the pre-crisis trend.

However, it has been observed that the EU may not be able to take full advantage of these trends if it lags behind other major powers in terms of digital technology. In order to maintain its competitiveness in the future, the EU has to draft a successful trade policy considering other structural elements as well, such as the role of digital infrastructure, technology standards, and digital currencies.

The EU has been facing a decline in the export of goods since 2002, from around 19 percent to less than 15 percent in the early 2020s. This decline has been attributed to the large drop in the share of exports in machinery and transport equipment, as well as in other manufactured goods.



## Overview of the exports effect

### Employment

In terms of employment the increase in the number of jobs has been directly or indirectly been supported by the European Union's exports. Looking at the 1995 to 2011 time period, the number of jobs supported by extra-EU exports increased by 67% (read: [EU exports to the world: overview of effects on employment and income](#)). In which this increase tended to be for high-skilled jobs and were on average better paid. Since 2000 to 2019, the number of jobs supported has increased by 75% (read: [EU Exports to the World: Effects on Employment](#)).

From the table below, one can be able to observe that this increase in the number of jobs is across all member states. Germany has been leading in the share of exports and is also leading here in the number of jobs supported by the state's exports. Over the 1995-2011 period the strongest increases in the contribution to EU export-supported employment were in Luxembourg (750%), Ireland (265%), Malta (148%), Greece (142%), Austria (131%) and Spain (121%).

## A.2. EU employment supported by the exports of each Member State (2000-2019; 1,000 jobs)

	2000	2007	2014	2019(p)
AT	446	603	734	849
BE	767	785	1,124	1,211
BG	174	505	681	816
CY	47	58	59	88
CZ	574	544	768	1,011
DE	5,103	6,737	8,297	<b>9,311</b>
DK	530	634	633	817
EE	61	93	138	168
EL	290	402	534	632
ES	1,393	1,727	2,060	2,427
FI	358	450	425	500
FR	2,902	2,964	3,421	4,064
HR	324	261	315	485
HU	557	521	641	762
IE	586	711	868	1,770
IT	2,418	2,773	3,209	3,656
LT	148	210	322	388
LU	137	179	238	295
LV	92	134	170	202
MT	30	45	68	65
NL	1,284	1,538	1,721	2,317
PL	1,042	1,336	1,818	2,508
PT	319	460	650	775
RO	1,119	845	1,225	1,311
SE	850	943	943	978
SI	78	140	150	222
SK	131	282	399	508
<b>EU</b>	<b>21,758</b>	<b>25,881</b>	<b>31,613</b>	<b>38,135</b>

(p) = projected (see section on Methodology)

In 2019, Germany's extra-EU exports supported around 9.3 million jobs in the EU.



## Conceptual literature and research review

### EU Export Dependencies and Vulnerabilities

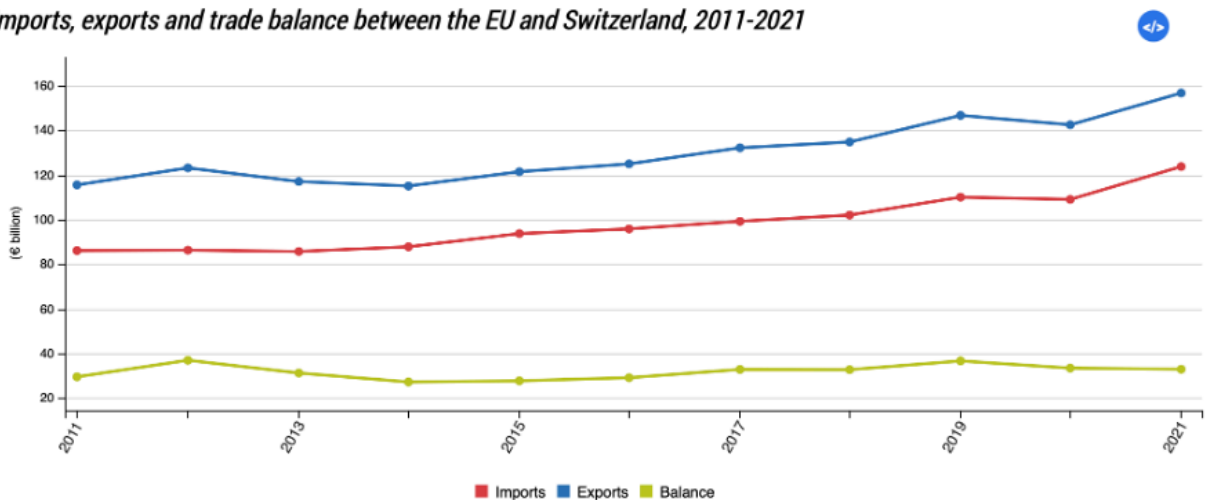
#### Overview:

The international trade of the European Union with countries outside of the EU is defined by the EU's common external trade policy, which is a result of the trade agreements the EU negotiates with partner countries on behalf of its member states. The EU is a major player in world trade, being an important partner of global economic powers such as China, the U.S., and Japan, as well as having strong trade relationships with the non-EU members in Europe (the UK, Norway, Switzerland) and other countries in the region. The EU's balance of trade follows a distinctive pattern, with the EU member states have a large export surplus in areas such as machinery and transport goods, as well as chemicals and related products.

Main countries dependent on EU exports:

- **Switzerland:** According to [Reskiyah \(2023\)](#) the European Union is Switzerland's largest trading partner followed by the USA, China, India, Hongkong, and Japan. Swiss' main imports from the EU include machinery and appliances, paramedical products, transport equipment, and precious metals.

*Imports, exports and trade balance between the EU and Switzerland, 2011-2021*

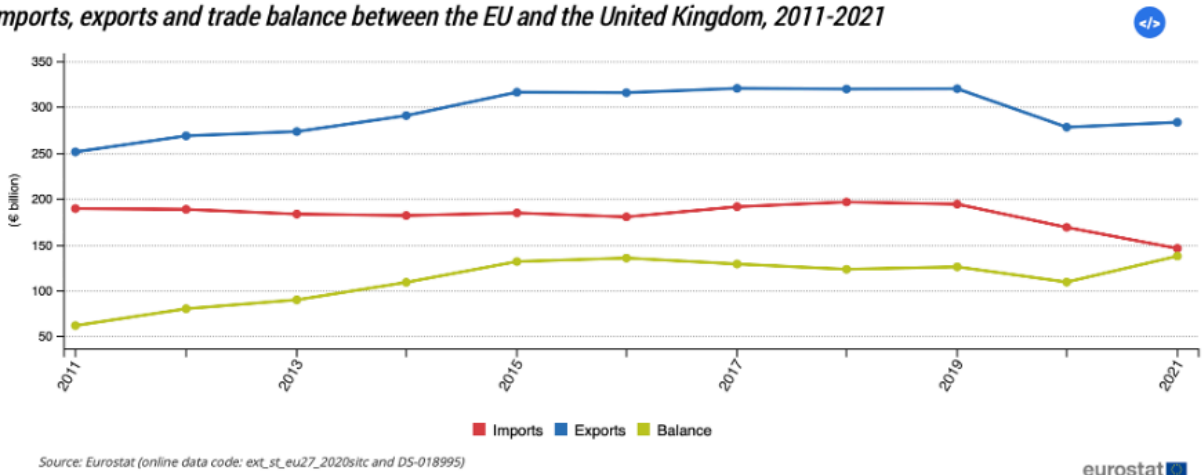


Source: Eurostat (online data code: ext\_st\_eu27\_2020sitc and DS-018995)

eurostat

- **The UK:** According to the [House of Commons Library](#) research briefing the European Union is the UK's one of the largest trading partners. Main imports from the EU include vehicles, medical and pharmaceutical products, electrical machinery and appliances, general industrial machinery, and equipment.

*Imports, exports and trade balance between the EU and the United Kingdom, 2011-2021*



Sources on EU export dependency:

- [Article by Reskiyah \(2023\) on EU export dependency in Switzerland](#)

According to the author, due to high volumes of EU exports to Switzerland in a range of products, the level of economic interdependence between the EU and Switzerland is quite large, in terms of trade in goods and services. The author discusses several issues related to this high trade dependence, namely how external influences such as Brexit or the weakening of the global economy may harm the bilateral relations between the EU and Switzerland and how it can negatively impact the internal economy of Switzerland.

- [Policy brief by Peterson Institute for International Economics](#)

This policy brief analyses the EU export of medical products and how EU export dependency in this sector was impacted negatively during the COVID-19 pandemic. It illustrates how the internal policy of the EU, in this case, the imposed export authorization restriction on five separate medical products at the beginning of the Pandemic put countries dependent on EU exports in the medical products sector at risk (for example, Switzerland and Norway).

- [Report by The London School of Economics and Political Science](#)

This report analyses the UK's trade dependency on the EU with a focus on the food and beverage sector. The report shows that consumers in the UK are highly dependent on products originating in the EU where 40 % of all consumption of food products in the UK comes from EU countries, suggesting that UK consumers are highly exposed to changes in the future trading relationship. At the same time, it discusses how this trade dependency may harm the EU (farmers, importers, and logistic companies) as these are usually put at risk managing with mitigation measures. At the same time, the long-term effects of changes on the trading relationship between the EU and the UK may substantially alter trade flows and supply chains.

- [Report by European Centre for International Political Economy](#)

This policy brief analyses export vulnerabilities with a focus on the degree to which exports may be negatively impacted if other countries engage in reducing their import dependencies. It argues that export vulnerabilities are closely interlinked with import dependencies. If countries reduce their import dependencies, they also increase their export vulnerabilities. The EU27 has by far the most to lose in this regard. For the EU27, the largest exporter of medicines globally (more than 63% of all medicines exported globally come from the EU27), and the largest vaccine exporter globally, import-reducing measures from trade partners will hurt these exports directly. Hence, in particular, the EU should look at its export vulnerability towards the countries where it exports large volumes of medicine products or transport equipment and vehicles.

- [Report by European Commission, DG for Agriculture and Rural Development](#)

A report by the EU (DG AGRI) shows that the EU had a high level of trade diversification with a focus on the agri-food sector. Trading key commodities, such as food, with various partners minimizes supply chain risks and vulnerabilities. In the case of agrifood products, it strengthens resilience by ensuring a steady flow of exports. The analysis shows that the EU's total agri-food trade is well diversified, with numerous trade partners, while some dependency remains on certain commodities. Overall, the EU's position as the world's top exporter of agri-food products allows for balanced and favourable trade relations with third countries.

- [Report by AmCham EU and LE Europe](#)

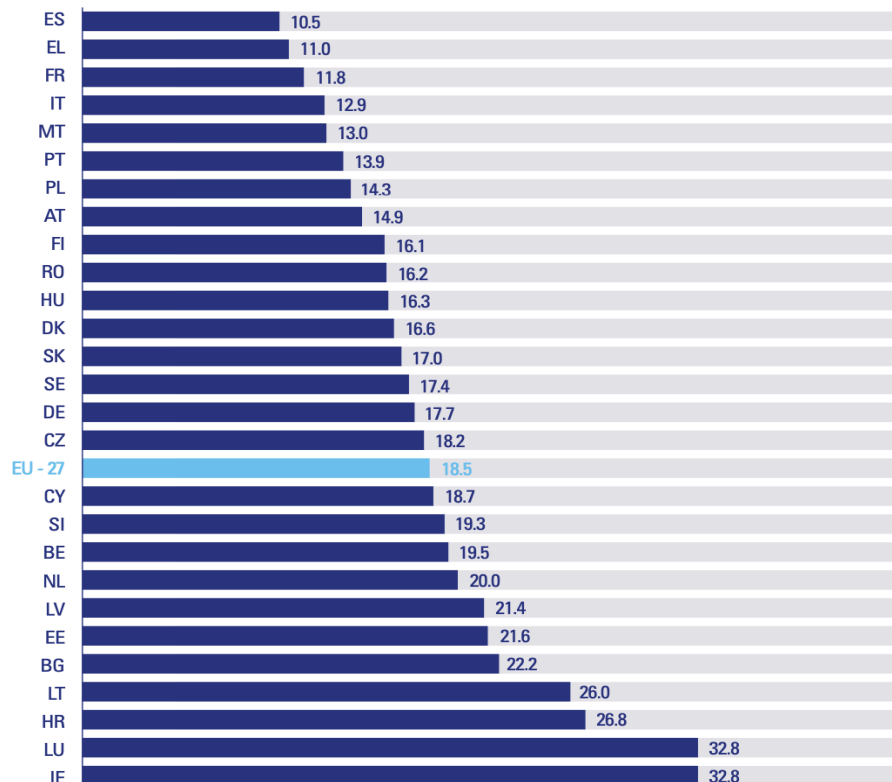
A report by AmCham EU and LE Europe extensively discusses EU exports from the perspective of the EU regions. It discusses and analyses how the EU's economic prosperity is dependent on EU exports. For example, their analysis shows that one in seven jobs in the EU

is supported by exporting activities. Overall, the study concluded that across all regions covered in the report:

1. Exports add regional jobs: every percentage point of growth in national exports led to an average increase of 0.9% in both regional output and regional employment.
2. Every region benefits from an increase in exports: the regional impact of an increase in national exports varied markedly across and within Member States. However, all regions benefitted from the growth in exports over the past decade, regardless of whether their GDP per capita was above or below the EU-27 average.

As a result, the report shows that economic development specifically employment in the regions is dependent on EU exports.

**Figure 17** Employment supported by EU exports as a percentage of total employment, by Member State - 2017



Note: EU-27 = average of Member States  
Source: Arto et al. (2018) EU Exports to the World: Effects on Employment

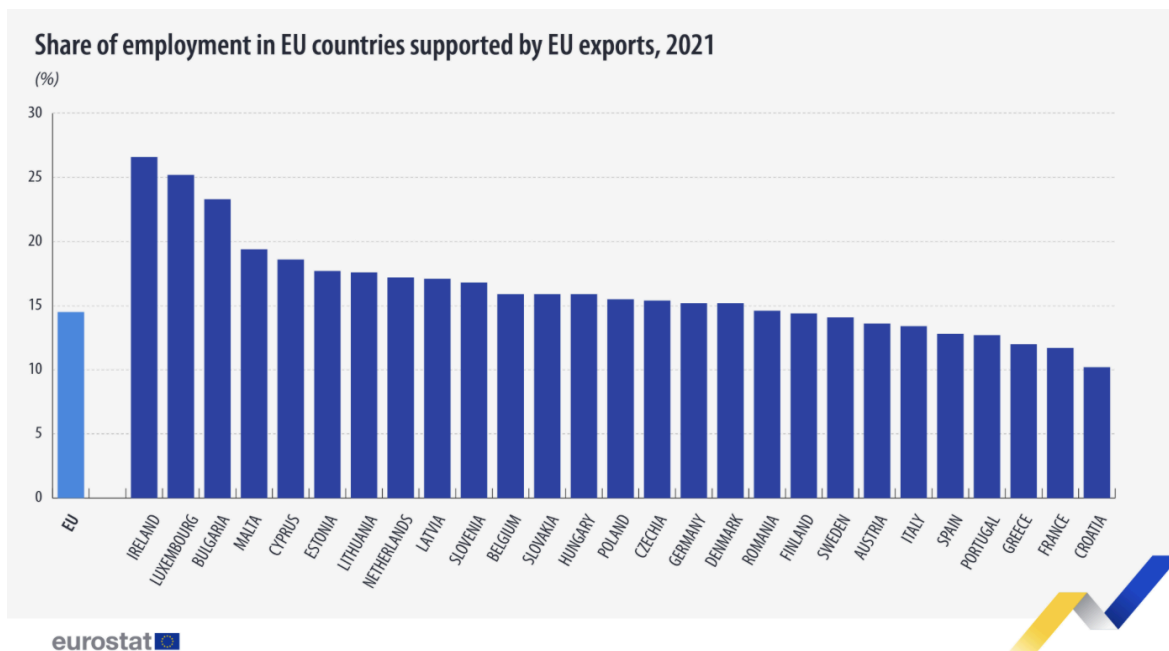
- Article by European Commission

An article by the European Commission shows that more than 30 million jobs in the EU owing to extra-EU exports. In 2021 employment was supported by exports to non-EU countries, a slight increase from 29.9 million in 2020 (+1.7%).

Germany was the EU country with the highest absolute level of employment supported by EU exports. In 2021, the employment of 6.9 million people in Germany was supported by exports from the EU, including from Germany itself. France and Italy (both 3.4 million people) had the following highest levels of export-supported employment.

Nevertheless, the highest share of employment supported by exports to non-EU countries was recorded in Ireland (27%), followed by Luxembourg (25%) and Bulgaria (23%). Moreover, Croatia (10%), along with France and Greece (both 12%), recorded the lowest share of employment supported by EU exports in 2021.

Hence, jobs related to extra-EU exports play a vital role in the European Union's economic landscape. They contribute to trade, economic growth, and employment opportunities, fostering connections with other regions and countries worldwide. These figures often highlight the interconnectedness of global economies and the importance of international trade for job creation within the EU.



Source dataset: [naio\\_10\\_faex](#)

EU export vulnerability:

- **Political and Geopolitical Factors:**

Political tensions, conflicts, or policy changes in partner countries or regions can significantly impact the EU's exports. For instance, sanctions or trade disputes can disrupt established trade routes and affect the EU's export capabilities.

- **Financial Dependencies:**

Dependency on foreign investment and financial markets can also affect the EU's export capabilities. Fluctuations in global financial markets can impact the competitiveness of EU exports.

Addressing these dependencies and vulnerabilities often involves diversification of supply chains, investment in domestic production capacities, fostering innovation, and engaging in diplomatic efforts to secure stable trade relationships. These vulnerabilities highlight the importance for the EU to strategically manage its dependencies and seek to diversify its sources to ensure greater stability and resilience in its export-oriented industries.

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**This paper was produced by the conceptual research team of the Global Arena Research Institute (GARI) as part of the preparatory work for utilizing GARI's signature digital twin of the globalized environment. Supported by the International Visegrad Fund and the Konrad Adenauer Stiftung, GARI is at the forefront of integrating leading-edge computing technologies with socio-economic and political analysis. These internal conceptual working papers lay the foundation for our digital twin's application, offering critical insights and frameworks that enhance our understanding and foresight into global and local processes across various domains, including economy, trade, politics, defense, society, energy, and the environment.**