Value added content in EU exports - an analysis with FIGARO data

Statistics Explained

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1

" In 2021, € 2 226 billion of value added in the EU was supported by exports to non-member countries, equivalent to 17 % of the € 12 993 billion total value added in the EU. "

" In 2021, the EU Member State with the highest share of value added supported by EU exports was Ireland (47 %). "

" Germany was by far the largest contributor to export-supported value added spillover in the rest of the EU: in 2021, € 71.0 billion of value added in EU Member States other than Germany was supported by German exports. "

" Manufacturing exports supported € 1 285 billion of value added in the EU in 2021, 58 % of all export-supported value added. Three fifths (60 %) of the value added supported by manufacturing exports was generated within manufacturing itself. "

The production of goods and services requires inputs, which may be sourced domestically or globally. The final value of a product may well reflect value that has been added in many different stages of the production chain, potentially in many different countries; this fact is not always visible in conventional trade statistics, which generally reflect the total value of a product when traded. This article aims to provide an indication of the relationship between value added in the European Union (EU) and the EU's exports . This is done by analysing the value added content of EU exports at a detailed industry¹ level. The article provides an overview of the data compiled using the FIGARO tables – full international and global accounts for research in input-output analysis – and the Leontief input-output model (Miller and Blair, 2009). For more information, see the Data Sources and Context sections below.

Whole economy - all industries combined

Level and share of value added

The value added in the EU or in individual EU Member States supported by exports includes not only value added by enterprises that are directly exporting, but also by those providing goods and/or services to support the production of exported goods and services; in other words, it also includes value added by *upstream* enterprises. This may concern value added by enterprises in the same industry as the exporter or in a different one (depending, in part, how detailed an activity classification is used). Equally, exports by enterprises in one Member State may support value added in that Member State or in a different one.

Regardless of whether presenting data for the EU as a whole or for individual Member States, all references to exports in this article concern exports to non-member countries, in other words extra-EU exports; trade between Member States is not considered.

Overall, \notin 2 226 billion of value added in the EU in 2021 was supported by exports to non-member countries (Table 1). This export-supported value added was 17.1 % of all value added (\notin 12 993 billion).

¹The terms industry/industries are used as synonyms for the activity/activities listed in the NACE Rev. 2 classification.

Germany was the EU Member State with the highest value added supported by EU exports: in 2021, € 583.6 billion of value added in Germany was supported by exports from the EU, including from Germany itself. The level of export-supported value added in Germany was more than the combined level of export-supported value added in France (€ 287.2 billion) and Italy (€ 227.8 billion), which had the second and third highest levels (see Table 1). As a share of total value added, the value added in each of the EU Member States supported by EU exports to non-member countries

ranged from just over one tenth in Croatia (10.3 %) to 28.1 % in Cyprus, 33.0 % in Luxembourg and 46.9 % in Ireland.

Value added and exports, key indicators, 2021

	Value	added	Share of value	Exports						
	total	supported in each EU Member State by exports of all Member States to non-member countries	added supported by exports of all EU Member States to non- member countries	total	as a ratio to value added (%)					
	(€ bi	llion)	(%)	(€ billion)						
EU	12 993.1	2 225.7	17.1	2 /92.5	21.5					
Belgium	447.6	85.0	19.0	107.3	24.0					
Bulgaria	62.2	13.9	22.4	18.2	29.2					
Czechia	216.5	32.9	15.2	42.2	19.5					
Denmark	292.6	62.0	21.2	96.3	32.9					
Germany	3 258.6	583.6	17.9	668.3	20.5					
Estonia	27.6	5.8	20.9	1.8	28.3					
Ireland	401.5	188.2	46.9	261.3	65.1					
Greece	158.7	22.7	14.3	37.4	23.6					
Spain	1 090.9	141.8	13.0	165.0	15.1					
France	2 216.8	287.2	13.0	348.7	15.7					
Croatia	48.4	5.0	10.3	5.3	11.0					
Italy	1 602.3	227.8	14.2	295.4	18.4					
Cyprus	21.1	5.9	28.1	9.9	47.0					
Latvia	29.4	5.2	17.5	5.5	18.8					
Lithuania	50.2	10.4	20.6	12.7	25.3					
Luxembourg	65.6	21.6	33.0	46.0	70.2					
Hungary	130.5	23.2	17.8	37.8	29.0					
Malta	13.7	2.6	18.9	8.0	58.5					
Netherlands	760.0	157.7	20.8	199.6	26.3					
Austria	363.3	58.1	16.0	74.4	20.5					
Poland	501.6	86.9	17.3	94.9	18.9					
Portugal	185.7	22.0	11.8	30.9	16.6					
Romania	218.0	30.7	14.1	33.3	15.3					
Slovenia	45.9	8.6	18.7	10.2	22.2					
Slovakia	89.5	14.5	16.3	24.0	26.8					
Finland	217.1	36.7	16.9	49.0	22.6					
Sweden	477.8	85.7	17.9	102.9	21.5					

Reading note: value added of €85.0 billion in Belgium was supported by the exports of all EU Member States to non-member countries. Source: Eurostat (online data code: naio_10_favx)

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Table 1: Value added and exports, key indicators, 2021 Source: Eurostat (naio_10_favx)

In addition to estimating export-supported value added in each EU Member State, FIGARO also provides insight into the value added anywhere in the EU that is supported by the exports from a particular EU Member State. Figure 1 compares these two indicators.

The EU Member States on the left-hand side of Figure 1 receive greater benefits from the exports of other Member States than the benefits they provide in other Member States through their own exports: in other words, they were net beneficiaries from cross-border spillover effects (see Box 1). For example, € 583.6 billion of value added in Germany was supported by exports from all Member States (including from Germany), whereas € 560.2 billion of value added across the EU (some of which in Germany) was supported by exports only from Germany; the difference – with Germany being a net beneficiary – was € 23.4 billion. Similarly, most of the eastern Member States (Bulgaria, Czechia, Croatia, Poland, Romania and Slovenia) were net beneficiaries from spillover effects, as were Belgium, Germany, Greece, Spain, France, Latvia, Lithuania, the Netherlands and Sweden.

Conversely, the EU Member States on the right-hand side of Figure 1 are those that benefited less (in value added terms) from exports of all Member States. These Member States were net contributors of cross-border spillover effects. As an example, € 188.2 billion of value added in Ireland was supported by EU exports (including from

Ireland), whereas € 203.2 billion of value added across the EU (some of which in Ireland) was supported by exports from Ireland alone; the difference was € 14.9 billion, making Ireland the largest net contributor to value added in other Member States. Other large net contributors of

spillover effects were Italy and Luxembourg with differences of \notin 11.1 billion and \notin 9.8 billion, respectively (Figure 1).



Value added supported by EU exports, 2021

Source: Eurostat (online data code: naio_10_favx)

Figure 1: Value added supported by EU exports, 2021 (€ billion) Source: Eurostat (naio 10 favx)

Figure 2 focuses on the change in value added within each EU Member State (supported by exports from anywhere in the EU). All of the Member States recorded an increase in export-supported value added between 2011 (during recovery from the global financial and economic crisis) and 2021 (the second year of the COVID-19 pandemic).

The share of export-supported value added in total value added in the EU increased from 14.7 % in 2011 to 17.1 % in 2021. Overall, export-supported value added in the EU increased by € 731.1 billion during this period. Between one guarter and one fifth of the increase (€ 164.1 billion of value added; 22.5 % of the EU total) was located in Germany, with the next largest increases in Ireland (€ 139.0 billion of value added; 19.0 % of the EU total), France (€ 70.3 billion of value added; 9.6 % of the EU total) and Italy (€ 64.9 billion of value added; 8.9 % of the EU increase).

In relative terms, the largest increases in export-supported value added between 2011 and 2021 occurred in Ireland (282.6 %) and Bulgaria (114.6 %), while increases of at least 50.0 % were also observed in 12 other EU Member States.



Value added supported by EU exports, 2011 and 2021 (€ billion)

Note: overall, EU value added of €1 495 billion in 2011 and €2 226 billion in 2021 was supported by EU exports (not shown for scale reasons). As such, there was an increase of €731 billion between 2011 and 2021. Source: Eurostat (online data code: naio_10_favx) eurostat

Figure 2: Value added supported by EU exports, 2011 and 2021 (€ billion) Source: Eurostat (naio_10_favx)

Domestic and spillover effects

The share of export-supported value added within each EU Member State can be divided up into two parts – the domestic effect and the spillover effect – with a further division of the domestic effect between direct and indirect effects: see Box 1 for more information. The share of total value added in each Member State that is related to these effects is presented in Figure 3.

Box 1: What are domestic and spillover effects?

The **domestic effect** is value added in a given EU Member State that is supported by its own exports. This value added may be in the same industry as the one that exports the goods or services (**direct domestic effect**) or in another industry (**indirect domestic effect**). As such, the indirect domestic effect is effectively an*industry spillover effect* within a single EU Member State – it is the value added in a particular industry that is supported by the exports of a different industry (within the same Member State).

In this article, the split of the domestic effect into a direct and indirect effect is based on an analysis of the economy dividing it into 21 different industries (according to the EU's activity classification called NACE).

The **spillover effect** reflects the value added in a given EU Member State that is supported by the exports of other Member States. For example, it includes value added in a Member State engaged in the production of intermediate inputs to be used in other Member States' exports to non-member countries.

In 2021, the direct domestic effect accounted for 8.8 % of total value added in the EU Member States, while the indirect domestic effect accounted for 5.3 % and the spillover effect for 3.1 % (see Figure 3).



Share of value added in each Member State supported by EU exports, 2021

Source: Eurostat (online data code: naio_10_favx)

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Figure 3: Share of value added in each Member State supported by EU exports, 2021 (%) Source: Eurostat (naio_10_favx)

Among the EU Member States, the largest contribution to total value added of the **direct domestic** effect occurred in Ireland, at 34.6 %. This effect also contributed more than 10.0 % of value added in Cyprus, Luxembourg, Denmark, Malta, Bulgaria, Estonia, the Netherlands and Lithuania. The lowest contribution was in Croatia, at 5.2 %. The largest contributions to total value added of the **indirect domestic** effect were in Luxembourg and Ireland, with shares of 10.5 % and 8.2 %, respectively. The smallest contribution occurred again in Croatia, at 2.8 %. Concerning **spillover** effects, the largest contribution to total value added was in Luxembourg (7.1 %), followed by Slovakia (5.4 %), Lithuania (5.3 %), Slovenia, Belgium (both 5.2 %) and Estonia (5.1 %) – see Map 1. The smallest contributions occurred in France (2.0 %) and Italy (1.9 %).

Contribution of spillover effects to total value added, 2021

(%)





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The **direct domestic** effect accounted for 51.2 % of all export-supported value added across the EU Member States in 2021. This effect was dominant (among the three effects shown in Figure 3) in all EU Member States, accounting for more than half of export-supported value added in 14 Member States. Close to three fifths of export-supported value added was due to the direct domestic effect in Malta (57.7 %), Denmark (59.1 %) and Cyprus (59.8 %), with this share peaking at 73.7 % in Ireland.

The **indirect domestic** effect accounted for 31.0 % of all export-supported value added in the EU Member States in 2021. This was the second largest effect in most EU Member States; in Slovakia, Latvia, Belgium, Slovenia, Czechia, Hungary, Lithuania, Austria, Poland and Estonia, the spillover effect was larger. The indirect domestic effect accounted for one fifth to one third of export-supported value added in most Member States. Ireland (17.5 %) reported a lower share, while five Member States reported higher shares, including the four largest: Spain (33.4 %), Germany (33.6 %), Finland (34.0 %), France (36.4 %) and Italy (42.5 %).

Finally, the **spillover** effect accounted for 17.8 % of all export-supported value added in the EU Member States in 2021. This effect accounted for 8.8 % of export-supported value added in Ireland and 13.3 % in Italy. In France, the share was 15.8 % and in Germany it was 16.2 %; therefore, the spillover effect was relatively small in each of the three largest EU Member States. The spillover effect accounted for at least one quarter of export-supported value added in eight Member States, peaking at close to one third (33.1 %) in Slovakia.

Export-supported value added from the domestic and spillover effects are shown in absolute values for 2021 in Table 2. Value added from the domestic effect is shown in the shaded cells running in a diagonal line from the top left to the bottom right of the table.

In 2021, the highest export-supported value added resulting from the domestic effect was clearly in Germany, where € 489.2 billion of value added was supported by Germany's own exports, with the next largest domestic effects being observed in France (€ 241.9 billion) and Italy (€ 197.4 billion).

The two largest spillover effects between pairs of countries in 2021 were the \in 12.5 billion and \in 11.5 billion of value added in Germany supported, respectively, by French and Italian exports. Two other country pairings had spillover effects valued at \in 8.0 billion or more:

- € 10.1 billion of value added in France supported by German exports;
- € 9.5 billion of value added in Germany supported by Dutch exports.

Germany was by far the largest contributor of export-supported value added resulting from spillover effects: \bigcirc 71.0 billion of value added in 2021 in EU Member States other than Germany was supported by German exports. Out of this figure, \bigcirc 10.1 billion was in France, while the Netherlands (\bigcirc 7.9 billion), Italy (\bigcirc 7.4 billion), Poland (\bigcirc 7.3 billion), Austria (\bigcirc 5.6 billion), Spain (\bigcirc 5.1 billion) and Belgium (\bigcirc 4.3 billion) all had more than \bigcirc 4.0 billion of value added supported by German exports. For comparison, the next highest contributors to value added spillover from exports were France (\bigcirc 41.8 billion of value added in other Member States), Italy (\bigcirc 41.5 billion), Ireland (\bigcirc 31.6 billion)and the Netherlands (\bigcirc 30.5 billion).

Value added in each Member State supported by EU exports, 2021 (€ billion)

	Exports from:																										
	Belgium	Bulgaria	Czechia	Denmark	Germany	Estonia	Ireland	Greece	Spain	France	Croatia	Italy	Cyprus	Latvia	Lithuania	Luxembourg	Hungary	Malta	Netherlands	Austria	Poland	Portugal	Romania	Slovenia	Slovakia	Finland	Sweden
Value added	in:																										
Belgium	61.7	0.1	0.2	0.7	4.3	0.0	2.3	0.1	0.7	4.1	0.0	2.1	0.1	0.0	0.1	1.9	0.3	0.1	3.7	0.4	0.5	0.2	0.1	0.0	0.1	0.4	0.7
Bulgaria	0.2	11.1	0.1	0.1	0.6	0.0	0.1	0.2	0.1	0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.0
Czechia	0.3	0.1	23.1	0.2	3.4	0.0	0.2	0.0	0.3	0.6	0.0	0.9	0.0	0.0	0.0	0.1	0.6	0.0	0.4	0.7	0.6	0.1	0.1	0.1	0.9	0.1	0.2
Denmark	0.3	0.1	0.1	52.5	2.2	0.0	1.0	0.1	0.2	0.6	0.0	0.5	0.0	0.0	0.1	0.1	0.1	0.2	0.7	0.2	0.3	0.1	0.0	0.0	0.1	0.6	1.8
Germany	5.8	0.5	3.6	3.6	489.2	0.3	7.4	0.5	4.7	12.5	0.1	11.5	0.3	0.1	0.4	3.9	3.8	0.8	9.5	7.7	5.3	1.3	1.3	0.5	3.3	1.8	3.9
Estonia	0.0	0.0	0.0	0.1	0.2	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.2
Ireland	1.1	0.0	0.2	0.4	3.1	0.0	171.6	0.1	0.6	1.8	0.0	3.0	0.1	0.0	0.0	1.3	0.3	0.2	1.7	0.4	0.3	0.2	0.1	0.0	0.1	0.8	0.7
Greece	0.2	0.2	0.0	0.1	0.8	0.0	0.2	19.1	0.2	0.2	0.0	0.5	0.2	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1
Spain	1.1	0.1	0.3	0.8	5.1	0.0	2.3	0.2	114.5	5.0	0.0	3.7	0.1	0.0	0.1	0.8	0.3	0.1	2.0	0.5	0.6	2.5	0.2	0.1	0.3	0.4	0.8
France	4.8	0.2	0.7	0.9	10.1	0.1	5.0	0.2	4.0	241.9	0.0	6.4	0.0	0.0	0.2	1.8	0.6	0.2	4.2	1.0	1.1	0.8	0.4	0.1	0.6	0.5	1.3
Croatia	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	3.8	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Italy	1.2	0.3	0.7	0.8	7.4	0.1	1.1	0.3	2.3	5.4	0.1	197.4	0.1	0.0	0.1	2.0	0.8	0.2	1.6	1.4	1.3	0.5	0.6	0.3	0.5	0.4	0.7
Cyprus	0.0	0.0	0.0	0.1	0.2	0.0	0.1	0.2	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Latvia	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	3.7	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Lithuania	0.1	0.0	0.0	0.3	0.5	0.1	0.1	0.0	0.1	0.3	0.0	0.2	0.0	0.1	7.7	0.0	0.0	0.0	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.2
Luxembourg	0.3	0.0	0.0	0.1	1.4	0.0	0.2	0.0	0.2	0.7	0.0	0.8	0.0	0.0	0.0	17.0	0.0	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Hungary	0.2	0.1	0.2	0.2	1.7	0.0	0.2	0.0	0.2	0.3	0.0	0.7	0.0	0.0	0.0	0.1	17.4	0.1	0.3	0.5	0.3	0.0	0.2	0.0	0.2	0.1	0.1
Malta	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands	4.4	0.1	0.4	1.6	7.9	0.1	7.7	0.2	1.3	3.6	0.0	2.8	0.1	0.0	0.1	1.0	0.5	0.2	121.7	0.7	0.8	0.3	0.2	0.1	0.2	0.5	1.3
Austria	0.4	0.1	0.4	0.3	5.6	0.0	0.6	0.1	0.3	0.8	0.1	1.8	0.0	0.0	0.0	0.2	0.7	0.1	0.5	44.3	0.5	0.1	0.2	0.2	0.3	0.1	0.3
Poland	0.9	0.1	1.2	1.1	7.3	0.1	0.9	0.1	1.0	1.8	0.0	2.2	0.1	0.1	0.4	0.4	0.8	0.1	1.9	1.0	62.4	0.2	0.4	0.1	0.7	0.6	1.1
Portugal	0.2	0.0	0.1	0.1	0.7	0.0	0.2	0.0	1.2	0.7	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.1	17.6	0.0	0.0	0.0	0.1	0.1
Romania	0.3	0.3	0.2	0.2	1.7	0.0	0.2	0.1	0.3	0.6	0.0	1.1	0.0	0.0	0.0	0.2	0.5	0.0	0.6	0.4	0.3	0.1	23.2	0.0	0.2	0.1	0.1
Slovenia	0.1	0.0	0.1	0.1	0.6	0.0	0.0	0.0	0.1	0.1	0.1	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.1	0.0	0.0	6.2	0.1	0.0	0.0
Slovakia	0.1	0.0	0.5	0.1	1.2	0.0	0.1	0.0	0.1	0.3	0.0	0.5	0.0	0.0	0.0	0.1	0.5	0.0	0.2	0.4	0.4	0.0	0.1	0.0	9.7	0.0	0.1
Finland	0.2	0.0	0.1	0.4	1.4	0.2	0.5	0.0	0.2	0.4	0.0	0.5	0.0	0.0	0.1	0.0	0.1	0.0	0.4	0.2	0.3	0.0	0.0	0.0	0.0	30.3	1.2
Sweden	0.6	0.0	0.2	2.3	3.3	0.1	1.1	0.1	0.4	1.5	0.0	1.0	0.1	0.0	0.1	0.3	0.2	0.1	1.2	0.3	0.5	0.1	0.1	0.0	0.1	1.6	70.3
Total	84.6	13.7	32.4	67.0	560.2	5.9	203.2	21.7	133.1	283.7	4.5	238.9	6.2	4.5	9.7	31.4	28.1	5.1	152.2	61.0	76.3	24.2	27.6	7.9	17.8	39.1	85.6

Reading note: value added of €61.7 billion in Belgium was supported by Belgian exports to non-member countries (the domestic effect); value added of €0.3 billion in Czechia was supported by Belgian exports to non-member countries (part of the spillover received effect in Czechia). Source: Eurostat (online data code: naio_10_favx)

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Table 2: Value added in each Member State supported by EU exports, 2021 (€ billion) Source: Eurostat (naio_10_favx)

Industries

Whereas Table 2 focused on value added in EU Member States supported by exports, Table 3 provides a similar analysis for industries. This presentation reveals the extent to which value added in specific industries depends on exports from the same industry or from other (downstream) industries. Unlike Table 2, Table 3 does not show absolute levels of value added but instead presents value added shares. The shares in each column sum to 100 %: each column shows the distribution (among the industries where value is added) of the value added that is supported by exports from a specific industry.

The share of export-supported value added within the same industry as the exporting industry is shown in the shaded cells running in a diagonal line from the top left to the bottom right of the table. The largest share² was observed for education: in 2021, 86.2 % of all value added in the EU supported by exports from this industry was generated in the education industry itself. The 20 other industries received the remaining 13.8 %, with the administrative and support service activities industry as the largest beneficiary (2.0 %) of export-supported value added from industrial spillover effects.

By contrast, 50.3 % of the value added supported by exports from the construction industry was generated in the same industry, the lowest share of any industry in 2021. Some 14.8 % of the value added supported by exports from the construction industry was added in manufacturing, 8.0 % in distributive trades and 6.8 % in professional, scientific and technical activities (which includes, among others, the activities of notaries, architectural and

²Leaving aside the small and somewhat atypical activities of households as employers and the undifferentiated goods- and services-producing activities of households for own use.

Supported value added in each industry as a share of the total value added supported by the exports of each industry, EU, 2021
(%)

	Exports from:																					
											LAPOIL	3 110111										
	griculture, forestry d fishing	ining and quarrying	anufacturing	ectricity, gas, steam and air inditioning supply	ater supply; sewerage, waste anagement and remediation activities	onstruction	stributive trades	ansportation and storage	ccommodation and od service activities	formation and ommunication	nancial and surance activities	al estate activities	ofessional, scientific id technical activities	dministrative and support rvice activities	ublic administration and defence; ompulsory social security	Jucation	uman health and ocial work activities	ts, entertainment id recreation	ther service activities	ctivities of households employers (')	ctivities of extraterritorial ganisations/bodies	otal
Value added in:	a A	Σ	Σ	шо	5 5	0	<u> </u>	-	A 9	5 5	<u></u>	~	e e	A 9	<u> </u>	ш	τõ	a	0	A S	V 0	F
Agriculture forestry																					1	
and fishing	57.6	04	18	0.6	04	0.5	04	0.3	2.0	0 2	0 1	0 1	0.2	0.3	0.2	0 1	0.3	0.3	02	0 1	_	19
Mining and quarrying	0.4	58.5	0.6	1.6	0.4	0.8	0.1	0.3	0.1	0.1	0.0	0.3	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0	_	0.6
Manufacturing	11.2	7.2	60.0	6.5	7.0	14.8	3.7	5.4	7.0	4.3	2.0	2.6	3.3	3.6	2.8	14	47	3.2	3.3	0.2	_	36.5
Electricity, gas, steam																						
and air conditioning																						
supply	1.8	3.2	1.9	60.0	1.9	1.2	0.9	1.1	1.5	0.6	0.5	1.3	0.7	0.5	0.8	0.6	0.8	1.2	0.7	0.5	_	1.6
Water supply:																						
sewerage, waste																						
management &																						
remediation activities	0.7	0.9	1.1	0.8	55.0	0.8	0.4	0.4	0.8	0.3	0.2	1.0	0.3	0.4	0.7	0.2	0.4	0.5	0.4	0.2	_	1.0
Construction	1.2	1.8	1.2	2.8	2.5	50.3	0.9	1.5	1.5	0.7	0.8	4.0	1.1	0.7	1.6	0.9	0.7	1.2	0.6	0.1	_	1.5
Distributive trades	8.7	5.5	8.9	4.4	6.2	8.0	64.0	5.3	7.8	7.0	2.6	1.5	3.2	3.5	2.2	1.2	3.7	3.4	3.1	0.9	_	13.0
Transportation and																						
storage	3.2	5.6	4.7	3.6	3.6	3.4	6.8	61.6	2.6	2.3	1.7	0.9	1.9	2.0	1.8	1.2	1.3	1.8	1.8	0.0	_	8.0
Accommodation & food																						
service activities	0.3	0.3	0.4	0.3	0.3	0.4	0.5	0.8	58.7	0.3	0.4	0.1	0.5	0.6	0.3	0.2	0.4	0.7	0.6	0.0	_	0.7
Information and																						
communication	1.5	1.9	2.5	2.4	2.7	1.9	2.7	2.7	2.1	66.2	5.0	1.0	5.0	2.8	2.5	1.4	1.3	5.0	2.4	0.1	-	8.1
Financial and																						
insurance activities	3.0	2.0	2.3	2.6	2.4	2.5	2.8	3.4	2.0	2.4	68.3	4.0	2.7	2.4	2.0	0.9	1.3	2.0	2.3	0.1	-	4.7
Real estate activities	1.9	1.7	2.6	2.5	2.7	3.3	4.6	3.2	5.4	2.3	3.9	78.2	3.9	3.4	2.6	1.2	2.0	3.2	2.8	0.3	_	3.1
Professional, scientific																						
and technical activities	4.0	4.8	5.7	4.7	6.0	6.8	6.0	5.9	3.2	6.1	8.6	2.7	69.8	6.1	3.4	1.6	2.4	5.6	4.6	0.2	-	9.6
Administrative and																						
support service																						
activities	3.0	4.4	4.4	3.7	5.3	3.9	4.4	5.9	3.1	5.4	4.2	1.5	4.8	71.7	3.1	2.0	2.5	4.1	5.2	0.1	_	6.8
Public administration																						
and defence;																						
compulsory social																						
security	0.6	0.9	0.8	2.3	2.5	0.7	0.6	1.0	0.7	0.5	0.5	0.3	0.9	0.6	74.2	0.3	0.4	0.9	0.4	0.0	-	1.2
Education	0.3	0.3	0.4	0.4	0.4	0.2	0.4	0.5	0.2	0.5	0.5	0.1	0.7	0.4	0.8	86.2	0.6	0.6	0.4	0.0	_	0.7
Human health & social																						
work activities	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.0	0.2	0.2	0.3	0.2	76.7	0.3	0.2	0.0	_	0.3
Arts, entertainment and				<i></i>																		
recreation	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.6	0.4	0.2	0.1	0.2	0.2	0.6	0.2	0.1	65.5	0.2	0.0	-	0.3
Other service activities	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.4	0.7	0.3	0.4	0.1	0.5	0.4	0.2	0.2	0.4	0.5	70.7	0.0	-	0.5
Activities of households																						_
as employers (1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.2	_	0.0
Activities of																						
extraterritorial																						
organisations/bodies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	-	100

Reading note: 57.6 % of the value added supported by exports from agriculture, forestry and fishing was in agriculture, forestry and fishing; 11.2 % of the value added supported by exports from agriculture, forestry and fishing was in manufacturing.

(1) Including also undifferentiated goods- and services-producing activities of households for own use.

Source: Eurostat (online data code: naio_10_favx)

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Table 3: Supported value added in each industry as a share of the total value added supported by the exports of each industry, EU, 2021 (%) Source: Eurostat (naio_10_favx)

In 2021, the single largest industrial spillover effect between any pair of industries was the 14.8 % noted above for value added in manufacturing supported by exports from the construction industry. Five other industry pairings had industrial spillover effects equal to or exceeding 8.0 % of value added supported by exports from a particular

industry:

- 11.2 % of the value added supported by agriculture, forestry and fishing exports was in manufacturing and 8.7 % in distributive trades:
- 8.9 % of the value added supported by manufacturing exports was in distributive trades;
- 8.6 % of the value added supported by exports from financial and insurance activities was in professional, scientific and technical activities;
- 8.0 % of the value added supported by construction exports was in distributive trades.

In absolute terms, the picture is somewhat different, as manufacturing exports alone supported € 1 285 billion of value added in the EU in 2021, equivalent to close to three fifths (57.7 %) of all export-supported value added in the EU. A value of € 771.5 billion of this total was added within manufacturing itself, with the remaining € 513.7 billion representing the industrial spillover effect within the other 20 industries. The 10 largest industry pairings for export-supported value added resulting from industrial spillover effects all concerned value added in industries outside the manufacturing industry itself that were supported by manufacturing exports. For example, € 114.0 billion of value added in distributive trades was supported by manufacturing exports (see Figure 4).

Value added in each industry supported by manufacturing exports, EU, 2021



shown for scale reasons).

(1) Including also undifferentiated goods- and services-producing activities of households for own use. Source: Eurostat (online data code: naio_10_favx)

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Figure 4: Value added in each industry supported by manufacturing exports, EU, 2021 (€ billion) Source: Eurostat (naio 10 favx)

In 2021, the largest pairing of industrial spillover effects that did not involve manufacturing was the € 14.8 billion of value added in transportation and storage activities supported by exports from distributive trades.

Table 4 identifies, for each EU Member State the two industries with the highest export-supported value added. In 23 Member States, manufacturing had the highest level of export-supported value added in 2021. The relatively

small Member States of Cyprus, Luxembourg and Malta were the only exceptions where manufacturing was not one of the two industries with the highest levels of export-supported value added. The next most common industry was distributive trades, which had the second highest level of export-supported value added in 14 Member States.

Four other industries appear in Table 4:

- transportation and storage in Denmark, Greece, Lithuania and Malta;
- · financial and insurance activities in Cyprus and Luxembourg;
- information and communication in Estonia, Ireland, Cyprus, Romania, Finland and Sweden;
- administrative and support service activities in Belgium, Luxembourg, Hungary and Malta.

Industries with the highest value added supported by EU exports, 2021

	Industry with highest lev	el of support	ed value add	Industry with second highest level of supported value added							
	industry	Value added supported	Value added as a sh total value added	d supported are of: all supported value added	Industry	Value added supported	Value added as a shi total value added	l supported are of: all supported value added			
	(name)	(€ million)	(%)		(name)	(€ million)	(%)			
Value added	in:										
Belgium	Manufacturing	22 039	4.9	25.9	Administrative & support service act.	15 509	3.5	18.2			
Bulgaria	Manufacturing	3 169	5.1	22.7	Distributive trades	2 968	4.8	21.3			
Czechia	Manufacturing	15 197	7.0	46.1	Distributive trades	3 406	1.6	10.3			
Denmark	Manufacturing	21 032	7.2	33.9	Transportation and storage	10 586	3.6	17.1			
Germany	Manufacturing	257 382	7.9	44.1	Distributive trades	64 436	2.0	11.0			
Estonia	Manufacturing	1 317	4.8	22.9	Information and communication	870	3.2	15.1			
Ireland	Manufacturing	92 056	22.9	48.9	Information and communication	47 355	11.8	25.2			
Greece	Transportation and storage	6 773	4.3	29.9	Manufacturing	3 893	2.5	17.2			
Spain	Manufacturing	34 795	3.2	24.5	Distributive trades	28 133	2.6	19.8			
France	Manufacturing	83 876	3.8	29.2	Distributive trades	37 939	1.7	13.2			
Croatia	Manufacturing	1 111	2.3	22.3	Distributive trades	885	1.8	17.8			
Italy	Manufacturing	100 493	6.3	44.1	Distributive trades	28 314	1.8	12.4			
Cyprus	Financial and insurance activities	1 250	5.9	21.0	Information and communication	1 101	5.2	18.5			
Latvia	Manufacturing	1 230	4.2	23.8	Distributive trades	995	3.4	19.3			
Lithuania	Manufacturing	3 087	6.1	29.8	Transportation and storage	2 942	5.9	28.4			
Luxembourg	Financial and insurance activities	7 895	12.0	36.5	Administrative & support service act.	3 456	5.3	16.0			
Hungary	Manufacturing	9 593	7.4	41.3	Administrative & support service act.	2 637	2.0	11.3			
Malta	Administrative & support service act.	508	3.7	19.7	Transportation and storage	386	2.8	15.0			
Netherlands	Manufacturing	35 219	4.6	22.3	Distributive trades	31 874	4.2	20.2			
Austria	Manufacturing	25 893	7.1	44.6	Distributive trades	7 651	2.1	13.2			
Poland	Manufacturing	27 529	5.5	31.7	Distributive trades	18 550	3.7	21.4			
Portugal	Manufacturing	8 441	4.5	38.4	Distributive trades	2 640	1.4	12.0			
Romania	Manufacturing	10 162	4.7	33.1	Information and communication	3 765	1.7	12.3			
Slovenia	Manufacturing	4 067	8.9	47.5	Distributive trades	919	2.0	10.7			
Slovakia	Manufacturing	6 891	7.7	47.4	Distributive trades	1 799	2.0	12.4			
Finland	Manufacturing	15 293	7.0	41.7	Information and communication	4 764	2.2	13.0			
Sweden	Manufacturing	27 542	5.8	32.1	Information and communication	11 743	2.5	13.7			

Source: Eurostat (online data code: naio_10_favx)

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Table 4: Industries with the highest value added supported by EU exports, 2021 Source: Eurostat (naio_10_favx)

Earlier it was noted that a considerable level of value added in other industries is supported by exports from the manufacturing industry. Nevertheless, in most EU Member States – including the largest ones – manufacturing had the highest absolute level of value added that was supported by exports (from any industry).

Source data for tables and graphs

Value added content in EU exports: tables and figures

All FIGARO data for value added are available from the following files:

• Excel: 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

They can also be accessed through the Eurostat dissemination database: (naio_10_favx)

Data sources

Concept

The FIGARO tables are a statistical product for economic modelling. They **link national accounts and data on business, trade and jobs** for the EU Member States and 18 main EU trading partners (Argentina, Australia, Brazil, Canada, China, India, Indonesia, Japan, Mexico, Norway, Russia, Saudi Arabia, South Africa, South Korea, Switzerland, Türkiye, the United Kingdom and the United States). A 'rest of the world' region completes the FIGARO tables.

The FIGARO tables present the relationship between economies at for **64 industries and 64 products**, as defined in the ESA 2010 national accounts transmission programme.

The three following main applications are produced based on the FIGARO tables:

- · employment supported by EU exports to the rest of the world,
- · value added supported by EU exports to the rest of the world,
- · CO2emissions footprints linked to final consumption and investment in the EU.

Frequency and availability

The FIGARO tables are produced and updated annually, as are the results for the three main FIGARO applications. In 2023, the time series **from 2010 to 2021** has been published (periodt-24 months,t being the year of release). The time series is in line with the latest macroeconomic aggregates. This release is linked to major improvements both in terms of data availability and methodology, namely:

- the results are available in the Eurostat online database with a tool that offers the possibility to customise, visualise (for example, using a chart, bar chart and a map) and extract statistical data in an easy and interactive way;
- the FIGARO tables and applications benefit from several methodological improvements, such as enhanced adjustments linked to discrepancies between trade statistics and national accounts;
- the quality has also been further enhanced due to the inclusion of fresher data, leading to less data estimation, in particular for the EU's main trading partners.

More information

For more information, please refer to the dedicated section for the input-output and FIGARO tables .

Context

Partners

The FIGARO tables are the result of a long-term collaboration between Eurostat and the European Commission's Joint Research Centre. Both partners also collaborate in the OECD expert group on regional-global trade in value-added (TiVA) initiatives, which aims to explore synergies and common action among the various initiatives on extended supply, use, and input-output tables.

Purpose

The FIGARO tables provide the first official inter-country supply, use and input-output data for the EU and the global economy. They are a tool for analysing the social, economic and environmental effects of globalisation. These may be analysed through studies on competitiveness, growth, productivity, employment, environmental footprint and international trade (for example, analyses of global value chains).

The tables are used to evaluate EU policies and assess the economic interdependencies of the EU, the euro area or individual EU Member States in a globalised world.

Other articles

- · Employment content in EU exports an analysis with FIGARO data
- · Supply and use statistics

Publications

- EURONA 1/2019 The employment content of EU exports: an application of FIGARO tables see Chapter 3
- EU inter-country supply, use and input-output tables Full international and global accounts for research in input-output analysis (FIGARO)

Database

- Data can be accessed through the dedicated section as CSV files (flat or matrix format) and Excel files.
- Data are also available from the Eurostat dissemination database: (naio_10_favx)

Dedicated section

• Supply, use and input-output tables (SUIOTs) and FIGARO tables

Methodology

- Figaro project methodological note
- Latest methodological improvements May 2021
- EU inter-country supply, use and input-output tables Full international and global accounts for research in input-output analysis (FIGARO)

External links

- Joint Research Centre Input-output economics
- OECD Trade in value added