



THE EUROSTAT'S FIGARO TABLES: 2024 RELEASE



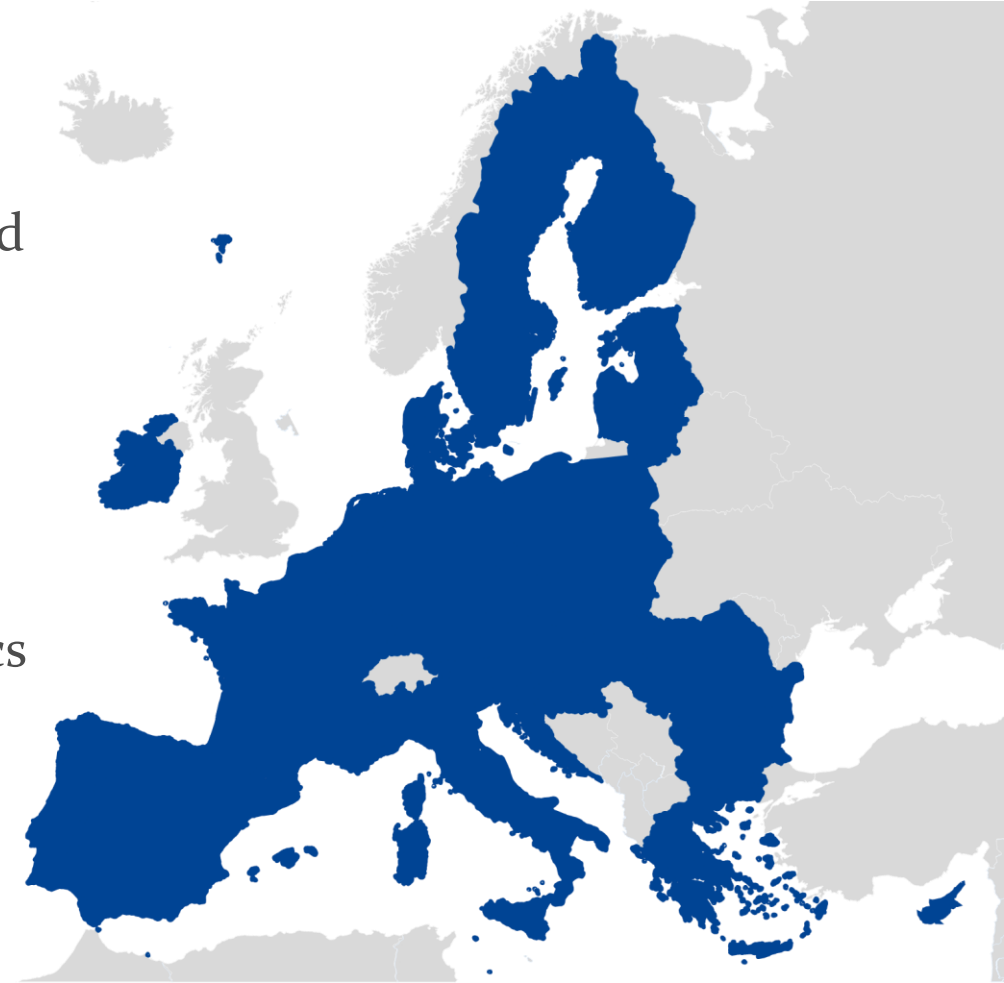
José M. Rueda-Cantuche
EC Joint Research Centre

Fabienne Montaigne
Eurostat

10th Conference on Input-
Output Analysis, Gijón,
4-6 September 2024

What is FIGARO?

- ‘Full International and Global Accounts for Research in input-Output analysis
- EU inter-country Supply, Use and Input-Output tables and applications (environment, economic globalisation)
- EU perspective + countries perspective
- Long-term co-operation between Eurostat and the European Commission’s Joint Research Centre
- Since 2021, FIGARO published annually as official statistics
- Allow deep analyses of the socio-economic and environmental effects of globalisation

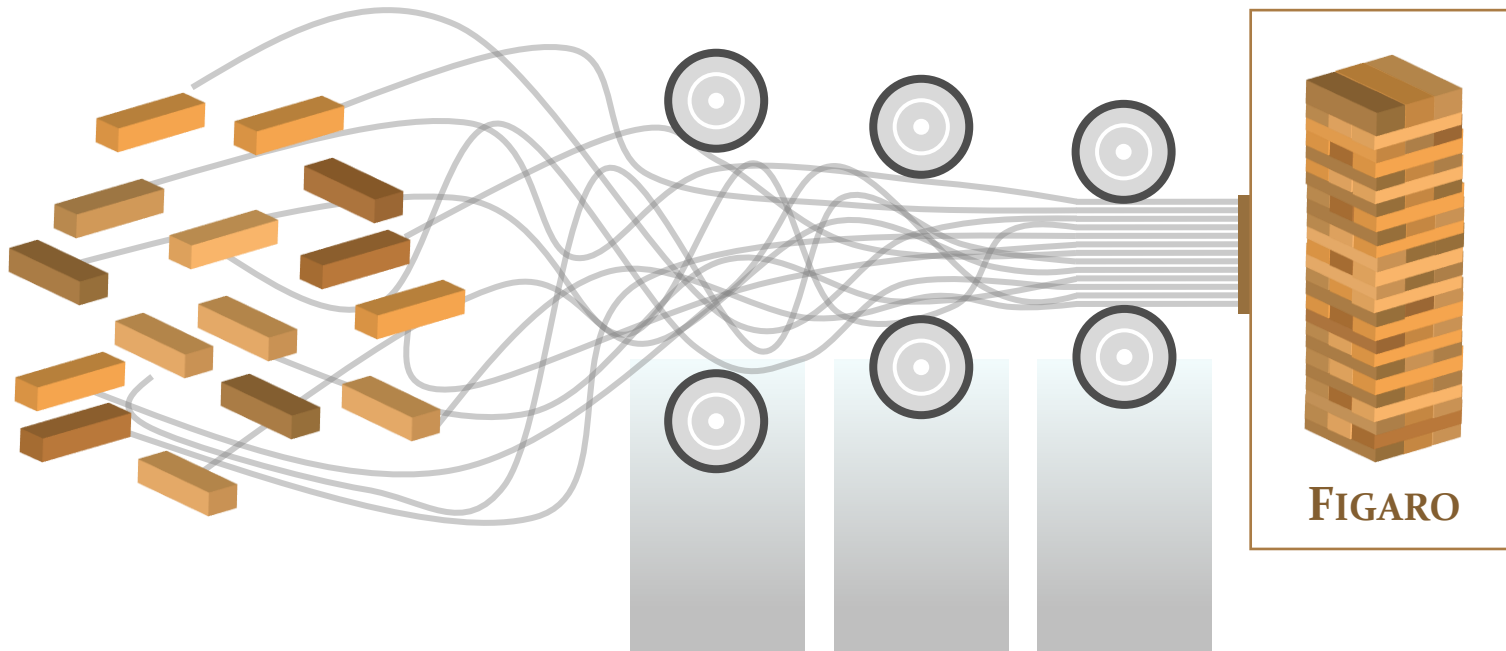


Who are the main actors?



EU Regulations for
data transmission

eurostat 



ESS

- National statistical institutes collect and verify data
- Use common definitions and methods
- Send data to Eurostat



Eurostat

- Consolidate data
- Produces European aggregates
- Publish official statistics for Europe as open data

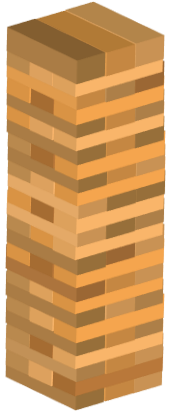


JRC

- Methodology
- Economic modelling
- GVC indicators
- Other FIGARO applications

How is it produced?

FIGARO 2010-2022
released on 16 July 2024



FIGARO

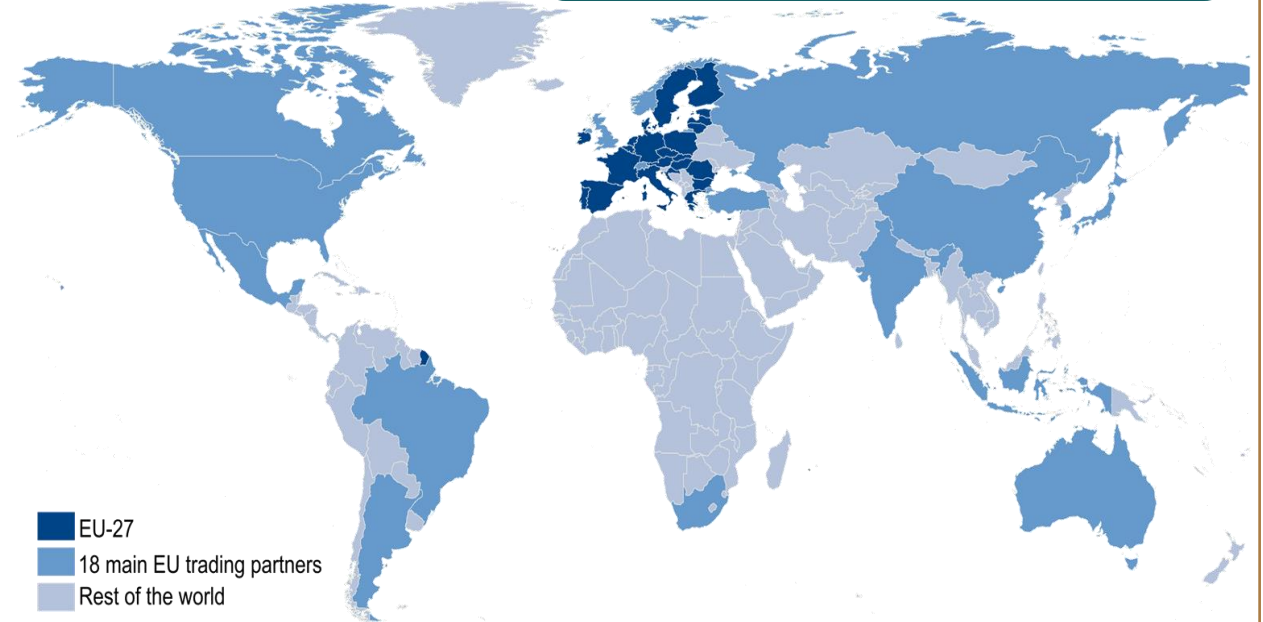


+

18 main
trading
partners
+ RoW

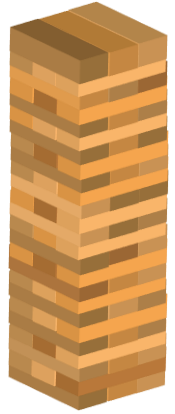
=

45 + RoW



- Globally balanced view of **National Accounts Main Aggregates**, adjusted to latest national GDP main aggregates (99.1% population and 99.8% GDP)
- Build upon available data from National Accounts (national SUTs) and balanced international trade statistics
- Supply-use by 64 product/industry categories (CPA/NACE Rev.2)
- Fully aligned with countries' National Accounts official statistics (since 2022 release)

Methodological overview

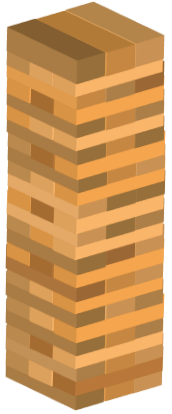


FIGARO

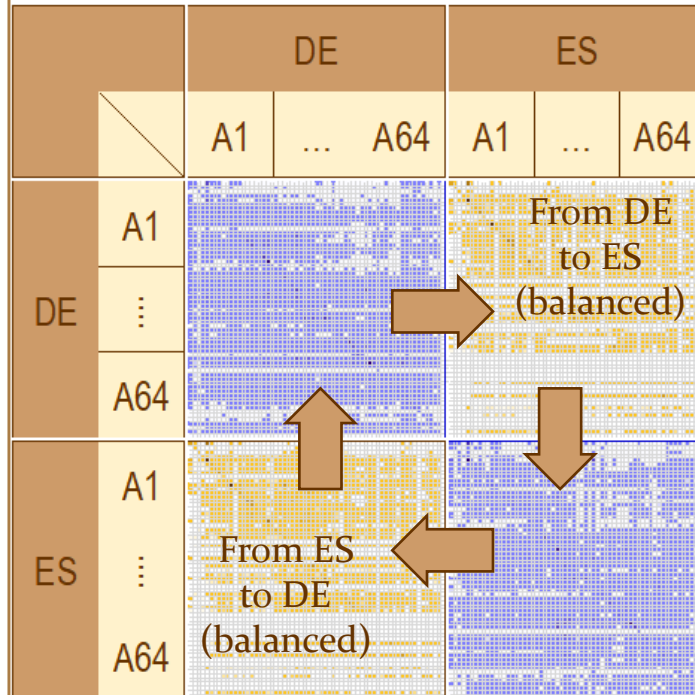
		DE		
		A1	...	A64
DE	A1			
	⋮			
	A64			



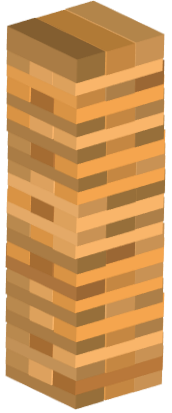
Methodological overview



FIGARO



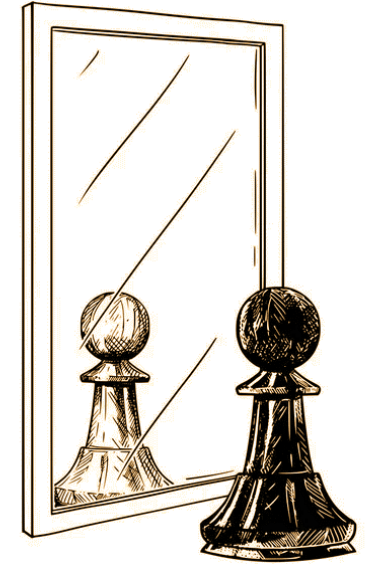
Methodological overview



FIGARO

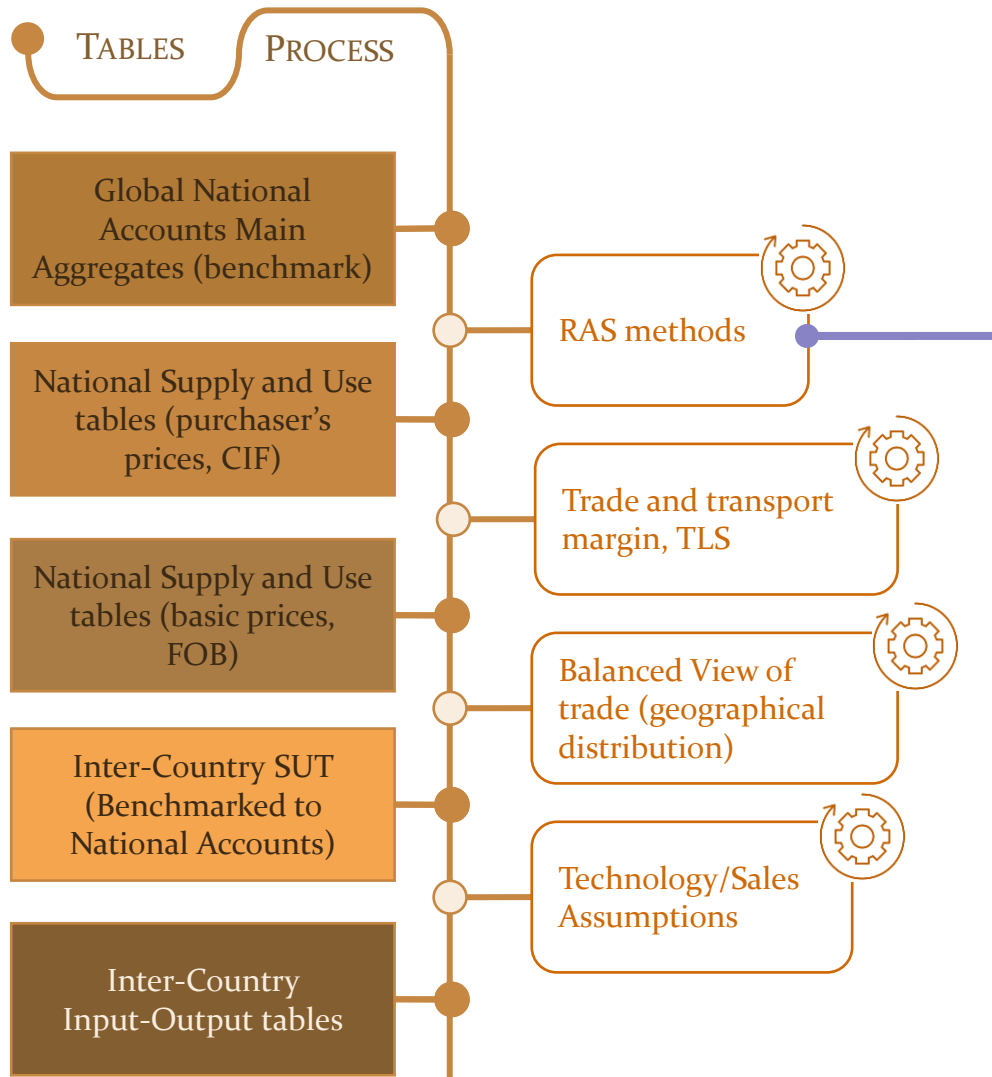
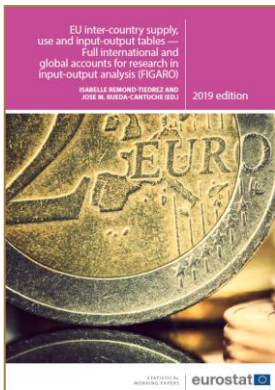
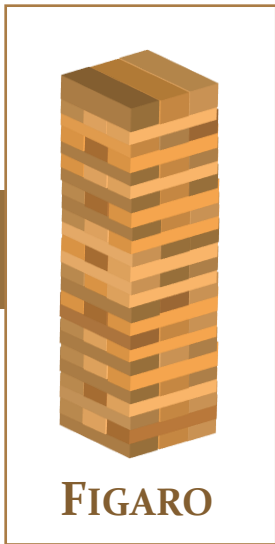
		Intermediate Consumption									Final Use		
		DE			ES			RoW			DE	ES	RoW
		A1	...	A64	A1	...	A64	A1	...	A64	P3/5	P3/5	P3/5
DE	A1	[Data]			[Data]			[Data]			[Data]	[Data]	[Data]
	⋮	[Data]			[Data]			[Data]			[Data]	[Data]	[Data]
	A64	[Data]			[Data]			[Data]			[Data]	[Data]	[Data]
ES	A1	[Data]			[Data]			[Data]			[Data]	[Data]	[Data]
	⋮	[Data]			[Data]			[Data]			[Data]	[Data]	[Data]
	A64	[Data]			[Data]			[Data]			[Data]	[Data]	[Data]
RoW	A1	[Data]			[Data]			[Data]			[Data]	[Data]	[Data]
	⋮	[Data]			[Data]			[Data]			[Data]	[Data]	[Data]
	A64	[Data]			[Data]			[Data]			[Data]	[Data]	[Data]

MIRROR TRADE APPROACH



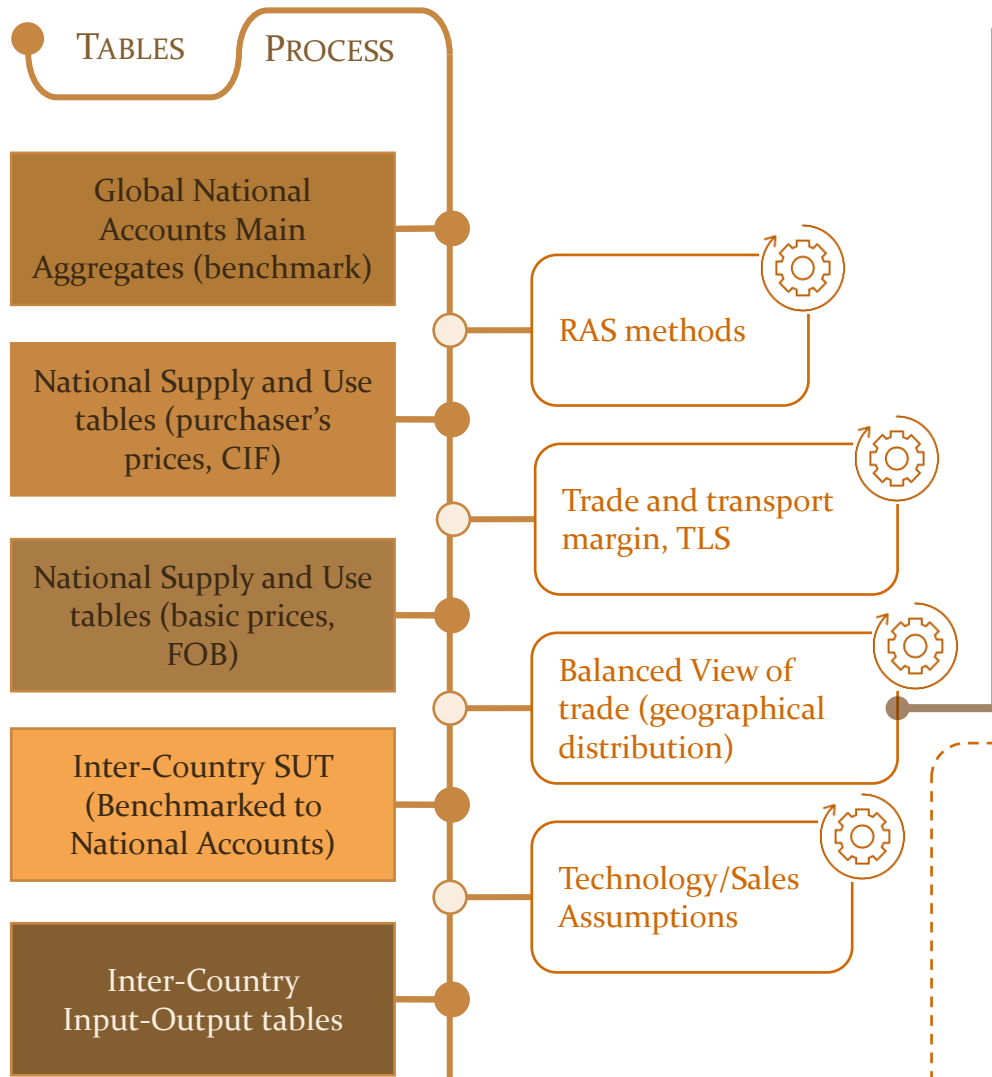
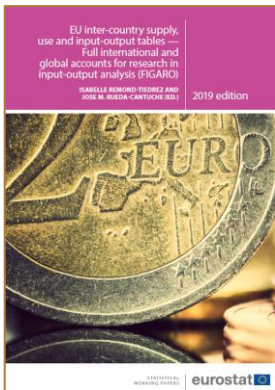
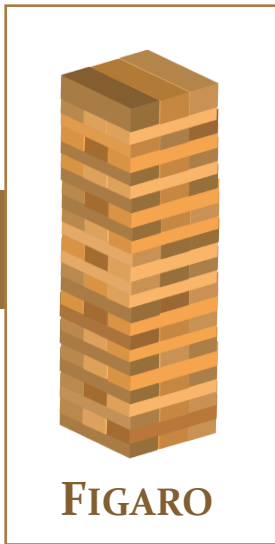
FULL INTERNATIONAL AND GLOBAL ACCOUNTS
FOR RESEARCH IN INPUT-OUTPUT ANALYSIS

Methodological overview



		Intermediate Consumption									Final Use		
		DE			ES			RoW			DE	ES	RoW
		A1	...	A64	A1	...	A64	A1	...	A64	P3/5	P3/5	P3/5
DE	A1	[Heatmap]									[Heatmap]		
	⋮	[Heatmap]									[Heatmap]		
	A64	[Heatmap]									[Heatmap]		
ES	A1	[Heatmap]									[Heatmap]		
	⋮	[Heatmap]									[Heatmap]		
	A64	[Heatmap]									[Heatmap]		
RoW	A1	[Heatmap]									[Heatmap]		
	⋮	[Heatmap]									[Heatmap]		
	A64	[Heatmap]									[Heatmap]		

Methodological overview



		Intermediate Consumption									Final Use		
		DE			ES			RoW			DE	ES	RoW
		A1	...	A64	A1	...	A64	A1	...	A64	P3/5	P3/5	P3/5
DE	A1	[Data grid]											
	⋮	[Data grid]											
	A64	[Data grid]											
ES	A1	[Data grid]											
	⋮	[Data grid]											
	A64	[Data grid]											

- Balanced view of trade in goods (QDR methodology)
- Balanced view of trade in services (fully consistent)
- Goods sent abroad for processing
- Estimation of merchanting
- Direct purchases abroad

Previous editions highlights

2018 edition

- 2010
- A*64 for EU28 + US
- Aggregated non-EU imports and exports
- Experimental statistics
- Working Paper Series (2019)

2021 edition

- Time series 2010 - 2019
- A*64 for EU27 + US, UK
A*21 non-EU (18) + RoW
- Misclassification of products
- GSA, MCH and DPA
- Improved quality checks of national SUIOTs
- Regular production in Eurostat (IT infrastructure)

2022/23 editions

- Time series 2010 – 2021
- A*21 to A*64 for 46 regions
- Global balanced NAMA
- DPA as additional tables
- Extended validation checks (dashboards)
- IT “engine” revised to better suit regular statistical production

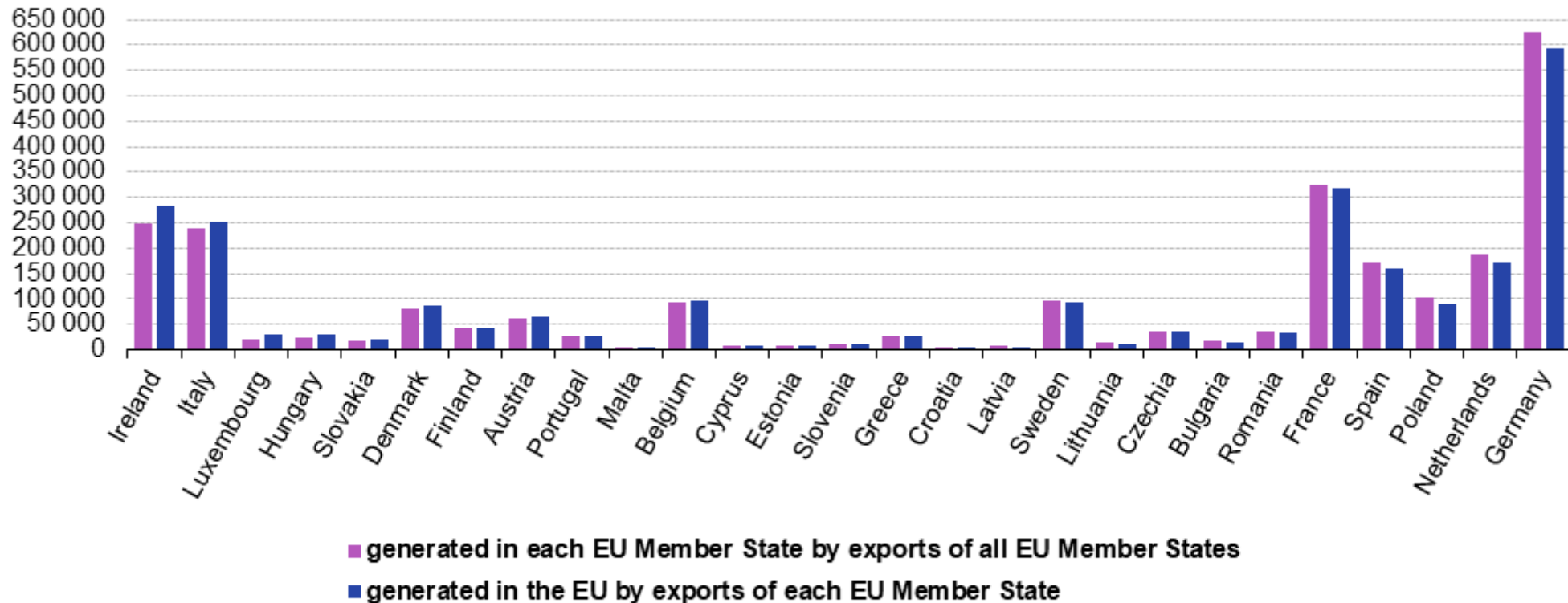
The 2024 FIGARO edition



- Stable methods and sources but still incorporate some improvements
- Updated CIF/FOB margins & BaTiS data
- Extended use of Balance of Payments data
- Benefit from the cooperation with other international organisations (UN-ECLAC, UNECA, ADB, OECD, IMF, WTO) under the GIANT initiative
- Interpolation in 2 steps of SUTs at basic prices and valuation matrices, when not available
- Better tracing of the different adjustments from source data to final estimates

Value added generated by exports

Value added generated by exports to non-EU countries, by EU Member State, 2022
(€ million)



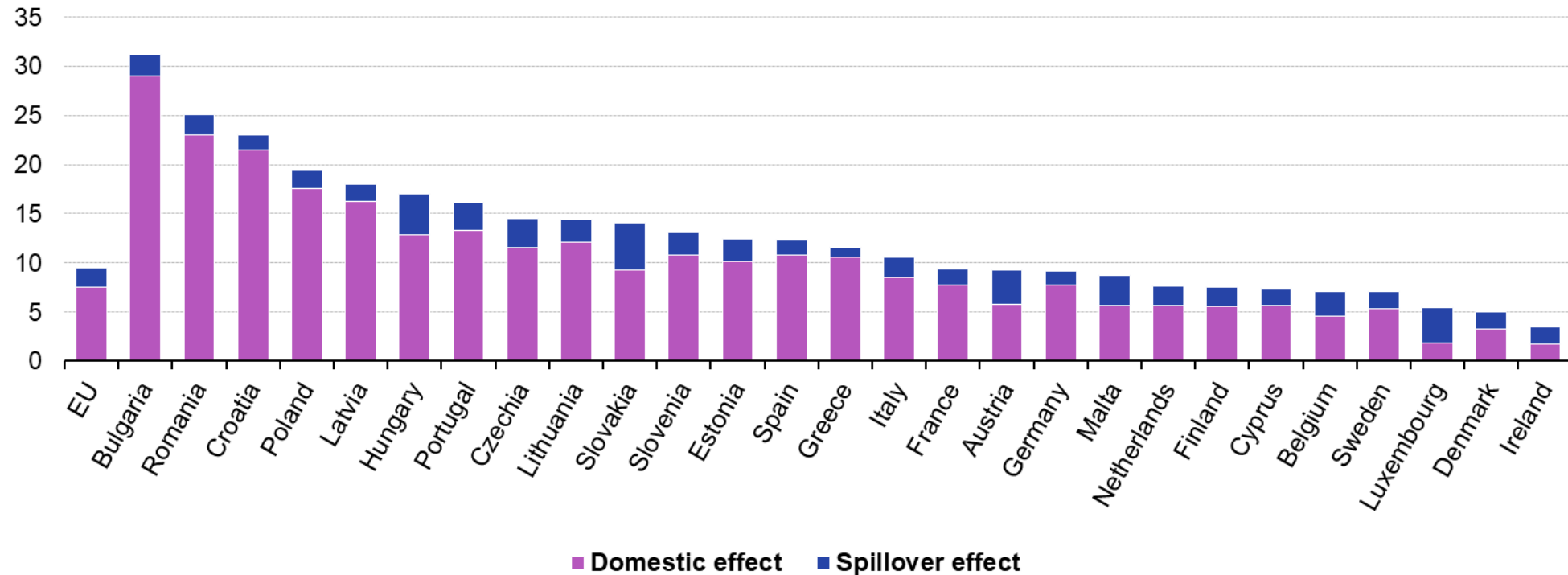
Note: Countries are ranked by increasing difference between the two bars (purple bar minus blue bar).
Reading tip: In 2022, €247.3 billion of value added was generated in Ireland due to the exports of all EU Member States to non-EU countries. On the other hand, €284.7 billion of value added was generated in the EU due to the exports of Ireland to non-EU countries.

Source: Eurostat (online data codes: naio_10_favx)

Employment supported by exports

Employment in the EU supported by exports of each EU Member State to non-EU countries, 2022

(number of employed people per € million exported by the EU Member State)



Note: Countries are ranked by decreasing order of employment supported by their exports.

Reading tip: In 2022, 629 thousands employed people in the EU supported Bulgaria's exports to non-EU countries. Each million euro exported by Bulgaria to non-EU countries supported 31 employed people in the EU. Out of these 31, 29 were located in Bulgaria (domestic effect) while 2 were located in other EU Member States (spillover effect).

Source: Eurostat (online data codes: naio_10_faex)

GHG footprints based on FIGARO

Global CO₂-emissions - EU vis-a-vis the rest of the world, 2021

(billion tonnes)

	serving EU's consumption (final demand)		serving consumption (final demand) in the non-EU rest of the world		Total produced	
produced in EU	2.4	6%	0.6	2%	3.0	8%
produced in the non-EU rest of the world	1.1	3%	33.8	89%	34.9	92%
Total consumed	3.5	9%	34.4	91%	37.9	100%

Source: Eurostat (online data code: env_ac_co2fp)

eurostat 

- 2010-2021 emission footprints published on Eurostat website:
 - Carbon dioxide emission footprints
 - Methane emission footprints (CH₄ in CO₂ equivalent)
 - Nitrous oxide emission footprints (N₂O in CO₂ equivalent)
 - Hydrofluorocarbon emission footprints (HFC in CO₂ equivalent)
 - Perfluorocarbon emission footprints (PFC in CO₂ equivalent)
 - Nitrogen trifluoride and sulphur hexafluoride emission footprints (SF₆_NF₃ in CO₂ equiv.)

Where to find the results?

Eurostat's dissemination database

Data navigation tree

Detailed datasets

General and regional statistics

Economy and finance

National accounts (ESA 2010) (na10)

Annual national accounts (nama10)

Quarterly national accounts (namq_10)

Supply, use and input-output tables (naio_10)

National supply, use and input-output tables (naio_10_n) (Information note)

EU inter-country supply, use and input-output tables (FIGARO) (naio_10_f)

EU inter-country supply, use and input-output tables (FIGARO) – current prices (naio_10_fcp)

FIGARO applications (naio_10_fa)

- ↓ Employment generated by EU exports (FIGARO application) (naio_10_faex)
- ↓ Value-added generated by EU exports (FIGARO application) (naio_10_favx)
- ↓ Greenhouse gas emission footprints (in CO2 equivalent, FIGARO application) (env_ac_ghgfp)
- ↓ Carbon dioxide emission footprints (FIGARO application) (env_ac_co2fp)
- ↓ Methane emission footprints (CH4 in CO2 equivalent, FIGARO application) (env_ac_ch4fp)
- ↓ Nitrous oxide emission footprints (N2O in CO2 equivalent, FIGARO application) (env_ac_n2ofp)
- ↓ Hydrofluorocarbon emission footprints (HFC in CO2 equivalent, FIGARO application) (env_ac_hfcfp)
- ↓ Perfluorocarbon emission footprints (PFC in CO2 equivalent, FIGARO application) (env_ac_pfcfp)
- ↓ Nitrogen trifluoride and sulphur hexafluoride emission footprints (NF3-SF6 in CO2 equivalent, FIGARO application) (env_ac_nf3sf6fp)

https://ec.europa.eu/eurostat/web/esa-supply-use-input-tables/database

Overview

Database

Publications

Information on data

Methodology

Figaro tables: EU inter-country supply, use and input-output tables

CSV flat format (FIGARO 2023 edition)

Open

CSV matrix format (FIGARO 2023 edition)

Open

Excel format (FIGARO 2023 edition)

Open

Figaro applications

Open

Thematic section on the Eurostat website



Thank you



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