“Eurostat’s FIGARO Project and its relevance to measure trade in services embodied in manufactured goods"

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European Commission

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"Special Session F:

“Globalisation and Input-Output Tables"

FIGARO: Full International and Global Accounts for Research in Input-Output Analysis

- Develop and implement by Eurostat a **regular production** process of **EU inter-country Supply, Use and Input-Output Tables** at **current** and **previous year's prices** (2010-2016) with **projections** for two years (2017-18) at current prices, each release, and **benchmarked** to the latest macroeconomic aggregates from National Acocunts.

How do inter-country input-output tables look like?

		Country A			Country B			Country C			Final Demand		
		Sector 1	Sector 2	Sector 3	Sector 1	Sector 2	Sector 3	Sector 1	Sector 2	Sector 3	Country A	Country B	Country C
Country A	Sector 1	1			4						3	5	
	Sector 2												
	Sector 3												
Country B	Sector 1	6									7		
	Sector 2												
	Sector 3												
Country C	Sector 1												
	Sector 2												
	Sector 3												
Taxes less subsidies on products		2											
Cif-fob adjustments													
Value added	Labour compensation												
	Operating surplus												
	Taxes less subsidies on production												
Output													

Directly taken from the national IO or SUT table:

1. Intermediate domestic use; **2.** Value added, output per industry; **3.** Final demand (**EXCL** exports)

4+5 Exports, by industry and partner country (B and C) (*end use from imports*)
6+7 Imports, by using industry (and final use sector) and partner (B or C)

Source: OECD

Methodological framework (FIGARO)

- Roadmap to FIGARO:
  1. Preparing **national SUIOTs (pp; bp; dom/imp)**
  2. Creating a coherent view of **EU bilateral trade statistics on goods and services**
  3. **Aligning** balanced view of trade with **Nat. Accounts**:
     - Goods sent abroad for processing
     - Merchanting
     - International trade and transport margins (CIF-FOB valuation adjust.)
     - Unobserved trade: allow for discrepancies
  4. **Domestic vs. national concepts**: Purchases by non-residents and residents' expenditures abroad
  5. **EU- International SUTs** and **EU-ICIO tables**

European Commission

OECD

WIOD

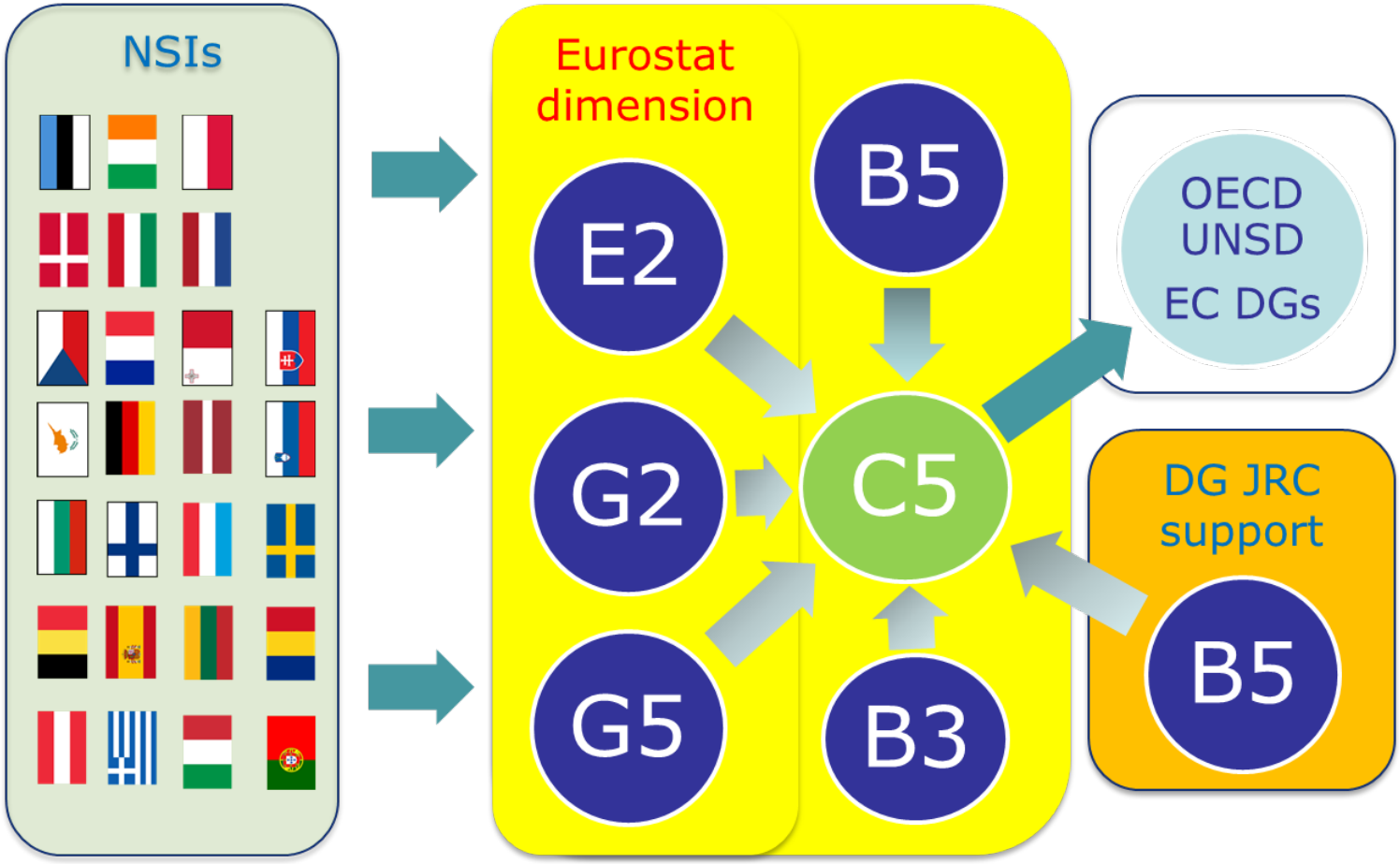
Eora MRIO

EXIOPOL

GTAP

IDE-JETRO

Implementation of the project



FIGARO progress and implementation

- **First development phase:** FIGARO (2016-17) – 2010 – Current prices – Methodology (book) – OECD collaboration and other contributors (WIOD)
- **Second development phase:** FIGARO Act I (2018-2020) – 2010-18 – CUP/PYP – Projections – Design of producion phase in liaison with ESTAT – Closer collaboration with OECD

FIGARO progress and implementation

- **Third phase (production)** – FIGARO Act II (2020-2023)
  - Regular production and implementation of the FIGARO methodology to publish FIGARO tables annually – releases coordinated with OECD
  - Development and implementation of EU TiVA indicators – section on ESTAT website
  - Estimation of (inter-country) national/social accounting matrices for the EU

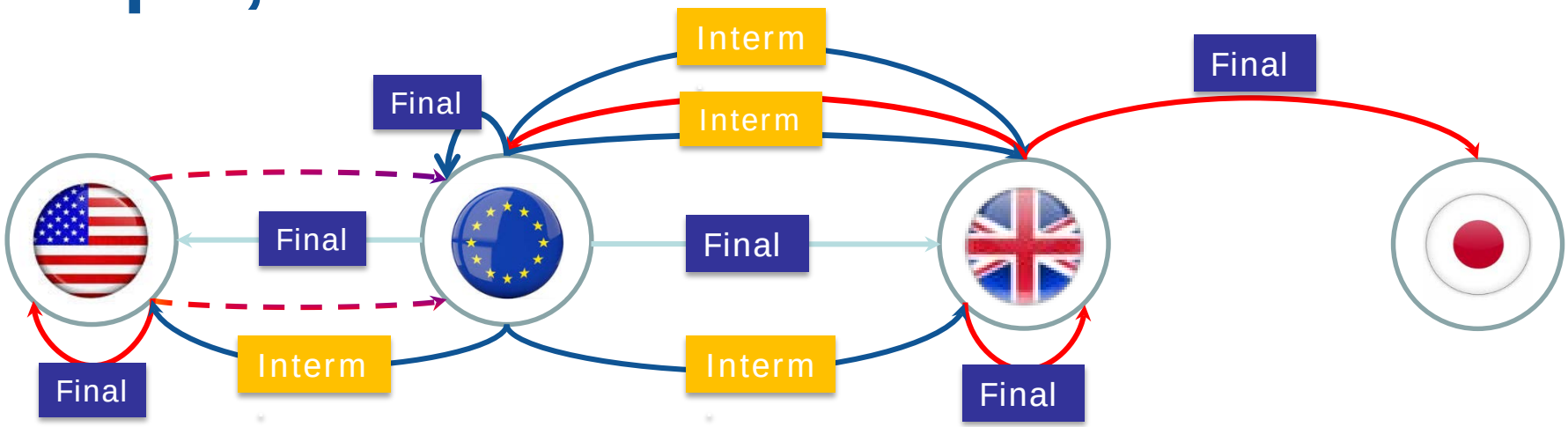
FIGARO progress and implementation

- **Annual production process**
  - **January – March** – Preparing the data inputs and estimating the FIGARO tables for the April release
  - **April – June** – Calculation of the EU TiVA indicators and publication
  - **July – December** – data collecting and preparing + further improvements in scripts (maintenance, efficiency, usability…)

Quality assessments of data inputs and results: towards becoming official stats

- **Validation rules;** all applied to national input data + others deemed convenient
- **Quality assessment**; intermediate reports on changes to raw data + new MS data available + confidentiality treatment
- **Transparency in the methodology** – replicable, flexible, documented (metadata, confluence, bitbucket) and user-friendly tool

Intuitively simple, but…



Foreign value added → *Foreign employment*

Domestic value added → *Domestic employment*

Industry, skill and country break down; balance

Basic results (WIOD, release 2016)

12.4% of the EU exports to the World corresponded to exports to the UK: 308 bn € (out of 2,486 bn €)

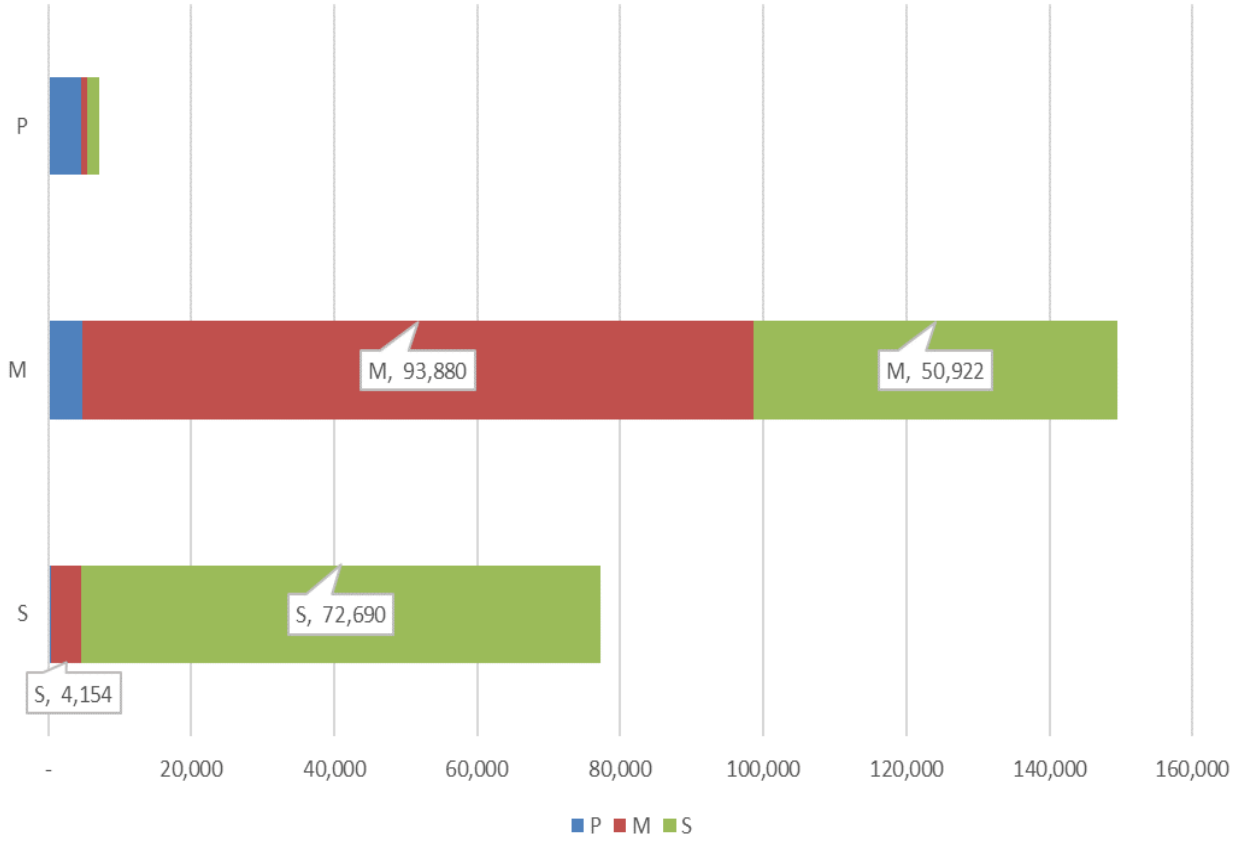
- Malta 50.3%
- Ireland 19.6%

75.9% of the EU gross exports to the UK is value added generated within the EU: 234 bn € (out of 308 bn €)

- Croatia, Italy, Austria, Germany, France, Romania, Greece > 80%
- Lithuania, Luxembourg, Malta ca. 50%

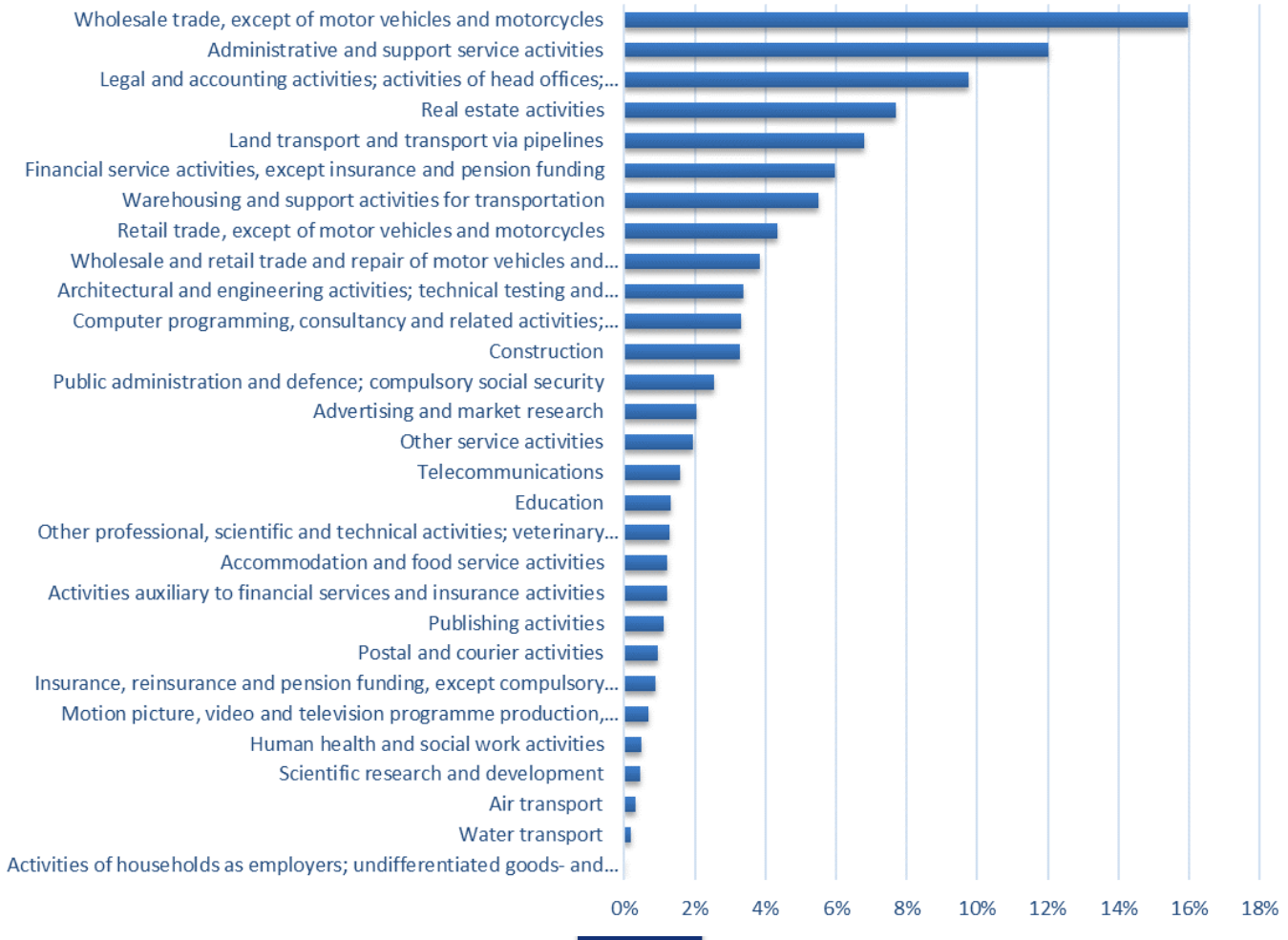
Sectors	P	M	S	Total
P	4,642	4,719	449	**9,810**
M	779	93,880	4,154	**98,812**
S	1,728	50,922	72,690	**125,339**
Total	**7,149**	**149,520**	**77,292**	**233,962**

Sectors	P	M	S	Total
P	64.9%	3.2%	0.6%	**4.2%**
M	10.9%	62.8%	5.4%	**42.2%**
S	24.2%	34.1%	94.0%	**53.6%**
Total	**100%**	**100%**	**100%**	**100.0%**

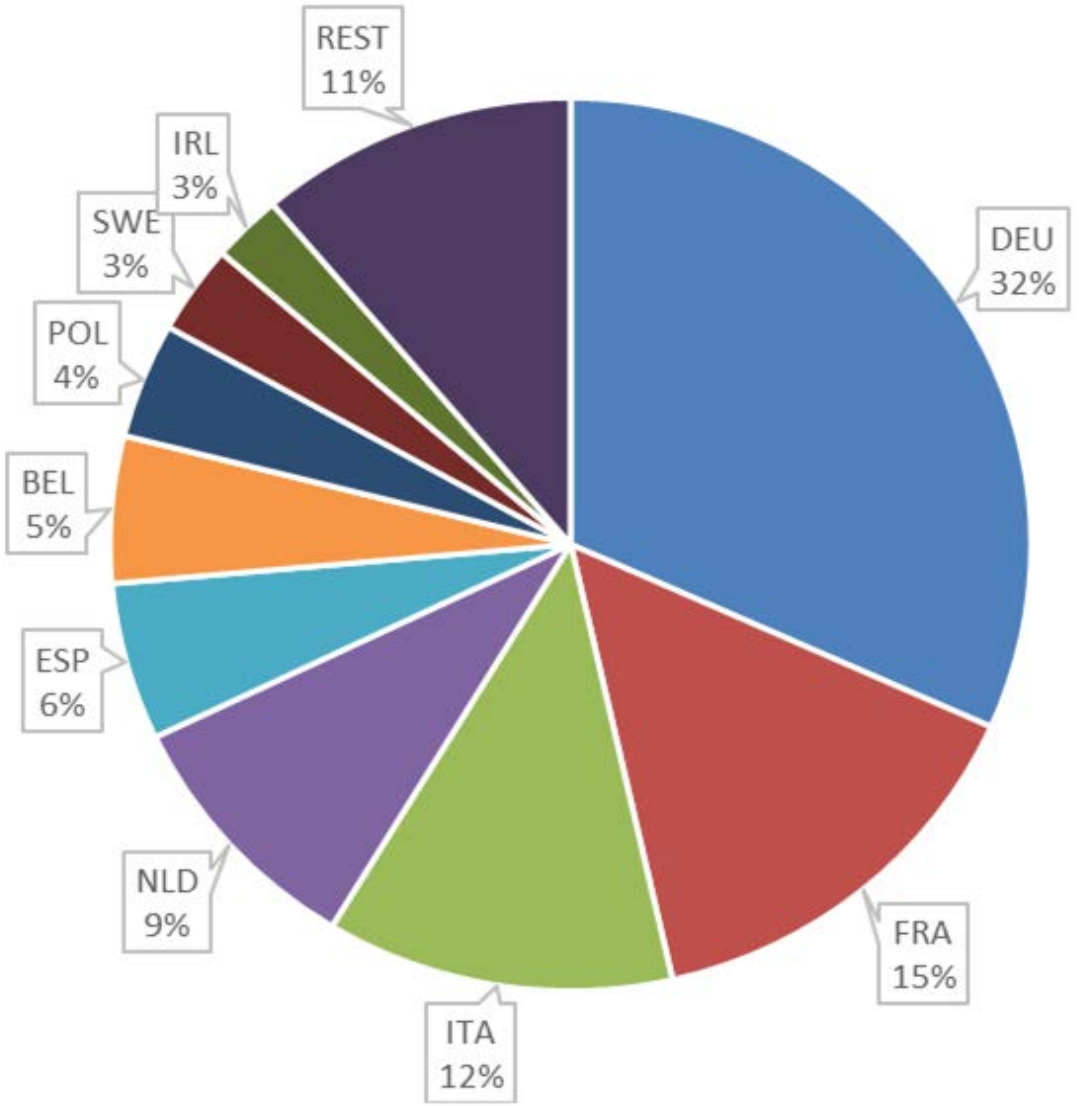


EU exports of manufactured products to the UK generated 149.5 bn € in the EU, of which **34%** in the **services sectors** (50,922 Mio €)

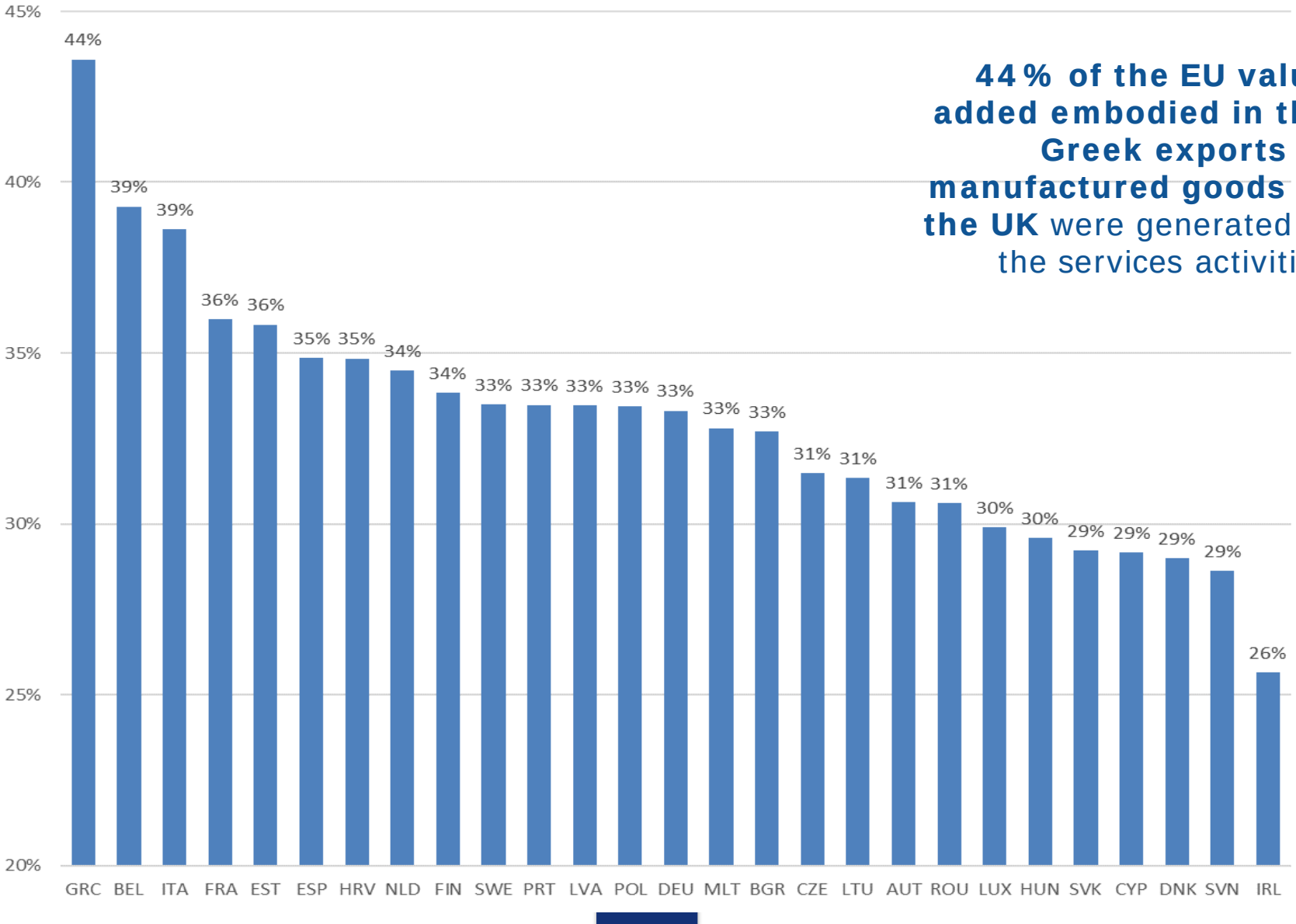
EU exports of manufactured products to the UK generated services value added mainly in **Wholesale trade** (16%), **Admin. & support services** (14%) and **Legal & Accounting activities** (10%)



Almost 60% of the EU value added generated by **EU exports of manufactured goods to the UK** (50,922 bn €) are located in **Germany, France and Italy**



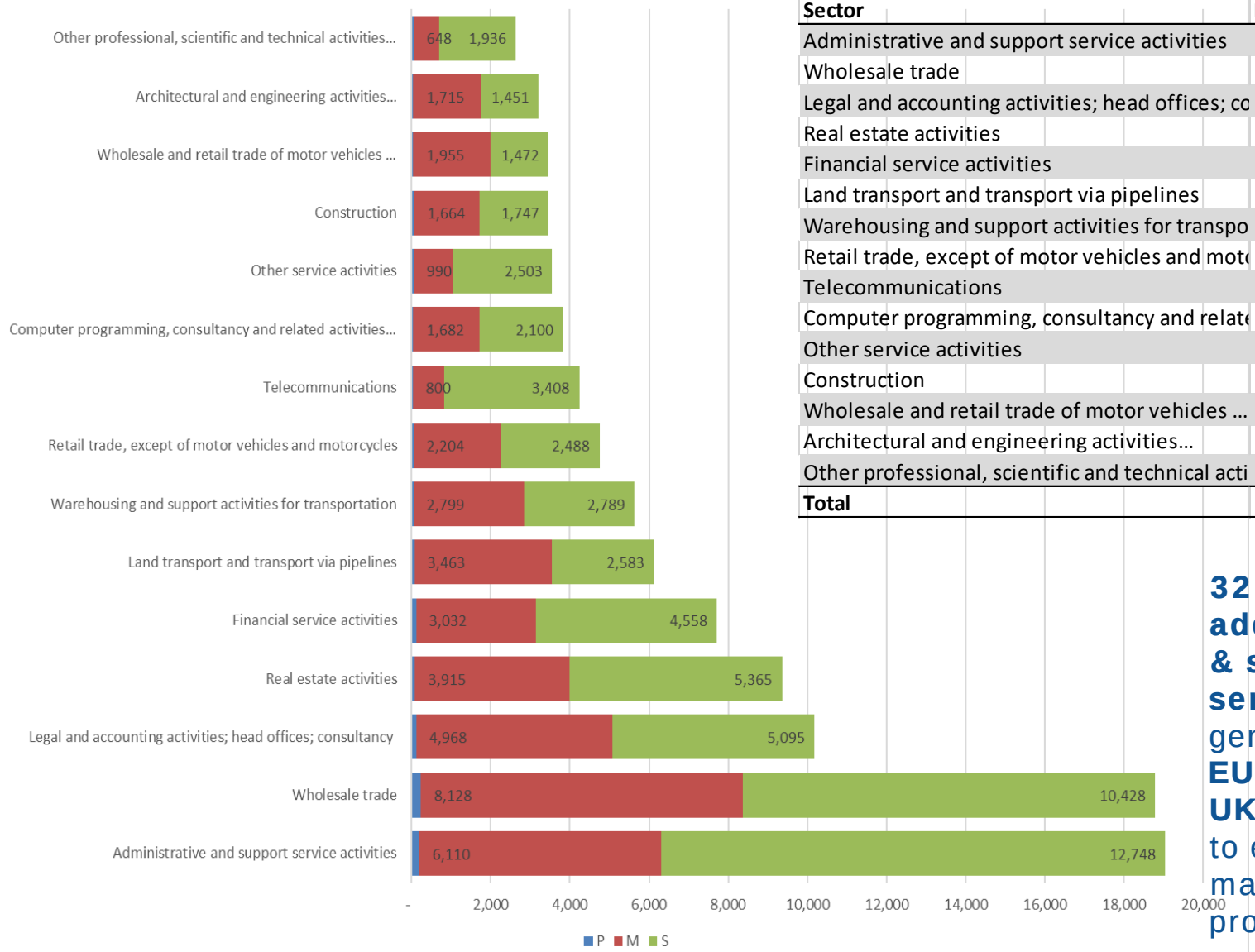
44% of the EU value added embodied in the Greek exports of manufactured goods to the UK were generated in the services activities



Sectors	P	M	S	Total
P	4,642	4,719	449	**9,810**
M	779	93,880	4,154	**98,812**
S	1,728	50,922	72,690	**125,339**
Total	**7,149**	**149,520**	**77,292**	**233,962**

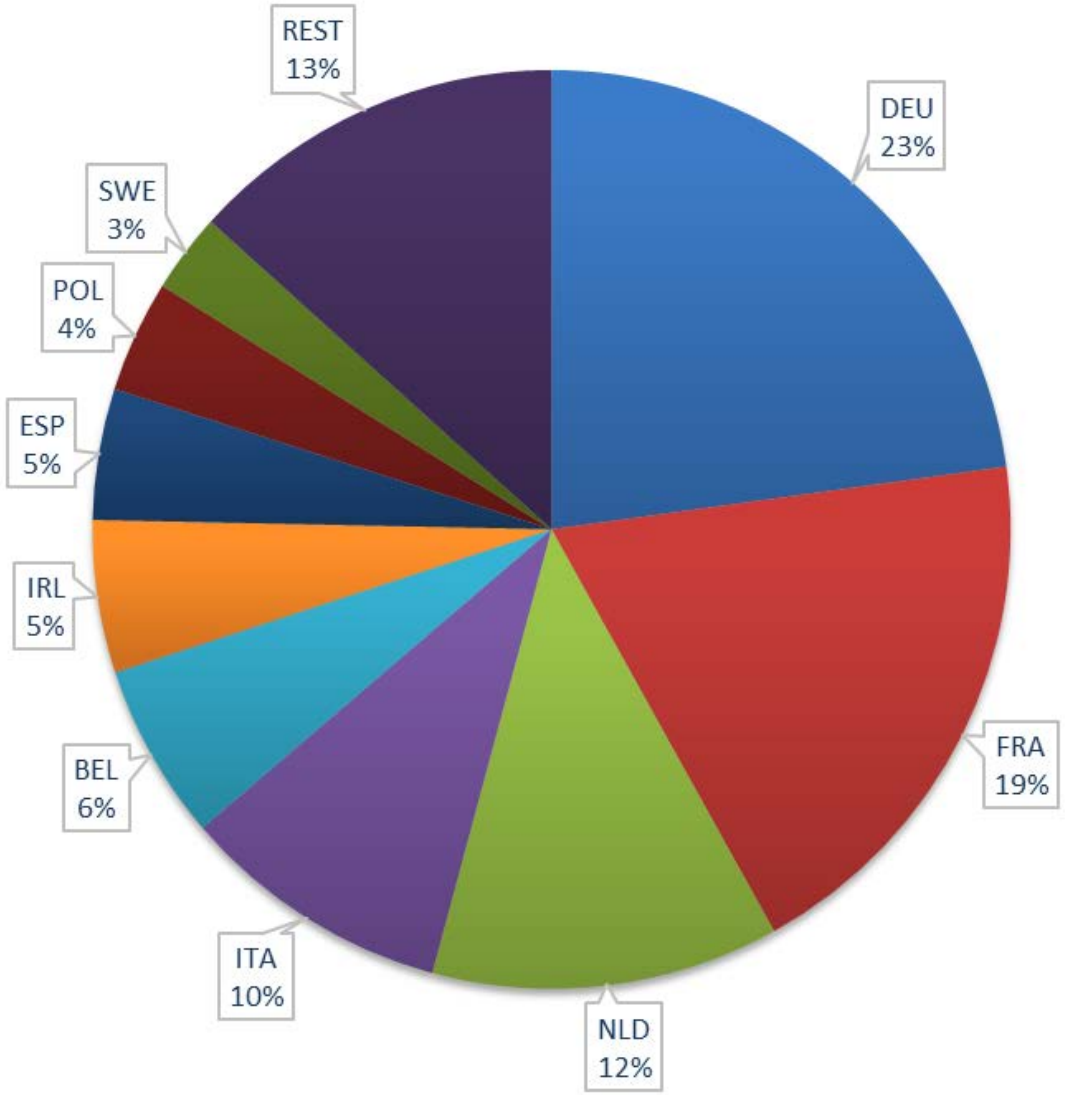
Sectors	P	M	S	Total
P	47.3%	48.1%	4.6%	**100.0%**
M	0.8%	95.0%	4.2%	**100.0%**
S	1.4%	40.6%	58.0%	**100.0%**
Total	**3.1%**	**63.9%**	**33.0%**	**100.0%**

EU exports to the UK generated 234 bn € in the EU, of which **125 bn €** in the **services sectors** (54%). **40.6%** were **due to** the EU exports of **manufactured goods** (50,922 Mio €)



Sector	P	M	S	Total
Administrative and support service activities	1%	32%	67%	**100%**
Wholesale trade	1%	43%	56%	**100%**
Legal and accounting activities; head offices; cc	1%	49%	50%	**100%**
Real estate activities	1%	42%	57%	**100%**
Financial service activities	2%	39%	59%	**100%**
Land transport and transport via pipelines	1%	57%	42%	**100%**
Warehousing and support activities for transpo	1%	50%	49%	**100%**
Retail trade, except of motor vehicles and mot	1%	46%	52%	**100%**
Telecommunications	1%	19%	80%	**100%**
Computer programming, consultancy and relate	1%	44%	55%	**100%**
Other service activities	1%	28%	71%	**100%**
Construction	2%	48%	50%	**100%**
Wholesale and retail trade of motor vehicles ...	1%	56%	43%	**100%**
Architectural and engineering activities...	1%	53%	45%	**100%**
Other professional, scientific and technical acti	2%	25%	74%	**100%**
Total	**1.4%**	**40.6%**	**58.0%**	**100%**

32% of the value added of admin. & supporting services generated by the **EU exports to the UK** corresponded to exports of manufactured products (6.1 bn €)



More than half of the services value added embodied in EU exports to the UK are generated in Germany, France and the Netherlands

67.6% of the services value added in Lithuania embodied in the EU exports to the UK are due to EU exports of **manufactured goods.**

A summary of main facts…

- ✓ **12.4%** of the **extra-EU exports** are sold to **the UK**
- ✓ Around **76%** of the **gross exports** is **EU value added**
- ✓ **…** of which **54%** in **EU services** sectors
- ✓ **Mode 5 services** contribute **34%** of the **EU exports of manufactured** goods **to the UK**
- ✓ **…** mainly in **wholesale trade, administrative and support services**, legal and accounting activities and retail trade

Concluding remarks

- ✓ …Opens up **trade policy considerations**: extension of duty exemption of Art. 8 WTO ACV for other mode 5 services than those already included in new FTAs?…
- ✓ Global GDP rise by 300 bn € by 2025 (Antimiani & Cernat,2018)

Thank you very much for your attention!!

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Disclaimer: The views expressed herein are those of the author and do not necessarily reflect an official position of the European Commission.