

EU exports to Indonesia, Malaysia and Thailand

Note prepared for the Malaysian Palm Oil Council
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EU exports of goods to Indonesia, Malaysia and Thailand amounted to EUR 39.5 billion in 2017 and supported at least 354,000 jobs in the EU. Maintaining low trade costs with these countries is thus important to sustain these export jobs.¹

Key findings

- EU exports of goods to Indonesia, Malaysia and Thailand equalled 39.5 bn in 2017, which is equivalent to 2.1 per cent of total EU exports of goods to non-EU countries.
- EU exports of goods to Indonesia, Malaysia and Thailand supported at least 354,000 jobs in the EU in 2017.
- A reduction in trade by EUR 2 bn would place at least 18,000 jobs at risk in key sectors across the EU.
- Germany alone exported over EUR 12 bn to Malaysia, Indonesia and Thailand in 2017. Other leading exporters are France (EUR 6.1 bn), UK (EUR 3.8 bn), Italy (EUR 3.8 bn) and the Netherlands (EUR 3.6 bn).
- 3.1 % of France's total non-EU exports are sold to Indonesia, Malaysia and Thailand. Other countries with high percentage exports to these three countries include the Netherlands (2.5%), Austria (2.4%), Germany (2.3%), Belgium (2.2%), Sweden (2.1%) and Denmark (2.0%).
- 76 per cent of EU exports of goods to Indonesia, Malaysia and Thailand were concentrated in five sectors in 2017: Machinery and electrical equipment (EUR 14.1 bn), Transport equipment (EUR 6.7 bn), Chemicals incl. pharmaceuticals (EUR 5.0 bn), Measuring instruments (EUR 2.6 bn) and Metals (EUR 1.8 bn).
- In 2017, some of the export products in these sectors were: Aircraft exports (EUR 3.2 bn), Electronic integrated circuits (EUR 1.2 bn), Computer processors and memories (EUR 676 mn) and Cars and other motor vehicles (EUR 384 mn).

¹ This note is prepared in the light of the public statements made by Indonesia, Malaysia and Thailand around potential retaliatory trade actions against the EU (e.g. <https://www.nst.com.my/business/2018/01/323331/malaysia-indonesia-and-thailand-ready-retaliate-eu-palm-oil-ban>). This note makes no comment on the likelihood, legality or desirability of such actions. This note seeks only to analyse the current trade between the EU and the three countries in South-East Asia, and the potential impact of reduced trade for the EU economy

1 EU exports to Indonesia Malaysia and Thailand

In 2017, the EU exported goods to Indonesia Malaysia and Thailand worth EUR 39.5 billion. This is equivalent to 2.1 per cent of total EU exports of goods to non-EU countries. The EU exported services to the three Asian countries worth EUR 11.0 billion in 2016.²

2 EU exports to Indonesia Malaysia and Thailand across sectors

The three largest EU export sectors to Indonesia, Malaysia and Thailand are: 1) machinery and electrical equipment, 2) transportation equipment (mainly aircraft) and 3) chemicals incl. pharmaceuticals, cf. Figure 1. The four largest export sectors are all classified as either high or medium-high technology sectors, while the metal sector is classified as medium-low.³ At the same time, the average gross value added per employee in the five main sectors is more than 50 per cent higher than in the remaining manufacturing sectors.⁴

Figure 1 EU goods exports to Indonesia, Malaysia and Thailand and top export sectors, 2017



Note: Details on the grouping of sectors are contained in the Appendix.

Source: Copenhagen Economics based on data from Eurostat

² Based on data from Eurostat. 2016 is the most recent year, with available data on trade in services.

³ This classification follows Eurostat: http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:High-tech_classification_of_manufacturing_industries.

⁴ Based on national accounts data from Eurostat for 2015. The averages have been calculated using the aggregate value added per sector as weights. The national accounts are reported according to a slightly different sector classification. To calculate the gross value added per employee in the five main sectors, we have used the NACE groups C20-C21 and C24-C30. 2015 is the newest year with available employment data.

In 2017, the EU exported machinery and various electrical equipment to Indonesia, Malaysia and Thailand worth more than EUR 14.1 billion, equivalent to 2.9 per cent of EU exports of machinery and electrical equipment.⁵ Within this sector, the two main export products are electronic integrated circuits and turbo-jets, turbo-propellers and other turbines.⁶

Transportation equipment is the second largest export sector, with EU exports to the three Asian countries equalling EUR 6.7 billion in 2017. The most important export within this sector is aircraft, which comprises 56 per cent of all EU exports to Indonesia, Malaysia and Thailand within the transportation equipment sector. Other important products in the transportation sector are vehicles and vehicle parts.

Exports of chemicals incl. pharmaceuticals to the three Asian countries amounted to EUR 5.0 billion in 2017. Medicaments and vaccines are the two most important export products in this sector, and they make up around 31 per cent of the sector's total exports to Indonesia, Malaysia and Thailand.

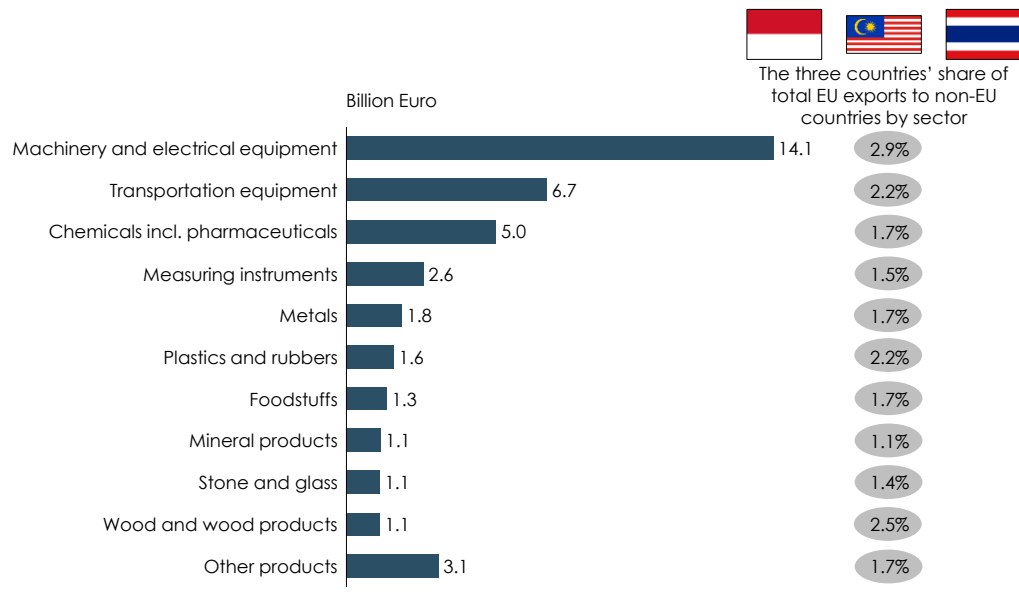
Measuring instruments and metals are likewise important EU export sectors to Indonesia, Malaysia and Thailand. The main export products in measuring instruments are instruments used in medical, surgical, dental or veterinary sciences, as well as instruments to measure electrical quantities and radiations and instruments for physical and chemical analyses. The five largest EU sectors in terms of export to the three Asian countries constitute 76 per cent of the total EU exports to these countries. This implies that EU exports to Indonesia, Malaysia and Thailand are concentrated within a few key sectors.

To determine the importance of an export sector it is not sufficient to analyse absolute export levels across sectors. The three Asian countries' share of the sector's total exports to non-EU countries is also essential. The four sectors where Indonesia, Malaysia and Thailand account for the largest shares of EU total exports to non-EU countries are machinery and electrical equipment (2.9 per cent), wood and wood products (2.5 per cent), transportation equipment (2.2 per cent) and plastics and rubbers (2.2 per cent), cf. Figure 2.

⁵ Export figures for specific sectors can be found in Table 1 in the Appendix.

⁶ The most important goods within each of the five largest export sectors can be seen from Table 2 in the Appendix.

Figure 2 EU exports to Indonesia, Malaysia and Thailand across sectors, 2017



Note: The figure shows EU exports to Indonesia, Malaysia and Thailand across sectors in 2017. The numbers in the right column report Indonesia's, Malaysia's and Thailand's combined share of EU exports to non-EU countries within each sector. Measuring instruments further includes a miscellaneous category which contains e.g. watches, musical instruments, arms and furniture.

Source: Copenhagen Economics based on data from Eurostat

The sectors most dependent on exports to the three countries are those with both large value of exports and those where the three Asian countries make up the largest share of total exports to non-EU countries. Hence, machinery and electrical equipment, transportation equipment, chemicals incl. pharmaceuticals and plastics and rubbers are among the sectors most dependent on export to Indonesia, Malaysia and Thailand.

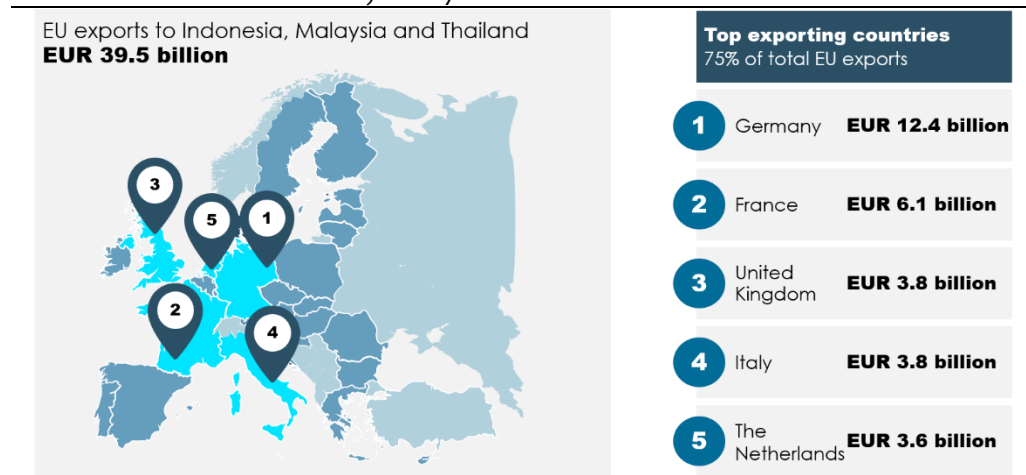
3 EU exports to Indonesia Malaysia and Thailand across Member States

Germany, France and the UK are the Member States that export the largest value of goods to Indonesia, Malaysia and Thailand, cf. Figure 3.

Germany alone exports goods worth EUR 12 billion to the three countries, which amounted to around 30 per cent of total EU exports of goods to Indonesia, Malaysia and Thailand in 2017. France and the UK follow Germany as the Member States with the second and third largest exports to the three Asian countries, while Italy and the Netherlands come in as fourth and fifth, respectively. Combined, these five EU Member

States accounted for almost 75 per cent of total EU exports of goods to Indonesia, Malaysia and Thailand in 2017. Exports from these Member States to the three Asian countries will also draw on exports from other Member States through EU wide supply-chains.

Figure 3 EU Member States with the highest exports to the three Asian countries, 2017

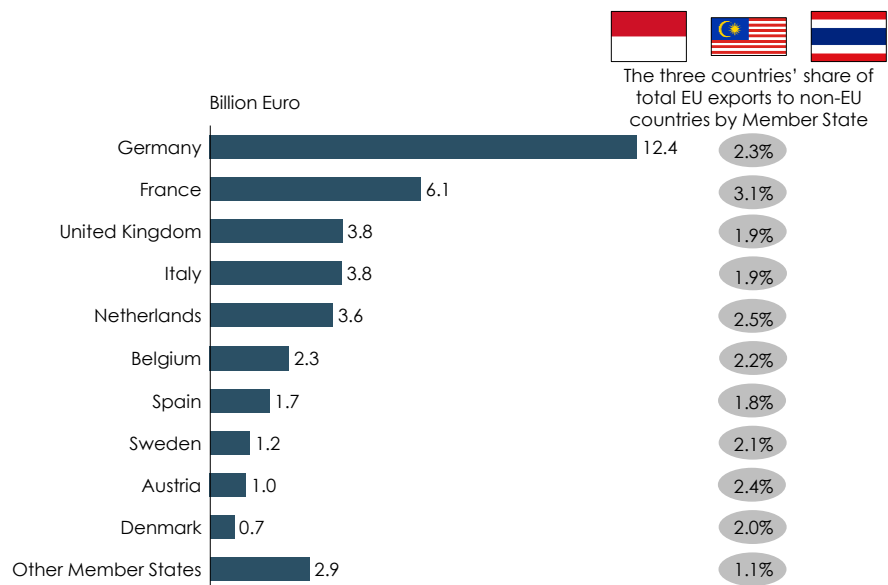


Source: Copenhagen Economics based on data from Eurostat

Indonesia, Malaysia and Thailand account for 3.1 per cent of France’s total goods exports to non-EU countries in 2017, cf. Figure 4. This is the largest share for any EU Member State, followed by the Netherlands (2.5 per cent), Austria (2.4 per cent), Germany (2.3 per cent), Belgium (2.2 per cent), Sweden (2.1 per cent) and Denmark (2.0 per cent).⁷

⁷ The value and share of each Member State’s exports to Indonesia, Malaysia and Indonesia are shown in Table 3 in the Appendix.

Figure 4 EU goods exports to Indonesia, Malaysia and Thailand across EU Member States, 2017



Note: The figure shows EU exports to Indonesia, Malaysia and Thailand across EU Member States in 2017. The numbers in the right column reports Indonesia's, Malaysia's and Thailand's combined share of total EU exports to non-EU countries from each Member State.

Source: Copenhagen Economics based on data from Eurostat

Combined, Germany, France, the UK, Italy and the Netherlands are therefore among the EU Member States most dependent on exports to Indonesia, Malaysia and Thailand. The Scandinavian countries and other old EU Member States are also found in this group.

4 Exports to Indonesia, Malaysia and Thailand support jobs in the EU

According to the European Commission, one billion EUR worth of EU exports of goods and services to countries outside of the EU on average supported around 14,000 jobs across the EU in 2011.⁸ This job figure includes jobs supported within the exporting firms as well as among their EU suppliers (see box below).

Exports of manufactured and primary products accounted for 64 per cent of the jobs supported by total EU exports to countries outside of the EU, while exports of services

⁸ European Commission (2016) "EU exports to the world: Overview of effects on employment and income", Chief Economist Note February 2016.

accounted for the remaining 36 per cent.⁹ This means that EU exports of goods (manufactured and primary products) to countries outside of the EU on average support just under 9,000 jobs per billion EUR worth of exports.¹⁰

Box 1 European exports support jobs

Based on an input-output model, the European Commission has assessed the employment effects of EU exports of goods and services to the rest of the world and finds that this export supports just over 31 million jobs in the EU. This figure includes jobs supported *directly* within the exporting firms as well as *indirectly* (i.e. among suppliers).

The Commission further notes that on average, one EUR billion worth of exports to the rest of the world support 14,000 jobs across the EU-27, and that around 64 per cent of jobs supported by exports are associated with exports of manufacturing and primary goods.

The EU Commission's analysis includes EU wide supply chain effects. This means that the number of jobs supported in e.g. Germany by the exports of cars to e.g. Malaysia includes jobs supported among German suppliers to the German car producer as well as suppliers located in a different EU Member States (e.g. a Czech supplier of car parts to the German car producer).

The analysis is based on data from the World Input-Output Tables and uses the most recent data from 2011.

Source: Copenhagen Economics based on European Commission (2016) "EU exports to the world: Overview of effects on employment and income", Chief Economist Note February 2016 and the underlying study European Commission (2015) "EU exports to the world: Effects on employment and income".

We use this average estimate to calculate the number of EU jobs supported by EU exports of goods to Indonesia, Malaysia and Thailand, as no specific estimates are available for the number of jobs supported per billion EUR worth of goods exports to these three countries.

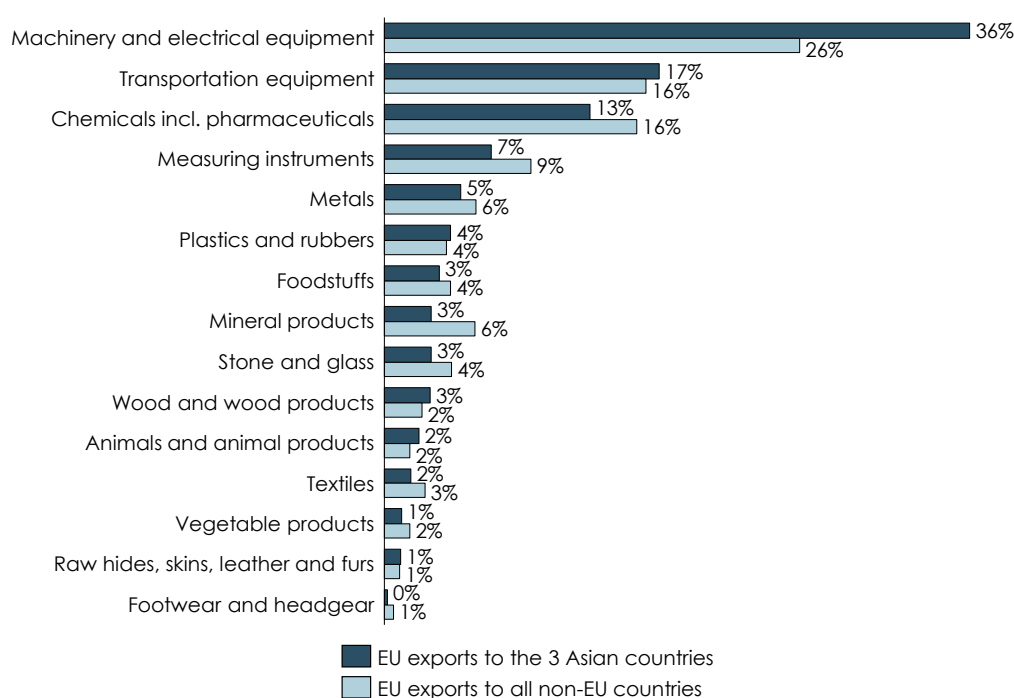
This estimate is likely to be a conservative estimate because machinery and equipment account for a larger share of EU goods exports to the three Asian countries (36 per cent) than to all non-EU countries (26 per cent). As exports of machinery are among the exports that support the most jobs in the EU, the estimate is likely to underestimate the number of jobs supported per billion EUR worth of EU goods exports to the three

⁹ Exports of manufactured products accounted for 61 per cent of jobs supported by exports, while exports of primary products accounted for 3 per cent. European Commission (2015) "EU exports to the world: Effects on employment and income".

¹⁰ This is calculated as 64 per cent of 14,000. The European Commission (2016) writes that of the 14,000 jobs, exports of manufactured products approximately support 8,500 jobs. The estimate of 9,000 also includes exports of primary products.

Asian countries.^{11,12} Besides this difference, the sector composition of EU goods exports to the three Asian countries is similar to the sector composition of EU goods exports to all non-EU countries, cf. Figure 5.

Figure 5 Sector distribution of EU goods exports to three Asian countries and to all non-EU countries, 2017



Note: The figure shows the sector distribution of EU goods exports to the three Asian countries and to all non-EU countries in 2017.

Source: Copenhagen Economics based on data from Eurostat

If the estimate of around 9,000 EU jobs supported per billion worth of EU’s goods exports is linear, this implies that EU’s goods exports to the three countries in 2017 supported at least 354,000 jobs in the EU in total. A reduction in exports of one billion EUR would thus place at least 9,000 jobs in the EU at risk, while a reduction in exports of two billion EUR would double this effect and place at least 18,000 EU jobs at risk. A reduction in exports to these countries could result from increases in trade costs from either tariffs or other trade barriers related to customs procedures or regulatory divergence.

¹¹ The machinery sector is grouped together with the transport equipment in European Commission (2016), and this sector is one of the sectors that support the largest amount of jobs.

¹² European Commission (2016) “EU exports to the world: Overview of effects on employment and income”, Chief Economist Note February 2016.

Appendix

Table 1 shows the distribution of total EU exports to Indonesia, Malaysia and Thailand across product categories in 2017. The first column reports the product codes included in each group using the Harmonised System Codes at the two-digit level. The groupings of the products follow foreign-trade.com. The third column reports the total EU exports to Indonesia, Malaysia and Thailand in EUR million. The final column shows the share of EU exports for each group of products that goes to Indonesia, Malaysia and Thailand.

Table 1 EU goods exports to Indonesia, Malaysia and Thailand across products, 2017

Product code (HS)	Product name	EU exports to the three Asian countries (EUR million)	Share of total EU exports of the product
84-85	Machinery and electrical equipment	14,145	2.92%
86-89	Transportation equipment	6,654	2.18%
28-38	Chemicals incl. pharmaceuticals	4,967	1.68%
90-99	Measuring instruments	2,571	1.50%
72-83	Metals	1,841	1.73%
39-40	Plastics and rubbers	1,587	2.19%
16-24	Foodstuffs	1,341	1.74%
25-27	Mineral products	1,140	1.08%
68-71	Stone and glass	1,124	1.43%
44-49	Wood and wood products	1,112	2.52%
01-05	Animals and animal products	833	2.79%
50-63	Textiles	628	1.31%
06-15	Vegetable products	411	1.36%
41-43	Raw hides, skins, leather and furs	405	2.35%
64-67	Footwear and headgear	63	0.60%
-	Unclassified	710	-
-	Total	39,534	2.10%

Note: Some trade data are confidential and thus not classified at the product level. This amounted to EUR 710 million in 2017. Column four reports exports to Indonesia, Malaysia and Thailand out of total EU exports to non-EU countries of the given product.

Source: Copenhagen Economics based on data from Eurostat

Table 2 shows the main export products to Indonesia, Malaysia and Thailand within each of the five largest product groups in 2017.

Table 2 The main products within each of the five largest product groups in terms of EU exports to the three Asian countries

Product code	Product name	EU exports to Indonesia, Malaysia and Thailand	Share within product group
84-85	Machinery and electrical equipment	14,145	
8542	Electronic integrated circuits	1,970	14%
8411	Turbojets, turbo propellers and other gas turbines	878	6%
8479	Machines and mechanical appliances having individual functions	579	4%
8541	Diodes, transistors and similar semiconductor devices	478	3%
8422	Dishwashers and machinery for cleaning, filling and closing bottles	433	3%
	Other 84-85	9,808	69%
86-89	Transportation equipment	6,654	
8802	Powered aircraft, e.g. helicopters and aeroplanes	3,727	56%
8708	Parts and accessories for tractors, cars and vehicles	975	15%
8703	Motor vehicles designed for the transport of persons	628	9%
8803	Parts of aircraft and spacecraft	381	6%
8704	Motor vehicles for the transport of goods	158	2%
	Other 86-89	786	12%
28-38	Chemicals incl. pharmaceuticals	4,967	
3004	Medicaments for therapeutic or prophylactic uses, measured doses	1,131	23%
3002	Vaccines, blood and blood fractions and immunological products	414	8%
3824	Chemical products and preparations for the chemical industry	178	4%
3302	Mixtures of odoriferous substances	168	3%
3304	Beauty or make-up preparations	147	3%
	Other 28-38	2,928	59%
90-99	Measuring instruments	2,571	
9018	Instruments used in medical, surgical or dental sciences	330	13%
9031	Measuring instruments, appliances and machines	222	9%
9030	Instruments for measuring electrical quantities and radiations	189	7%
9027	Instruments and apparatus for physical or chemical analysis	187	7%
9021	Orthopaedic appliances, artificial body parts and hearing aids	133	5%
	Other 90-99	1,511	59%
72-83	Metals	1,841	
7219	Flat-rolled products of stainless steel	237	13%
7326	Other articles of iron or steel	138	8%
7318	Screws, bolts, nuts, coach screws etc.	83	4%
7403	Copper, refined, and copper alloys, unwrought	68	4%
8302	Base metal mountings, fittings for furniture etc.	67	4%
	Other 72-83	1,249	68%

Note: The table shows the main HS4 products within each aggregate product group.

Source: Copenhagen Economics based on data from Eurostat

Table 3 shows the distribution of total EU exports to Indonesia, Malaysia and Thailand across EU Member States in 2017. The last column in the table reports the share of exports to Indonesia, Malaysia and Thailand out of the Member State's total exports to non-EU countries.

Table 3 EU exports to Indonesia, Malaysia and Thailand across Member States, 2017

Member State	Goods exports to the three Asian countries (EUR million)	Share of total goods exports to non-EU countries by Member State
Germany	12,385	2.33%
France	6,121	3.14%
United Kingdom	3,849	1.87%
Italy	3,815	1.92%
Netherlands	3,566	2.49%
Belgium	2,289	2.16%
Spain	1,725	1.80%
Sweden	1,159	2.09%
Austria	1,037	2.42%
Denmark	703	2.03%
Finland	586	2.41%
Poland	464	1.12%
Czech Republic	443	1.71%
Ireland	423	0.72%
Hungary	273	1.44%
Greece	120	0.90%
Slovenia	91	1.11%
Romania	91	0.60%
Bulgaria	87	0.97%
Portugal	74	0.52%
Slovakia	61	0.57%
Luxembourg	40	1.83%
Croatia	31	0.60%
Estonia	27	0.74%
Lithuania	24	0.22%
Latvia	23	0.57%
Cyprus	19	1.09%
Malta	7	0.68%
Total	39,534	2.10%

Source: Copenhagen Economics based on Eurostat data