## TRADE IN VALUE ADDED: ROLE OF INTERMEDIATES AND SERVICES

The data on Trade in Value Added (TiVA) highlight the significance of intermediate imports used in producing goods and services for export in many economies. They emphasise that being competitive on international markets requires access to the most efficient inputs – either domestically produced or imported – and that tariffs on imports can harm the competitiveness of downstream exporters. The data also stress the important role played by upstream services in producing exports of goods, and, so, the importance of ensuring that producers have access to the most efficient services (again from either foreign or domestic affiliates, or via direct imports).

#### **Definition**

Re-exported intermediates reflect the share of intermediate imports that are used (indirectly and directly) in producing goods and services for exports, as a percentage of total intermediate imports (by import category).

#### Overview

In most economies, around one-third of intermediate imports are destined for the export market. Not surprisingly, the smaller the economy the higher the share. However, even in the United States and Japan, which have the lowest such shares amongst OECD countries, these are 17% and 23% respectively at the total economy level, with noticeably higher percentages for some imported products. In Japan for example nearly 40% of all intermediate imports of transport equipment end up in exports.

In other countries, the share of intermediate imports embodied in exports is significantly higher. In Hungary for example, two-thirds of all intermediate imports are destined for the export market after further processing, with the share reaching 85% for electronic intermediate imports. In China, Korea and Mexico, around three-quarters of all intermediate imports of electronics are embodied in exports. The TiVA database also reveals that close to 80% of China's intermediate imports of textile products end up in exports.

Services comprise about two-thirds of GDP in most developed economies. However, based on gross terms, reported trade in services typically account for just over one-quarter of total trade in goods and services in OECD countries. Accounting for the value added by services in the production of goods though, shows that the service sector contributes over 50% of total exports in the United States, the United Kingdom, France, Germany and Italy and nearly one-third in China, with a significant contribution (typically one-third) across all manufactured goods, provided by both foreign and domestic service providers.

Total domestic services value added embodied in gross exports shows the total value added provided by the services sector in generating direct exports of services and also embodied in the exports of goods using intermediate services. The indicator shown contains a breakdown showing the contributions embodied in direct services and those embodied in goods.

## Comparability

It is important to stress that the indicators presented in the TiVA database are estimates. Official gross statistics on international trade produced by national statistics institutions result in inconsistent figures for total global exports and total global imports; inconsistencies which are magnified when bilateral partner country positions are considered. The global input-output tables from which TiVA indicators are derived, necessarily eliminate these inconsistencies, such as those that reflect different national treatments of re-exports and transit trade (e.g. through hubs such as the Netherlands and Hong Kong), to achieve a coherent picture of global trade. For the countries for which data is presented, total exports and imports are consistent with official National Accounts estimates, however bilateral trade positions presented here and those published by national statistics institutions may differ.

#### Sources

 OECD (2013), International Trade by Commodity Statistics, OECD Publishing.

# Further information Analytical publications

- Beltramello, A., K. De Backer and L. Moussiegt (2012), "The Export Performance of Countries within Global Value Chains (GVCs)", OECD Science, Technology and Industry Working Papers, No. 2012/02, OECD Publishing.
- De Backer, K. and N. Yamano (2012), "International Comparative Evidence on Global Value Chains", OECD Science, Technology and Industry Working Papers, No. 2012/03, OECD Publishing.
- OECD (2013), Interconnected economies: Benefiting from Global Value Chains, OECD Publishing

#### Online databases

• OECD/WTO (2013), OECD-WTO: Statistics on Trade in Value Added, (Database).

#### Websites

 Measuring Trade in Value Added: An OECD-WTO joint initiative, www.oecd.org/trade/valueadded

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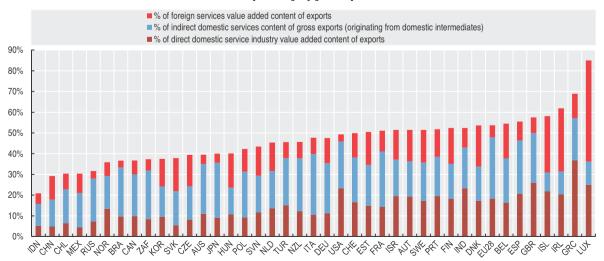
# Re-exported intermediates as percentage of total intermediate imports by selected industries Percentage, 2009

	Agriculture, hunting, forestry and fishing	Food products, beverages and tobacco	Textiles, textile products, leather and footwear	Wood paper, paper products, printing and publishing	Chemicals and non-metallic mineral products	Basic metals an fabricated metal products	Machinery and equipment	Transport equipment	Transport and storage, post and telecommunication	Business services
Australia	27.6	21.4	20.0	14.2	21.8	34.5	25.2	19.1	18.2	13.6
Austria	46.5	38.3	71.9	52.8	52.0	64.0	64.9	78.2	41.6	49.8
Belgium	57.4	48.5	69.2	43.2	60.2	65.3	63.3	83.1	50.4	42.7
Canada	34.9	26.9	34.4	25.4	34.8	41.5	38.9	57.5	20.9	21.1
Chile	35.9	32.5	19.9	41.6	35.0	29.0	32.7	31.0	33.4	28.3
Czech Republic	34.0	30.0	68.4	51.4	60.5	68.6	55.5	70.9	38.8	31.8
Denmark	60.4	49.3	59.2	32.5	52.9	59.6	54.2	59.3	71.8	27.0
Estonia	62.8	49.1	81.5	61.7	56.4	72.4	63.2	56.2	59.3	46.2
Finland	27.9	20.7	36.1	34.1	39.7	52.7	49.6	48.3	33.5	60.6
France	31.6	22.5	50.5	26.4	42.5	47.1	43.4	63.1	27.1	24.2
Germany	26.0	25.2	49.1	39.7	56.7	70.7	64.5	68.3	42.8	36.1
Greece	12.5	8.3	23.8	14.7	21.9	21.7	22.5	27.4	45.3	15.8
Hungary	42.1	37.7	69.8	47.4	56.5	69.9	72.7	74.2	45.7	43.5
Iceland	55.7	41.9	44.5	21.7	38.8	43.0	40.5	34.8	34.8	47.8
Ireland	85.3	64.2	51.5	63.6	60.9	49.8	50.4	60.7	69.3	71.3
Israel	19.4	17.1	46.0	43.6	42.6	42.4	29.4	38.6	33.2	51.3
Italy	21.8	17.3	46.5	29.0	36.0	52.0	41.6	37.7	24.0	23.8
Japan	5.4	5.5	14.8	12.2	22.1	38.6	32.1	38.3	12.6	9.1
Korea	21.8	16.7	50.2	35.1	57.8	62.3	54.5	54.2	49.0	43.6
Luxembourg	77.7	30.4	74.5	81.7	80.8	88.8	80.9	86.9	87.8	75.7
Mexico	13.8	14.8	51.6	30.8	31.0	45.0	53.6	56.9	29.1	18.2
Netherlands	73.3	64.9	52.0	40.3	72.9	63.8	59.2	63.3	39.3	46.1
New Zealand	54.1	44.9	38.5	29.6	38.3	37.3	26.6	24.0	27.7	27.3
Norway	34.2	36.1	39.5	19.6	42.3	62.8	51.8	33.7	43.9	34.3
Poland	32.1	29.3	70.4	39.9	42.0	59.3	43.6	59.5	34.7	28.3
Portugal	24.8	16.4	62.0	35.5	36.6	51.5	34.4	74.4	34.6	23.1
Slovak Republic	48.8	41.5	85.3	58.4	63.1	73.4	67.9	83.4	40.3	38.0
Slovenia	39.8	32.4	79.5	60.5	59.5	76.9	62.3	77.3	47.9	32.1
Spain	20.0	14.5	48.0	23.8	32.5	36.4	26.5	44.5	29.1	21.0
Sweden	35.1	22.4	45.2	45.7	54.7	69.6	60.6	66.8	39.1	44.7
Switzerland	45.1	38.5	60.9	46.4	67.6	74.0	63.2	50.2	46.1	49.1
Turkey	11.9	10.9	33.6	24.1	26.5	50.2	28.3	42.4	23.6	17.6
United Kingdom	23.5	16.7	34.7	25.0	32.3	53.5	35.6	35.0	23.2	21.3
United States	15.0	9.6	14.2	12.4	18.2	27.5	18.8	19.5	10.7	9.6
EU 28				.=						
OECD										
Brazil	20.7	16.5	11.7	14.9	16.4	19.3	18.4	13.9	10.6	9.1
China	44.1	32.1	80.6	49.2	49.1	52.3	48.8	37.9	37.7	42.1
India	18.1	17.6	33.1	27.4	20.9	19.8	37.5	27.7	20.2	41.2
Indonesia	16.8	15.1	38.0	19.7	21.1	10.7	33.3	16.2	16.3	10.8
Russian Federation		8.7	18.9	22.0	31.4	37.5	32.1	24.0	23.6	17.1
South Africa	19.6	19.4	23.6	22.9	24.3	34.0	34.4	26.2	32.2	15.9

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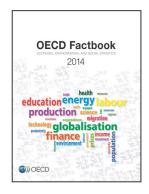
## Total domestic services value added embodied in gross exports

As a percentage of gross exports



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