International trade, foreign direct investment and global value chains

2017

PORTUGAL

TRADE AND INVESTMENT STATISTICAL NOTE

International trade and foreign direct investment (FDI) are the main defining features and key drivers of global value chains (GVCs). However, despite their strong complementarities, the two flows are typically presented and treated separately in the statistical information system. Drawing on new and improved measures of trade and investment, this country note provides relevant statistical information from OECD databases on trade, investment, the activities of multinational enterprises (MNEs) and global value chains (TiVA). It sheds new light on the trade-investment nexus by highlighting the interrelationships between trade and FDI, their economic impact in the context of GVCs, and the role of MNEs as the main directors of these flows. The data are as of 1 May 2017. More information and country notes are available at www.oecd.org/investment/trade-investment-gvc.htm.

Thirty percent of economic activity (GDP) in Portugal in 2014 depended on foreign markets, towards the lower end of OECD countries but comparable with Finland. Domestic non-MNEs account for nearly half (47%) of goods exports from Portugal, one of the highest shares in Europe, while foreign-owned firms account for almost 40% of goods exports. Portugal's inward investment (equivalent to 53% of GDP in 2015) was over twice the size of its outward investment (24% of GDP), A broader notion of international orientation, which captures the impact on national income of exports and sales through foreign affiliates, shows that Portugal's international orientation was equivalent to 28% of GDP in 2014.

Considering both trade and investment through this broader perspective can also shed new light on Portugal's most important partner countries. For example, while most partner countries supply Portuguese consumers mainly through trade, the United States and Switzerland also do a substantial amount through sales by foreign affiliates. Furthermore, considering the importance of both trade and investment for partners; the Netherlands moves ahead of China, and Switzerland jumps ahead of Brazil.

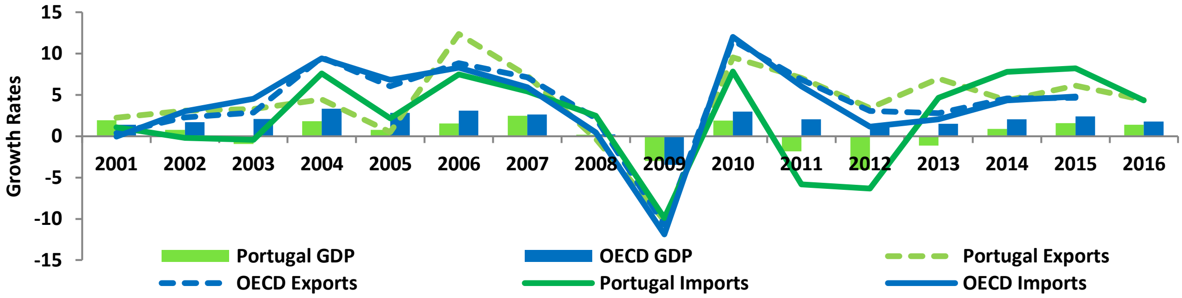
The top manufacturing exporting industries in Portugal are textiles (TEX), food and beverages (FOD) and motor vehicles (MTR). Often industries with high export orientation have higher shares of value added produced by foreign-owned firms as foreign owned firms offer a channel for GVC participation; the textiles industry in Portugal is an exception reflecting the strength of the domestic industry. The services content of Portuguese exports at 58% is just above the OECD median, and much of the value added produced by foreign-owned firms takes place in the services industries.

Trade and Investment in Portugal

Growth in trade has recovered since the global and euro crises

Like many European economies, Portuguese trade contracted significantly at the height of the global crisis and imports dropped again during the euro crisis. Portuguese trade growth followed a similar pattern to the OECD average in the pre-crisis years but rates have diverged since the crisis. In 2016, both export and import growth was just above 4%.

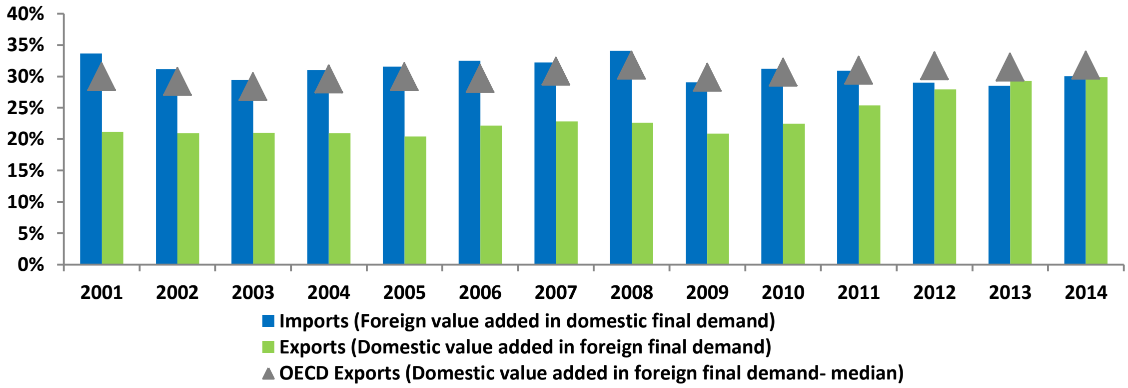
Figure 1 Growth rates of trade and GDP for the OECD and Portugal, 2001-2016



Source: OECD SNA 2016

Gross exports amounted to USD 82 billion in 2016 (46% of GDP), and gross imports to USD 80 billion (45% of GDP). Gross trade figures, however, overstate the ‘real’ contribution of trade to the economy. In value-added terms, exports contributed 30% per cent of total GDP in 2014, the highest recorded but below the OECD median (grey diamond). The contribution of direct and indirect imports to domestic final demand was 30 per cent in 2014.

Figure 2. Trade in value added terms, imports and exports, 2001-2014

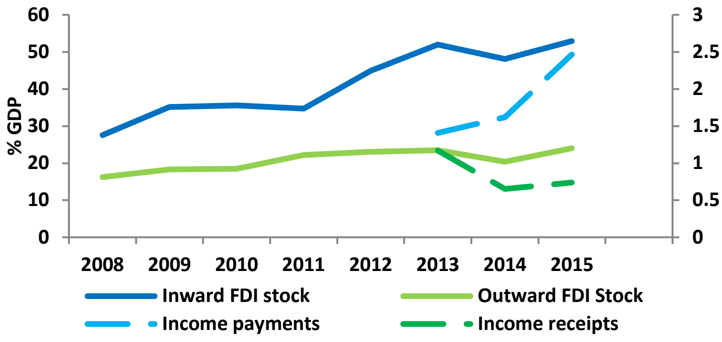


Source: OECD-WTO Trade in Value Added Data

Portuguese investment is more inward than outward orientated

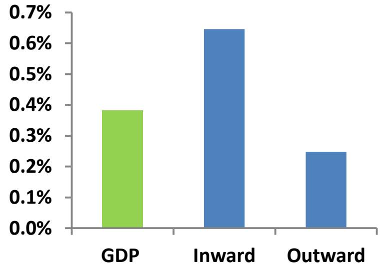
Inward FDI stocks have been growing relative to GDP since 2008 and are now equivalent to 53% of GDP, FDI remains inward orientated with outward stocks equivalent to 24% of GDP (Figure 3). In 2015, Portugal’s share of the OECD total inward FDI stock (0.6%) was above its share of GDP (0.4%), but its share in outward stock was 0.2% of the OECD total, lower than its share of GDP (Figure 4).

Figure 3. FDI stocks and income as a share of GDP total, 2008-2015



Source: OECD FDI Statistics (BMD4)

Figure 4. FDI stocks and GDP as a share of OECD total, 2015



Source: OECD FDI Statistics (BMD4)

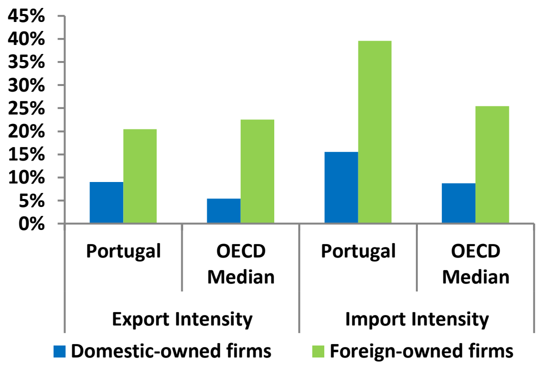
Foreign-owned firms directly sustained 12% of jobs in the private sector in 2013….

Despite the size of inward investment compared to other OECD economies, foreign-owned enterprises accounted for 12% of jobs in the private sector in 2013 and 21% of private sector value added produced in Portugal, excluding the agriculture and finance sectors.

…and are more export intensive than domestically owned firms

On average, foreign-owned firms in Portugal are twice as export intensive (share of exports in turnover) as domestically owned firms; however, their export intensity is just below the OECD median. The import intensity of foreign-owned firms (share of imports in purchases) is also significantly higher for foreign-owned than domestic firms, and greater than the median.

Figure 5. Export and import intensity of domestic and foreign-owned enterprises

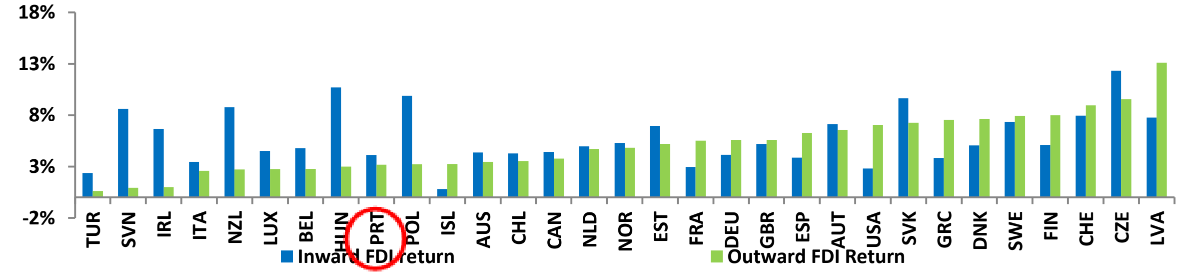


Source: OECD AMNE and Trade by Enterprise Characteristics (TEC) statistics (2011)

Domestic MNEs provide important channels to penetrate foreign markets via affiliates…

In 2015, Portugal received USD 1.4 billion in income from its outward investment, equivalent to approximately 1% of GDP. Portugal's rate of return at 3.2% (green bar) on its outward FDI is below the OECD median. On the other side, the return to foreign investors in Portugal was 4.1% in 2015, also towards the lower end of OECD countries.

Figure 6. Return on investment, income receipts and payments as a share of inward and outward stocks, 2015

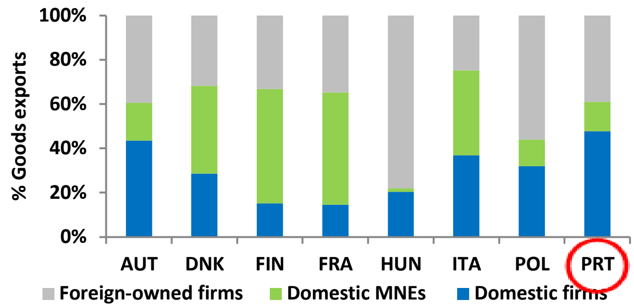


Source: Source: OECD FDI Statistics (BMD4)

…and via exports

Relative to other European economies, Portuguese parent MNEs play a smaller role in GVC integration. However, almost half of all goods exports are by domestic non-MNEs. Almost 40% of goods exports are by foreign-owned firms, offering another channel for GVC integration.

Figure 7. Goods Exports by firm type, the role of Portuguese MNEs

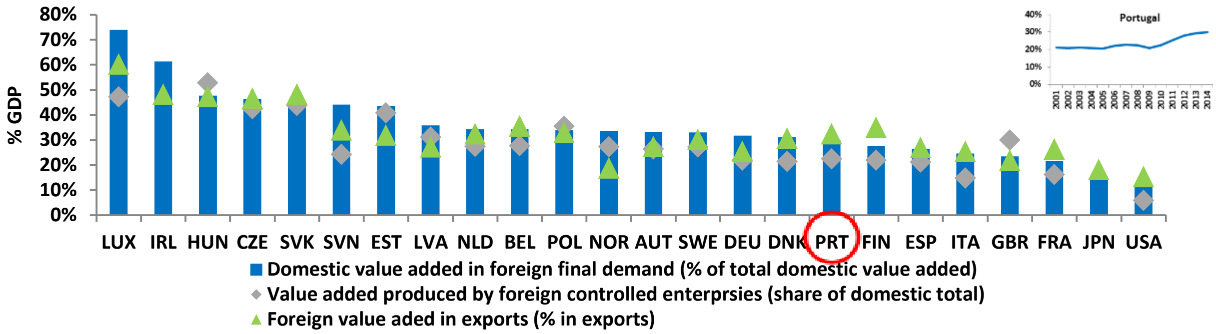


Source: OECD TEC statistics (2011)

Portugal's export orientation is low relative to similarly sized economies

Exports (in value added terms) contribute around 30% of Portuguese GDP; this is below the OECD median and other smaller OECD countries but comparable with Finland. It may in part reflect lower levels of inward investment and their export intensity (compared to foreign affiliates operating in other countries). However, their GVC integration as measured by the import content of exports is higher relative to countries with similar export orientations. Export orientation has recovered since the crisis (see insert chart).

Figure 8. Export orientation, foreign affiliates value added and import content of exports, 2014

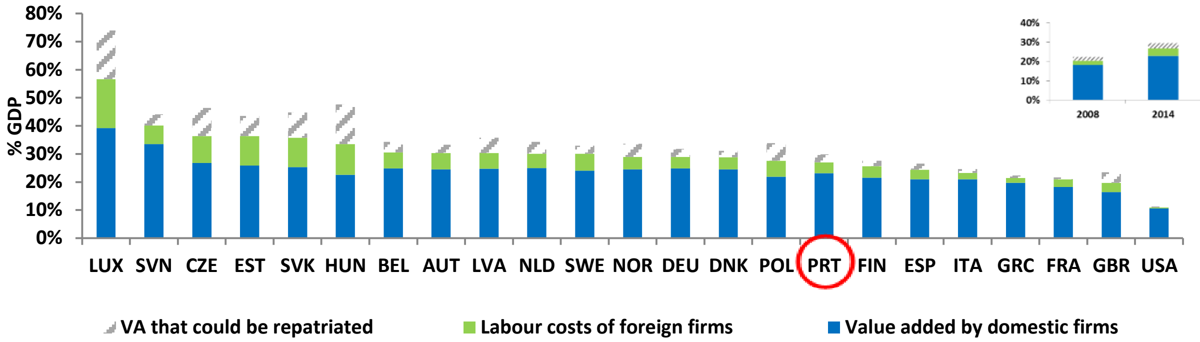


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics (2014)

Not all of the domestic value added content of exports sticks in the economy

Gross export figures overstate the real economic impacts of trade to the exporting economy, but TiVA estimates can also overstate these impacts as the profits earned by foreign-owned firms through exports are repatriated if they are not reinvested. Figure 9 illustrates the importance of these flows across countries by showing the value added in exports of domestically-owned firms (blue bar), wages paid by foreign-owned firms (green bar), and profits of foreign-owned firms (grey bar), which in practice can be repatriated. Excluding these profits, Portugal's exports contain 27% of value-added that remains in the economy. So, 10% of Portugal's exported domestic value added represents profits by foreign-owned firms and 13% represents wages paid by foreign–owned firms. The share of value added that remains in the economy has increased since 2008, (insert chart).

Figure 9. Exports by ownership and their contribution to income, as a share of GDP, 2014

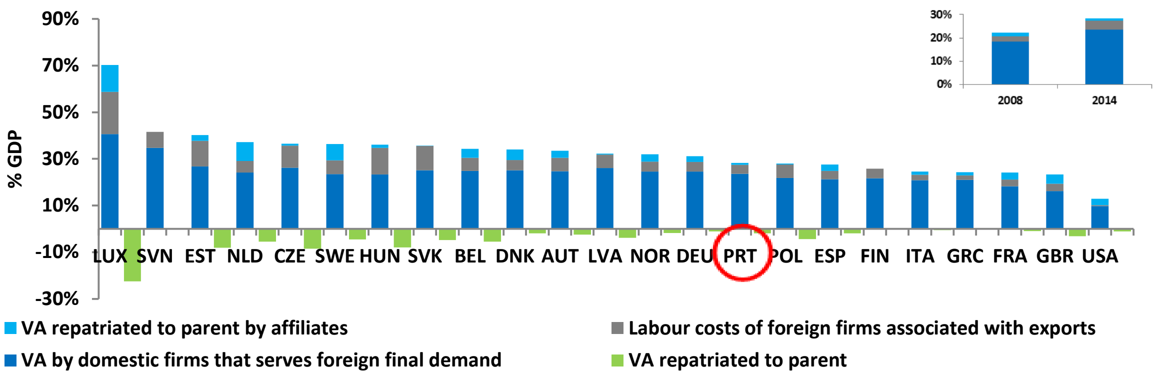


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics

Taking a broader view by including the income of foreign affiliates can provide a more complete picture of the international orientation of the Portuguese economy

Firms serve foreign markets by exporting or by selling through their foreign affiliates. Figure 10 takes a broader view of an economy's international orientation by taking account of both trade and investment. The chart begins with the domestic value added in exports that remains in the economy – exports of value added by domestic firms (blue bar) and wages paid by foreign-owned firms associated with exporting (grey bar) – and adds to it the profits that domestic MNEs receive from the activities of their foreign affiliates as measured by FDI income receipts (light blue bar). The income payments made to foreign parents are presented for information purposes (green bar). For Portugal this broader measure (28% of GDP) is lower than the export orientation measure from TiVA (30%) because Portugal is a net recipient of inward FDI. Portugal remains below the median of OECD countries using this measure; the measure has increased since 2008 due to increased exports of value added (see chart insert).

Figure 10. Supplying markets through trade and investment: a broader perspective, 2014

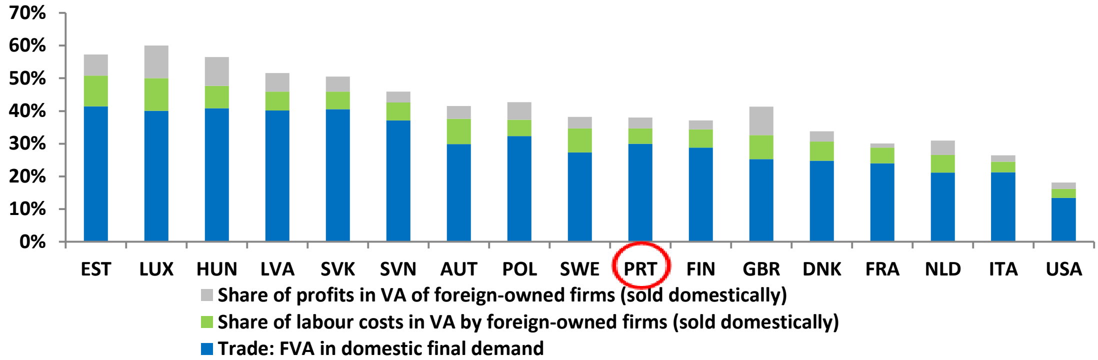


Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD FDI (BMD3) statistics

This broader perspective can also shed light on how foreign firms serve the Portuguese market

Foreign producers supplied products and services for Portuguese final consumption equivalent to 38% of GDP in 2014, the majority is through trade (foreign value added in Portuguese final demand equals approximately 30% of GDP), but value added generated by foreign affiliates in Portugal for domestic (non-export) sales (Figure 11) accounts for a not insignificant 8% of GDP. Although some of this value added can be repatriated to parents, the share is significantly lower in Portugal than in many other OECD economies (grey bar).

Figure 11. How foreign firms serve your market: a value added perspective, 2014



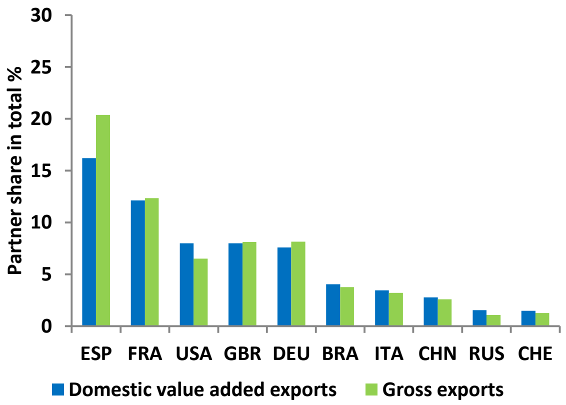
Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD TEC statistics

Trade and investment by partner country

Trade measured from a value added perspective better reflects the bilateral relationships…

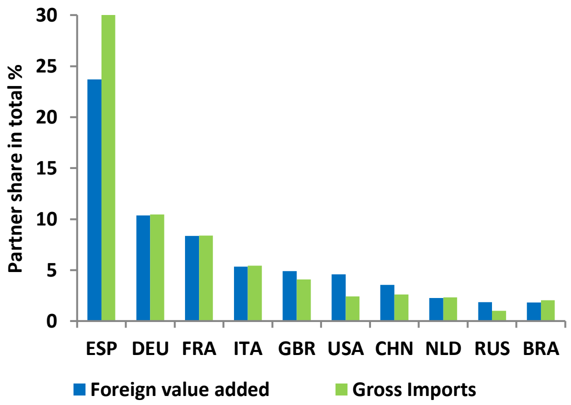
Gross bilateral trade figures can disguise the true nature of trade interdependencies, particularly between final consumers in one country and producers at upstream parts of the value chain. For example the United States moves ahead of the United Kingdom and Germany once value added data of exports are used. For imports, value added data indicate that the United States is a more important partner than China, and Russia is more important than Brazil.

Figure 12. Exports: gross and value added terms, by partner country, 2014



Source: OECD-WTO TiVA Data

Figure 13. Imports: gross and value added terms, by partner country, 2014

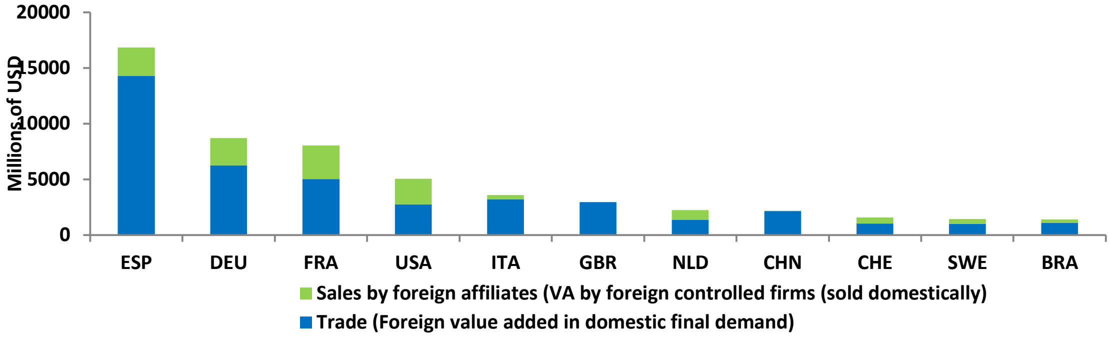


Source: OECD-WTO TiVA Data

…and interdependencies are further revealed when looking at the broader notion of 'trade'

Foreign firms can serve an economy though trade or sales by foreign affiliates; bringing the trade and investment perspectives together can shed a different light on who a country's most important partners are (Figure 14). Variation exists across countries in how they supply the Portuguese market. For example, while most partner countries supply Portuguese consumers mainly through trade, the United States and Switzerland also do a substantial amount through sales by foreign affiliates. Furthermore, considering both trade and investment the Netherlands moves ahead of China and Switzerland jumps ahead of Brazil.

Figure 14. Supplying the Portuguese market via trade and investment: Top 10 partner countries, 2014



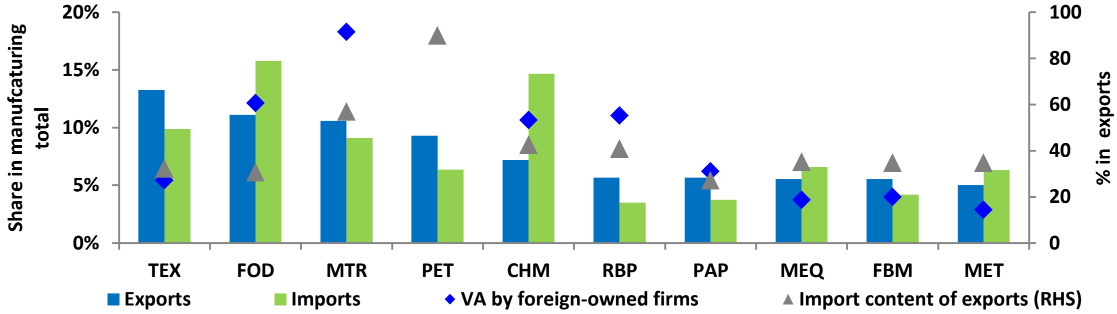
Source: OECD-WTO TiVA data and OECD AMNE statistics
Note. Data on foreign affiliate presence is not available for the United Kingdom.

Trade and investment by industry

Inward investment helps shape Portugal's GVC integration

The top manufacturing exporting industries in Portugal are textiles (TEX), food and beverages (FOD) and motor vehicles (MTR). A high import content of exports typically illustrates the role that importing plays in supporting exports and indicating the degree of GVC integration in these industries, but this is less the case for textiles and food products. The role of foreign-owned firms differs substantially across Portuguese industry, in part reflecting Portugal's own comparative advantages and specialisation of its MNEs and the importance of foreign investment for certain industries.

Figure 15. Top exporting manufacturing industries in Portugal, 2014

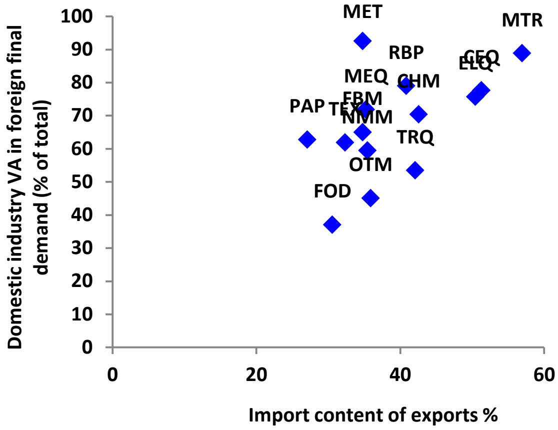


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics. See page 10 for a description of industry codes.

Exports and imports go hand in hand…

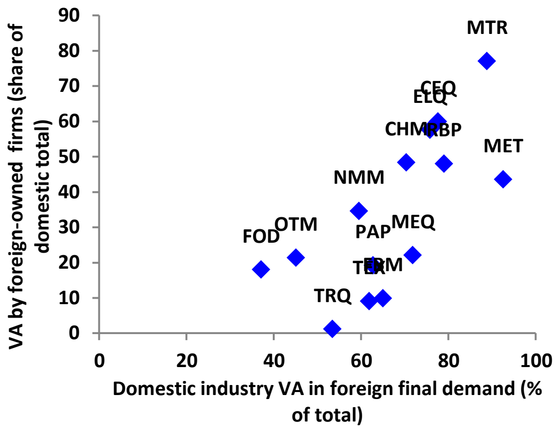
Across most industries there is a strong correlation between higher import content of exports and a higher share of their domestic value added being exported (export orientation) illustrating the strong complementarity of exports and imports (Figure 16).

Figure 16. Import content of exports and export orientation, 2014



Source: OECD-WTO TiVA Data and OECD AMNE statistics

Figure 17. Foreign-owned firms and export orientation, 2014

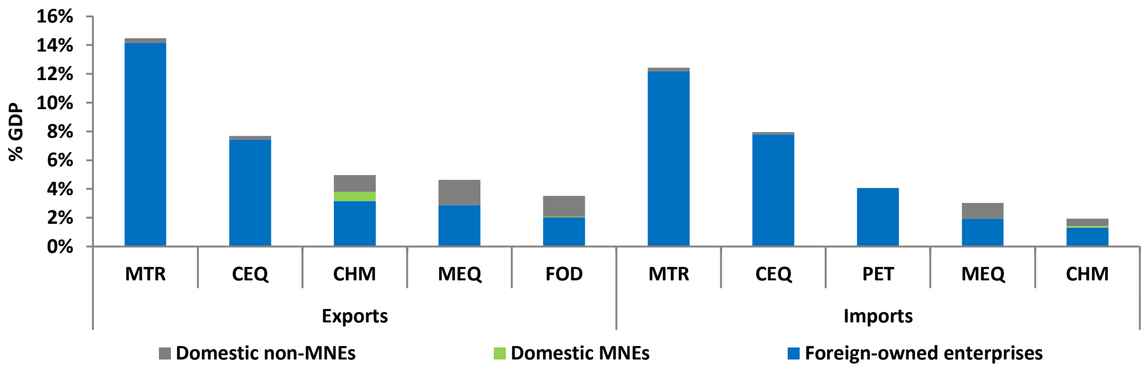


Source: OECD-WTO TiVA Data and OECD AMNE statistics

...and investment and export orientation can also go hand in hand

At the same time, strong complementarities can exist between inward investment and export orientation (Figure 17). For Portugal, the industries where foreign-owned firms produce more of the value added are also those that have a higher export orientation. The textiles industry is an exception, reflecting the strength of domestic industry. Figure 18 illustrates the trade in goods by firm ownership; foreign-owned enterprises are the main traders for Portugal reflecting the importance of inward investment for Portugal's GVC integration.

Figure 18. Gross trade in goods by enterprise ownership and industry, as a per cent of GDP



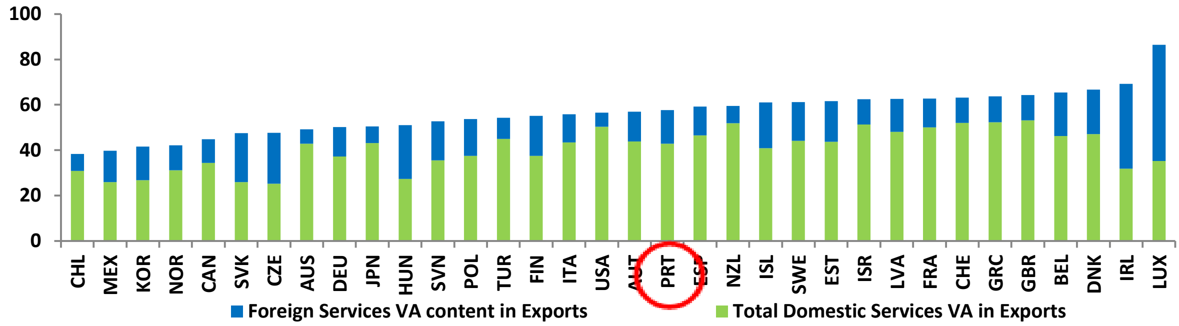
Source: OECD TEC Statistics, 2011 (latest data available)

Service industries play an important role in the export orientation of an economy…

Typically, services account for a large share of the value added in the economy but conventional gross trade statistics understate this as they cannot reveal the contribution that the upstream services industry plays in the production of goods exports. Accounting for this contribution, the services content of

Portugal's total exports of goods and services was 58% in 2014 (Figure 19), above the OECD median of 56%. Considering the services content of manufactured goods alone, 40% of manufacturing exports reflects services value added, above the OECD average of 36%.

Figure 19 Services content of gross exports for OECD countries, 2014

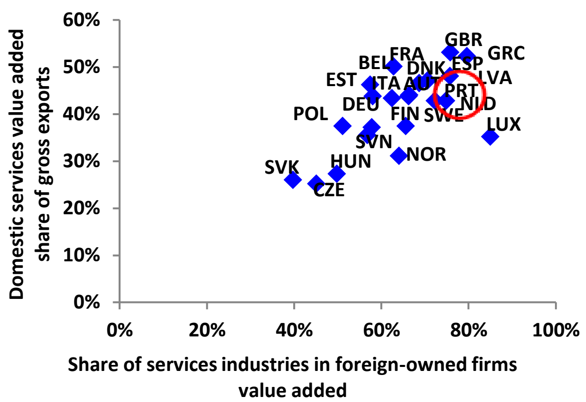


Source: OECD-WTO TiVA data, 2014

…and so inward FDI in the services sector can be an important channel for export success

Greater foreign investment in the services sector is associated with higher services content in exports. For Portugal, the share of investment in services is at the higher end for OECD economies which could contribute to the above the median services content in exports.

Figure 20. Share of services industries in foreign-owned firms' value added and domestic services value added share of gross exports, OECD countries, 2014



Source: OECD-WTO TiVA Data and OECD AMNE statistics

Links and data sources

Guide to the trade and investment statistical notes
www.oecd.org/investment/Guide-trade-investment-statistical-country-notes.pdf

Activity of Multinational Enterprises - AMNE www.oecd.org/sti/ind/amne.htm

OECD Benchmark Definition of Foreign Direct Investment - 4th Edition (BMD4)
(see Chapter 8 for information on the intersection of AMNE and FDI data)
www.oecd.org/investment/fdibenchmarkdefinition.htm

Foreign Direct Investment (FDI) Statistics www.oecd.org/investment/statistics.htm

Trade by Enterprise Characteristics - TEC
www.oecd.org/std/its/trade-by-enterprise-characteristics.htm

Trade in Value Added - TiVA
www.oecd.org/sti/ind/measuringtradeinvalue-addedanoecd-wtojointinitiative.htm

Table of industry codes

Industry Type	Ind Code	Industry Description
Primary Industries	**AGR**	Agriculture, hunting, forestry and fishing
	MIN	Mining and quarrying
Manufacturing	**FOD**	Food products, beverages and tobacco
	TEX	Textiles, textile products, leather and footwear
	WOD	Wood and products of wood and cork
	PAP	Pulp, paper, paper products, printing and publishing
	PET	Coke, refined petroleum products and nuclear fuel
	CHM	Chemicals and chemical products
	RBP	Rubber and plastics products
	NMM	Other non-metallic mineral products
	MET	Basic metals
	FBM	Fabricated metal products except machinery and equipment
	MEQ	Machinery and equipment n.e.c
	CEQ	Computer, electronic and optical products
	ELQ	Electrical machinery and apparatus n.e.c
	MTR	Motor vehicles, trailers and semi-trailers
	TRQ	Other transport equipment
	OTM	Manufacturing n.e.c; recycling
Services	**EGW**	Electricity, gas and water supply
	CON	Construction
	WRT	Wholesale and retail trade; repairs
	HTR	Hotels and restaurants
	TRN	Transport and storage
	PTL	Post and telecommunications
	FIN	Finance and insurance
	REA	Real estate activities
	RMQ	Renting of machinery and equipment
	ITS	Computer and related activities
	BZS	Research and development & Other Business Activities
	GOV	Public admin. and defence; compulsory social security
	EDU	Education
	HTH	Health and social work
	OTS	Other community, social and personal services
	PVH	Private households with employed persons