

International trade, foreign direct investment and global value chains



2017

SPAIN

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.

Over one-quarter (27% in 2014) of economic activity (GDP) in Spain depends on foreign markets, around the same as in the United Kingdom and Italy. Spain's inward investment (equivalent to 43% of GDP in 2015) was slightly larger than outward investment (39% of GDP in 2015). Under a broader notion of international orientation that captures the impact on national income of exports and sales through foreign affiliates, Spain's international orientation was equivalent to 28% of GDP in 2014.

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, exports to the United Kingdom are larger than to Germany once value added data are used. Russia is a more important export partner than the Netherlands and Switzerland once trade is measured on a value added basis. On the import side, the United States jumps ahead of the United Kingdom and China once trade in value added is used.

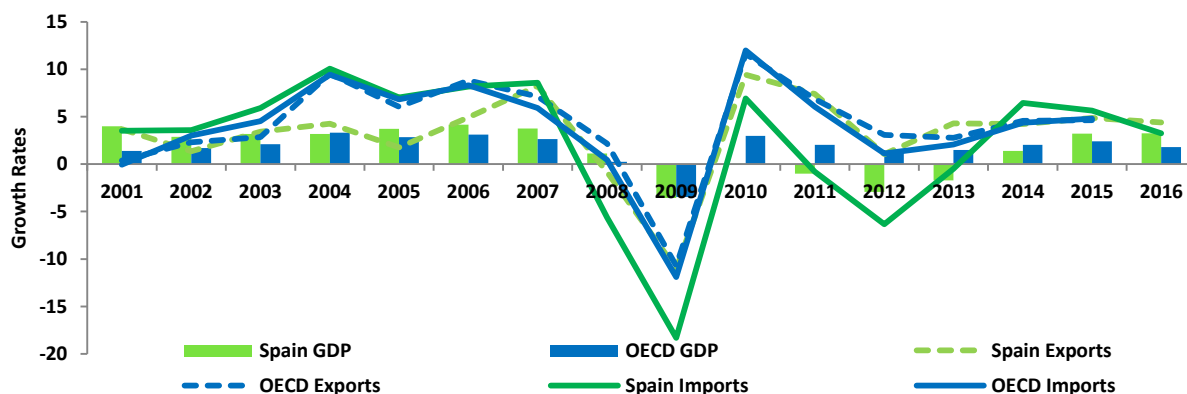
The top manufacturing exporting industries in Spain are motor vehicles (MTR), chemicals and chemical products (CHM) and food products (FOD). The motor industry has a high share of value added by foreign-owned firms (three-quarters) and a high export orientation illustrating the role inward investment can play in GVC integration. For Spain the share of investment in services is at the higher end for OECD economies, which could contribute to the relatively high services content in exports.

Trade and investment in Spain

Growth in trade has recovered since the global and euro crises

Like many European economies, Spanish trade contracted significantly at the height of the global crisis and again during the euro crisis. Spanish export growth was below the OECD average in the pre-crisis years and tracked OECD rates post crisis, in contrast import growth was in sync with OECD rates pre-crisis and diverged to a lower trend between 2007 and 2014. In 2016, export growth continued steadily at 4.8%.

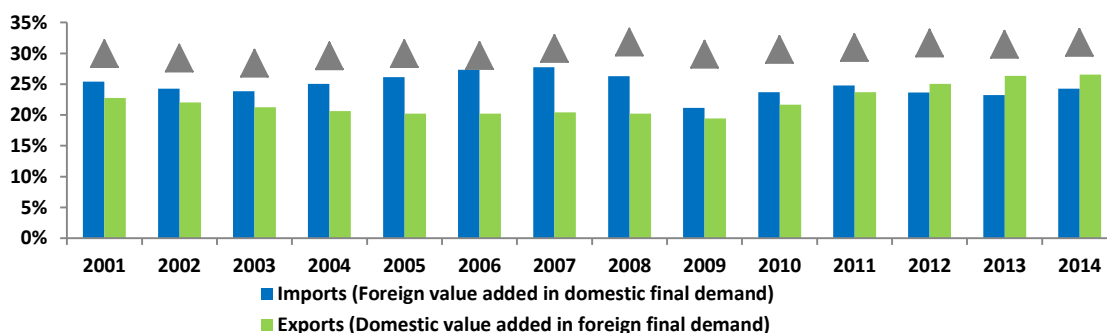
Figure 1. Growth rates of trade and GDP for the OECD and Spain, 2001-2016



Source: OECD SNA

Gross exports amounted to USD 407 billion in 2016 (36% of GDP), and gross imports to USD 371 billion (33% of GDP). Gross trade figures, however, overstate the ‘real’ contribution of trade to the economy. In value-added terms, exports contributed 27% of total GDP in 2014, the highest value recorded, although below the OECD median (grey diamond). The contribution of direct and indirect imports to domestic final demand measured 24% in 2014, lower than the 2007 high of 28%.

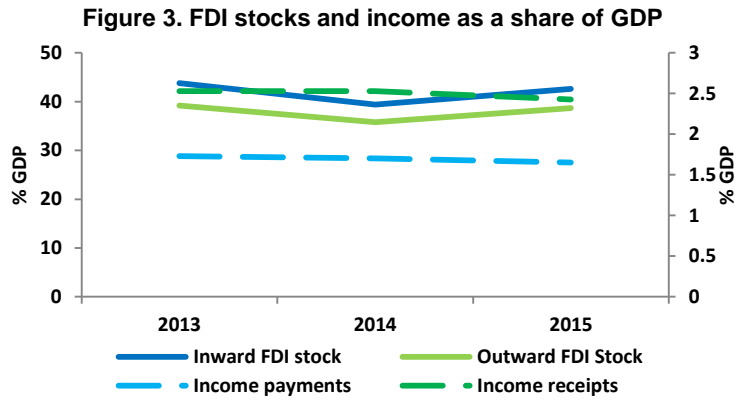
Figure 2. Trade in value added terms, imports and exports, 2001-2014



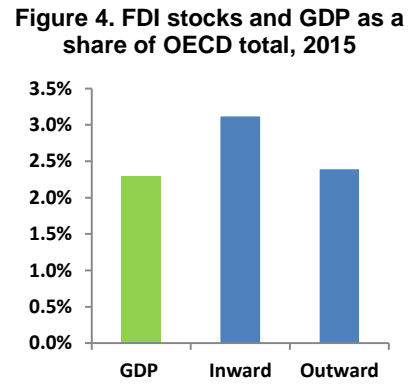
Source: OECD-WTO Trade in Value Added Data

Investment is slightly more inward than outward

Investment in Spain (equivalent to 43% of GDP) is slightly higher than Spanish investment overseas relative to GDP and this has been broadly constant since 2013 (Figure 3). In 2015, Spain’s share of the OECD total inward FDI stock (3.1%) was above its share of GDP (2.3%), but its share in outward stock at 2.4% was only fractionally above its share of GDP (Figure 4).



Source: OECD FDI Statistics (BMD4)



Source: OECD FDI Statistics (BMD4)

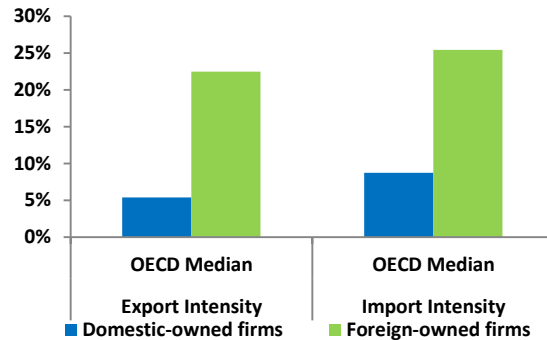
Foreign-owned firms directly sustained 12% of jobs in the private sector in 2013....

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

...and are export intensive than domestically owned firms

On average, foreign-owned firms in the OECD are more export intensive (share of exports in turnover) than domestically owned firms. The import intensity of foreign-owned firms (share of imports in purchases) is also significantly higher for foreign-owned than domestic firms. Although data are not available for Spain, it is likely that similar firm behaviour would be observed.

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

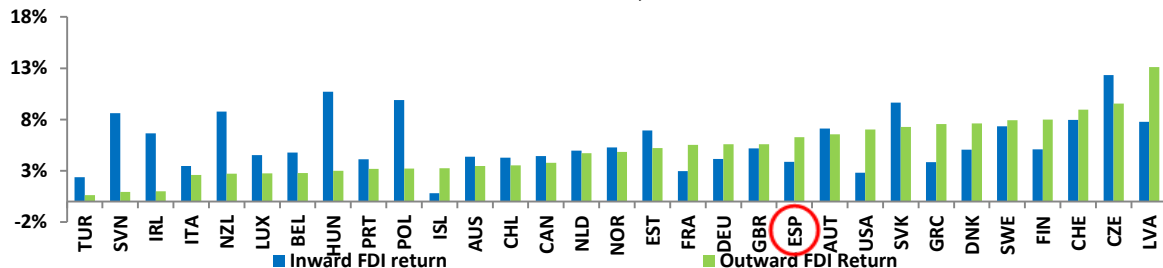


Source: OECD AMNE and Trade by Enterprise Characteristics (TEC) statistics (2011)

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

In 2015, Spain received USD 34 billion in income from its outward investment, equivalent to approximately 2.5% of GDP. Spain's rate of return at 6.3% (green bar) on its outward FDI is above the OECD median. On the other hand, the return to foreign investors in Spain was 3.9% in 2015, at the mid-range of OECD countries.

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

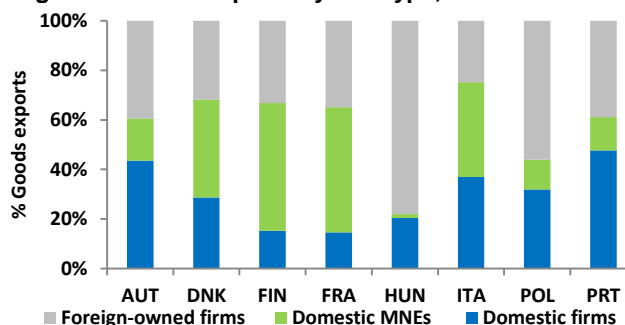


Source: OECD FDI Statistics (BMD4)

... and via exports

Looking across a selection of European economies, MNEs play a significant role in GVC integration. In some countries it is through the activity of MNE parents, while for other it is foreign-owned firms. In each country with available data, at least half of all goods exports are conducted by MNEs.

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

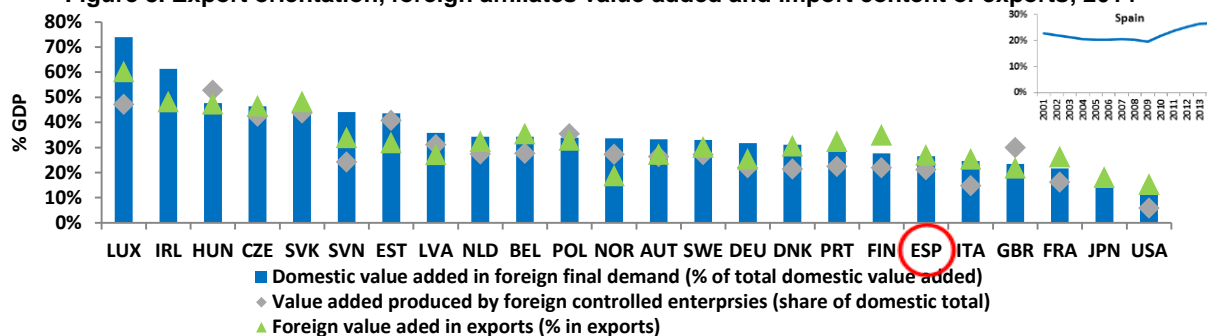


Source: OECD TEC statistics (2011)

Spain's export orientation is improving significantly relative to OECD countries and is comparable with similarly sized economies

Exports (in value added terms) contribute around 27% of Spanish GDP, this is relatively low compared to other OECD economies, but higher than Italy and France, which may in part reflect high levels of inward investment, Spain's GVC integration is also higher than these countries as measured by the import content of exports. Spanish export orientation has increased strongly since the crisis (insert chart).

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

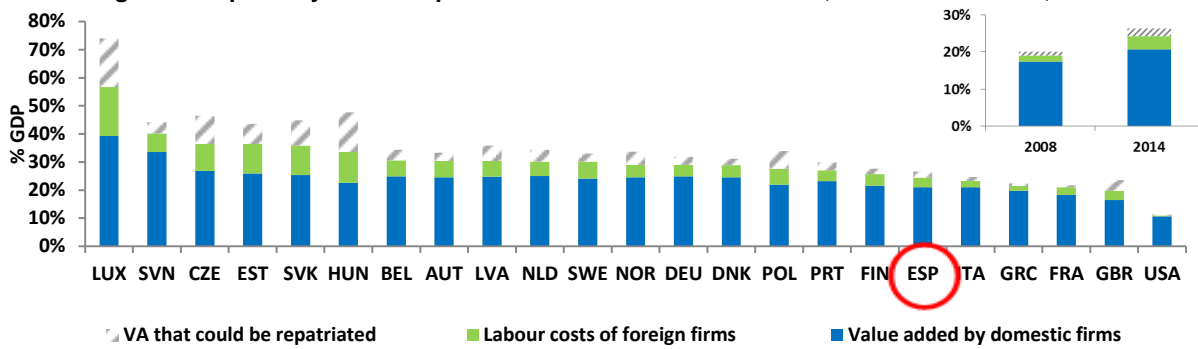


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics

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 Spanish exports contain 24% of value-added that remains in the economy. So, 8% of Spain's exported domestic value added represents profits by foreign-owned firms, and 13% of the exported domestic value added represents wages paid by these 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

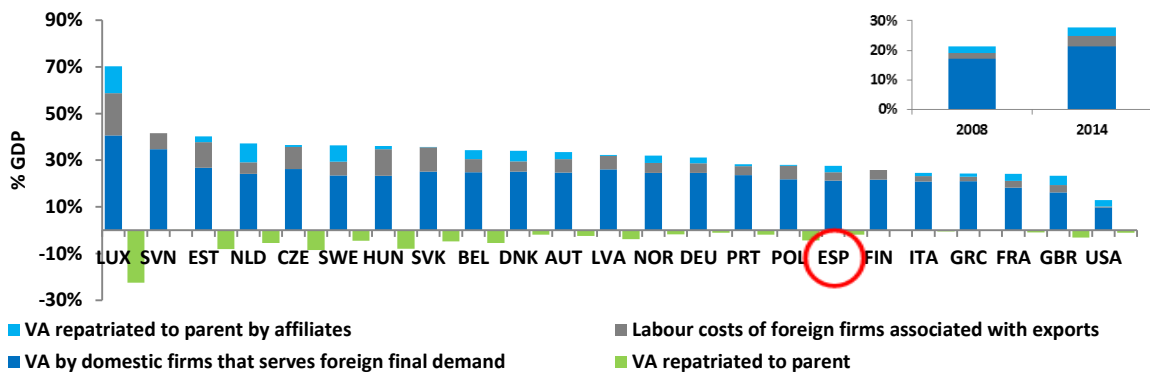


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics

Taking a broader view by including the income of foreign affiliates can provide a more complete picture of the international orientation of the Spanish 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 Spain this broader measure (28%) is slightly higher than the export orientation measure from TiVA (27%) because Spain also receives income from affiliates overseas. Spain remains at the lower end of OECD countries using this measure, however this has increased since 2008, due to growth in every component (see chart insert).

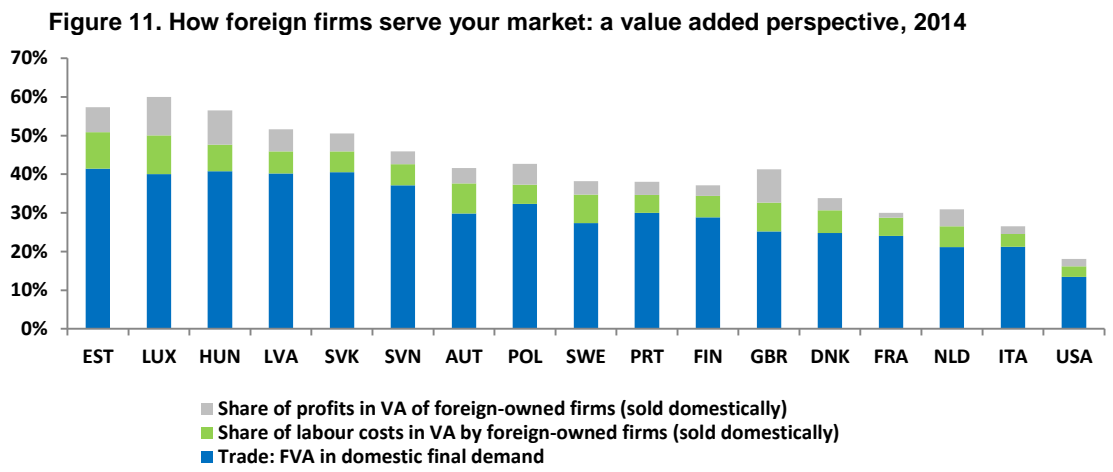
Figure 10. Supplying markets through trade and investment: a broader perspective, 2014



Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD FDI (BMD4) statistics

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

Foreign producers supply products and services for final consumption through trade (foreign value added in final demand), and sales by foreign affiliates (non-export). The value added by foreign affiliates can either stay in the economy in the form of wages, or some of this value added can be repatriated to parents, these shares vary across OECD countries. Due to data availability this cannot be calculated for Spain.



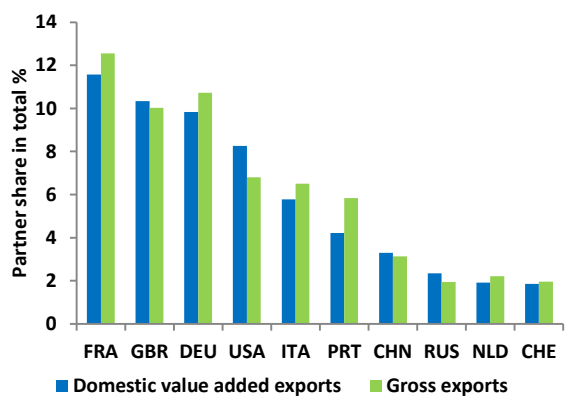
Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD TEC statistics

Trade and investment by partner country

Trade measured from a value added perspective better reflects the bi-lateral relationships

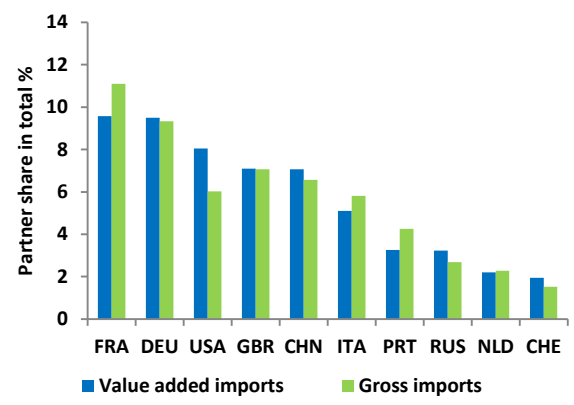
Gross bilateral trade figures can disguise the true nature of trade interdependencies, particularly between final consumers in one country and producers at upstream parts of the value chain. For example, exports to the United Kingdom are larger than to Germany once value added data are used. Russia is a more important export partner than the Netherlands and Switzerland once trade is measured on a value added basis. On the import side, the United States jumps ahead of the United Kingdom and China once trade in value added is used.

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



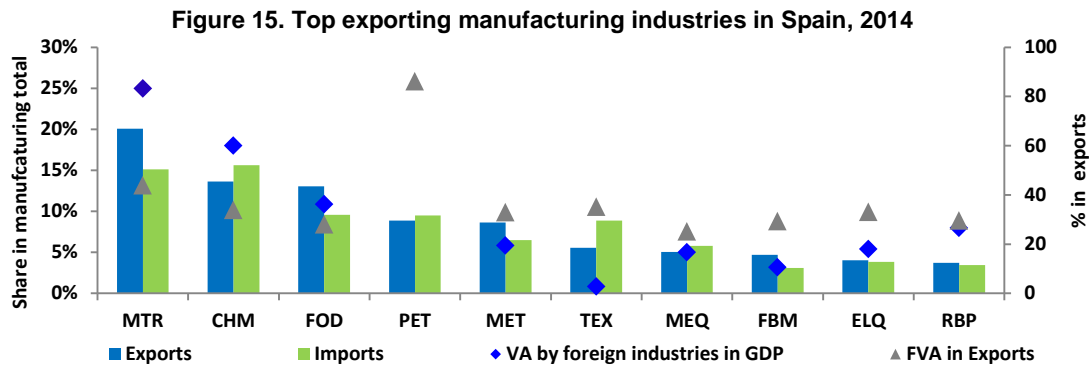
Source: OECD-WTO TiVA Data

Figure 14, supplying the domestic market via trade and investment: Top 10 partner countries, cannot be computed for Spain due to data availability.

Trade and investment by industry

Inward investment helps shape Spain's GVC integration

The top manufacturing exporting industries in Spain are motor vehicles (MTR), chemicals and chemical products (CHM) and food products (FOD). The import content of exports is relatively high across these industries—illustrating the role that importing plays in supporting exports and indicating the degree of GVC integration in these industries. The role of foreign-owned firms varies across Spanish industry, in part reflecting Spain's own comparative advantages and specialisation of its MNEs.

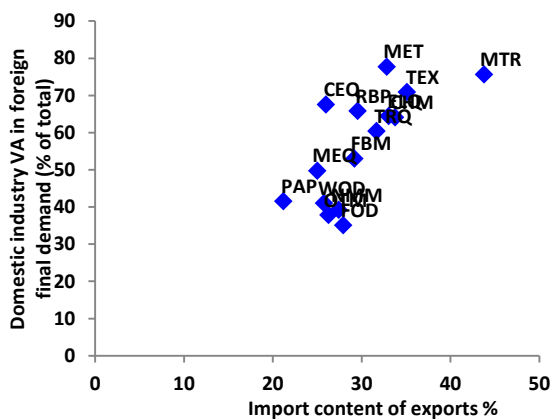


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics. See page 10 for a description of industry codes.

Exports and imports go hand in hand...

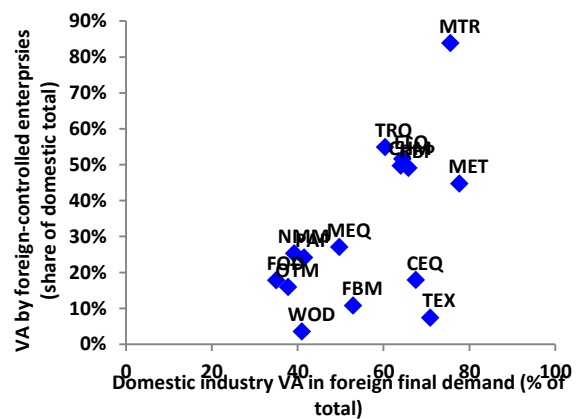
Across most industries there is a strong positive correlation between higher import content of exports and a higher share of their domestic value-added being exported (export orientation) illustrating the strong complementarity of exports and imports.

Figure 16. 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

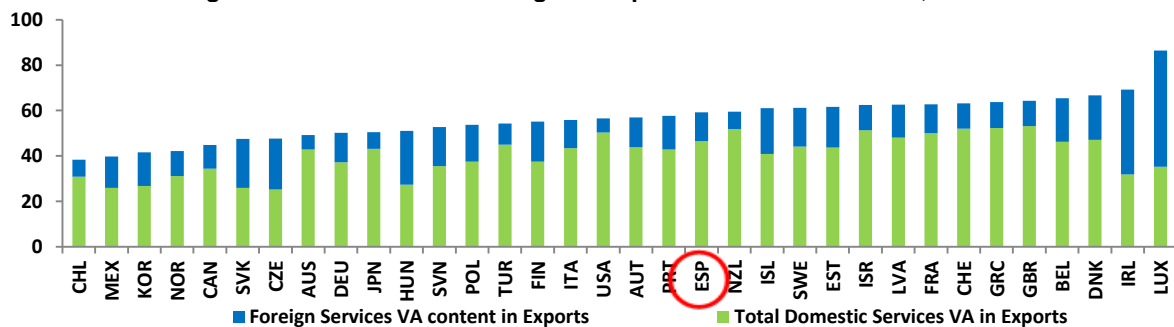
At the same time, strong complementarities can exist between inward investment and export orientation (Figure 17). For Spain, in industries where foreign-owned firms produce more of the value added are also those that have a higher export orientation. The textiles industry (TEX) is an exception, with low value

added by foreign-owned firms and high export orientation reflecting strong domestic industry. Figure 18, goods trade by enterprise ownership and industry can't be produced for Spain due to TEC data availability.

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 Spain's total exports of goods and services was 59% in 2014 (Figure 19), above the OECD median of 57%. Considering the services content of manufactured goods alone, over one third of Spanish manufacturing exports reflects services value added, just above the OECD median of 36%.

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

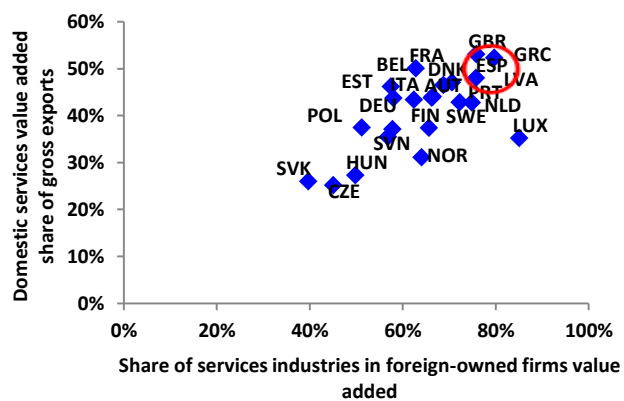


Source: OECD-WTO TiVA Data

...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 Spain, the share of investment in services is at the higher end for OECD economies which could contribute to the relatively high services content in exports.

Figure 20. Share of services industries in foreign-owned firms' value added and domestic services value added share of 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

Annex: Further data requirements

To make this note as informative as those of other OECD countries, more detailed information about Spanish trade and investment are needed. Primarily, data on trade by enterprise characteristics would benefit the analysis. Trade by ownership data are used in Figures 5 and 11 to create the export intensity of foreign-owned firms. With the export intensity of foreign-owned firms, an additional Figure (14) on bilateral partners combining trade and investment (sales by foreign affiliates) can be generated which provides a more complete picture of a countries main partners. Secondly, TEC information on trade by foreign-owned firms, domestic non-MNEs and domestic MNEs is used for Figure 7 and 18, this data helps analyse where Spanish industry might be at the start of GVCs.

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 | |