

International trade, foreign direct investment and global value chains



2017

SWEDEN

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.

One-third (33% in 2014) of economic activity (GDP) in Sweden depends on foreign markets, around the same as in Norway and Denmark. Sweden has substantial inward investment (equivalent to 57% of GDP in 2015), which supports one fifth of private sector jobs, while Swedish outward investment was larger still (equivalent to 72% of GDP in 2015). A broader notion of international orientation, which captures the impact on national income of exports and sales through foreign affiliates, shows that Sweden's international orientation was equivalent to 36% of GDP in 2014.

Considering both trade and investment through this broader perspective can also shed new light on Sweden's most important partner countries. While most partner countries supply Swedish consumers through trade and sales by foreign affiliates, Italian and Spanish firms do so almost entirely through trade while Finnish firms supply the majority through sales by foreign affiliates. Furthermore, considering both trade and investment, Finland jumps ahead of Denmark, China and Italy as a supplier to the Swedish market, which is not evident when looking at trade alone.

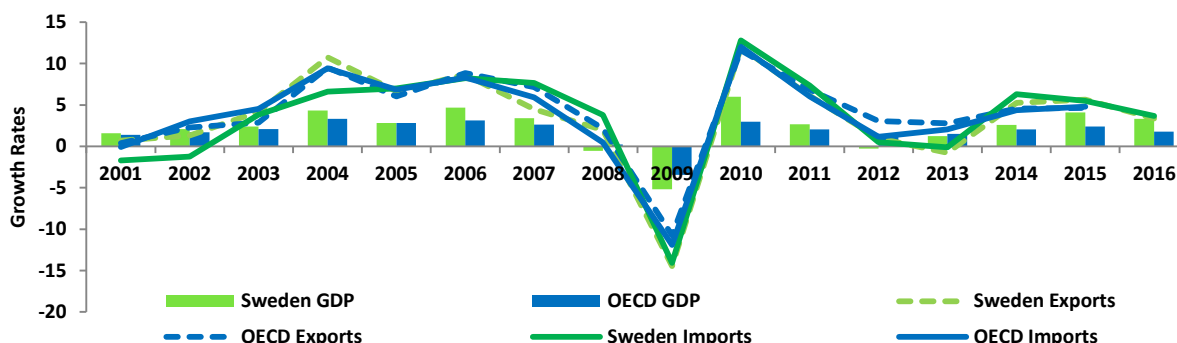
The top exporting manufacturing industries in Sweden are chemicals and chemical products (CHM), motor vehicles (MTR) and computers and electronics (CEQ). Many Swedish industries are highly export orientated and the driving forces are a mixture of foreign affiliates and domestic enterprises. For example, the chemicals (CHM) industry has high value added by foreign-owned firms and most of the value added produced meets foreign demand, so too for the motor vehicles (MTR) and electronics (ELQ) industries; however, the metals (MET) and computers (CEQ) industries have low shares of value added by foreign owned firms and high export orientation.

Trade and investment in Sweden

Growth in trade has recovered since the global and euro crises but slowed in 2016

Like many European economies, Swedish trade contracted significantly at the height of the global crisis and again during the euro crisis. Swedish trade growth closely tracked the OECD average in the pre-crisis years, and apart from a sharper fall during the euro crisis, Swedish rates have been broadly in sync with OECD rates since then. In 2016, export and import growth fell slightly to 3.5% from approximately 5.5% in 2015.

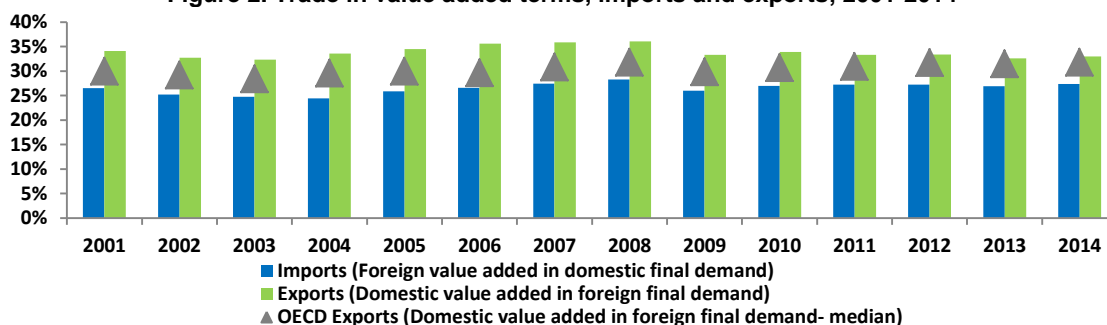
Figure 1 Growth rates of trade and GDP for the OECD and Sweden, 2001-2016



Source: OECD SNA

Gross exports amounted to USD 227 billion in 2016 (50% of GDP), and gross imports to USD 203 billion (45% of GDP). Gross trade figures, however, overstate the ‘real’ contribution of trade to the economy. In value added terms, exports contributed 33% of total GDP in 2014, below both the pre-crisis high and the OECD median (grey diamond). The contribution of direct and indirect imports to domestic final demand measured 27% in 2014.

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

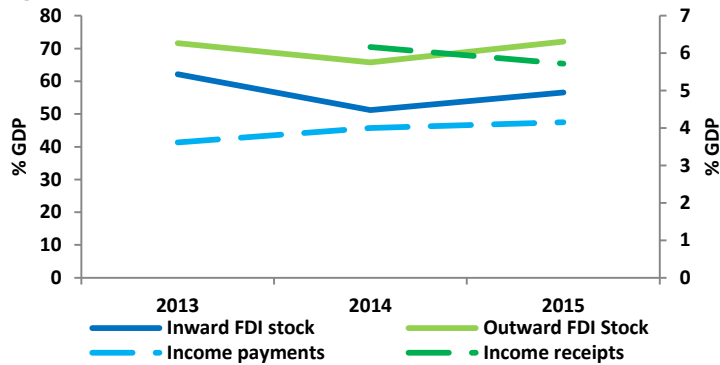


Source: OECD-WTO Trade in Value Added Data

Investment is more outward than inward

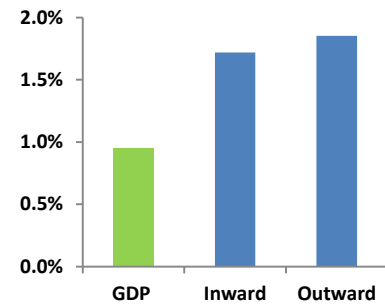
Sweden has strong outward and inward investment; outward stocks were equivalent to 72% of GDP meaning Swedish FDI is more outward orientated (Figure 3). In 2015, Sweden’s share of the OECD total outward FDI stock (1.9%) was above its share of GDP (1%), and its share in inward stock was 1.7% of the OECD total, also above its share of GDP (Figure 4).

Figure 3. FDI stocks and income as a share of GDP total



Source: OECD FDI Statistics (BMD4)

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



Source: OECD FDI Statistics (BMD4)

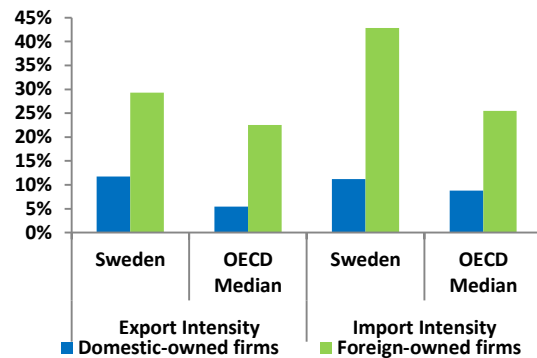
Foreign-owned firms directly sustained 21% of jobs in the private sector in 2013....

Reflecting the size of inward investment compared to other OECD economies, foreign-owned enterprises accounted for 21% of jobs in the private sector in 2013 and 27% of private sector value added produced in Sweden, excluding the agriculture and finance sectors.

...and are more export intensive than domestically owned firms

On average, foreign-owned firms in Sweden are over twice as export intensive (share of exports in turnover) as domestically owned firms, and their export intensity is above the OECD median. The import intensity of foreign-owned firms (share of imports in purchases) is over three times that of domestically-owned firms and also above the OECD median.

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

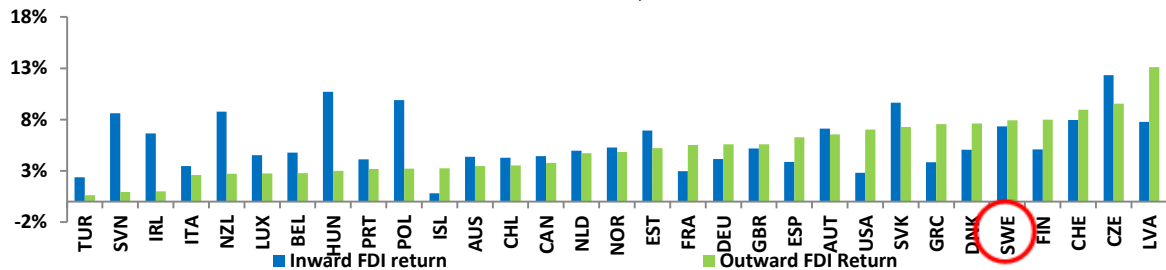


Source: OECD AMNE and Trade by Enterprise Characteristics (TEC) statistics (2011)

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

In 2015, Sweden received USD 28 billion in income from its outward investment, equivalent to approximately 6% of GDP. Sweden's rate of return at 7.9% (green bar) on its outward FDI is at the higher end of OECD countries. On the other side, the return to foreign investors in Sweden was also high relative to that of other OECD countries at 7.3%.

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

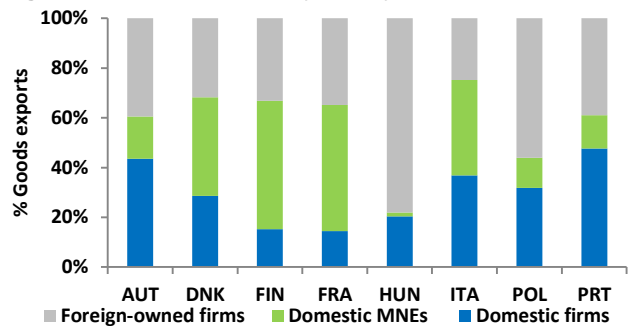


Source: OECD FDI Statistics (BMD4)

... 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

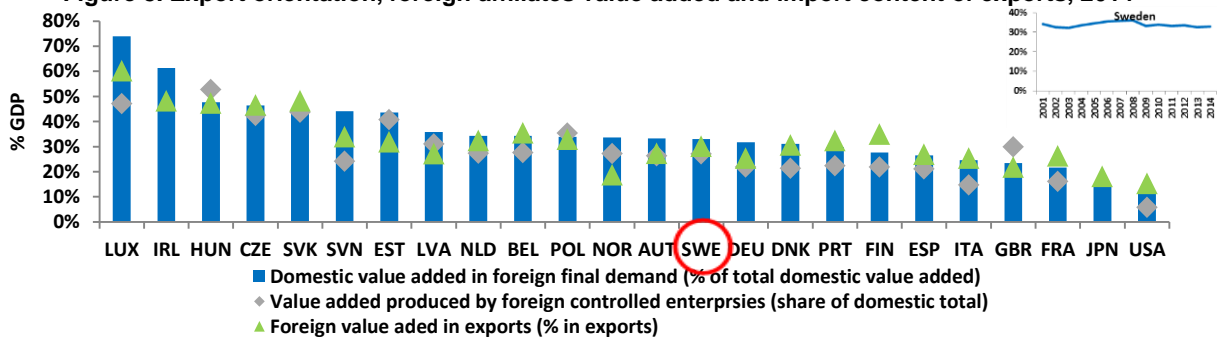


Source: OECD TEC statistics (2011)

Sweden's export orientation is below the OECD median

Exports (in value added terms) contribute around 33% of Swedish GDP, this is below the OECD median, but comparable with Norway and Denmark. It may in part reflect high levels of inward investment and their relatively high export intensity (compared to foreign affiliates operating in other countries) contributing to substantial GVC integration as measured by the import content of exports. However, export orientation has not recovered to pre-crisis levels (see insert chart).

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

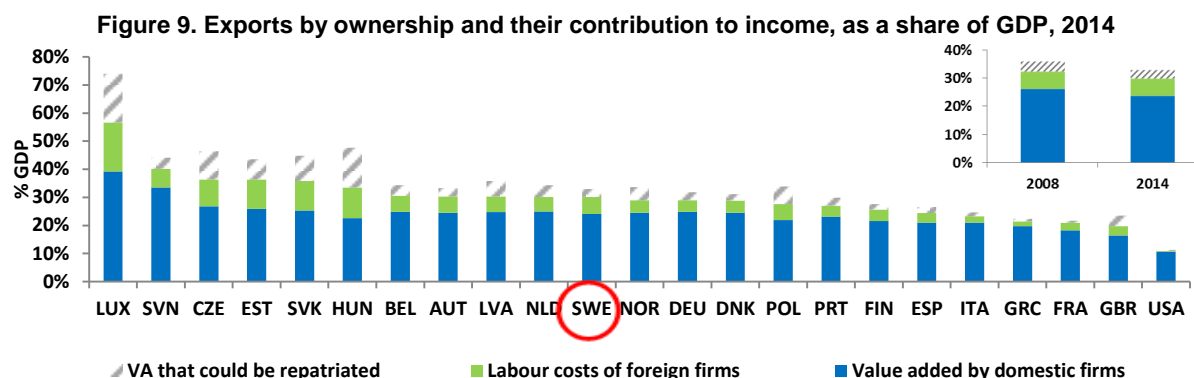


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics

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

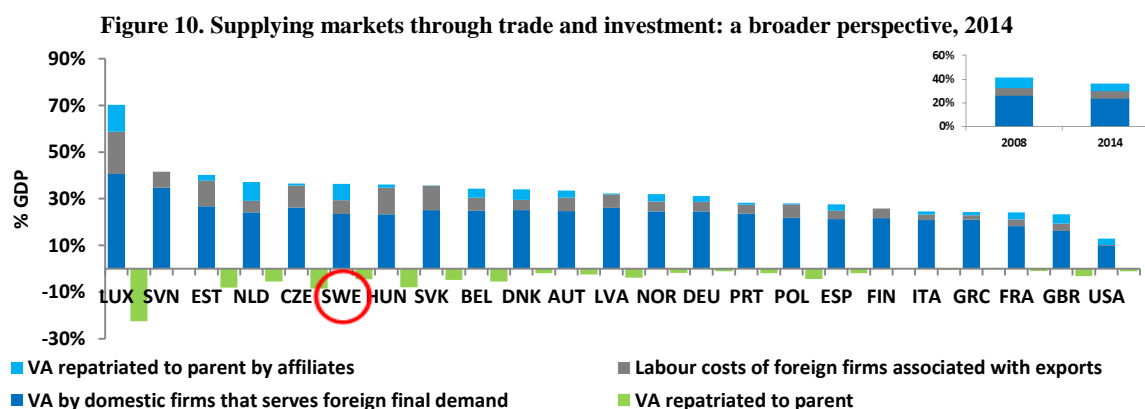
firms (green bar), and profits of foreign-owned firms (grey bar), which in practice can be repatriated. Excluding these profits Swedish exports contain 30% of value-added that remains in the economy. So, 9% of Sweden's exported domestic value added represents profits by foreign-owned firms and 18% represent wages paid by these firms. The share of value added that remains in the economy has fallen since 2008 (see insert chart).



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 Swedish economy

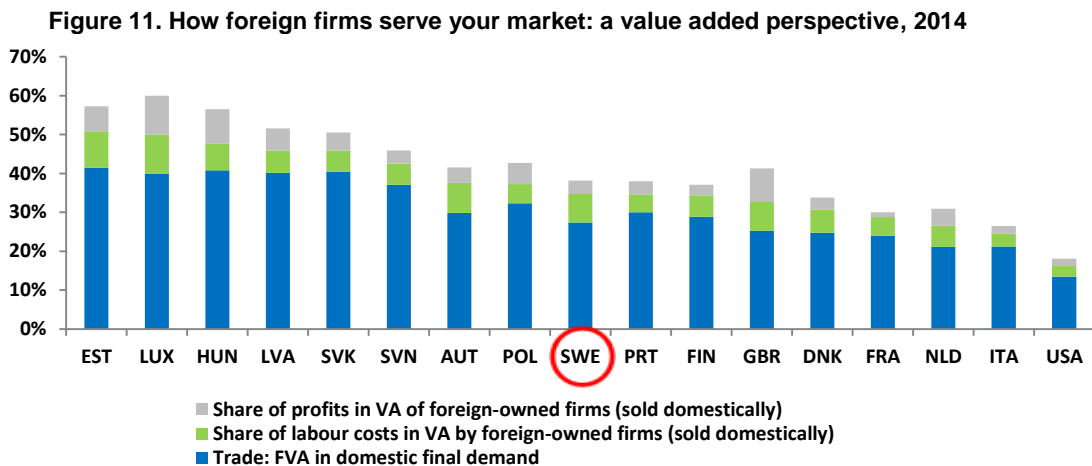
Firms serve foreign markets by exporting or by selling through their foreign affiliates. Figure 10 takes a broader view of an economy's international orientation by taking account of both trade and investment. The chart begins with the domestic value added in exports that remains in the economy – exports 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 Sweden this broader measure (36%) is higher than the export orientation measure from TiVA (33%) because Sweden is a net outward direct investor. Sweden moves towards the higher end of OECD countries using this measure, highlighting the role of outward investment. However, this measure has fallen since 2008 due to drops in both exports of value added and FDI income receipts (see chart insert).



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 Swedish market

Foreign producers supplied products and services for Swedish final consumption equivalent to 38% of GDP in 2014; the majority is through trade (foreign value added in Swedish final demand equals approximately 27% of GDP), but value added generated by foreign affiliates in Sweden for domestic (non-export) sales (Figure 11) accounts for a not insignificant 11% of GDP. Although some of this value added can be repatriated to parents, this share is lower in Sweden than in most other OECD economies (grey bar).

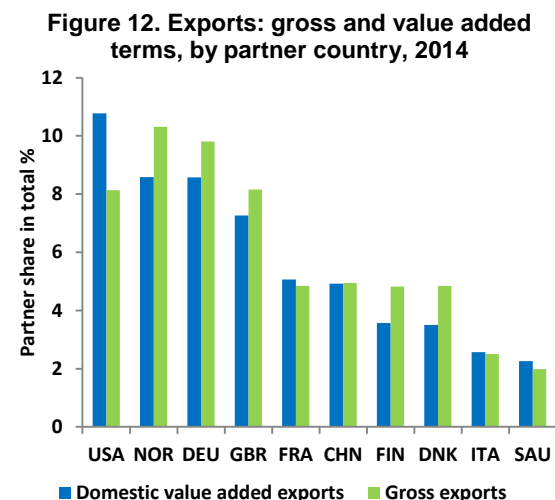


Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD TEC statistics.

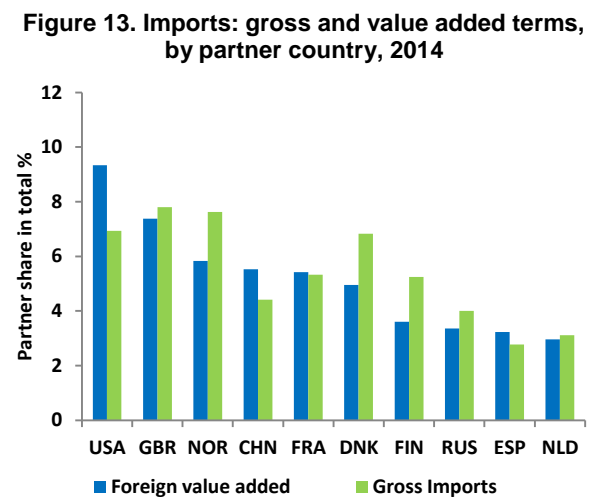
Trade and investment by partner country

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. This is evident for the bilateral relationship with the United States; value added data show that the United States leap-frogs Germany, Norway, and the United Kingdom to the top destination for Swedish exports. For imports, value added data show that Chinese production is more important than French, Danish and Finnish value added.



Source: OECD-WTO TiVA Data

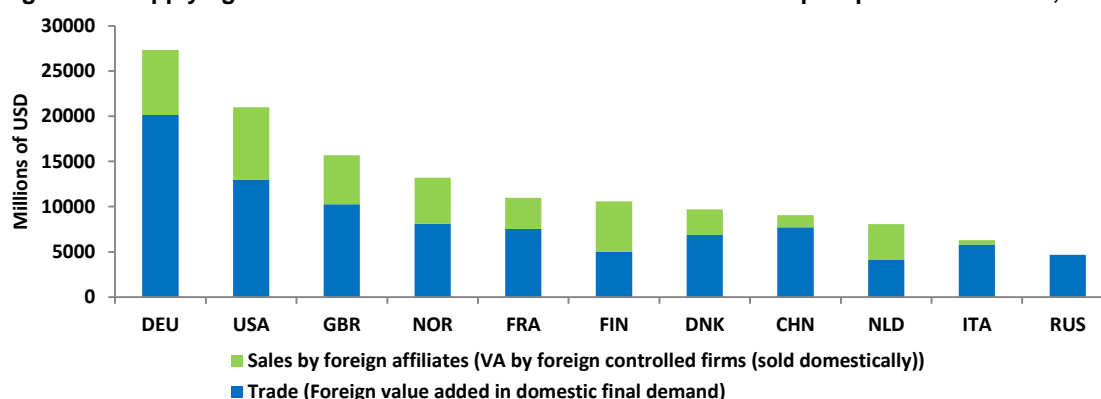


Source: OECD-WTO TiVA Data

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

Foreign firms can serve an economy through 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). Substantial variation exists across countries in how they supply the Swedish market. Most partner countries supply Swedish consumers through trade and sales by foreign affiliates, but Italian and Spanish firms do so almost entirely through trade while Finnish firms do the majority through sales by foreign affiliates. Furthermore, considering both trade and investment Finland jumps ahead of Denmark, China and Italy as a supplier of the Swedish market, which is not evident when looking at trade alone.

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



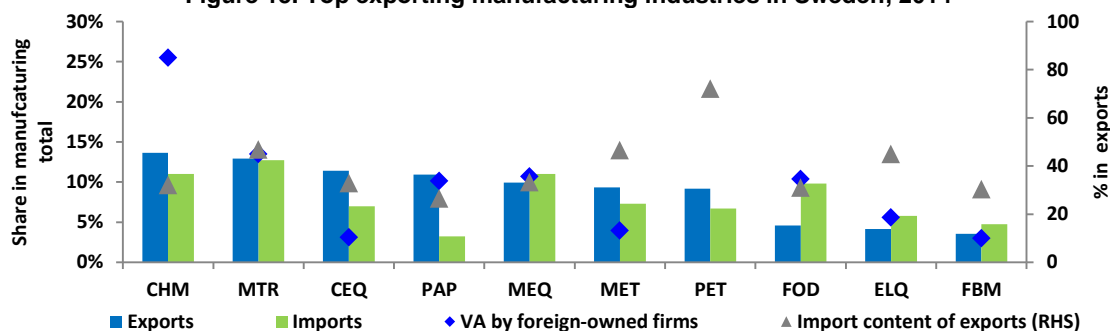
Source: OECD-WTO TiVA Data and OECD AMNE statistics
 Note: Data on foreign affiliate presence is not available for Russia.

Trade and investment by industry

Outward and inward investment help shape Sweden's GVC integration

The top manufacturing exporting industries in Sweden are chemicals and chemical products (CHM), motor vehicles (MTR) and computers and electronics (CEQ). The import content of exports varies across 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 Swedish industry, in part reflecting Sweden's own comparative advantages and specialisation of its MNEs as well as the importance of foreign investment for certain industries.

Figure 15. Top exporting manufacturing industries in Sweden, 2014

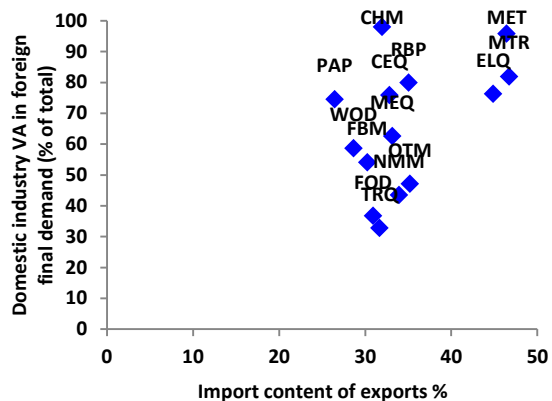


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics. See page 10 for a description of industry codes.

Exports and imports go hand in hand...

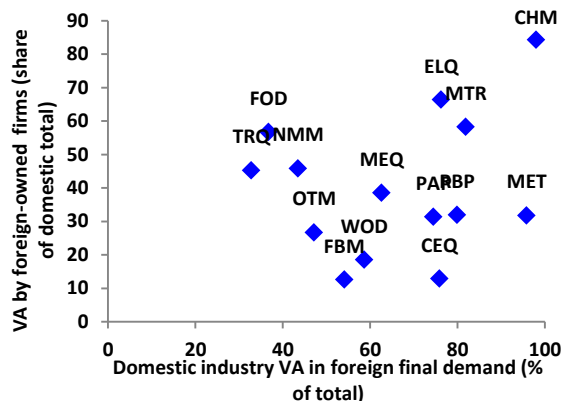
Across most industries there is a strong correlation between higher import content of exports and a higher share of their domestic value-added being exported (export orientation) illustrating the strong complementarity of exports and imports.

Figure 16. 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

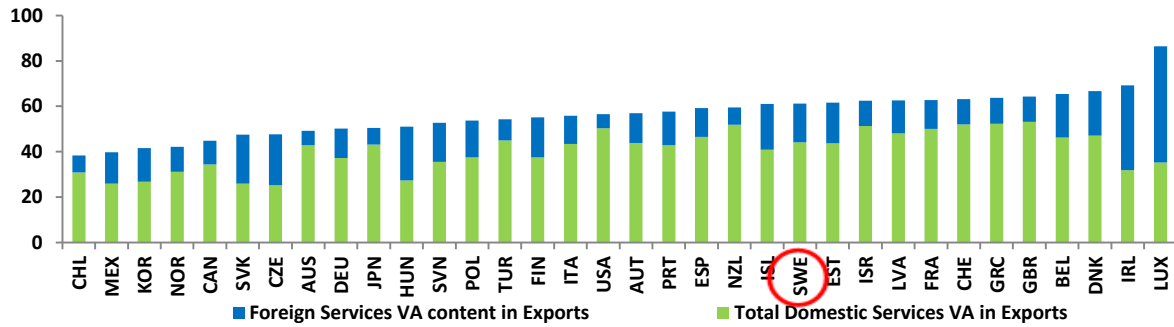
...and investment and export orientation can also go hand in hand

At the same time, strong complementarities can exist between inward investment and export orientation (Figure 17). For Sweden, this pattern is less obvious, reflecting the strength of domestic industry. For example, the chemicals (CHM) industry has high value added by foreign-owned firms and most of the value added produced meets foreign demand, so too for the motor vehicles (MTR) and electronics (ELQ) industries; however, the metals (MET) and computers (CEQ) industries have low shares of value added by foreign owned firms and high export orientation. Figure 18: trade in goods by ownership and industry cannot be produced for Sweden due to 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 Sweden's total exports of goods and services was 61% in 2014 (Figure 19), above the OECD median of 56%. Considering the services content of manufactured goods alone, 42% of manufacturing exports reflects services value added, above the OECD average of 36%.

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

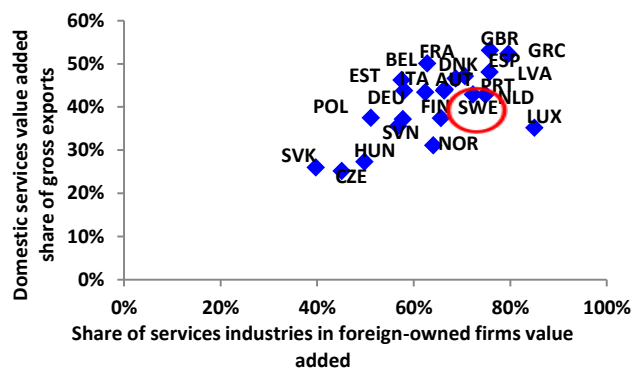


Source: OECD-WTO TiVA Data

...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 Sweden, the share of investment in services is at the higher end for OECD economies, which could contribute to its 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

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 | |