

International trade, foreign direct investment and global value chains



2017

FINLAND

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.

The Finnish economy is not as export orientated as other similarly sized OECD economies (exports contributed 28% of GDP in 2014), and inward investment is lower than Finnish investment overseas. However, foreign-owned firms are twice as export intensive as domestic Finnish firms, and the economy as a whole has a high import content in exports reflecting GVC integration. Finland's investment overseas offers another channel to participate in GVCs. The strength of Finnish MNEs is illustrated once a broader notion of international orientation, capturing both trade and investment, is used. This broader view captures the impact on national income of both exports and sales through foreign affiliates and suggests Finland has a higher international orientation than trade data alone indicate because it is a net outward investor (the broader measure is equivalent to 30% GDP)

Looking at trade in value added rather than gross values illustrates that the United States and Germany are Finland's most important export and import partners respectively. Considering both trade and investment can shed new light on Finland's partner countries; for example, the United Kingdom and France both serve the Finnish market through trade and investment, while China, India and Italy do so mainly through trade. The United States supplies Finland mainly through sales by foreign affiliates, and moves ahead of many countries once trade and investment are combined.

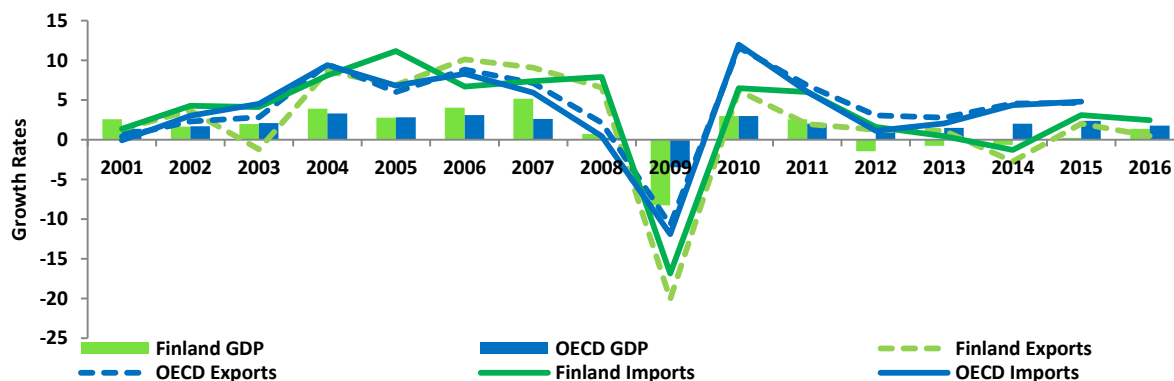
The top manufacturing exporting industries in Finland are machinery and equipment (MEQ), pulp and paper products (PAP) and basic metals (MET). In each of these top exporting industries, the majority of exports are by domestic MNEs, reflecting the strength of domestic industry. Apart from the pulp and paper products industry, these industries have a high import content of exports, an indicator of GVC integration.

Trade and investment in Finland

Growth in trade had recovered after the global crisis, but has since slowed

Like many economies, Finnish trade contracted significantly at the height of the global crisis, but has also struggled to regain pre-crisis rates. Having outpaced OECD growth in trade for the pre-crisis years, Finnish trade contracted more severely than the OECD on aggregate in 2009. In 2015 and 2016, Finnish growth in exports was positive, although only marginally so in 2016 at 0.5%. It is likely that trade sanctions on Russia by the international community have had an effect on Finnish trade in recent years.

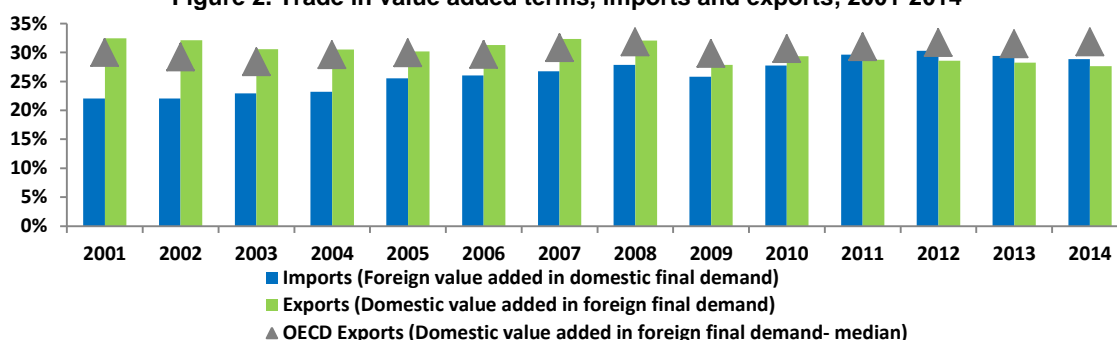
Figure 1. Growth rates of trade and GDP for the OECD and Finland, 2001-2016



Source: OECD SNA

Gross exports amounted to USD 83 billion in 2016 (41% of GDP), and gross imports to USD 87 billion (42% of GDP). Gross trade figures, however, overstate the ‘real’ contribution of trade to the economy. In value-added terms, exports contributed 28% of total GDP in 2014, below the 32% recorded in 2001 and 2008, and also below the OECD median. The contribution of direct and indirect imports to domestic final demand measured 29% in 2014, below the 2012 high.

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

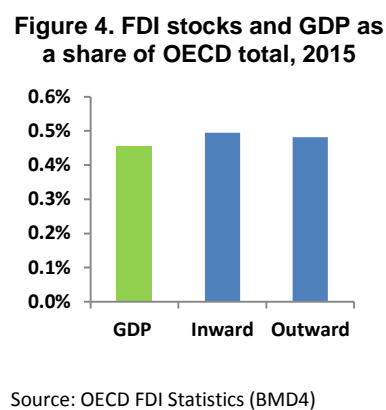
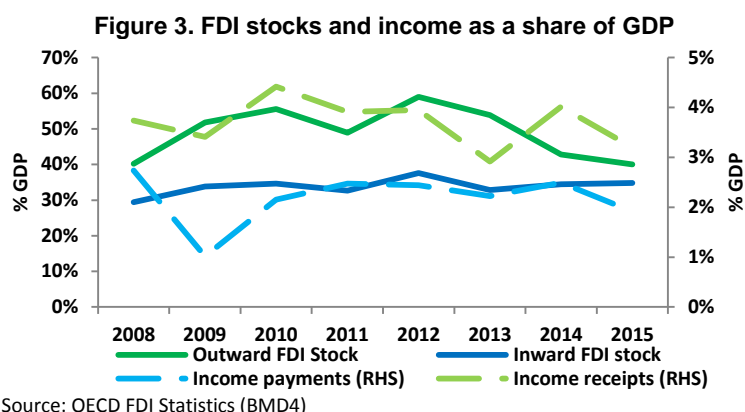


Source: OECD-WTO Trade in Value Added Data

Investment is more outward than inward, but the gap is narrowing

Outward FDI has decreased since 2012 (this is due to negative valuation adjustments as well as divestment by Finnish investors) while inward investment has remained broadly stable. In 2015, outward stock was equivalent to 40% of GDP while inward was 35% of GDP. Despite the reduced growth in outward FDI stock as a share of GDP, FDI remains more outward orientated in Finland (Figure 3). In 2015, Finland’s

share of the OECD total outward and inward FDI stock (0.48%, 0.49%) was slightly above its share of GDP (0.45 %) (Figure 4).



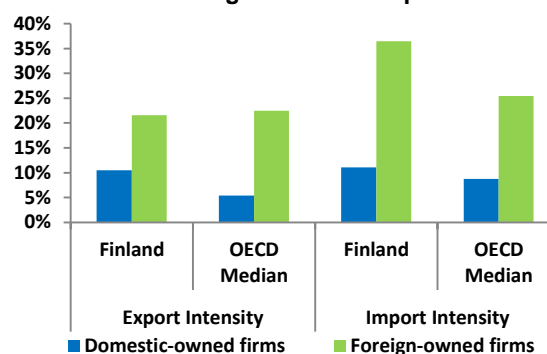
Foreign-owned firms directly sustained 16% of jobs in the private sector in 2013....

Reflecting the relatively low level of inward investment compared to other similar OECD economies, foreign-owned enterprises accounted for 16% of jobs in the private sector in 2013 and 21% of private sector value added produced in Finland, excluding the agriculture and finance sectors.

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

On average, foreign-owned firms in Finland are twice as export intensive (share of exports in turnover) as 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. Finnish domestic firms are more export and import intensive than the OECD median, and the foreign-owned firms in Finland are close to the OECD median for export intensity.

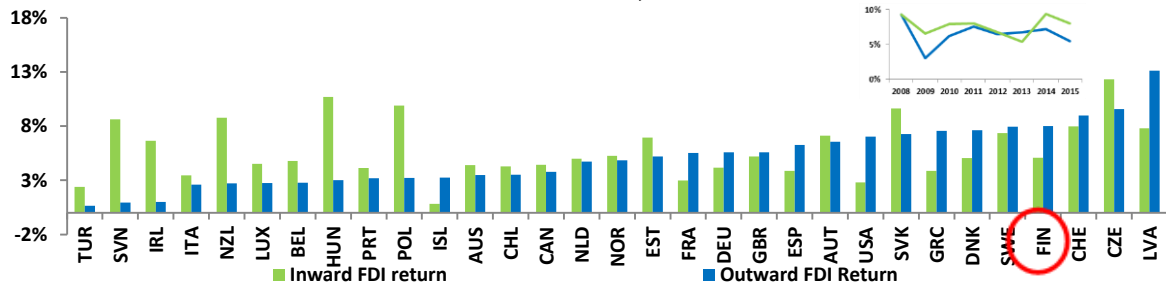
Figure 5. Export and import intensity of domestic and foreign-owned enterprises



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

In 2015, Finland received USD 7 billion in income receipts from its outward investment, equivalent to approximately 3% of GDP. Finland's rate of return at 8.0% (green bar), on its outward FDI is at the top end of OECD countries, slightly lower than 2014 (see chart insert). On the other hand, the return to foreign investors in Finland was 5.1% in 2015.

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

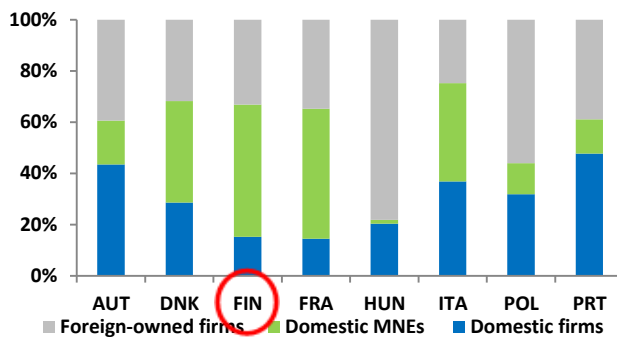


Source: OECD FDI Statistics (BMD4)

...and via exports

Reflecting its significant outward investment, 52% of goods exports are by domestic MNEs, 15% are by domestic firms, while 33 per cent are by foreign-owned firms. The domestic MNE share is high compared to other small European countries, illustrating it is both domestic MNEs and foreign-owned firms that drive Finnish GVC participation.

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

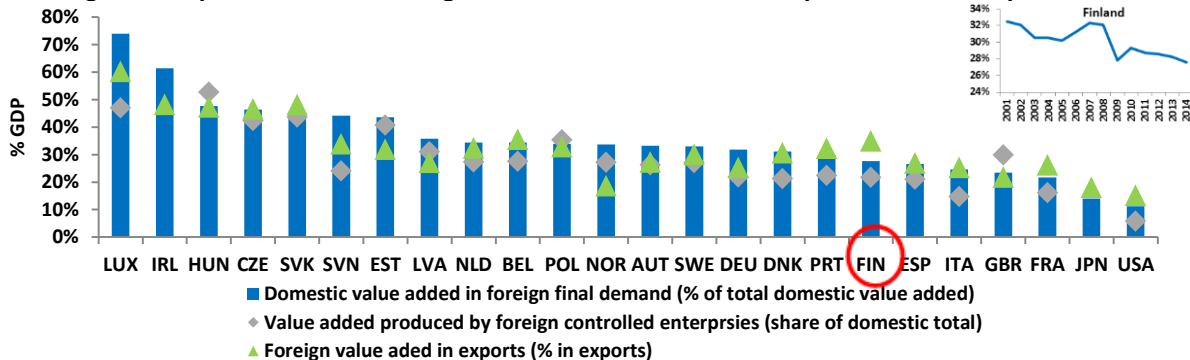


Source: OECD TEC statistics (2011)

But Finland's export orientation is low relative to similarly sized economies

Exports (in value added terms) contribute around 28% of Finnish GDP; this is towards the lower end of small OECD countries, which may reflect relatively low levels of inward investment, the import content of exports, a measure of GVC integration is comparable to some similar sized economies. The insert illustrates that Finnish export orientation has been decreasing over time.

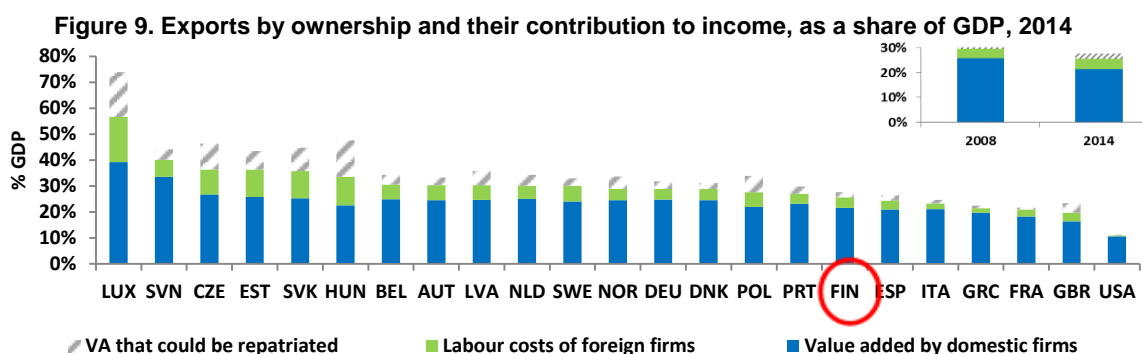
Figure 8. Export orientation, foreign affiliates value added and import content of exports, 2014



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...

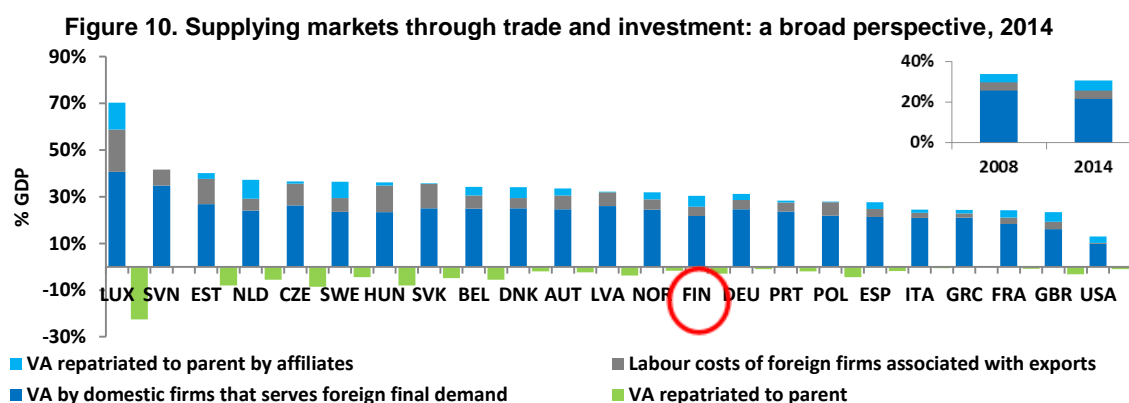
Gross export figures overstate the real economic impacts of trade to the exporting economy, but TiVA estimates can also overstate these impacts as the profits earned by foreign-owned firms through exports are repatriated if they are not reinvested. Figure 9 illustrates the importance of these flows across 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 profits generated by foreign-owned firms, Finnish exports contain 26% of value-added that remains in the economy. So, only 7% of Finland's exported domestic value added represents profits by foreign-owned firms. The share of value added that remains in the economy decreased since 2008, (see chart insert).



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 Finnish economy

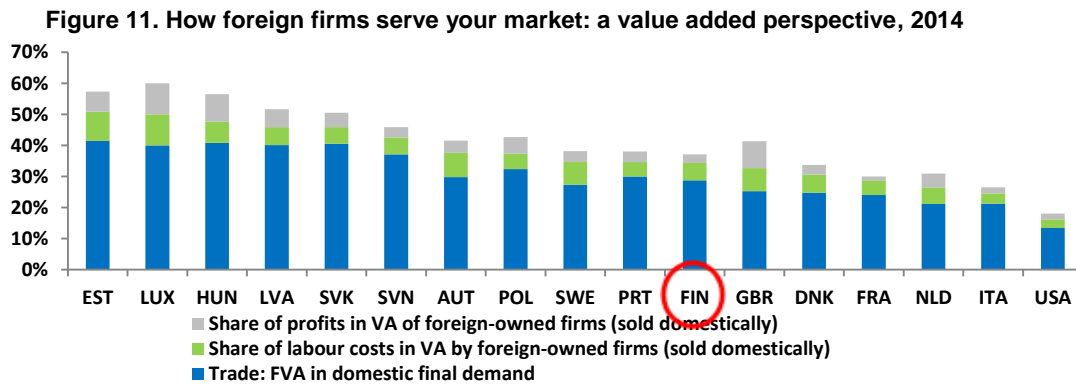
Firms serve foreign markets by exporting or by selling through their foreign affiliates. Figure 10 takes a broader view of an economy's international orientation by taking account of both trade and investment. The chart begins with the domestic value added in exports that remains in the economy – exports 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 informative purposes (green bar). For Finland, this broader measure, at 30% of GDP, is higher than the export orientation measure from TiVA because Finland is a net outward direct investor. However, this has decreased since 2008 due to a drop in exports of domestic value added, (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 Finnish market

Foreign producers supplied products and services for Finnish final consumption equivalent to 37% of GDP in 2014, the majority is through trade (foreign value added in Finnish final demand equals approximately 29% of GDP), but value added generated by foreign affiliates in Finland for domestic (non-export) sales (Figure 11) accounts for 8% of GDP. Although some of this value added can be repatriated to parents, the amount generated that is paid in wages is 6% of GDP.



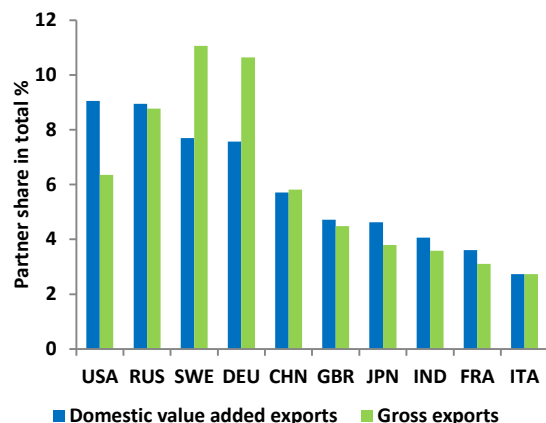
Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD TEC statistics

Trade and investment by partner country

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

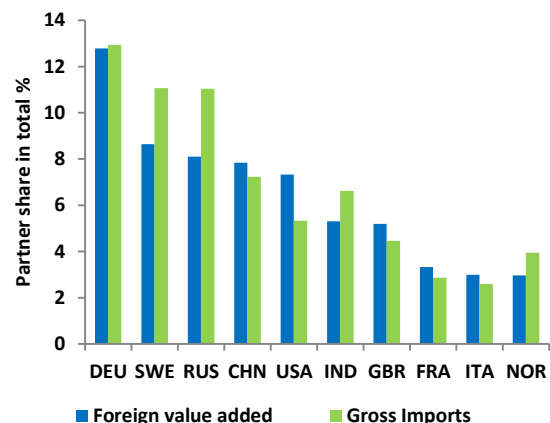
Gross bilateral trade figures can disguise the true nature of trade interdependencies, particular between final consumers in one country and producers at upstream parts of the value chain. In the case of Finland, the relative importance of partner countries changes substantially; the United States is a more important export partner than Sweden, Russia and Germany using value added, contrary to what gross data suggest.

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

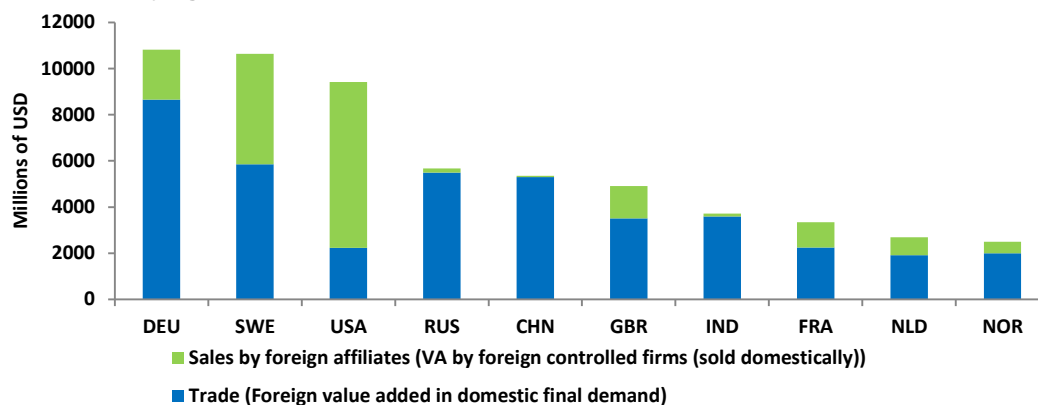


Source: OECD-WTO TiVA Data

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

Foreign firms can serve an economy 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). Once including data on foreign affiliates, Sweden is almost as important as Germany when supplying the Finnish market. United Kingdom and France supply Finland through both trade and investment while Russia and China do so mainly through trade. The United States supplies Finland mainly through sales by foreign affiliates, and moves ahead of the range of countries from Russia to Norway once trade and investment are combined.

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

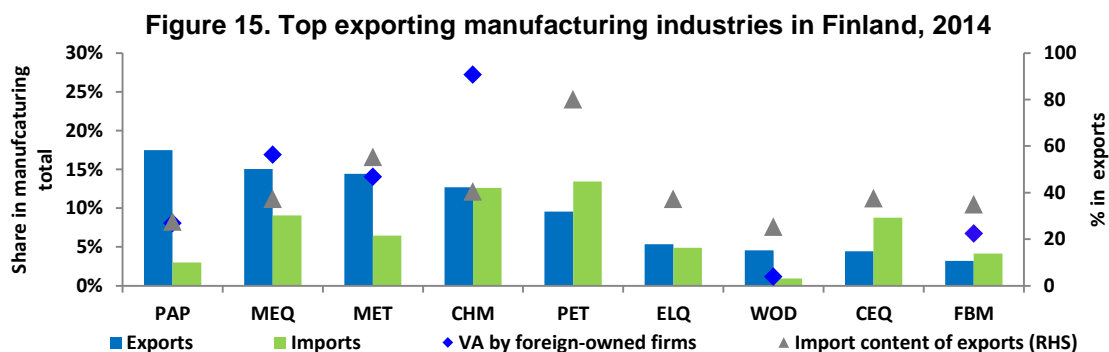


Source: OECD-WTO TiVA Data and OECD AMNE statistics

Trade and investment by industry

Inward investment helps shape Finland's GVC integration

The top manufacturing exporting industries in Finland are Pulp and paper products (PAP), machinery and equipment (MEQ), and basic metals (MET). 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 chemicals and chemical product industry (CHM) accounts for the highest share of value added by foreign-owned firms.

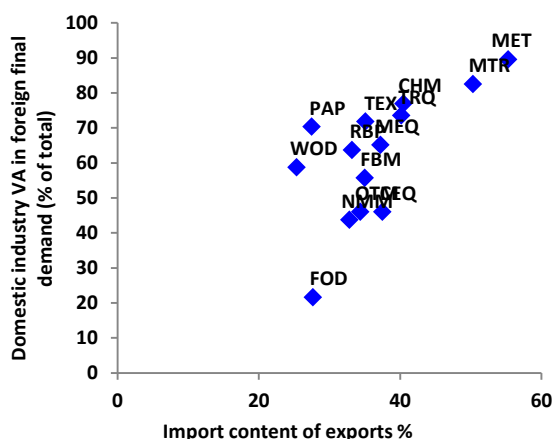


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics. See page 10 for a description of industry codes.

Exports and imports go hand in hand...

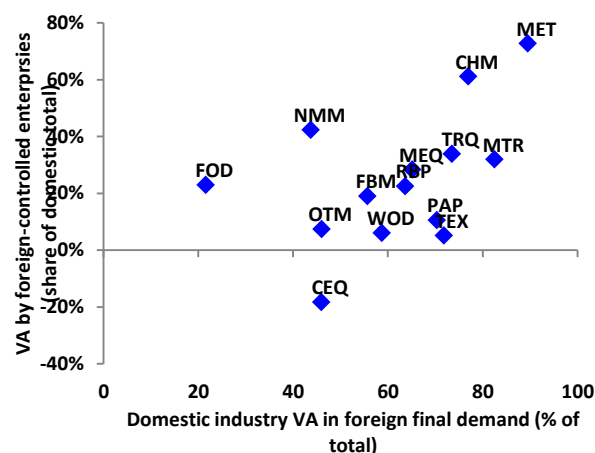
Across most industries there is a strong correlation between higher import content of exports and a higher share of their domestic value-added being exported (export orientation) illustrating the strong complementarity of exports and imports.

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

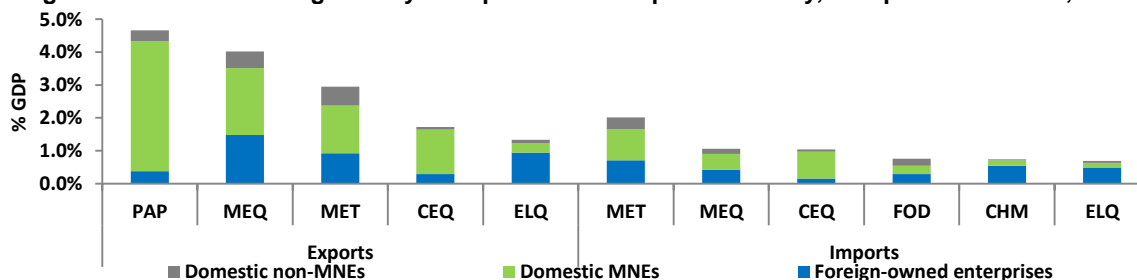


Source: OECD-WTO TiVA Data and OECD AMNE statistics

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

At the same time, strong complementarities exist between inward investment and export orientation (Figure 17). For Finland, the industries where foreign-owned firms produce more of the value added are also those that have a higher export orientation. Figure 18 illustrates the trade in goods by firm ownership; domestic MNES are driving Finland's goods export behaviour, reflecting the strong domestic industry, while foreign-owned firms also play a significant role.

Figure 18. Gross trade in goods by enterprise ownership and industry, as a per cent of GDP, 2011



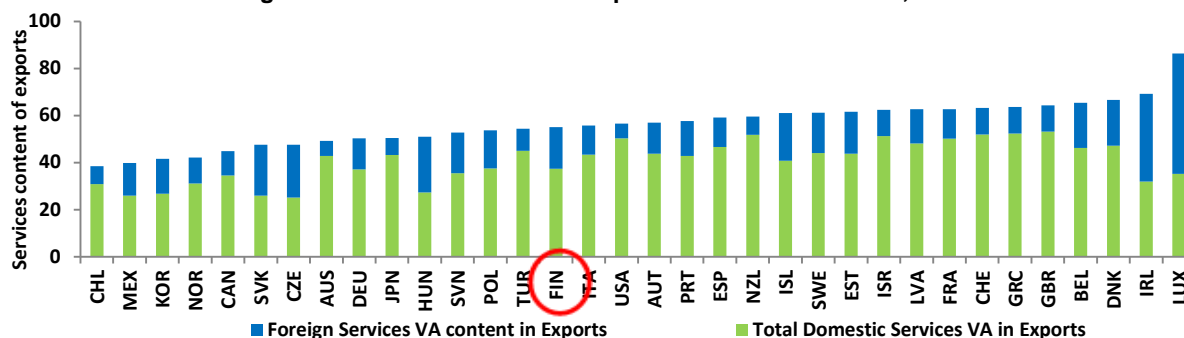
Source: OECD TEC Statistics

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 Finland's total exports of goods and services was 55% in 2014 (Figure 19), below the OECD average of

57%. Looking at the services content of manufactured goods alone, 42% of the total value of Finnish manufacturing exports reflects services value added, above the OECD average of 36%.

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

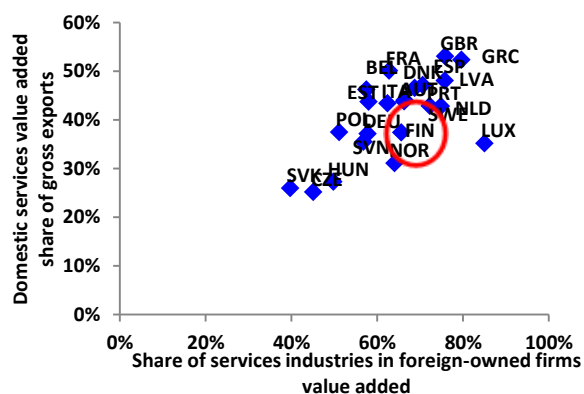


Source: OECD-WTO TiVA Data

...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 Finland, the share of investment in services is close to the median of OECD economies, in line with its services content of 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
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	