International trade, foreign direct investment and global value chains

OECD

2017

NEW ZEALAND

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.

Almost one-quarter (25% in 2014) of economic activity (GDP) in New Zealand depends on foreign markets, towards the lower end of OECD economies but around the same as in Finland. New Zealand's inward investment (equivalent to 40% of GDP in 2016) was four times the size of its outward investment (10%), and inward investment directly supported 11% of jobs in New Zealand. However, the import content of exports, an indicator of GVC integration is comparatively low for New Zealand, likely in part a function of its geographic location.

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. Australia is New Zealand's main trading partner for both imports and exports using either gross or value added data. However, the relative importance of other countries varies once value added data are used. For imports, value added data show that the United States is actually a more important supplier for New Zealand than China.

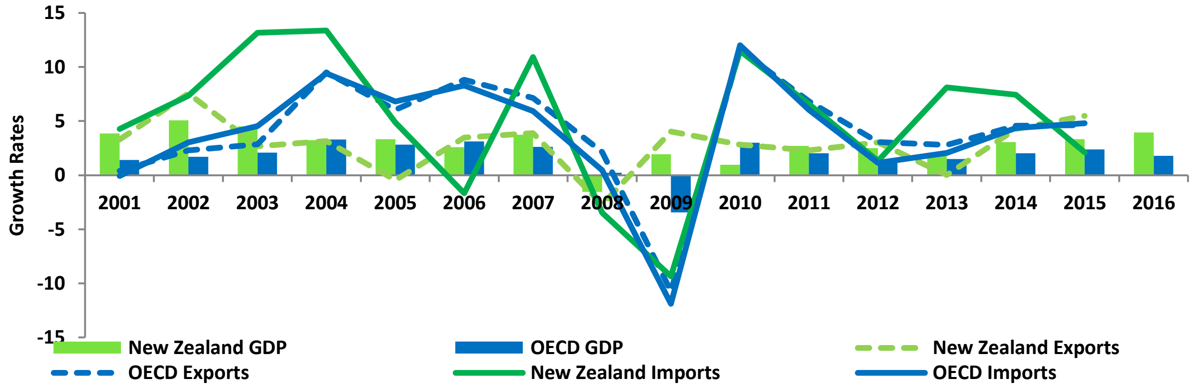
The top manufacturing exporting industries in New Zealand are food and beverages (FOD) and basic metals (MET). The import content of exports is relatively low for the food and beverages industry but is higher in the basic metals industry. The services content of New Zealand exports (60%) is above the OECD median, and this is correlated with a relatively high share of its inward investment going to the services sector.

Trade and Investment in New Zealand

Growth in exports was largely unaffected by the global crisis; import growth slowed in 2015

Unlike many OECD economies, New Zealand's rates of trade growth do not track the OECD rates. Furthermore, there is little correlation between export and import rates; imports had higher growth rates (averaging 5%) over the period, while exports had lower rates (3%). In 2015, New Zealand exports grew at 5.5% while imports slowed to 2.1%.

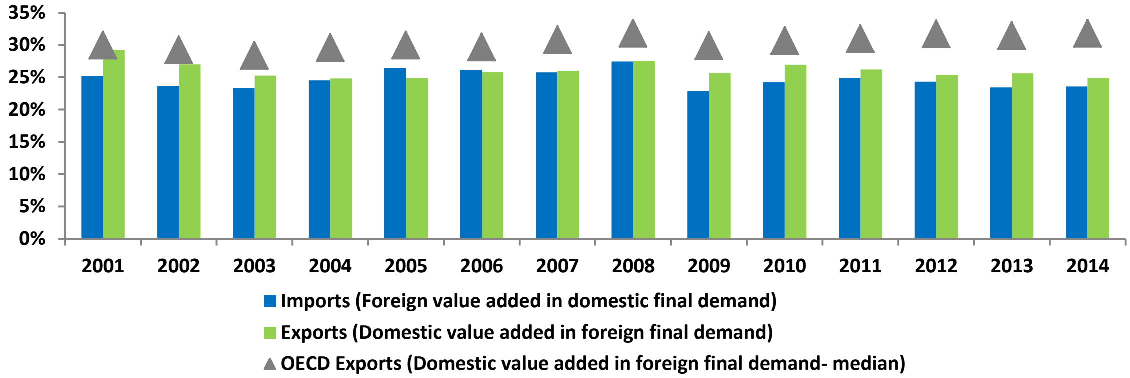
Figure 1. Growth rates of trade and GDP for the OECD and new Zealand, 2001-2016



Source: OECD SNA

Gross exports amounted to USD 49 billion in 2015 (28% of GDP) and gross imports to USD 477 billion (27% of GDP). Gross trade figures, however, overstate the 'real' contribution of trade to the economy. In value added terms, exports contributed 25% of total GDP in 2014, below the OECD median (grey diamond). The contribution of direct and indirect imports to domestic final demand measured 24% in 2014.

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

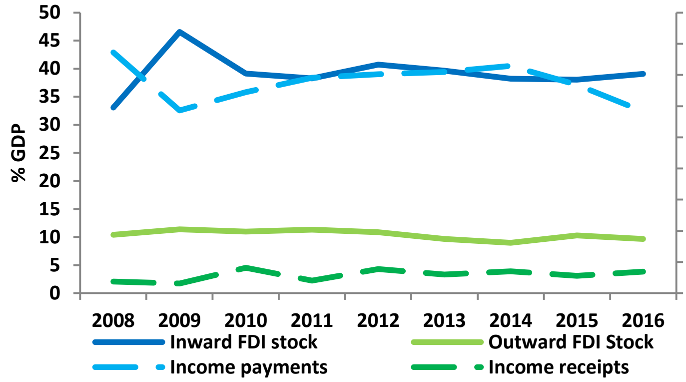


Source: OECD-WTO Trade in Value Added Data

Investment is more inward than outward orientated

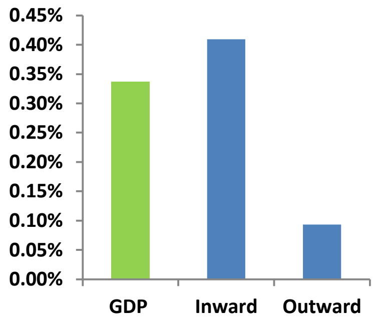
There has not been significant change in the direct investment positions of New Zealand since 2008 relative to GDP. The stock of inward investment was equivalent to almost 40% of GDP while outward FDI stocks were closer to 10%, so that FDI remains inward orientated (Figure 3). In 2015, New Zealand's share of the OECD total inward FDI stock (0.4%) was slightly above its share of GDP (0.3%), but its share in outward stock at 0.09% of the OECD total, was lower than its share of GDP (Figure 4).

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



Source: OECD FDI Statistics (BMD4)

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



Source: OECD FDI Statistics (BMD4)

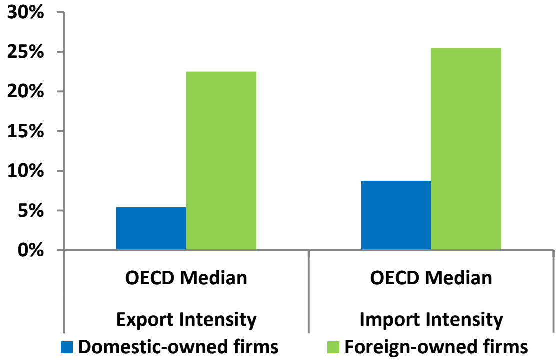
Foreign-owned firms directly sustained 11% of jobs in 2013….

Reflecting the size of inward investment compared to other OECD economies, foreign-owned enterprises accounted for 11% of jobs in the private sector in 2013 in New Zealand.

…and are more 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 typically higher for foreign-owned than domestic firms. These intensities cannot be calculated for New Zealand due to data availability.

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

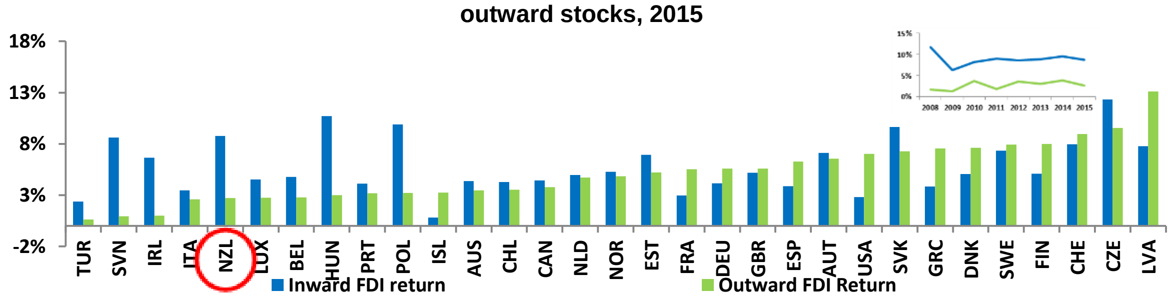


Source: OECD AMNE and Trade by Enterprise Characteristics (TEC) statistics (2011)

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

In 2015, New Zealand received USD 492 million in income from its outward investment, equivalent to 0.4% of GDP. New Zealand's rate of return at 2.7% (green bar) on its outward FDI is at the lower end of OECD economies and below recent values (see chart insert). On the other hand, the return to foreign investors in New Zealand was 8.8% in 2015, at the higher end of OECD countries.

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



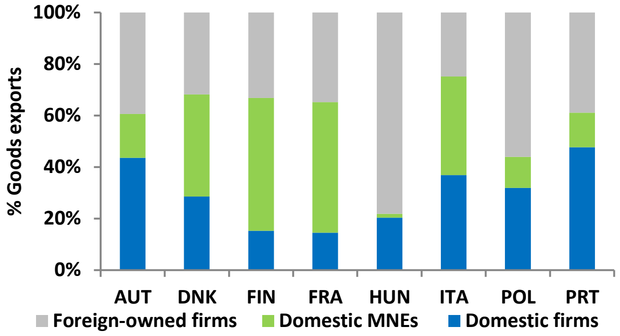
Source: OECD FDI Statistics (BMD4)

…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 others it is foreign-owned firms. In each country with available data, at least half of all goods exports are conducted by MNEs.

But New Zealand's export orientation is low relative to other OECD economies

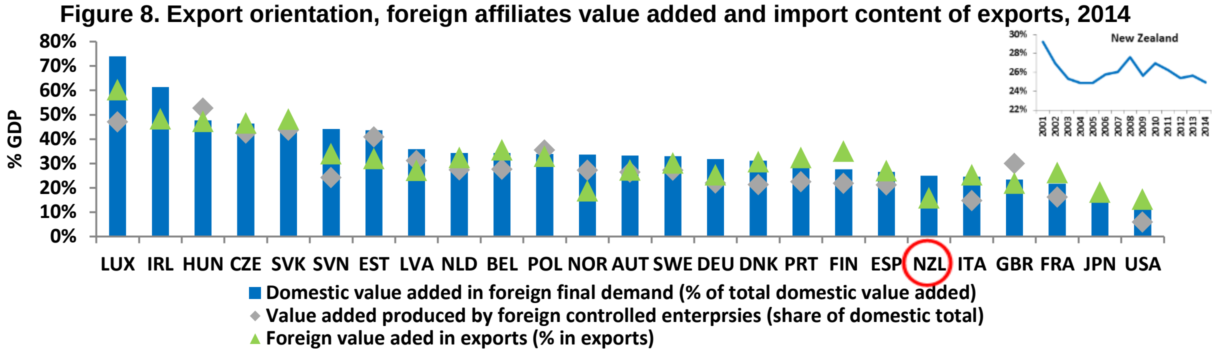
Figure 7. Goods Exports by firm type, the role of MNEs



Source: OECD TEC statistics (2011)

Exports (in value added terms) contribute around 25% of New Zealand's GDP; this is relatively low compared to other OECD economies, but comparable with Finland. It may in part reflect the geographic location, contributing to low GVC integration as measured by the import content of exports (green diamond). However, export orientation has been declining since 2010 (see insert chart).

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

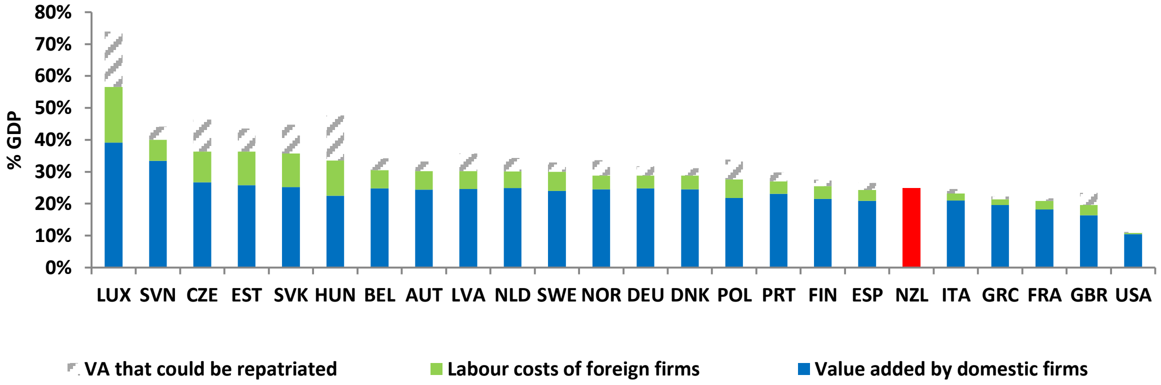


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics

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. The split cannot be calculated for New Zealand due to data availability.

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

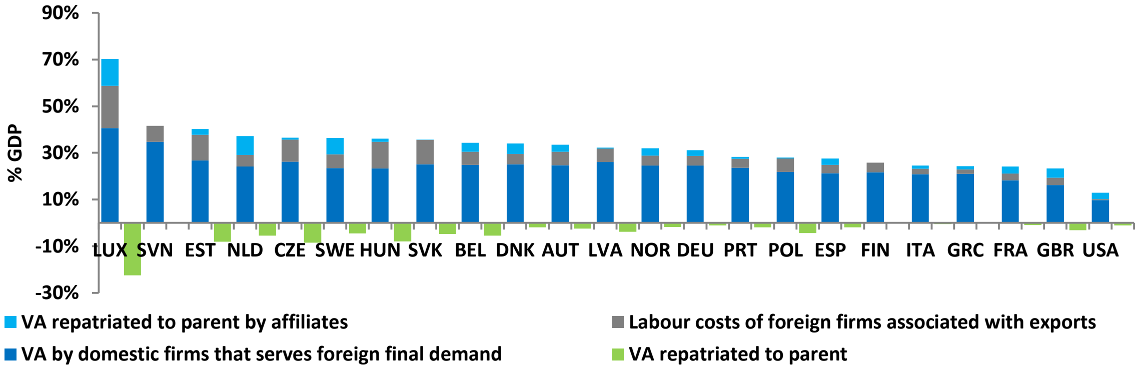


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics.

Taking a broader view by including the income of foreign affiliates can provide a more complete picture of the international orientation of the domestic 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). This broader measure cannot be calculated for New Zealand due to data availability; however, it would likely be lower than the export orientation because New Zealand is a net recipient of inward direct investment.

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

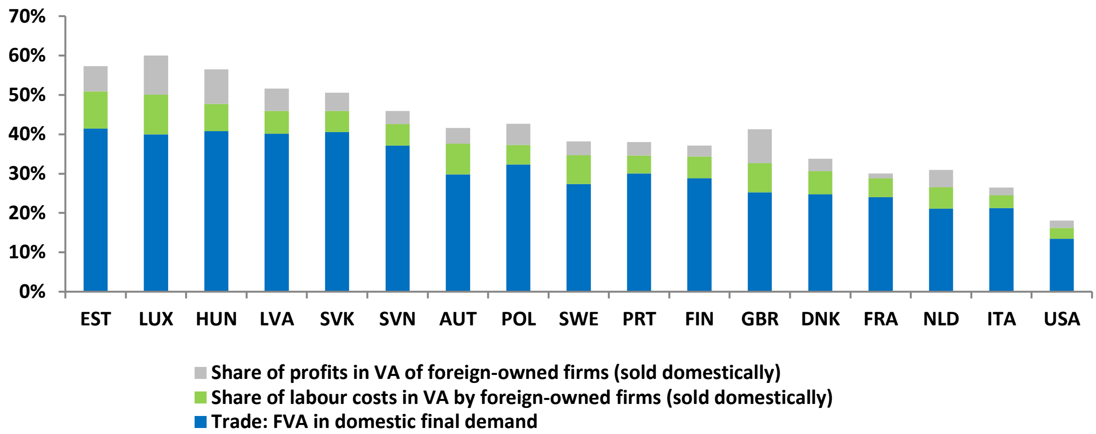


Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD FDI (BMD4) statistics

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

Foreign producers supply products and services for final consumption through trade (foreign value added in domestic final demand) blue bar, and sales by foreign affiliates sold domestically (green and grey bar) (Figure 11). Foreign production can be split between labour costs and profits, the profit component of value added by foreign-owned firms can be repatriated to the parents. Due to limited data availability, the following chart cannot be produced for New Zealand.

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



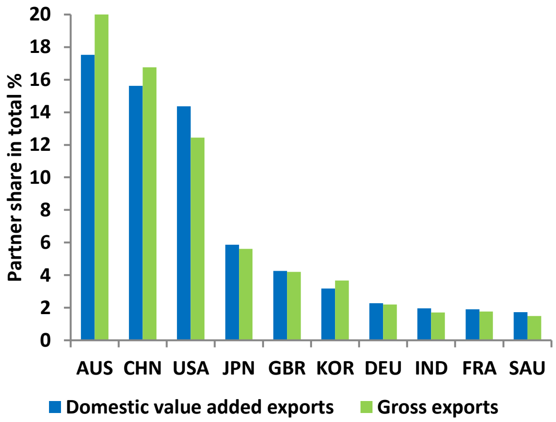
Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD TEC statistics.

Trade and investment by partner country

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

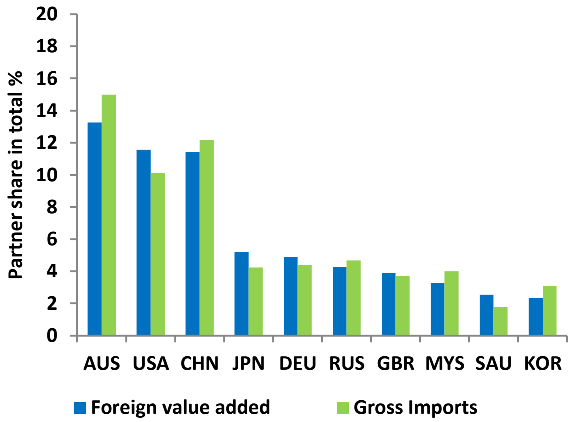
Gross bilateral trade figures can disguise the true nature of trade interdependencies, particularly between final consumers in one country and producers at upstream parts of the value chain. Australia is New Zealand's main trading partner for both imports and exports using either gross or value added data, However, the relative importance of other countries varies for imports once value added data are used. For imports, value added data show that the United States is actually a more important supplier of value added for New Zealand than China; and Japan and Germany are more important than Russia for imports of value added.

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



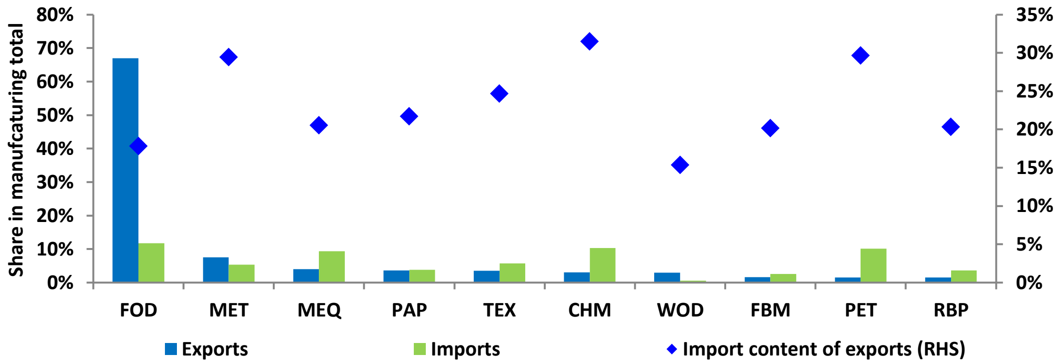
Source: OECD-WTO TiVA Data

Figure 14, supplying the domestic market through trade and investment, cannot be produced for New Zealand due to data availability.

Trade and investment by industry

The top manufacturing exporting industries in New Zealand are food and beverages (FOD) and basic metals (MET). The import content of exports is relatively low for the food and beverages industry but is higher in the basic metals industry. The import content of exports illustrates the role that importing plays in supporting exports and indicates the degree of GVC integration in these industries.

Figure 15. Top exporting manufacturing industries in New Zealand, 2014

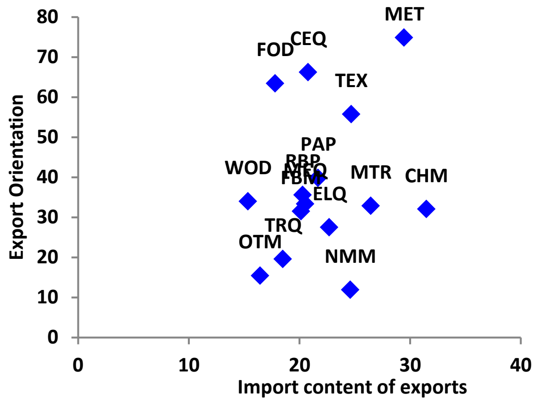


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics See page 10 for a description of industry codes

Exports and imports go hand in hand…

Across many OECD countries 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). Figure 17: export orientation and value added by foreign-owned firms and Figure 18: goods trade by ownership and industry cannot be produced for New Zealand due to data limitations.

Figure 16. Import content of exports and export orientation

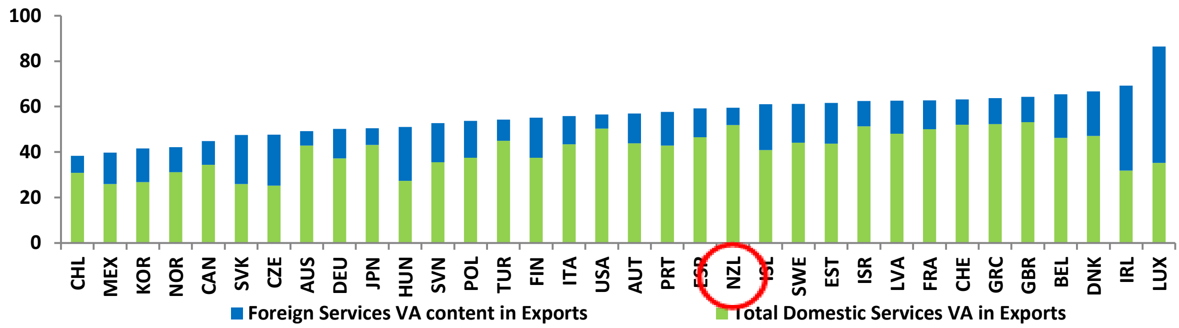


Source: OECD-WTO TiVA Data and OECD AMNE statistics

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 New Zealand's total exports of goods and services was 60% in 2014 (Figure 19), above the OECD median of 57%. Considering the services content of manufactured goods alone, over 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

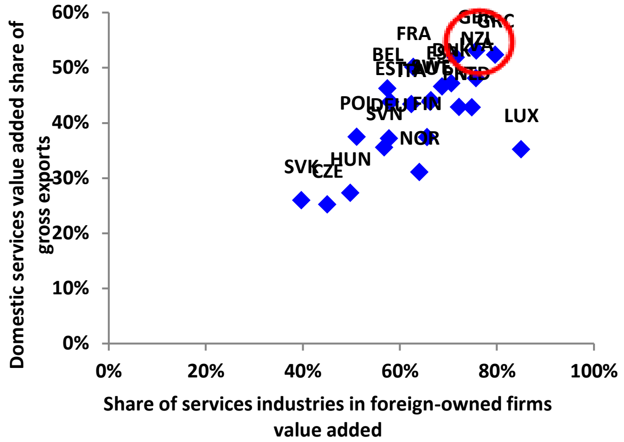


Source: OECD-WTO TiVA Data

…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 New Zealand, 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 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

Annex: Further Data Requirements

To make this note as informative as those of other OECD countries, more detailed data about New Zealand's trade and investment are needed. Primarily, more complete data on foreign-owned firms or inward AMNE statistics at the aggregate, industry and partner country level. Data on the value added by foreign-owned firms, their labour and personnel costs and gross operating surplus would greatly enhance the extent of the analysis that could be completed (Figures 8, 9, 10, 11, 13,16, 17). Secondly, data on trade by enterprise characteristics (TEC) would greatly benefit the analysis, facilitating the calculation of the export intensities of domestic and foreign firms so that Figures 5, 7, 14 and 18 could be produced.

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