

International trade, foreign direct investment and global value chains



2017

MEXICO

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-fifth (20% in 2014) of economic activity (GDP) in Mexico depends on foreign markets, one of the lowest values in the OECD. However, Mexico has a comparatively high integration in GVCs as measured by the import content of exports. Direct investment is inward orientated for Mexico, and, in 2015, inward FDI was equivalent to 44% of GDP. Reflecting this orientation, Mexico accounted for a higher share of inward FDI in the OECD total than its share of GDP, but it accounted for a lower share of total OECD outward FDI than its share in OECD GDP.

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. Although the United States is by far the main partner for exports and imports measured on both gross and value added bases, some differences emerge between gross and value added data for other partners. For exports, the Japanese market is actually more important than the Spanish market once value added data are used.

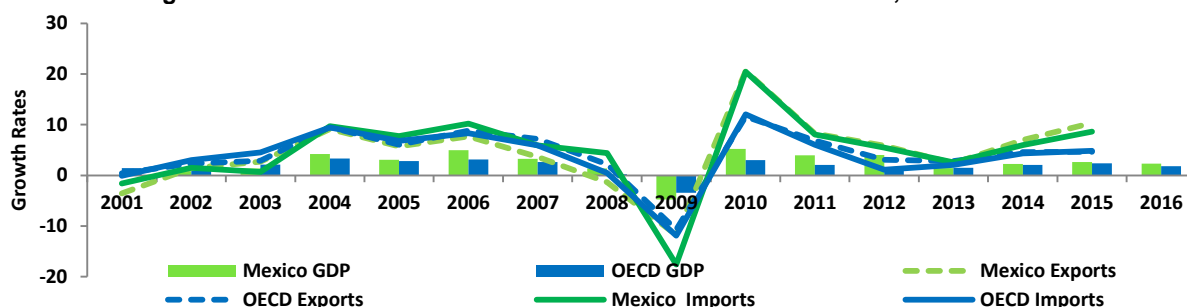
The top manufacturing exporting industries in Mexico are motor vehicles (MTR) and computers and electronics (CEQ). The import content of exports is relatively high across Mexican industries—illustrating the role that importing plays in supporting exports and indicating the degree of GVC integration in these industries. Mexico has one of the lowest services content in its exports at 40%, and almost one-third of the value added of manufacturing exports contains services, which is also at the lower end of OECD countries.

Trade and investment in Mexico

Growth in trade has recovered since the global crisis

Like many OECD economies, Mexican trade contracted significantly at the height of the global crisis and again (to a lesser extent) during the euro crisis. Mexican trade growth broadly tracked the OECD rates in the pre-crisis years; however, Mexican trade recovered faster following the crises. In 2015, Mexican export growth was 10.3% and import growth was 8.6%, both much higher than the OECD rates.

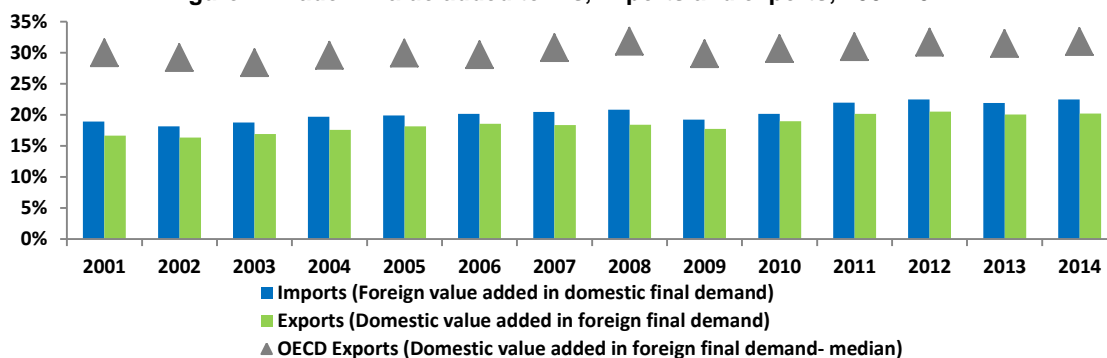
Figure 1. Growth rates of trade and GDP for the OECD and Mexico, 2001-2016



Source: OECD SNA

Gross exports amounted to USD 404 billion in 2016 (37% of GDP), and gross imports to USD 427 billion (40% of GDP). Gross trade figures, however, overstate the ‘real’ contribution of trade to the economy. In value-added terms, exports contributed 20% of total GDP in 2014, one of the highest values recorded for the period, but below the OECD median (grey diamond). The contribution of direct and indirect imports to domestic final demand reached a new high in 2014 of 22%.

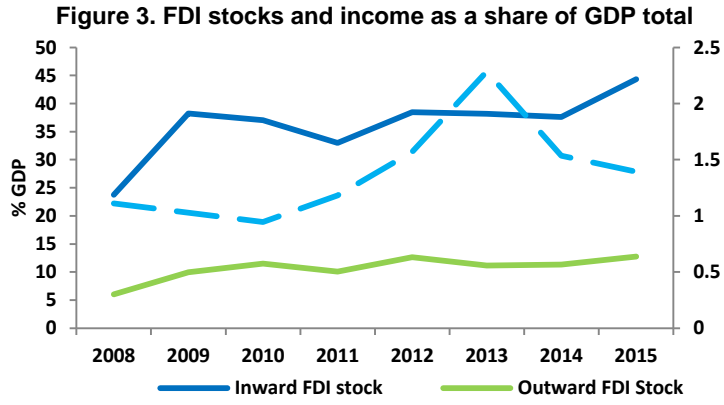
Figure 2. Trade in value added terms, imports and exports, 2001-2014



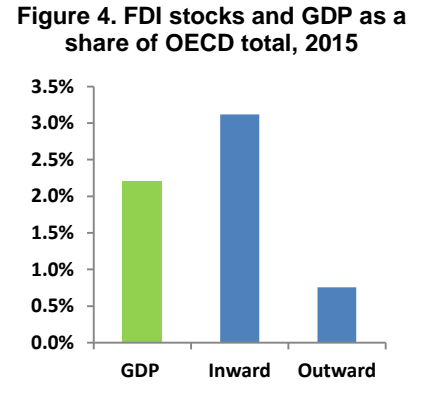
Source: OECD-WTO Trade in Value Added Data

Investment is more inward than outward

Although both outward and inward FDI stocks have been growing relative to GDP since 2008, investment in Mexico was much more substantial, equivalent to 44% of GDP in 2015, and leaving FDI mainly inward orientated (Figure 3). In 2015, Mexico’s share of the OECD total inward FDI stock (3.1%) was higher than its share of GDP (2.2%), but its share in outward stock was 0.8% of the OECD total, lower than its share of GDP (Figure 4).



Source: OECD FDI Statistics (BMD4)

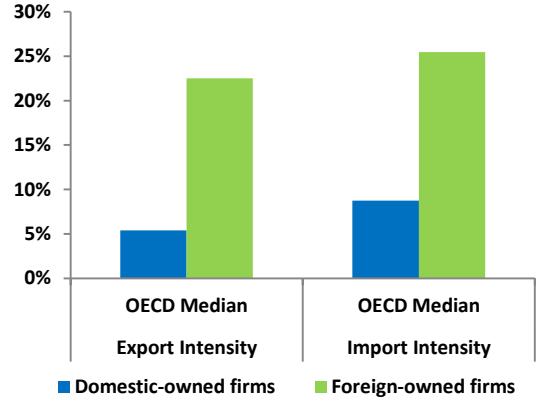


Source: OECD FDI Statistics (BMD4)

...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 can't be produced for Mexico due to data availability but it is likely that foreign-owned firms in Mexico would also be more trade intensive than their domestic counterparts.

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

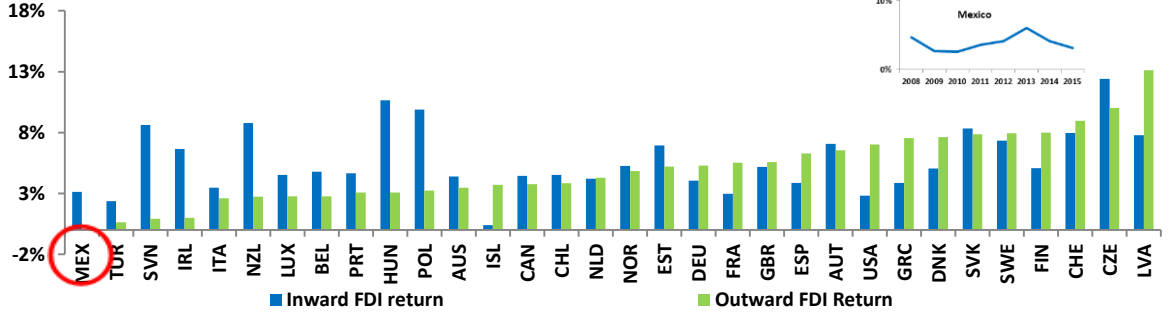


Source: OECD AMNE and Trade by Enterprise Characteristics (TEC) statistics (2011)

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

In 2015, the rate of return to foreign investors in Mexico was 3.1%; this is below the OECD median and lower than recent years (see chart insert). The rate of return on Mexican direct investment overseas is not reported due to data availability.

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

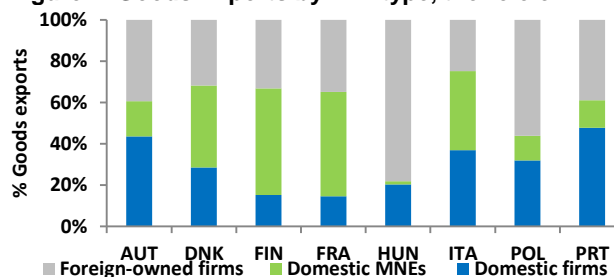


Source: OECD FDI Statistics (BMD4)

...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.

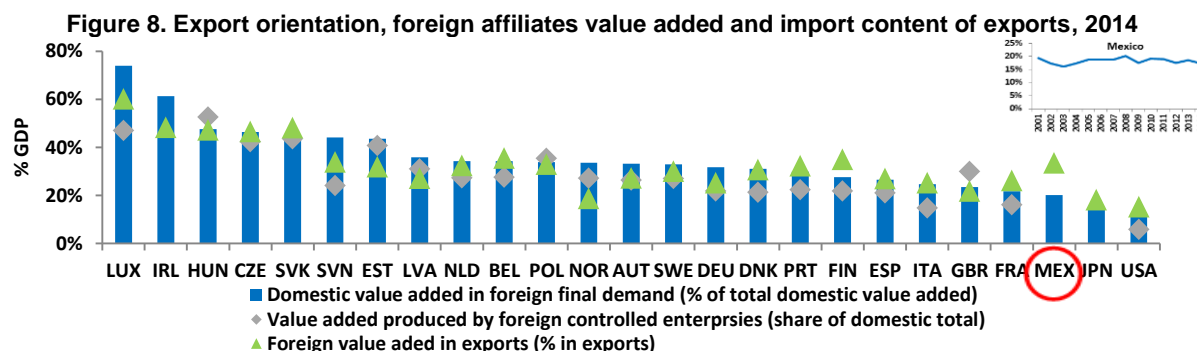
Figure 7. Goods Exports by firm type, the role of MNEs



Source: OECD TEC statistics (2011)

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

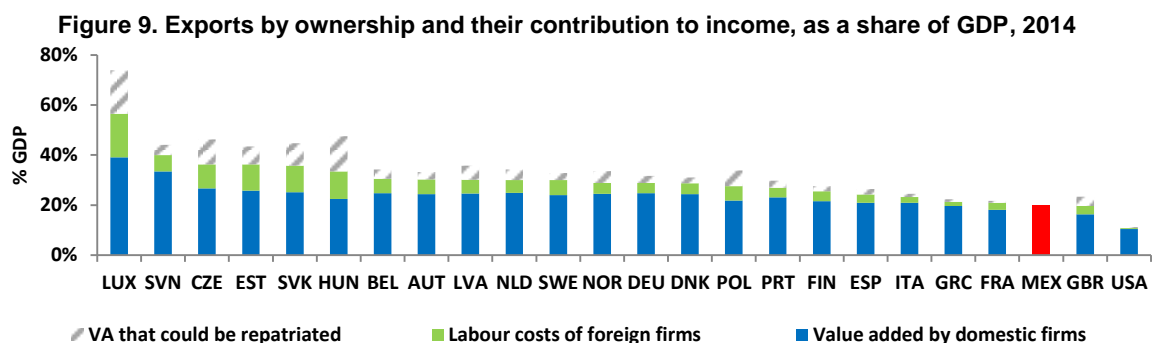
Exports (in value added terms) contribute around 20% of Mexican GDP; this is low compared to other OECD economies, but the import content of exports (green triangle), a measure of GVC integration, is relatively high. Mexican export orientation has not changed significantly in recent years (see insert chart).



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...

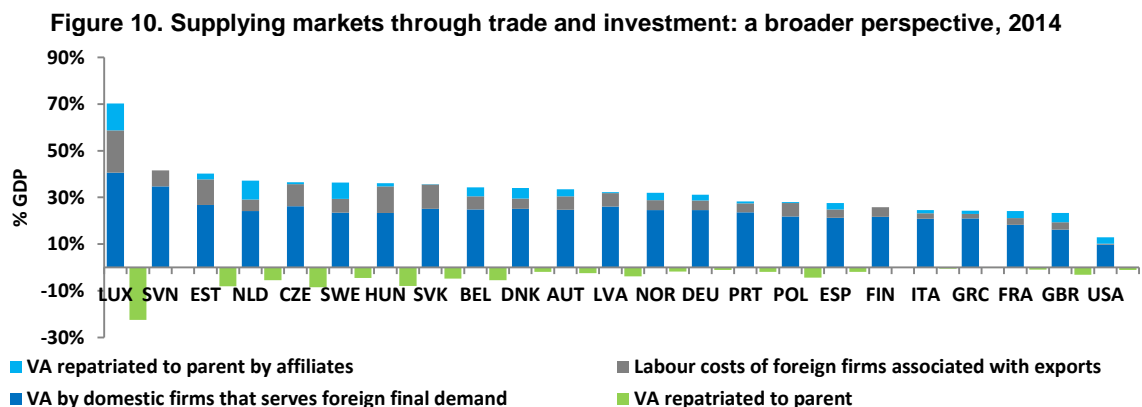
Gross export figures overstate the real economic impacts of trade to the exporting economy, but TiVA estimates can also overstate these impacts as the profits earned by foreign-owned firms through exports are repatriated if they are not reinvested. Figure 9 illustrates the importance of these flows across 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 Mexico due to data availability.



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

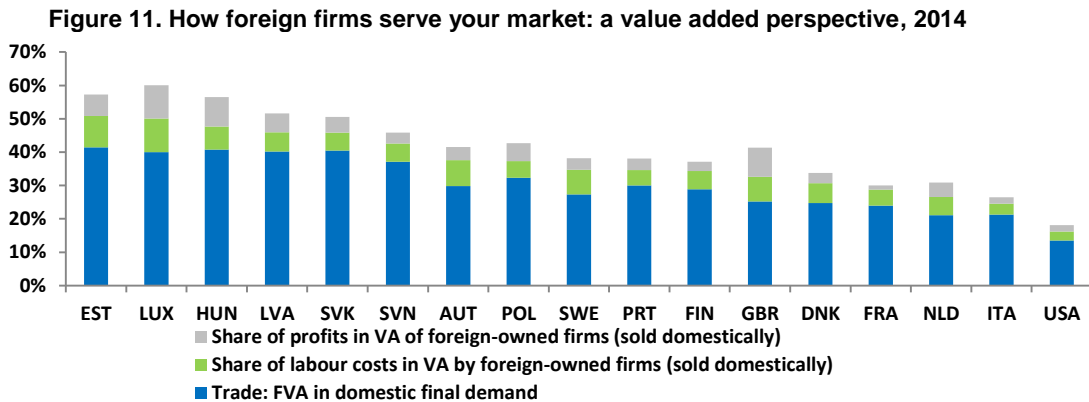
Firms serve foreign markets by exporting or by selling through their foreign affiliates. Figure 10 takes a broader view of an economy’s international orientation by taking account of both trade and investment. The chart begins with the domestic value added in exports that remains in the economy – exports 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 Mexico due to data availability; however, it would likely be lower because Mexico is a net inward FDI recipient.



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 reproduced for Mexico, but it is likely that foreign firms serve the Mexican market more through trade than through investment as in other economies.



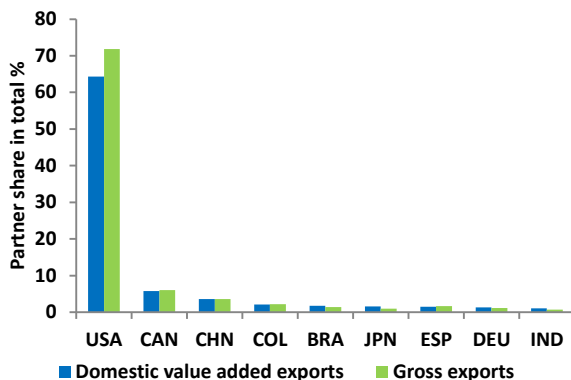
Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD TEC statistics

Trade and investment by partner country

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

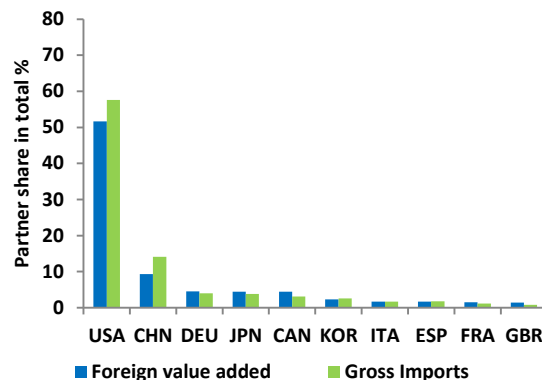
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Figure 12. Exports: gross and value added terms, by partner country, 2014



Source: OECD-WTO TiVA Data

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



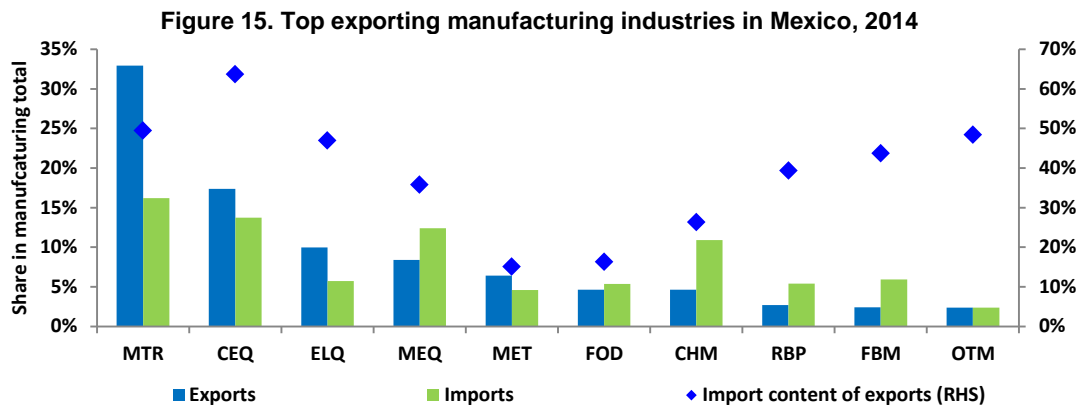
Source: OECD-WTO TiVA Data

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

Trade and investment by industry

The top manufacturing exporting industries in Mexico are motor vehicles (MTR) and computers and electronics (CEQ). The import content of exports is relatively high across Mexican industries—illustrating

the role that importing plays in supporting exports and indicating the degree of GVC integration in these industries.

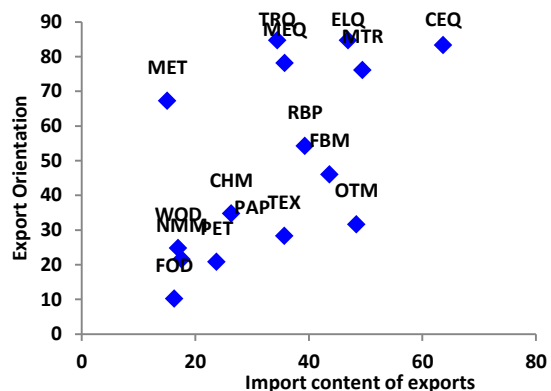


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics. See page 9 for a description of industry codes.

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). Figure 17, export orientation and value added by foreign-owned firms, and Figure 18, goods trade by ownership and industry, cannot be produced for Mexico due to data limitations.

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

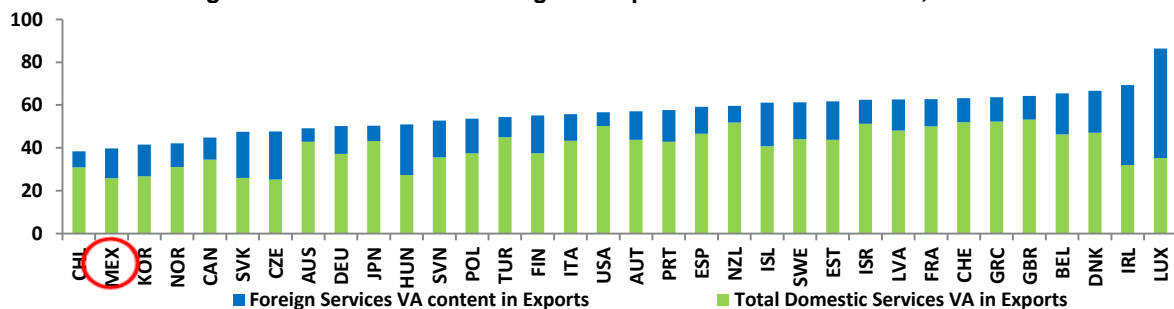


Source: OECD-WTO TiVA Data and OECD AMNE statistics

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 Mexico's total exports of goods and services was 40% in 2014 (Figure 19), the second lowest in the OECD. Considering the services content of manufactured goods alone, nearly one-third of manufacturing exports reflects services value added, below the OECD average of 36%.

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

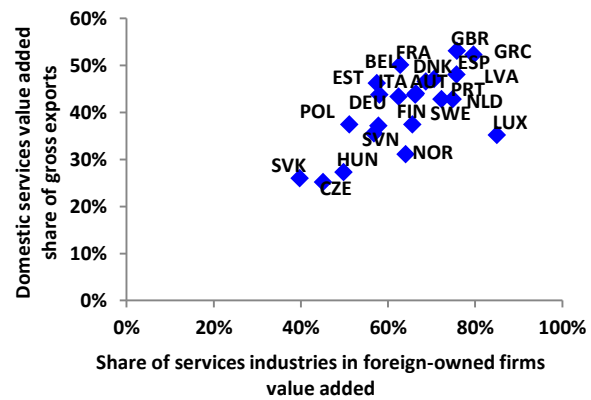


Source: OECD-WTO TiVA Data

...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. This data point cannot be produced for Mexico due to data availability.

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 Mexican 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 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	