

International trade, foreign direct investment and global value chains



2017

BELGIUM

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-third (34% in 2014) of economic activity (GDP) in Belgium depends on foreign markets, around the same as in the Netherlands and Austria. Belgium's outward investment (equivalent to 95% of GDP in 2015) was almost the same size as its inward investment (98%). Under a broader notion of international orientation, which captures the impact on national income of exports and sales through foreign affiliates, Belgium's international orientation doesn't change, reflecting the balanced nature of its inward and outward investment.

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 import relationship with the United States; value added figures reveal that it is a more important partner to Belgium than Germany and the United Kingdom which is not apparent from the gross trade data.

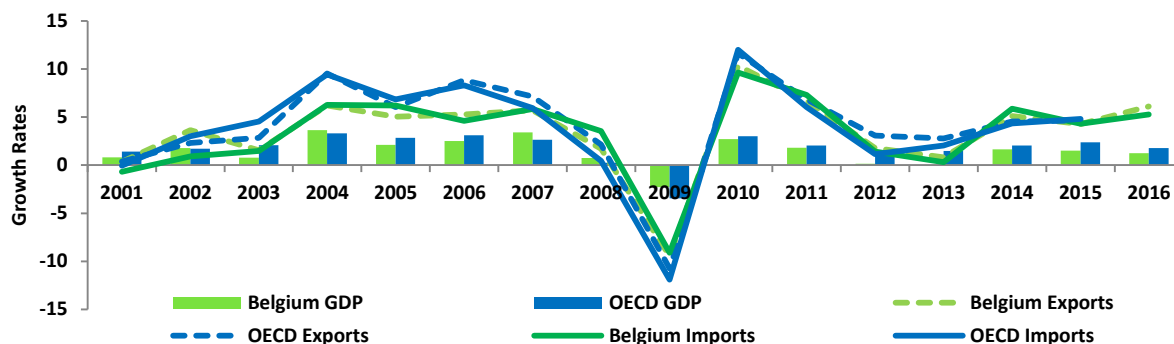
The top manufacturing export industries in Belgium are chemicals and chemical products (CHM), food products (FOD) and basic metals (MET). The chemicals industry has a comparatively low share of value added by foreign-owned firms reflecting the strength of the domestic industry, while the motor vehicles industry has a high export orientation and value added by foreign-owned firms, illustrating GVC participation through inward investment. Belgium has one of the highest services content in its exports, which is correlated with service industries accounting for a high share of the total value added by foreign-owned firms.

Trade and investment in Belgium

Growth in trade has recovered since the global and euro crises

Like many European economies, Belgian trade contracted significantly at the height of the global crisis and again during the euro crisis. Belgian trade growth was below the OECD average in the pre-crisis years, but has broadly tracked the OECD rates in the post-crisis years. Unlike many OECD countries, Belgian export growth increased in 2016, to 6.1%.

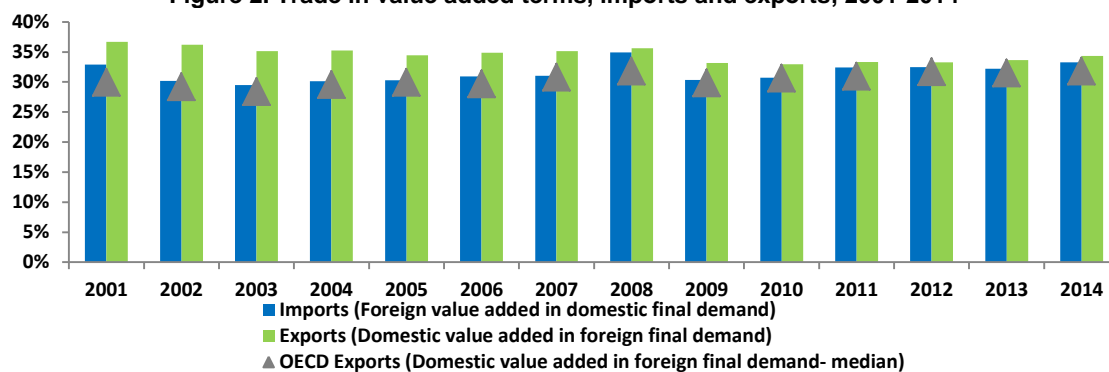
Figure 1. Growth rates of trade and GDP for the OECD and Belgium, 2001-2016



Source: OECD SNA

Gross exports amounted to USD 396 billion in 2016, (95% of GDP), and gross imports to USD 380 billion, (91% of GDP). Gross trade figures, however, overstate the ‘real’ contribution of trade to the economy. In value-added terms, exports contributed 34% of total GDP in 2014, slightly below the pre-crisis high but in line with the OECD median (grey diamond). The contribution of direct and indirect imports to domestic final demand reached a new high in 2014 of 33%.

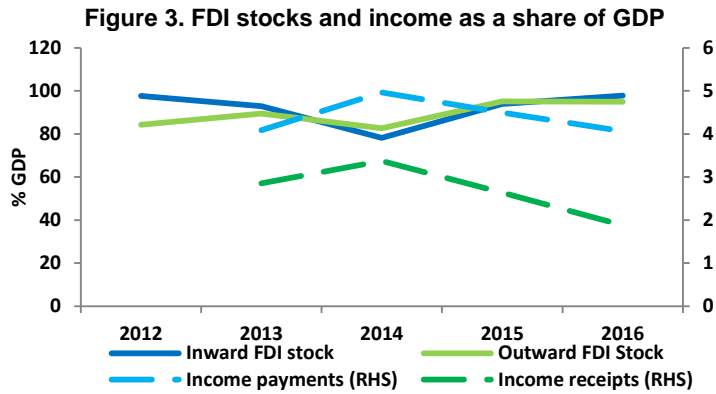
Figure 2. Trade in value added terms, imports and exports, 2001-2014



Source: OECD-WTO Trade in Value Added Data

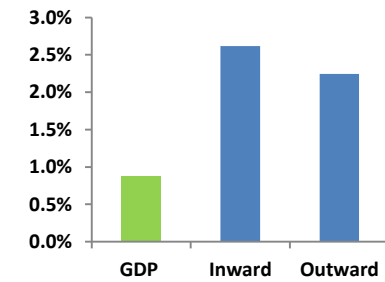
Investment is balanced between inward and outward

Although in 2008 Belgian FDI was more inward orientated, the series have converged since so that in 2016 outward FDI was equivalent to 95% of GDP and inward at 98% (Figure 3). In 2015, Belgium’s share of the OECD total inward FDI stock (2.6%) was almost three times its share of GDP (0.9%), and its share in outward stock was 2.2% of the OECD total, also substantially above its share of GDP (Figure 4).



Source: OECD FDI Statistics (BMD4)

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



Source: OECD FDI Statistics (BMD4)

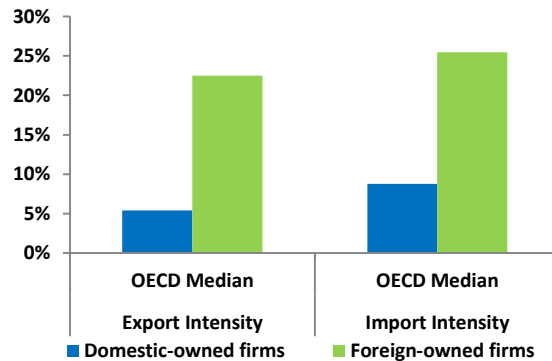
Foreign-owned firms directly sustained 17% of jobs in the private sector in 2013....

Despite the relatively large size of inward investment compared to other OECD economies, foreign-owned enterprises accounted for 17% of jobs in the private sector in 2013 and 28% of private sector value added produced in Belgium, excluding the agriculture and finance sectors.

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

On average, foreign-owned firms in the OECD are more 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. Although data are not available for Belgium, it is likely that foreign-owned firms in Belgium would also be more trade intensive than domestic firms.

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

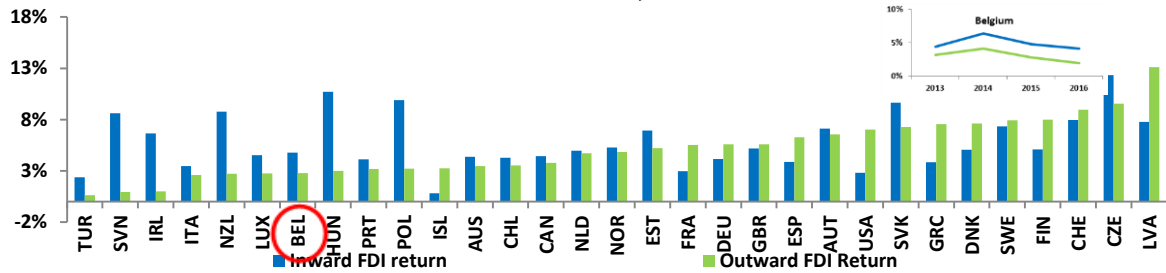


Source: OECD AMNE and Trade by Enterprise Characteristics (TEC) statistics (2011)

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

In 2015, Belgium received USD 12 billion in income from its outward investment, equivalent to approximately 2% of GDP. Belgian's rate of return at 2.8% (green bar) on its outward FDI is below the OECD median, and below the rate of 4% in 2014 (see chart insert). On the other hand, the return to foreign investors in Belgium was 4.8% in 2015, towards the middle of OECD countries.

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

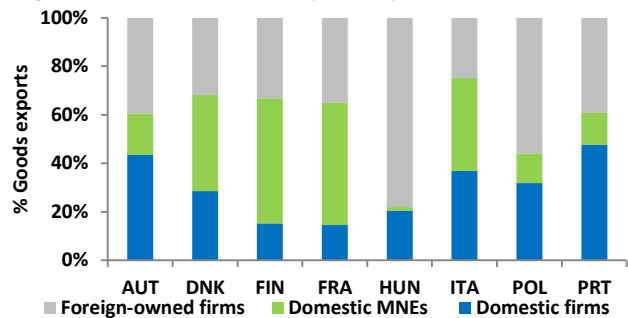


Source: OECD FDI Statistics (BMD4)

...or via exports

In some European economies, parent MNEs play a substantial role in GVC integration. Goods exports and imports are by mainly by these parent MNEs, while for other economies, foreign-owned firms offer a channel for GVC participation. This breakdown cannot be made for Belgium due to data availability.

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

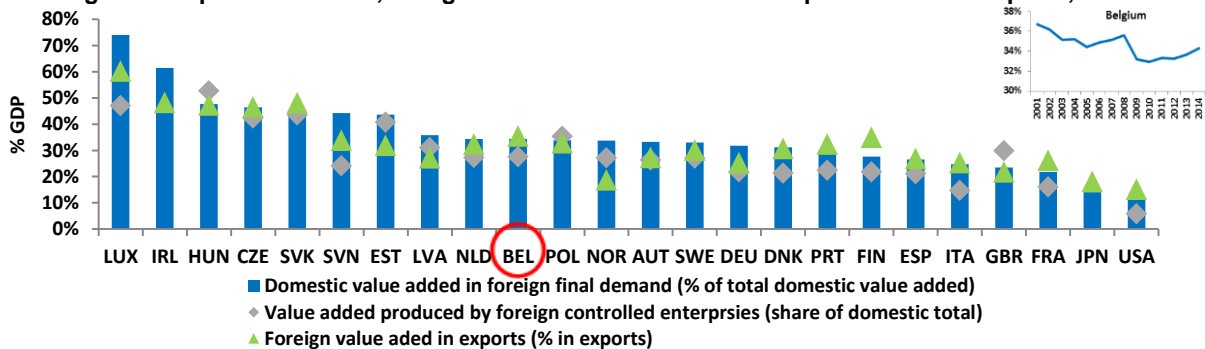


Source: OECD TEC statistics (2011)

Belgium's export orientation is comparable to similarly sized economies

Exports (in value added terms) contribute around 34% of Belgian GDP, this is just above the OECD median and comparable with Austria and the Netherlands. This export orientation is consistent with the inward investment contributing to Belgium's integration in GVCs as measured by its import content of exports. However, export orientation is recovering slowly since the crisis and is still below the 2001 peak.

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

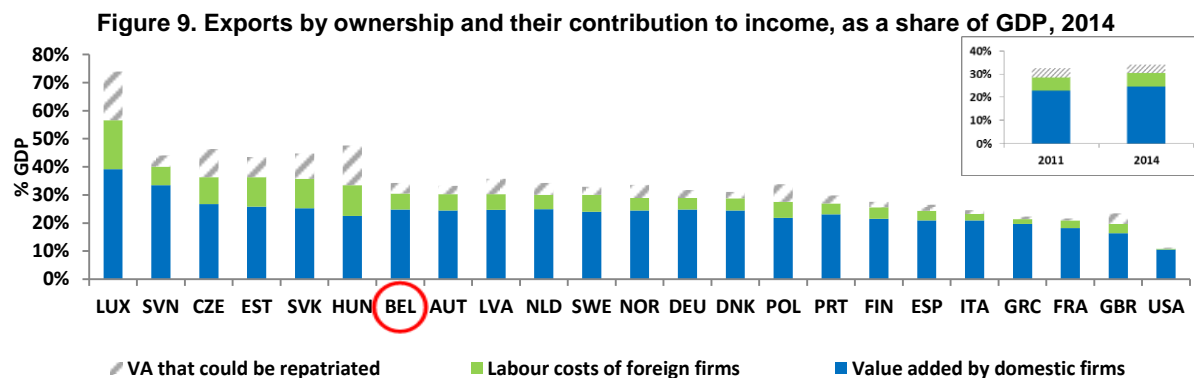


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics

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.

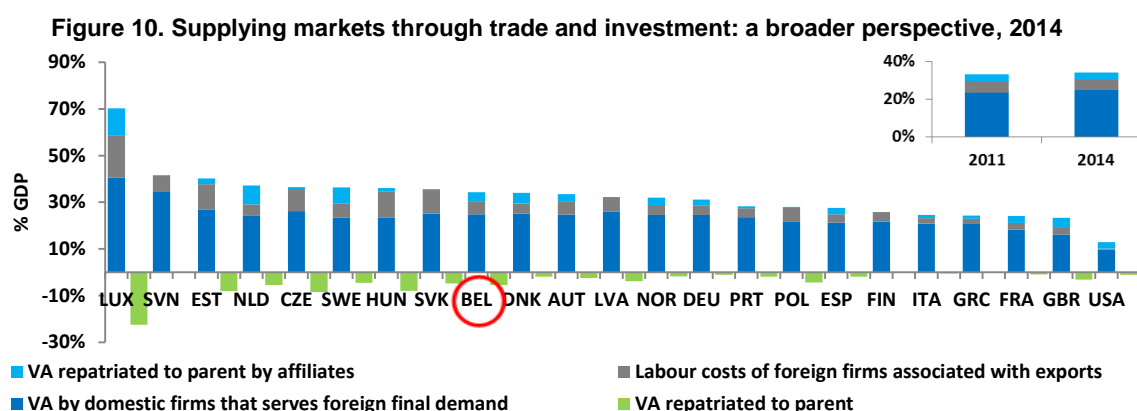
Excluding these profits of foreign-owned firms, Belgian exports contain 30% of value-added that remains in the economy. So, only 11% of Belgium's exported domestic value added represents profits by foreign-owned firms. The share of value added that remains in the economy increased since 2008, (see chart 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 Belgian economy

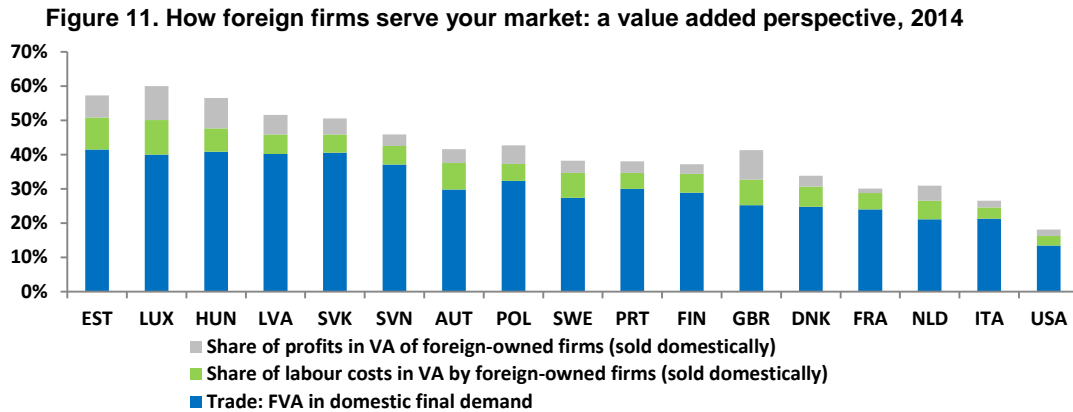
Firms serve foreign markets by exporting or by selling through their foreign affiliates. Figure 10 takes a broader view of an economy's international orientation by taking account of both trade and investment. The chart begins with the domestic value added in exports that remains in the economy – exports 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 Belgium, this broader measure (34% of GDP) is approximately the same as the export orientation measure from TiVA (34% of GDP) because Belgian MNEs receive as much FDI income receipts as foreign affiliates in Belgium pay their parents. Belgium remains just above the median of OECD countries using this measure, and this has increased since 2014 largely due to an increase in exports of domestic value added by domestic firms (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 Belgian 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 Belgium.



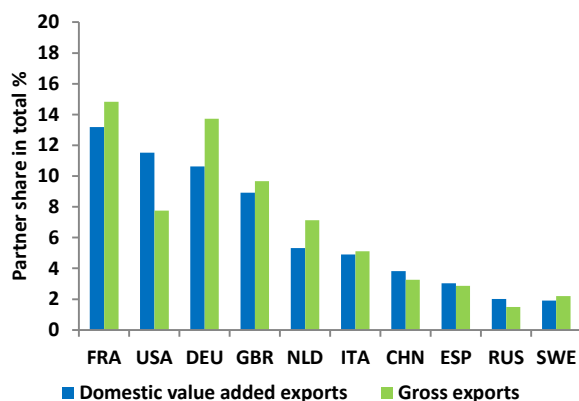
Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD TEC statistics

Trade and investment by partner country

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

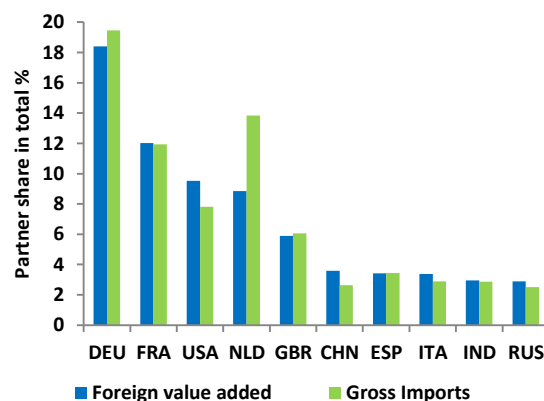
Gross bilateral trade figures can disguise the true nature of trade interdependencies, particularly between final consumers in one country and producers at upstream parts of the value chain. This is evident for the bilateral relationship with the United States; unlike the gross data, value added figures reveal that it is a more important partner to Belgium than Germany and the United Kingdom.

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



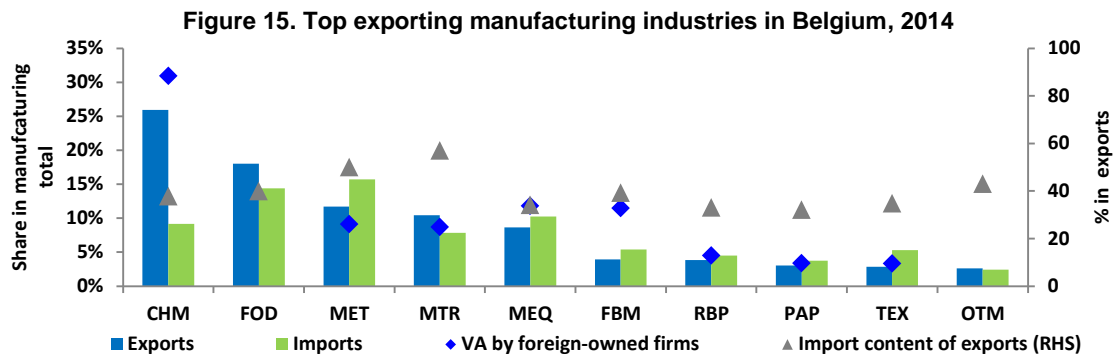
Source: OECD-WTO TiVA Data

Figure 14 cannot be produced due to a lack of data on the trade by enterprise characteristics required to create the export intensity of foreign-owned firms.

Trade and investment by industry

Both inward and outward investment helps shape Belgium's GVC integration

The top manufacturing exporting industries in Belgium are chemicals and chemical products (CHM), food products (FOD) and basic metals (MET). 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 the top Belgian exporting industries, partly reflecting the comparative advantages of Belgium's domestic firms.

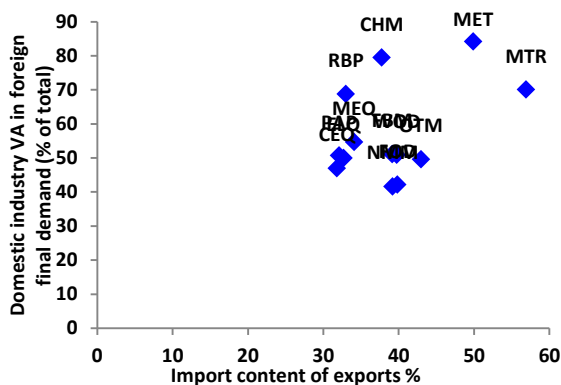


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics. See page 10 for a description of industry codes.

Exports and imports go hand in hand...

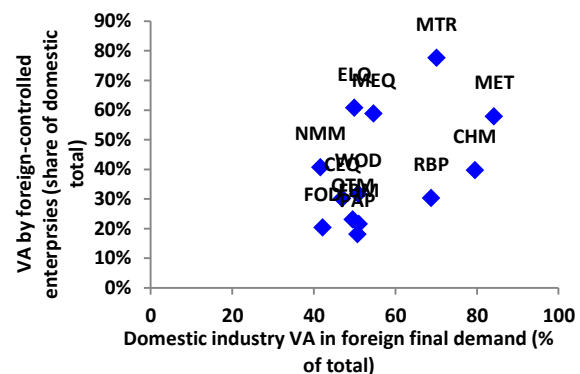
Across most industries there is a strong correlation between higher import content of exports and a higher share of their domestic value-added being exported (export orientation) illustrating the strong complementarity of exports and imports.

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

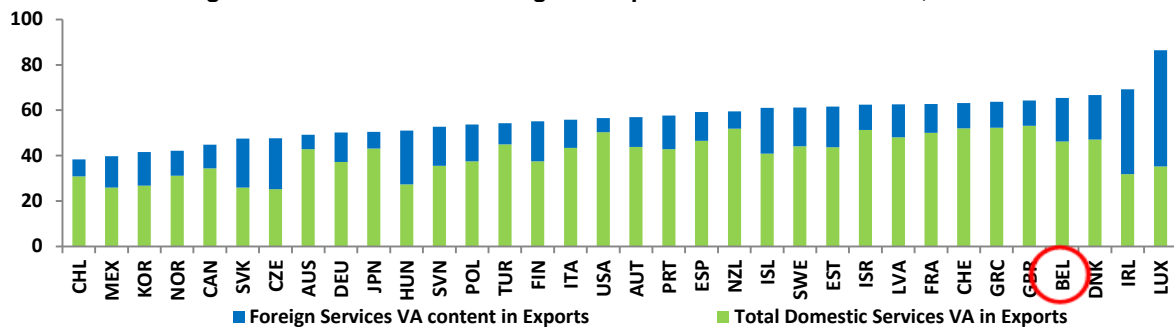
At the same time, strong complementarities can exist between inward investment and import content of exports (Figure 17). For Belgium, the industries where foreign-owned firms produce more of the value

added are also those that are more export orientated. Figure 18, gross trade in goods by enterprise and industry, cannot be produced for Belgium 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 Belgium's total exports of goods and services was 65% in 2014 (Figure 19), significantly above the OECD median of 57%. Considering the services content of manufactured goods alone, nearly half of the total value of Belgium's manufacturing exports reflects services value added, significantly above the OECD average of 36%.

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

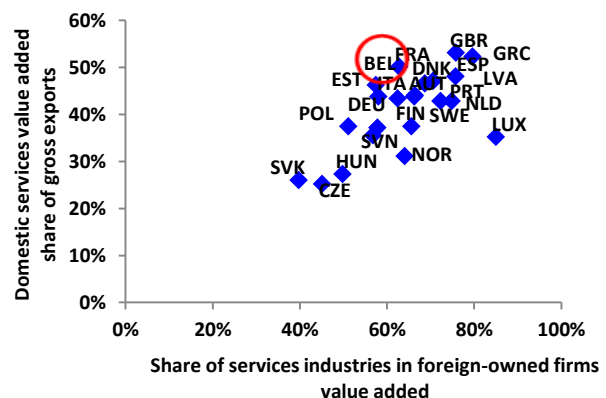


Source: OECD-WTO TiVA Data

...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 Belgium, 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 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 for other OECD countries, more detailed data about Belgian trade are needed. The main data gap is information on trade by enterprise characteristics. Data on trade by firm type, domestic non-MNE, domestic MNE or foreign-owned firms enables the calculation of the export intensity of foreign owned firms. These data would enable the production of Figures 5, 7, 11, 14 and 18 for Belgium.

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	