International trade, foreign direct investment and global value chains

2017

AUSTRIA

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 Austria depends on foreign markets, about the same as in Belgium and Denmark. Both foreign-owned firms and domestic non-MNEs play a significant role in driving exports (around 40% each), one of the highest values for domestic non-MNEs. Austria’s outward investment (equal to over 50% of GDP in 2015) was higher than inward investment (42%). Under a broader notion of international orientation that captures the impact on national income of exports and sales through foreign affiliates, Austria’s international orientation remains equivalent to one third of GDP in 2014.

Considering both trade and investment through this broader perspective can also shed new light on Austria's most important partner countries. Although Germany remains the most important partner considering both trade and investment, the United States is a more important partner than Italy because of its more extensive investment links with Austria. Similarly, Switzerland passes China.

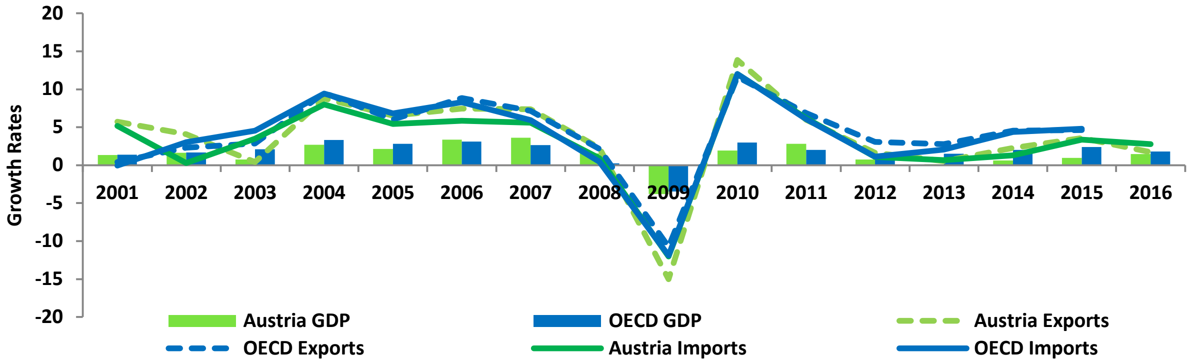
The top manufacturing exporting industries in Austria are machinery and equipment (MEQ), motor vehicles (MTR) and basic metals (MET). In the motor vehicles industry, inward investment plays an important role in GVC integration, with foreign owned firms accounting for 80% of total value added, and almost 80% of the industry value added meeting foreign final demand. The basic metals industry has low value added by foreign owned firms, but high export orientation reflecting the strength of the domestic industry. These two industries illustrate how Austria participates in GVCs through both inward and outward investment. The services content in Austrian exports is 57%, the OECD median, and its share of its inward investment going to the services sector is also the OECD median.

Trade and investment in Austria

Growth in Austrian trade has recovered somewhat since the global and euro crises

Like many European economies, Austrian trade contracted significantly at the height of the global crisis and again during the euro crisis. Austrian trade growth was broadly in sync with the OECD average in the pre-crisis years. Since the euro crisis, growth in Austrian trade has been below the OECD rates, and, in 2016, export growth fell to 1.7% while import growth slowed to 2.8%.

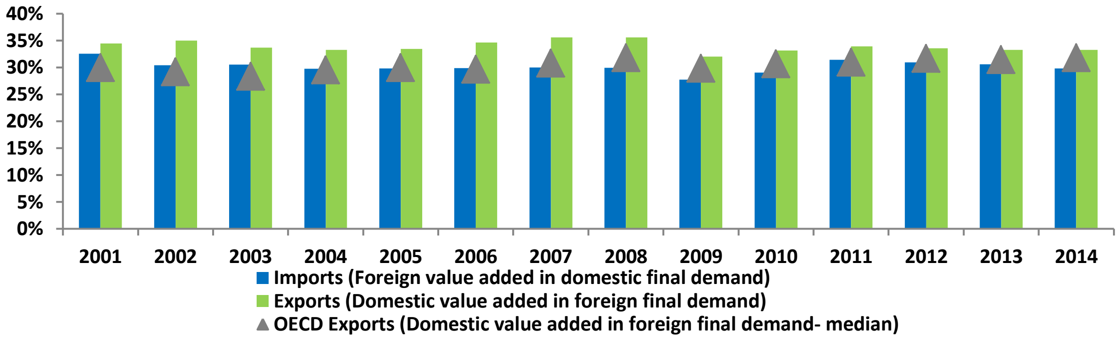
Figure 1. Growth rates of trade and GDP for the OECD and Austria, 2001-2016



Source: OECD SNA

Gross exports amounted to USD 202 billion in 2016 (59% of GDP), and gross imports to USD 187 billion (54% 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 the pre-crisis high, but above the OECD median value (grey diamond). The contribution of direct and indirect imports to domestic final demand was 30% in 2014, slightly below the high of 31% recorded in 2011.

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

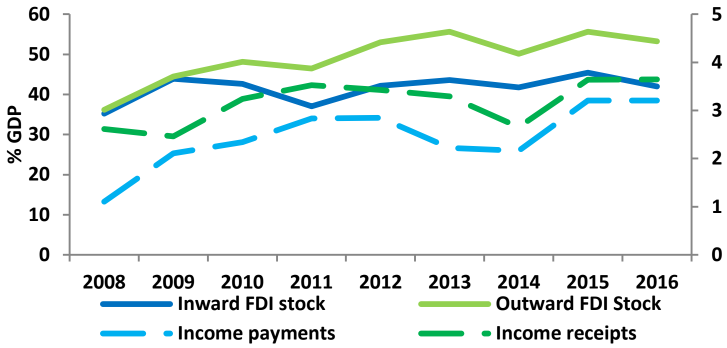


Source: OECD-WTO Trade in Value Added Data

Investment is more outward than inward

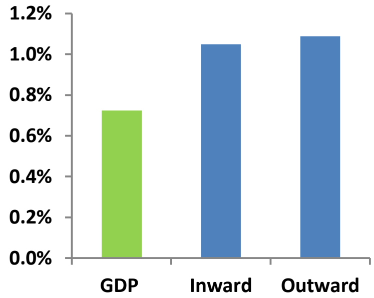
Although both outward and inward FDI stocks have been growing relative to GDP since 2008, outward has grown faster, resulting in FDI becoming outward orientated (Figure 3). In 2015, Austria's share of the OECD total inward FDI stock (1.0%) and its share in outward stock (1.1%) were both above its share of GDP (0.7%) (Figure 4).

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



Source: OECD FDI Statistics (BMD4)

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



Source: OECD FDI Statistics (BMD4)

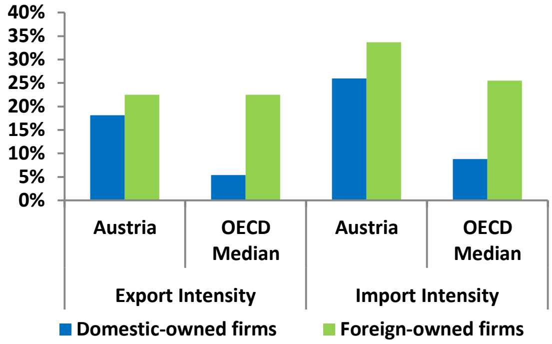
Inward investment directly sustained 19% of jobs in the private sector in 2013….

Reflecting the size of inward investment, foreign-owned enterprises accounted for 19% of jobs in the private sector in 2013 and 25% of private sector value added produced in Austria, excluding the agriculture and finance sectors.

…and are more export intensive than domestically owned firms

On average, foreign-owned firms in Austria are more export intensive (share of exports in turnover) than domestically owned firms, and their export intensity is the OECD median. The import intensity of foreign-owned firms (share of imports in purchases) is higher than the OECD median. Domestically-owned Austrian firms are significantly more import intensive than the OECD median.

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

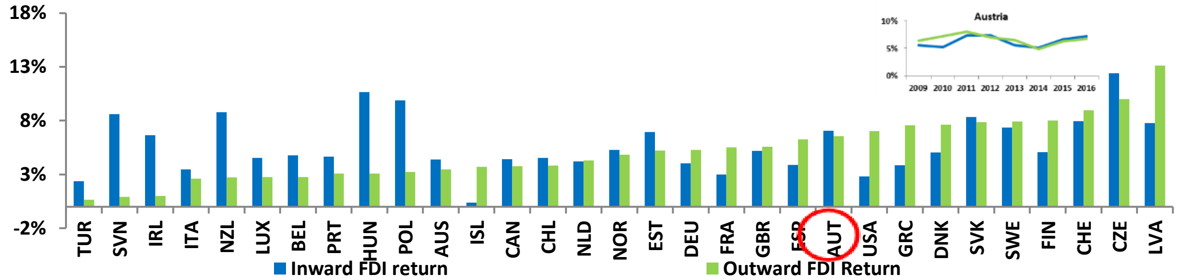


Source: OECD AMNE and Trade by Enterprise Characteristics (TEC) statistics (2011)

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

In 2016, Austria received USD 14 billion in income from its outward investment, equivalent to approximately 3.6% of GDP. Austria's rate of return at 6.5% (green bar) on its outward FDI is above the OECD median, but is lower than it was in 2011 (see chart insert). On the other hand, the return to foreign investors in Austria was 7.1% in 2015, at the upper end of OECD countries.

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



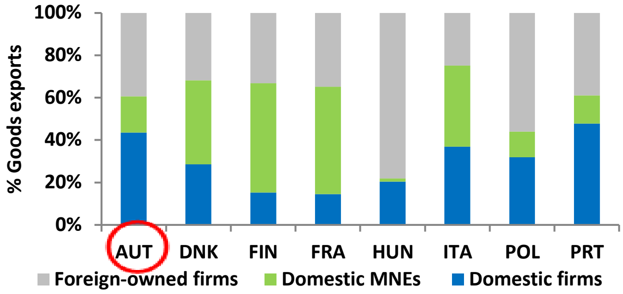
Source: OECD FDI Statistics (BMD4)

…and via exports

Relative to other European economies, Austrian non-MNEs play a substantial role in exports. Foreign-owned firms also offer a channel for GVC integration, while domestic MNEs play a smaller role than in some other European economies.

But Austria's export orientation is comparable to similar sized economies

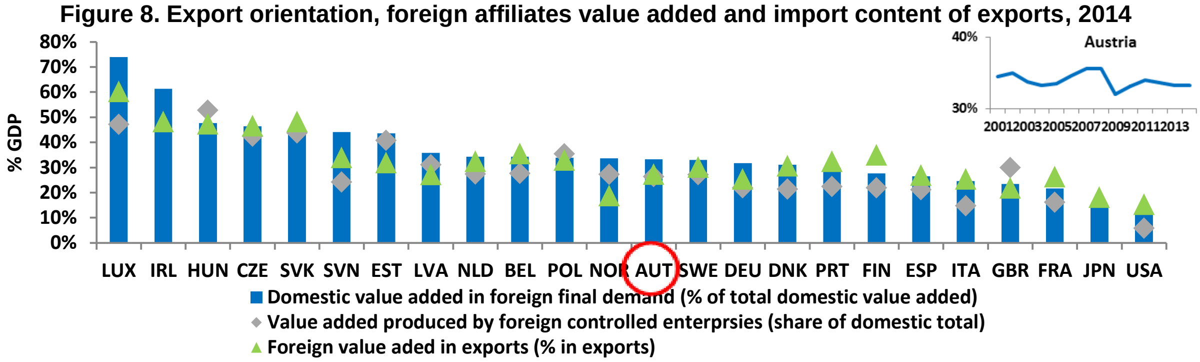
Figure 7. Goods Exports by firm type, the role of Austrian MNEs



Source: OECD TEC statistics (2011)

Exports (in value added terms) contribute around 33% of Austrian GDP; this is fractionally below the OECD median and comparable with other European economies. The level of inward investment in Austria and the export intensity of foreign-owned firms (compared to foreign affiliates operating in other countries) reflect its integration in GVCs as measured by the import content of exports. However, export orientation has not recovered to pre-crisis levels (see chart insert).

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

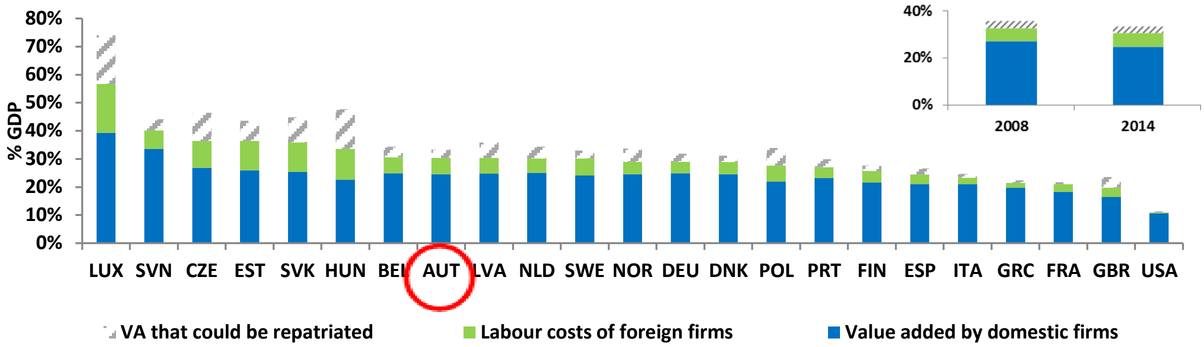


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics

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, Austrian exports contain 30% of value-added that remains in the economy. So, 9% of Austria's exported domestic value added represents profits by foreign-owned firms, in line with the levels of inward investment and their exporting behaviour. The share of value added that remains in the economy has decreased since 2008, (see chart insert).

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

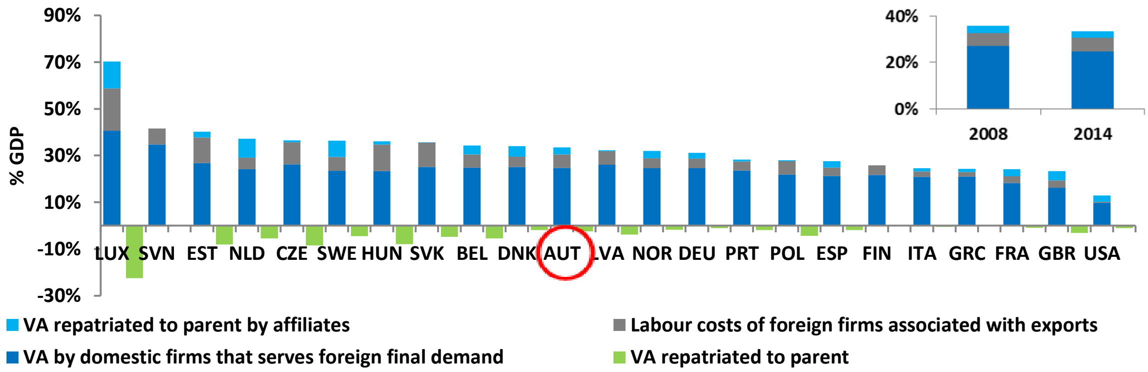


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics

Taking a broader view by including the income of foreign affiliates can provide a more complete picture of the international orientation of the Austrian 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 Austria this broader measure (33%) is approximately the same as the export orientation measure from TiVA (33%), reflecting balance in the profits received from Austrian affiliates and the profits repatriated by foreign affiliates in Austria. Austria remains at the middle of OECD countries using this measure; however, this measure of international orientation has decreased since 2008, mainly due to reduced exports of value added by domestic firms (see chart insert).

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

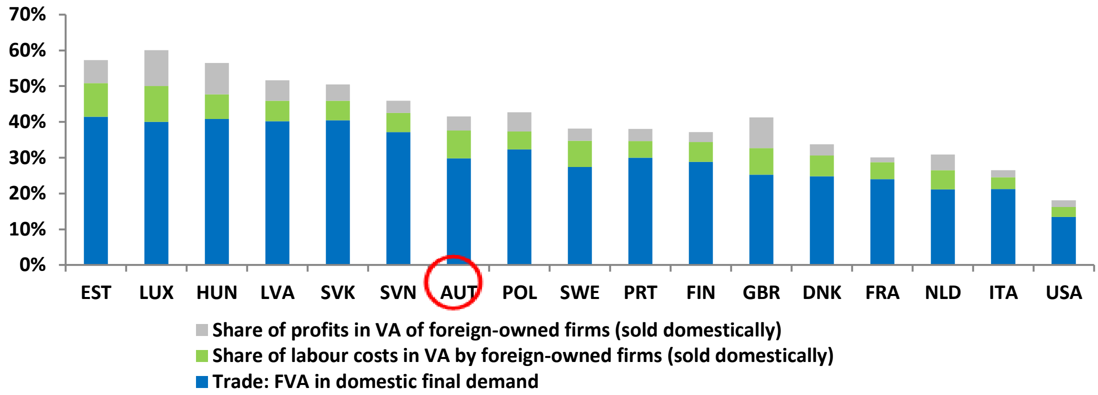


Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD FDI (BMD4) statistics

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

Foreign producers supplied products and services for Austrian final consumption equivalent to 42% of GDP in 2014, the majority is through trade (foreign value added in Austrian final demand equals approximately 30% of GDP), but value added generated by foreign affiliates in Austria for domestic (non-export) sales (Figure 11) accounts for a not insignificant 12% of GDP. Although some of this value added can be repatriated to parents (4%), the share of profits that can be repatriated is at the median of OECD economies (grey bar).

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



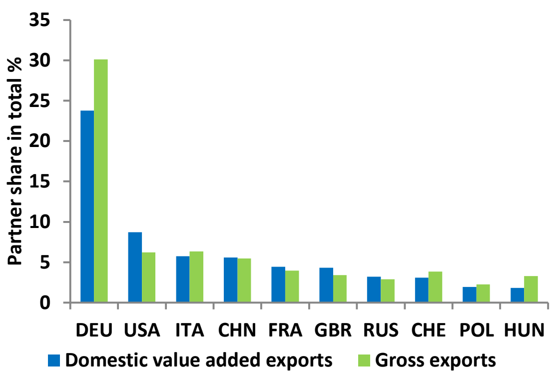
Source: OECD-WTO Trade in Value Added Data, OECD AMNE and OECD TEC statistics

Trade and investment by partner country

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

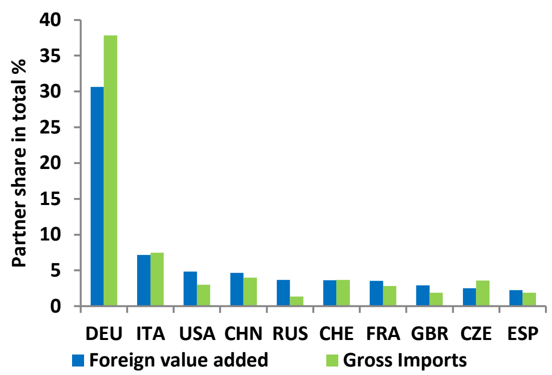
Gross bilateral trade figures can disguise the true nature of interdependencies, particularly between final consumers in one country and producers at upstream parts of the value chain. This is evident for some bilateral relationships with Austrian partners. Although Germany remains the most important trading partner by both measures, value added figures reveal that the United States is a more important export market than Italy, and that imports from Russia are actually more important than Switzerland, France, the United Kingdom, and the Czech Republic.

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

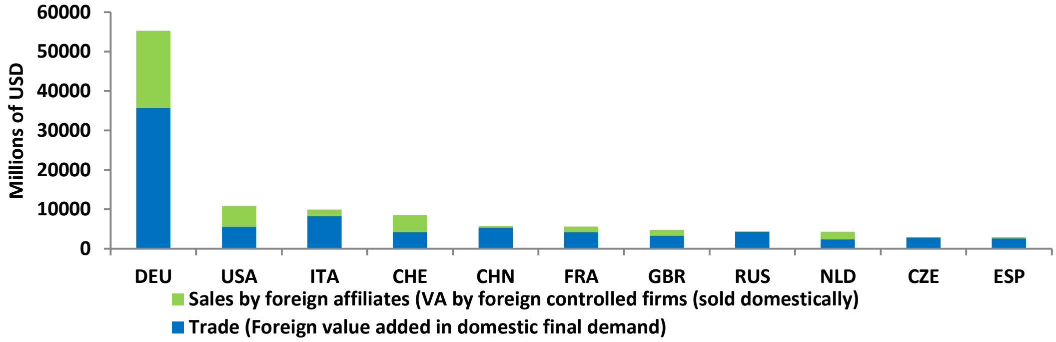


Source: OECD-WTO TiVA Data

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

Foreign firms can serve an economy though 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). Consistent with the trade data, Austrian consumers are hugely reliant on German production through both trade and investment channels. Substantial variation exists across countries in how they supply the Austrian market. For example, while Italy, China and Russia supply Austrian consumers mainly through trade, Germany, the United States and Switzerland do so both through trade and sales by foreign affiliates. Furthermore, considering both trade and investment the United States is a more important partner that Italy, which is not evident when looking at trade alone.

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



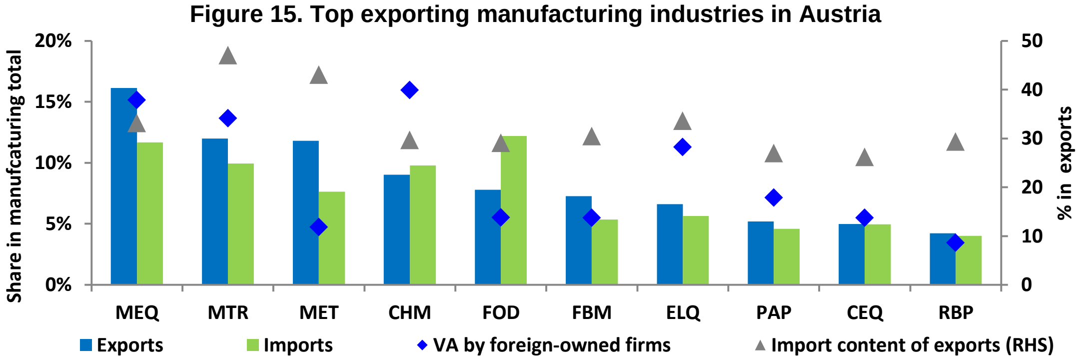
Source: OECD-WTO TiVA Data and OECD AMNE statistics

Trade and investment by industry

Outward investment also helps shape Austria's GVC integration

The top manufacturing exporting industries in Austria are machinery and equipment (MEQ), motor vehicles (MTR) 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 Austrian exporting industries, in part reflecting Austria's own MNEs and their comparative advantages.

Figure 15. Top exporting manufacturing industries in Austria

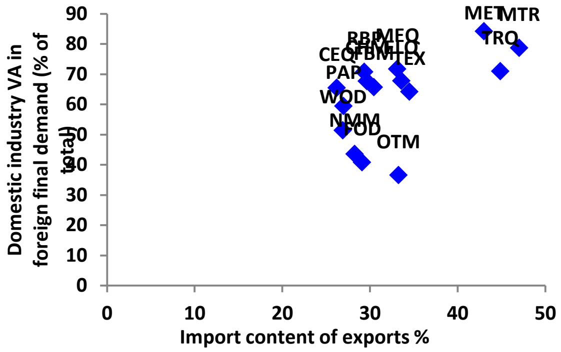


Source: OECD-WTO Trade in Value Added Data and OECD AMNE statistics. See page 10 for a description of industry codes.

Exports and imports go hand in hand…

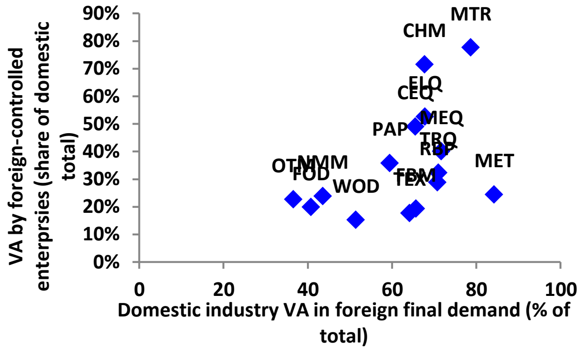
Across most industries there is a strong correlation between higher import content of exports and a higher share of their domestic value-added being exported (export orientation), illustrating the strong complementarity of exports and imports.

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



Source: OECD-WTO TiVA Data

Figure 17. Foreign-owned firms and export orientation, 2014

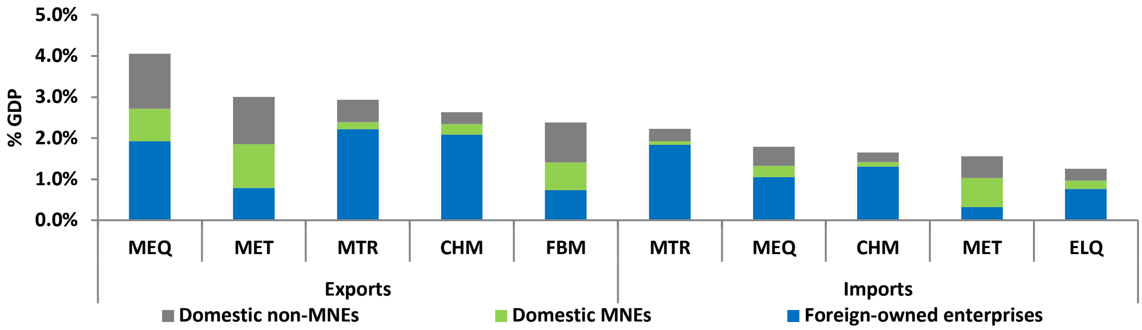


Source: OECD-WTO TiVA Data and OECD AMNE statistics

...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 Austria, the industries where foreign-owned firms produce more of the value added are also those that are usually more export orientated, such as MTR. MET is an exception reflecting the strong domestic MNEs. Figure 18 illustrates the trade in goods by firm ownership; domestic MNEs are important traders for Austria, especially in the MET industry, as are foreign-owned enterprises.

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



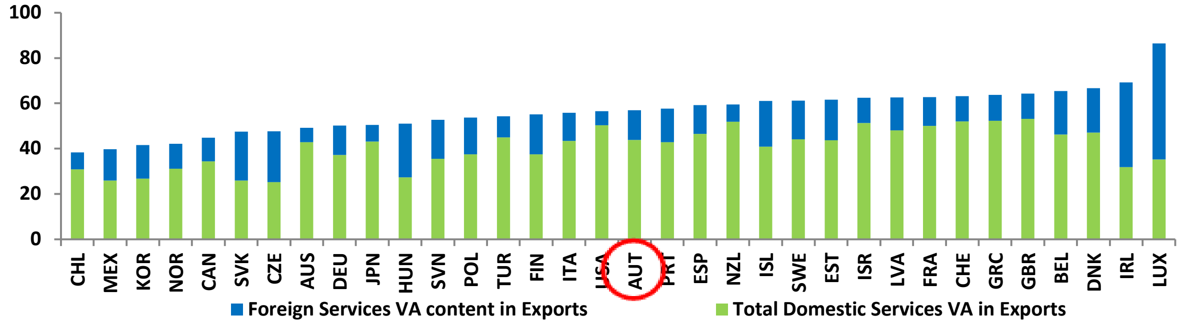
Source: OECD TEC Statistics

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 Austria's total exports of goods and services was 57% in 2014 (Figure 19), just above the OECD average of 53%.

Considering the services content of manufactured goods alone, over one third the total value of Austria's manufacturing exports reflects services value added, close to the OECD average of 36%.

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

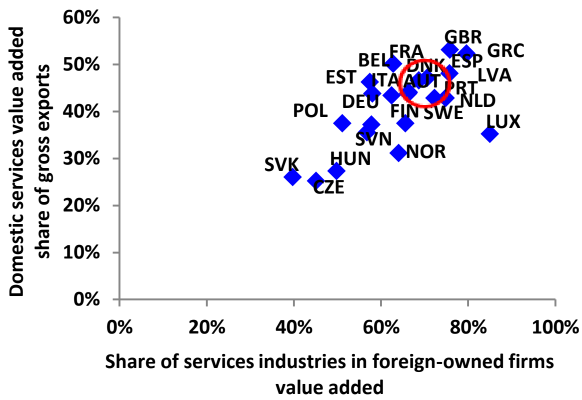


Source: OECD-WTO TiVA Data

…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 Austria the share of investment in services is at the median for OECD economies, consistent with its 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

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