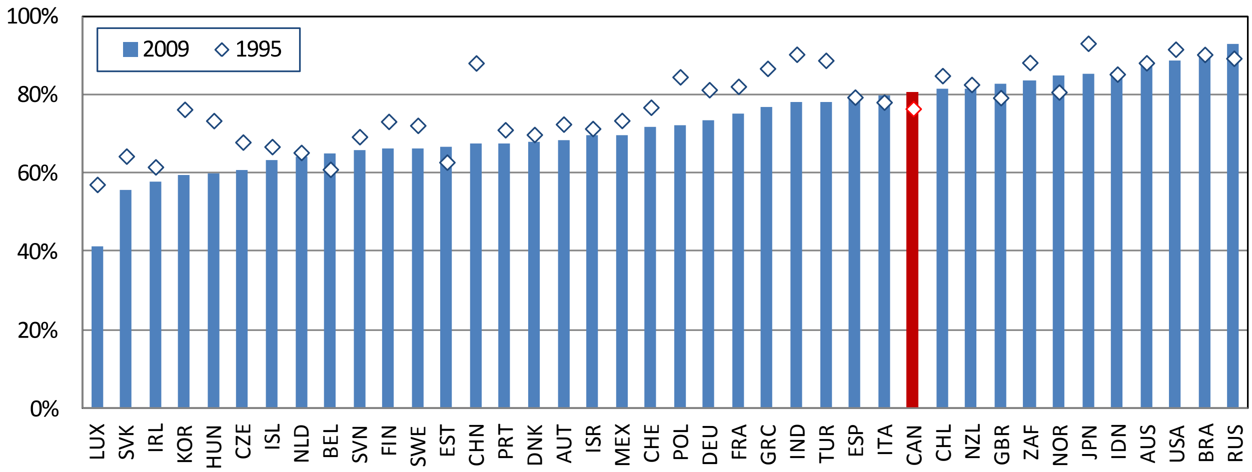
OECD/WTO TRADE IN VALUE ADDED (TIVA) INDICATORS

CANADA

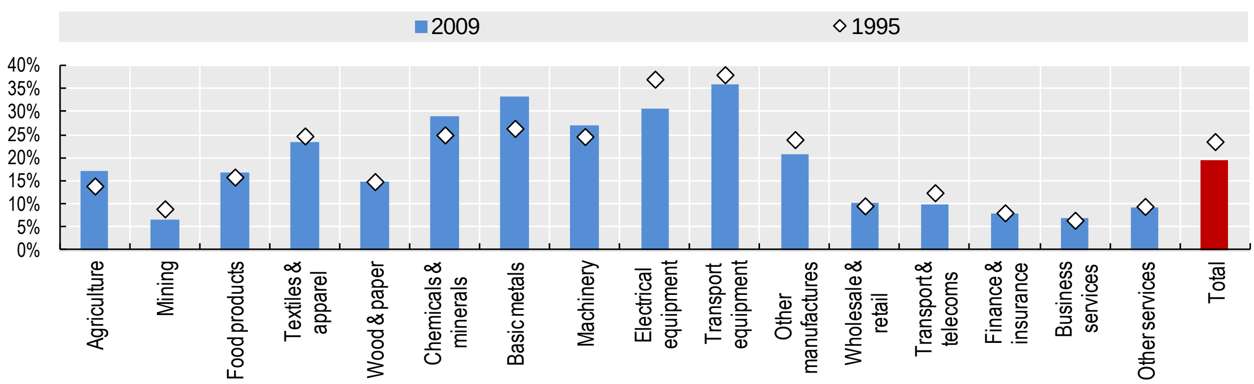
Countries with relatively open and liberal trade regimes and high degrees of foreign investment will be typically expected to have higher foreign content in their exports. But a number of other factors impact on the extent of a country's integration into, and specialisation within, global value chains. Larger economies, those with significant mineral resources, and those that are relatively far from foreign markets and suppliers, tend to have higher domestic (and lower foreign) value added content in their exports than smaller economies. Canada’s domestic value added content of its exports in 2009 was 80%, about 5 percentage points (pp) higher than the OECD average. Unlike most other countries, Canada’s domestic value added content of its exports has risen marginally since 1995 (Fig. 1). This largely reflects the significant increase in mining’s share of overall value added exports, rising from a little over 10% in 1995 to over one-quarter in 2009. The relatively stable ratio of the value added content of exports at the total economy in recent decades masks varying degrees of fragmentation of production in some other sectors (Fig. 2).

Figure 1: Domestic value added content of gross exports, % (EXGRDVA_EX)



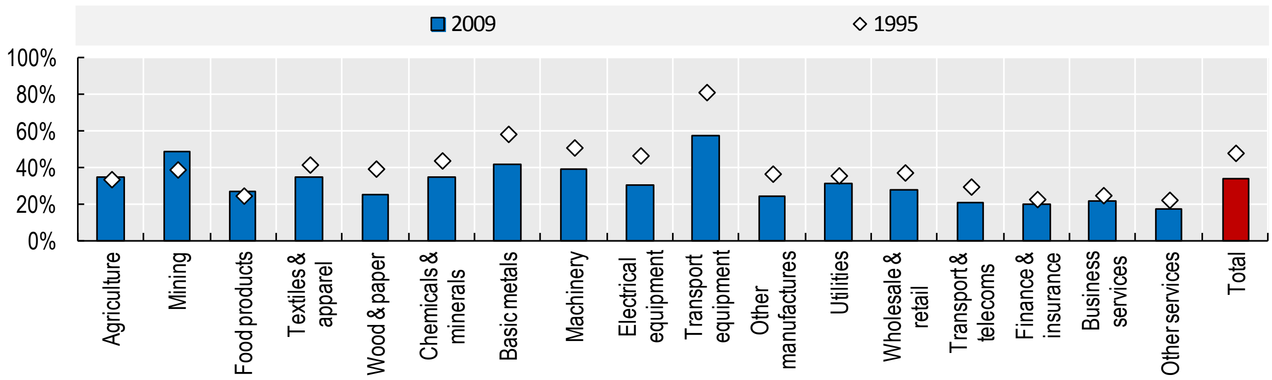
The foreign content of Canada’s exports was highest in the *Transport equipment* industry (36%) in 2009, reflecting its relatively high degree of integration in the North American global value chain (Fig. 2). *Basic metals* and *Chemicals and minerals* industries also had relatively high shares of foreign content in 2009 (around 30%), with the foreign content shares rising over the period 1995-2009. The *Electrical equipment* industry had similar shares in 2009 but these were marginally down compared to 1995.

Figure 2: Foreign value added content of gross exports, by industry, % (EXGR_FVASH)



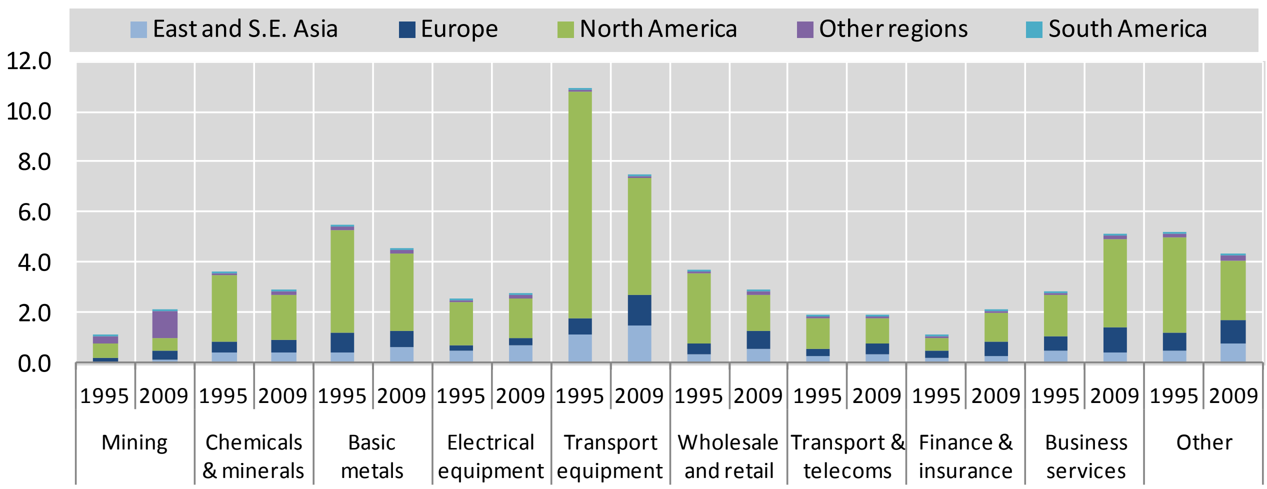
The shares of intermediate imports used to produce exports were highest in the following industries: *Transport equipment* (57%); *Mining* (48%); *Basic metals* (42%); and *Machinery* (39%), illustrating the integration of many Canadian industries in global value chains (Fig. 3). Interestingly the shares fell in nearly all categories, falling around 20% for Transport equipment products, which may partly reflect changes in the positioning of Canada's *Transport equipment* industry in the global value chain (Fig 4).

Figure 3: Share of imported intermediate inputs that are exported, by import category, % (REI)



Although the overall foreign content of the *Transport equipment* exports remained broadly unchanged between 1995 and 2009, there were notable changes in the composition of the origin industries and regions, which may reflect a greater fragmentation of the global value chain for transport equipment but it may also indicate changes in the positioning of Canada's transport equipment sector in the chain. The most notable change concerned the share of value added by foreign intermediate upstream *Transport equipment* industries, which fell significantly over the period, in particular for other North American suppliers whose share halved (Fig. 4). The share of business services inputs provided by North American suppliers rose marginally however, as did the share of European and Asian intermediate inputs across all industries.

Figure 4: Foreign value added in Transport equipment, by originating region and industry, %



[Figure 4 illustrates how the TiVA infrastructure can be used to focus on the origins of foreign value added in the output of a particular sector in a particular country].

The United States is by far Canada's largest trading partner both in value added and gross terms (Fig. 5). Around 60% of all its exports go the US, both in value added and gross terms, and around 50% of all its imports are sourced from the US.

Figure 5a: Exports, partner shares, in gross and value added terms (as a % of total), 2009

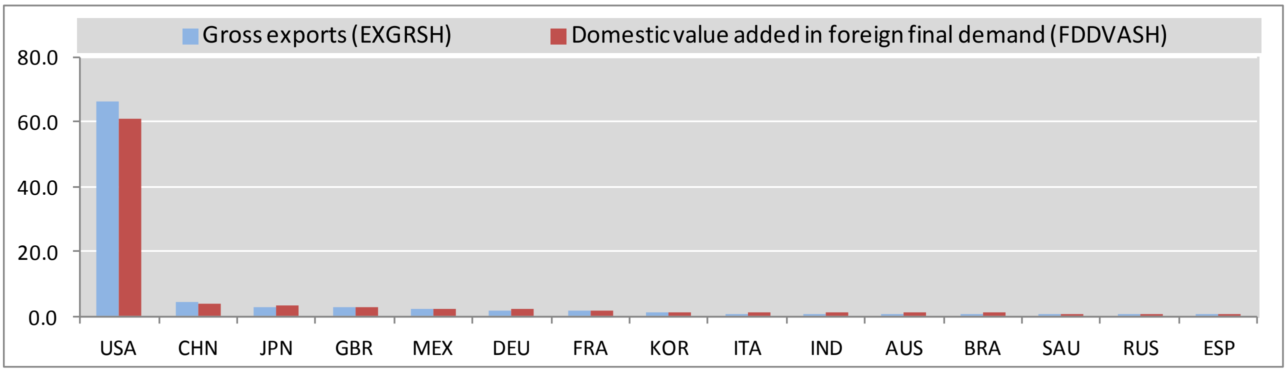
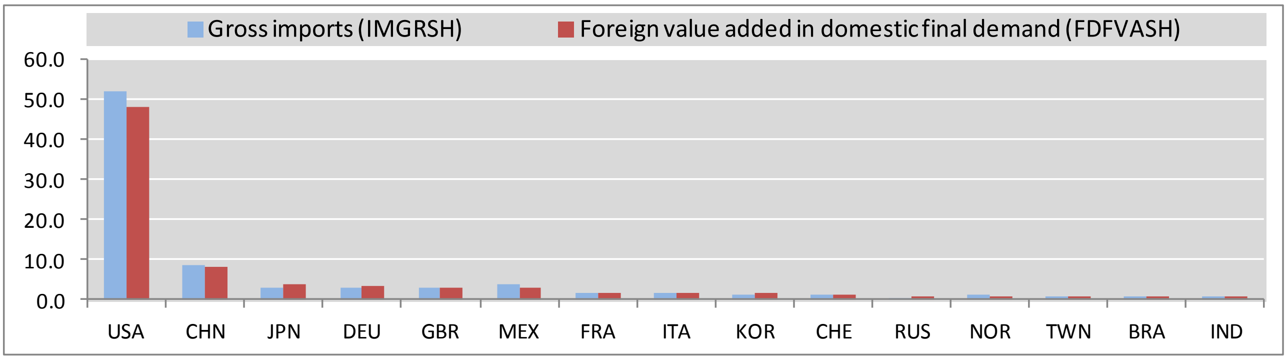
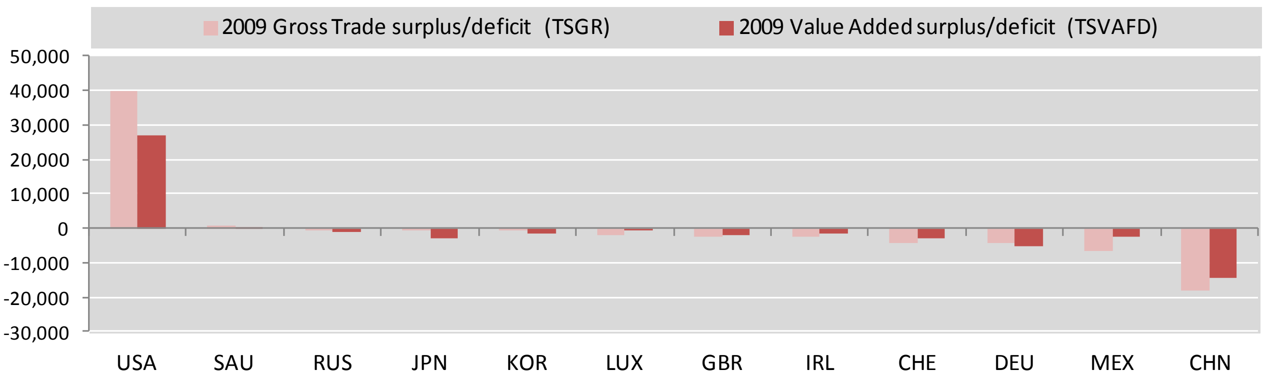


Figure 5b: Imports, partner shares, in gross and value added terms (as a % of total), 2009



Domestic value added embodied in exports, and intermediate imports embodied in exports, combine to reveal a notable shift in Canada's bilateral trade balances with China and the United States (as recorded in the OECD-WTO TiVA database). Canada's trade deficit with China and trade surplus with the United States both reduced significantly in 2009, reflecting in part the embodiment of Canadian value added in US exports as well as the relatively high foreign content of Chinese exports (Fig. 6).

Figure 6: Bilateral trade balances, USD million, 2009



In value added terms about 37% of Canada's exports reflected services in 2009 (Fig. 7). This is relatively low compared to the OECD average (48%). This largely reflects the relatively high proportion of mining products exported by Canada, where the services content is typically low. The contribution of services at the individual industry level was closer to the OECD average, with shares of around 35% in agriculture and food products and transport equipment, where the foreign content was also relatively high (Fig. 8). The contribution of services rose in nearly all industries over the period 1995-2009.

Figure 7: Services content of gross exports, 2009 (EXGR_*_SV; SERV_VAGR)

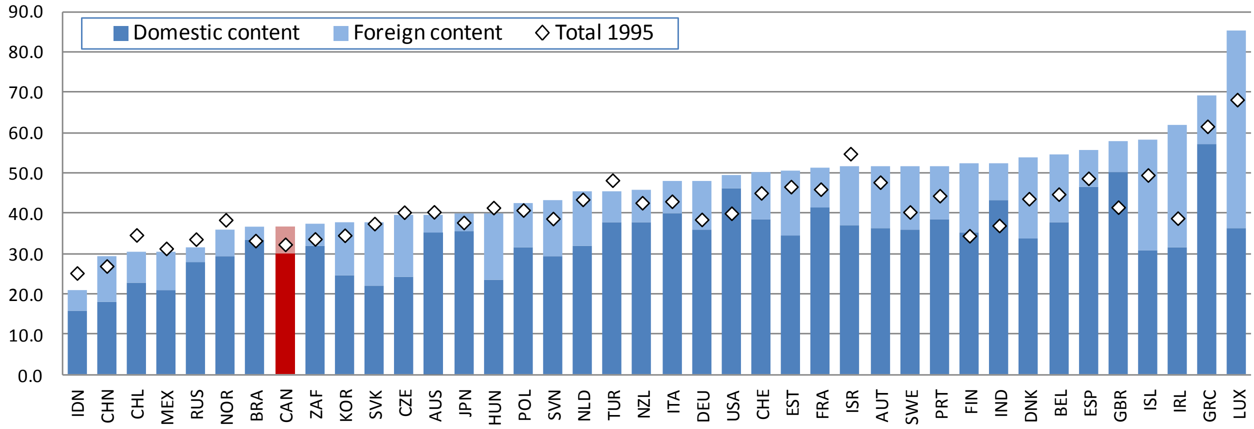
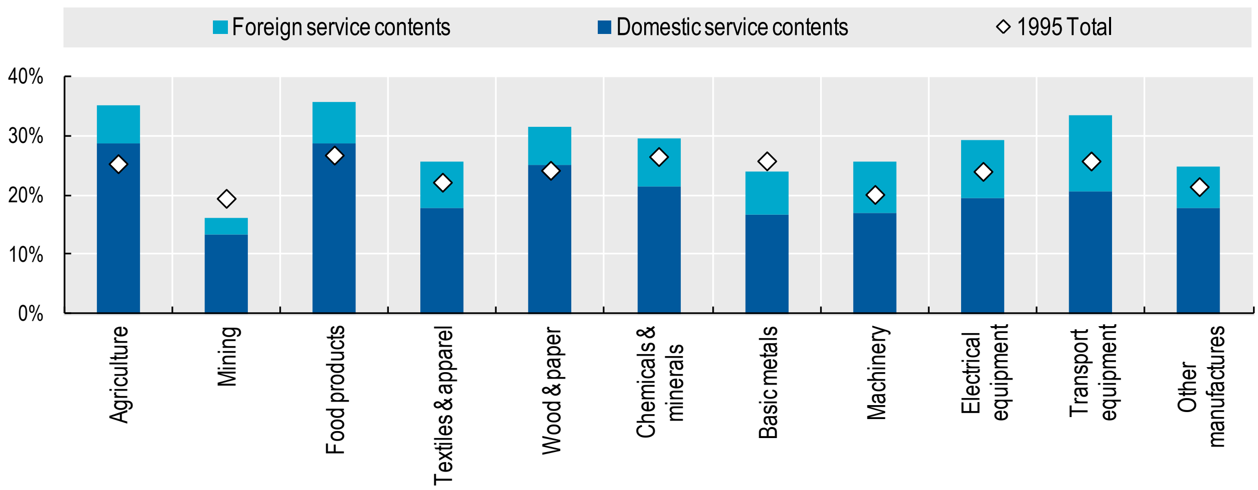


Figure 8: Services content of gross exports, by industry, 2009 (EXGR_*_SV; SERV_VAGR)



The information included in this note is based on the May 2013 release of the Trade in Value added (TiVA) database. The data can be accessed from www.oecd.org/trade/valueadded. For further information, please contact us (tiva.contact@oecd.org).