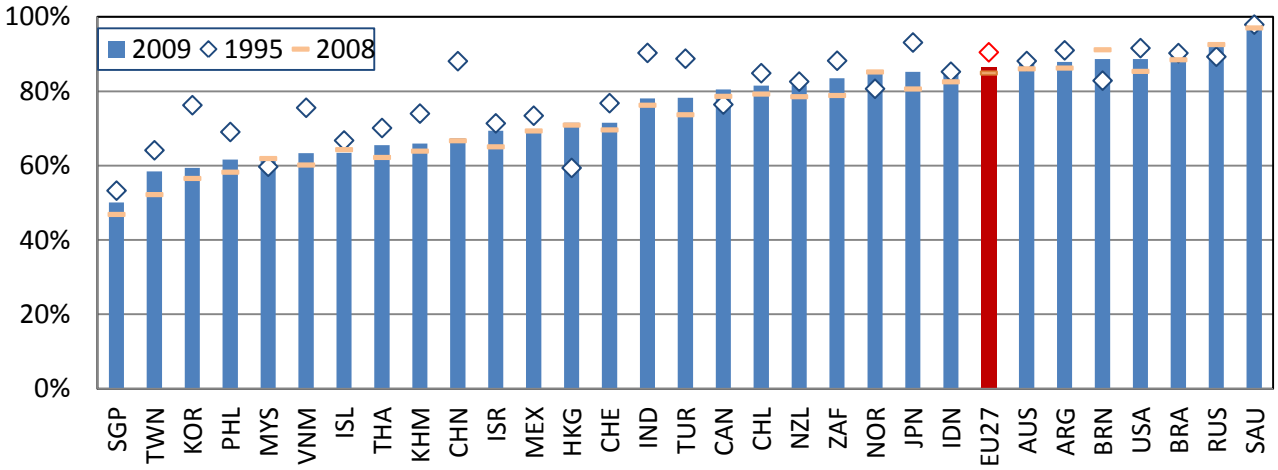
OECD/WTO TRADE IN VALUE-ADDED (TIVA) INDICATORS

EUROPEAN UNION

Economies 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, such as the European Union as a whole and those with significant mineral resources, tend to have higher domestic (and lower foreign) value added content in their exports than smaller economies, which helps to explain the relatively high position of the EU in Figure 1 below. The domestic value added content of the EU's exports in 2009 was 86% in 2009, 4 percentage points lower than in 1995, illustrating the EU's growing integration within international value chains. National percentages vary considerably within the EU however, ranging from 41% in Luxembourg, reflecting its relatively small size, to a high of 83% in the UK, reflecting its relatively high specialisation in services, which typically have high domestic value added content.

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



Like the EU as a whole, the foreign content of exports rose in nearly all EU economies over the period 1995 to 2009. Percentages fell only in the United Kingdom, Italy, Bulgaria, Estonia, Belgium and Malta. For Italy this may partly reflect the recent crisis, as the foreign content of Italy's exports increased by 5 pp between 1995 and 2005, with the foreign content falling significantly in 2008 and 2009; possibly reflecting the evidence, in many countries, that global value chains were more affected by the synchronised collapse in international trade at the height of the crisis than more domestic value chains.

Figure 2: Foreign content of gross exports %

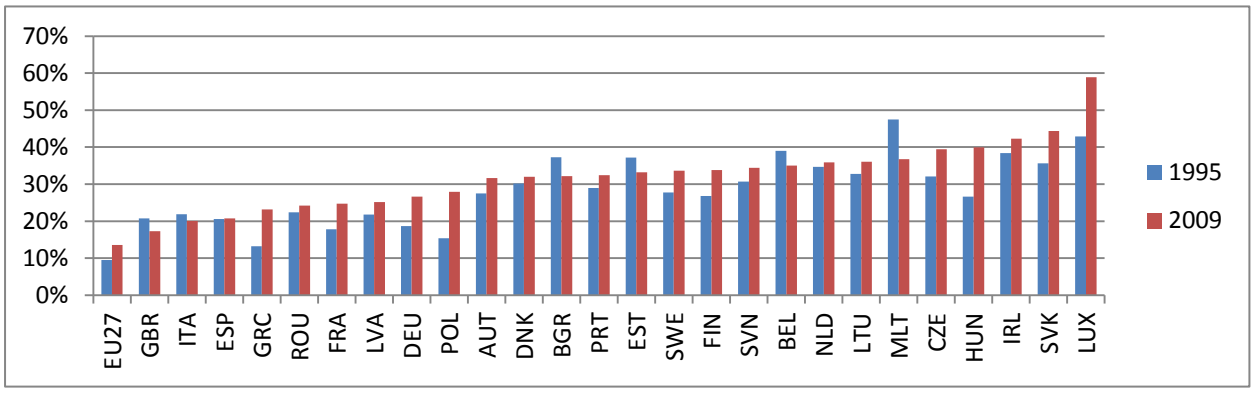
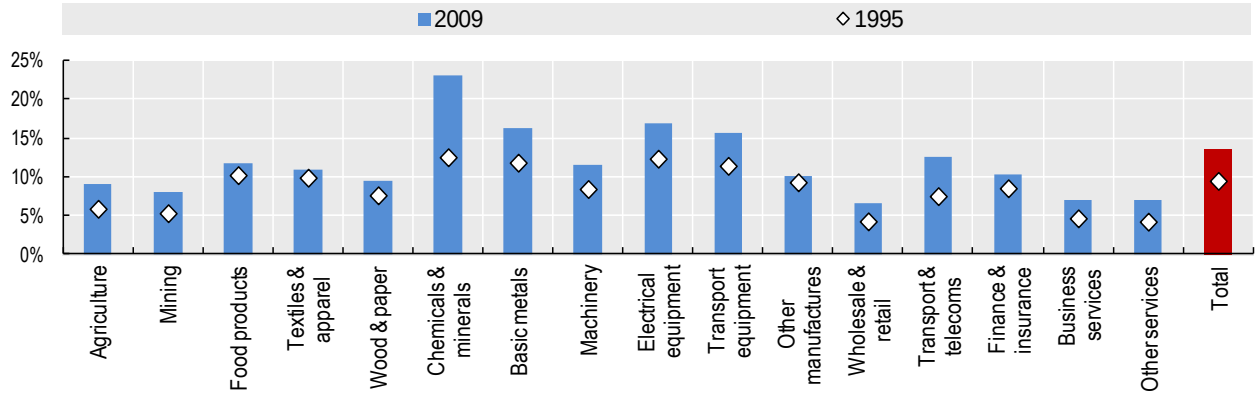
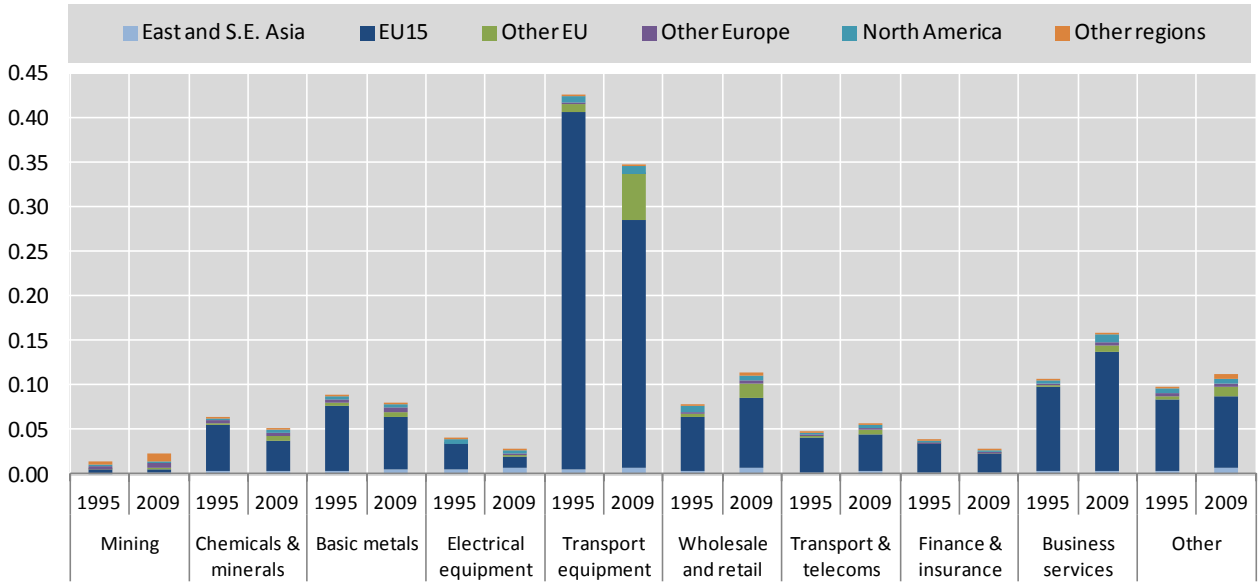


Figure 3: Foreign value-added content of gross exports, by industry, % (EXGR_FVASH)



The foreign content of the EU's exports rose in all sectors between 1995 and 2009. The shares were highest in the *Chemicals and Minerals* industry, with nearly one-quarter of the overall value reflecting foreign content, around double the content in 1995, illustrating the increasing integration of the sector within global value chains (Fig. 3). In the *Transport equipment* sector the foreign content increased significantly rising from under 11% in 1995 to over 15% in 2009; broadly similar to the foreign content shares of US and Japanese exports of transport equipment. Asia as a whole and North America both contributed about 5% of the total value of European transport equipment. But this to some extent masks significant structural changes and fragmentation within the European value chain (Fig. 4). In most EU economies, for example, the foreign content share ranges from between one-third to half of the total value, reflecting in large part significant content from other EU countries. Part of this narrative reflects the contribution made by the newer members of the EU (referred to below as Other EU) which rose significantly over the period as they became integrated within the European value chain. What is also noticeable from the Figure is the increasing contribution made by services, reflecting in part the rising knowledge content of transport equipment.

Figure 4: Origin of value-added in gross exports, transport equipment, by region and product group, %



When looking at national positions the US emerges as a more important source of imports and destination for exports in value-added terms compared to gross terms in all EU countries, reflecting the interconnected nature of EU production chains. The same pattern emerges when value-added flows are compared to gross flows net of intra EU trade (Fig. 5). Nearly one quarter of all EU exports in value-added terms were destined for final consumers in the US in 2009, and over one-fifth of all EU imports in value added terms were sourced from the US. China was the EU's second largest trading partner in 2009 in both gross and value-added terms but for both

imports and exports, China's share was lower in value-added terms than in gross terms. For imports this partly reflected the relatively high foreign content of Chinese exports, which also partly explains the higher contribution made by Japan in value-added terms, (as Chinese exports contain a relatively high share of Japanese value-added). For exports, this partly reflected China's role as a processor of EU intermediates before being exported to third countries. Switzerland's shares of imports and exports were also lower in value-added terms reflecting its integration within EU production chains and trade in intermediates.

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

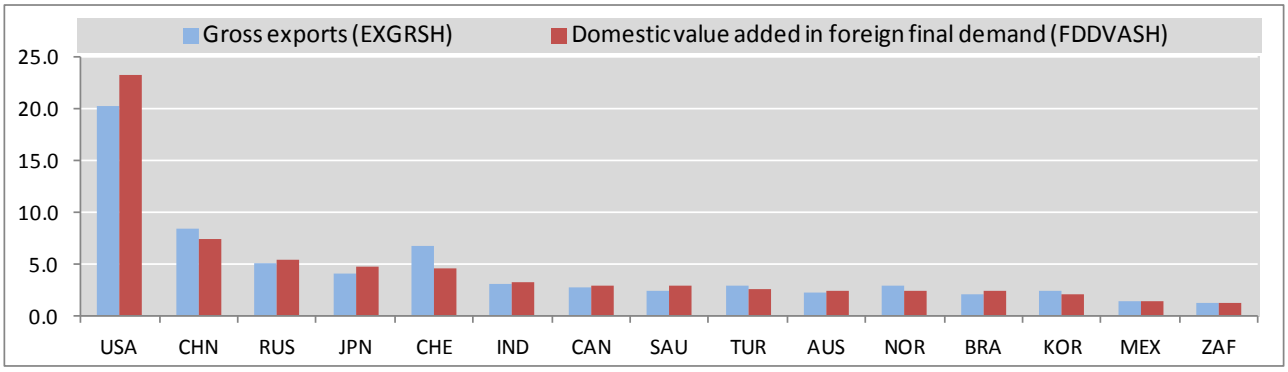
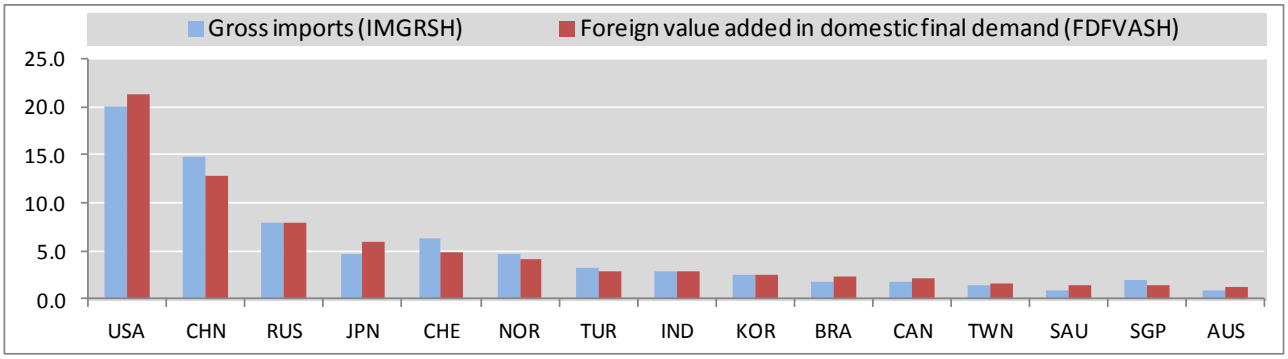
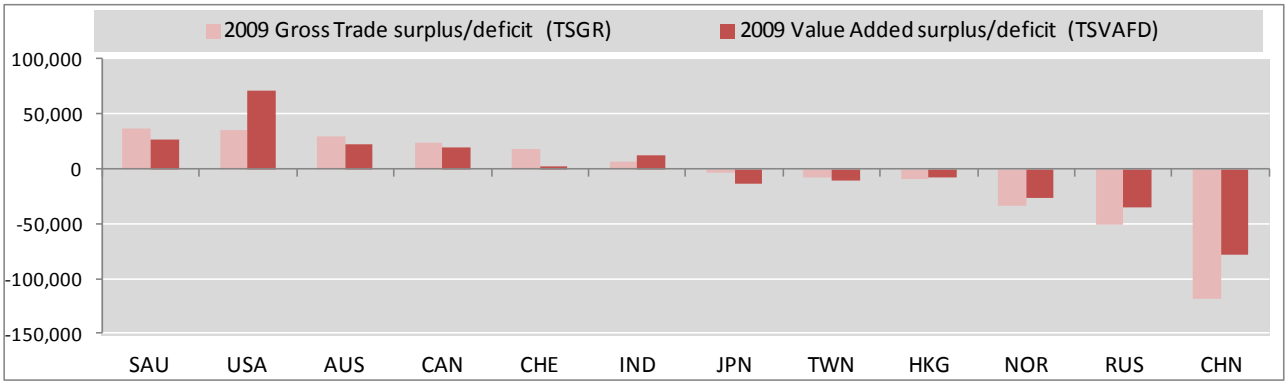


Figure 5b: Imports in gross and value-added terms, by partner country (as a % of total), 2009



These various flows, domestic value added embodied in exports and intermediate imports embodied in exports, combine to reveal notable differences in the EU's trade balance positions with some of its major trading partners (as recorded in the OECD-WTO TiVA database). The EU's trade surplus with the United States for example increased significantly, reflecting EU value added embodied in the exports of third countries, such as Switzerland, to the United States (Fig. 6). At the same time the EU's trade deficit with China reduced and its deficit with Japan increased. Its deficit with Russia also decreased, reflecting in part Russian value-added embodied in EU exports.

Figure 5: Bilateral trade balances, USD billion, 2009



In value added terms over half (54%) of the EU's gross exports reflected services in 2009, above the OECD average (48%) and 10 pp higher than the share in 1995 (Fig. 6). The contribution of services rose in nearly all industries, particularly the *Transport equipment* sector, and reflected between one-third to 40% of the value of exports in all manufacturing activities, and around one-quarter in *Agriculture*.

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

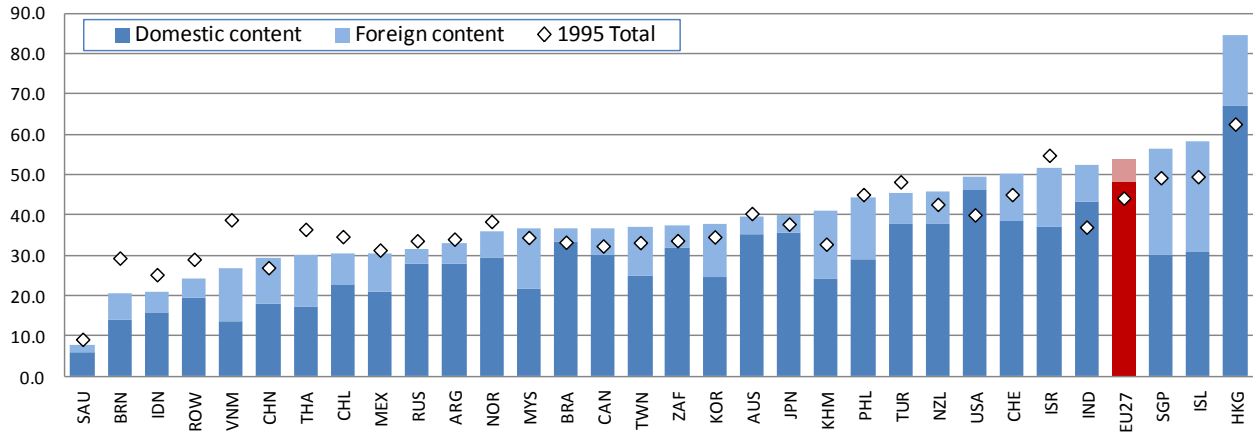
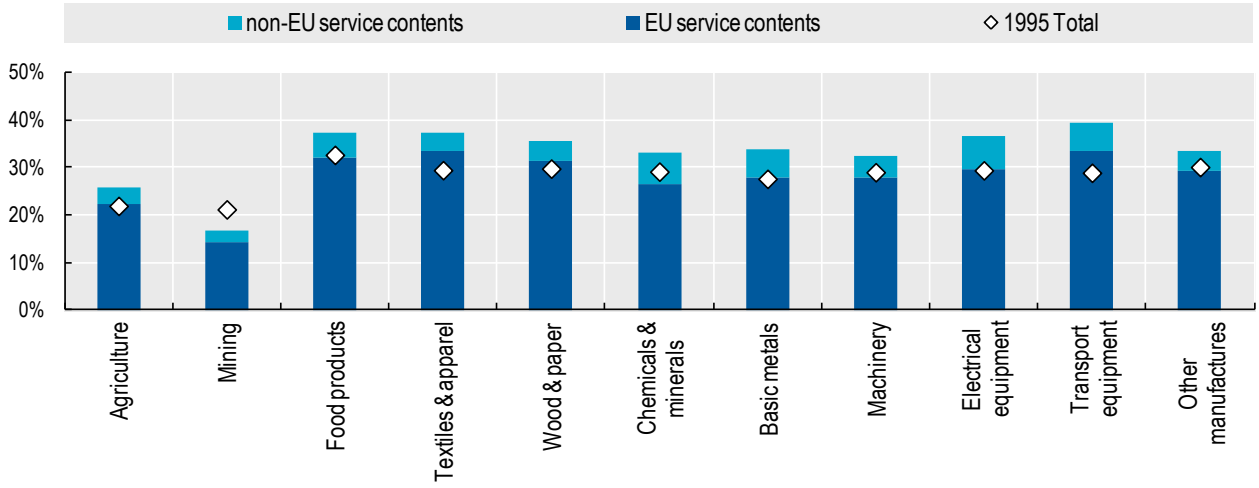


Figure 8: Services content of gross exports, by industry, 2009 (EXGR_*_SV; SERV_VAGR)



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).