Chapter IV

Merchandise trade and trade in commercial services

The share of manufactured goods in total merchandise exports was just over 70 per cent in 2015, up from 67 per cent in 2014. The share of agricultural products also increased slightly to around 10 per cent in 2015. This was mostly due to the sharp decline in the value of fuels and mining products whose share dropped to 18 per cent in 2015, from 20 per cent in 2014.

In 2015, the world transport sector fell by 10 per cent as container shipping rates fell sharply due to lower demand especially in developing economies. Global travel receipts also decreased largely as a result of strong exchange rate fluctuations rather than declining demand for international tourism. The aggregate category "other commercial services", which account for more than half of services exported worldwide, contracted by 5 per cent. Construction was the hardest hit services sector (-15 per cent), reflecting a fall in exports in both developed and developing economies.

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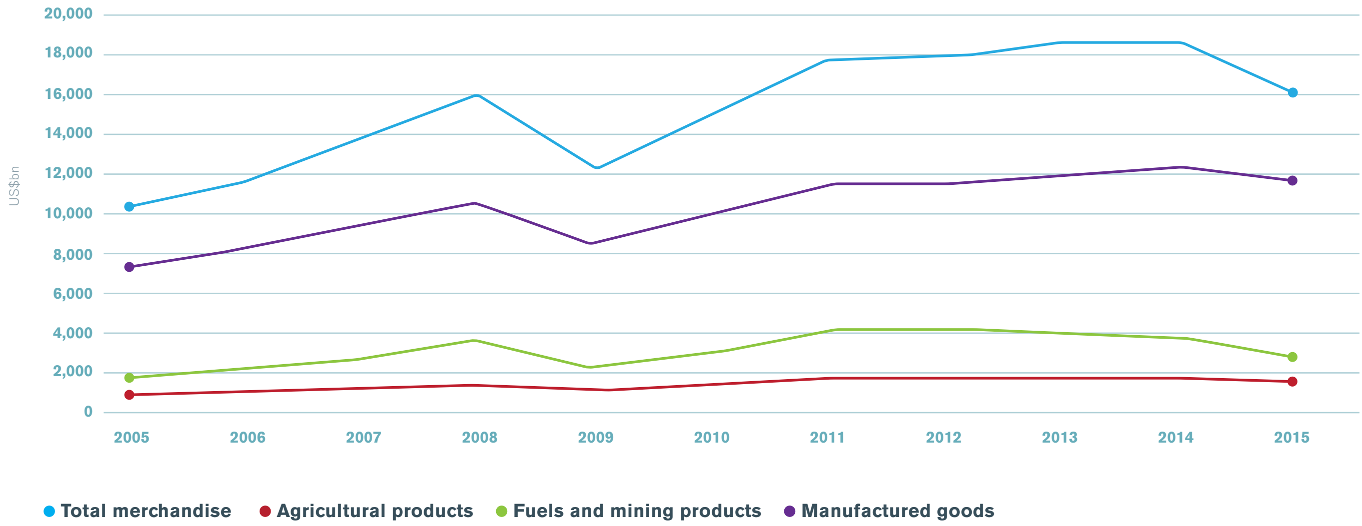
Merchandise trade

The dollar value of merchandise trade fell by 13 per cent in 2015. This was mostly caused by a fall in the value of world exports of fuels and mining products, which declined at a dramatic rate (-25 per cent compared with -6 per cent in 2014). The decline was due to a sharp decrease in prices and a significant decrease in demand. Exports of agricultural products fell by 11 per cent, while exports of manufactured goods declined by 5 per cent (see Chart 4.1).

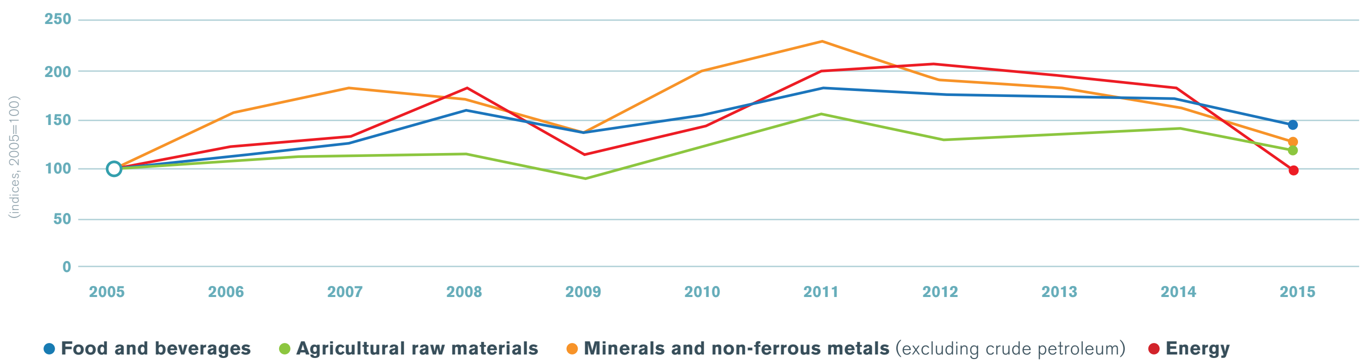
The reduction in the price of commodities in 2015 was especially steep for fuels (see Chart 4.2). For exporting countries, this decline has been partially compensated by an increase in the dollar exchange rate (short-term fluctuations between the US dollar and commodity prices are often negatively correlated). But the decline in commodity prices was also due to the slow-down in the Chinese economy and an increase in world supply as many projects – fuelled by high prices after 2003 – reached maturity. Financial volatility is also responsible for higher uncertainty and lower investment worldwide, leading to a further reduction in demand for minerals and oil (see Table A67).

Chart 4.1:
World merchandise exports, 2005-2015



Source: WTO Secretariat.

Chart 4.2:
Fluctuations in international prices, 2005-2015



Source: IMF

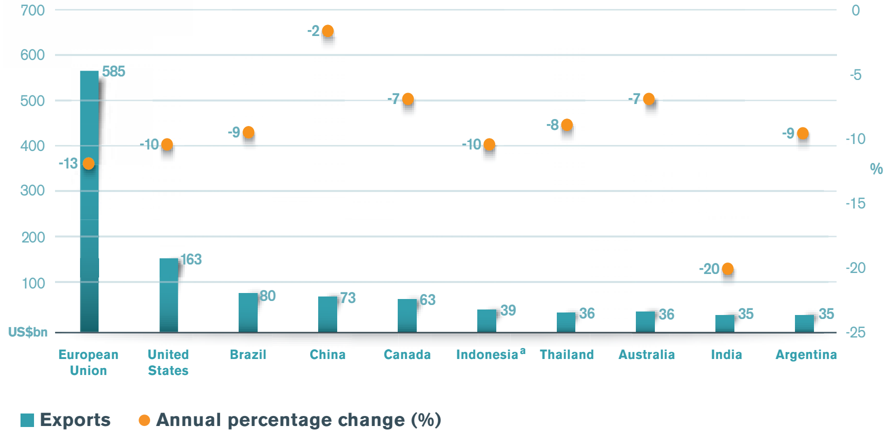
Regarding agricultural products in 2015, the ranking of the top six exporters remained unchanged compared with the previous year (see Chart 4.3). India dropped two places to ninth position while Thailand and Australia improved their ranking. Argentina remained in tenth position. All of the major exporters of agricultural products experienced a decline in exports in 2015, with India recording the most significant fall (-19 per cent) and China the smallest decline (-2 per cent) (see Table A14). The top ten exporters represented 72.7 per cent of world agricultural exports in 2015, down 0.2 per cent on their share in 2014.

Major exporters of fuels and mining products suffered from the dramatic decline in prices for fuels and minerals in 2015 – recording a significant fall in exports ranging from -14 per cent for China to -47 per cent for Saudi-Arabia (see Chart 4.4) (see Table A15). The share in world trade of the top ten exporters declined to 50 per cent in 2015, compared with 60 per cent in 2000. This reflects increasing geographical diversification in the exporting of fuels and mining products.

World exports of iron and steel were heavily affected by falling prices for steel and iron ores and a decline in demand in 2015. The top ten exporters saw a marked decrease in annual exports – ranging from -9 per cent for Brazil to -39 per cent for the Russian Federation and Ukraine (see Chart 4.5) (see Table A17). The top four exporters remained the same as in 2014. Russia dropped from fifth to sixth position while Ukraine dropped two places, to ninth position. Brazil broke into the top ten, reaching eighth position compared with 11th place in 2014. Among the major exporters, Brazil's exports suffered the least.

Chart 4.3:

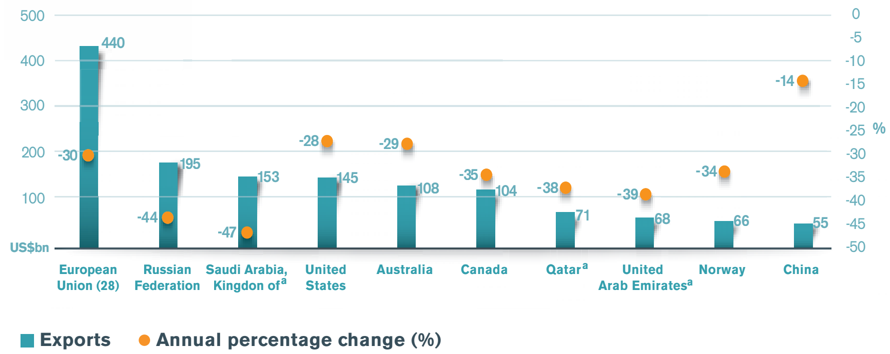
Top ten exporters of agricultural products, 2015



[a] Includes Secretariat estimates. Source: WTO Secretariat.

Chart 4.4:

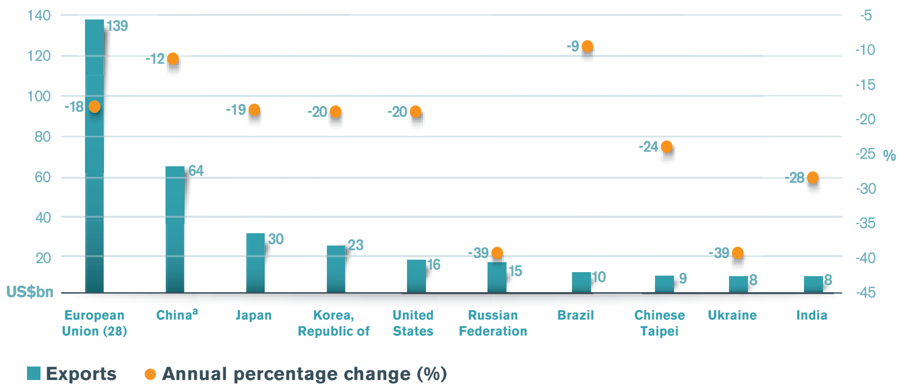
Top ten exporters of fuels and mining products, 2015



[a] Includes Secretariat estimates. Source: WTO Secretariat.

Chart 4.5:

Top ten exporters of iron and steel, 2015



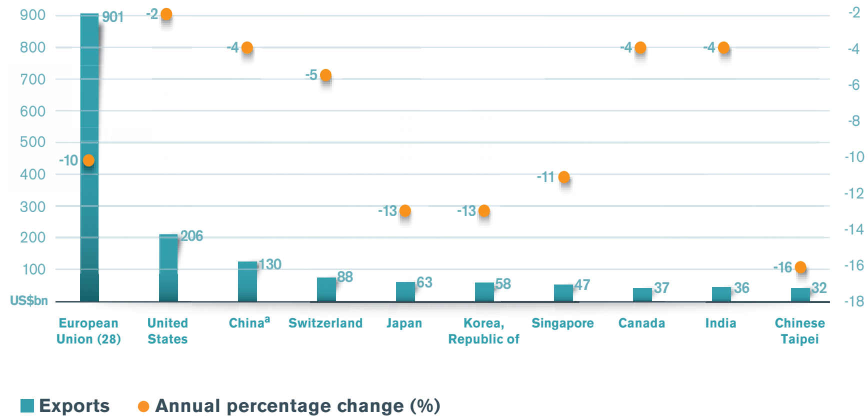
[a] Includes significant shipments through processing zones. Source: WTO Secretariat.

The ranking of the major exporters of chemicals remained mostly unchanged in 2015. Only India improved its position, from tenth to ninth place, while Chinese Taipei dropped one place, to tenth position (see Chart 4.6). All major exporters saw a decrease in their exports in 2015. US exports declined the least (-2 per cent) while Chinese Taipei's fell by the most (-16 per cent). Between 2000 and 2015, China expanded its share in the world market the most (increasing it by 5 percentage points and reaching a market share of almost 7 per cent in 2015) while the European Union experienced the biggest loss in market share (-6 percentage points). The top ten exporters accounted for almost 86 per cent of world exports of chemicals in 2015 (see Table A18).

Among the top ten exporters of office and telecom equipment (see Chart 4.7), only Hong Kong (China) and the Republic of Korea increased the value of their exports (by +3 per cent and +1 per cent respectively). All other major exporters saw a decline in the value of their exports, varying from -1 per cent (China) to -10 per cent (European Union and Malaysia). The export of office and telecom equipment is still concentrated among a small group of economies – even if the market share of the top ten decreased slightly to 89.6 per cent in 2015 from 90.1 per cent in 2000 (see Table A20).

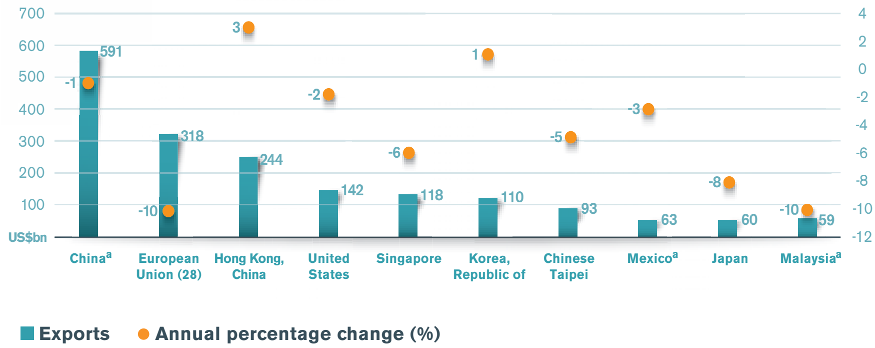
The ranking of the top ten exporters of automotive products remained unchanged in 2015, with the European Union (49 per cent share of world exports), Japan (10 per cent) and the United States (10 per cent) in the first three positions (see Chart 4.8). Of the top ten exporters, only

Chart 4.6:
Top ten exporters of chemicals, 2015



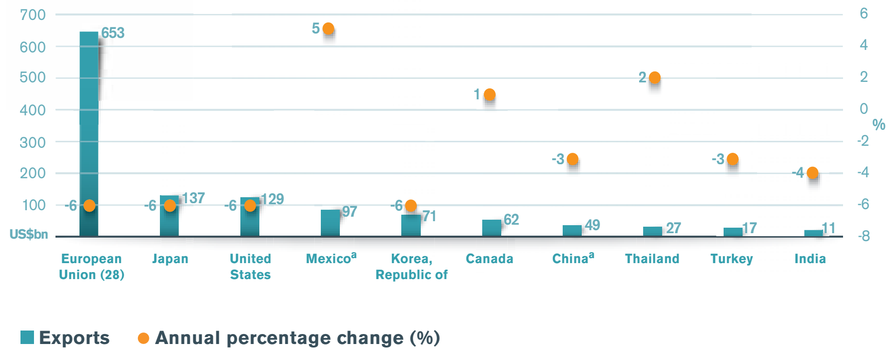
[a] Includes significant shipments through processing zones. Source: WTO Secretariat.

Chart 4.7:
Top ten exporters of office and telecom equipment, 2015



[a] Includes significant shipments through processing zones. Source: WTO Secretariat.

Chart 4.8:
Top ten exporters of automotive products, 2015



[a] Includes significant shipments through processing zones. Source: WTO Secretariat.

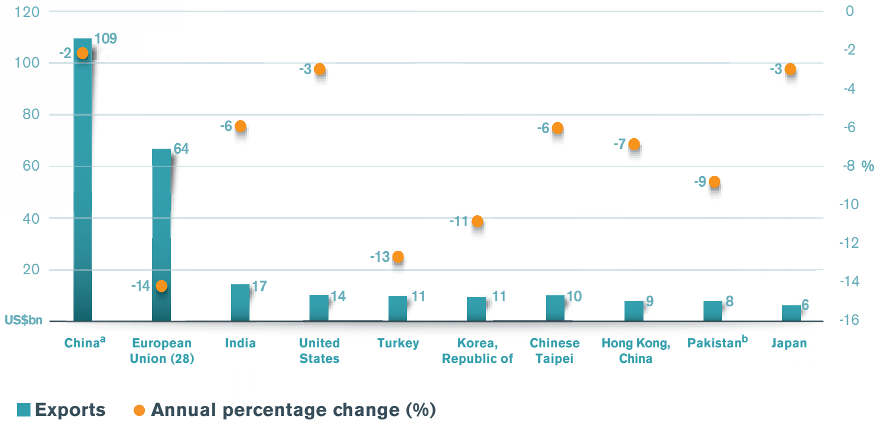
three saw an increase in the value of their exports in 2015: Mexico (+5 per cent), Thailand (+2 per cent) and Canada (+1 per cent). The other top ten exporters recorded declines (ranging from -3 per cent to -6 per cent). Collectively, the top ten exporters accounted for almost 95 per cent of world exports of automotive products in 2015 (compared with 96 per cent in 2000) (see Table A21).

China, the European Union and India remained the top three exporters of textiles in 2015 (see Chart 4.9). Altogether, they accounted for almost two-thirds of world exports. The top ten exporters all experienced a decline in the value of their exports in 2015, with the highest declines seen in the European Union (-14 per cent) and Turkey (-13 per cent). The smallest decline was recorded in China (-2 per cent) (see Table A22).

Among the top ten exporters of clothing (see Chart 4.10), increases in export values were recorded by Viet Nam (+10 per cent), Cambodia (+8 per cent), Bangladesh (+6 per cent) and India (+2 per cent). The other major exporters saw stagnation in their export values (United States) or recorded a decline (all other top ten economies). In 2015, the top ten accounted for 87 per cent of world exports of clothing.

Chart 4.9:

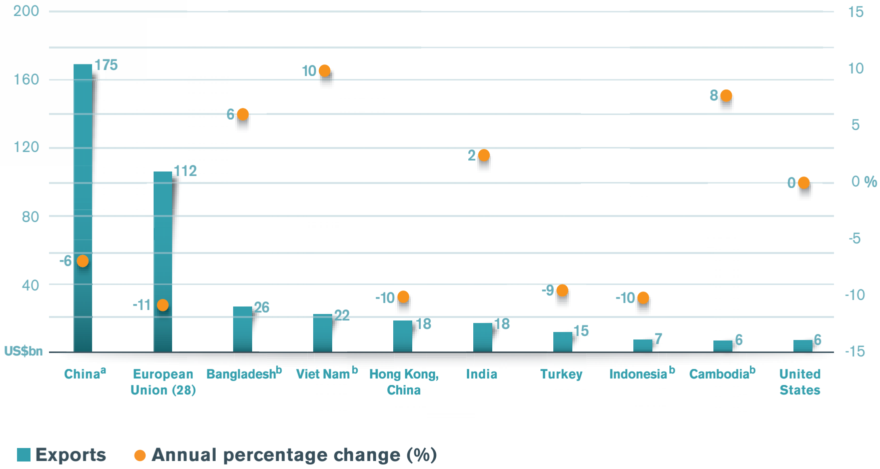
Top ten exporters of textiles, 2015



[a] Includes significant shipments through processing zones. [b] Includes Secretariat estimates.
Source: WTO Secretariat.

Chart 4.10:

Top ten exporters of clothing, 2015



[a] Includes significant shipments through processing zones. [b] Includes Secretariat estimates.
Source: WTO Secretariat.

Trade in commercial services

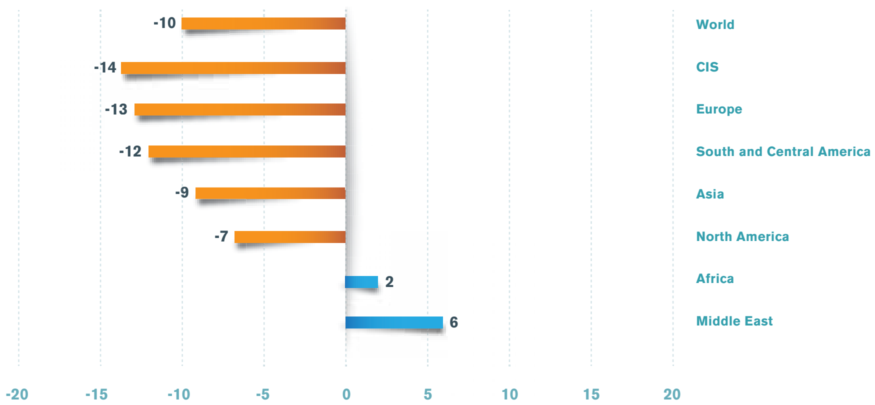
Transport

The transport sector experienced a difficult year in 2015. Container shipping rates fell sharply and the shipping sector suffered from overcapacity due to lower demand in developing economies. Global air freight volumes slowed in particular in Asia and in Europe, reflecting weaker merchandise trade flows. In contrast, cheaper global air fares resulting from collapsing oil prices boosted international air passenger traffic, which rose by 6.5 per cent[1], a record for the past decade.

In 2015, world transport exports fell by 10 per cent to US$ 875 billion, with sharp declines in most regions (see Chart 4.11). In the Commonwealth of Independent States (CIS), exports dropped by 14 per cent as air transport services sunk by 26 per cent. In Europe, the decline was 13 per cent, with international sea transport exports falling by 17 per cent. Transport receipts in South and Central America were down by 12 per cent. The contraction was less pronounced in Asian economies, as China's transport exports remained positive (+1 per cent) while they plummeted in other leading exporting economies in the region (see Chart 4.12) (see Table A25).

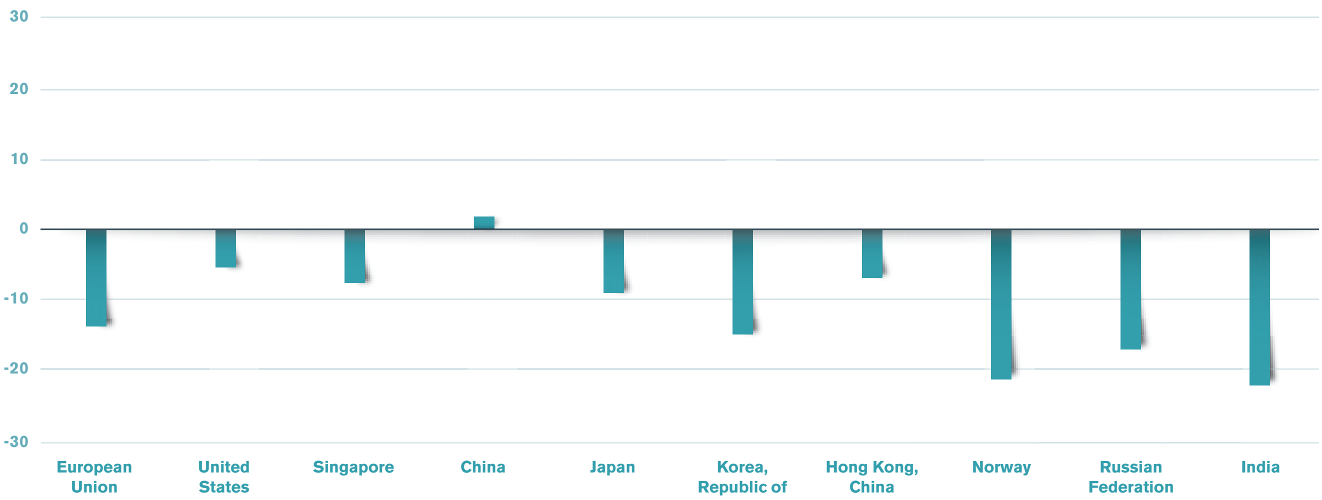
By contrast, transport receipts expanded by 6 per cent in the Middle East, the fastest growing region. The Middle Eastern air transport industry recorded strong growth, with international air freight and air passenger transport expanding by more than 10 per cent in 2015.

Chart 4.11:
World transport exports by region, 2015
(annual percentage change)



Source: WTO-UNCTAD-ITC estimates.

Chart 4.12:
Leading transport exporters, 2015
(annual percentage change)



Source: WTO-UNCTAD-ITC estimates.

[1] IATA "Air freight market analysis" and "Air passanger market analysis" (December 2015)

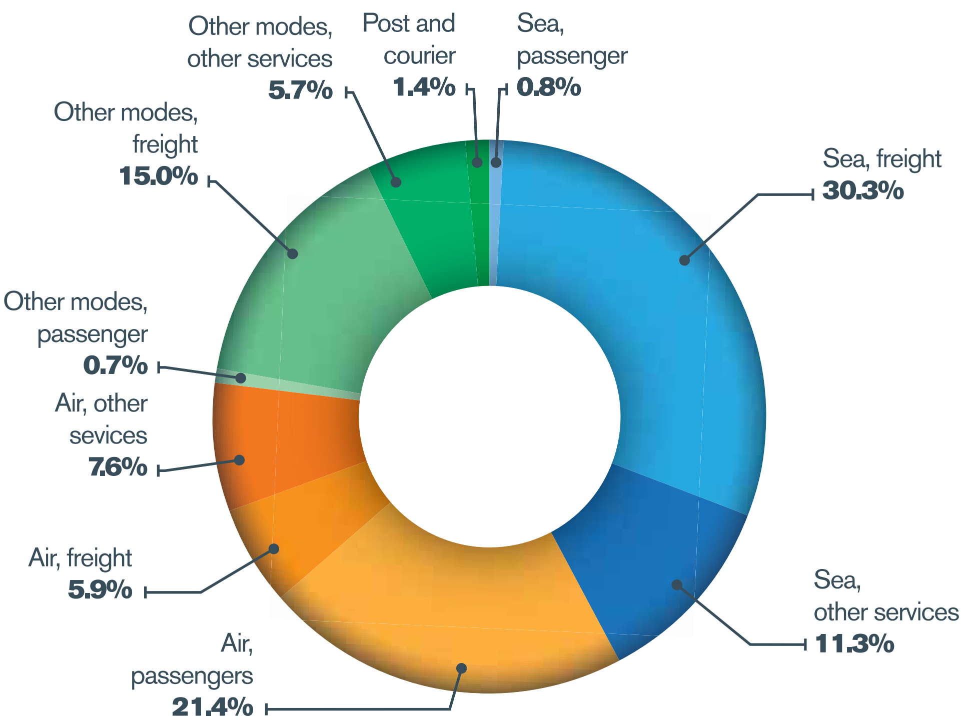
Freight accounts for the largest part of world transport exports

More than half of global transport exports relate to freight transport. In particular, seaborne freight represents the largest share, at 30 per cent in 2014. International freight transport through railways, roads and inland waterways accounted for 15 per cent, while airborne freight accounted for an additional 6 per cent.

Supporting and auxiliary transport services performed in ports, airports or railways, such as cargo handling, storage and warehousing, formed overall around one-quarter of world transport exports. By comparison, passenger transport by air was estimated at only 21 per cent of the total.

World transport exports mirror closely trends in global merchandise trade flows. Even record performances in international air passenger traffic, as in 2015, cannot offset negative developments in goods transport.

Estimated structure of world transport exports, 2014
(percentage)



Source: WTO estimates.

In 2015, world travel exports fell by 5 per cent (see Table A25) to US$ 1,230 billion, largely as a result of strong exchange rate fluctuations, in particular the appreciation of the US dollar against major world currencies, rather than declining demand for international tourism (see Chart 4.13). Despite rising security concerns and geopolitical tensions in various destinations, global international tourist arrivals grew by 4 per cent, reaching 1,184 million in 2015.

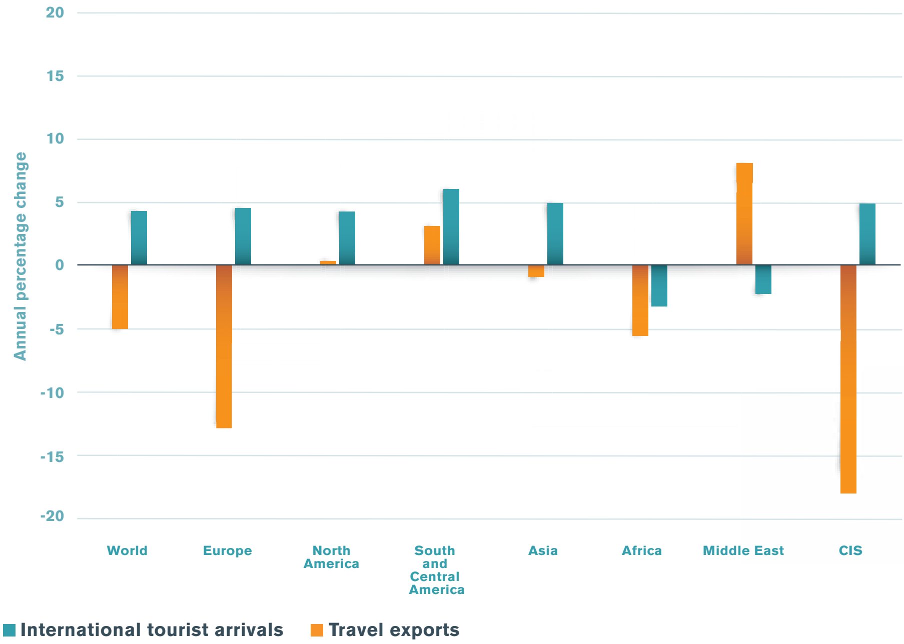
Europe saw international tourist arrivals rise by 5 per cent in 2015, or by an additional 24 million tourists compared to 2014, with the European hotel industry recording the highest growth in occupancy rates. However, in dollar terms Europe's travel receipts dropped by 13 per cent. Similarly, in the CIS, travel exports dropped by 17 per cent while international tourists were up by 5 per cent. Africa was the only region with plunging travel exports due to falling international tourists following terrorist attacks in some economies and fear of Ebola. Increasing foreign tourists, in particular from the United States, boosted travel receipts in South and Central America and the Caribbean, which expanded by 3 per cent.

The leading economies for travel exports had mixed experiences in 2015, particularly in Asia, where receipts dropped by 26 per cent in Macao, China, while they were up by 16 per cent in Thailand and by 35 per cent in Japan (see Chart 4.14) (see Table A33).

Other commercial services

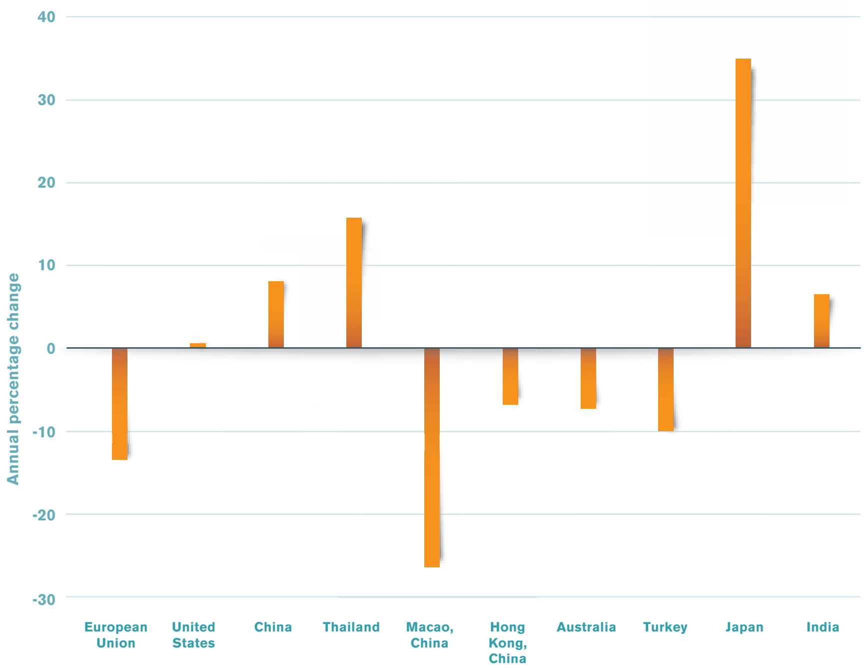
"Other commercial services" account for more than half of services exported worldwide (see Chart 4.15). In 2015,

Chart 4.13:
World travel exports and international tourist arrivals by region, 2015
(annual percentage change)



Source: WTO calculations based on UNWTO data and WTO-UNCTAD-ITC estimates.

Chart 4.14:
Leading exporters of travel, 2015
(annual percentage change)



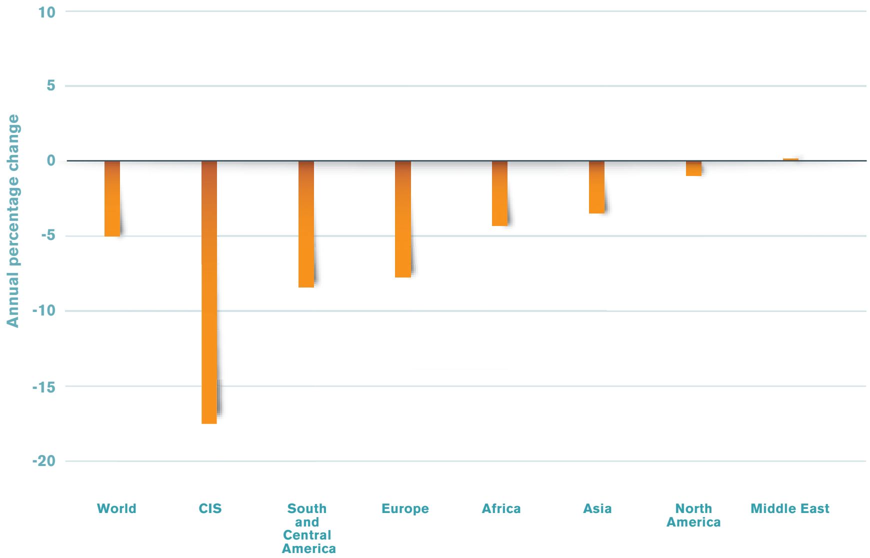
these services declined by 5 per cent to US$ 2,495 billion (see Table A34). The steepest fall was recorded in the CIS, where exports dropped by 17 per cent followed by South and Central America (-8 per cent). These declines reflected negative growth in the Russian Federation (-21 per cent) and Brazil (-16 per cent). In Europe, exports dropped by 7 per cent as the European Union's exports decreased.

Most leading exporters of other commercial services recorded significant declines in 2015 (see Chart 4.16). India and Hong Kong, China, were the only economies with positive growth above 1 per cent, rising by 2 per cent and 6 per cent respectively. In the United States, the increase was a modest 0.7 per cent (see Table A35).

All categories of other commercial services decreased, but some were more adversely affected than others (see Chart 4.17). Construction was the hardest hit services sector (-15 per cent), reflecting a drop in exports in both developed and developing economies, such as the European Union (-21 per cent), Japan (-6 per cent) and the Republic of Korea (-30 per cent) (see Table A37). In the latter, the fall was due to a significant contraction in building projects in the Middle East, a key export market. In recent years, the Republic of Korea has specialized in building refinery and petrochemical plants as well as power plants. Among top exporters, China was the only economy with strong growth (8 per cent) (see Table A37), reflecting thriving construction activity notably in African countries. For both the Republic of Korea and China, construction exports are essentially trade with other developing countries.

Chart 4.15:

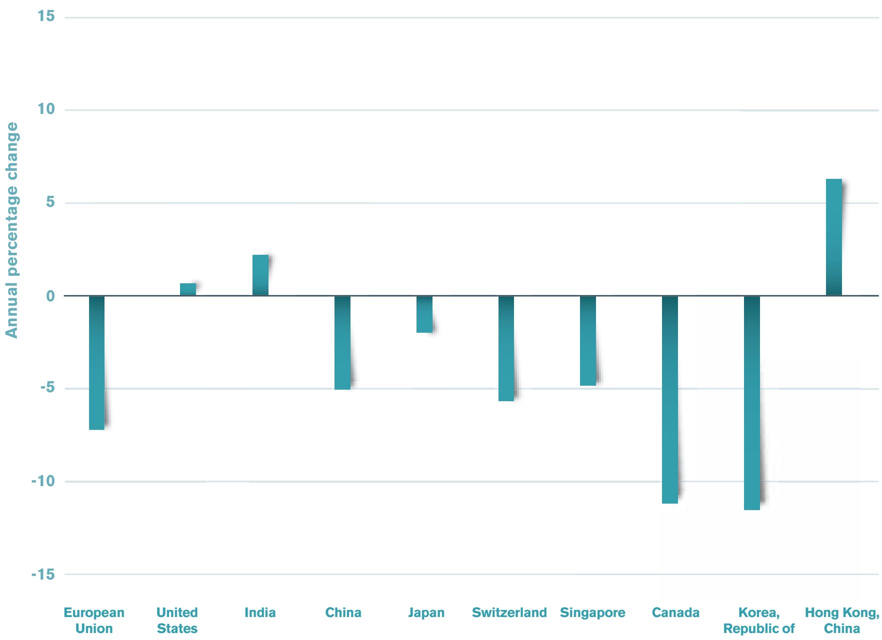
World exports of other commercial services by region, 2015
(annual percentage change)



Source: WTO-UNCTAD-ITC estimates.
Note: "Other commercial services" covers: construction; insurance and pension services; financial services; charges for the use of intellectual property n.i.e.; telecommunications, computer and information services; other business services; and personal, cultural and recreational services.

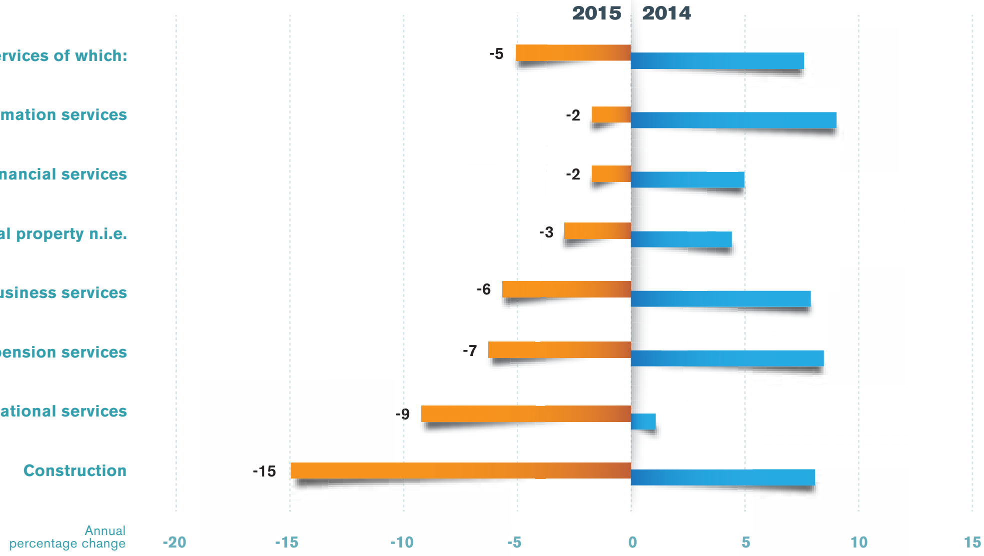
Chart 4.16:

Leading exporters of other commercial services, 2015
(annual percentage change)



Source: WTO-UNCTAD-ITC estimates.

Chart 4.17:
World exports of other commercial services by main category, 2015
(annual percentage change)

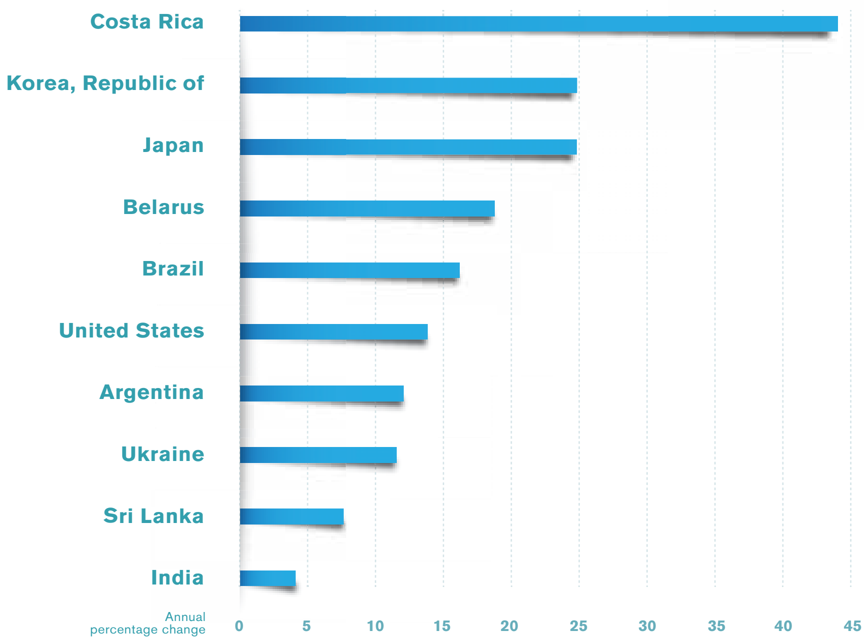


Source: WTO-UNCTAD-ITC estimates.

Computer services was the most resilient services sector in 2015, as it has been in other periods in which trade has contracted. This is due to a regular global demand for cost-efficient technologies, the development of innovative software in various sectors such as manufacturing, finance, insurance, healthcare and education as well as the pressing need to address IT security concerns.

In 2015, the IT services sector expanded rapidly in many emerging exporters (see Chart 4.18). In Costa Rica, the third-largest supplier of computer services in South and Central America, exports were up by 43 per cent, followed by Brazil (16 per cent) and Argentina (12 per cent). Double-digit growth was reported also in Asian exporters, such as the Republic of Korea and Japan, both growing by 25 per cent, as well as in the United States (14 per cent) (see Table A47).

Chart 4.18:
Exports of computer services in selected economies, 2015
(annual percentage change)



Source: WTO-UNCTAD-ITC estimates.

Global value chains

Estimating trade in terms of value added provides a new perspective on trade patterns. The OECD-WTO Trade in Value Added (TiVA) database provides data on the origin of the value added in gross exports. This can be used to outline trade flows taking place within global value chains (GVCs). TiVA data is based on the International Standard Industrial Classification (ISIC Rev.3) that covers all sectors of the economy, including primary products, manufactured goods and services.

International supply chains in the chemicals industry

The chemicals industry is a sector dominated by supply chains. The chemicals market faces strong international competition, and companies make use of supply chains to optimize their production or services and to make cost savings.

The ISIC definition of the chemical industry includes basic chemicals (plastics, synthetic rubber, etc.), agrochemical products (fertilizers, pesticides, etc.), pharmaceutical products, cosmetic products (soap, perfume, etc.) and synthetic fibres.

TiVA data shows that around 62 per cent of the value added in chemicals exports in 2011 (the latest year for which data is available in the TiVA database) originated from other industries supplying inputs to chemical firms to allow them to produce goods and services for export (see Chart 4.19).

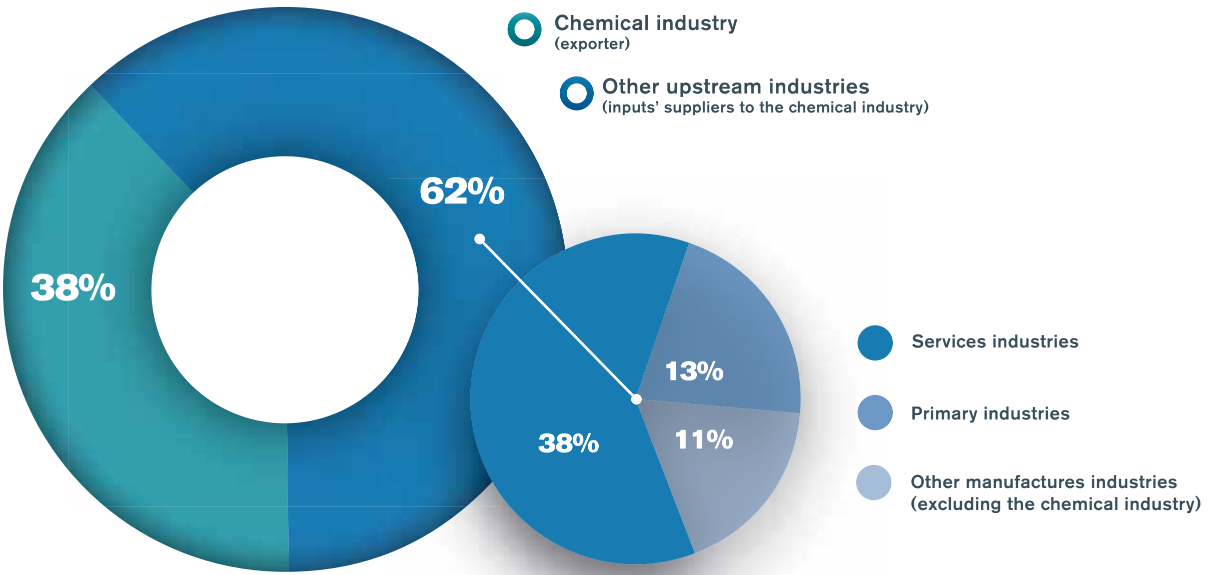
The share of “upstream” services inputs in the overall value added in chemicals exports reached 38 per cent in 2011 of which the “wholesale and retail trade” industry represented 12 per cent, reflecting the distribution networks that support the production process and that ensure the circulation of intermediate goods within the supply chain. “Research and development and other business activities” accounted for more than 10 per cent of the value added in world exports of chemicals. “Transport and storage” services accounted for 4 per cent of its value added exports, reflecting the fact that the chemicals sector is transport-intensive.

Among primary industry inputs, raw materials, such as “mining and quarrying” products, are essential for the production of chemicals. These accounted for 11 per cent of the value added.

Chart 4.19:

World exports in chemical products - Origin of value added, 2011

(per cent share in gross exports of chemicals)



Source: OECD-WTO TiVA database.

The breakdown between domestic and foreign value added content in chemicals exports reveals to what extent domestic content contributes to exports in this sector and how much the economy depends on foreign production partners for the foreign value added content of exports.

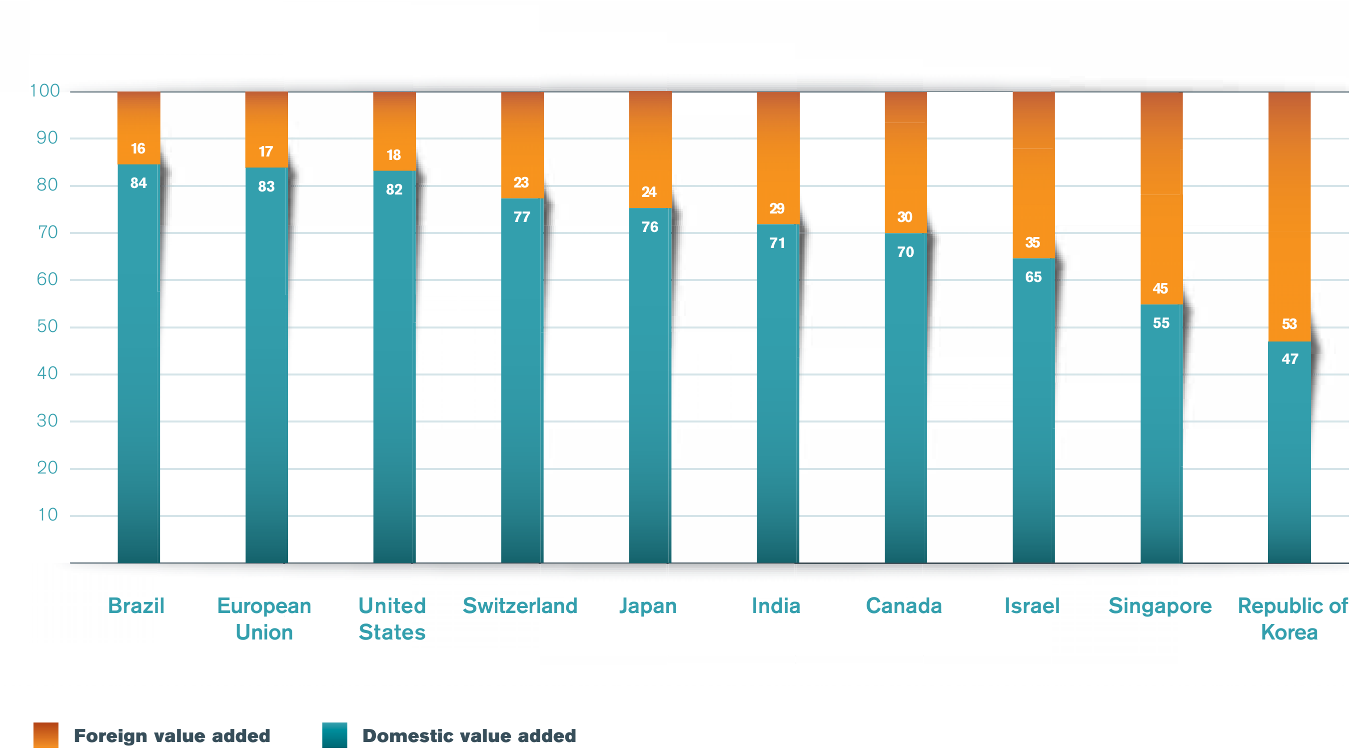
Chart 4.20 shows that for most countries, chemicals exports have a higher proportion of domestic rather than foreign value added content but the share varies significantly. The foreign value added content corresponds to the upstream supply of intermediate goods and services from foreign companies for the production of chemicals exports. The level of foreign value added content depends on multiple factors, such as the size of the exporting economy and its capacity to host the required production processes, the economy's level of industrial specialization and its position in the supply chain.

Chemicals supply chains in the European Union are concentrated among its member countries, with 83 per cent of the value added in exports in 2011 sourced from within the EU. Germany, France and the United Kingdom are the main suppliers of value added, with 22 per cent, 12 per cent and 11 per cent respectively of the value added in EU exports of chemicals. The United States is the main non-EU contributor to EU exports of chemicals, with 5 per cent of the value added in 2011, mainly from services sectors such as research and development or wholesale/retail distribution services.

Large economies such as the United States or Japan have a high share of domestic content in their chemicals exports. This is because their domestic production networks have the capacity to meet the needs of exporting industries, and their chemical industry therefore relies to a lesser extent on international supply chains to produce their exports.

The share of domestic content in chemicals exports is also high in Brazil,

Chart 4.20:
Domestic and foreign value added content in chemicals exports – selected economies, 2011
(per cent share in gross exports of chemicals)



Source: OECD-WTO TiVA database.

whose exports contained only 16 per cent of foreign value added content in 2011. This is because Brazil's chemicals industry is one of the largest in the southern hemisphere, and the country has its own natural resources and industrial infrastructure to produce basic raw materials or petrochemical products used in the chemical industry. Switzerland also incorporates a high level of domestic value added in its exports of chemical products. This is due to its specialization in high-grade products and the application of innovative processes and its high-skilled workforce.

Among the economies shown in Chart 4.20, the Republic of Korea has the lowest share of domestic value added content in chemical exports, at just 47 per cent in 2011. This is because Korean firms have established vertical supply chains with a number of countries to optimize the production process, to generate cost savings and to import raw materials such as oil products, which they largely source from Saudi Arabia. TiVA data reveals that Saudi Arabia plays a key role in the international chemicals industry as a core supplier of oil products to many countries.