

# World trade in 2015-2016

- The volume of world trade continued to grow slowly in 2015 recording growth of 2.7 per cent, revised down from a preliminary estimate of 2.8 per cent in April 2016. Trade growth was roughly in line with world GDP growth of 2.4 per cent.
  - Despite positive growth in trade volume terms, the current dollar value of world merchandise exports declined by 14 per cent in 2015, to US\$ 16.0 trillion, as export prices fell by 15 per cent.
  - The dollar value of world commercial services exports also fell 6 per cent in 2015 to US\$ 4,754 billion, although the decline was less severe than for merchandise.
  - In the first half of 2015, a sharp slowdown in trade volumes affected all regions to varying degrees, particularly in the second quarter, but this was mostly reversed by the end of the year.
  - The weakness of trade in 2015 was due to a number of factors, including an economic slowdown in China, a severe recession in Brazil, falling prices for oil and other commodities, and exchange rate volatility.
  - Demand for imports slowed in Asia and in resource-based economies in 2015 but strengthened in the United States and the European Union.
  - Merchandise values appeared to be stabilizing in the first quarter of 2016 as the dollar eased and oil prices staged a modest recovery, but the outlook for the year as a whole remained subdued.
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# General trends and drivers of world trade in 2015

## Overview

Growth in the volume of world merchandise trade remained sluggish in 2015, at 2.7 per cent as measured by the average of exports and imports. This figure was revised downward from a preliminary estimate of 2.8 per cent released in April 2016 based on available data at the time. Slow global trade growth was accompanied by a modest increase in world GDP, which grew 2.4 per cent in real terms at market exchange rates in the same period. Several factors contributed to the lacklustre performance, including economic slowdown in China, recessions in other large developing economies including Brazil, falling prices for oil and other primary commodities, strong fluctuations in exchange rates, and financial volatility driven by divergent monetary policies in

developed countries. Faster economic growth and rising import demand in developed countries partly made up for weaker demand elsewhere, leaving trade growth and output growth nearly unchanged compared with the previous year (2.8 per cent and 2.5 per cent, respectively, in 2014). 2015 marked the fourth consecutive year with trade volume growth below 3 per cent, and the fourth year in a row with world trade growing at nearly the same rate as world GDP. Growth rates for trade and GDP in 2015 remained below their respective averages since 1990 of 5 per cent and 2.7 per cent (see Chart 3.1). The slow pace of trade growth relative to GDP growth over the past four years stands in contrast to the period from 1990 to 2008, during which world merchandise trade volume grew 2.1 times as fast as world GDP on average. The recent uninterrupted spell of slow trade growth

is unusual but not unprecedented, and its importance should not be exaggerated. Overall, world trade growth was weaker between 1980 and 1985, when five out of six years saw trade growth below 3 per cent, including two years of outright contraction.

Unlike merchandise trade in volume terms, which recorded a modest increase last year, the dollar value of world merchandise trade declined sharply in 2015 as exports fell 14 per cent to US\$ 16 trillion, down from US\$ 19 trillion in the previous year. World trade in commercial services also registered a substantial decline in dollar terms (exports down 6 per cent to US\$ 4.7 trillion) (see Table A3). Larger declines were recorded in services categories closely linked to merchandise trade (e.g. transport services, down 10 per cent to US\$ 876

**Chart 3.1:**  
Growth in volume of world merchandise trade and real GDP, 2005-2015  
(percentage change)



Source: WTO Secretariat for trade figures, International Monetary Fund and Secretariat calculations for GDP.

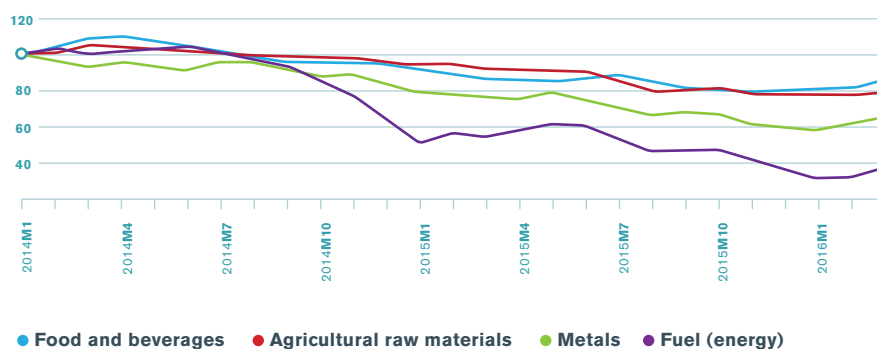
billion) than in other types of services, in particular travel and other commercial services, both down 5 per cent to US\$ 1,230 billion and US\$ 2,495 billion respectively (see Table A25).

The discrepancy between trade growth in 2015 in terms of volume and value was mostly attributable to large swings in commodity prices and exchange rates, as illustrated by Charts 3.2 and 3.3. Fuels registered the largest price decline of any commodity group (down 63 per cent between June 2014 and December 2015), as a result of new sources of supply such as shale oil and an easing of world energy demand as economic growth slowed in Asia. The decline in metals prices (down 35 per cent over the same period) was smaller than the decline in fuels due to the fact that there was no increase in the supply of metals comparable to the development of shale oil in the United States. Prices of food and agricultural raw materials also fell, by around 22 per cent each between June 2014 and December 2015 (more on commodity prices in Table A67).

The appreciation of the US dollar contributed to falling commodity

**Chart 3.2:**

**Prices of primary commodities, January 2014-March 2016**  
(indices of dollar values, January 2014=100)



Source: IMF Primary Commodity Prices.

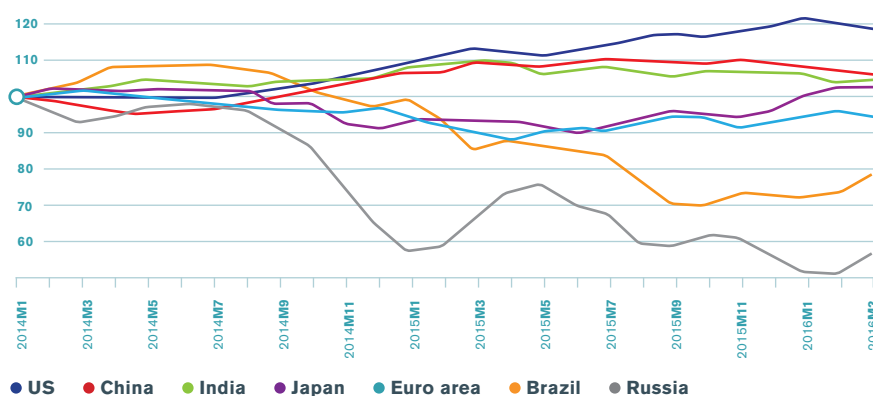
prices since most primary products are priced in dollars and a stronger US currency generally allows the same quantity of goods to be purchased with fewer dollars.

The dollar appreciated 13 per cent on average against the currencies of US trading partners in 2015 (i.e. in "nominal effective" terms), and was up even more (19 per cent) between June 2014 and December 2015. The Chinese yuan appreciated along with the dollar, rising 10 per cent on

average in 2015 and 13 per cent between June 2014 and December 2015, due to the Chinese currency's quasi-peg to the US dollar at the time. The appreciation of the yuan may have contributed to the economic slowdown in China to the extent that it made Chinese exports more expensive in foreign markets. Meanwhile, major natural resource exporters such as Brazil and the Russian Federation saw their currencies drop sharply in value in 2014 as falling prices for oil and other commodities reduced export earnings.

**Chart 3.3:**

**Nominal effective exchange rates of selected economies, January 2014 - March 2016**  
(indices, January 2014=100)

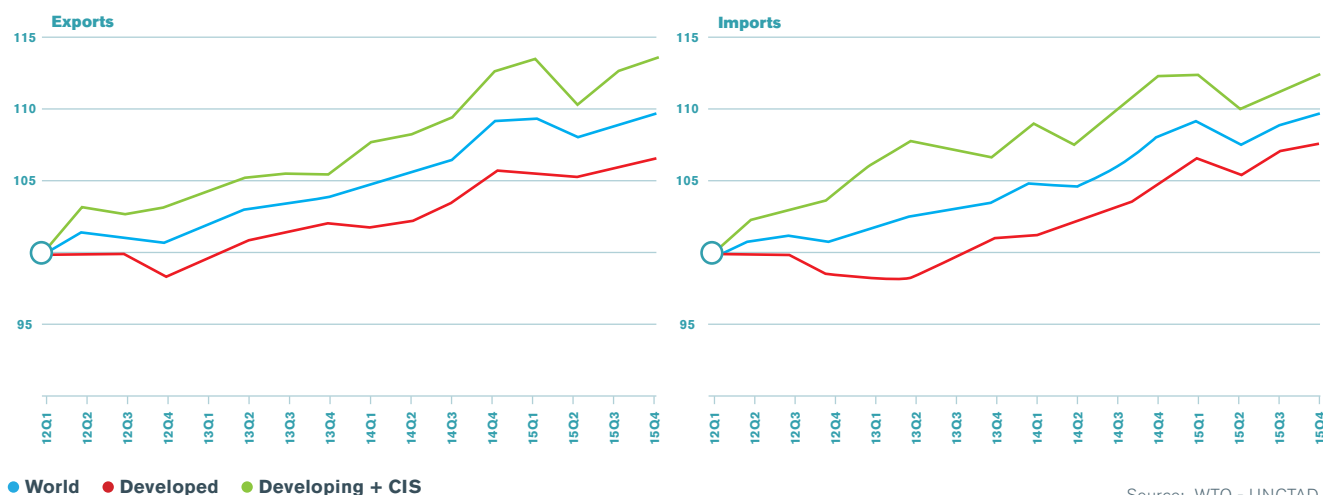


Source: Bank for International Settlements.

### Merchandise trade in volume terms

The regional and product composition of export and import growth has changed in recent years. In 2012-13, strong demand for imported goods and services on the part of China and other developing economies helped cushion slow GDP growth and weak import demand in developed countries, particularly in the euro area. However, in 2015 a recovery of imports in Europe and North America compensated for weak import demand in developing countries, especially natural resource exporters and developing Asian economies.

**Chart 3.4:**  
Volume of merchandise exports and imports by level of development, 2012Q1-2015Q4  
(indices, 2012Q1=100)



Source: WTO - UNCTAD

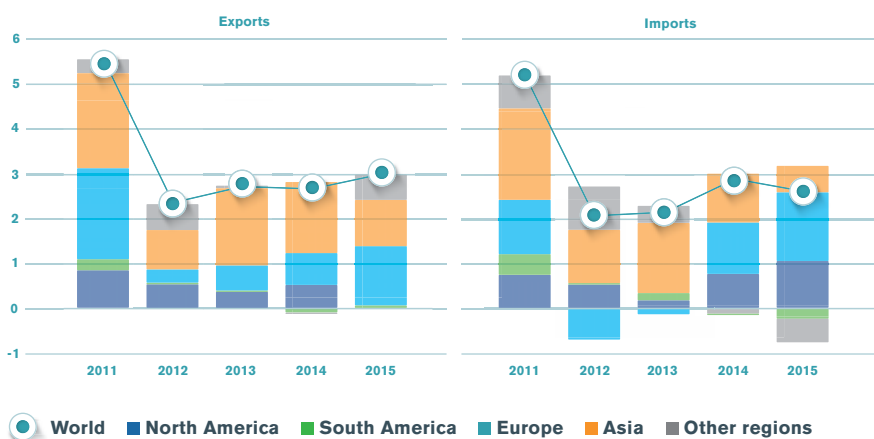
World trade volume was unusually volatile over the course of 2015, falling sharply in the second quarter before rebounding in the second half of the year (see Chart 3.4). The 1.4 per cent drop in world trade in the second quarter (average of exports and imports) was equivalent to a decline of roughly 5 per cent on an annualized basis, but this was reversed in the third and fourth quarters to the point that trade finished the year above its initial level. The declines in exports and imports of developed economies in the second quarter were less than the world average, but all economies were affected to varying degrees by the trade slowdown.

The volume of world merchandise trade has grown at a slow, steady pace in recent years, but this consistency belies changes in the contributions of WTO geographic regions to that growth over time. This is illustrated by Chart 3.5, which shows annual contributions of regions to world export and import volume growth.

Asia contributed more than any other region to the recovery of world trade after the financial crisis of 2008-09. However, the region's impact on global import demand declined in 2015 as China and other Asian economies cooled. Asia contributed 1.6 percentage points to the 2.3 per cent rise in the volume of world

merchandise imports in 2013, or 73 per cent of world import growth, but in 2015 the region contributed just 0.6 percentage points to the global increase of 2.4 per cent, or 25 per cent of world import growth. Asia's share in world import growth began to shrink at an earlier point than other regions in the first quarter of 2015

**Chart 3.5:**  
Contributions to world trade volume growth by region, 2011-2015  
(annual percentage change)



Source: WTO Secretariat.

before turning negative in the second quarter along with every other region.

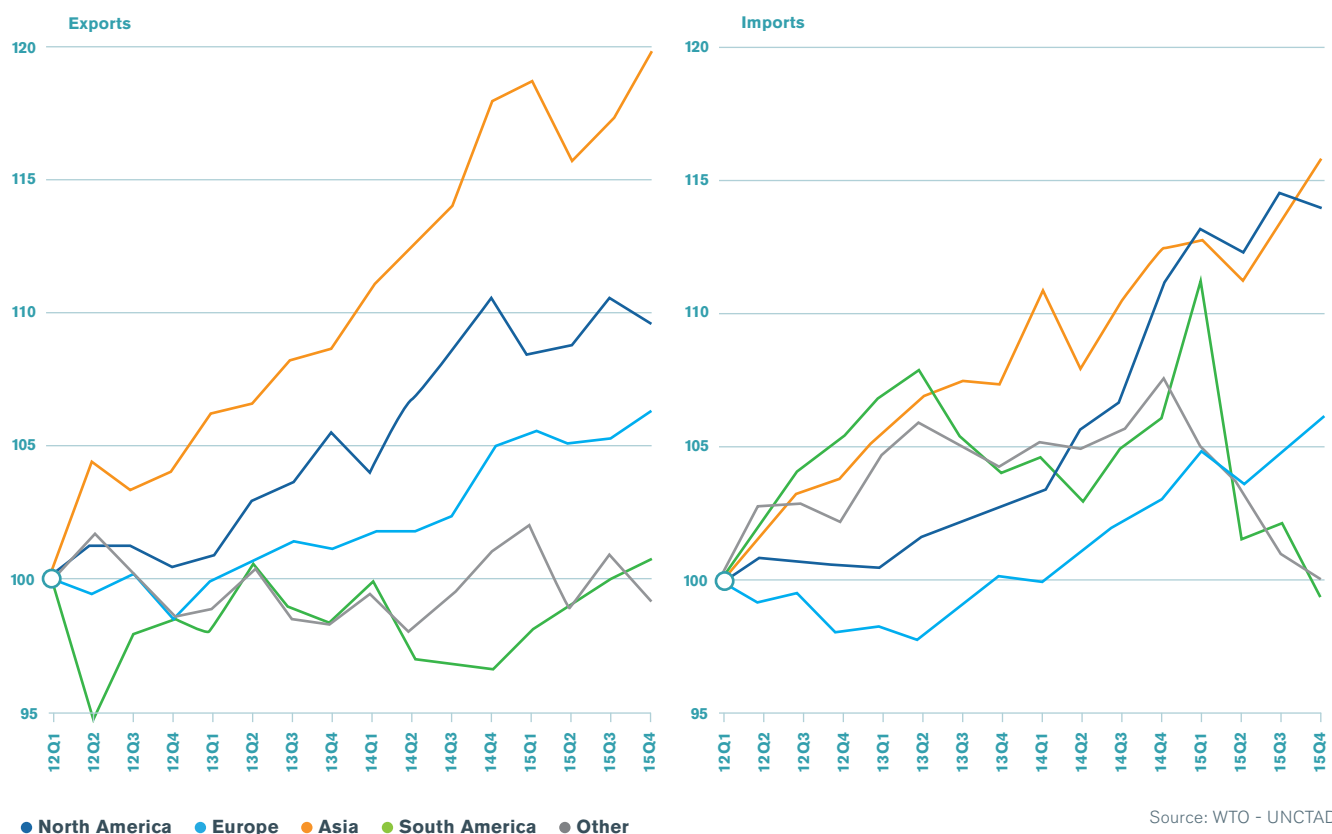
In contrast to Asia, Europe mostly weighed down world trade growth since the financial crisis, making a negative contribution to global import growth in 2012 and 2013. However, by 2015 Europe's contribution was again largely positive, accounting for 1.5 percentage points of the 2.4 per cent increase in world import volume for the year, or 64 per cent of global trade growth. A gradual recovery of trade within the European Union in 2014 and 2015 was responsible for much of the rebound in Europe, as the negative impact from the European

sovereign debt crisis faded. North America made a positive contribution to world import growth in 2015 (1.1 per cent), while negative contributions were recorded in 2015 for South and Central America (-0.2 per cent) and other regions including Africa, the Middle East and the Commonwealth of Independent States (-0.6 per cent).

On the supply side, "factory Asia" did more than any other region to lift merchandise export volume growth between 2011 and 2014, but its contribution fell below that of Europe in 2015. Asia was responsible for 1 percentage point of the 3.0 per cent rise in world merchandise exports in

2015, or 35 per cent of export growth, whereas Europe's 1.3 percentage point contribution accounted for 44 per cent of the rise, thanks in part to a reactivation of trade within the European Union. North America's contribution to export growth in volume terms was close to zero in 2015 as demand for US goods slowed in Canada, Asia and South and Central America. North American exports were the first to slow in 2015, as its quarterly contribution to world trade growth turned negative in the first quarter before registering a small rebound in the second quarter (see Chart 3.5). Meanwhile, South and Central America made a small positive contribution to export volume growth in 2015.

**Chart 3.6:**  
Volume of merchandise exports and imports by region, 2012Q1-2015Q4  
(seasonally adjusted volume indices, 2012Q1=100)



Source: WTO - UNCTAD

## Trade in value and trade in volume: Which one to use when analysing trade?

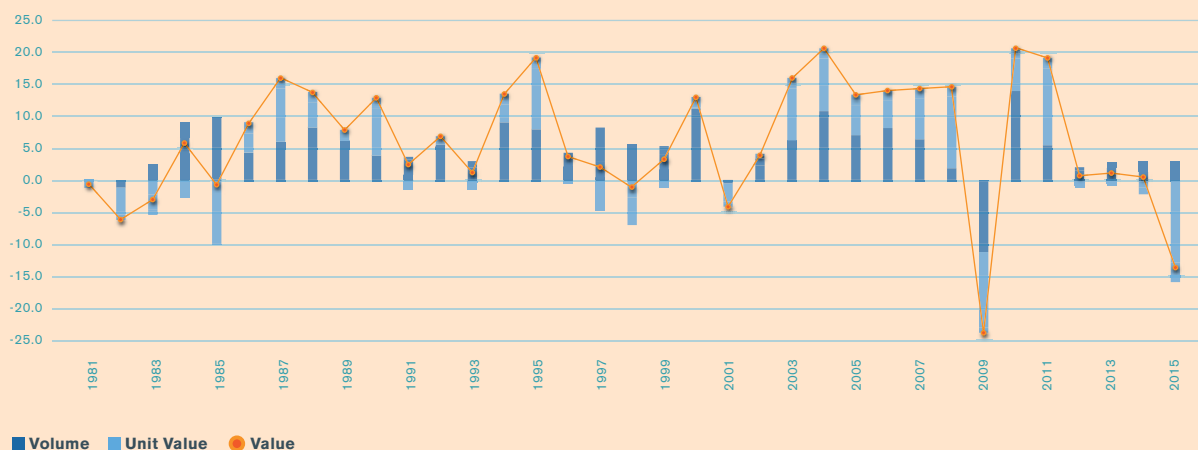
The WTO's merchandise trade volume indices are designed to approximate changes in quantities of goods traded by adjusting trade values in current dollar terms to account for fluctuations in prices and exchange rates. To calculate them, we divide changes in the dollar value of trade flows (represented by trade value indices) by changes in export and import prices (represented by unit value indices) using data collected from national sources. In general, trade statistics in volume terms are used to analyse changes in trade in real terms while trade in value is used when analysing changes in trade using current prices.

During the 2000–2010 period, growth in trade value resulted from a balanced contribution of price and quantities: on average, a 9.7 per cent increase in value terms was due to a 4.3 per cent contribution of volume

change and a 4.8 per cent change in prices. During the 2009 financial crisis, merchandise trade values dropped 23 per cent, i.e. volume changes accounted for 52 per cent and unit changes accounted for 48 per cent (see chart below). During 2010, both price and volume recovered. Volume developments contributed more than price change, resulting in a 21 per cent increase in value terms (the volume contribution was 68 per cent and the price change was 32 per cent).

2013 and 2015 saw a different contribution to value growth: volume growth stabilized at 2.7 per cent in a context of falling commodity prices. This resulted in a large decrease in value growth (see table below), with relationships between price and volume similar to those registered in the early 1980s before the ratios between volume and prices bounced back.

**Contribution to trade growth, in volume and unit price terms, 1981 – 2015 (per cent)**



**Average trade growth by volume, value and unit value (per cent)**

Period	Volume	Unit Value	Value
1981-1985	2.9	-3.5	-0.7
1986-1990	5.8	6.2	12.3
1991-1995	6.2	1.9	8.4
1995-2000	7.0	-2.1	4.8
2001-2005	5.0	5.1	10.5
2006-2010	3.7	4.6	9.0
2011-2015	3.1	-1.3	1.8
2013-2015	2.6	-6.0	-3.6

Source: WTO Secretariat.

All geographic regions were affected to varying degrees by the trade slowdown in the first half of 2015, as observed in Chart 3.6. Imports of resource dependent economies (mostly in South and Central America and “Other regions”) were squeezed by falling export revenues and did not see their imports recover in the second half of 2015, whereas imports of the more industrialized regions (Europe, North America, Asia) staged a partial recovery in the second half. The plunge in South and Central America’s imports has been precipitous, with a decline of 11 per cent between the first and fourth quarters of 2015.

A product breakdown of world trade growth in volume terms in 2015 is not available, but such a decomposition

is possible for the dollar value of merchandise trade. Chart 3.7 illustrates that fuels and mining products were responsible for more than half of the plunge in trade values in 2015, but that slowing trade in manufactured goods and agricultural products also contributed significantly to the overall decline. Among manufactured goods, the products where trade values notably declined in 2015 were office and telecom equipment, chemicals and other machinery, while clothing and textiles only made small positive contributions to trade growth.

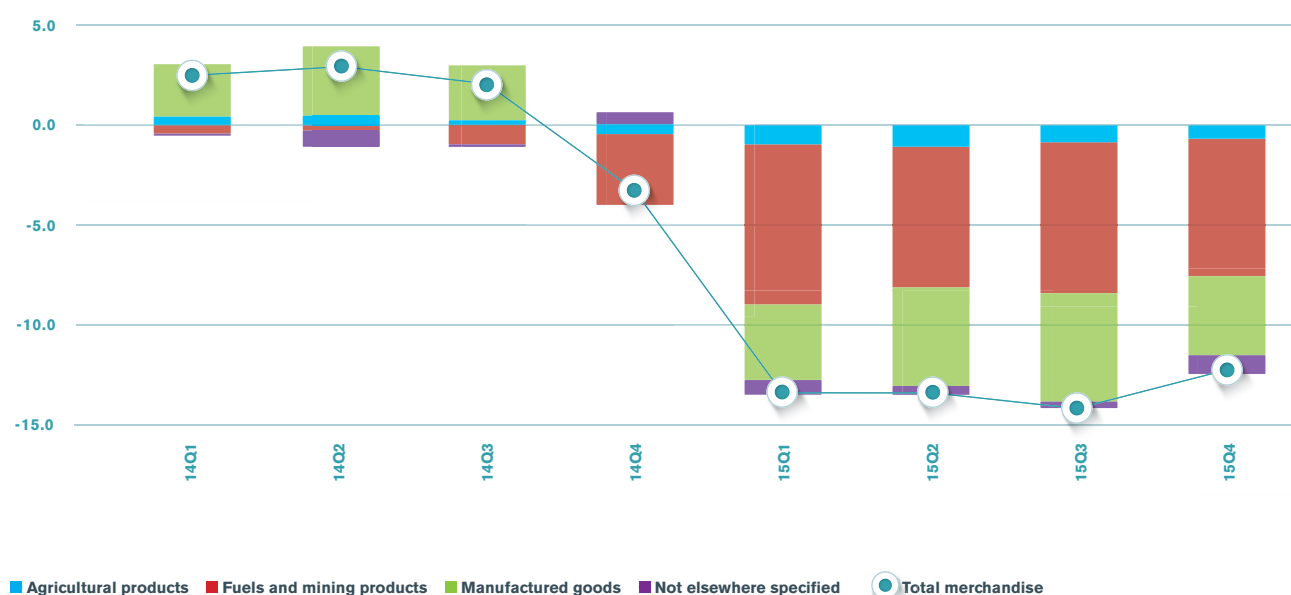
#### Trade in commercial services

The 6 per cent (see Table A3) decline in the dollar value of world exports of commercial services in 2015 was

strongly influenced by exchange rate fluctuations, particularly the general appreciation of the dollar against the currencies of US trading partners and more specifically by the depreciation of the euro and the pound against the US currency.

Europe accounted for a large fraction of world commercial services trade in 2015 (46 per cent of exports). A large share of this encompassed trade within the euro area and within the European Union more generally, so exchange rate developments within the EU have an outsized impact on world trade. However, all regions were probably affected to some degree by exchange rate movements due to the fact that trade statistics are usually recorded in US dollars. To illustrate the sensitivity

**Chart 3.7:**  
Contributions to year-on-year growth in world merchandise trade by product, 2014Q1-2015Q4  
(year-on-year percentage change in current dollar values)



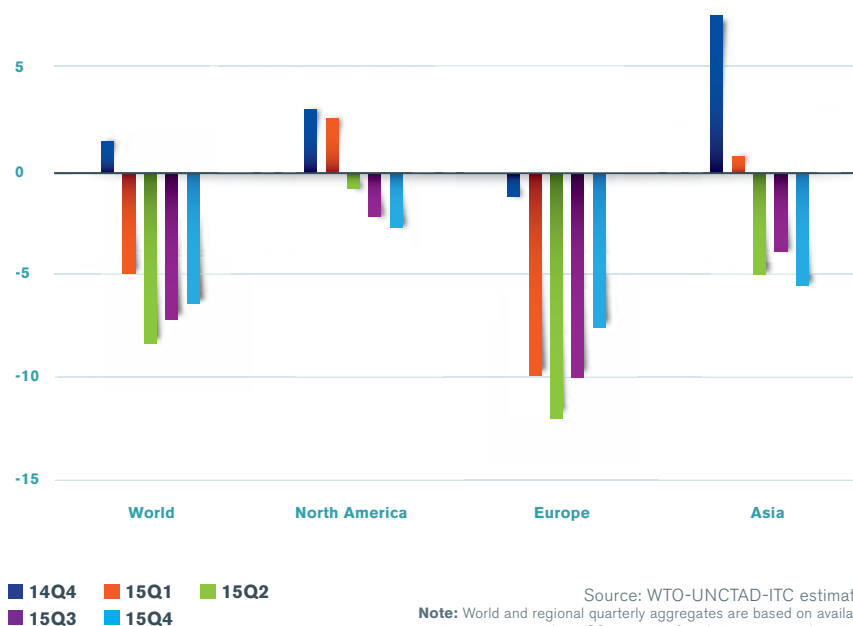
Source: WTO Secretariat estimates.



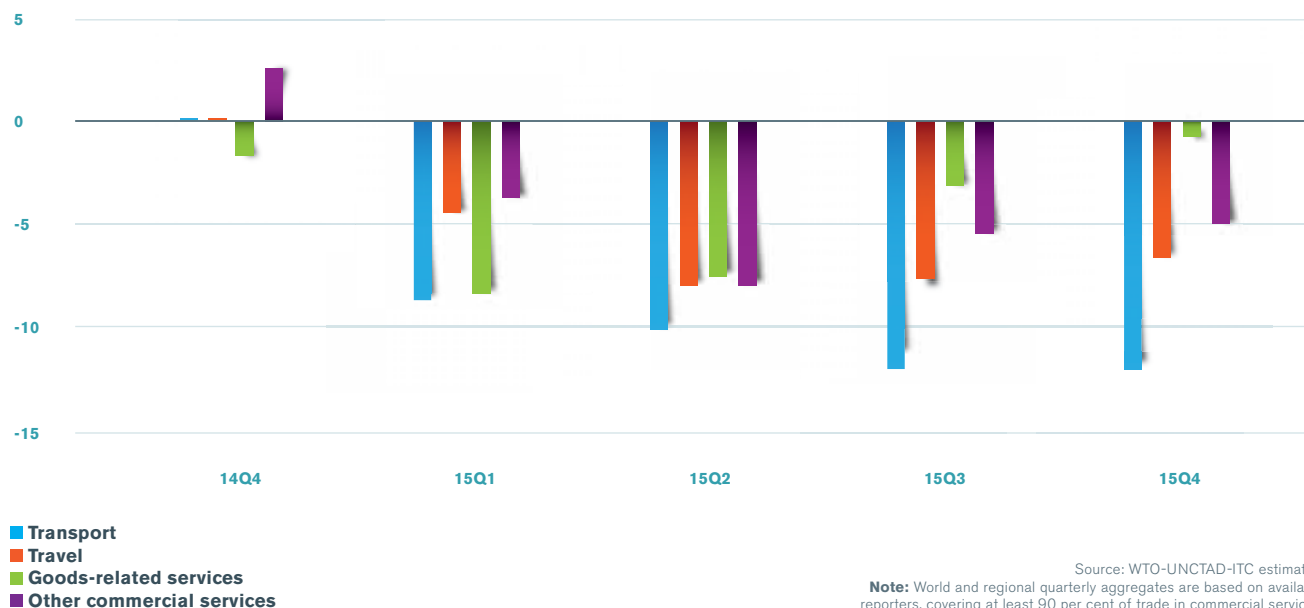
of these data to exchange rates, consider the fact that commercial services exports of the European Union were down nearly 10 per cent in 2015 (see Table A3), but if this trade was measured in euro terms exports would have risen 8 per cent.

Chart 3.8 shows quarterly developments in commercial services exports in 2015 broken down by geographic regions. World exports in dollar terms were down as much as 8 per cent year-on-year in the second quarter, but by the fourth quarter the decline had moderated to around 6 per cent. The evolution of European exports followed a similar pattern, although the magnitude of the decline was greater (-12 per cent in the second quarter, -8 per cent in the fourth quarter). North America recorded a more modest contraction, with commercial services exports

**Chart 3.8:**  
World exports of commercial services by region, 2014Q4-2015Q4  
(year-on-year percentage change)



**Chart 3.9:**  
World exports of commercial services by main category, 2014Q4-2015Q4  
(year-on-year percentage change)



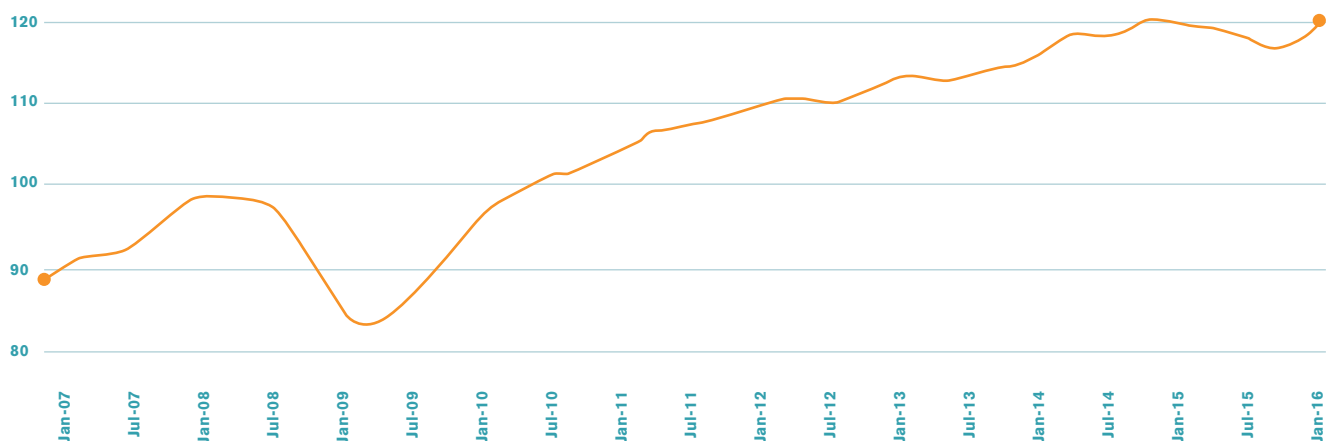
down 3 per cent in the final quarter compared to the same period in 2014. Asia's decline was steeper (down 6 per cent in the fourth quarter after rising 8 per cent in the equivalent period in 2014) and probably reflected a real slowdown in trade activity as well. Figures for imports by region display similar trends. Chart 3.9 shows the quarterly evolution of the dollar value of world commercial services exports in 2015 by major services categories. Transport recorded the largest contraction at year end, with exports down 12 per cent in the fourth quarter. On the other hand, goods-related services and

other commercial services showed signs of recovery in the second half of the year, with respective declines of 1 per cent and 5 per cent in the final quarter.

There is no volume indicator for services trade akin to the WTO's merchandise trade volume indices, but physical measures of services trade, such as passenger arrivals and container port throughput, point to a resumption of growth after a slowdown in the middle of 2015. Chart 3.10 shows an index of container port throughput compiled by the Institute for Shipping Economics and Logistics. The

seasonally adjusted trend index declined by 2.3 per cent between January and September of 2015 but then increased by 2.8 per cent between September 2015 and January 2016. Meanwhile, the World Tourism Organization (UNWTO) reports that worldwide tourist arrivals were estimated to have risen 4.4 per cent in 2015, marking the sixth consecutive year of above average growth in tourism since the financial crisis of 2009. These figures suggest that commercial services trade may have suffered a setback in the middle of 2015 but has since started to recover.

**Chart 3.10:**  
Container shipping throughput index, January 2007 - January 2016  
(seasonally adjusted trend index, 2010=100)



Source: Institute for Shipping Economics and Logistics

## World trade and output in early 2016

The outlook for the world economy and world trade remained subdued in the opening months of 2016.

Quarter-on-quarter GDP growth was modest in the United States and the euro area in the final quarter of 2015. Meanwhile, output slowed in China and contracted in Japan. China's economy slowed further in the first quarter of 2016, but indicators of business and consumer sentiment suggested that growth would remain stable at a lower but more sustainable rate. Growth also eased in the United States in the first quarter of 2016 but accelerated in the euro area. Finally, Japan's GDP continued to alternate between

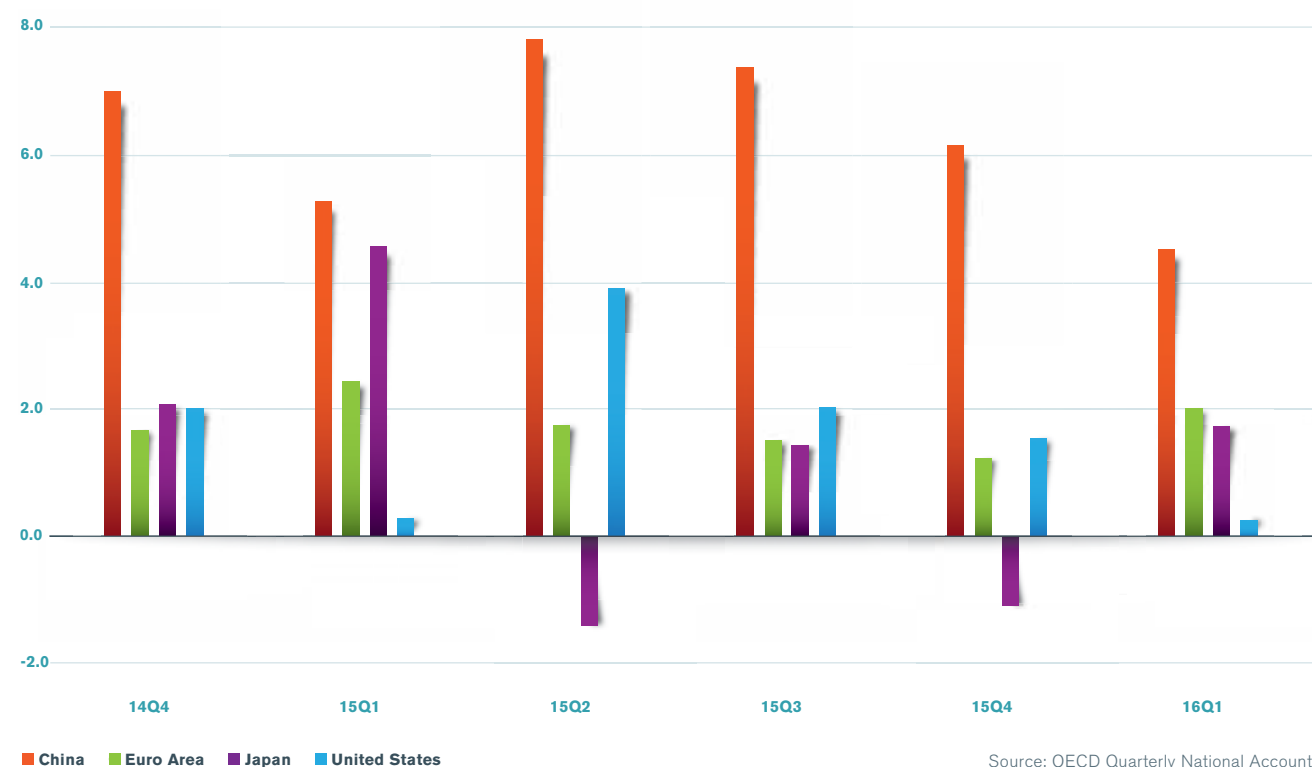
positive and negative growth with a rebound in the first quarter (see Chart 3.11). Current economic forecasts for the whole of 2016 at the time of writing point to another year of weak, uneven growth in both real GDP and merchandise trade volume.

Monthly merchandise trade data for the first quarter of 2016 indicate stabilization in the dollar value of trade flows in the latest months (see Chart 3.12). Imports of the United States were up 4 per cent year-on-year in February, the largest increase since December 2014. On the export side, however, shipments from the United States were down 4 per cent compared to the same month in

the previous year, but this was the least negative result in 14 months. Meanwhile, year-on-year growth in both exports and imports for the European Union was effectively zero in February following many months of contraction.

China's exports surged 11 per cent in March while imports were less negative compared with previous months, at -8 per cent. The 1 per cent decline in Japan's imports for March was the best result since January 2015, and although import growth remained negative at -9 per cent, this was less negative than the 20 per cent declines that became routine in 2015.

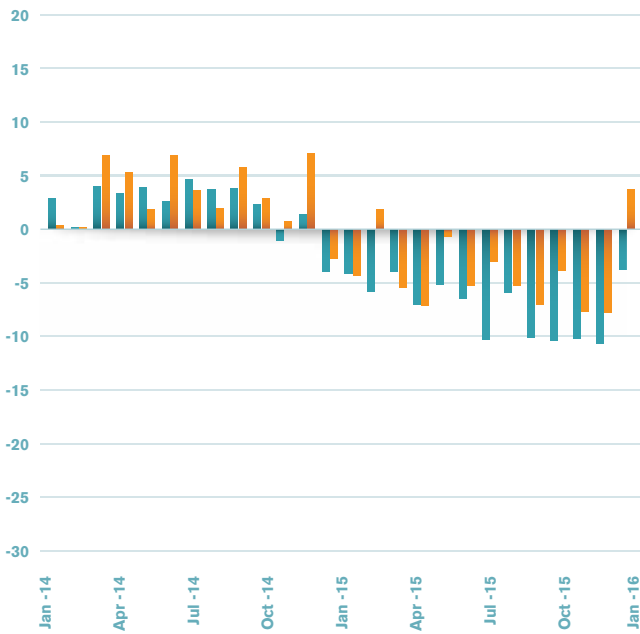
**Chart 3.11:**  
GDP growth of selected economies, 2014Q4-2016Q1  
(annualized per cent change, seasonally adjusted)



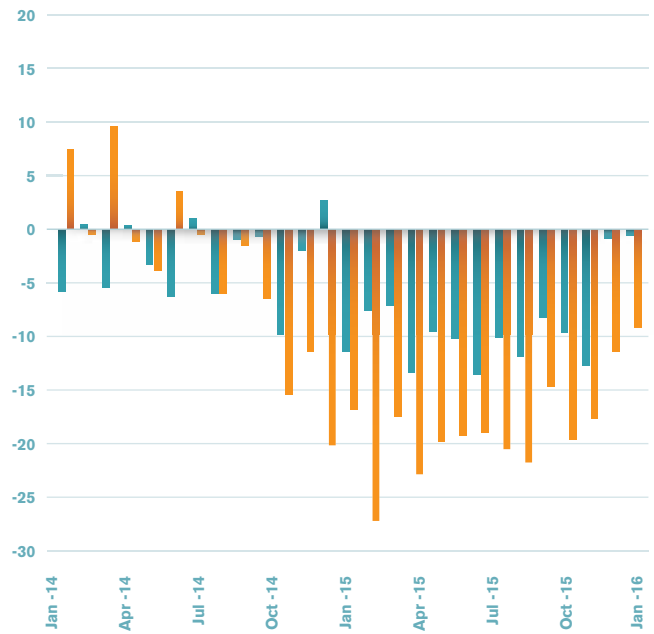
**Chart 3.12:**  
**Merchandise exports and imports of selected economies, January 2014-March 2016**  
 (year-on-year percentage change in current dollar values)

Imports Exports

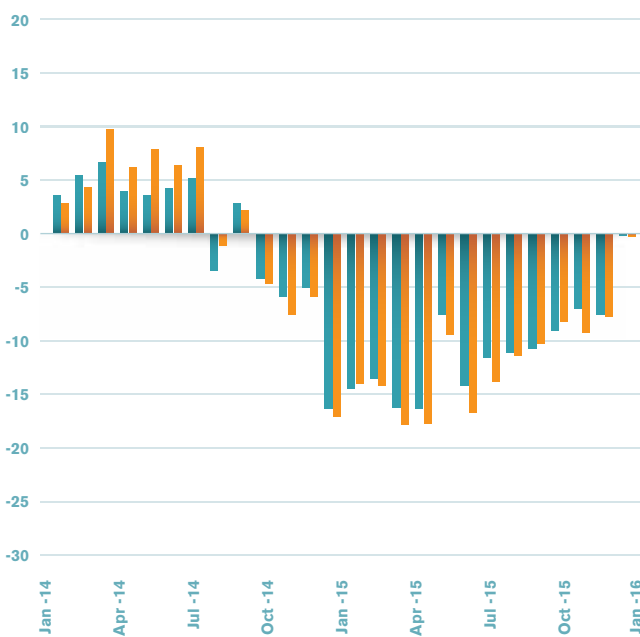
**UNITED STATES**



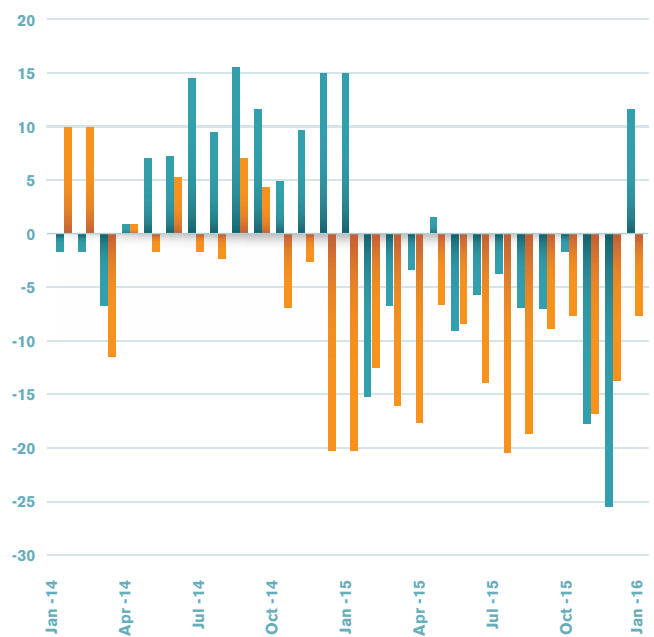
**JAPAN**



**EUROPEAN UNION (28)**



**CHINA<sup>a</sup>**



<sup>a</sup> January and February averaged to minimize distortions due to lunar new year.  
 Sources: IMF International Financial Statistics, Global Trade Information Services GTA database, national statistics.