

Chapter IV

Trade in merchandise and commercial services

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Merchandise exports
grew by

10%

in 2018, with all major product groups showing growth. Fuels and mining products recorded the highest growth (23 per cent), followed by manufactured goods (8 per cent) and agricultural products (5 per cent).



Global value chains

Developing economies in Asia, such as Viet Nam, the Philippines and India, are playing an increasing role in global value chains according to the latest available data.



15%

Telecommunications, computer and information services was the most dynamic services sector in 2018 (growing by 15 per cent) followed by insurance and pension services (8 per cent).



Digital trade

The WTO continues to work with other international organizations and the private sector to improve the measurement of digital trade.

Merchandise trade

Exports of fuels and mining products declined over the past ten years

World merchandise exports increased on average by 1.8 per cent per year from 2008 to 2018 but exports of fuels and mining products decreased by 0.9 per cent per year.

In 2018, world exports of fuels and mining products stood at 91 per cent of their value in 2008 (see Chart 4.1). This is due to a combination of weaker demand and increased supply leading to a decline in fuel prices, which, in 2018, were 33 per cent below the level of 2008.

Agricultural products saw the biggest increase, growing by 3.1 per cent per year and rising by 36 per cent compared to 2008. Exports of manufactured goods have risen by 26 per cent in comparison to 2008.

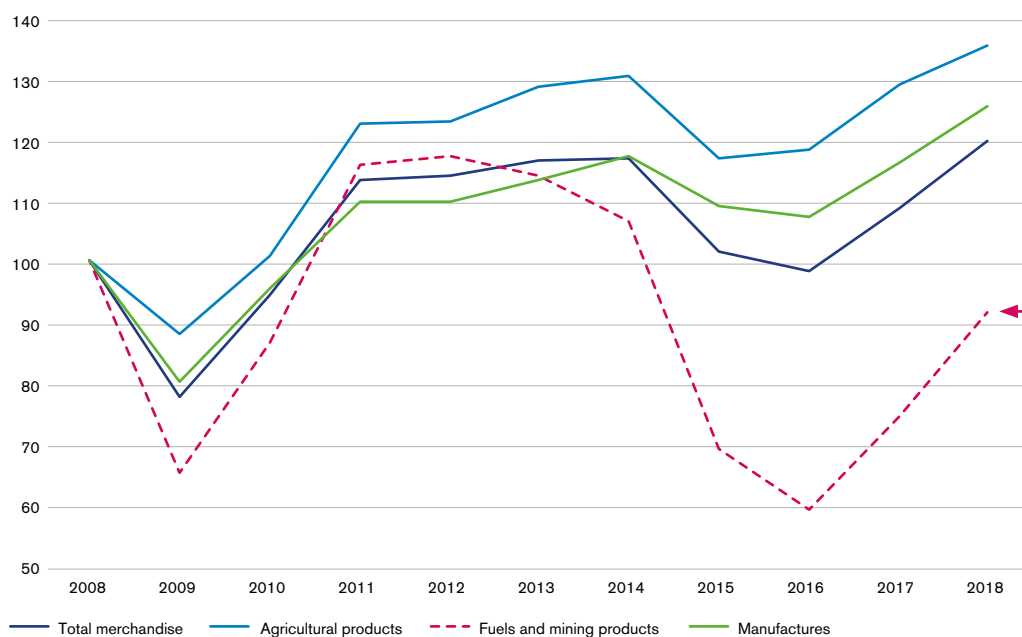
Manufactured goods increased from 66 per cent of world trade in 2008 to a 68 per cent share in 2018 but fuels and mining products declined from a 22 per cent share to 19 per cent. The share of agricultural products grew from 8 per cent to 10 per cent.

Since 2016, world exports of all major product groups have shown growth: fuels and mining products have increased by 23 per cent since 2017, manufactured goods by 8 per cent and agricultural products by 5 per cent. Total merchandise exports have seen growth of 10 per cent since 2017.

Chart 4.1

Merchandise world exports, by major product groups, 2008-2018

(Index 2008 = 100)



-9%

Decline in the value of exports of fuels and mining products in comparison to 2008.

Source: WTO estimates.

Top ten exporters of agricultural products represented 72 per cent of world exports in 2018

In 2018, the top seven exporters of agricultural products remained unchanged, led by the European Union, the United States and Brazil (see Chart 4.2). India moved up to eighth place and Australia down to ninth. Mexico moved up to tenth position while Argentina dropped out of the top ten.

The biggest increases in exports of agricultural products within the top ten exporters were recorded by China (9 per cent),

Brazil (6 per cent) and Mexico (6 per cent) while declines were experienced by Australia (-10 per cent) and Indonesia (-7 per cent). Australia's largest declines were for wheat and meslin (-34 per cent) and barley (-13 per cent). Indonesia experienced declines in exports of animal or vegetable fats (-11 per cent) and rubber and related articles (-18 per cent).

Chart 4.2

Top ten exporters of agricultural products, 2018
(US\$ billion and annual percentage change)



-10%
Decline in Australian exports of agricultural products in 2018.

Box 4.1

Share of soybeans in exports of agricultural products increases from 2.6 per cent to 3.3 per cent

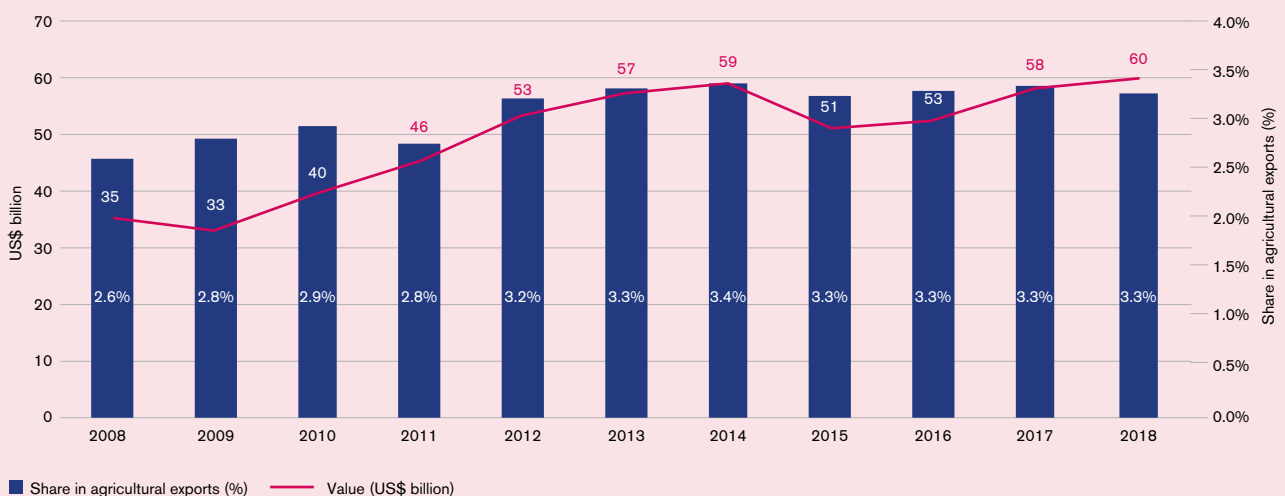
The share of soybeans in world exports of agricultural products increased from 2.6 per cent in 2008 to 3.3 per cent in 2018, totalling US\$ 60 billion in 2018 (up from US\$ 35 billion in 2008). On average, soybean exports increased by 5.5 per cent per year during this period, reaching a peak in 2018. Exports of soybeans grew more than exports of agricultural products overall (3.1 per cent per year) despite a 24 per cent decline in soybean prices since 2008.

The major suppliers of soybeans in 2018 were Brazil (56 per cent share of world exports; 29 per cent increase since 2017), the United States (29 per cent share; 20 per cent decline), Paraguay (4 per cent share; 3 per cent increase) and Canada (4 per cent share; 14 per cent increase).

Chart 4.3

World exports of soybeans, 2008-2018

(US\$ billion and share in agricultural products, %)



Source: WTO estimates.
Note: Soybeans as defined in HS 12.01.

Top ten exporters of fuels and mining products show continuing growth

The top ten exporters of fuels and mining products recorded marked increases in the value of their exports in 2018, continuing the positive trend recorded in 2017. The increases in 2018 ranged from 17 per cent (Russian Federation) to 44 per cent (Iraq) – see Chart 4.4. This was mostly price-driven; fuel prices rose by 27 per cent in 2018.

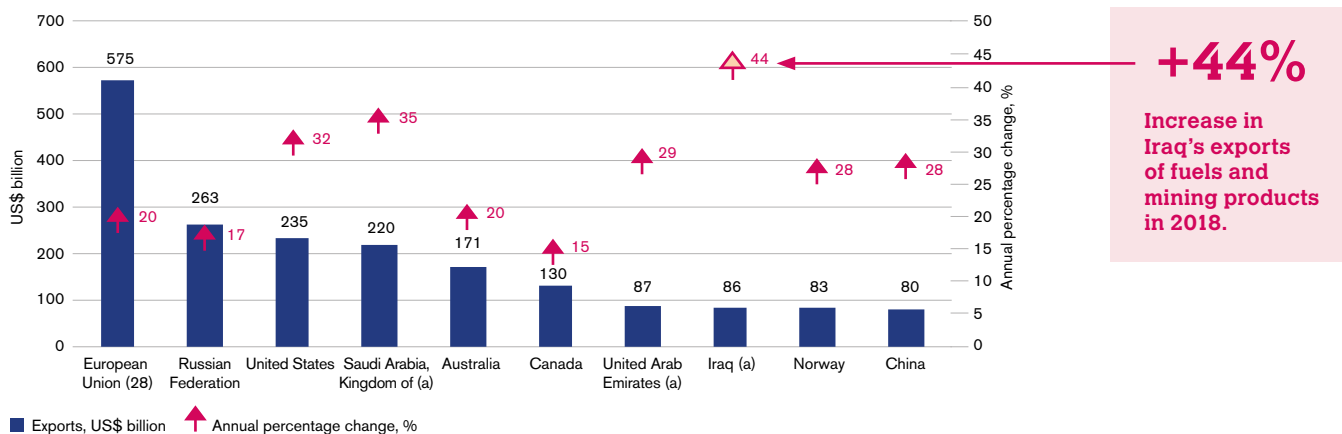
Four of the top ten exporters (the United States, Australia, Iraq and China) surpassed their 2008 values.

The top seven exporters remained unchanged in 2018, led by the European Union, Russia and the United States. Iraq overtook Norway and China – reaching eighth position.

Chart 4.4

Top ten exporters of fuels and mining products, 2018

(US\$ billion and annual percentage change)



(a) Includes WTO Secretariat estimates.
Source: WTO estimates.

Box 4.2

World exports of electrical energy decreased by 1.9 per cent annually since 2008

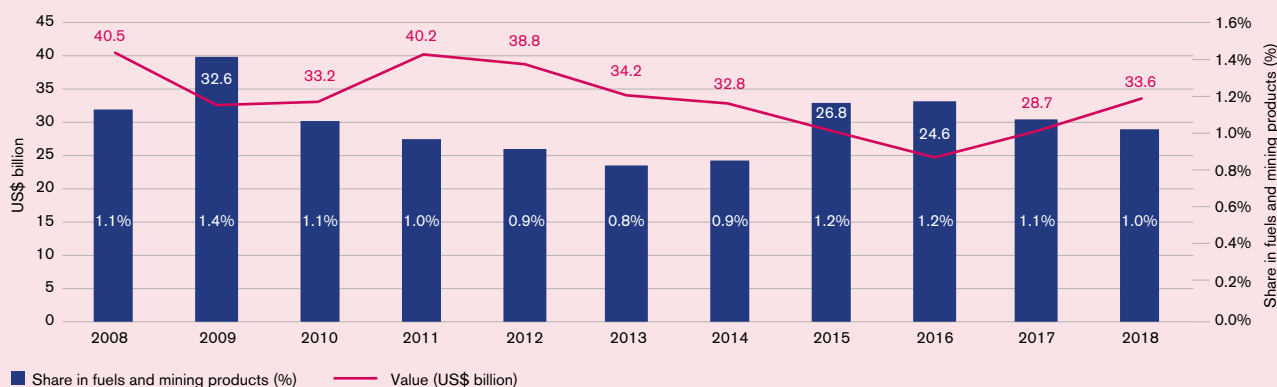
The share of electrical energy in world exports of fuels and mining products decreased from 1.1 per cent in 2008 to 1.0 per cent in 2018. The highest shares during this period were reached in 2009 (1.4 per cent) and 2015-16 (1.2 per cent). On average, exports decreased by 1.9 per cent annually during this period, recording a value of US\$ 33.6 billion in 2018.

In 2018, the top exporters of electrical energy were France (12.4 per cent share in world exports; 2.1 per cent annual decline), Germany (11.2 per cent share; 3.4 per cent decline), Canada (6.7 per cent share; 4.5 per cent decline), Paraguay (6.3 per cent share; 0.8 per cent increase) and Switzerland (6.3 per cent share; 8.4 per cent decline). The top five were the same in 2008 but were led by Germany followed by France, Switzerland, Canada and Paraguay.

Chart 4.5

World exports of electrical energy, 2008-2018

(US\$ billion and share in fuels and mining products, %)



Source: WTO estimates based on Comtrade and Trade Data Monitor.
Note: Electrical energy as defined in HS 27.16.

Switzerland breaks into top ten exporters of manufactured goods

The European Union was the largest exporter of manufactured goods in 2018, with a 39 per cent world share and an export value of US\$ 5.09 trillion (+9 per cent) – see Chart 4.6. This was followed by China, which had an 18 per cent share with a value of US\$ 2.32 trillion (+9 per cent). The United States – in third place – had a 9 per cent share, with exports of US\$ 1.18 trillion (+5 per cent).

Japan and the Republic of Korea remained in fourth and fifth positions, followed by Hong Kong (China) and Mexico. Chinese Taipei overtook Singapore, rising to eighth position.

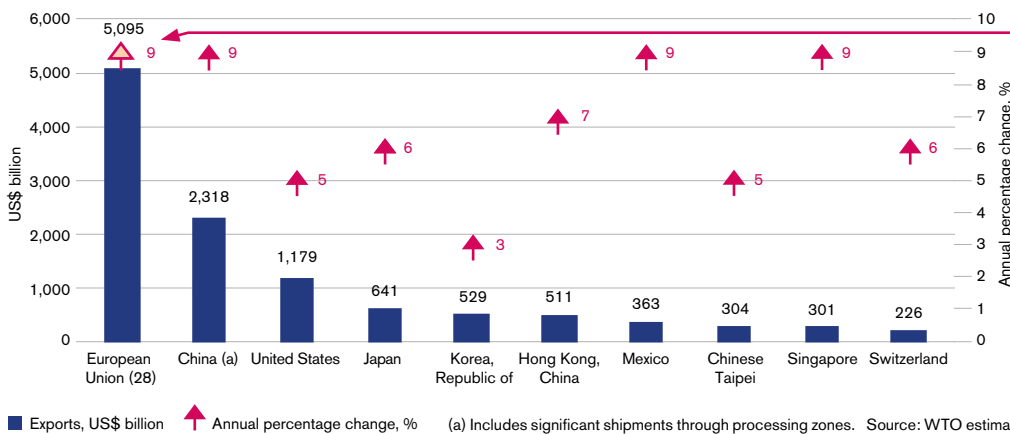
Switzerland entered the top ten, overtaking Canada, which dropped to 12th position.

Exports of manufactured goods increased for all of the top ten exporters, with the highest growth rates recorded by the European Union (+9.3 per cent) and China (+9.1 per cent). The United States (+4.6 per cent) and the Republic of Korea (+3.4 per cent) had the lowest growth rates among the top ten. The top ten exporters accounted for 83 per cent of world exports of manufactured goods in 2018.

Chart 4.6

Top ten exporters of manufactured goods, 2018

(US\$ billion and annual percentage change)



+9%
Increase in EU exports of manufactured goods in 2018.

India and the United States see decline in exports of iron and steel

India and the United States experienced declines of 14 per cent and 5 per cent respectively in their exports of iron and steel in 2018 but the other top ten exporters saw increases. The highest growth rates were recorded by Turkey (39 per cent) and the Russian Federation (20 per cent – see Chart 4.7).

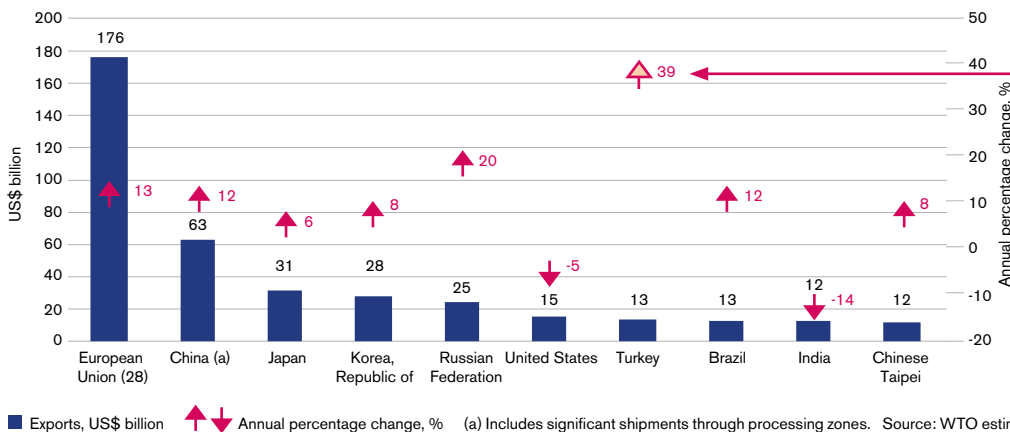
The top six exporters remained in the same order – with the European Union in first place (38 per cent share in

world exports), followed by China (14 per cent share) and Japan (7 per cent share). Turkey rose three places to seventh position while India fell from seventh to ninth. Chinese Taipei dropped from ninth to tenth. The top ten exporters accounted collectively for 83 per cent of world exports in 2018 (down from 85 per cent in 2017).

Chart 4.7

Top ten exporters of iron and steel, 2018

(US\$ billion and annual percentage change)



+39%
Increase in Turkey's exports of iron and steel in 2018.

Top ten exporters of chemicals account for 87 per cent of world exports

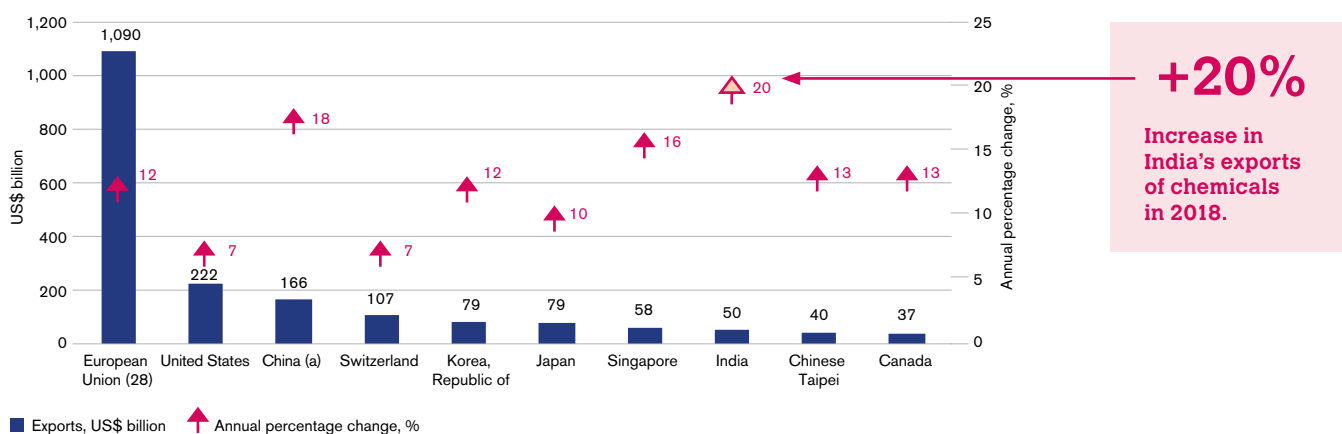
The top ten exporters of chemicals, led by the European Union and the United States, remained in the same order in 2018 – except for the Republic of Korea overtaking Japan and moving into fifth position.

All of the top ten exporters recorded growth (see Chart 4.8), ranging from 7 per cent (United States and Switzerland) to

20 per cent (India). India saw large increases to China (+72 per cent), Indonesia (+55 per cent) and Brazil (+37 per cent). The European Union accounted for 49 per cent of world exports in 2018, followed by the United States (10 per cent share) and China (7 per cent share). Collectively, the top ten were responsible for 87 per cent of world exports in 2018.

Chart 4.8

Top ten exporters of chemicals, 2018 (US\$ billion and annual percentage change)



(a) Includes significant shipments through processing zones.
Source: WTO estimates.

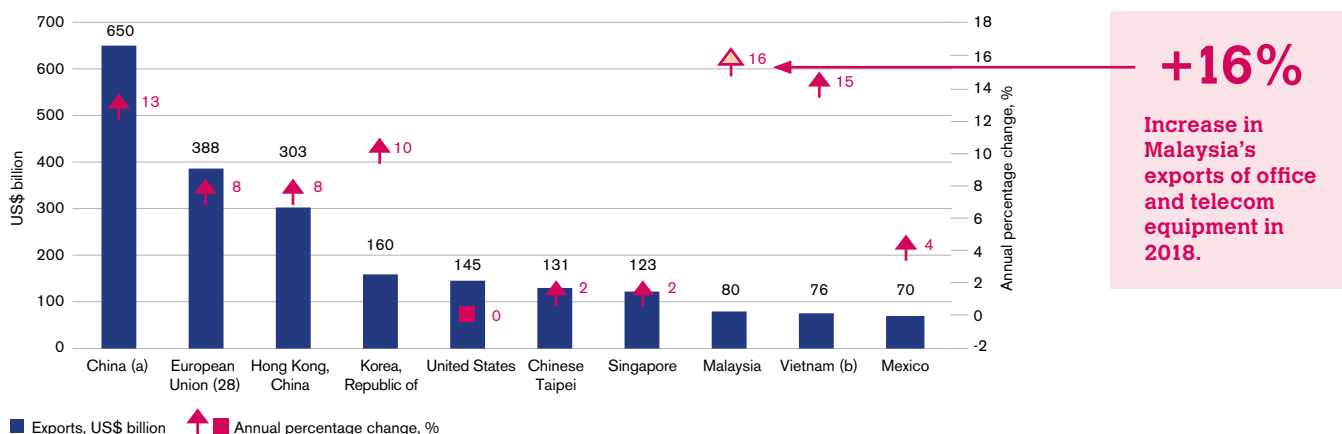
China accounts for almost one-third of world exports of office and telecom equipment

The highest growth rates among the top ten exporters of office and telecom equipment in 2018 were recorded by Malaysia (16 per cent), Viet Nam (15 per cent) and China (13 per cent) – see Chart 4.9. The leading exporter, China, accounted for 32 per cent of world exports in 2018, followed by the European Union with a share of 19 per cent.

The Republic of Korea moved up to fourth position, overtaking the United States, and Chinese Taipei moved into sixth place, overtaking Singapore. Malaysia moved up one place into eighth position while Viet Nam moved up to ninth position, recording a 15 per cent increase (4 per cent share). Mexico fell from eighth to tenth position. The top ten exporters accounted for more than 90 per cent of world exports in 2018.

Chart 4.9

Top ten exporters of office and telecom equipment, 2018 (US\$ billion and annual percentage change)



(a) Includes significant shipments through processing zones.
(b) Includes WTO Secretariat estimates.
Source: WTO estimates.

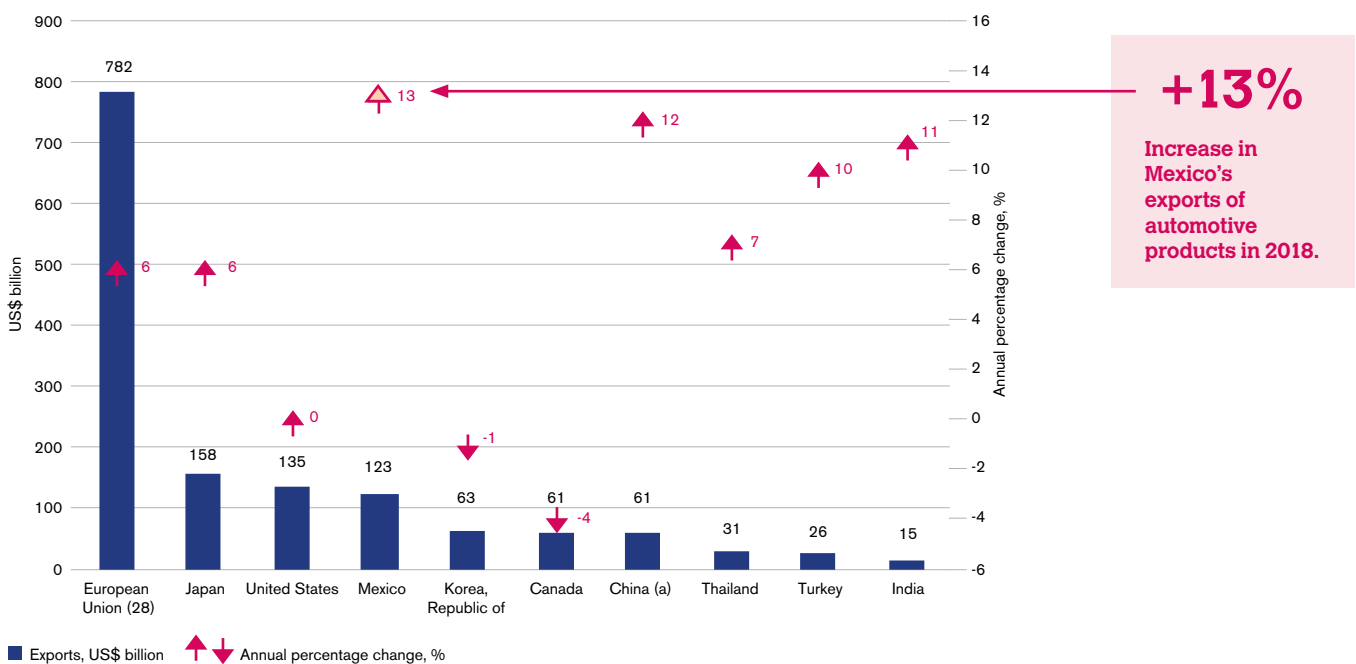
Canada's exports of automotive products decrease by 4 per cent

Eight of the ten top exporters of automotive products increased their export values in 2018 – with annual growth rates ranging from +0.2 per cent (United States) to +13 per cent (Mexico). Two of the top ten saw decreases: Canada, -4 per cent, and the Republic of Korea, -1 per cent – see Chart 4.10). For Canada, this was mostly due to declines in exports of 'motor cars, including station wagons' to the United States. For the Republic of Korea, there were also declines of motor cars to the United States as well as a decline in exports of trucks and buses to mostly Asian destinations.

The European Union once again accounted for slightly more than 50 per cent of world exports of automotive products in 2018 (a 6 per cent increase) followed by Japan with a share of 10 per cent (+6 per cent) and the United States with a share of 9 per cent (see Chart 4.10). The order of the top nine exporters remained unchanged. However, India entered the top ten, overtaking Brazil. The top ten exporters accounted for 94 per cent of world exports in 2018.

Chart 4.10

Top ten exporters of automotive products, 2018 (US\$ billion and annual percentage change)



(a) Includes significant shipments through processing zones.
Source: WTO estimates.

Trade in commercial services

Transport services continued to grow in 2018

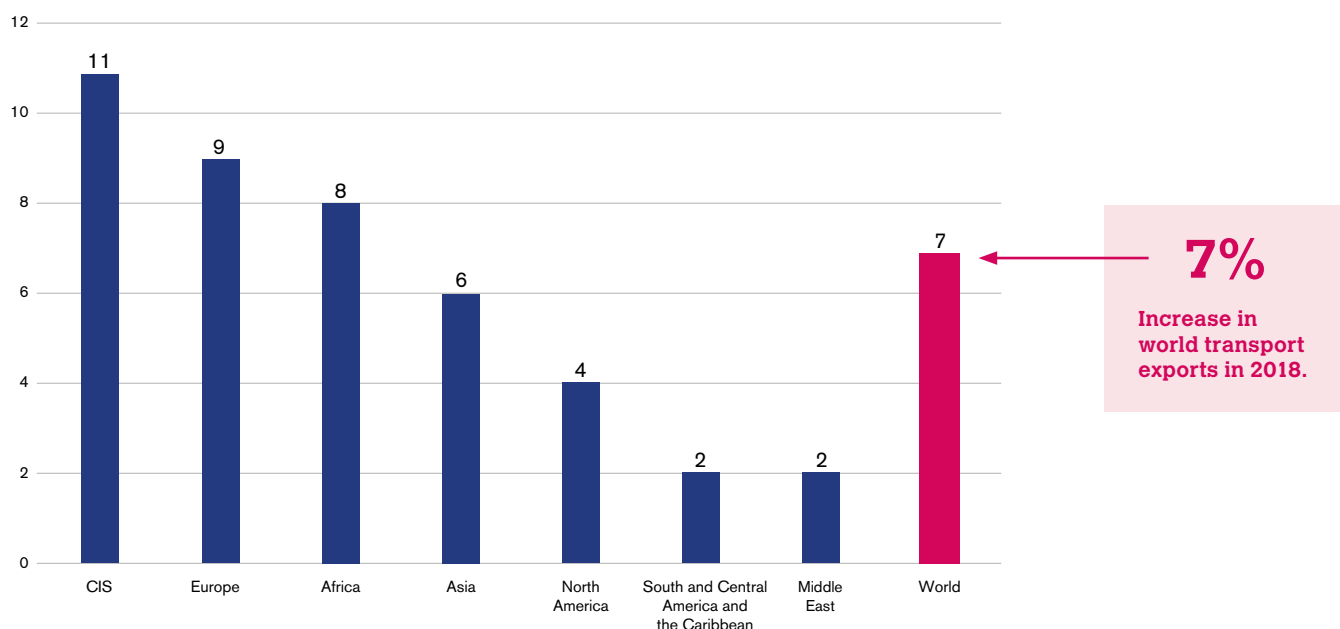
World trade in transport services totalled over US\$ 1 trillion in 2018, up 7 per cent, with growth in all regions (see Chart 4.11). The Commonwealth of Independent States (CIS) recorded the highest growth (11 per cent), followed by Europe (9 per cent). Europe accounted for nearly half of global transport exports in 2018.

Growth was below average in the Middle East as air and sea transport growth both levelled off. South and Central America and the Caribbean also saw slower transport growth than the world average in 2018, reflecting a slowdown in GDP growth in key regional economies and a particularly active Atlantic hurricane season.

Chart 4.11

World transport exports by region, 2018

(Annual percentage change)



Source: WTO-UNCTAD-ITC estimates.

Air transport exports continued to grow in 2018, with the volume of airline cargo growing by 4.1 per cent. Air cargo yields grew at a faster rate than in 2017 but the second half of 2018 showed a slowdown in air freight shipments.¹ The CIS registered the highest growth in air freight transport (24 per cent) followed by Africa (21 per cent), both well above the world average growth rate of 11 per cent.

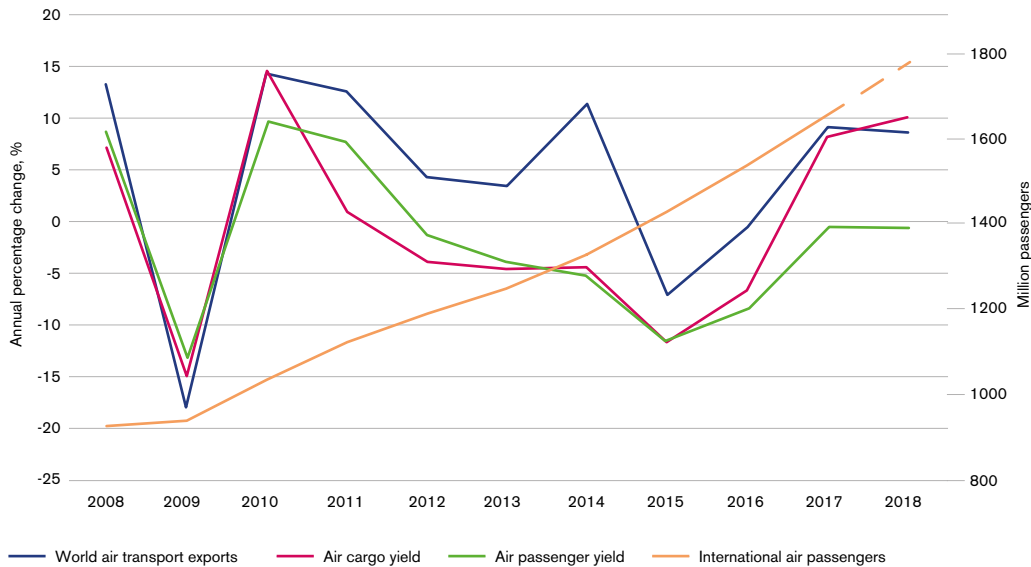
International air passenger traffic saw significant growth in 2018, increasing by an estimated 7 per cent. Airline capacity grew at a slower rate, thereby raising the aircraft load factor (the percentage of seats filled per flight) to a record high and contributing to airlines' profitability.² The CIS had the highest growth in air passenger transport services (19 per cent) as regional airlines increased capacities. World air transport services rose by 8.5 per cent overall (see Chart 4.12).

¹ IATA, "Air freight market analysis."
² IATA, "Air passenger market analysis."

Chart 4.12

World air transport exports and air passenger yields, 2008-2018

(Annual percentage change and million passengers)



8%
Increase in world air transport exports in 2018.

Source: WTO estimates, International Air Transport Association (IATA) and International Civil Aviation Organization (ICAO). The number of international air passengers in 2018 is estimated by the WTO Secretariat.

Worldwide maritime freight exports increased by 5 per cent in 2018, down from the 12 per cent recorded in 2017, the lower figure being partly due to global trade uncertainties. Growth was particularly subdued in Asia (+1 per cent) while exports fell in the Middle East (-1 per cent) due to overcapacity and slowing transshipments.

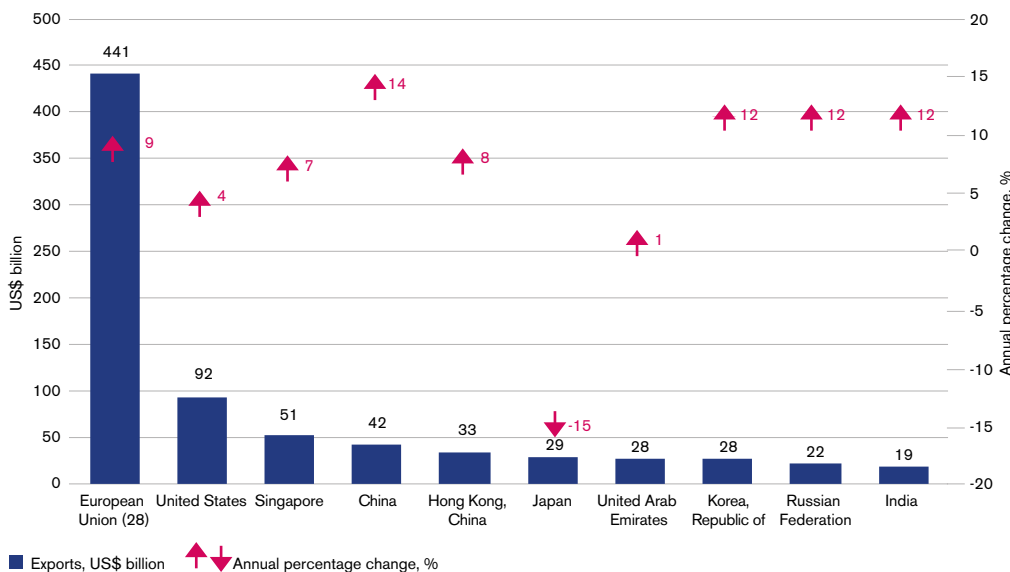
As in 2017, nearly every leading economy registered growth in its transport sector in 2018 (see Chart 4.13). China's transport exports grew at the fastest rate (+14 per cent) followed by India, the Republic of Korea and the Russian Federation. Japan was the only leading economy to post negative transport exports growth in 2018 due to an active typhoon season, notably typhoon Jebi, which disrupted operations at Kansai airport and Kobe sea port.

Freight transport via other modes, including rail and road, grew by 8 per cent, led by growth in Europe and Asia as rail freight between the two continents continued to expand.

Chart 4.13

Leading transport exporters, 2018

(US\$ billion and annual percentage change)



9%
Increase in EU transport exports in 2018.

Source: WTO-UNCTAD-ITC estimates.

Travel services continued to grow in 2018

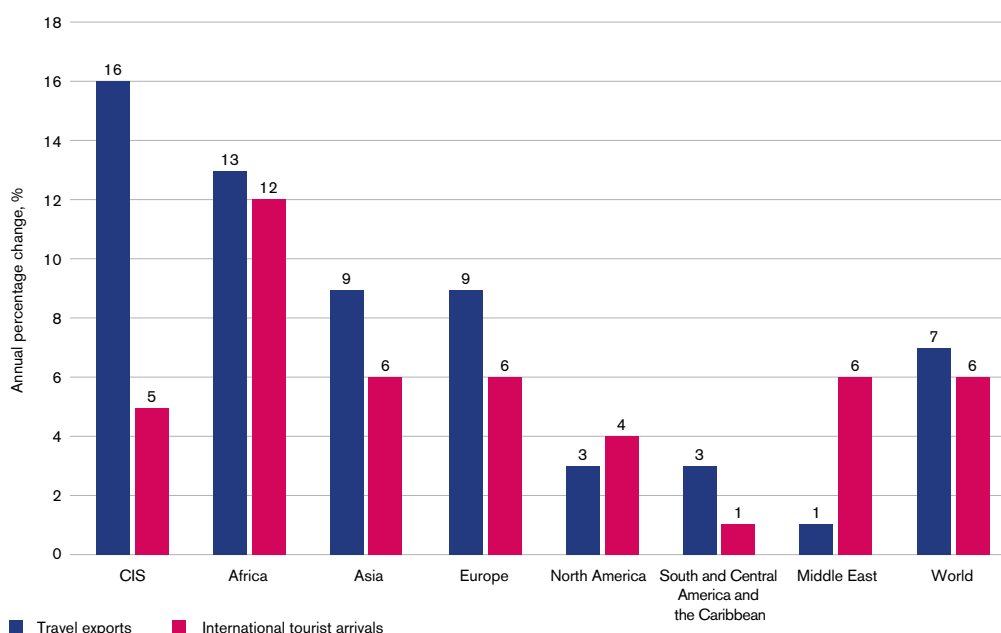
World travel exports, covering travellers' expenditure on goods and services during their stay abroad, continued its upward trend of the past two years, growing 7 per cent in 2018 (see Chart 4.14). As in previous years, this was largely due to an increase in international tourism, with 2018

seeing 1.4 billion international arrivals – two years ahead of schedule.³ An increase in tourist arrivals and higher traveller expenditure benefited all regions of the world, especially the CIS and Africa, which recorded growth in travel exports of 16 per cent and 12.5 per cent respectively.

Chart 4.14

World travel exports and international tourist arrivals, 2018

(Annual percentage change)



16%
Increase in CIS
travel exports
in 2018.

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

CIS travel receipts were boosted by Russia's hosting of the 2018 FIFA World Cup, leading to an increase in visitors to the region. Georgia had a significant increase in tourist arrivals, especially from the European Union, as new budget air routes between Tbilisi and the EU were implemented.

Africa posted a second year of significant growth in travel exports (+12.5 per cent) and tourist arrivals (+12.1 per cent), led by growth in North Africa. Egypt, responsible on average for one-fifth of Africa's travel exports over the past ten years, posted significant growth (+49 per cent) after another year of relatively stable security. Tunisia also saw increases in travel exports as tourists from Europe increasingly returned following the lifting of travel warnings to the country.

Only a handful of African nations had a decline in travel receipts in 2018, mostly due to instability and security concerns. South Africa, Sub-Saharan Africa's most visited destination, had limited growth in 2018 because of a strong currency and severe drought in Cape Town.

All leading travel services exporters showed an increase in both travel receipts and international tourist arrivals in 2018 (see Chart 4.15). Europe, the largest global exporter of travel services, had a third year of growth. Turkey had an especially

high increase in tourist arrivals, bolstered by a favourable exchange rate, and Greece saw tourist numbers climb as off-season flights increased.

In Asia, Chinese tourists boosted travel receipts, particularly in the south-east. China registered low growth in travel exports following two years of decline. Travel and tourism in the Greater Bay Area of China in Hong Kong, China, and in Macao, China, received a boost from the opening of the Hong-Kong-Zuhai-Macao Bridge, a 55km bridge-tunnel system, in October 2018.

The United States had low growth in travel receipts in 2018, although data for inbound tourists is only available for the first seven months of the year. South American travel receipts were bolstered by tourism within the region but Argentina's currency crisis contributed to a decline in their neighbours' exports. The Caribbean had mixed results as some destinations continued to rebuild after a heavy hurricane season in 2017 while others, notably the Dominican Republic and Jamaica, reported strong growth.

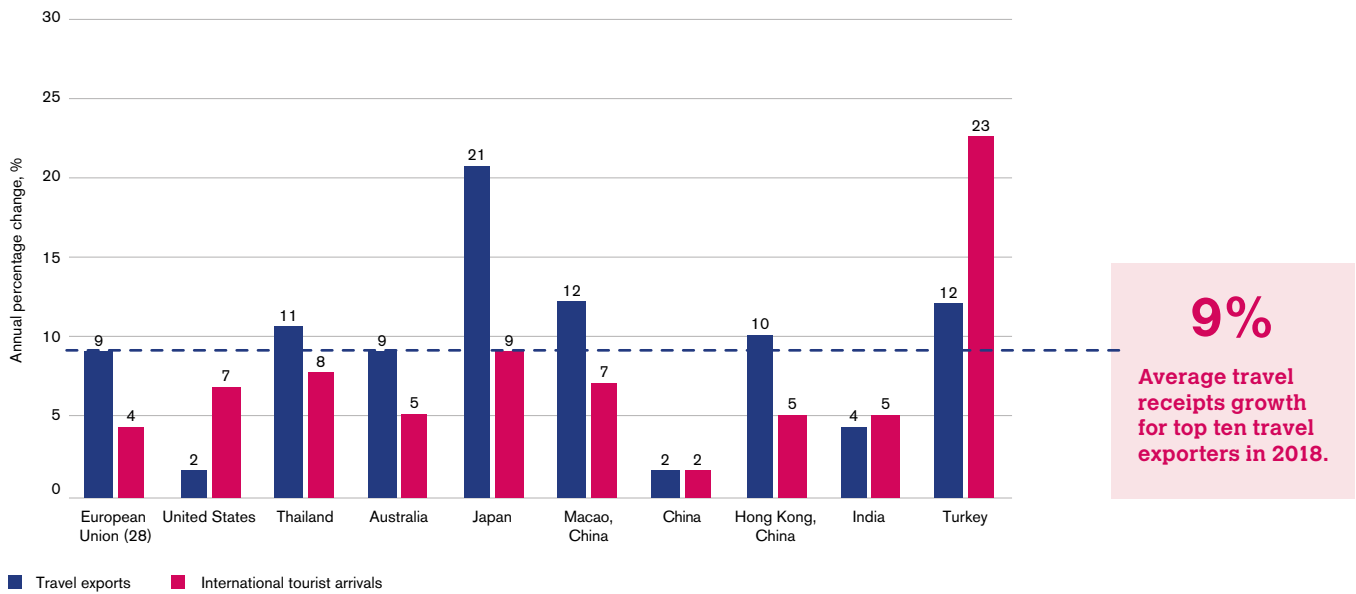
The United Nations World Tourism Organization (UNWTO) anticipates tourism to slow in 2019 after a year of above-expected growth in 2018.

³ UNWTO, "World Tourism Barometer."

Chart 4.15

Top travel exporters and tourist arrivals, 2018

(Annual percentage change)



Source: WTO-UNCTAD-ITC estimates.

Note: International tourist arrivals are based on latest available data up to Q3 2018.

Growth in other commercial services is led by ICT services

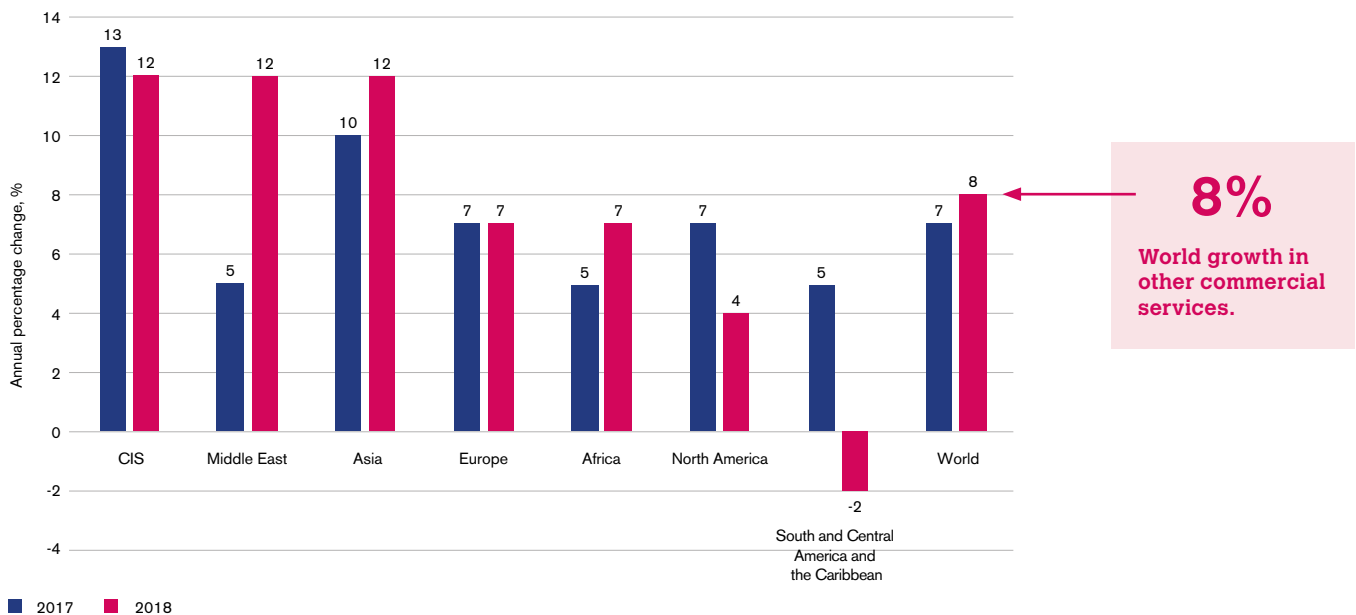
Growth in trade of “other commercial services”, including financial services, business services and charges for the use of intellectual property, picked up pace in 2018, rising to over US \$3.1 trillion. Nearly every region of the world saw growth in this category, continuing the trend from 2017 (see Chart 4.16). Growth in the CIS and the

Middle East were both boosted by an upturn in insurance, telecommunications, computer and information services receipts. South and Central America saw a slight decline in other commercial services receipts as GDP slowed in key economies, such as Brazil and Argentina.

Chart 4.16

Growth of other commercial services by region, 2017 and 2018

(Annual percentage change)

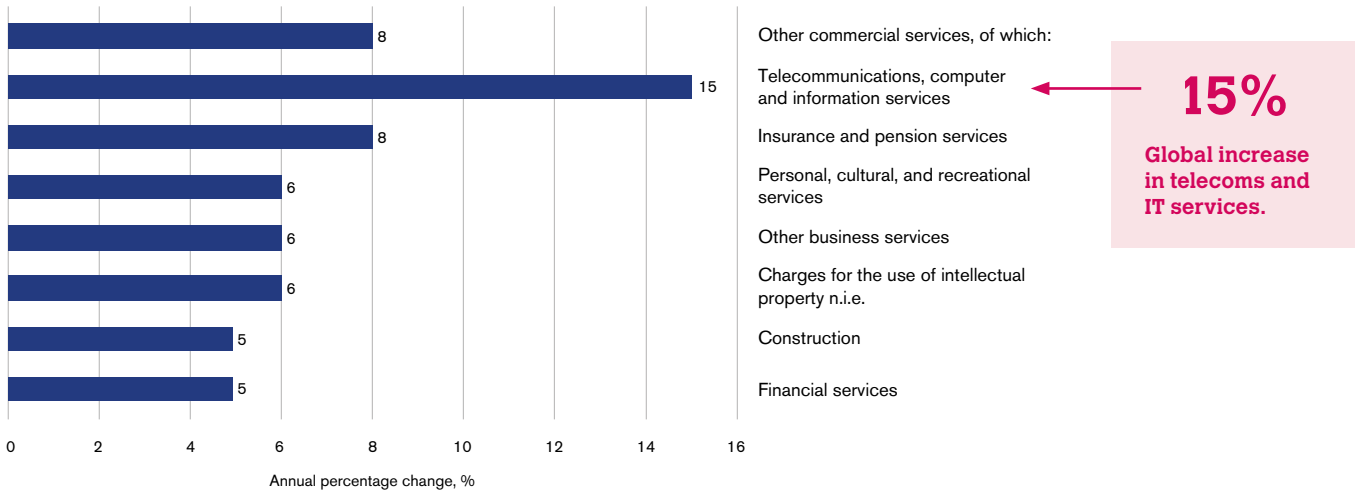


Source: WTO-UNCTAD-ITC estimates.

Telecommunications, computer and information services (also referred to as information and communication technology – ICT) resumed its position as the most dynamic services sector in 2018 (+15 per cent). Insurance and pension services

had the second highest growth rate (+8 per cent – see Chart 4.17). Growth in ICT and in insurance and pension services exports was recorded every year from 2008 to 2018 except in 2009 and 2010 respectively.

Chart 4.17
Commercial services by sector, 2018
 (Annual percentage change)

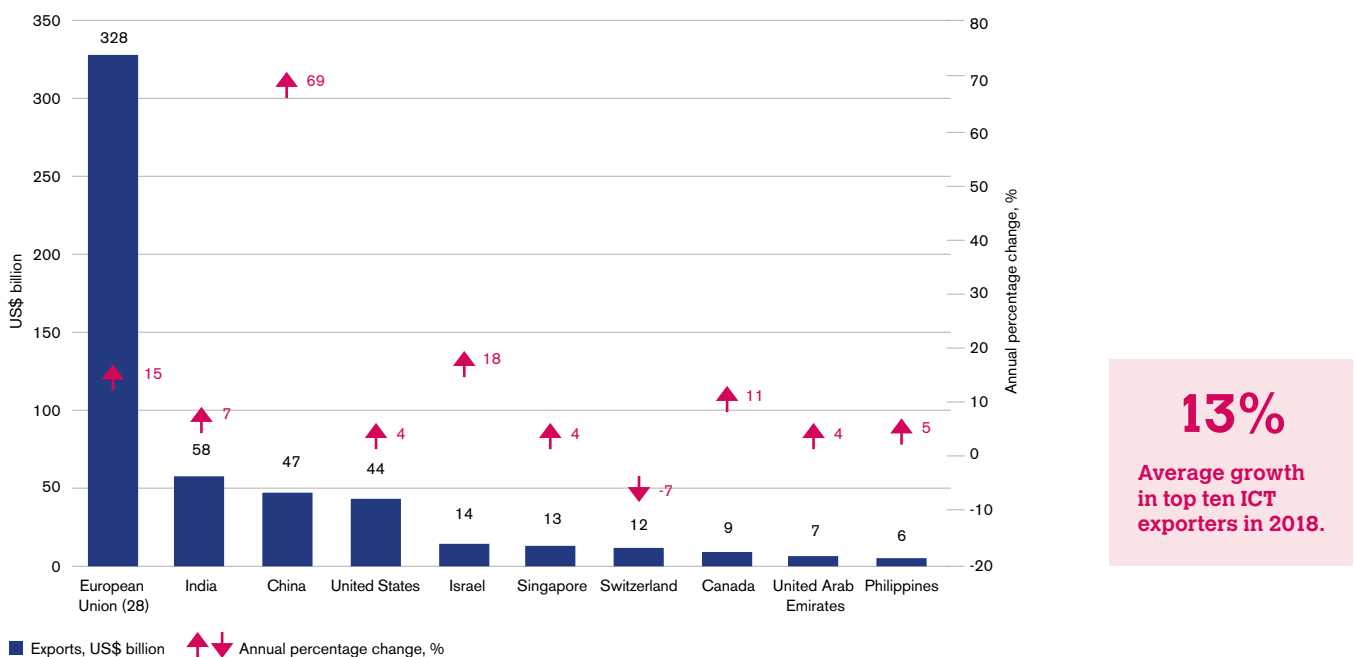


Source: WTO-UNCTAD-ITC estimates.

ICT as a share of other commercial services increased from 2008 to 2018, rising from 16.1 per cent to 19.5 per cent. The sector has averaged 8 per cent growth over the past ten years, the highest of all sectors covered by other commercial services.

The European Union was the leading exporter of ICT services in 2018, with Ireland the largest ICT exporter within the EU and in the world. India was the second-largest exporter with China overtaking the United States as the third-largest (see Chart 4.18).

Chart 4.18
Leading ICT exporters, 2018
 (US\$ billion and annual percentage change)

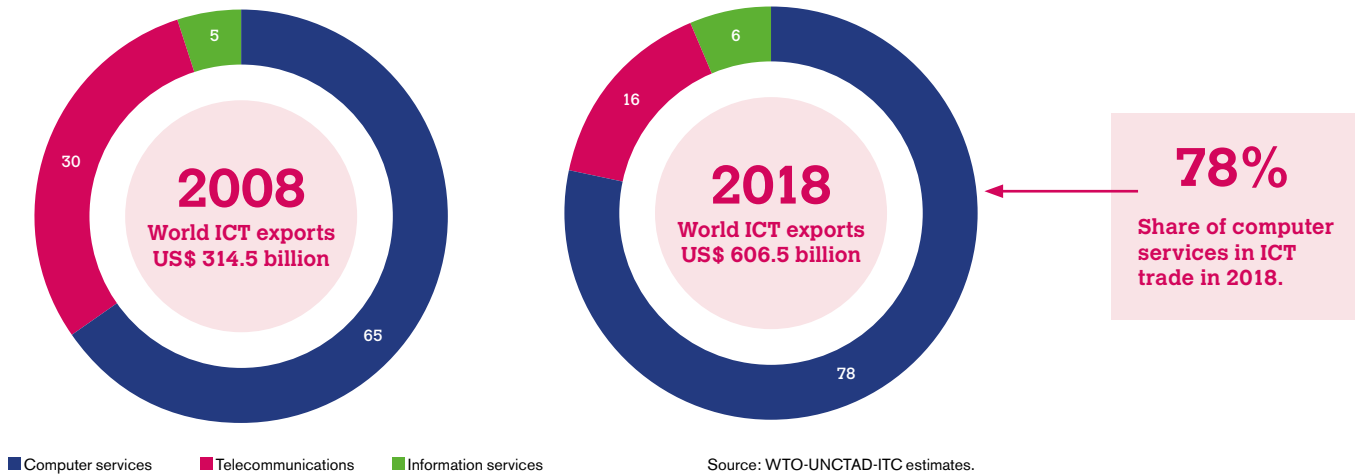


Source: WTO-UNCTAD-ITC estimates.

ICT services have always been dominated by computer services, whose share has increased over the past ten years as the share of telecommunications exports has declined (see Chart 4.19). Part of this decline is due to the diminishing cost of telecommunications transmission,

which has fallen by 40 per cent since 2008.⁴ This has contributed to the declining share of global telecommunications receipts in ICT services exports. Telecom receipts include payments for mobile telecommunications and internet provision, which did not grow significantly in value from 2008 to 2018.

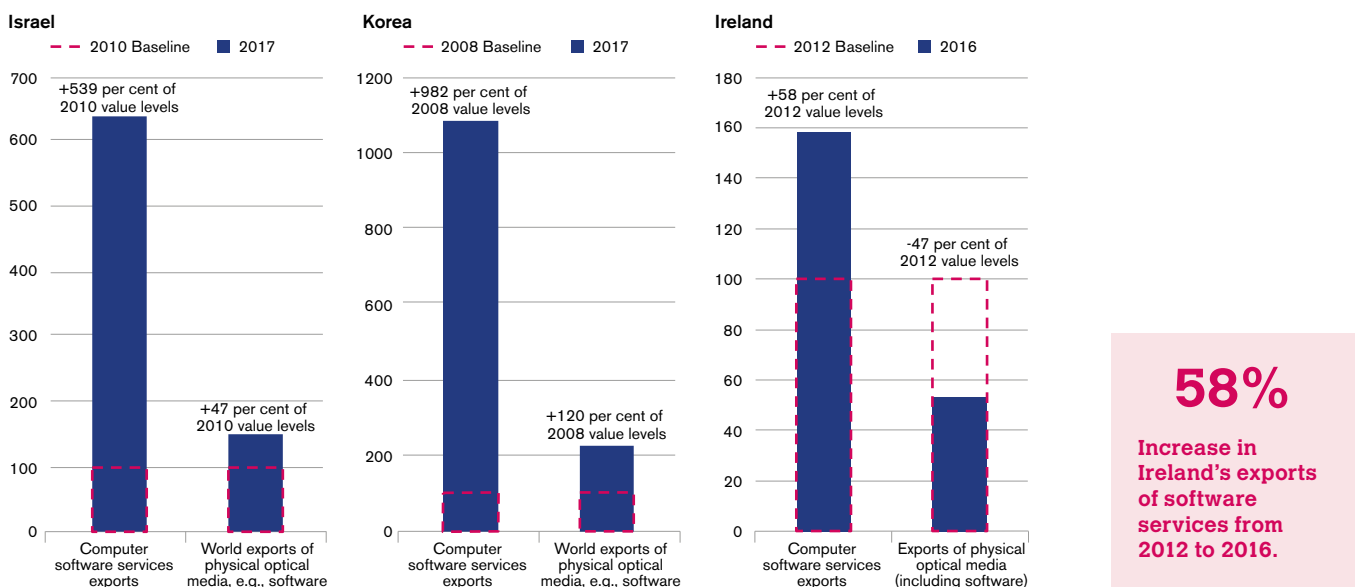
Chart 4.19
World ICT exports by type, 2008 and 2018
(Percentage share)



While the share of telecommunications services has declined, computer services receipts have more than doubled in value, increasing their share of ICT trade from 65 per cent in 2008 to 78 per cent in 2018. Computer services, including database development, data processing and software design, has benefitted from technological changes such as an increase in businesses moving their IT operations to cloud computing.

Computer services trade has also seen increasing provision of software in a downloadable format, with regular updates, as opposed to trade in software on physical media, such as DVDs (see Chart 4.20). For example, Ireland – the largest global exporter of computer services – saw an increase in software exports as a service while physical exports declined from 2012 to 2016. Israel, on the other hand, saw both services and physical exports grow from 2010 to 2017. Its services grew more than 11 times faster than physical software exports.

Chart 4.20
Computer software, services and physical exports
(Index 2012 = 100, Ireland, Index 2010 = 100, Israel, Index 2008 = 100, Korea)



Source: OECD and UN Comtrade.
Note: Computer software services are categorized under EBOPS 9.2. Optical media includes trade of HS 8523.40, HS 8523.41, and HS 8523.49.

⁴ WTO estimates based on ITU data.

Global value chains, 2005-2015

Developing economies play growing roles in GVCs

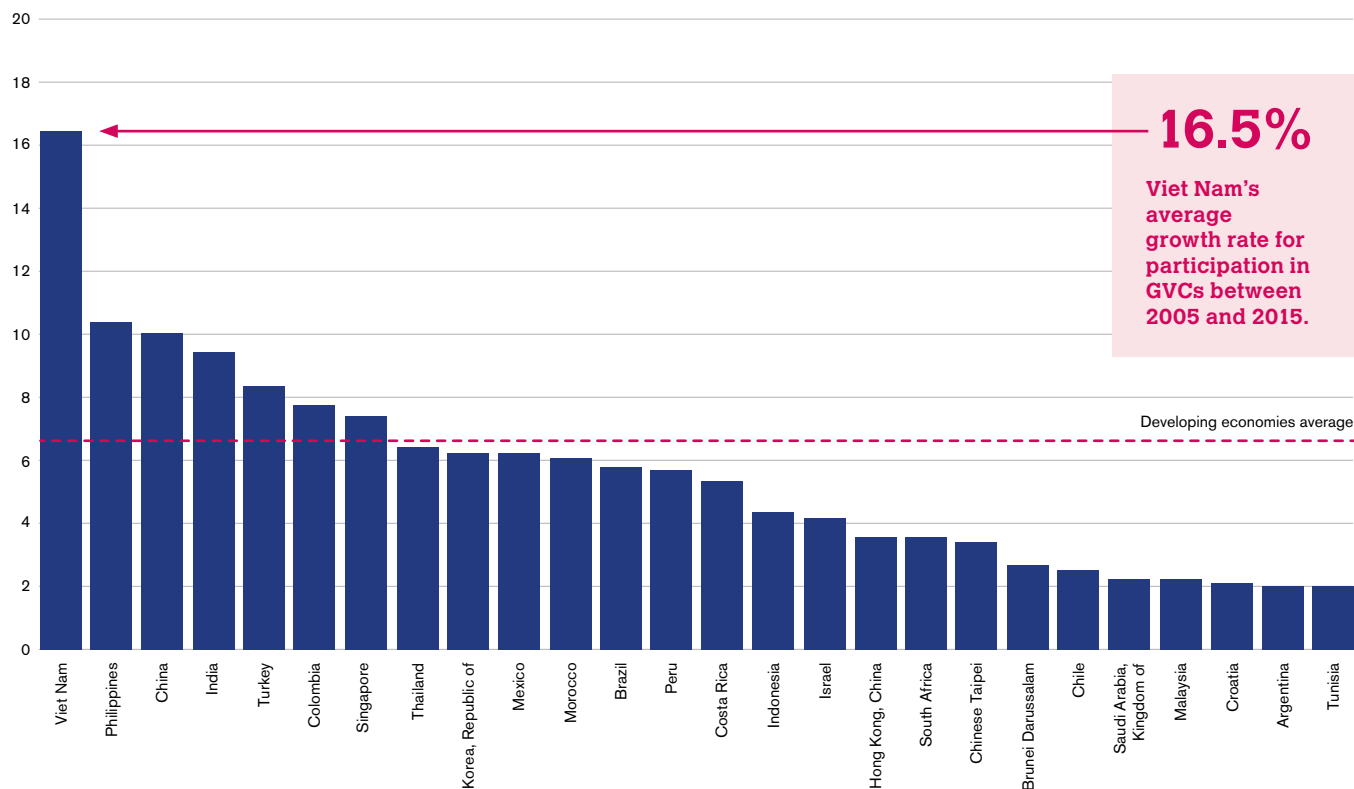
More than half of world trade in goods and services consists of intermediate products which are mostly exchanged within global value chains (GVCs), worldwide networks for the production of goods and services. Latest figures show that GVCs covered 57 per cent of world trade in 2015. Becoming part of these production chains is an opportunity for developing countries to boost their economic growth by taking advantage of their natural resources, productive capacities, workforce or specialized skills.

The latest updates of the OECD Trade in Value Added (TiVA) database covering 64 economies including 26 developing economies, reveal that developing economies are as engaged in GVCs as developed economies. In 2015, both developed and developing economies had the same rate of GVC participation estimated to be 41.4 per cent of their total exports. This reflects the global nature of production networks which rely on the participation of a number of economies.

Chart 4.21 shows that Asian economies have the highest growth rates in terms of contribution to GVCs, meaning that they are trading increasingly with international industrial partners. Viet Nam, the Philippines, China and India easily exceed the 6.5 per cent average, with Viet Nam recording the highest yearly growth of 16.5 per cent between 2005 and 2015.

TiVA data outline that Vietnamese industries are playing an increasing role in textiles, clothing and agro-industry supply chains. For example, 25.7 per cent of the foreign value added content in Viet Nam's exports stem from the textiles and clothing sector.⁵ A number of Latin American economies, such as Colombia, Mexico, Brazil, Peru and Costa Rica, are also showing a growing participation in GVCs.

Chart 4.21
Participation in GVCs for selected developing economies, 2005-2015
 (Annual percentage change)



Source: OECD TiVA database.

⁵ See the WTO "Trade in Value added and Global Value Chains" country profiles.

Economies participate in GVCs in two ways. First, they import inputs to produce the goods and services they export (known as backward GVC participation) and second, they export domestically produced inputs to partners involved in the later stages of production (known as forward GVC participation).

Saudi Arabia and Brunei Darussalam show high rates of forward GVC participation, reflecting their roles as core oil suppliers to GVCs, with respectively 37 per cent and 41 per cent of their exports contributing to GVCs (see Chart 4.22). Other exporters of primary products, such as Peru and Chile, participate at the start of supply chains and therefore have high rates of forward GVC participation. All of these economies require few inputs for their production processes.

China's role within GVCs has evolved considerably. The economy has advanced its domestic capacity to produce industrial goods, thus reducing its level of backward GVC participation.⁶ At the same time, it has increased its exports of industrial goods to South-East Asia partners, boosting its forward GVC participation. In 2015, China's rate of vertical specialization – or backward GVC participation – was 17.3 per cent lower than in 2005, standing at 26.3 per cent. However, this sharp decrease may be partly due to the way TiVA statistics have been revised, reducing the evaluation of vertical specialization.⁷ China's forward GVC participation increased by 2 per cent over the same period, reaching 17.5 per cent in 2015.

Mexico mainly acts as a “buyer” in GVCs and therefore has a significant rate of GVC backward participation, standing at 36 per cent in 2015. The economy imports inputs mostly from the United States and China to produce its exports.

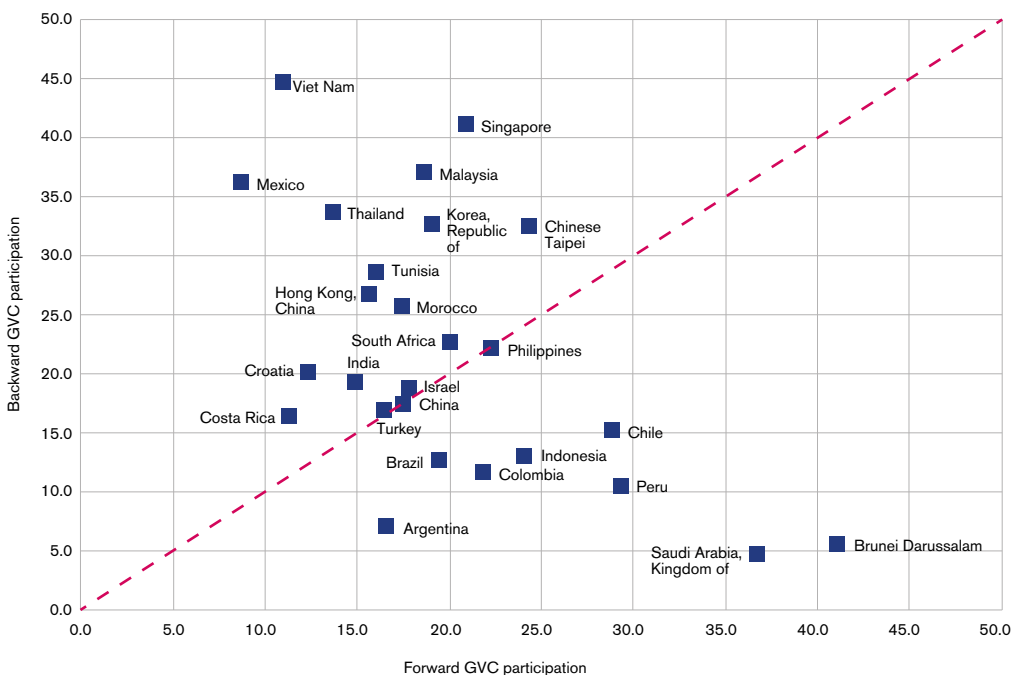
Its level of vertical specialization stood at 36 per cent in 2015, among the highest shown in Chart 4.22. Among South American economies, Argentina has a relatively low participation in GVCs, with less than 24 per cent of its exports in 2015 linked to GVC activities (in both backward and forward directions). Brazil's rate is higher, standing at 33 per cent.

The three African economies available in the TiVA database – Morocco, South Africa and Tunisia – have a more prominent backward rather than forward participation in GVCs. For South Africa, a key supplier of mining inputs to industries all over the world (with mining products representing 20 per cent of all South African value added in GVCs in 2015), the country has a high level of participation in both backward and forward GVC participation as the mining industry also imports significant amounts of inputs.

In 2015, the import content of the exports of Tunisia and Morocco represented 29 per cent and 26 per cent respectively. The two economies import textile inputs for their clothing industries. In addition, Tunisia imports electrical equipment and Morocco imports chemical inputs for their production of exports.

South-East Asian economies such as Singapore, Chinese Taipei and Malaysia show the highest rates of GVC participation, with more than 55 per cent of their trade taking place in international production networks, in both backward and forward directions. A total of 62 per cent of Singapore's trade was related to GVC activities in 2015, the highest level among all economies in the TiVA database.

Chart 4.22
Backward and forward GVC participation, selected developing economies, 2015
 (Percentage in total gross exports)



62%
 The percentage of Singapore's trade related to GVC activities.

Source: OECD TiVA database.

6 Backward GVC participation is also referred to as “vertical specialization” when expressed as a percentage of gross exports.
 7 See the following link from the OECD on the main reasons for data differences between the 2016 and 2018 versions of the TiVA database:
<http://www.oecd.org/industry/ind/tiva-2018-differences-tiva-2016.pdf>

Digital trade

Questions remain on the scope and measurement of digital trade

The question surrounding digital trade is whether it facilitates existing international trade or whether it creates additional trade, or both. Sometimes it is said that trade growth has been dampened by not measuring digital trade adequately. A McKinsey report published in 2016 included an infographic entitled “Global flows of trade and finance are flattening, while data flows are soaring”.⁸ Thus, do conventional trade statistics reflect economic reality?

Current trade statistics cannot quantify the level of international trade attributable to digital transactions, i.e. to digital ordering or digital delivery. Both these components together, however, can be used to determine the quantity of digital trade.

In other words, digital trade can be explained via the nature of the transaction, i.e. whether it is digitally ordered or digitally delivered. Electronic tools or platforms facilitate trade by cutting out intermediaries.

Statisticians struggle with how best to quantify this digital trade in a timely manner. A recent blog from the International Monetary Fund said: “Recent trends on global trade have tended to focus on protectionist measures and diplomatic tensions... Yet what is often lost in the current discussion is that we are entering a new era of trade.”⁹

The market capitalisation of digital companies is soaring and at times exceeding the GDP of economies such as Spain, Mexico or Switzerland. In the United Kingdom, a study estimated that the annual growth rate over the past decade would have been between 0.4 and 0.7 percentage points higher if benefits arising from digitised products were fully accounted for.¹⁰

The system of national accounts (SNA) is built around the use of finite resources. Although data is sometimes considered the “new oil”, it is essentially different to fuels in that data can be “copied and pasted” multiple times and their value depends on how a potential user can utilise these data and create value from it. However, the measurement of cross-border digital trade must be in line with national accounts to allow for accurate analysis of statistical indicators.

The statistical community has developed a conceptual framework based on how digital transactions are undertaken and by whom. E-commerce is defined as something that is ordered digitally but delivered either physically or digitally. Platforms facilitate this process of digital ordering and delivering. For trade policy purposes, transactions need to be broken down by product (broadly goods or services; however, sub-categories should reflect newly created goods and services to allow policy-makers to take account of economic developments).

Digitally ordered transactions refer to OECD’s definition of e-commerce¹¹ and define “digitally ordered” as: “An e-commerce transaction [as] the sale or purchase of a good or service, conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders.”¹²

Digitally delivered transactions refer to UNCTAD’s definition of ICT and ICT-enabled services (TGServ).¹³ “All cross-border transactions that are delivered remotely over ICT networks – i.e. over voice or data networks, including the internet, in an electronically downloadable format.”

8 McKinsey, March 2016

9 IMF Blog, 30/05/2018

10 “UK richer and growing faster than official figures suggest”, The Financial Times, 11 March 2016

11 It is important to note that the definition measures the total value of the product being traded, whether that product has digital characteristics or not.

12 OECD, Guide to Measuring the Information Society, 2011

13 With membership from ITU, OECD, UNCTAD, UNESCWA, UNSD, World Bank and WTO. See also, https://unctad.org/en/PublicationsLibrary/tn_unctad_ict4d03_en.pdf

Actors is broken down into broad categories: business to consumer (B2C), business to business (B2B), government to consumer (G2C), consumer to consumer (C2C).

Although some countries have started pilot projects, no reliable estimates of the digital economy at cross-country level currently exist. Any available estimates have been calculated via a variety of methodologies, with numerous assumptions, and often refer to the total sales rather than cross-border.

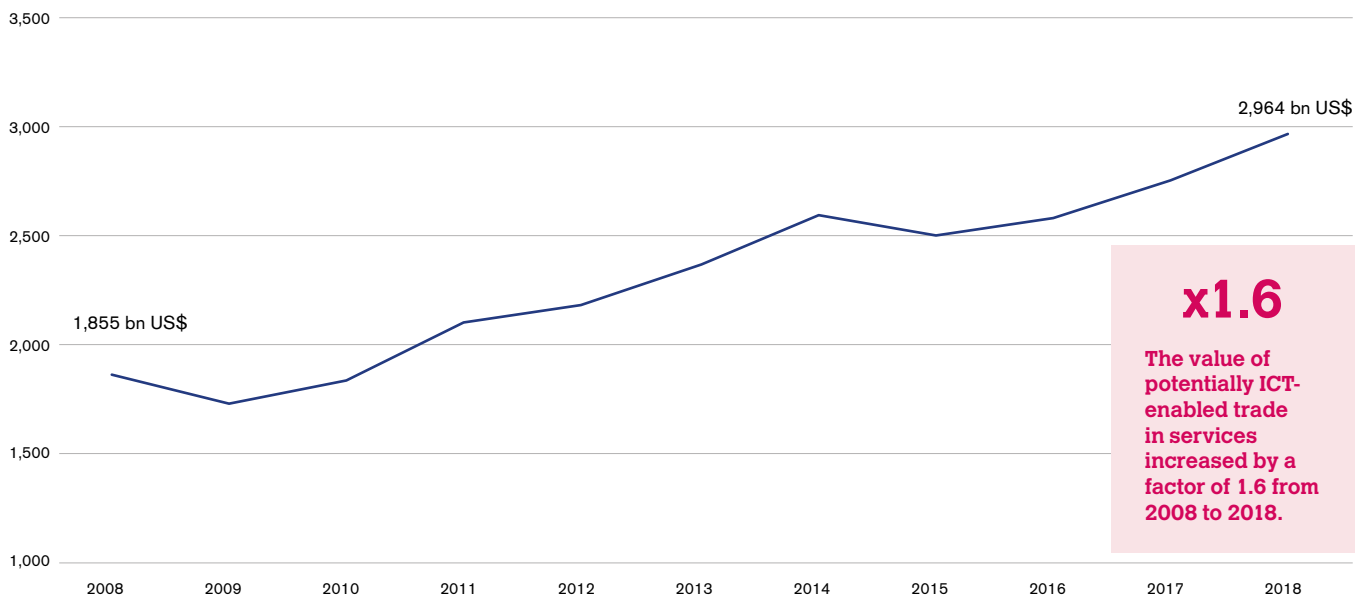
At the end of March 2019, UNCTAD estimated global sales of e-commerce (defined as digitally ordered transactions, whether digitally or physically delivered) to be close to US\$ 29 trillion for 2017. It reported that 88 per cent of these sales are taking place between businesses (B2B).

However, these estimates refer to global sales and do not specify the cross-border proportion, apart from B2C estimates where the global share for cross-border transactions is estimated at 2.3 per cent.

Turning to digitally delivered services and applying UNCTAD's scope of services that could potentially be delivered digitally (that is, insurance and pension services, financial services, charges for the use of intellectual property, telecommunications, computer and information services, other business services, and personal, cultural and recreational services)¹⁴ results in a traded value which increased from US\$ 1,855 billion in 2008 to US\$ 2,964 billion in 2018 (see Chart 4.23).

Chart 4.23

Growth of share of potentially ICT-enabled services in world trade, 2008-2018
(US\$ billion)



Source: WTO-UNCTAD-ITC estimates.

14 https://unctad.org/en/PublicationsLibrary/tn_unctad_ict4d03_en.pdf