

Composition, definitions & methodology

The data for this report comes from a variety of sources. How it is compiled and presented is explained in this chapter.

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1. Composition of geographical and economic groupings

WTO members are frequently referred to as “countries”, although some members are not countries in the usual sense of the word but are officially “customs territories”. The definition of geographical and other groupings in this report does not imply an expression of opinion by the Secretariat concerning the status of any country or territory, the delimitation of its frontiers, nor the rights and obligations of any WTO member in respect of WTO agreements. The colours, boundaries, denominations, and classifications in the maps of this publication do not imply, on the part of the WTO, any judgement on the legal or other status of any territory, or any endorsement or acceptance of any boundary.

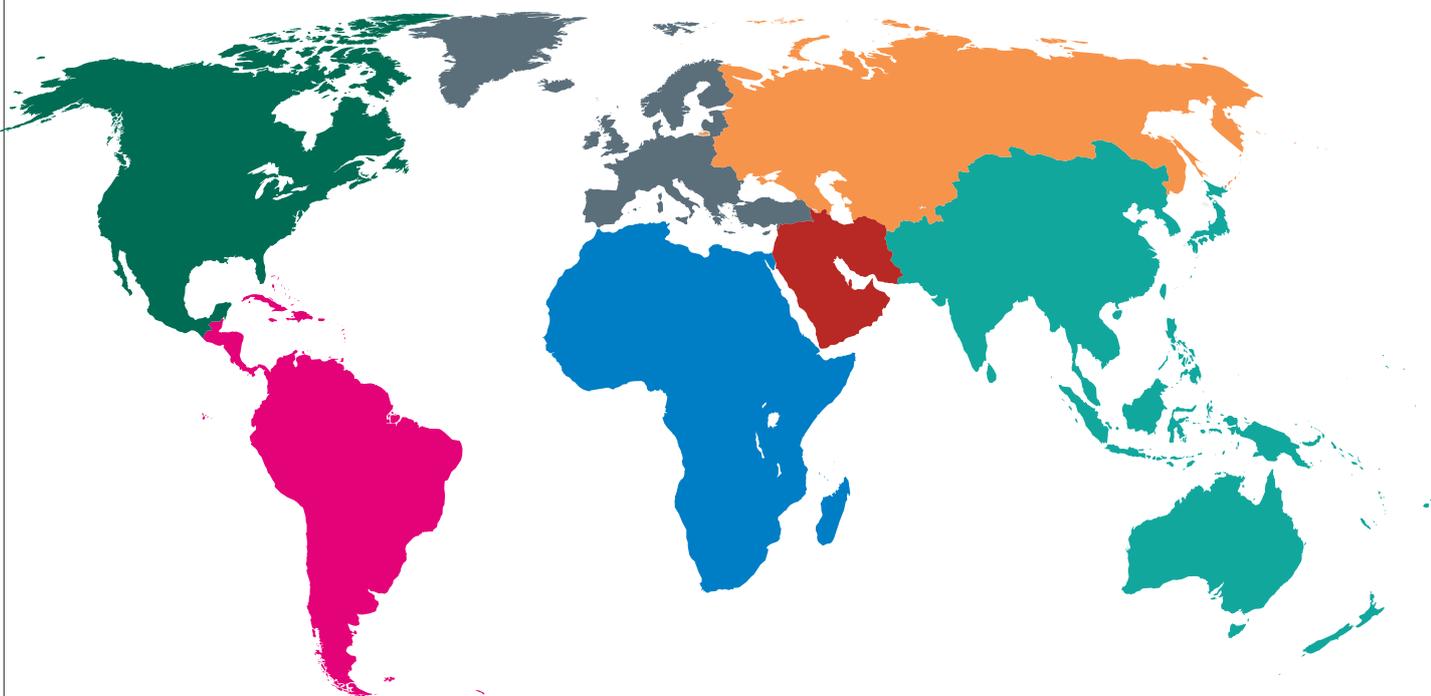
Throughout this report, South and Central America and the Caribbean is referred to as South and Central America; Aruba, the Bolivarian Republic of Venezuela, Hong Kong Special Administrative Region of China, Macao Special Administrative Region of China, the Republic of Korea

and the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu are referenced as Aruba (the Netherlands with respect to), Venezuela, Bolivarian Rep. of; Hong Kong, China; Macao, China; Korea, Republic of; and Chinese Taipei respectively.

Changes in statistical territories in 2010 and 2011 involving the Netherlands Antilles and Sudan are reflected in this report, as far as available statistics permit. Data for the Netherlands Antilles are no longer given beginning with 2011, and are replaced with data for the successor states Curaçao and Sint Maarten. Further, the secession of South Sudan from Sudan in July 2011 resulted in a decrease in the magnitude of the latter's trade flows. No time series is currently disseminated for South Sudan.

Data for least developed countries until 2013 includes Samoa.

Data provided by Ukraine do not include the Autonomous Republic of Crimea and the city of Sevastopol starting 2014.



North America

Bermuda
Canada*
Mexico*
United States of America*
Other territories in the region not elsewhere specified

South and Central America and the Caribbean

Antigua and Barbuda*	Brazil*	Dominican Republic*	Honduras*	Saint Lucia*
Argentina*	Chile*	Ecuador*	Jamaica*	Saint Vincent and the Grenadines*
Aruba (the Netherlands with respect to)	Colombia*	El Salvador*	Nicaragua*	Sint Maarten
Bahamas**	Costa Rica*	Grenada*	Panama*	Suriname*
Barbados*	Cuba*	Guatemala*	Paraguay*	Trinidad and Tobago*
Belize*	Curaçao	Guyana*	Peru*	Uruguay*
Bolivia, Plurinational State of*	Dominica*	Haiti*	Saint Kitts and Nevis*	Venezuela, Bolivaria Rep. of*
Other territories in the region not elsewhere specified				

Europe

Albania*	Czech Republic*	Hungary*	Malta*	Slovak Republic*
Andorra**	Denmark*	Iceland*	Montenegro*	Slovenia*
Austria*	Estonia*	Ireland*	Netherlands*	Spain*
Belgium*	Finland*	Italy*	Norway*	Sweden*
Bosnia and Herzegovina**	France*	Latvia*	Poland*	Switzerland*
Bulgaria*	FYR Macedonia*	Liechtenstein*	Portugal*	Turkey*
Croatia*	Germany*	Lithuania*	Romania*	United Kingdom*
Cyprus*	Greece*	Luxembourg*	Serbia**	
Other territories in the region not elsewhere specified				

Commonwealth of Independent States (CIS)^a

Armenia*	Georgia**	Moldova*	Turkmenistan
Azerbaijan**	Kazakhstan**	Russian Federation*	Ukraine*
Belarus**	Kyrgyz Republic*	Tajikistan*	Uzbekistan**
Other territories in the region not elsewhere specified			

^a Georgia is not a member of the Commonwealth of Independent States but is included in this group for reasons of geography and similarities in economic structure.

Africa

Algeria**	Congo*	Guinea*	Morocco*	South Africa*
Angola*	Congo, Dem. Rep. of*	Guinea-Bissau*	Mozambique*	Sudan**
Benin*	Côte d'Ivoire*	Kenya*	Namibia*	South Sudan
Botswana*	Djibouti*	Lesotho*	Niger*	Swaziland*
Burkina Faso*	Egypt*	Liberia, Republic of**	Nigeria*	Tanzania*
Burundi*	Equatorial Guinea**	Libya**	Rwanda*	Togo*
Cameroon*	Eritrea	Madagascar*	Sao Tome and Principe**	Tunisia*
Cabo Verde*	Ethiopia**	Malawi*	Senegal*	Uganda*
Central African Republic*	Gabon*	Mali*	Seychelles*	Zambia*
Chad*	The Gambia*	Mauritania*	Sierra Leone*	Zimbabwe*
Comoros**	Ghana*	Mauritius*	Somalia	
Other territories in the region not elsewhere specified				

Middle East

Bahrain*	Israel*	Lebanese Republic**	Saudi Arabia, Kingdom of*	Yemen*
Iran**	Jordan*	Oman*	Syrian Arab Republic**	
Iraq**	Kuwait, the State of*	Qatar*	United Arab Emirates*	
Other territories in the region not elsewhere specified				

Asia

Afghanistan**	Hong Kong, China*	Malaysia*	Papua New Guinea*	Tonga*
Australia*	India*	Maldives*	Philippines*	Tuvalu
Bangladesh*	Indonesia*	Mongolia*	Samoa*	Vanuatu*
Bhutan**	Japan*	Myanmar*	Singapore*	Viet Nam*
Brunei Darussalam*	Kiribati	Nepal*	Solomon Islands*	
Cambodia*	Korea, Republic of*	New Zealand*	Sri Lanka*	
China*	Lao People's Dem. Rep.*	Pakistan*	Chinese Taipei*	
Fiji*	Macao, China*	Palau	Thailand*	
Other territories in the region not elsewhere specified				



Regional integration agreements				
Andean Community (CAN)				
Bolivia				
Colombia				
Ecuador				
Peru				
ASEAN (Association of South East Asian Nations) / AFTA (ASEAN Free Trade Area)				
Brunei Darussalam	Indonesia	Malaysia	Philippines	Thailand
Cambodia	Lao People's Dem. Rep.	Myanmar	Singapore	Viet Nam
CACM (Central American Common market)				
Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua
CARICOM (Caribbean Community and Common Market)				
Antigua and Barbuda	Belize	Guyana	Montserrat	Saint Vincent and the Grenadines
Bahamas	Dominica	Haiti	Saint Kitts and Nevis	Suriname
Barbados	Grenada	Jamaica	Saint Lucia	Trinidad and Tobago
CEMAC (Economic and Monetary Community of Central Africa)				
Cameroon	Chad	Congo	Equatorial Guinea	Gabon
Central African Republic				
COMESA (Common Market for Eastern and Southern Africa)				
Burundi	Egypt	Libya	Rwanda	Swaziland
Comoros	Eritrea	Madagascar	Seychelles	Uganda
Congo, Dem. Rep. of	Ethiopia	Malawi	South Sudan	Zambia
Djibouti	Kenya	Mauritius	Sudan	Zimbabwe
ECCAS (Economic Community of Central African States)				
Angola	Central African Republic	Congo, Dem. Rep. of	Gabon	Sao Tome and Principe
Burundi	Chad	Equatorial Guinea	Rwanda	
Cameroon	Congo			
ECOWAS (Economic Community of West African States)				
Benin	Côte d'Ivoire	Guinea	Mali	Senegal
Burkina Faso	The Gambia	Guinea-Bissau	Niger	Sierra Leone
Cabo Verde	Ghana	Liberia, Republic of	Nigeria	Togo
EFTA (European Free Trade Association)				
Iceland	Liechtenstein	Norway	Switzerland	
European Union (28)				
Austria	Denmark	Hungary	Malta	Slovenia
Belgium	Estonia	Ireland	Netherlands	Spain
Bulgaria	Finland	Italy	Poland	Sweden
Croatia	France	Latvia	Portugal	United Kingdom
Cyprus	Germany	Lithuania	Romania	
Czech Republic	Greece	Luxembourg	Slovak Republic	
GCC (Gulf Cooperation Council)				
Bahrain	Oman	Qatar	Saudi Arabia, Kingdom of	United Arab Emirates
Kuwait, the State of				
MERCOSUR (Southern Common Market)				
Argentina	Brazil	Paraguay	Uruguay	
NAFTA (North American Free Trade Agreement)				
Canada	Mexico	United States		
SADC (Southern African Development Community)				
Angola	Lesotho	Mauritius	South Africa	Tanzania
Botswana	Madagascar	Mozambique	Seychelles	Zambia
Congo, Dem. Rep. of	Malawi	Namibia	Swaziland	Zimbabwe
SAFTA (South Asia Free Trade Agreement)				
Bangladesh	India	Nepal	Pakistan	Sri Lanka
Bhutan				
Maldives				
SAPTA (South Asian Preferential Trade Area)				
Bangladesh	India	Nepal	Pakistan	Sri Lanka
Bhutan				
Maldives				
WAEMU (West African Economic and Monetary Union)				
Benin	Côte d'Ivoire	Mali	Senegal	Togo
Burkina Faso	Guinea-Bissau	Niger		



Other groups

ACP (African, Caribbean and Pacific countries)				
Angola	Côte d'Ivoire	Haiti	Niger	South Africa
Antigua and Barbuda	Cuba	Jamaica	Nigeria	South Sudan
Bahamas	Djibouti	Kenya	Niue	Sudan
Barbados	Dominica	Kiribati	Palau	Suriname
Belize	Dominican Republic	Lesotho	Papua New Guinea	Swaziland
Benin	Equatorial Guinea	Liberia, Republic of	Rwanda	Tanzania
Botswana	Eritrea	Madagascar	Saint Kitts and Nevis	Timor Leste
Burkina Faso	Ethiopia	Malawi	Saint Lucia	Togo
Burundi	Fiji	Mali	Saint Vincent and the Grenadines	Tonga
Cameroon	Gabon	Marshall Islands	Samoa	Trinidad and Tobago
Central African Republic	The Gambia	Mauritania	Sao Tome and Principe	Tuvalu
Chad	Ghana	Mauritius	Senegal	Uganda
Comoros	Grenada	Micronesia	Seychelles	Vanuatu
Congo	Guinea	Mozambique	Sierra Leone	Zambia
Congo, Dem. Rep. of	Guinea-Bissau	Namibia	Solomon Islands	Zimbabwe
Cook Islands	Guyana	Nauru	Somalia	
Africa				
North Africa				
Algeria	Egypt	Libya	Morocco	Tunisia
Sub-Saharan Africa				
Western Africa				
Benin	The Gambia	Guinea-Bissau	Mauritania	Senegal
Burkina Faso	Ghana	Liberia, Republic of	Niger	Sierra Leone
Cabo Verde	Guinea	Mali	Nigeria	Togo
Côte d'Ivoire				
Central Africa				
Burundi	Central African Republic	Congo	Equatorial Guinea	Rwanda
Cameroon	Chad	Dem. Rep. of the Congo	Gabon	Sao Tome and Principe
Eastern Africa				
Comoros	Ethiopia	Mauritius	South Sudan	Tanzania
Djibouti	Kenya	Seychelles	Sudan	Uganda
Eritrea	Madagascar	Somalia		
Southern Africa				
Angola	Lesotho	Mozambique	Swaziland	Zambia
Botswana	Malawi	Namibia	South Africa	Zimbabwe
Territories in Africa not elsewhere specified				
Asia				
East Asia (including Oceania):				
Australia	Indonesia	Mongolia	Samoa	Tuvalu
Brunei Darussalam	Japan	Myanmar	Singapore	Vanuatu
Cambodia	Kiribati	New Zealand	Solomon Islands	Viet Nam
China	Lao People's Dem. Rep.	Papua New Guinea	Chinese Taipei	
Fiji	Macao, China	Philippines	Thailand	
Hong Kong, China	Malaysia	Republic of Korea	Tonga	
West Asia:				
Afghanistan	Bhutan	Maldives	Pakistan	Sri Lanka
Bangladesh	India	Nepal		
APEC (Asia-Pacific Economic Cooperation)				
Australia	Hong Kong, China	Malaysia	Russian Federation	Viet Nam
Brunei Darussalam	Indonesia	New Zealand	Singapore	
Canada	Japan	Peru	Thailand	
Chile	Korea	Papua New Guinea	Chinese Taipei	
China	Mexico	Philippines	United States	
BRIC (Brazil, Russian Federation, India and China)				
Developed economies:	North America (except Mexico)	European Union (28)	EFTA (Iceland, Liechtenstein, Norway, Switzerland)	Australia, Japan and New Zealand
Developing economies:	Africa	South and Central America and the Caribbean, Mexico	Europe except the European Union (28) and EFTA; Middle East	Asia except Australia, Japan, and New Zealand
LDCs (Least-developed countries)				
Afghanistan	Comoros	Kiribati	Nepal	Tanzania
Angola	Congo, Dem. Rep. of	Lao People's Dem. Rep.	Niger	Timor Leste
Bangladesh	Djibouti	Lesotho	Rwanda	Togo
Benin	Equatorial Guinea	Liberia, Republic of	Sao Tome and Principe	Tuvalu
Bhutan	Eritrea	Madagascar	Senegal	Uganda
Burkina Faso	Ethiopia	Malawi	Sierra Leone	Vanuatu
Burundi	The Gambia	Mali	Solomon Islands	Yemen
Cambodia	Guinea	Mauritania	Somalia	Zambia
Central African Republic	Guinea-Bissau	Mozambique	South Sudan	
Chad	Haiti	Myanmar	Sudan	
Six East Asian traders*				
Hong Kong, China	Republic of Korea	Singapore	Chinese Taipei	Thailand
Malaysia				

* Excluding Malaysia and Thailand, these countries comprise the Four East Asian Traders.

2. Definitions and methodology

2.1 Merchandise trade

2.1.1 Exports and imports

Two systems of recording merchandise exports and imports are in common use. They are referred to as general trade and special trade and differ mainly in the way warehoused and re-exported goods are treated. General trade figures are larger than the corresponding special trade figures because the latter exclude certain trade flows, such as goods shipped through bonded warehouses.

To the extent possible, total merchandise trade is defined in this report according to the general trade definition. It covers all types of inward and outward movement of goods through a country or territory including movements through customs warehouses and free zones. Goods include all merchandise that either add to or subtract from the stock of material resources of a country or territory by entering (imports) or leaving (exports) the country's economic territory. For further explanations, see United Nations International Trade

Statistics, Concepts and Definitions, Series M, N° 52, Revision 2.

Unless otherwise indicated, exports are valued at transaction value, including the cost of transportation and insurance to bring the merchandise to the frontier of the exporting country or territory ("free on board" valuation). Imports are valued at transaction value plus the cost of transportation and insurance to the frontier of the importing country or territory ("cost, insurance and freight" valuation).

Table IV.2

Products
A. Primary products
(i) Agricultural products (SITC sections 0, 1, 2 and 4 minus divisions 27 and 28) of which,
- Food (SITC sections 0, 1, 4 and division 22) of which,
0 - Food and live animals
1 - Beverages and tobacco
4 - Animal and vegetable oils, fats and waxes
22 - Oil seeds and oleaginous fruits
- - Fish (SITC division 03)
- - Other food products and live animals (SITC sections 0, 1, 4 and division 22 minus division 03)
- Raw materials (SITC divisions 21, 23, 24, 25, 26, 29) of which,
21 - Hides, skins and furskins, raw
23 - Crude rubber (including synthetic and reclaimed)
24 - Cork and wood
25 - Pulp and waste paper
26 - Textile fibres (other than wool tops and other combed wool) and their wastes (not manufactured into yarn or fabric)
29 - Crude animal and vegetable materials, not elsewhere specified
(ii) Fuels and mining products (SITC section 3 and divisions 27, 28, 68) of which,
- Ores and other minerals (SITC divisions 27, 28) of which,
27 - Crude fertilizers, other than those of division 56, and crude minerals (excluding coal, petroleum and precious stones)
28 - Metalliferous ores and metal scrap
- Fuels (SITC section 3)
- Non-ferrous metals (SITC division 68)
B. Manufactures (SITC sections 5, 6, 7, 8 minus division 68 and group 891)
(i) Iron and steel (SITC division 67)
(ii) Chemicals (SITC section 5) of which,
- Pharmaceuticals (SITC division 54)
- Other chemicals (SITC divisions 51, 52, 53, 55, 56, 57, 58, 59) of which,
51 - Organic chemicals
52 - Inorganic chemicals
53 - Dyeing, tanning and colouring materials
55 - Essential oils and resinoids and perfume materials; toilet, polishing and cleaning preparations
56 - Fertilizers (other than those of Group 272, i.e. Fertilizers, crude)
57 - Plastics in primary forms
58 - Plastics in non-primary forms
59 - Chemical materials and products, not elsewhere specified



Products (continued)

(iii) Other semi-manufactures (SITC divisions 61, 62, 63, 64, 66, 69) of which,

- 61 - Leather, leather manufactures, not elsewhere specified and dressed furskins
- 62 - Rubber manufactures, not elsewhere specified
- 63 - Cork and wood manufactures (excluding furniture)
- 64 - Paper, paperboard and articles of paper pulp, of paper or of paperboard
- 66 - Non-metallic mineral manufactures, not elsewhere specified
- 69 - Manufactures of metals, not elsewhere specified

(iv) Machinery and transport equipment (SITC section 7)

- Office and telecommunication equipment (SITC divisions 75, 76 and group 776)
- of which,

- - Electronic data processing and office equipment (SITC division 75)
- - Telecommunications equipment (SITC division 76)
- - Integrated circuits, and electronic components (SITC group 776)

- Transport equipment (SITC group 713, sub-group 7783 and divisions 78, 79)
- of which,

78 - Road vehicles (including air-cushion vehicles)

79 - Other transport equipment

- - Automotive products (SITC groups 781, 782, 783, 784 and subgroups 7132, 7783)
- of which,

781 - Motor cars and other motor vehicles principally designed for the transport of persons (other than public-transport type vehicles), including station wagons and racing cars

782 - Motor vehicles for the transport of goods and special purpose motor vehicles

783 - Road motor vehicles, not elsewhere specified

784 - Parts and accessories of the motor vehicles and tractors

7132 - Internal combustion piston engines for propelling vehicles listed above

- - Other transport equipment (SITC division 79, groups 713, 785, 786 minus sub-group 7132) of which,

79 - Other transport equipment

713 - Internal combustion piston engines, and parts thereof, not elsewhere specified

785 - Motorcycles and cycles, motorized and non-motorized

786 - Trailers and semi-trailers, other vehicles (not mechanically propelled), and specially designed and equipped transport containers

- Other machinery (SITC divisions 71, 72, 73, 74, 77 minus groups 713, 776 minus sub-group 7783) of which,

- - Power generating machinery (SITC division 71 minus group 713)
- of which,

71 - Power generating machinery and equipment

minus

713 - Internal combustion piston engines, and parts thereof, not elsewhere specified

- - Non-electrical machinery (SITC divisions 72, 73, 74)
- of which,

72 - Machinery specialized for particular industries

73 - Metal working machinery

74 - General industrial machinery and equipment, not elsewhere specified and machine parts, not elsewhere specified

- - Electrical machinery (SITC division 77 minus group 776 and subgroup 7783)
- of which,

77 - Electrical machinery, apparatus and appliances, not elsewhere specified and electrical parts thereof

minus

776 - Thermionic, cold cathode or photo-cathode valves and tubes

7783 - Electrical equipment, not elsewhere specified, for internal combustion engines and vehicles; and parts thereof

(v) Textiles (SITC division 65)

(vi) Clothing (SITC division 84)

(vii) Other manufactures (SITC divisions 81, 82, 83, 85, 87, 88, 89 excluding group 891) of which,

- Personal and household goods (SITC divisions 82, 83 and 85)
- of which,

82 - Furniture and parts thereof, bedding, mattresses, mattress supports, cushions and similar stuffed furnishings

83 - Travel goods, handbags and similar containers

85 - Footwear

- Scientific and controlling instruments (SITC division 87)

- Miscellaneous manufactures (SITC divisions 81, 88 and 89 minus group 891)
- of which,

81 - Prefabricated buildings, sanitary plumbing, heating and lighting fixtures and fittings, not elsewhere specified

88 - Photographic apparatus, equipment and supplies and optical goods, not elsewhere specified; watches and clocks

89 - Miscellaneous manufactured articles, not elsewhere specified

C. Other products: commodities and transactions not classified elsewhere (including gold); arms and ammunition (SITC section 9 and group 891)

9- Commodities and transactions not classified elsewhere in SITC

891 - Arms and Ammunition

D. Intermediate products include all parts and accessories as well as industrial primary and processed intermediate products. The "fuels and lubricants" category (BEC code 3) was excluded.

BEC codes 42, 53, 111, 121, 21, 22

2.1.2 Products

All product groups are defined according to Revision 3 of the Standard International Trade Classification (SITC).

Throughout this report, other food products and live animals; beverages and tobacco; animal and vegetable oils, fats and waxes; oilseeds and oleaginous fruit are referred to as other food products; electronic data processing and office equipment is referred to as EDP and office equipment; and integrated circuits and electronic components is referred to as integrated circuits.

Agricultural products according to the AOA (WTO Agreement on Agriculture) definition refer to HS chapters 1 to 24 (excluding fish and fish products) and a number of manufactured agricultural products (for further information see "The Legal Texts, The Results of the Uruguay Round of Multilateral Negotiations", WTO). This definition does not correspond to the definition of agricultural products presented in the breakdown of merchandise trade by main commodity group (see table II.1).

2.1.3 World trade network

The world merchandise trade network by region and product from which Appendix tables A2 and A12 are derived is based on export data. The network is constructed in the following way:

First, total merchandise exports from each of the seven regions are aggregated from the individual country or territory figures published in Appendix table A6.

Next, the total merchandise exports of each region are distributed by destination and then by product. The regional and commodity breakdown is based on UNSD *Comtrade database*, EUROSTAT, GTIS GTA database, national statistics and Secretariat estimates.

During this process, the principal adjustments to the figures are as follows:

- (i) Exports of ships to the open registry countries Panama and the Republic of Liberia are re-allocated from each region's exports to South and Central America and Africa to "unspecified destinations" (a category not shown separately).
- (ii) China's exports are adjusted to approximate their final destination.

(iii) Exports of non-monetary gold, where known, are included. When they cannot be broken down by destination, they are allocated to "unspecified destinations".

(iv) South Africa's trade has been revised to include trade with the former Southern African Customs Union members starting 2010.

(v) "Estimates for the Middle East include unrecorded re-exports of the United Arab Emirates which accounted for 6 per cent of the region's total exports in 2014. As of this publication, these are no longer distributed by product and destination and are instead included in unspecified products and destinations."

2.1.4 Merchandise trade by product, region and major trading partner (Commodity and Appendix tables)

For trade by product, world totals include shipments which have not been distinguished by origin or destination.

For trade by region and partner, world totals include goods which have not been specified by product.

The following adjustment has been made to the figures:

Exports of ships to the open registry countries Panama and the Republic of Liberia are reallocated from each economy's exports to South and Central America and Africa to "unspecified destinations" (a category not shown separately).

The selection of each economy's major trading partners is based on a ranking of total trade (exports plus imports) of each economy with their trading partners in 2014 (member States of the EU (28) are counted as one trading partner).

Appendix tables are no longer found in the print publication and may be found in the WTO Statistics webpage (http://www.wto.org/english/res_e/statis_e/its2015_e/its15_appendix_e.htm)

2.1.5 Merchandise trade and the goods account in balance of payments statistics

Merchandise trade statistics serve as an input for the compilation of the goods account in the balance of payments (BOP) and the rest of

the world account in the System of National Accounts (SNA).

The compilation of international merchandise trade statistics (IMTS) relies principally on customs records complemented, as appropriate, by additional sources to enhance their coverage (for instance, to include electricity, or trade in vessels and aircrafts). These statistics essentially reflect the physical movement of goods across borders, while National Accounts and BOP statistics record transactions that involve change in ownership.

The goods account in the BOP is generally compiled on the basis of IMTS after they have been adjusted for coverage, timing, and valuation.

Coverage differences between BOP statistics and IMTS concern mainly:

- items such as blueprints, videos, and tapes which are regarded as services within the BOP (hence are excluded from goods) whereas they are included in merchandise trade statistics at the value of the material support;
- goods that for practical reasons are excluded from merchandise trade but should in theory be recorded in BOP statistics, such as fish and salvage sold abroad by resident vessels, or imports of bunkers and stores acquired abroad for mobile equipment operated by residents;
- goods under the improvement and repair trade regime should be excluded from IMTS, but they are to be included in the goods account at the value of the repair under the BPM5;
- another coverage difference concerns goods that are imported in an economy where they undergo processing operations, and are thereafter re-exported. IMTS recommends that these movements be recorded on a gross basis, whereas BPM5 distinguishes between goods that return to the country of origin (included within the goods account but reported separately) and those that are sent to a third economy (such flows are considered as trade in general merchandise between the economy of origin and final destination, and should be excluded from the goods account of the economy where the processing takes place).



The physical movement of goods across border measured in IMTS do not necessarily coincide in timing with changes in the ownership of goods. BPM5 therefore recommends the application of specific adjustments for such cases.

As far as valuation is concerned, the issue that affects most data comparability concerns the point of valuation, namely, whether goods are valued at the importer's border - that is at the cost, insurance and freight value - or at the free on board value at the exporter's border. IMTS guidelines recommend the adoption of the c.i.f. valuation for imports whereas the fifth edition of the IMF's Balance of Payments Manual (BPM5) requires the f.o.b. valuation. Additional adjustments may be made by BOP compilers to conform to the BPM5 requirement for a market price for valuing trade, processing trade, and with respect to currency conversion.

Once adjusted, merchandise trade is recorded in the goods category of the current account, along with services, income, and current transfers. Therefore, within the balance of payments framework transactions in both goods and services are harmonized and provide for comparable statistical series. Strictly speaking, it is not correct to aggregate the figures for commercial services and merchandise shown elsewhere in this report.

It should be noted that some economies still apply the concepts of the fourth edition of the Balance of Payments Manual, and thus do not include goods for processing and goods procured in port carriers in the goods account.

2.2 Trade in commercial services between residents and non-residents of an economy (BPM6)

Depending on the location of the supplier and the consumer, the General Agreement on Trade in Services (GATS) defines four modes of supply. In addition to the cross-border supply (mode 1), where both the supplier and the consumer remain in their

respective home territories, GATS also covers cases where consumers are outside their home territory to consume services (mode 2 – consumption abroad), or where service suppliers are in the territory of the consumers to provide their services, whether by establishing affiliates through direct investment abroad (mode 3 – commercial presence), or through the presence of natural persons (mode 4). An economy's Balance of Payments, namely the services account, can be used to derive estimates covering trade in commercial services for modes 1, 2 and 4. The Balance of Payments does however not include most of the information on services supplied through foreign affiliates that is required to estimate the size of mode 3. A framework for collecting these data, the "Foreign Affiliates Statistics (FATS)" was adopted by the international statistical community for the first time in 2002, and then further developed in 2010. FATS are available in the annual publication International Trade Statistics and on the online tool I-TIP services.

2.2.1 Trade in commercial services between residents and non-residents of an economy (BPM6), exports and imports

Exports (credits or receipts) and imports (debits or payments) of commercial services are included in balance of payments statistics, in conformity with the concepts, definitions and classification of the sixth (2009) edition of the IMF Balance of Payments and International Investment Position Manual (BPM6) as well as the 2010 edition of the Manual on Statistics of International Trade in Services (MSITS 2010).

Definition of commercial services in the Balance of Payments

In the sixth edition of the Balance of Payments Manual, the current account is subdivided into goods, services (including government goods and services, n.i.e.), primary income, and secondary income. Commercial services comprise all services categories except government goods and services, n.i.e. Commercial services are sub-divided into manufacturing services on physical inputs owned by others, maintenance

and repair services n.i.e., transport, travel, and other commercial services. The BPM6 contains the following 12 standard services components.

- (1) Manufacturing services on physical inputs owned by others
- (2) Maintenance and repair services, n.i.e.
- (3) Transport
- (4) Travel
- (5) Construction
- (6) Insurance and pension services
- (7) Financial services
- (8) Charges for the use of intellectual property, n.i.e.
- (9) Telecommunications, computer and information services
- (10) Other business services
- (11) Personal, cultural and recreational services
- (12) Government goods and services, n.i.e.

Manufacturing services on physical inputs owned by others cover processing, assembly, labelling, packing, and similar activities undertaken by enterprises that do not own the goods concerned and are paid a fee by the owner. Only the fee charged by the processor, which may cover the cost of materials purchased, is included under this item. Examples include oil refining, liquefaction of natural gas, assembly of clothing and electronics, assembly, labelling, and packing.

Maintenance and repair services n.i.e. cover maintenance and repair work – by residents – on goods that are owned by non-residents (and vice versa). The repairs may be performed at the site of the repairer or elsewhere. The value recorded for maintenance and repairs is the value of the work done – not the gross value of the goods before and after repairs.

Manufacturing services on physical inputs owned by others and *Maintenance and repair services n.i.e.* form a new WTO aggregate named *Goods-related services*.

Transport is the process of carriage of people and objects from one location to another as well as related supporting and auxiliary services. Transport can be classified according to: (i) mode of transport, namely, sea, air, or other ("other" may be further broken down into rail, road, internal waterway, pipeline, and space transport as well as electricity



transmission); and (ii) what is carried – passengers or freight. Also included are postal and courier services.

Travel credits cover goods and services – for own use or to give away – acquired by non-residents from an economy during visits to that economy. Travel debits cover goods and services – for own use or to give away – acquired from other economies by residents of the reporting economy during visits to these other economies. The most common goods and services covered are lodging, food and beverages, entertainment and transportation (within the economy visited), gifts and souvenirs. Travel is further subdivided into: (i) personal travel and (ii) business travel.

The aggregate category *Other commercial services* corresponds to the following components defined in BPM6:

Construction covers the creation, renovation, repair, or extension of fixed assets in the form of buildings, land improvements of an engineering nature, and other similar engineering constructions such as roads, bridges, dams, and so forth. It also includes related installation and assembly work, site preparation, specialized services such as painting, plumbing, and demolition, and management of construction projects. Construction also covers the acquisition of goods and services by the enterprises undertaking construction work from the economy of location of the construction work. Construction can be divided into (i) construction abroad and (ii) construction in the compiling economy.

Insurance and pension services include services of providing life insurance and annuities, nonlife insurance, reinsurance, freight insurance, pensions, standardized guarantees, and auxiliary services to insurance, pension schemes, and standardized guarantee schemes.

Financial services cover financial intermediary and auxiliary services, except insurance and pension fund services, provided by banks and other financial corporations. They include deposit taking and lending, letters of credit, credit card services, commissions and charges related to financial leasing, factoring, underwriting, and clearing

of payments. Also included are financial advisory services, custody of financial assets or bullion, financial asset management, monitoring services, liquidity provision services, risk assumption services other than insurance, merger and acquisition services, credit rating services, stock exchange services, and trust services. Financial services may be charged for by: (i) explicit charges; (ii) margins on buying and selling transactions; (iii) asset management costs deducted from property income receivable in the case of asset-holding entities; or (iv) margins between interest payable and the reference rate on loans and deposits (called financial intermediation service charges indirectly measured – FISIM).

Charges for the use of intellectual property n.i.e. include: (i) Charges for the use of proprietary rights (such as patents, trademarks, copyrights, industrial processes and designs including trade secrets, franchises); these rights can arise from research and development, as well as from marketing; and (ii) Charges for licenses to reproduce or distribute (or both) intellectual property embodied in produced originals or prototypes (such as copyrights on books and manuscripts, computer software, cinematographic works, and sound recordings) and related rights (such as for live performances and television, cable, or satellite broadcast).

Telecommunications, computer and information services cover (i) Telecommunications services, which encompass the broadcast or transmission of sound, images, data, or other information by telephone, telex, telegram, radio and television cable transmission, radio and television satellite, electronic mail, facsimile, and so forth, including business network services, teleconferencing, and support services; (ii) Computer services consisting of hardware- and software-related services and data-processing services; (iii) Information services including news agency services, such as the provision of news, photographs, and feature articles to the media as well as database services.

Other business services include (i) Research and development services, (ii) Professional and management consulting services and (iii) Technical, trade-related and other business services. (i) Research and development services consist of services that are associated with basic and applied research, and experimental development of new products and processes. (ii) Professional and management consulting services include (a) legal services, accounting, management consulting, managerial services, and public relations services; and (b) advertising, market research, and public opinion polling services. (iii) Technical, trade-related, and other business services include: (a) architectural, engineering, and other technical services; (b) waste treatment and depollution, agricultural, and mining services; (c) operating leasing services; (d) trade-related services; and (e) other business services n.i.e.

Personal, cultural, and recreational services consist of (i) Audiovisual and related services and (ii) other personal, cultural, and recreational services. (i) Audiovisual and related services cover services and fees related to the production of motion pictures (on film, videotape, disk, or transmitted electronically, etc.), radio and television programs (live or on tape), and musical recordings. (ii) Other personal, cultural, and recreational services include (a) health services, (b) education services, (c) heritage and recreational services, and (d) other personal services. Health services as well as education services are provided remotely or on-site. Data on exports and imports of total services (including government goods and services n.i.e), other services (including government goods and services n.i.e) as well as government goods and services n.i.e. are available as memorandum items in the WTO online Statistics Database.

Memo items:

- Total services (Commercial services plus Government goods and services n.i.e)
- Other services (Other commercial services plus Government goods and services n.i.e)



- Government goods and services n.i.e

Government goods and services n.i.e. cover: (a) goods and services supplied by and to enclaves, such as embassies, military bases, and international organizations; (b) goods and services acquired from the host economy by diplomats, consular staff, and military personnel located abroad and their dependents; (c) services supplied by and to governments and not included in other categories of services.

Statistics on international trade in services are produced jointly and published simultaneously with UNCTAD and ITC.

Regional and world estimates for 2014 for sub-item of other commercial services should be considered as preliminary.

Coverage and comparability

While many economies worldwide have fully implemented the BPM6 for the recording of their Balance of Payments services transactions, some are still compiling their statistics according to the BPM5 methodology. Consequently, comparability and coverage of data may not always be complete. It should be noted in particular that world and regional estimates of trade in new services items such as Manufacturing services on physical inputs owned by others and Maintenance and repair services n.i.e. may be underestimated, as some economies do not report these items yet.

While the coverage and comparability of trade in services statistics have improved significantly over the years, the data remain subject to recognized limitations, such as i) certain countries do not collect figures for all items, ii) statistically capturing some services items remains difficult (more notably on the imports side), iii) data can be reported on a net rather than gross basis, iv) certain transactions may prove complex to classify appropriately, v) different sources, data collection and estimation methods lead to diverse results, etc. These distortions are more significant on detailed items levels and may lead to considerable asymmetries among countries' reported trade flows by origin and destination.

2.3 Foreign Affiliates Statistics

The new statistical framework on Foreign Affiliates Statistics (FATS) is developed in the Manual on Statistics of International Trade in Services 2010, the OECD Benchmark Definition of Foreign Direct Investment and the OECD Handbook on Economic Globalisation Indicators. The statistical framework covers both goods and services producing enterprises.

It analyses the universe of affiliates for which foreign investors own more than 50 per cent of the voting power or equity interest.

Depending on the compiler's view, one can distinguish inward FATS, that is, activities of foreign-owned affiliates in the compiling economy, or, outward FATS, that is, foreign affiliates of the compiling economy active abroad. Variables such as sales, value added, number of employees, etc. are used to describe the affiliates' activities. These variables are broken down by country of origin or destination of investments and also by type of primary activity of the affiliates. The United States also provide a breakdown into total supply of goods and total supply of services products. In the case of services industries the concept of supply (or output) is based on measures that better capture service output (i.e. the margin). This mainly has an impact on the measurement of activities of wholesalers and retailers, insurers and financial intermediaries.

From a GATS perspective, the size of mode 3 in a given country can be approximated through the value of the output (or supply) of services by foreign-owned affiliates. In the absence of data on output, sales of services are used. In tables i.24-i26 the focus is on services (i.e. to measure the GATS concept of supply of services through commercial presence), whereas table iv.4 covers both goods and services.

FATS are currently available mainly for OECD and a small number of non-OECD economies. Given the recent development of these statistics, comparability and coverage of individual economy data may not always be complete. Availability of detailed data and long-time series varies considerably between economies.

2.4 Trade in global value chains

The measurement of trade in value added terms traces the source of the value added, by country and industry that is contained in the products (goods and services) traded across the world.

Value added is defined as the value that is added by industries to produce goods and services. In a national account sense, it reflects the compensation of labour, capital, non-financial assets and natural resources used in the production as well as net indirect taxes, when relevant.

The value added approach reflects the interconnection of economies and sectors as well as the increasing importance of trade in intermediate inputs that takes place among international supply and production chains. It provides insights on where the value added comes from and thus on the actual contribution of trade to economies.

Trade in value added indicators are estimates based on Inter-Country Input-Output (ICIO) tables. ICIO tables cover both goods and services. They regroup national Input-Output tables and international trade statistics into a consistent framework to describe sale and purchase of goods and services between producers and consumers from various economies and industries. They enable to disentangle domestic and foreign value added in each economy and industry.

Trade in value added estimates presented in this publication are sourced from the OECD-WTO "Trade in value added" (TiVA) database and the OECD ICIO table. The latter covers 57 economies plus a "rest of the world" aggregate. Industries are regrouped into 37 sectors and cover productive activities in the primary, secondary and tertiary sectors classified according to the International Standard Industrial Classification (ISIC) Revision 4.

2.4.1 The decomposition of gross exports into their value added components

The breakdown of conventional export data (gross) into their value added components allows showing



the role played by economies in global value chains.

The **domestic value added content of exports** is composed of the following indicators:

(i) The domestic value added, embodied either in final or intermediate goods/services, directly consumed by the importing country. This represents a one-to-one country transfer of value added, with exported goods/services crossing borders only once.

(ii) The domestic value added contained in intermediates exported to a first country which re-exports them to a third country as embodied in others goods/services. This indicator represents a one-to-many country transfer of value added, when exported goods/services cross borders more than once. This illustrates the level of participation of an economy within international production.

(iii) The domestic value added of exported goods/services which is eventually re-imported by the country itself. Such a value added round-trip between two countries highlights the domestic value added content present in a country's imports.

The **foreign value added content of exports** corresponds to the value added of inputs that was imported in order to produce intermediate or final goods/services to be exported. It can also be referred to as vertical specialization, when expressed in percentage.

2.4.2 The sectoral value added contributions to gross exports

Exports from a (domestic) industry do not only contain value added produced within the same industry but also value added sourced from other industries within the economy or from other economies.

The value added approach to estimate trade flows can describe both the geographical and sectoral origin of the value added contained in gross exports of any given industry. Table IV.3 presents the value added origin (columns) of gross exports (rows) according to the domestic and foreign source and by main sector. This highlights the extent of the global value chains phenomenon and outlines the interconnection and related dependency across countries

and sectors for the production and trade of goods and services.

2.5 Other definitions and methods

2.5.1 Annual changes

Throughout this report, average annual percentage changes are analogous to compound interest rates. In calculating the average annual rate of change between 2005 and 2012, for example, data for calendar year 2005 were taken as the starting point, and data for calendar year 2012 as the end point.

2.5.2 Prices

Commodity price movements are primarily described by indices largely based on spot market prices, and therefore exclude transactions governed by longer-term contracts. Price indices for such commodities as food, beverages, agricultural raw materials, minerals, non-ferrous metals, fertilizers and crude petroleum are obtained from IMF Primary Commodity Prices (July 2014 release). Aggregates for all primary commodities and for non-fuel primary commodities are calculated using IMF weights (Appendix table A25). Beginning with the first quarter of 2011, the crude oil price index shown in Appendix table A36 is computed excluding West Texas Intermediate (WTI), which accounts for one third of the IMF's crude oil index. The price of WTI became largely dislocated from international markets in early 2011 and is thought not to represent well prices in international oil trade. For more information, see Box Comm.1 of the World Bank's Global Commodity Market Outlook, January 2012 (see page 65 of the complete report on <http://go.worldbank.org/WI8LCZ6PT0>).

Export and import prices by commodity group of Germany, Japan and the United States are sourced from national statistics. Aggregates are calculated by weighting the countries' price indices with the export and import values of the countries' respective base year (Appendix tables A26 and A27).

2.5.3 World merchandise trade indices

The volume indices and the deflators (i.e. price indices or unit values) are taken

from a range of different international and national sources. The reported deflators and volume indices may not always be available for the most recent years or may differ in product coverage from the corresponding value indices.

Aggregation of the indices to obtain a world total is a two-tier process. First, export and import deflators from national and international sources are complemented with Secretariat estimates for missing data. They are then aggregated to obtain regional totals. The volume index for each region is obtained by dividing the respective trade value index for each region by the corresponding regional deflator.

Second, the total world merchandise volume index is obtained by deflating the world trade value with the aggregate of regional deflators. Throughout the aggregation process trade values of the previous year are used as weights.

2.5.4 World production

Production of agriculture (including hunting, forestry and fish), mining and manufacturing is defined according to major Categories A, B, C and D of the International Standard Industrial Classification of all Economic Activities Revision 3 (ISIC). World production in these sectors is estimated by combining production indices published by the FAO, OECD, UNIDO and UNSD. The world index is derived through aggregation of the three sectors by using value added shares in 2005 as weights.

2.5.5 World gross domestic product

World GDP growth is estimated as a weighted average of individual economies' real GDP growth. The weights used are shares of the economies' previous year GDP at 2005 constant prices converted to dollars at market exchange rates.

The use of official exchange rates which are not market-based for some major economies, together with the fluctuations of the United States dollar vis-à-vis major currencies, can have a significant impact on the weighting pattern. The increasing use of weights based on purchasing power parities (PPP) by other international organizations is meant to



attenuate “anomalies” linked to these factors. In a period of widely diverging growth rates among countries and regions, the choice of the weighting pattern can have a marked influence on the global growth estimate. For the 2000-2011 period, global growth estimates based on PPP-weights indicate a significantly faster growth than estimates using weights based on GDP data measured at market exchange rates. This is because of differences in the two weighting patterns.

2.5.6 Re-exports and re-imports

Under the system of general trade adopted in this report, re-exports are included in total merchandise trade (see Section II.1).

However, in the case of Hong Kong, China, the magnitude of its re-exports (amounting in 2014 to \$508 billion), if included in regional or world aggregates, would adversely affect the analytical value of the statistics by introducing a significant element of double counting. Therefore, Hong Kong, China's re-exports are excluded from the world and from Asia aggregates (unless otherwise indicated); only Hong Kong, China's domestic exports and retained imports are included in the totals. For this reason, the figures for world exports and for exports of Asia shown in Appendix tables A2 and A12 are smaller than those in Appendix table A6. When retained imports are not published, an approximation is made on the basis of re-export values.

China reports imports from China (re-imports), a trade flow which accounted for 7.4 per cent (\$44.6 billion) of its total merchandise imports in 2014. These imports consist of products which have been produced in China and thereafter temporarily exported. The product structure of China's imports from China indicates that in absolute terms office and telecom equipment is the largest category (\$88.5 billion) in this particular trade flow. The share of re-imports is particularly large in the imports of telecommunications equipment (48.7 per cent), EDP and office equipment (39.5 per cent), electrical machinery (26.1 per cent) and in textiles (13.6 per cent). Further information on these imports is provided in Box 2 of the International Trade Statistics 2005.

3. Specific notes for selected economies

3.1 Merchandise trade statistics of the European Union

Beginning with the 2002 report, EU data compiled according to national statistical practices have been replaced, starting 1993, with data compiled by Eurostat in accordance with EU legislation. The concepts and definitions adopted by the EU are in line with the United Nations' *International Trade Statistics, Concepts and Definitions, Series M, N° 52, Revision 2*. As a result, the conceptual differences between EU member states' data have been substantially reduced. Moreover, for the EU as a whole, Eurostat data are more timely than the previous source, thus reducing substantially the amount of estimation included in the EU aggregate.

Since January 1993, statistics on the trade between the member states of the EU have been collected through the “Intrastat” system (see GATT 1994, *International Trade Trends and Statistics*). The coverage of this system, which relies on reports submitted by firms for transactions above a minimum value, is not as wide as the previous one, which was based on customs declarations. This is particularly noticeable on the import side. For example, prior to the adoption of the Intrastat system, reported intra-EU imports (c.i.f.) closely matched reported intra-EU exports (f.o.b.). However, from 1993 onwards, the reported value of intra-EU imports has been on average around 3 per cent lower than the value of intra-EU exports, indicating a substantial under-reporting of intra-EU imports. As a result of this inconsistency, the Secretariat has substituted intra-EU exports data for intra-EU imports at the aggregate EU level when estimating regional and world totals. However, this adjustment is not allocated between EU member countries. Hence, the sum of reported imports of individual EU members does not add to the figure for EU imports as a whole. This adjustment is also reflected in the volume estimates for the EU as a whole.

3.2 Major breaks in data continuity of merchandise trade

Beginning 2003, Singapore includes merchandise trade with Indonesia. Beginning 2008, Indonesia's imports are reported according to the general trade system.

With respect to the Russian Federation, considerable uncertainty remains about the accuracy of foreign trade statistics, especially as regards imports. A large proportion of the reported data on imports consists of official estimates of inflows of goods which enter the economy without being registered by the customs authorities. Such adjustments to import data accounted for 6 per cent of the officially reported totals in 2012; 8 per cent of the officially reported totals in 2013.

As of 2012, data for Switzerland includes trade in gold. Merchandise trade flows between the European Union member States include trade associated with fraudulent VAT declaration, which concerns mainly office and telecommunications equipment. Between 2006 and 2007, intra-EU merchandise trade statistics have been particularly affected by a considerable reduction in this fraudulent trade in the United Kingdom.

4. Statistical sources

Most frequently used sources for statistics are:

- EUROSTAT**, *Comext and on-line databases*
- FAO**, *FAOSTAT Agriculture database*
- FAO**, *Production Yearbook*
- GTIS**, *Global Trade Atlas database*
- IMF**, *Balance of Payments Statistics*
- IMF**, *International Financial Statistics*
- IMF**, *World Economic Outlook database*
- OECD**, *Main Economic Indicators*
- OECD**, *Measuring Globalisation: The Role of Multinationals in OECD Economies*
- OECD**, *Monthly Statistics of International Trade*
- OECD**, *National Accounts*
- OECD**, *Statistics on International Trade in Services*
- OECD/IEA**, *Energy Prices & Taxes*
- UNECE**, *Economic Survey of Europe*



UNECLAC, *Overview of the Economies of Latin America and the Caribbean*

UNIDO, *National Accounts Statistics Database*

UNSD, *Comtrade database (for OECD members the UNSD-OECD Joint Trade Data Collection and Processing system)*

UNSD, *International Trade Statistics Yearbook*

UNSD, *Monthly Bulletin of Statistics*

UNSD, *Servicetrade database*

World Bank, *World Development Indicators*

These sources are supplemented by national publications and other international databases and Secretariat estimates.

Figures for total merchandise trade are largely derived from IMF, *International Financial Statistics*. Data on merchandise trade by origin, destination and product are mainly obtained from Eurostat's Comext database, the Global Trade Atlas and UNSD's *Comtrade database*. Some

inconsistencies in the aggregate export and import data for the same country or territory between sources are inevitable. These can be attributed to the use of different systems of recording trade, to the way in which for example IMF and UNSD have converted data expressed in national currencies into dollars, and revisions which can be more readily incorporated in the IMF data.

Statistics on trade in commercial services are mainly drawn from the IMF *Balance of Payments Statistics*. Data for European Union members, EU candidate and EU observer countries as well as the EU(28) aggregate are drawn from Eurostat's on-line database from 2004. For other economies that do not report to the IMF (e.g., Chinese Taipei) data are drawn from national sources. Estimations for missing data are mainly based on national statistics. Statistics on trade in commercial services by origin and destination are also derived from national statistics.

GDP series in current dollars are mainly derived from the World Bank *World*

Development Indicators, supplemented in some cases with statistics from the IMF *World Economic Outlook database*.

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Closing date for merchandise trade statistics (Customs basis) and commercial services (Balance of Payments basis) is 15 July 2015. For foreign affiliates trade in services statistics the closing date is 16 August 2015.

