cent, up from 1.8 per cent in 2015, which is below the historical average of 3 per cent recorded over the past four decades. Total volumes reached 10.3 billion tons, reflecting the addition of over 260 million tons of cargo, about half of which was attributed to tanker trade (tables 1.3 and 1.4; figure 1.2). Strong import demand in China in 2016 continued to support world maritime seaborne trade, although overall growth was offset by limited expansion in the import demand of other developing regions.

Table 1.3. Growth in international seaborne trade, selected years (Millions of tons loaded)

Year	Oil and gas	Main bulks[a]	Dry cargo other than main bulks	Total (all cargoes)
1970	1 440	448	717	2 605
1980	1 871	608	1 225	3 704
1990	1 755	988	1 265	4 008
2000	2 163	1 295	2 526	5 984
2005	2 422	1 709	2 978	7 109
2006	2 698	1 814	3 188	7 700
2007	2 747	1 953	3 334	8 034
2008	2 742	2 065	3 422	8 229
2009	2 642	2 085	3 131	7 858
2010	2 772	2 335	3 302	8 409
2011	2 794	2 486	3 505	8 785
2012	2 841	2 742	3 614	9 197
2013	2 829	2 923	3 762	9 514
2014	2 825	2 985	4 033	9 843
2015	2 932	3 121	3 971	10 023
2016	3 055	3 172	4 059	10 287

Source: Compiled by the UNCTAD secretariat, based on data supplied by reporting countries and as published on government and port industry websites, and by specialist sources. Data for 2006 onwards have been revised and updated to reflect improved reporting, including more recent figures and better information regarding the breakdown by cargo type. Figures for 2016 are estimates, based on preliminary data or on the last year for which data were available.

[a] Iron ore, grain, coal, bauxite, alumina and phosphate rock.

B. WORLD SEABORNE TRADE

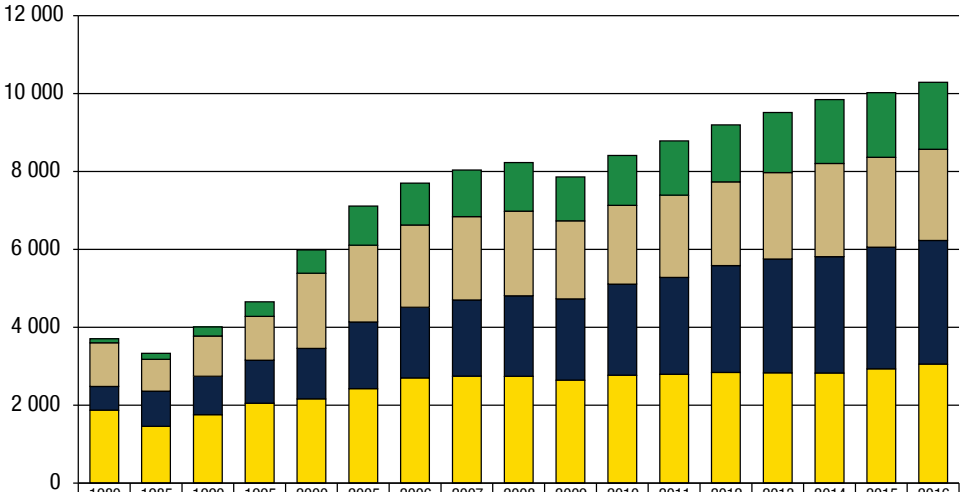
1. Overview

In line with developments in the world economy, demand for shipping services improved in 2016, albeit only moderately. World seaborne trade expanded by 2.6 per

Seaborne dry cargo shipments totalled 7.23 billion tons in 2016, reflecting an increase of 2 per cent over the previous year (table 1.4). As shown in figure 1.2 and table 1.3, the share of the major bulk commodities (coal, iron ore, grain and bauxite/alumina/phosphate rock) amounted to about 43.9 per cent of total dry cargo volumes, followed by containerized trade (23.8 per cent) and minor bulks (23.7 per cent). Remaining volumes were accounted for by "other" dry cargo,[3] namely breakbulk shipments.

In 2016, the major bulk commodities increased by 1.6 per cent, while other dry cargo expanded by 2.2 per cent.

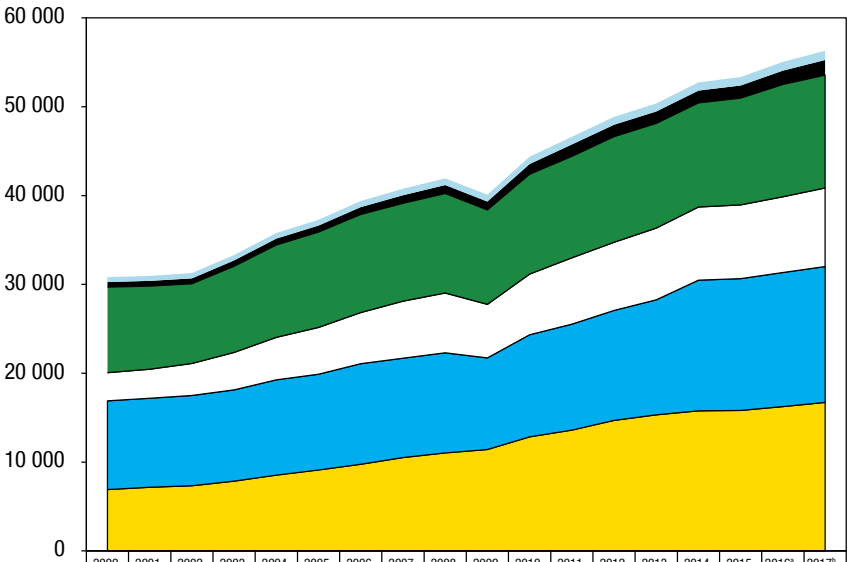
Figure 1.2. International seaborne trade, selected years (Millions of tons loaded)



	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Container	102	152	234	371	598	1 001	1 076	1 193	1 249	1 127	1 280	1 393	1 464	1 544	1 640	1 661	1 720
Other dry cargo	1 123	819	1 031	1 125	1 928	1 975	2 112	2 141	2 173	2 004	2 022	2 112	2 150	2 218	2 393	2 310	2 339
Five major bulks	608	900	988	1 105	1 295	1 711	1 814	1 953	2 065	2 085	2 335	2 486	2 742	2 923	2 985	3 121	3 172
Oil and gas	1 871	1 459	1 755	2 050	2 163	2 422	2 698	2 747	2 742	2 642	2 772	2 794	2 841	2 829	2 825	2 932	3 055

Sources: Review of Maritime Transport, various issues. For 2006–2016, the breakdown by cargo type is based on data from Clarksons Research, Shipping Review and Outlook and Seaborne Trade Monitor, various issues.

Figure 1.3. World seaborne trade in cargo ton-miles by type of cargo, 2000–2017 (Billions of ton-miles)



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016[a]	2017[b]
Chemicals	552	562	593	606	625	651	689	724	736	765	824	864	889	908	914	953	991	1 039
Gas	576	591	611	662	719	736	833	913	956	958	1 147	1 344	1 346	1 347	1 392	1 422	1 563	1 706
Oil	9 631	9 352	8 971	9 698	10 393	10 729	11 036	11 011	11 200	10 621	11 237	11 417	11 890	11 779	11 717	12 013	12 638	12 701
Container	3 170	3 271	3 601	4 216	4 785	5 269	5 757	6 422	6 734	6 030	6 833	7 469	7 673	8 076	8 237	8 302	8 529	8 845
Other (minor bulks and other dry cargo)	9 998	10 023	10 167	10 275	10 729	10 782	11 330	11 186	11 272	10 325	11 504	11 927	12 375	12 952	14 707	14 836	15 097	15 298
Five main dry bulks	6 896	7 158	7 331	7 852	8 527	9 107	9 745	10 503	11 028	11 400	12 824	13 596	14 691	15 312	15 768	15 813	16 239	16 710

Source: UNCTAD secretariat calculations, based on data from Clarksons Research, 2017a.
[a] Estimated.
[b] Projected figures.

Table 1.4. World seaborne trade by economic grouping, region and type of cargo, 2015 and 2016 (Tonnage and percentage share)

Economic grouping	Year	Goods loaded				Goods unloaded			
		Total	Crude	Petroleum products and gas	Dry cargo	Total	Crude	Petroleum products and gas	Dry cargo
		Millions of tons							
World	2015	10 023.5	1 761.0	1 170.9	7 091.6	10 016.4	1 910.2	1 187.2	6 919.0
	2016	10 286.9	1 837.6	1 217.9	7 231.4	10 281.6	1 990.0	1 233.3	7 058.3
Developed economies	2015	3 417.4	129.6	467.2	2 820.6	3 733.7	994.3	530.9	2 208.5
	2016	3 594.7	143.5	505.0	2 946.3	3 633.0	990.8	533.5	2 108.7
Transition economies	2015	632.3	164.4	43.1	424.7	58.6	0.3	4.3	54.0
	2016	646.5	176.3	48.2	421.9	61.5	0.3	4.5	56.7
Developing economies	2015	5 973.8	1 466.9	660.6	3 846.3	6 224.0	915.6	651.9	4 656.5
	2016	6 045.7	1 517.7	664.7	3 863.2	6 587.1	998.9	695.4	4 892.8
Africa	2015	755.1	293.7	58.6	402.8	485.6	39.4	72.1	374.2
	2016	745.3	290.1	50.2	405.0	506.2	40.1	78.7	387.4
America	2015	1 327.6	223.5	83.8	1 020.3	589.6	65.8	102.1	421.7
	2016	1 369.0	270.7	69.7	1 028.6	594.3	58.2	123.1	413.1
Asia	2015	3 882.9	948.0	517.3	2 417.7	5 136.3	809.6	473.6	3 853.1
	2016	3 923.0	955.1	543.9	2 424.0	5 473.9	899.7	489.4	4 084.8
Oceania	2015	8.2	1.7	0.9	5.5	12.5	0.9	4.1	7.5
	2016	8.4	1.8	1.0	5.6	12.7	0.9	4.3	7.5
Economic grouping	**Year**	**Goods loaded**				**Goods unloaded**			
		Total	**Crude**	**Petroleum products and gas**	**Dry cargo**	**Total**	**Crude**	**Petroleum products and gas**	**Dry cargo**
		Percentage share							
World	2015	100.0	17.6	11.7	70.7	100.0	19.1	11.9	69.1
	2016	100.0	17.9	11.8	70.3	100.0	19.4	12.0	68.6
Developed economies	2014	34.1	7.4	39.9	39.8	37.3	52.1	44.7	31.9
	2015	34.9	7.8	41.5	40.7	35.3	49.8	43.3	29.9
Transition economies	2015	6.3	9.3	3.7	6.0	0.6	0.0	0.4	0.8
	2016	6.3	9.6	4.0	5.8	0.6	0.0	0.4	0.8
Developing economies	2015	59.6	83.3	56.4	54.2	62.1	47.9	54.9	67.3
	2016	58.8	82.6	54.6	53.4	64.1	50.2	56.4	69.3
Africa	2015	7.5	16.7	5.0	5.7	4.8	2.1	6.1	5.4
	2016	7.2	15.8	4.1	5.6	4.9	2.0	6.4	5.5
America	2015	13.2	12.7	7.2	14.4	5.9	3.4	8.6	6.1
	2016	13.3	14.7	5.7	14.2	5.8	2.9	10.0	5.9
Asia	2015	38.7	53.8	44.2	34.1	51.3	42.4	39.9	55.7
	2016	38.1	52.0	44.7	33.5	53.2	45.2	39.7	57.9
Oceania	2015	0.1	0.1	0.1	0.1	0.1	0.0	0.3	0.1
	2016	0.1	0.1	0.1	0.1	0.1	0.0	0.3	0.1

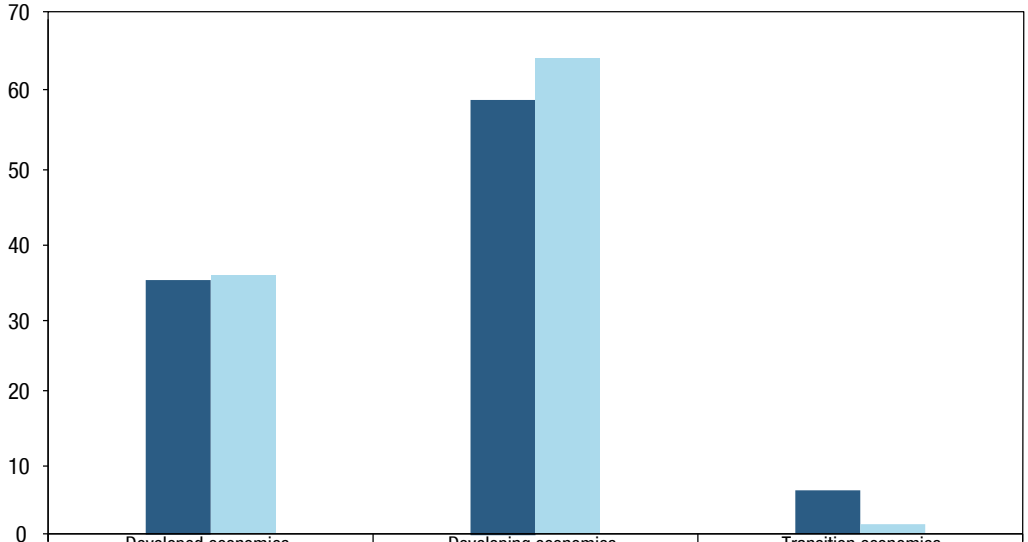
Sources: Compiled by the UNCTAD secretariat, based on data supplied by reporting countries and data obtained from government, port industry and other specialist websites and sources. Data for 2006 onwards have been revised and updated to reflect improved reporting, including more recent figures and better information regarding the breakdown by cargo type. Figures for 2016 are estimates based on preliminary data or on the last year for which data were available.

Note: For longer time series and data prior to 2015, see UNCTAD, 2017b.

In 2016, distance-adjusted seaborne trade continued to grow but at a slightly faster pace than seaborne trade in tons. Global shipping ton-miles reached 55,057 estimated billions, up by 3.2 per cent over the previous year, when ton–miles increased by 1.1 per cent (figure 1.3).

Despite the particularly weak import demand and limited exports in many economies, developing economies as a group continued, nevertheless, to account for most of world seaborne cargo shipments in 2016. As shown in figure 1.4 (a), developing economies accounted for 59 per cent of world goods loaded (outbound/exports)

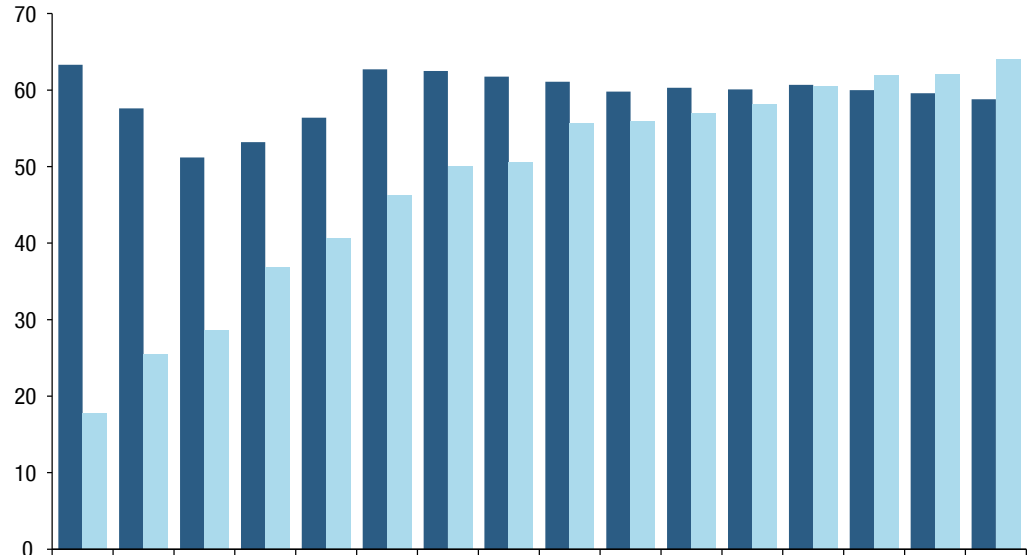
Figure 1.4 (a). World seaborne trade, by type of economy, 2016 (Percentage share in world tonnage)



	Developed economies	Developing economies	Transition economies
Loaded	35	59	6
Unloaded	35	64	1

Sources: Compiled by the UNCTAD secretariat, based on data supplied by reporting countries and as published on government and port industry websites, and by specialist sources.
Note: Estimates are based on preliminary data or on the last year for which data were available.

Figure 1.4 (b). Participation of developing economies in world seaborne trade, selected years (Percentage share in world tonnage)



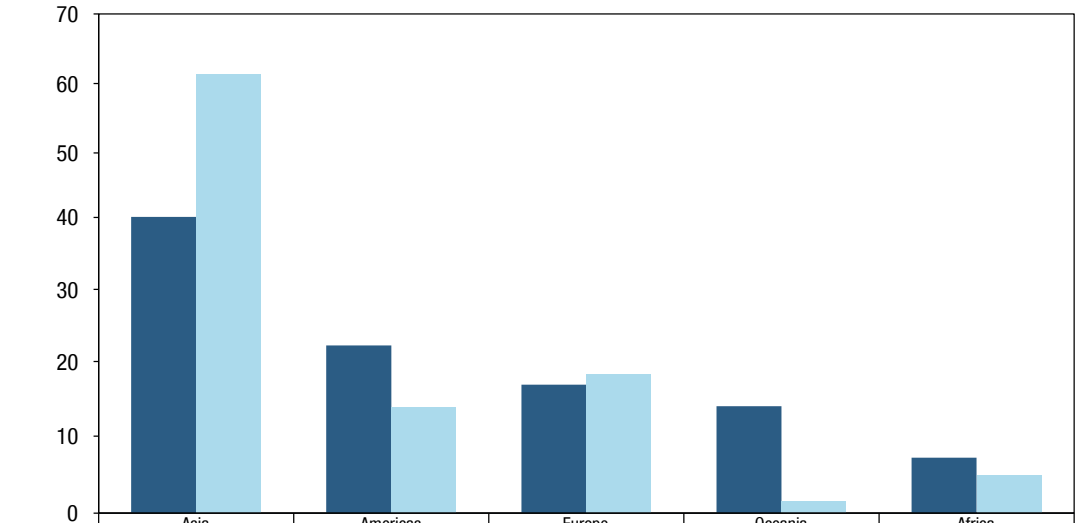
	1970	1980	1990	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Loaded	63	58	51	53	56	63	62	62	61	60	60	60	61	60	60	59
Unloaded	18	26	29	37	41	46	50	51	56	56	57	58	60	62	62	64

Source: Review of Maritime Transport, various issues.

and nearly two thirds of goods unloaded (inbound/imports), respectively.

Figure 1.4 (b) highlights the contribution of developing economies in terms of goods loaded and unloaded globally. Since the 1970s, participation of developing economies in world seaborne trade has shifted, reflecting their rise as major importers and exporters. For over four decades, developing economies' share of goods unloaded has increased significantly, while their share of goods loaded has also increased, albeit at a slower rate, before stabilizing at about 60 per cent since 2010.

Figure 1.4 (c). World seaborne trade, by region, 2016 (Percentage share in world tonnage)



	Asia	Americas	Europe	Oceania	Africa
Loaded	40	22	17	14	7
Unloaded	61	14	18	2	5

Sources: Compiled by the UNCTAD secretariat, based on data supplied by reporting countries and as published on the relevant government and port industry websites, and by specialist sources. Estimates are based on preliminary data or on the last year for which data were available.

Developing economies are no longer only a source of supply for raw materials and fossil fuel energy, but are also key players in globalized manufacturing processes and a growing source of consumption import demand, including of raw materials, such as oil (figure 1.4 (b)). In terms of geographical influence, Asia remained the main global cargo loading and unloading area in 2016 (figure 1.4 (c)).

2. Seaborne trade by cargo type

Tanker trade

In 2016, world seaborne tanker trade – crude oil, refined petroleum products and gas – continued to grow amid a surplus in oil market supply and low oil prices. Total volumes reached 3.1 billion tons, reflecting an increase of 4.2 per cent over the previous year. Oil imports for inventory building continued unabated for crude oil and refined oil products, and resulted in record high storage levels. These positive trends were underpinned by strong demand for crude oil imports in China, India and the United States and a high level of exported petroleum products from China and India. An overview of global players in oil and gas production, consumption and volumes shipped in 2016, is presented in tables 1.5 and 1.6.

Table 1.5. Major producers and consumers of oil and natural gas, 2016 (World market share in percentage)

World oil production		World oil consumption	
Western Asia	35	Asia Pacific	35
North America	18	North America	23
Transition economies	15	Europe	14
Developing America	11	Western Asia	11
Africa	9	Developing America	9
Asia Pacific	9	Transition economies	4
Europe	4	Africa	4
Oil refinery capacities		**Oil refinery throughput**	
Asia Pacific	34	Asia Pacific	34
North America	21	North America	22
Europe	15	Europe	15
Western Asia	10	Western Asia	11
Transition economies	9	Transition economies	9
Developing America	7	Developing America	7
Africa	4	Africa	2
World natural gas production		**World natural gas consumption**	
North America	26	North America	25
Transition economies	22	Asia Pacific	20
Western Asia	18	Transition economies	16
Asia Pacific	16	Western Asia	15
Europe	6	Europe	12
Developing America	6	Developing America	8
Africa	6	Africa	4

Source: UNCTAD secretariat calculations, based on data from British Petroleum, 2017.

Notes: Totals may not add up to 100 per cent due to rounding. Oil includes crude oil, shale oil, oil sands and natural gas liquids. The term excludes liquid fuels from other sources such as biomass and coal derivatives.

Supported by firm import demand in China, India and the United States and for the second consecutive year, crude oil shipments expanded by 4.3 per cent in 2016, reaching an estimated total volume of 1.8 billion tons. Imports into North America increased, reflecting reduced domestic production, while growing imports into China reflected additions to refinery capacity.

Exports from Western Asia rose steadily, owing to growing shipments from the Islamic Republic of Iran following the end of economic sanctions. In the United States, shipments of crude oil increased as the 40-year ban on oil exports was lifted. In Nigeria, exports dropped sharply, owing to disruptions in production.

Table 1.6. Oil and gas trade, 2015 and 2016 (Million tons and annual percentage change)

	2015	2016	Percentage change 2015–2016
Crude oil	1 761	1 838	4.3
Petroleum products and gas	1 171	1 218	4.0
Of which			
Liquefied natural gas	250	268	7.2
Liquefied petroleum gas	79	87	10.1
Total tanker trade	2 932	3 055	4.2

Source: UNCTAD secretariat calculations, derived from table 1.4 above. Figures relating to liquefied natural gas and liquefied petroleum gas are derived from Clarksons Research, 2017a.
Note: Discrepancies with data in table 1.4 are due to rounding.

Together, refined oil products and gas trade volumes expanded by 4 per cent, taking total shipments to 1.2 billion tons in 2016. Demand for refined oil products was generally supported by a low oil price environment, with growth driven by increased exports from Western Asia, China and India, as well as by a recovery in Europe's import demand. While demand for refined oil products grew in China, India and the United States, weak economic growth in Japan and developing America, has nevertheless, constrained global imports of refined oil products. Volumes were supported by stronger gasoline demand, while diesel demand declined as a result of weak global industrial activity. Only India, the Republic of Korea and Europe recorded strong increases in diesel oil demand, mostly for transportation use.

With regard to gas trade, liquefied natural gas shipments were estimated to have expanded by 7.2 per cent in 2016, with shipments reaching 268 million tons (Clarksons Research, 2017b). Expansion was led by increased exports from Australia and the United States, which saw new liquefaction terminals come online. Volumes of imports into China, India and other Asian developing economies, notably in Western Asia, grew steadily. These positive developments helped offset declines in the import volumes of the Republic of Korea and Japan.

Liquefied petroleum gas trade rose by 10.1 per cent, with volumes reaching 87 million tons in 2016 (Clarksons Research, 2017b). Volumes were supported by the continued strong expansion in exports from the United States and Western Asia and robust import demand in China and India. The growing needs of the petrochemical industry and the household sector were the primary source of demand in both countries. For the liquefied petroleum gas sector, the opening in June 2016 of the expanded Panama Canal allowed for the passage of gas carriers, thus shortening the distance travelled on the United States–China route as compared with the Cape of Good Hope.

Dry cargo trades

Dry bulk shipments: Major and minor dry bulks

Overall, weak global investment and industrial activity have weighed down on the dry bulk trade segment,[4] which continues to be heavily dependent on developments in China. In 2016, world demand for dry bulk commodities grew at a modest rate of 1.3 per cent, taking total shipments to 4.9 billion tons. China remained the primary source of growth, owing to the positive impact of the stimulus measures introduced during the year. Policy-driven support measures helped increase infrastructure and housing market investment and in turn, the demand for commodities and steel. However, these trends were offset by declines in import volumes in Latin America and the Caribbean, North America and India. An overview of global players in the dry bulk sector, including producers, consumers and volumes shipped in 2016, is presented in tables 1.7 and 1.8.

Within the dry bulk segment, trade in the major bulk commodities increased by 1.6 per cent. Iron ore trade showed the strongest growth with volumes expanding by 3.4 per cent, reaching 1.4 billion tons in 2016. Imports into China increased by over 7 per cent, reflecting the country's steel output growth, falling domestic iron ore production, growing stockpiling activity and access to affordable, high-quality iron ore from Australia and Brazil. In contrast, iron ore imports into Europe and other Asian countries declined, in the wake of low steel prices.

Coal trade diminished in 2016, owing to flat demand for coal. Total volumes were estimated at 1.14 billion tons, with both coking coal and thermal coal volumes stagnating at 249 million tons and 890 million tons, respectively. A marginal increase in coking coal volumes reflected higher import demand in China and Japan. These were offset by declining import volumes in India, the Republic of Korea and Europe.

Declining imports of thermal coal into India, Japan, the Republic of Korea and Europe were offset by a 4 per cent increase in other Asian countries imports, notably China, where import volumes surged by over 28 per cent.

Table 1.7. Major dry bulks and steel: Market shares of producers, users, exporters and importers, 2016 (Percentage)

Steel producers		Steel users	
China	50	China	45
Japan	6	United States	6
India	6	India	6
United States	5	Japan	4
Russian Federation	4	Republic of Korea	4
Republic of Korea	4	Germany	3
Germany	3	Russian Federation	3
Turkey	2	Turkey	2
Brazil	2	Mexico	2
Other	18	Other	25
Iron ore exporters		**Iron ore importers**	
Australia	57	China	71
Brazil	26	Japan	9
South Africa	5	Europe	7
Canada	3	Republic of Korea	5
Sweden	2	Other	8
Other	7		
Coal exporters		**Coal importers**	
Australia	33	China	18
Indonesia	32	India	17
Russian Federation	9	Japan	16
Colombia	8	Europe	12
South Africa	6	Republic of Korea	11
United States	4	Taiwan Province of China	5
Canada	2	Malaysia	3
Other	6	Other	18
Grain exporters		**Grain importers**	
United States	22	Eastern and Southern Asia	34
Russian Federation	19	Africa	22
European Union	14	Developing America	19
Ukraine	11	Western Asia	16
Argentina	9	Europe	6
Canada	8	Transition economies	3
Others	17		

Sources: UNCTAD secretariat calculations, based on data from the World Steel Association, 2017a and 2017b; Clarksons Research, 2017d.

Grain trade grew by an estimated 3.7 per cent in 2016 as imports into the European Union rose sharply, owing to poor harvests in some producing member countries. In China, grain imports fell as the Government decided to promote the use of local grain stocks to support local farmers. Import demand in the United States declined due to strong domestic production, while Brazil increased its exports of corn and soybeans.

Given limited growth in the minor bulks trade, volumes remained static at an estimated 1.7 billion tons. The drag on volumes reflects the decline in steel products trade, as well as the reduction in bauxite and nickel ore shipments resulting from a bauxite-mining ban in Malaysia and nickel ore mine closures in the Philippines. However, trade in some other minor bulk commodities such as cement, petroleum coke and sugar was positive and helped offset slightly the decline in nickel ore and bauxite shipments.

Table 1.8. Dry bulk trade, 2015 and 2016 (Million tons and annual percentage change)

	2015	2016	Percentage change 2015–2016
Five major bulks	3 121	3 172	1.6
of which:			
Iron ore	1 364	1 410	3.4
Coal	1 142	1 140	-0.2
Grain	459	476	3.7
Bauxite/alumina	126	116	-7.9
Phosphate rock	30	30	1.0
Minor bulks	1 706	1 716	0.6
of which:			
Steel products	406	404	-0.5
Forest products	346	354	2.3
Total dry bulks	4 827	4 888	1.3

Source: UNCTAD secretariat calculations, based on data from Clarksons Research, 2017d.

Other dry cargo

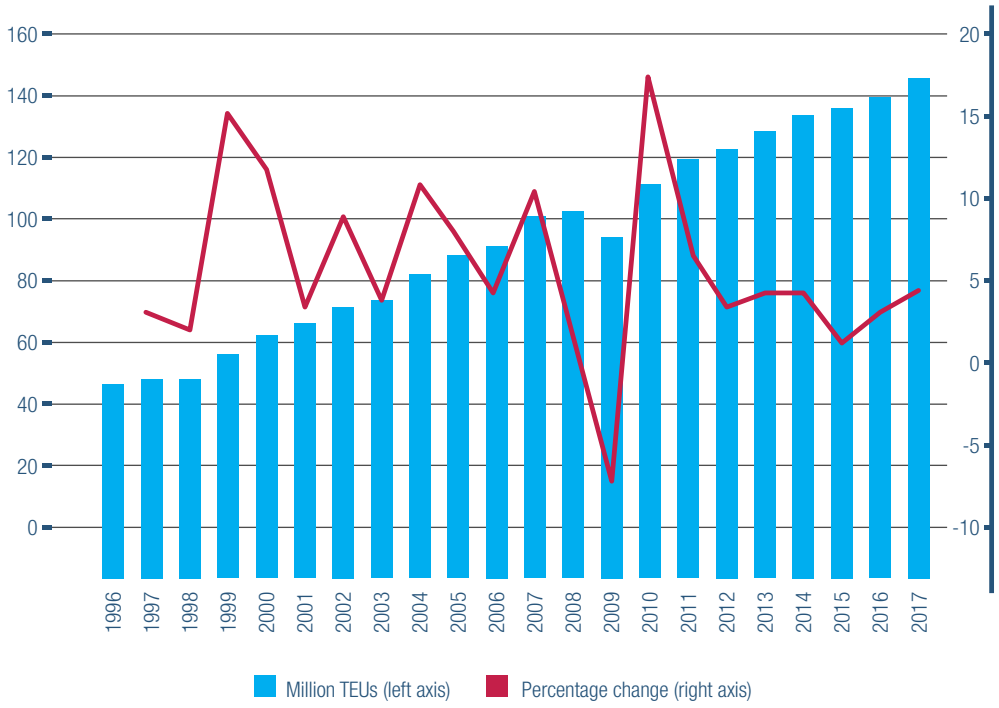
Containerized trade

As shown in figure 1.5, following a modest expansion of 1.2 per cent in 2015, global containerized trade expanded at a faster rate of 3.1 per cent in 2016, with volumes attaining an estimated 140 million 20-foot equivalent units (TEUs) (MDS Transmodal, 2017).

Recovery was driven by volume growth in the peak leg of the Asia–Europe trade, where volumes contracted in 2015. Other contributing factors were accelerated growth in intra-Asian cargo flows and positive trends in the trans-Pacific. Together, these developments contributed to raising overall containerized trade volumes. In contrast, limited growth on North–South trade routes caused by reduced import demand of key fuel and non-fuel commodity exporters hindered overall growth.

Table 1.9 and figure 1.6 summarize developments in contain trade flows on the main East–West trade routes. Cargo flows on the route increased by 4.4 per cent in 2016, up from 1.2 per cent in 2015. The trans-Pacific containerized trade route dominated the East–West containerized trade lane in 2016, with volumes exceeding 25 million TEUs. Volumes on the Asia–Europe route increased by 3.1 per cent, reflecting some recovery in volumes following the 2015 contraction. Volumes on the transatlantic trade route increased by 2.9 per cent, with volumes reaching 7 million TEUs in 2016.

Figure 1.5. Global containerized trade, 1996–2017
(Million 20-foot equivalent units and annual percentage change)



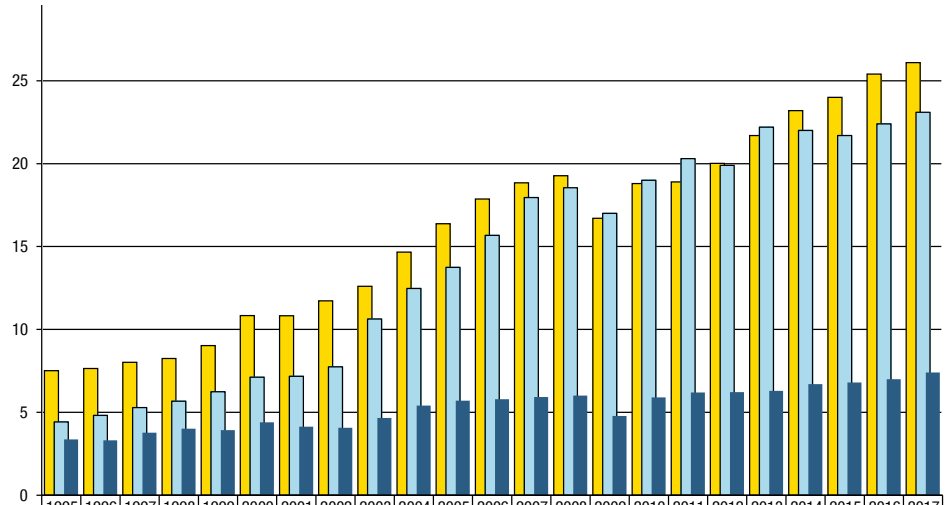
Source: UNCTAD secretariat calculations, based on data from MDS Transmodal, 2017.
Note: Data for 2017 are projected figures.

Table 1.9. Containerized trade on major East–West trade routes, 2014–2017
(Million 20-foot equivalent units and annual percentage change)

Year	Trans-Pacific Eastbound	Westbound	Asia–Europe Eastbound	Westbound	Trans-Atlantic Eastbound	Westbound
	Eastern Asia–North America	North America–Eastern Asia	Northern Europe and Mediterranean to Eastern Asia	Eastern Asia to Northern Europe and Mediterranean	North America to Northern Europe and Mediterra-nean	Northern Europe and Mediterra-nean to North America
2014	15.8	7.4	6.8	15.2	2.8	3.9
2015	16.8	7.2	6.8	14.9	2.7	4.1
2016	17.7	7.7	7.1	15.3	2.7	4.3
2017	17.9	8.2	7.6	15.5	2.9	4.5
Annual percentage change						
2014–2015	6.6	-2.9	0.0	-2.4	-2.4	5.6
2015–2016	5.2	7.3	4.0	2.8	0.5	3.3
2016–2017	1.0	6.4	7.3	1.8	6.7	4.5

Source: UNCTAD secretariat calculations, based on data from MDS Transmodal, 2017.
Note: Data for 2017 are projected figures.

Figure 1.6. Estimated containerized cargo flows on major East–West trade routes, 1995–2017 (Million 20-foot equivalent units)



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Trans-Pacific	8	8	8	8	9	11	11	12	13	15	16	18	19	19	17	19	19	20	22	23	24	25	26
Europe–Asia–Europe	4	5	5	6	6	7	7	8	11	12	14	16	18	19	17	19	20	20	22	22	22	22	23
Transatlantic	3	3	4	4	4	4	4	4	5	5	6	6	6	6	5	6	6	6	6	7	7	7	7

Sources: UNCTAD secretariat calculations, based on data from United Nations Economic Commission for Latin America and the Caribbean, 2010 (Global Insight database). Figures from 2009 onward are derived from data provided by MDS Transmodal, 2017 and Clarksons Research.

Note: Data for 2017 are estimated forecasts.

Table 1.10. Containerized trade on non-mainlane routes, 2015–2017 (Million 20-foot equivalent units and annual percentage change)

	Intraregional	South–South	Non-mainlane East–West	North–South
	Annual percentage change			
2015	3.2	-3.1	5.1	0.3
2016	5.1	-2.9	2.6	0.7
2017	6.1	-1.7	4.3	2.0

Source: UNCTAD secretariat calculations, based on data from Clarksons Research, 2017e.

Notes: Data for 2017 are projected figures.

Non-mainlane East–West: Trade from the Middle East and Indian subcontinent with Europe, the Far East and North America. North–South: Trade between regions of the southern hemisphere (Latin America, Oceania and sub-Saharan Africa) and those of the northern hemisphere (Europe, the Far East and North America). Intraregional: Mainly intra-Asian (trade between Asian countries, not including the Indian subcontinent). South–South: Trade between regions of the southern hemisphere.

As shown in table 1.10, intraregional trade continued to growth steadily (5.1 per cent) in 2016. To a large extent, intraregional trade has been gaining market share due to the rapid expansion in intra-Asian containerized trade, driven by the movement of intermediate goods and the value chains involving China and its neighbouring Asian countries. South–South trade contracted by 3.1 per cent and 2.9 per cent in 2015 and 2016, respectively. In this respect, the impact of lower commodity prices on developing economies' purchasing power may play a part in this development. However, given the small volumes associated with South–South containerized trade, the impact on overall trade appears to be marginal.

Falling commodity prices continued to undermine North–South trade and hinder flows on secondary East–West trade routes. There were fewer imports into Western Asia, owing to the negative impact of lower oil prices on the purchasing power of the region. Offsetting this trend, however, was the strong import demand in Southern Asia.

The troubles experienced by the liner shipping industry since 2008/2009 highlight the difficulties for the sector to adapt to the seemingly "new normal", where merchandise trade flows are growing at a slower pace than GDP. In an oversupplied market characterized by mega containerships (over 18,000 TEUs) and overall weak growth in global demand, the shipping industry has turned to consolidation and rationalization to optimize capacity utilization and reduce costs. In 2016 and first half of 2017, the container shipping industry intensified its consolidation efforts, both in the form of mergers and acquisitions, as well as through shake-ups in liner shipping alliances and the exit from the market of a major container shipping company after it filed for bankruptcy protection (Hanjin effect). The advent of megaships, intensified consolidation activity and formation of new and larger shipping alliances is

altering overall liner shipping dynamics and forces. It remains unclear whether this is a temporary cyclical development or a permanent structural shift.

These trends could potentially alter the bargaining powers between large carriers and cargo owners and entail some negative implications for prices and costs to shippers, as well as trade competitiveness through reduced market access, with lines and alliances deploying strategies that may change the configuration of their networks and market areas serviced by their port calls.

Ship upsizing and cascading of capacity continue to affect containerized trade, while the opening of the expanded Panama Canal locks is creating a shift in ship deployment patterns, which could affect seaborne trade. In the second quarter of 2017, some 40 "old Panamax" ships were deployed on the Asia–United States East Coast route via the Panama Canal. In comparison, there were over 150 "old Panamax" ships in early June 2016. These have been replaced by capacity ranging from 8,000–12,000 TEUs (Clarksons Research, 2017c). Ship cascading onto secondary trade routes is affecting the usual balance between transhipment and direct call patterns, a trend that can be expected to continue as carriers aim to limit the number of calls made by their megaships (Lloyd's List, 2017).

The standard box or container is considered to be a landmark technological development that revolutionized shipping and seaborne trade when it was first introduced over 60 years ago. Today other technological developments are unfolding and could redefine not only the containerized trade landscape but the entire maritime transport sector. These span digitalization, e-commerce, cloud computing, big data, the Internet of Things, three-dimensional printing (also known as additive manufacturing), to name but a few (UNCTAD, forthcoming). Some observers have estimated that as much as 37 per cent of container shipping operations and related freight flows are threatened by three-dimensional printing (PricewaterhouseCoopers, 2015). Others, however, question this estimate. They consider that three-dimensional printing is destined for only a niche role in logistics, for example, prototyping, aftermarket or service logistics where spare parts are required to be available on a timely basis, for locations that are not accessible and where supply chains are uncertain, especially in remote developing regions. Furthermore, the technology will not result in a huge disruptive effect (Lloyd's Loading List, 2016). How trends will evolve and whether they will materialize and at what speed still remains to be seen.

The rapid expansion of e-commerce is to a large extent enabled by digitalization and the use of electronic platforms. The market for e-commerce expanded significantly over the past decade and continues to grow. While global e-commerce is still dominated by the developed economies, the highest growth can be observed in developing regions, especially in Asia. UNCTAD estimates the 2015 business-to-consumer sales and business-to-business sales reached $25.3 trillion in 2015, $9 trillion above the 2013 value. The business-to-business segment represents the largest share of e-commerce, while the business-to-consumer segment appears to be expanding faster. The world's largest business-to-consumer e-commerce market, China, accounted for $617 billion, followed by the United States, with $612 billion. However, the United States led in business-to-business sales (UNCTAD, 2017c).

Experts participating in the third UNCTAD E-commerce Week held in April 2017, emphasized the magnitude of opportunities and challenges that e-commerce entails for transport and trade, noting that there was "more than enough capacity in the shipping and air transport channels to deal with the anticipated and projected increase in the number of shipments due to e-commerce trade" (UNCTAD, 2017d). Data from the Universal Postal Union on the volume of international postal traffic offer insights into the recent growth of cross-border e-commerce of goods. Between 2011 and 2016, global deliveries of small packets, parcels and packages more than doubled, most likely in great part due to e-commerce transactions (OECD and World Trade Organization, 2017).

These trends have implications for shipping and container shipping. For industry players such as liner shipping companies, logistics service providers and air carriers, e-commerce will likely have a transformational effect on transport and supply chains (Business Insider, 2016). While this impact continues to unfold, one basic pattern is emerging and is pointing to the importance of ocean shipping for e-commerce. There is a growth in the strategic distribution support centres for both cross-border and domestic e-commerce transactions and a rise in business models that favour the emergence of shipping as the main mode of transport (JOC.com, 2016). Products that are highly time sensitive and could rapidly lose value between production and delivery will continue to favour air transport. However, for goods that are less time sensitive and that rely on forward inventory systems close to markets – seemingly the preferred e-commerce supply chain model – maritime shipping will remain the favoured mode of delivery (JOC.com, 2016). This e-commerce supply chain model is more cost-effective and allows for e-commerce-specific services that are well integrated with logistics.