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# REVIEW OF MARITIME TRANSPORT, 2004

#### **CHAPTER 1.**

## **Development of International Seaborne Trade**

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#### Chapter 1

## DEVELOPMENT OF INTERNATIONAL SEABORNE TRADE

The first chapter provides an overview of the demand for global maritime transport services, together with background information on the world economic situation and a review and forecast of developments in world seaborne trade.

#### A. WORLD ECONOMIC BACKGROUND

#### 1. World output

General

During 2003 the growth of world output continued its recovery and reached 2.6 per cent, almost a whole 1 per cent increase over the 1.7 per cent finally recorded for 2002 (see table 1), with virtually all regions of the world experiencing a simultaneous economic recovery, albeit at different paces.

The economic recovery of developed countries led to a 2.0 per cent growth, well over the 1.2 per cent of the previous year. It was concentrated in the United States, fuelled by sustained domestic demand in the wake of the short-term impact of tax cuts and mortgage refinancing. These resulted in an accelerated rate of output growth, reaching 3.1 per cent. The Japanese economy rebounded strongly, also fuelled by stimulated domestic demand, and achieved an increase in output growth of 2.7 per cent. The European Union, however, continued its sluggish performance and output growth slowed for the third consecutive year, to 0.7 per cent. Economic deceleration was more pronounced in Italy, down to 0.3 per cent, and in France, down to 0.2 per cent, while Germany's economy actually contracted by 0.1 per cent. In the United Kingdom output increased by 2.2 per cent, slightly better than the figure recorded in 2001.

The growth in the economic output of developing economies reached 4.5 per cent, well above the world

average. The highest growth was recorded in a number of Asian countries, which reached 5.9 per cent after a disappointing performance during the first half of the year due to the impact of the Severe Acute Respiratory Syndrome (SARS). Performance was particularly good in South Asia, with India and Pakistan recording output growth of 7.4 and 5.5 per cent respectively. Output growth for countries located further east was less impressive: Malaysia reached 5.2 per cent, but the Republic of Korea managed only 3.1 per cent, about half the rate of the previous year.

The star performer of the year was undoubtedly China, whose output growth was 9.1 per cent, supported by strong domestic demand and remarkable export performance. This result was achieved in spite of the impact of SARS, with the output growth of Hong Kong (China) and Taiwan Province of China almost trebling.

The output growth of African economies reached 3.6 per cent. This was better than the figure for the previous but still below that of 2001. These countries benefited from an overall increase in the price of commodities, with output in Ghana, Cameroon and Nigeria growing at the rate of 4.7, 4.2 and 4.1 per cent respectively. Countries in North Africa fared particularly well, with Algeria's output expanding by 6.7 per cent and that of Morocco by 5.5 per cent. South Africa's output growth was only 1.5 per cent, while Zimbabwe contracted for a fifth consecutive year by 13.2 per cent.

The output growth of the economies in developing America rebounded to reach 1.6 per cent, also as a result of improved commodity prices. Argentina rebounded

Table 1
World output growth, 2001–2003

(percentage)

Region/grouping	Average 1990–2000	2001	2002	2003 a
World	2.7	1.4	1.7	2.6
Developed economies	2.4	1.0	1.2	2.0
of which:				
<b>United States</b>	3.5	0.5	2.2	3.1
Japan	1.4	0.4	-0.3	2.7
<b>European Union</b>	2.1	1.7	1.0	0.7
of which:				
Germany	1.6	0.8	0.2	-0.1
France	1.8	2.2	1.2	0.2
Italy	1.6	1.8	0.4	0.3
United Kingdom	2.7	2.1	1.6	2.2
Developing economies	4.1	2.4	3.5	4.5
of which:				
Africa	2.5	3.6	3.1	3.4
Latin America	3.3	0.4	-0.6	1.6
Asia	6.2	3.2	5.4	5.9
<b>Economies in transition</b>	-2.5	4.7	4.1	5.9
China	10.3	7.5	8.0	9.1

*Source*: Calculations by the UNCTAD secretariat based on data in 1995 dollars, as published in UNCTAD (2004), *Trade and Development Report 2004*, United Nations publication, Sales No. E.04.II.D.29, New York and Geneva, table 1.1.

<sup>a</sup> Estimates.

after four years of contracting output to reach 8.7 per cent and was the best performer in the region. Peru, Colombia and Chile managed to grow at a rate less than half and reached 4.0, 3.6 and 3.2 per cent respectively. A lower output growth of 1.3 per cent was achieved by Mexico as a result of the relocation of export industries elsewhere. Brazil, the largest economy in South America, contracted by 0.2 per cent, while Venezuela's economy, afflicted by internal upheaval, contracted by 9.2 per cent for the second year running, in spite of good crude oil prices.

Economies in transition recorded the fifth consecutive year of economic growth with a 5.9 per cent increase, which was more than twice the world average. The Russian Federation and Belarus recorded output growth of 7.3 and 6.8 per cent respectively. The countries of Eastern Europe recorded output growth of around 5 per

cent, with three countries located further east — Armenia, Azerbaijan and Tajikistan — achieving double-digit output growth.

#### Prospects

Forecasts of world economic output growth for 2004 have been cautiously optimistic and contingent on the level reached by the price of oil, the sustainability of Chinese growth and the development of the financial sector of the economy. Forecasts are around 3.5 per cent.

#### 2. Merchandise trades

Recent developments in international trade

During 2003 the volume of world exports expanded by 4.5 per cent (see table 2). Increased exports were

Table 2

Growth in the volume of merchandise trade by geographical region, 2001–2003

(annual percentage change)

	Exports				Imports	
2001	2002	2003	Countries/regions	2001	2002	2003
-1.5	3.0	4.5	World <sup>a</sup>	0.9	3.0.	n.a.
n.a.	n.a.	n.a.	Developed economies a	0.3	n.a.	n.a.
			of which:			
-5.0	-3.0	3.0	North America	-3.8	4.0	5.5
1.1	0.5	0.9	European Union	0.3	-0.5	1.8
-5.0	8.5	n.a.	Japan	0.3	1.5	n.a.
0.5	n.a.	n.a.	Developing economies <sup>a</sup>	0.8	n.a.	n.a.
			of which:			
2.5	n.a.	n.a.	Africa	4.6	n.a.	n.a.
2.7	1.5	4.5	Latin America	0.5	-5.5	1.6
n.a.	n.a.	n.a.	Middle East b	n.a.	n.a.	n.a.
-3.7	10.5	n.a.	Asia <sup>c</sup>	-1.9	9.5	11.1
8.0	8.0	n.a.	Economies in transition <sup>a</sup>	14.7	11.5	10.9
5.0	n.a.	n.a.	China	11.3	n.a.	n.a.

*Source:* WTO News — World Trade 2003; Press Release, 5 April 2004; and WTO Statistics at www.wto.org/english/res\_e/statis\_e/its2003\_e/section1\_e/i02.xls.

- <sup>a</sup> Excludes significant double counting.
- b Includes Israel.
- <sup>c</sup> Includes Japan, China, Hong Kong (China), Taiwan Province of China and developing countries in the Pacific.

particularly strong after a poor first quarter overshadowed by the effects of SARS and tensions in the Middle East. The expansion of exports indicated a clear recovery from the trade slump of two years ago. Among developed countries export volumes rebounded in North America and expanded by 3.0 per cent, and in European Union countries, export growth expanded by 0.9 per cent. The latter exports grew in spite of a currency that appreciated against the US dollar for most of the year. Export volumes for developing countries in Latin America expanded by 4.5 per cent aided by sustained imports in North America and Europe, and also by substantial Asian imports, notably from China.

The preliminary figures available for growth in import volumes indicate double-digit growth for countries in Asia, notably China, and countries with economies in transition, whose imports grew by 11.1 and 10.9 per cent

respectively. Among developed countries imports into North America expanded by 5.5 per cent and imports into countries of the European Union rebounded and expanded by 1.8 per cent. Imports of developing countries in Latin America also rebounded by a similar amount, 1.6 per cent, after a severe contraction of 5.5 per cent the previous year.

#### Trends in imports and exports

For 2004, prospects for export growth are good and expansion of up to 7.5 per cent can be expected. This forecast, however, is contingent on the behaviour of the United States economy in the face of an increased current account deficit, the effect of a lasting appreciation of the euro that would dampen European exports and steady or lower oil prices.

#### 3. OECD countries' industrial output

The industrial production index (1995 = 100) for OECD countries, another fundamental indicator for the global maritime transport sector, averaged 119.7 in 2003. This represented a clear 1.2 per cent increase over the average of the previous year, when the index's increase was negligible (see figure 1).

The results for 2003 were due to the steady increase in industrial activity in the major economies. In the United States the index reached 124.5 in the first quarter, then eased slightly during the second and third quarter and peaked at 126 during the last quarter. The average index was 124.6, a good 2.4 per cent increase for the year. The evolution of the index for Japan mirrored that of the United States, but its increase was almost double. The average index for the year was 100.1 — a remarkable 4.1 per cent increase. The index for the 15 countries of the European Union followed a similar pattern: it started at 113.8 and after faltering during the second quarter it recovery steadily up to the end of the year. The average index for the year was 113.9, only increasing by 1.5 per cent. The highest increases in the industrial production index during the year were recorded in Ireland, which registered a 19.9 per cent increase to 255; Turkey, with an 18.4 per cent increase to 146.7;

Poland, with a 17.8 increase to 159.8; and the Republic of Korea, with a 9.7 per cent increase to 176.1. The OECD outlook for 2004 points to a strengthening of the upward trend.

#### B. WORLD SEABORNE TRADE

#### 1. Overall seaborne trade

World seaborne trade increased strongly in 2003, reaching 6.17 billion tons of loaded goods. The annual growth rate, calculated with the provisional data available for 2003, reached 3.7 per cent, as shown in table 3 and figure 2.

The breakdown of world seaborne loaded goods by continent was as follows: Africa's share of world exports was 8.9 per cent, while America's was 20.7 per cent. Asia was by far the continent with the largest share of the world tonnage of seaborne loaded goods — 37.2 per cent. Europe's share was the second largest at 25.1 per cent, while Oceania's share was the smallest, representing only 8.0 per cent of world seaborne loaded goods. The breakdown for selected trading blocs was as follows: European Union (EU) 17.4 per cent; Gulf Cooperation Council (GCC) — 16.0 per cent; North American Free Trade Association (NAFTA) — 10.2 per cent; Association of South-East Asian Nations

Percentage change

8
6
4
2
0
-2
4
2000
2001
2002
2003

OECD industrial production

World seaborne trade

Figure 1

Annual change in OECD industrial production and world seaborne trade, 2000–2003

Source: OECD (2004), Main Economic Indicators, April.

Table 3

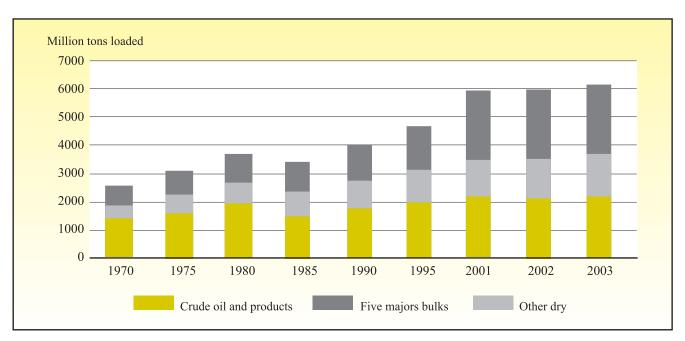
Development of international seaborne trade, selected years a (goods loaded)

Year	Tanker	cargo	To	•	cargo of which:	main bulk	Total (all goods)	
	million tons	% change	million tons	% change	million tons	% change	million tons	% change
1970	1 442		1 124		448		2566	
1980	1871		1833		796		3 704	
1990	1 755		2 2 5 3		968		4008	
1999	2068	-0.6	3 604	1.9	1 196	2.2	5 672	1.0
2000	2 163	4.6	3709	2.9	1 288	7.7	5 872	3.5
2001	2 174	0.5	3717	0.2	1 331	3.3	5 891	0.3
2002	2 129	-2.1	3819	2.8	1 352	1.6	5 948	1.0
2003 °	2 203	3.4	3 9 6 5	3.8	1 475	9.1	6168	3.7

Source: Estimated by the UNCTAD secretariat on the basis of annex II and data supplied by specialized sources.

Figure 2

International seaborne trade for selected years



Source: Review of Maritime Transport, various issues.

Includes international cargoes loaded at ports of the Great Lakes and St. Lawrence system for unloading at ports of the same system.

Iron ore, grain, coal, bauxite/alumina and phosphate.

c Estimates.

(ASEAN) — 6.9 per cent; South Common Market (MERCOSUR) — 5.2 per cent; and Common Market of Eastern and Southern Africa (COMESA) — 1.6 per cent.

Forecasts for 2004 indicate that annual growth rates will probably be as good as those of last year, while the distributions of world tonnage by continent and for selected trading blocs are expected to fluctuate marginally.

#### 2. Seaborne trade in tankers

#### General developments

In 2003 the total world shipments of tanker cargoes reached 2.20 billion tons, after rebounding by 3.4 per cent during the year. About 76.5 per cent of this tanker trade was in crude oil, with the remainder as petroleum products. The share of tanker shipments in overall world seaborne trade decreased slightly to 35.7 per cent.

#### Crude oil production

In 2002 crude oil production<sup>1</sup> averaged 73.9 million barrels per day (mbpd) — a marginal decrease of 0.7 per cent compared with the previous year. Oil production in OECD countries, notably the United States, Mexico, Norway and oil-producing countries within the EU, increased by 0.8 per cent to 21.5 mbpd, and this group therefore increased its market share to 29.1 per cent.

OPEC countries actually decreased their production by 6.4 per cent to 28.2 mbpd, the lowest level since 1996. Accordingly, their market share decreased from 41.7 to 38.2 per cent of world oil production in 2002. The remaining oil-producing countries, namely the Russian Federation, China, Brazil and a number of small producers, increased their average production by a remarkable 9.5 per cent to 24.2 mbpd. These countries therefore increased their market share to 32.7 per cent, an increase of 3.3 per cent over their share of the previous year.

Among OECD major producers, US production stood at 7.7 mbpd (the corresponding market share was 10.4 per cent), while that of Mexico was 3.6 mbpd (4.8 per cent). The figure for Norway was 3.3 mbpd (4.5 per cent), similar to that of the European Union countries, namely 3.2 mbpd (4.4 per cent). Among those countries the United Kingdom maintained its lion's share, 2.5 mbpd (3.4 per cent), the same as the previous year.

The oil output of two large OPEC producers — the Islamic Republic of Iran and Venezuela — declined by 8.5 and 8.3 per cent to reach 3.4 mbpd and 2.9 mbpd respectively. Their market shares were 4.6 and 4.0 per cent respectively. The output of the largest producer — Saudi Arabia — averaged 8.7 mbpd, a reduction of 3.5 per cent from the previous year's level. Its market share stood at 11.7 per cent. Other OPEC countries also cut production by less than 10 per cent: Nigeria's output just reached 2 mbpd (a decrease of 8.5 per cent), while that of Indonesia reached 1.3 mbpd (a reduction of 8.0 per cent). Two producers in the Middle East posted the highest reductions in output: Iraq by 14.4 per cent to 2.0 mbpd and Kuwait by 9.6 per cent to 1.9 mpbd.

Amongst the other oil-producing countries the output performance of the Russian Federation and Brazil was remarkable. The former increased production by 9.1 per cent to 7.7 mbpd (corresponding to a 10.4 per cent market share), while the latter increased production by 12.2 per cent to 1.5 mbpd (a 2.0 per cent market share). Chinese production rose by 2.5 per cent to 3.4 mbpd (a 4.6 per cent market share).

During 2003 the crude oil production level fluctuated in line with the quota decisions made by OPEC members in response to major events and quota compliance by them. At the beginning of the year the production quota was increased to 24.5 mbpd in response to shortages resulting from Venezuela's internal crisis, and then the quota was further relaxed to counter any oil shortage resulting from military operations that started in April in the Middle East Gulf. In June the production quota was reduced by 2 mbpd to 25.4 mbpd, while overproduction by members was put at 1.5 mbpd. During the summer concerns were expressed about the impact of Iraqi oil coming into the market owing to the lifting of UN and US sanctions and the end of oil monitoring exports. By November a reduction of 0.9 mbpd in the OPEC quota entered into force and measures to enforce production quotas were strengthened. A further 1 mbpd quota reduction was agreed in February 2004, to enter into force by April. Other producers, notably Mexico, Norway and the Russian Federation did not mirror OPEC decisions and actually boosted their production during 2003.

Prices evolved favourably during the year. The OPEC basket price of seven crude oil prices averaged \$28.10 per barrel during 2003, an increase of 15.4 per cent over the previous year and 21.6 per cent over the average of 2001. Prices peaked during the first quarter of 2003, reaching more than \$35 per barrel. Afterwards

they stood at around the \$30 level and started to climb again by the last quarter, reaching the \$35 mark again by mid-January 2004.

During the year there were reports that highlighted the increasing role of offshore production. Current world offshore production, estimated at 2.5 mbpd, is expected to treble in the next five years owing to annual investments of about \$11 billion. Early in the year, new discoveries at depths of 1,375 metres were announced by Brazil, one of the important offshore producers. Oil exploration and production were reaching deeper waters: some drilling rigs were probing the seabed beyond 3,000 metres and semi-submersible facilities for oil production were used in waters deeper than 2,000 metres. Some countries in West Africa (Angola, Cameroon, Equatorial Guinea, Nigeria and Mauritania) and in the Gulf of Mexico were targeted by these investments and techniques.

#### Refinery developments

World refineries' throughput reached 69.4 mbpd in 2002, a decrease of 0.7 per cent from the previous year. Refineries in the United States reduced throughput by 1.3 per cent, while those in Europe and the Russian Federation recorded a modest increase of 0.3 per cent. These two regions accounted for 49.8 per cent of world throughput. The largest increase in output was recorded by Chinese refineries, whose output reached 4.4 mbpd — an increase of 4.6 per cent. The largest output decreases were in refineries in the Asia-Pacific region and in Latin America, whose outputs decreased by 6.4 and 5.4 per cent respectively.

During 2003, Chinese refineries located along the Yangtze River boosted output to up to 90 per cent of capacity in spite of difficulties in transporting crude oil due to the unusually low levels of the river. Demand in the country continued to be fuelled by rising car sales and power for cities and massive infrastructure work. By mid-year, the largest Japanese oil refiner halted operations in two plants, representing a fifth of its refining capacity, to conduct safety inspections that had been overlooked.

#### Natural gas production

In 2002 production of natural gas reached 2,528 billion cubic metres<sup>2</sup> (bcm), an increase of 1.4 per cent over the 2001 level, but lower than the rate of growth achieved the previous year, which was finally 2.3 per cent. This production is equivalent to 2,275 million tons of oil or

47.3 mbpd. Major producers are the United States, with 547.7 bcm, and the Russian Federation, with 554.9 bcm, which together account for 43.7 per cent of total production. Lesser producers are Canada, with 183.5 bcm, the United Kingdom, with 103.1 bcm, Algeria, with 80.4 bcm, Indonesia, with 70.6 bcm, and the Islamic Republic of Iran, with 64.5 bcm. Other producers are scattered through the Middle East, Latin America and Asia, often obtaining natural gas as a result of oil production. About a fifth of natural gas production is exported, mainly by pipelines, which carry about three quarters of all exports.

Prospects for increasing natural gas production were good thanks to growing demand in the United States, Europe, Japan and China. It was estimated that demand would grow by 2.75 per cent for the next 20 years, and the corresponding annual capital expenditures to meet such demand were put at \$30 billion. Moreover, production and transport costs have been coming down. It was reported that the cost of production capacity fell by half to less than \$200 per ton during the last decade and the cost of sea transport and regasification plants dropped by a third and a quarter respectively.

The Saudi Arabian drive to develop gas production led to contracts that attracted production rivals (i.e. Lukoil from the Russian Federation) and consumers (i.e. Sinopec from China). The \$5 billion Qatargas3 project in neighbouring Qatar envisages the shipment of 1 bcm of gas daily to United States markets using 200,000 cubic metre gas carriers: this vessel size would be almost 50 per cent larger than the largest ones currently in operation. In South America, a \$2.1 billion investment in Venezuela (Plataforma Deltana project) was reported, as well as an 18-year supply contract from Peru to Mexico (Camisea project) and delays in starting the huge Margarita project in Bolivia.

#### Crude oil shipments

Crude oil seaborne shipments increased by 3.5 per cent to 1.66 billion tons in 2003 (see table 4). The major loading areas continued to be the developing countries in Western Asia, with 848.9 million tons, in West Africa, with 175.3 million tons, in North Africa, with 125.6 million tons, and around the Caribbean, with 207.2 million tons. The main discharging areas were located in developed market-economy countries in North America, with 532.3 million tons, in Europe, with 433.5 million tons, and in Japan, with 215.0 million tons. Developing countries in South and East Asia took 301.2 million tons during

Table 4

World seaborne trade <sup>a</sup> in 1970, 1980, 1990 and 1999–2003, by types of cargo and country groups <sup>b</sup>

Country grou	ıp Year		Goods	loaded		Goods unloaded			
			Oil	Dry	Total all		Dil c	Dry	Total all
		Crude	Products <sup>c</sup>	cargo	goods	Crude	Products	cargo	goods
			Tra	de in m	illions of t	ons			
World total									
	1970	1 109	232	1 162	2 504	1 101	298	1 131	2 529
	1980	1 527	344	1 833	3 704	1 530	326	1 823	3 679
	1990	1 287	468	2 253	4 008	1 315	466	2 365	4 126
	1999	1 577	496	3 593	5 666	1 552	546	3 762	5 860
	2000	1 665	498	3 709	5 872	1 720	550	3 979	6 249
	2001	1 678	497	3 717	5 891	1 702	552	3 913	6 167
	2002	1 629	500	3 819	5 948	1 713	550	4 014	6 276
	2003	1 686	517	3 965	6 168	1 787	550	4 122	6 460
		P	ercentage sl	hare of t	rade by co	untry gro	ups		
World total	1970	42.6	12.7	44.7	100.0	43.5	11.9	44.6	100.0
	1980	41.2	9.3	49.5	100.0	41.6	8.9	49.5	100.0
	1990	32.1	11.7	56.2	100.0	31.9	10.8	57.3	100.0
	1999	27.8	8.8	63.4	100.0	26.5	9.3	64.2	100.0
	2000	28.4	8.5	63.2	100.0	27.5	8.8	63.7	100.0
	2001	28.5	8.4	63.1	100.0	27.6	8.9	63.4	100.0
	2002	27.4	8.4	64.2	100.0	27.3	8.8	63.9	100.0
	2003	27.3	8.4	64.3	100.0	27.7	8.5	63.8	100.0
<b>DMECs</b>	1970	2.0	27.1	60.0	31.1	80.4	79.6	79.1	79.9
	1980	6.3	25.5	64.7	37.0	72.0	79.5	67.8	70.5
	1990	13.4	32.6	63.4	43.8	72.5	81.4	61.7	67.3
	1999	5.4	21.6	59.9	41.4	71.5	50.8	62.1	63.5
	2000	5.2	22.2	60.1	41.3	68.6	51.2	60.3	61.8
	2001	5.3	21.7	59.3	40.8	68.9	50.7	59.6	61.4
	2002	5.5	21.6	58.4	40.8	68.5	51.1	58.0	60.3
	2003	5.4	22.1	58.4	40.9	68.8	50.8	58.8	60.9
Central and	Eastern	Europe d							
	1970	3.4	8.0	6.9	5.6	1.2	1.0	3.8	2.3
	1980	3.6	14.6	5.2	5.4	2.3	0.4	6.0	4.0
	1990	4.6	11.8	3.8	5.0	2.6	0.3	5.8	4.1
	1999	3.8	4.8	5.1	4.7	1.6	0.4	1.3	1.3
	2000	5.5	8.9	4.2	5.0	0.5	0.4	1.9	1.4
	2001	5.4	8.1	4.1	4.8	0.5	0.7	1.9	1.4
	2002	5.6	8.4	4.3	5.0	0.6	0.5	1.9	1.4
	2003	6.9	8.5	4.2	5.3	0.6	0.6	1.9	1.4

Table 4 (continued)

Country group Year	Goods loaded				Goods unloaded				
		Oil	Dry	Total all	(	Oil	Dry	Total all	
	Crude	Products c	cargo	goods	Crude	Products <sup>c</sup>	cargo	goods	
Percentage share of trade by country groups									
Socialist countries of	'Asia <sup>e</sup>								
1970	-	-	1.2	0.5	0.5	0.1	2.0	1.2	
1980	1.4	1.7	1.0	1.2	1.4	1.6	4.0	2.7	
1990	2.7	0.9	2.0	2.0	0.3	0.3	3.4	2.1	
1999	1.1	1.2	5.5	3.9	2.4	4.7	5.8	4.8	
2000	1.0	1.1	6.7	4.6	4.1	4.1	7.3	6.1	
2001	1.0	1.1	7.2	4.9	3.6	4.8	8.0	6.5	
2002	1.1	2.1	7.6	5.4	4.1	4.6	9.3	7.4	
2003	1.1	2.2	8.0	5.6	5.0	5.0	9.7	8.0	
Developing countrie	S								
1970	94.6	64.9	31.9	62.8	17.9	19.4	15.1	16.6	
1980	88.7	58.2	29.0	56.3	24.3	18.5	22.3	22.8	
1990	79.6	54.7	30.8	49.2	24.6	18.0	29.1	26.5	
1999	89.7	72.4	29.6	50.0	24.6	44.1	30.8	30.4	
2000	88.3	67.8	29.0	49.1	26.8	44.4	30.6	30.8	
2001	88.2	69.1	29.4	49.5	27.0	43.8	30.4	30.7	
2002	87.8	67.9	29.6	48.8	26.9	43.7	30.8	30.9	
2003	86.6	67.2	29.4	48.2	25.6	43.7	29.6	29.7	
of which:									
Africa 1970	25.5	2.4	9.1	15.2	1.7	4.7	3.6	2.9	
1980	19.0	1.5	5.6	10.8	4.0	2.9	4.7	4.2	
1990	24.1	7.6	4.3	11.2	5.6	2.3	4.3	4.5	
1999	17.6	7.9	2.1	6.9	1.0	3.1	3.7	3.0	
2000	17.9	6.9	1.7	6.7	3.2	3.2	3.3	3.3	
2001	17.8	7.0	1.7	6.7	3.0	3.1	3.5	3.3	
2002	17.9	6.9	1.7	6.6	2.9	3.1	3.4	3.3	
2003	17.8	7.0	1.6	6.5	2.8	3.1	3.3	3.2	
Americas 1970	12.2	35.4	13.8	16.0	10.5	5.6	4.4	7.2	
1980	12.4	28.4	13.2	14.3	13.3	4.9	5.4	8.7	
1990	13.3	11.9	13.2	13.1	5.7	3.8	4.0	4.5	
1999	16.1	18.8	10.9	13.1	5.6	11.5	4.6	5.5	
2000	15.2	18.8	10.8	12.7	5.1	11.2	5.3	5.8	
2001	15.2	19.0	11.0	12.9	5.2	10.9	5.1	5.6	
2002	15.5	18.7	10.8	12.7	5.2	10.4	5.0	5.6	
2003	14.5	17.9	10.7	12.3	5.0	10.4	4.9	5.4	

Table 4 (continued)

Country gro	up Year		Goods	loaded		Goods unloaded			
			Oil Products <sup>c</sup>	Dry cargo	Total all goods		Products <sup>c</sup>	Dry cargo	Total all goods
		Po	ercentage sh	are of t	rade by co	ountry gr	oups		
Asia	1970	56.9	27.0	8.1	31.3	5.5	8.5	6.7	6.4
	1980	57.3	28.1	9.7	31.0	6.9	9.8	12.0	9.7
	1990	42.2	34.9	12.6	24.7	12.6	10.9	19.9	16.6
	1999	55.7	45.3	16.1	29.7	17.6	28.1	22.0	21.4
	2000	54.9	41.6	16.0	29.2	18.2	28.5	21.5	21.2
	2001	55.0	42.5	16.2	29.4	18.5	28.3	21.4	21.2
	2002	54.1	41.8	16.7	29.1	18.4	28.7	22.0	21.6
	2003	54.0	41.9	16.6	28.9	17.4	28.6	21.0	20.7
Europe	1970	_	-	-	-	-	0.1	0.1	-
	1980	-	-	-	-	-	0.2	-	-
	1990	-	0.2	0.3	0.2	0.7	0.5	0.8	0.7
	1999	0.0	0.4	0.4	0.3	0.4	0.4	0.3	0.3
	2000	0.0	0.4	0.4	0.3	0.4	0.4	0.3	0.3
	2001	0.0	0.4	0.4	0.3	0.4	0.4	0.3	0.3
	2002	0.0	0.5	0.4	0.3	0.4	0.4	0.3	0.3
	2003	0.0	0.4	0.4	0.3	0.4	0.4	0.3	0.3
Oceania	1970	-	0.1	0.8	0.4	-	0.5	0.3	0.2
	1980	-	0.2	0.5	0.2	0.1	0.7	0.2	0.2
	1990	-	0.1	0.4	0.2	-	0.5	0.1	0.2
	1999	0.2	0.0	0.1	0.1	0	1.1	0.1	0.2
	2000	0.2	0.0	0.1	0.1	0.0	1.1	0.1	0.2
	2001	0.2	0.0	0.1	0.1	0.0	1.1	0.1	0.2
	2002	0.2	0.0	0.1	0.1	0.0	1.1	0.1	0.2
	2003	0.2	0.0	0.1	0.1	0.0	1.1	0.1	0.2

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by reporting countries and other specialized sources.

- Includes international cargoes loaded at ports of the Great Lakes and St. Lawrence system for unloading at ports of the same system.
- See annex I for the composition of these groups, and note d thereto regarding the recording of trade of landlocked countries. Since 1986, Yugoslavia, previously included among the "developed market-economy countries", has been included in the group of "developing countries in Europe".
- Includes liquefied natural gas (LNG), liquefied petroleum gas (LPG), naphtha, gasoline, jet fuel, kerosene, light oil, heavy fuel oil and others.
- d Includes the former Soviet Union in data for 1970 and 1980.
- e Estimates.

2002. The major events of the year were the substantial increases in Russian exports, to 116.9 million tons, and Chinese imports, to 90.2 million tons.

Crude oil from Russian and landlocked countries around the Caspian Sea (Azerbaijan, Kazakhstan and Turkmenistan) has traditionally used pipelines connected to port facilities in the Black Sea. Increasing export volumes poses the problem of adding to the number of transits through the Turkish Straits, through which about 150 vessels pass each day. In mid-2003 the first phase of the Vessel Traffic Service was commissioned over a 17-mile stretch of the Bosphorus; when completed, it will be 164 miles long and embrace access to the Straits and the Marmara Sea. In the meantime there have been periods of acute congestion compounded by bad weather, as the one in early 2004 that forced the closure of the Straits and resulted in up to 14 days delay for southbound crossings. Alternative routes to the Turkish Straits are the Baku-Ceyhan pipeline, which will provide access to the Mediterranean Sea on Turkish territory by 2005, and a more elaborate pipeline scheme leading to the port of Omisalji (Croatia) on the Adriatic Sea, where environmentalists have voiced opposition to the plan. A complementary Russian strategy is to boost port capacity on the Baltic and Barents Seas. Capacity at Primorsk, a recently built deepwater port located north of St. Petersburg, was increased from 18 to 30 million tons in late 2003, including the access pipeline. Capacity was also increased at the Izhevsky terminal in Kaliningrad. Shipments from Murmansk continue to use transhipment from the White Sea. Elsewhere, Venezuelan shipments reverted to almost normal conditions after an unsettled period in early 2003.

#### Petroleum product shipments

The global trade in petroleum products increased strongly in 2003 to 516.7 million tons. The pattern and volume of shipments were similar to those of past years, but developments in the Russian Federation might alter it in the future. Export terminal capacity is being enlarged on the Baltic Sea at Kaliningrad and around St. Petersburg, where, at Vysotk, Lukoil has invested \$225 million. Late in the year Volgotanker, a domestic tanker owner-operator, started trial shipments from a new export facility near Arkhangelsk on the White Sea.

#### LNG shipments

LNG shipments increased by 4.9 per cent during 2002 to reach 150 bcm of natural gas. This is about 5.9 per

cent of world production. The largest importing area is located in the Far East, where major importers continued to be Japan, with 72.7 bcm, and the Republic of Korea, with 24.1 bcm. Supplies came from Indonesia, with 34.3 bcm, Malaysia, with 20.5 bcm, Qatar, with 18.6 bcm, and Australia, with 10 bcm. The share of Middle East Gulf supplies is poised to grow as Saudi Arabia and Qatar develop new export capacity for consumers in the Far East and North America.

Across the Mediterranean, Algerian exports (26.9 bcm) went to France (10.2 bcm) and to Spain (6 bcm). Nigeria also supplied the European market with 7.8 bcm and, marginally, the US market with 0.2 bcm. The largest share of the 5.2 bcm exports from Trinidad and Tobago went also to the US market. This market also takes almost 1 bcm from the Middle East (Qatar and Oman).

During 2003, there were indications that LNG shipments were poised to increase. A terminal and regasification plant were commissioned in Bilbao (Spain) and approval for other discharge facilities was obtained in Fos, close to Marseille (France), Altamira (Mexico) and Pelican (United States). Construction of an innovative terminal was started by El Paso, a US energy company. The terminal will be located 116 miles off Louisiana (United States) and remain underwater, about 9 metres above the seabed, except when receiving specialized vessels with an on-board regasification plant. It will be connected through submarine pipelines with a tank farm located on the coast. Other discharge terminals are under review in the United States, notably Cove Point in Maryland. In January 2004, the risks associated with these terminals were highlighted by the worst disaster in LNG history — the blast at Skikda (Algeria) that killed 30 people and injured 70, with estimated replacement costs of about \$1 billion.

#### 3. Dry cargo shipments

#### General developments

In 2003, overall dry cargo shipments increased by 3.8 per cent, reaching 3.97 billion tons (see table 3). The main five dry-bulk trades, namely iron ore, coal, grains, bauxite/alumina and rock phosphate, recorded a remarkable 9.1 per cent increase to reach 1.48 billion tons. The remaining dry cargo trades, minor bulks and liner cargoes increased modestly by 0.9 per cent to 2.49 billion tons. The share of dry cargo shipments in world seaborne trade was 64.3 per cent of total goods loaded during the year.

#### World crude steel production

World crude steel production in 2003 increased by a record 6.6 per cent to reach 962.5 million tons, compared with 902.9 million tons in 2002. Undoubtedly the major event of the year was the remarkable expansion of steel production in China — up by 21.2 per cent, to reach 220.1 million tons. This was the second year in which production expanded by more than 20 per cent. In other regions and countries production increases were dissimilar. In the countries of the North American Free Trade Agreement (NAFTA) production declined marginally to reach 122.0 million tons, compared with 122.3 million tons in 2002. Production increased by 0.8 per cent in countries of the European Union, reaching 159.7 million tons. Japan increased production by 2.6 per cent to reach 110.5 million tons, and growth of production in South American countries was almost double -4.5 per cent, with production at 42.7 million tons. Within these countries performance was also dissimilar: Ecuador's production increased by 20.8 per cent, but Venezuela's contracted by 12.0 per cent. The 1 per cent increase in steel production in Oceania to 8.4 million tons was mainly attributable to Australia since New Zealand production expanded by only 0.2 per cent. Countries of the Commonwealth of Independent States (the former Soviet Union) increased their production by 6 per cent to reach 105.9 million tons in 2003. Countries in Africa also increased production — by 2.4 per cent, to 16.1 million tons — but with dissimilar performances: a 57.1 per cent contraction of production in Tunisia, and a 30.5 per cent recovery of production in Zimbabwe. Countries in the Middle East also performed well, with production up by 8 per cent to 12.9 million tons: the largest producers — the Islamic Republic of Iran and Saudi Arabia — recorded increases of 7.5 and 10.5 per cent respectively.

In the same year, world pig iron production, another useful indicator for predicting dry-bulk trades, increased by a healthy 7.7 per cent to 689 million tons. Scrapbased production of pig iron increased by 4 per cent to 273 million tons.

#### World steel consumption

Forecast apparent steel consumption for 2003 was 884 million tons, 6.4 per cent above the 2002 level. The main increase is expected in China, by 21.7 per cent to 257 million tons. Estimated annual average apparent steel consumption growth for the period 2002–2004 indicates solid expansion of consumption in Kazakhstan by 10 per

cent, Saudi Arabia by 6.3 per cent, Mexico by 5.6 per cent, the Russian Federation by 4.7 per cent and Argentina by 3.6 per cent. Other countries are forecast to record slower consumption growth: other Latin American countries by 2.7 per cent and South Africa by 2.6 per cent. Major economies — the United States, the European Union and Japan — are expected to have consumption growth of about 1 per cent.

Fears of overproduction led in 2002 to the imposition of import duties in a number of countries, but these were ruled illegal by the World Trade Organization in late 2003. However, the surge of exports as Chinese demand exceeded domestic production during 2003 and 2004 dispelled such fears. Chinese demand was fuelled by the construction industry, which accounted for about half of the steel demand. This industry caters for the growing urbanization needs of the country resulting from the liberalization of the "household registration system", and its expansion could last for some time as the current urbanized population (38 per cent) is well below the average found in developing countries (50 per cent). During 2003, world steel prices reflected this improved balance between production and consumption and started to improve. Recent mergers aimed at consolidating producers have not altered the fragmented nature of steel production: the five largest steel makers control about a fifth of world output. Moves towards vertical integration were mixed. A proposal to include CVRD, one of the largest iron ore exporters, in a Brazilian steel holding did not attract enough support. In Western Australia, however, the \$564 million mine expansion of BHP Billiton, another large iron ore exporter, included a 20 per cent shareholding in Posco, the Republic of Korea's largest steel maker.

#### Iron ore shipments

The booming production of steel was reflected in the 11.6 per cent increase in iron ore shipments during 2003, totalling 540 million tons. Brazil and Australia, which account for more than two thirds of world exports, recorded growth of 15 and 14 per cent respectively. Similarly, India and South Africa, which together account for 14.5 per cent of world exports, recorded expansion of 25 and 3 per cent respectively. Exports from Canada and Sweden recorded opposite trends, with the former contracting by 2 per cent and the latter expanding by 9 per cent. These two countries account for 6.5 per cent of world exports. About two thirds of world imports went to the Far East, with Japanese and Chinese imports accounting for fourth fifths of this share. The 5 per cent

growth in Japanese imports of iron ore in 2003 was overshadowed by the 32.7 per cent growth in Chinese imports, with Australia, Brazil and India taking advantage of the increase in demand. EU countries' imports of iron ore are about one quarter of world imports and in 2003 they increased at the rate of 4.3 per cent. Imports into the Middle East, the Americas and Africa were mostly steady.

Increased shipments of iron ore pushed up both commodity prices and freight rates. Negotiations conducted in early 2004 reported increases in prices close to 20 per cent. Long-term charters, such as the one agreed late in 2003 between Baosteel, the largest Chinese steel maker, and Mitsui OSK for importing iron ore from Australia were a measure to counter higher freight rates.

#### Coal shipments

Coal shipments increased by 7 per cent in 2003 and reached an all-time record of 610 million tons. As in previous years, thermal coal made up 70 per cent of world coal trade, and in 2003 shipments grew at a rate of 8.4 per cent to reach 430.7 million tons. Shipments of coking coal increased by almost 4 per cent.

Australia, by far the largest exporter of both thermal and coking coal in almost equal amounts, again accounted for slightly more than one third of world shipments. Over the first 10 months of 2003 it increased exports by 7 per cent to reach 178.4 million tons. The total for the year is estimated at 214 million tons. Up to the third quarter of 2003, shipments from the United States and Canada, which are mainly exporters of coking coal, contracted by 6 and 13 per cent respectively. China, Indonesia and South Africa, mainly exporters of thermal coal, account for about 33 per cent of world exports. China increased exports in the first 10 months of 2003 by about 14 per cent to 78 million tons. Similarly, coal exports from Indonesia increased by a remarkable 26 per cent to 50.6 million tons during the first seven months of the year. South Africa's exports, however, contracted by 6 per cent to 31.3 million tons for the same period.

The main importers are EU countries, with about 30 per cent of world imports, and Japan, which accounts for about a quarter of world imports. The share of thermal coal in their imports varies from three quarters of the total for EU countries to about 60 per cent for Japan. Other importers are the Republic of Korea and Taiwan Province of China, with 10 per cent each.

Prospects for coal trade are good. The \$2 per ton f.o.b. price reductions for thermal coal at the beginning of 2003 gave way to increases of \$10 to \$15 per ton one year later, when f.o.b. prices reached \$60 per ton. In Japan, energy and environmental taxes to be imposed on thermal coal imports did not deter demand, partly owing to the difficulty in speeding up nuclear power generation. Producers increased production. Rio Tinto and BHP Billiton introduced measures to increase output in their mines. Two Colombian producers — Drummond and Carbocol — also announced output expansion in spite of temporary interruptions of coal transport to the ports due to guerrilla activity. In South Africa pressure was put on Spoornet to ensure coal supplies to the ports. As domestic demand for coal increased in some countries, as was reported for Indonesian thermal coal and Chinese coking coal, other more elaborate schemes were planned, such as the one to connect remote Chinese mines to Russian seaports on the Pacific.

#### Grain shipments

World grain shipments reached 240 million tons in 2003, a decrease of 2 per cent from the previous year's 245 million tons, almost equally split between wheat and coarse grains, such as maize, barley, soybeans, sorghum, oats and rye. In 2002, the main loading areas were North America, which accounted for 46.9 per cent of world exports, and the east coast of South America, which accounted for 17.7 per cent. Australia and the European Union accounted for about 8 and 9 per cent respectively. In 2003, the largest exporter, the United States, decreased shipments over 10 months to 59.9 million tons, a decrease of 8 per cent from same period in the previous year, when exports reached 65.4 million tons. Over the same period, shipments from the EU recorded a remarkable increase of 25 per cent, while those from Canada decreased by 19 per cent and those from Argentina were steady. Shipment flows might change in the medium term. Increased demand for coarse grains within the EU could reduce exports, and this possibility was heralded by reduced grain production after the severe drought of 2003. The decision by Brazil to legalize genetically modified soya is expected to increase exports substantially.

#### Other bulk shipments

During 2003 shipments of bauxite and alumina, the primary inputs for the aluminium industry, are estimated to have increased by 1.9 per cent to reach 55 million tons. Final figures for 2002 indicate that bauxite shipments

from West Africa, almost half of the world total, were steady at 14.0 million tons, while bauxite and alumina exports from Jamaica surged by 19.3 per cent to reach 8.7 million tons, with all shipments going to the United States market. EU countries and some Eastern European countries are the largest importers of bauxite and alumina shipments. They imported 23.1 million tons in 2002, representing 42.2 per cent of world exports. Australia, the largest exporter of bauxite and alumina, shipped 18.1 million tons in 2002, about half of it to Asian countries.

During 2003, production of primary aluminium products increased by 3.5 per cent to 21.9 million tons. The expansion in production was remarkable in the Far East and South and West Asia, which recorded a 9.5 per cent increase to 2.4 million tons. Countries in Eastern Europe and Africa recorded similar growth rates — 4.5 and 4.1 per cent respectively. Elsewhere, including in the industrialized countries of North America and Western Europe, production was steady. In mid-2003, the Siberianbased smelter Rusal, the Russian Federation's largest, was reported to be improving its competitiveness by taking a stake in the port of Vanino, which is used to import alumina and export aluminium. In early 2004 there were reports that shortages in alumina imports would hamper aluminium exports from China, as annual growth in domestic demand was booming at 16 per cent.

Shipments of rock phosphate stood at 30 million tons in 2003, almost the same level as the previous year. The major exporter, accounting for about one third of world exports, continued to be Morocco, which shipped about 12 million tons. Other traditional exporters were Jordan, with 3.7 million tons, and Togo, with 1.3 million tons. China maintained is exports at close to 5 million tons. The European Union and other Asian countries were major importers.

The minor dry bulks, a heterogeneous mix of merchandise, was believed to have reached 840 million tons in 2003, almost 1 per cent above the recent estimates released for the previous year. Shipments of steel and forest products are estimated to be slightly above 350 million tons, with the trade of the former increasing more rapidly than that of the latter. By mid-2003, a call for trade liberalization made by leading manufacturers of forest products was dampened by the stalled WTO trade negotiations in Cancún (Mexico). Agriculture-related trades, including sugar, rice, tapioca and meals (oilseeds and soy) and fertilizers (phosphates, potash, sulphur and

urea), accounted for almost 240 million tons. The bumper crop in Brazil, the world largest sugar producer, pushed exports up to more than 13 million tons, about half of its production, owing to a weak currency and limited demand for sugar-based domestic ethanol. The EU, the second largest world producer, also had good production, which, being above the EU production quota, needed to be exported, thus weakening world prices. Promising areas for increased demand were located in South Asia and Africa. Trade in fertilizers was poised to increase as traditional rock phosphate producers, such as Morocco, went ahead with plans for fertilizer production. Again, promising areas for increased demand were located in South Asia and Africa. Shipments of a number of minerals (cokes, non-ferrous ores, metals, salt, cement, etc.) are estimated at about 250 million tons. Overall forecasts for these cargoes indicate a similar volume of shipments for 2004, with agricultural trades fluctuating in the short term and industrial goods being affected by long-term investment decisions.

#### 4. Liner shipments of containerized cargoes

The balance of 1.65 billion tons of dry cargoes is increasingly being carried in containers along the liner trade routes. In some regions, specialized unitized services, such as ro-ro, reefer and cars, coexist with traditional stand-alone general cargo services, with some of the latter serving to back up the main container trades. Although most container routes are mature, there was scope for growth: the 2 per cent increase in the reefer trade during 2002 to reach 88 million tons also benefited container trades, which make up about 60 per cent of the reefer trade. Shipments of containerized cargoes differ from the other dry-bulk cargoes in terms of the increased use of transhipment to complement the direct calls of larger vessels. Containers flow along east-west (trans-Pacific, Europe-Far East and transatlantic), northsouth and regional routes.

On the largest east-west route, the trans-Pacific, the total flow was estimated to have reached 14.3 million TEU in 2003. Container flows on the dominant leg, Asia to North America, reached 10.1 million TEU, while in the opposite westbound direction the flow was less than half, at 4.2 million TEU. As a result, the past imbalance of container flows continued and repositioning of empty containers remained a major concern for carriers. The Asia–Europe route was estimated to have carried 11 million TEU during 2003. Again there was a gap between flows in the westward direction originating in

Asia, which reached 7 million TEU, and those flows heading eastward, which were estimated to total 4 million TEU. However, flow imbalance was less pronounced than that existing across the Pacific. In the transatlantic route, the smallest of the east—west ones, container flow was estimated to have reached 4.6 million TEU. As flows on the dominant leg from Europe to North America reached 2.9 million TEU and those in the opposite direction were almost static at 1.7 million TEU, the flow imbalance was less acute. Overall traffic flows in these three east—west routes almost reached 30 million TEU, with empty repositioning being an important feature in all of them.

North-south routes are articulated around major production and consumption centres of Europe, the Far East and North America, and link these centres with developing countries. In 2003, north–south routes were believed to have carried up to 16 million TEU, and flows expanded and contracted in line with economic conditions prevailing at both ends. Container flows on the routes linking Europe to Africa and Oceania were believed to have reached 0.7 and 0.6 million TEU respectively. Flows were almost evenly distributed between southward and northward directions. Container flows between Europe and Central and South America were about fourfold larger, 2.5 million TEU, and also more imbalanced, since southward flows totalled slightly less than 1 million TEU. Container flows between North America and Central and South America were larger still, about 3 million TEU, and similarly imbalanced, since southward flows were estimated at 1.3 million TEU. Container flows between Asia and Oceania were believed to have reached 1.7 million TEU.

Data for regional routes were difficult to come by. For the largest regional route, the intra-Asia one, container flows were estimated at 17 million TEU in 2003.

During 2003, the risks associated with some non-containerized shipping services were illustrated by the saga of the livestock carrier Cormo Express. This vessel sailed from Fremantle (Australia) on 5 August with more than 50,000 sheep and arrived as scheduled in Jeddah (Saudi Arabia) on 21 August. Discharge was forbidden by the authorities because more than 5 per cent of the sheep were infected with scabby mouth disease. As a result, the vessel looked for a port of discharge in the Middle East Gulf and the Pacific for 11 weeks before finally unloading at Massawa (Eritrea), with a loss of more than 10 per cent of the cargo.

#### 5. World shipments by country groups

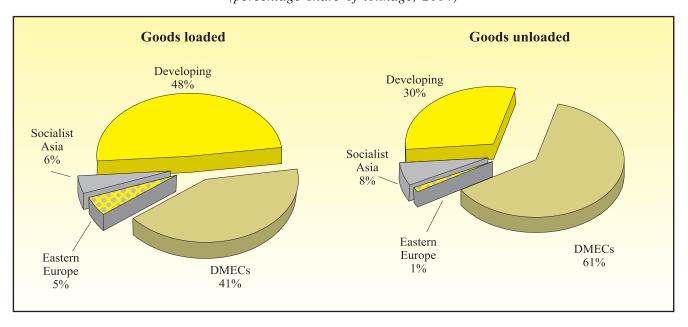
The split of the 6.17 billion tons of world seaborne trade by major cargo segments and country groups is shown in table 4 and figure 3. The shares of developed marketeconomy countries in goods loaded and unloaded in 2003 were 40.9 per cent and 60.9 per cent of the world total respectively. For these countries crude oil and petroleum products accounted for 5.4 and 22.1 per cent of total world exports, while imports accounted for 68.8 per cent for crude oil and 50.8 per cent for petroleum products. Further breakdowns in terms of regional groupings can be found in annex II. Among the market economies, Europe remains the most important exporter of crude oil and petroleum products, with a total of 110.9 million tons (5.0 per cent of world total). North America is the largest importer of crude oil and petroleum products, with 668.1 million tons (28.6 per cent), closely followed by Europe, with 537.2 million tons (23.0 per cent), and Japan, with 247.5 million tons (10.6 per cent).

In the dry-bulk segment, the share of global shipments of developed market-economy countries remained at 58.4 per cent for exports and increased slightly to 58.8 per cent for imports. Again, annex II gives an insight into regional distribution of these shipments. Europe remains the largest dry cargo market for exports and imports, with 1,090.9 million tons (27.5 per cent of world exports) and 1,474.5 million tons (37.2 per cent of world imports) respectively. Two countries in North America (United States and Canada) and in Oceania (Australia and New Zealand) were also large exporters of dry shipments, with shares of 11.1 per cent and 12.0 per cent respectively. This underlines their important shares in the shipping of the three major dry bulk commodities — iron ore, coal and grain.

During 2003 the share of developing countries in total seaborne exports was 48.2 per cent, while their share of seaborne imports was 29.7 per cent. For exports these percentages have been decreasing since 1998, while those corresponding to imports seem to be fairly stable. The trade structure for developing countries contrasts sharply with that of developed market-economy countries. The developing countries' combined share in crude oil and petroleum product exports was 86.6 per cent and 67.2 per cent respectively. For imports, the shares were 25.6 per cent for crude oil and 43.7 per cent for petroleum products. In the dry cargo sector, the share of developing countries' exports reached 29.4 per cent

Figure 3

World seaborne trade by country groups
(percentage share of tonnage, 2004)



Source: Compiled by the UNCTAD secretariat on the basis of data supplied by reporting countries and other specialized sources.

of world exports, while their share of world imports decreased by less than 1 per cent to 29.6 per cent.

Regional variations among groups of developing countries were related to their GDP. Developing countries in Asia had the largest shares in exports and imports, reaching 28.9 per cent and 20.7 per cent of world exports and imports respectively. The share of developing countries in America was 12.3 per cent of world exports and 5.4 of world imports. The shares for African countries were about half of that for America: 6.5 per cent of world exports and 3.2 of world imports. The shares for developing countries of Europe (0.3 per cent of world exports and imports) and Oceania (0.1 per cent of world exports and 0.2 per cent of imports) were considerable smaller.

In specific trades there were also considerable variations. The shares of Asian developing countries in world exports of crude oil were 54.0 per cent and of petroleum products 41.9 per cent. This reflects the importance of Middle East oil producers and refining activity in the Far East. The share of African developing countries in exports of crude oil (17.8 per cent) was higher than that of

developing countries in America (14.5 per cent). For exports of petroleum products, however, the opposite was true — 7.0 per cent for developing countries in Africa and 17.9 per cent for those in America. Again, for exports of dry cargoes, Asian developing countries had the largest share (16.6 per cent), followed by American developing countries (10.7 per cent) and African developing countries (1.6 per cent).

For imports of crude oil, the share of developing countries in Asia was 17.4 per cent of the world total. The shares for developing countries in America and Africa were 5.0 per cent and 2.8 per cent respectively. For imports of petroleum products, the corresponding shares for developing countries in Asia, America and Africa were 28.6 per cent, 10.4 per cent and 3.1 per cent. Imports of crude oil into developing countries in Europe reached 0.4 per cent of world imports, on a par with the percentage for imports of petroleum products. Developing countries in Oceania had negligible imports of crude oil, in line with the scant refining capacity in the region, while the share of world petroleum product imports was 1.1 per cent.

The share of socialist countries in Asia in world exports for 2003 was 5.6 per cent and reached 8.0 per cent for world imports. In recent years, imports have risen in line with the increased role of trade in the economic development of China and its high rates of economic growth. The trade of countries of Central and Eastern Europe (including the former USSR) achieved its largest share for exports, 5.3 per cent, thanks to shipments of crude oil and petroleum products from the Black Sea and Baltic Sea. Seaborne imports for those countries reached 1.4 per cent of the world total, and they were complemented by other imports carried overland from other European countries.

#### 6. Demand for shipping services

Table 5 provides data on total demand for shipping services in terms of ton-miles. World seaborne trade for 2003 reached 24,589 billion ton-miles, after growing at 5.9 per cent. As cargo transported increased by 3.7 per cent, the average transport distance increased during the year.

Increased demand for haulage of crude oil and oil products resulted in ton-miles for these commodities increasing by 5.9 per cent, a remarkable expansion after two years of contraction. This was an indication of crude oil supplies moving over longer distances, notably from sources close to the Black Sea and Baltic Sea, to destinations in Europe and, more important, to North America It also reflected the temporary long-distance haulage of crude oil to replace Venezuela's supplies to the United States. For all dry cargoes the ton-miles also increased by 5.9 per cent, while tonnage transported increased by 3.8 per cent. This also suggests longer distances between cargo origins and destinations. However, the breakdown of dry cargo indicates that the reverse is true for the five main dry bulks, whose tonmiles increased by 8.0 per cent, as against a 9.1 per cent increase in cargo volume. For the remaining dry cargoes, minor bulks and liner cargo, supply lines were extended, as their ton-miles increased by 3.6 per cent to 6,675, while cargo shipments increased barely by 0.9 per cent.

Table 5

World seaborne trade in ton-miles, selected years

(billions of ton-miles)

Year		Oil		Iron ore	Coal	Grain <sup>a</sup>	Five main	Other	World
	Crude	Products	Crude plus products				dry bulks	dry cargoes	total
1970	5 597	890	6 487	1 093	481	475	2 049	2 118	10 654
1975	8 882	845	9 727	1 471	621	734	2826	2810	15 363
1980	8 385	1 020	9 405	1 613	952	1 087	3 652	3 720	16777
1985	4 007	1 150	5 157	1 675	1 479	1 004	4 480	3 428	13 065
1990	6 2 6 1	1 560	7 821	1 978	1 849	1 073	5 259	4 041	17 121
1995	7 225	1 945	9 170	2 287	2 176	1 160	5 953	5 065	20 188
2000	8 180	2 085	10 265	2 5 4 5	2 509	1 244	6 638	6 113	23 016
2001	8 074	2 105	10 179	2 5 7 5	2 5 5 2	1 322	6782	6 280	23 241
2002	7 848	2 050	9 898	2731	2 549	1 241	6 879	6 440	23 217
2003 a	8 3 3 0	2 155	10 485	3 030	2 700	1 335	7 429	6 675	24 589

Source: Fearnleys, Review 2003.

<sup>&</sup>lt;sup>a</sup> Includes wheat, maize, barley, oats, rye, sorghum and soya beans.