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Chapter 1.



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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 the year 2002 the growth of world output recovered to 1.9 per cent from the low 1.2 per cent recorded for 2001 (see table 1). However with the exception of the United States, Asia and China, most regions saw their output growth rates continuing to decline.

Growth in developed countries reached a rate of 1.5 per cent, well over the 0.9 per cent of the previous year. This resulted from an eightfold increase in the rate of output growth in the United States to a level of 2.4 per cent that was fuelled by replenishment of run-down inventories and expansion of public consumption. However, the Japanese economy's poor growth saw a further slight decline in relation to 2001, and growth in the European Union slid by a third to 1.0 per cent. The deceleration of economic growth was more pronounced in Italy, where it fell to 0.4 per cent, and Germany, where it fell to 0.2 per cent, but not so great in France and the United Kingdom.

The growth of economic output for developing economies reached 3.3 per cent, well above the world average. The highest growth was seen in some Asian economies, which reached 4.4 per cent. Recovery was particularly strong in East Asia, with the rate of growth increasing almost tenfold in Malaysia and threefold in Thailand and doubling in Singapore and the Republic

of Korea. Increases were also recorded in Indonesia and the Philippines, where output growth rose to 3.7 and 4.6 per cent respectively. In South Asia, Pakistan almost doubled its output growth rate to 4.6 per cent, while in India the rate declined to 4.5 per cent - almost 1 per cent down from the previous year. China continued its economic expansion with 8 per cent growth, while Taiwan Province of China, recovered from the contraction of the previous year to reach 3.5 per cent, and Hong Kong (China) almost trebled its rate of growth to 2.4 per cent.

Output growth for African economies in 2002 dropped to 2.9 per cent from 3.4 per cent. Algeria, Côte d'Ivoire, Ghana and South Africa increased their rate of growth, while Cameroon, Egypt, Kenya, Morocco and Nigeria recorded minor declines. Zimbabwe, whose economy has contracted for four consecutive years, recorded a 12.5 per cent drop in 2002. In developing America, economies contracted by 0.8 per cent, mainly because of the financial collapse of Argentina, whose economy has contracted for four consecutive years, with record negative growth of -11 per cent, and its impact in neighbouring countries. Uruguay mirrored Argentina's economic performance, while Brazil managed to maintain the same 1.5 per cent growth as seen the previous year. In Andean countries, economic growth was mixed. Venezuela recorded negative output growth of 8.9 per cent, which reflected the political instability that prevailed for much of the year, while other countries recorded positive output growth. Mexico started to benefit from the US recovery and achieved a modest increase in output of 0.9 per cent.

Table 1

World output growth, 2000–2002

(percentage)

Region/grouping	Average 1990-2000	2000	2001	2002 ^a
World	2.2	3.9	1.2	1.9
Developed economies	2.0	3.4	0.9	1.5
<i>of which:</i>				
United States	2.8	3.8	0.3	2.4
Japan	1.1	2.8	0.4	0.3
European Union	1.7	3.5	1.5	1.0
<i>of which:</i>				
Euro area	1.7	3.6	1.4	0.8
Germany	1.6	3.0	0.6	0.2
France	1.4	3.8	1.8	1.2
Italy	1.2	3.1	1.8	0.4
United Kingdom	1.9	3.1	2.1	1.8
Developing economies	4.3	5.5	2.4	3.3
<i>of which:</i>				
Africa	2.2	3.3	3.4	2.9
Latin America	2.9	3.7	0.3	-0.8
Asia	4.4	6.5	1.8	4.4
Economies in transition	-3.0	5.8	4.1	4.0
China	9.3	8.0	7.3	8.0

Source: Calculations by the UNCTAD secretariat based on data in 1995 dollars, as published in UNCTAD (2003), *Trade and Development Report 2003*, United Nations publication, Sales No. E.03.II.D.7, New York and Geneva, table 1.1.

^a Estimates.

Economies in transition recorded the fourth consecutive year of positive economic growth, at 4 per cent, more than twice the world average. This represented a modest slowdown from the previous two years. The economies of the Russian Federation, Ukraine and Kazakhstan recorded rates of output growth of 4.3, 4.6 and 9.5 per cent respectively. Countries of Eastern Europe, such as Bulgaria, Poland and Slovakia, recorded increased output growth rates of 4.2, 1.3 and 4.4 per cent respectively.

Prospects

Forecasts of world economic output growth for 2003 have been cautiously optimistic, notably after the quick ending of the war in Iraq and in spite of concern caused by the outbreak of SARS in the fastest growing country of the world – China. Forecasts presently range from 1.9 to 3.0 per cent.

2. Merchandise trades

Recent developments in international trade

During 2002 the volume of world exports expanded by 2.5 per cent (see table 2), thereby recovering from the contraction of the previous year. Among developed countries, export volumes decreased in North America by 3.5 per cent, expanded slightly in the European Union by 0.5 per cent and increased by a healthy 8.3 per cent in Japan. Growth of export volumes for developing countries in Asia and Latin America were estimated at 13.0 and 1.8 per cent, respectively. Countries in transition continued their solid export expansion, with a rate of 8.5 per cent. Overall, after recovering from the 2001 contraction during the first quarter of 2002, exports were particularly strong during the second and third quarters but slowed down at the end of the year.

Table 2

Growth in the volume of merchandise trade by geographical region, 2000–2002
(annual percentage change)

Exports			Countries/regions	Imports		
2000	2001	2002		2000	2001	2002
11.9	-1.5	2.5	World ^a	11.3	0.9	n.a.
9.9	n.a.	n.a.	Developed economies ^a	9.6	0.3	n.a.
			<i>of which:</i>			
9.9	-5.0	-3.5	North America	11.3	-3.8	2.0
10.1	1.1	0.5	European Union (15)	10.9	0.3	-0.3
9.2	-5.0	8.3	Japan	10.9	0.3	0.8
15.7	0.5	n.a.	Developing economies ^a	15.4	0.8	n.a.
			<i>of which:</i>			
7.3	2.5	n.a.	Africa	5.4	4.6	n.a.
10.3	2.7	1.8	Latin America	11.1	0.5	5.5
14.0	n.a.	n.a.	Middle East ^b	14.6	n.a.	n.a.
16.2	-3.7	13.0	Asia ^c	15.4	-1.9	12.5
17.9	8.0	8.5	Economies in transition ^a	14.0	14.7	11.0
28.3	5.0	n.a.	China	33.1	11.3	n.a.

Source: From WTO (2003), *WTO Annual Report, 2003*, chapter II, chart II.4 on page 7, available at www.wto.org; WTO Press Release of 22 April 2003, entitled “World Trade Figures 2002”; and UNCTAD (2003), *Trade and Development Report 2003*, United Nations publications, Sales No. E.03.II.D.7, New York and Geneva, table 1.3.

^a Excludes significant double counting.

^b Includes Israel.

^c Includes Japan, China, Hong Kong (China), Taiwan Province of China and developing countries in the Pacific.

The preliminary figures available for growth in import volumes indicate modest increases for developed countries, notably in North America and Japan, with contraction for European Union countries, probably as a result of currency appreciation during the year. Developing countries in Asia and countries in transition recorded double-digit import growth, while Latin American imports contracted by 5.5 per cent as a result of currency depreciation in several countries.

Trends in imports and exports

For 2003, prospects for exports and imports growth are dependent on recovery in Japan and Europe and the continuing upward trend of North American imports. Elsewhere, trade is expected to adapt progressively to US security requirements and to health controls in the Far East. The increased trade in manufactures

from developing to developed countries will also stimulate growth.

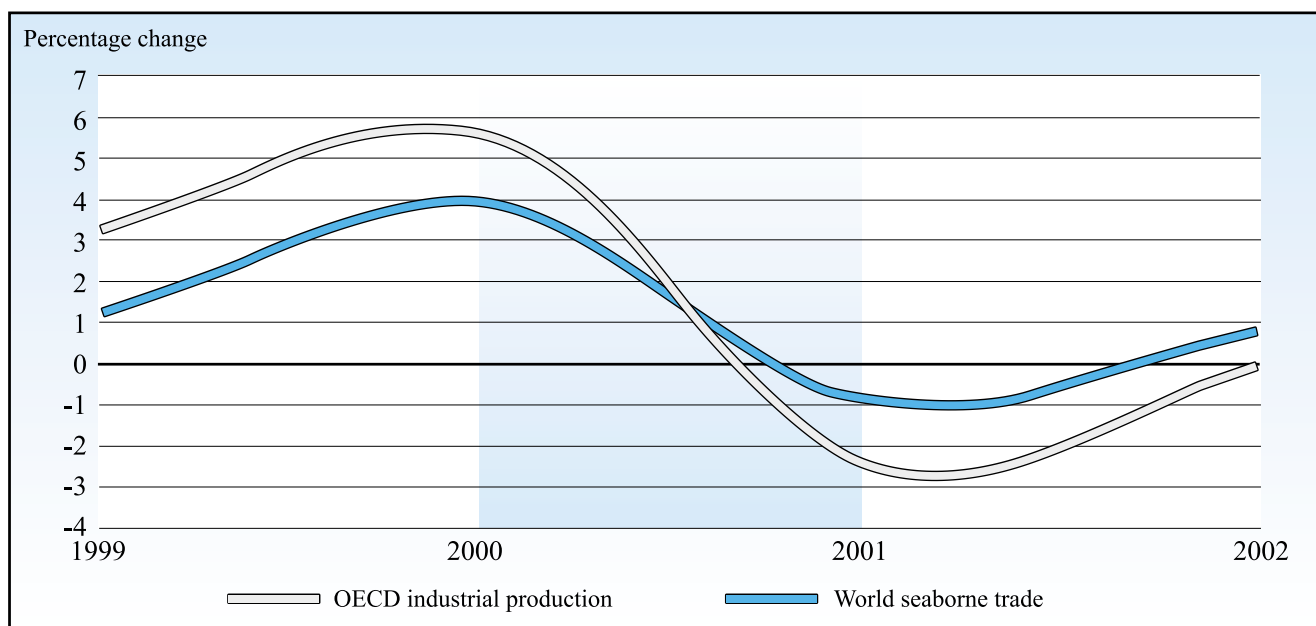
3. OECD countries' industrial output

The industrial production index (1995 = 100) for OECD countries, another fundamental indicator for the global maritime transport sector, averaged 118.1 in 2002, marginally lower than in the previous year but 2.6 per cent lower than the 121.2 average index for 2000 (see figure 1).

The results for 2002 were influenced by the uneven industrial activity in the major economies. In the United States, the index reached 122.4 in the first quarter, then climbed and peaked at 124.7 during the third quarter but slid down to 123.8 during the last quarter; the average index for the year was 0.8 per cent down from the level

Figure 1

Annual change in OECD industrial production and world seaborne trade, 1999–2002



Source: OECD (2002), *Main Economic Indicators*, April.

of 2001. The index for the 15 countries of the European Union followed a similar evolution: it started at 113.7, went up during the following two quarters, peaking at 114.5 during the third quarter, and finally dropped to 113.9 during the fourth quarter. Again, the average index for the year was down by 1 per cent to 114.2. The economic improvement for Japan was much stronger, starting at 93, peaking at 98.6 during the third quarter and sliding back to 97.7 in the last quarter, but the average for the year, at 96.4, was 1.4 per cent down from the level of 2001. The trend was upward in the smaller economies, notably those of Eastern Europe: Hungary started at 177.1 and ended at 182.3, while the Czech Republic started at 126.4 and ended at 132.3. For these two countries, the overall index for 2002 was up by 2.6 per cent and 9.4 per cent respectively. Canada also performed well, starting at 118.8 and ending at 120.7. The OECD outlook for the year 2003 indicates continued strengthening of industrial output.

B. WORLD SEABORNE TRADE

1. Overall seaborne trade

World seaborne trade increased slightly in 2002, reaching 5.88 billion tons of loaded goods. The annual

growth rate, calculated using the provisional data available for 2002, reached 0.8 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 8.8 per cent, while America's reached 21.2 per cent. Asia had by far the largest share of the world tonnage of seaborne loaded goods – 37 per cent. Europe's share was the second largest, at 25.4 per cent, while Oceania's was the smallest, representing only 7.6 per cent of the total. The breakdown for selected trading blocks was as follows: European Union (EU) – 17.8 per cent; Gulf Cooperation Council (GCC) – 12.5 per cent; North America Free Trade Association (NAFTA) – 10.2 per cent; Association of South East Asian Nations (ASEAN) – 7 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 2003 indicate that annual growth rates will probably be positive but modest, while the distribution of world tonnage by continent is expected to fluctuate marginally.

Table 3

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

Year	Tanker cargo		Dry cargo				Total (all goods)	
	million tons	% change	million tons	% change	million tons	% change	million tons	% change
1970	1 442		1 124		448		2 566	
1980	1 871		1 833		796		3 704	
1990	1 755		2 253		968		4 008	
1998	2 084		3 532		1 170		5 616	
1999	2 073	-0.5	3 593	1.7	1 196	2.2	5 666	0.9
2000	2 167	4.6	3 703	3.1	1 288	7.7	5 871	3.6
2001	2 170	0.1	3 670	-0.9	1 331	3.3	5 840	-0.5
2002 ^c	2 140	-1.4	3 748	2.1	1 352	1.6	5 888	0.8

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

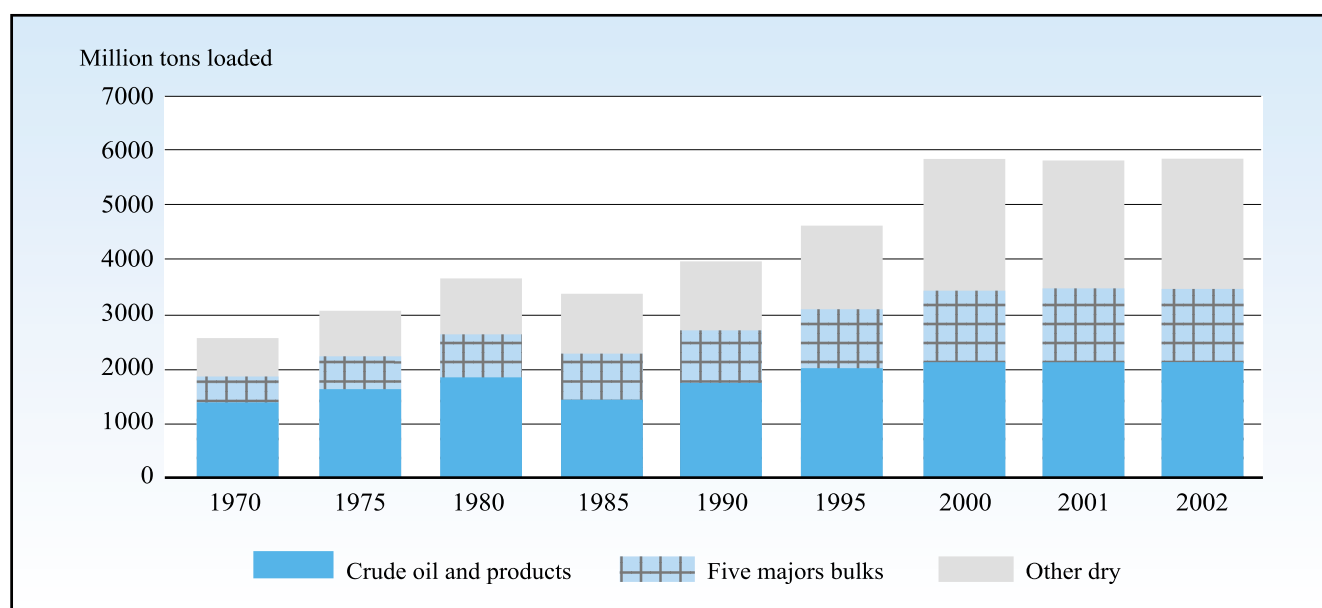
^a Includes international cargoes loaded at ports of the Great Lakes and St. Lawrence system for unloading at ports of the same system.

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

^c Estimates.

Figure 2

International seaborne trade for selected years



Source: *Review of Maritime Transport*, various issues.

2. Seaborne trade in tankers

General developments

In 2002 total world shipments of tanker cargoes amounted to 2.14 billion tons, a contraction of 1.4 per cent from the previous year. About 76.8 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 remained unchanged at 36.1 per cent.

Crude oil production

In 2001 crude oil production¹ averaged 74.5 million barrels per day (mbpd), the same as the previous year. Oil production in OECD countries, notably the United States, Mexico, Norway and oil-producing countries within the EU, remained at 21.5 mbpd, and this group therefore kept its market share of 28.8 per cent.

Following oil production cuts of 3.5 mbpd agreed in 2001, OPEC countries actually decreased their production by 2.3 per cent to 30.1 mbpd. Accordingly, their market share decreased by 1 per cent to reach 40.5 per cent of world oil production. The remaining oil-producing countries, namely the Russian Federation, China, Brazil and a number of small producers, raised their average production by 3.5 per cent to 22.9 mbpd. These countries therefore increased their market share to 30.7 per cent, an increase of 1 per cent over their share the previous year.

Among OECD major producers, US production reached 7.7 mbpd (the corresponding market share was 10.4 per cent), while that of Mexico was 3.6 mbpd (4.8 per cent). US production remained steady, with new drillings in Alaska and the Gulf of Mexico still awaiting approval as a result of environmental concerns. BP decided to invest \$15 billion to increase production in the Gulf of Mexico. Mexico's production expanded by 3.1 per cent in 2001, and forecasts of an increase in production of up to 25 per cent were reinforced by PEMEX's decision in 2002 to invest \$4.3 billion in Campeche Sound. Norway produced 3.4 mbpd (4.6 per cent), on a par with the European Union countries' 3.3 mbpd (4.4 per cent). Among these countries, the United Kingdom maintained the lion's share, with 2.5 mbpd (3.4 per cent), in spite of a production decline of 5.9 per cent. To overcome a further loss of output, the Ministry of Energy implemented shorter investments deadlines in 2002 for existing and new concessions.

During 2001, oil output of the major OPEC producers – Saudi Arabia and Iran – declined by 4.1 and 2.2 per cent to reach 8.8 mbpd and 3.7 mbpd respectively. Their market shares were 11.8 and 4.9 per cent, followed closely by Venezuela with 4.6 per cent. The latter actually raised production by 2.9 per cent to 3.4 mbpd. Other OPEC countries cut production marginally, while other oil-producing countries raised production. The Russian Federation increased production by 8 per cent to 7.1 mbpd (corresponding to a 9.5 per cent market share). Brazilian production increased by 5.4 per cent to 1.3 mbpd (1.8 per cent), and future prospects were bright with the discovery of a large offshore field in 2002. Chinese production increased by 1.2 per cent to 3.3 mbpd (4.4 per cent).

Crude oil production levels for 2002 are contingent on the performance of the additional 1.5 mbpd production cut agreed by OPEC members at the end of 2001 and the evolution of prices. Efforts were made by OPEC members to comply with their quotas in order to boost prices, and the production cut was renewed until the end of 2002. Other major producers such as the Russian Federation, Norway and Mexico were initially committed to voluntary export ceilings to match the OPEC production cut. However, by mid-year it was apparent that neither quotas nor export ceilings were being followed, and the Russian Federation and Norway announced their decision to raise output. Other events affecting oil production levels were the continuation of the "oil for food programme" in Iraq, approved by the UN Security Council in May 2002, the filling of the US strategic oil reserve at a rate of 0.1 mbpd using royalty-in-kind contributions; and the plan by the EU to enlarge its minimum oil stock from 90 to 120 days' requirements.

Prices evolved favourably during the year. The OPEC basket of seven crude oil prices increased by about 30 per cent over the year and in October briefly surpassed the \$28 per barrel mark. However, in December, when several weeks of strikes in Venezuela resulted in oil output losses of about 2.5 mbpd and the likelihood of war in Iraq increased, prices flared up to over \$30 per barrel. Consequently, in mid-January 2003, OPEC decided to increase output quotas by 1.5 mbpd to maintain prices within the target band. By the end of that month, Venezuelan production seemed to be recovering slowly and output reached 0.5 mbpd. Overall, and given the economic slowdown in major consumer countries, it is expected that world oil production levels for 2002 will record a modest increase.

Refinery developments

World refineries' throughput reached 70 mbpd in 2001, an increase of 1 per cent from the previous year. The major refining centres in the United States and Europe reduced throughputs by 0.1 per cent and together accounted for 42.7 per cent of world throughput – a decrease of 0.7 per cent from the previous year's share. In the United States output remained flat into early 2002. The merger of Conoco and Phillips Petroleum created the largest refiner in the country. Japanese refinery output decreased slightly and accounted for 5.9 per cent of world refinery throughput. Production in the Russian Federation increased by a substantial 6.5 per cent to 4.9 mbpd, equivalent to a market share of 7 per cent. Yukos, one of the largest oil companies, purchased a refinery in Lithuania, and other Russian oil companies were reported to be interested in purchasing refineries in EU countries. Chinese refineries kept output steady at 4.2 mbpd, but output is likely to grow in the future with the \$3 billion joint investment announced with Saudi Arabia Oil Co and ExxonMobil. Refineries located elsewhere in the Asia-Pacific region raised output by 2.2 per cent to 9.1 mbpd.

During the first quarter of 2003, Singaporean refineries were running at more than 80 per cent capacity and raised prices as shipments from Asia to the United States increased to replenish low inventories of petroleum products, with crude oil inventories at their lowest levels since 1975.

Natural gas production

In 2001 production of natural gas reached 2,464 billion cubic meters (bcm)², representing a 1.7 per cent increase from the 2000 level and about half the rate of growth achieved the previous year, which finally was 3.5 per cent. This production is equivalent to 2,217.7 million tons of oil or 46.1 mbpd. Major producers are the United States, with 555.4 bcm, and the Russian Federation, with 542.4 bcm, which together accounted for 44.5 per cent of total production. Lesser producers are Canada, with 172 bcm, the United Kingdom, with 105.8 bcm, Algeria, with 78.2 bcm, Indonesia, with 62.9 bcm, and the Islamic Republic of Iran, with 60.6 bcm. Other producers are scattered in the Middle East, Latin America and Asia where natural gas occurs as a result of oil production. Only 22.5 per cent of natural gas production is exported, mainly by pipelines, which carry around three-quarters of all exports.

Increasing natural gas production seems to be assured in the medium term, as growing demand in the United States and Europe and new demand in China and the Dominican Republic will more than offset the reduced Japanese demand. In the meantime the Republic of Korea is considering stockpiling LNG and removing the monopoly of the national gas company to import gas. Algeria is reorganizing Sonatrach so that it can take a more active national and international role in exploration and production. Expansion of production in Nigeria and Trinidad was commissioned in 2002, and plans for further increases in these countries were also accelerated. For instance BHP Billiton announced investment of \$327 million to produce gas offshore from Trinidad. New developments are at different stages of implementation in Bolivia, Egypt and Peru and off the northern coast of Australia, where production benefits would be shared with the new State of East Timor.

Crude oil shipments

Crude oil seaborne shipments decreased by 1.7 per cent to 1.64 billion tons in 2002 (see table 4). Major loading areas continued to be the developing countries in Western Asia, with 897.9 million tons, in West Africa, with 164.5 million tons, in North Africa, with 124.9 million tons, and around the Caribbean, with 221.4 million tons. Main discharging areas were located in developed market-economy countries in North America, with 463.2 million tons, in Europe, with 425.4 million tons, and in Japan, with 213.0 million tons. Developing countries in South and East Asia took 308.5 million tons during 2002.

The influx of crude oil from the five countries around the Caspian Sea (Azerbaijan, the Islamic Republic of Iran, Kazakhstan, the Russian Federation, and Turkmenistan) is progressively shaping new trade flows. Although these countries failed to agree on a comprehensive allocation of sea-based resources in April 2002, oil production continues unhindered on the basis of bilateral deals such as those reached between Russia and Kazakhstan one month later. Deliveries of Russian crude oil to northern Iranian refineries are balanced by Iranian exports through ports of the Gulf. A trilateral agreement between Bulgaria, Greece and Russia would pave the way for a pipeline from the Bulgarian Black Sea port of Bourgas to Alexandroupolis (Greece). This pipeline would complement a shuttle tanker service across the Black Sea and allow the loading of VLCCs in the Mediterranean Sea without any need to cross the Bosphorus Strait. Large tankers would also be loading

Table 4

**World seaborne trade ^a in 1970, 1980, 1990, 1998–2002,
by types of cargo and country groups ^b**

Country group	Year	Goods loaded				Goods unloaded			
		Oil		Dry cargo	Total all goods	Oil		Dry cargo	Total all goods
		Crude	Products ^c			Crude	Products ^c		
Trade in millions of tons									
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
	1998	1 581	503	3 532	5 616	1 539	543	3 695	5 777
	1999	1 577	496	3 593	5 666	1 552	546	3 762	5 860
	2000	1 669	498	3 703	5 870	1 720	551	3 971	6 242
	2001	1 672	497	3 670	5 840	1 703	553	3 865	6 121
	2002	1 643	497	3 748	5 888	1 683	548	3 907	6 137
Percentage share of trade by country groups									
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
	1998	28.2	9.0	62.9	100.0	26.6	9.4	64.0	100.0
	1999	27.8	8.8	63.4	100.0	26.5	9.3	64.2	100.0
	2000	28.4	8.5	63.1	100.0	27.6	8.8	63.6	100.0
	2001	28.6	8.5	62.9	100.0	27.8	9.0	63.1	100.0
	2002	27.9	8.4	63.7	100.0	27.4	8.9	63.7	100.0
DMECs	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
	1998	5.3	22.0	61.8	42.3	72.2	51.4	64.9	65.5
	1999	5.4	21.6	59.9	41.4	71.5	50.8	62.1	63.5
	2000	5.1	22.2	60.2	41.3	68.6	51.1	60.4	61.8
	2001	5.3	21.7	59.0	40.4	68.9	50.5	59.4	61.2
	2002	5.5	21.7	58.2	40.4	68.3	50.2	58.2	60.3
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
	1998	2.7	2.9	4.3	3.7	1.3	0.4	1.5	1.3
	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	5.5	8.1	4.2	4.9	0.5	0.7	2.0	1.4
	2002	5.6	8.4	4.4	5.1	0.6	0.5	2.0	1.5

Table 4 (continued)

Country group Year	Goods loaded				Goods unloaded			
	Oil		Dry cargo	Total all goods	Oil		Dry cargo	Total all goods
	Crude	Products ^c			Crude	Products ^c		
Percentage share of trade by country groups								
Socialist countries of Asia^e								
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
1998	1.5	1.3	4.3	3.2	1.9	6.4	4.7	4.1
1999	1.1	1.2	5.5	3.9	2.4	4.7	5.8	4.8
2000	1.0	1.1	6.8	4.6	4.1	4.0	7.3	6.1
2001	1.0	1.1	7.3	5.0	3.6	4.8	8.1	6.6
2002	1.1	1.2	7.5	5.1	3.8	5.1	8.4	6.8
Developing countries								
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
1998	90.5	73.8	29.6	50.7	24.6	41.8	29.0	29.0
1999	89.7	72.4	29.6	50.0	24.6	44.1	30.8	30.4
2000	88.3	67.8	28.9	49.1	26.9	44.5	30.4	30.7
2001	88.2	69.1	29.6	49.7	27.1	43.9	30.5	30.8
2002	87.9	68.6	29.9	49.4	27.4	44.2	31.4	31.4
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
1998	17.5	7.7	2.2	7.0	0.9	2.7	3.6	2.8
1999	17.6	7.9	2.1	6.9	1.0	3.1	3.7	3.0
2000	18.2	7.0	1.5	6.7	3.2	3.4	3.1	3.2
2001	17.5	7.1	1.6	6.6	3.0	3.4	3.3	3.2
2002	17.6	7.0	1.5	6.5	2.9	3.4	3.2	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
1998	15.9	18.4	10.9	13.0	5.9	11.7	4.8	5.8
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	15.3	19.0	11.2	13.0	5.2	10.9	5.1	5.7
2002	15.4	18.9	11.0	12.9	5.3	10.4	5.2	5.7

Table 4 (continued)

Country group	Year	Goods loaded				Goods unloaded			
		Oil		Dry cargo	Total all goods	Oil		Dry cargo	Total all goods
		Crude	Products ^c			Crude	Products ^c		
Percentage share of trade by country groups									
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
	1998	56.8	47.3	16.0	30.3	17.5	26.0	20.2	20.0
	1999	55.7	45.3	16.1	29.7	17.6	28.1	22.0	21.4
	2000	54.7	41.6	16.0	29.2	18.2	28.5	21.6	21.2
	2001	55.2	42.5	16.4	29.7	18.5	28.2	21.7	21.4
	2002	54.6	42.3	17.0	29.6	18.7	28.9	22.6	22.1
Europe	1970	-	-	-	-	-	0.1	0.1	-
	1980	-	-	-	-	-	0.2	-	-
	1990	-	0.2	0.3	0.2	0.7	0.5	0.8	0.7
	1998	0.0	0.4	0.4	0.3	0.4	0.4	0.3	0.3
	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
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
	1998	0.2	0.0	0.1	0.1	0.0	1.1	0.1	0.2
	1999	0.2	0.0	0.1	0.1	0.0	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

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

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

^b 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”.

^c 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.

from the Croatian port of Omisalj as a result of an agreement reached by pipeline companies in Ukraine, Hungary, Slovakia and Croatia. In September, work started on the 1800-kilometre-long Baku-Ceyhan pipeline that will bring Azeri crude oil to the Turkish coast in the Mediterranean Sea within three years.

There were also significant developments in northern Russia. The commissioning of the new deepwater port of Primorsk allowed crude oil shipping in the Baltic Sea, and trial shipments from ice-free Murmansk, in the Barents Sea, were made later in the year. In this case river/sea tankers transport crude oil to the port of Vitino, on the White Sea, from where it is shipped in handy-size tankers to Murmansk harbour and then transhipped directly to Aframax tankers for destinations in North America.

Elsewhere, Petrobras, the Brazilian oil company, announced that for the first time exports had exceeded imports. The discovery of oil in the Campos Basin, off the coast of Espiritu Santo, might make this trend permanent. By the end of 2002, temporary increases in crude oil flows from West Africa and the Mediterranean to North America had boosted tanker demand, since these shipments resulted from interruption of shipments from Venezuela. Venezuelan shipments were expected to revert to normal within the course of 2003. Early in 2003, the Philippines announced the setting up of a 30-day oil stockpile.

Petroleum product shipments

Global trade in petroleum products was steady in 2002 at 496.8 million tons. The pattern and volume of shipments were similar to those of past years, with temporary fluctuations due to several reasons. In the fourth quarter of 2002, the disruption in a nuclear power plant in Japan increased the shipments of fuel oil to the country. By the end of the year, the two-month strike afflicting Venezuelan oil production severely curtailed output of refineries in the Caribbean, and gasoline was hauled from Northern Europe and the Mediterranean to US destinations. Increased Russian exports of products from the Baltic Sea involved clean products shipped to European destinations and heavy oil shipped to destinations outside the continent.

LNG shipments

LNG shipments increased by 4.4 per cent during 2001 to reach 143 bcm of natural gas, representing about

5.8 per cent of world production. The largest importing area is the Far East, where major importers continued to be Japan, with 74.1 bcm, and the Republic of Korea, with 21.8 bcm. Supplies came from Indonesia (31.8 bcm), Malaysia (20.9 bcm), Qatar (15 bcm) and Australia (10.2 bcm). The share of smaller suppliers from the Gulf is poised to grow, as Oman has joined with MOL to build an LNG merchant fleet to carry its LNG exports and Iran is seeking to supply China, whose 2002 imports increased by 28 per cent, with Saudi Arabia being the largest supplier.

Across the Mediterranean, the majority of Algerian exports (25.5 bcm) went to France – 9.8 bcm, and to Spain – 5.2 bcm. Nigeria supplied the European market with 6.8 bcm and the United States with 1 bcm. The largest share of the 3.6 bcm of exports from Trinidad went to the United States market. This market also takes almost 1 bcm from the Middle East (Qatar and Oman). For 2002, the number of shipments to the US market will increase, as the four discharging terminals in the country are now in operation and under expansion.

3. Dry cargo shipments

General developments

In 2002, overall dry cargo shipments increased by 2.1 per cent, reaching 3.75 billion tons (see table 3). The five dry-bulk trades, namely iron ore, coal, grains, bauxite/alumina and rock phosphate, recorded 1.6 per cent growth to reach 1.35 billion tons. The remaining dry cargo trades, minor bulks and liner cargoes, increased by 2.4 per cent to 2.40 billion tons. The share of dry cargo shipments in world seaborne trade was 63.6 per cent of total goods loaded during the year.

World crude steel production

World crude steel production in 2002 increased by a record 6.4 per cent to reach 886.7 million tons, compared with 833.8 million tons in 2001. Regional and country increases were dissimilar. Countries part of the North America Free Trade Agreement (NAFTA) raised production by 3.3 per cent to reach 122.6 million tons, compared with 118.7 million tons in 2001. In countries of the European Union, production increased only marginally, by 0.1 per cent, to reach 158.7 million tons. Japan increased production by 4.7 per cent to reach 107.7 million tons, while growth of production in South American countries was almost double at 9.1 per cent, with production rising to 40.8 million tons. Within these

countries, performance was also dissimilar: Paraguayan production increased by 20.8 per cent, but Peruvian production contracted by 20.8 per cent. The 4.8 per cent increase in steel production in Oceania to a level of 8.2 million tons was attributable to Australia, since New Zealand output contracted by 5.6 per cent. Countries of the Community of Independent States (ex-Soviet Union) raised their production by 1.8 million tons to reach 99.9 million tons. Major expansion of steel production was achieved in China, with an increase of 20.3 per cent to a level of 181.6 million tons. Countries in Africa also raised production by 5.7 per cent to 14.6 million tons, but this result hides the significant contraction of production in Tunisia and Zimbabwe – by 14.6 and 28.9 per cent respectively. Countries in the Middle East also performed well, with production up by 6.1 per cent to 11.9 million tons: the largest producers – the Islamic Republic of Iran and Saudi Arabia – achieved increases of 5.9 and 4.2 per cent respectively.

In the same year, world pig iron production, another useful indicator for predicting dry bulk trades, increased by a healthy 5.5 per cent to 605.9 million tons, compared to a final figure for the previous year of 574.3 million tons. Production of direct reduced iron, which requires iron ore and gas, also went up by 5.7 per cent to 31.7 million tons.

World steel consumption

Estimated apparent steel consumption for 2002 was 783.6 million tons, 2 per cent above the 2001 level. The main increase was in China, where it rose by 7 per cent to 182 million tons. Consumption in Eastern Europe increased by 3.8 per cent to 36 million tons and in South America and NAFTA by 2.4 and 1.5 per cent to reach 29 and 132 million tons respectively. Elsewhere demand contracted – by 1.5 per cent in the European Union to 140 million tons, and by 0.2 per cent in Africa to 15 million tons.

The imbalance between production and consumption led to the imposition of duties on certain types of steel in some countries to discourage imports. The United States imposed tariffs of up to 30 per cent on certain grades of imported steel in March 2002. China imposed a 26 per cent emergency tariff on nine types of foreign steel for six months in May 2002 and then renewed it. By the end of the year, however, US imports had surged by 8 per cent. The OECD convened a high-level meeting on steel in December and decisions related to the monitoring of

excess production were adopted and work started on the elements for an agreement to reduce or eliminate subsidies. Consolidation of producers in the United States, such as the proposed \$1.5 billion bid of the International Steel Group to purchase Bethlehem Steel and the \$0.75 billion bid of US Steel to acquire National Steel Corp., is the industry's response to overcapacity. A similar process was observed in Japan with the capital alliance of Nippon Steel, Sumitomo Metal and Kobe Steel. However, consolidation was not always feasible, as the failed \$4 billion attempt of the British steelmaker, Corus, to buy CSN of Brazil shows.

Iron ore shipments

The booming production of steel was reflected in the 5.1 per cent increase in iron ore shipments during 2002, for a total of 475 million tons. Brazil and Australia, which account for about two-thirds of world exports, recorded growth of 3.6 per cent and a contraction of less than 1 per cent respectively. Similarly, India and South Africa, which together account for 11.4 per cent of world exports, recorded an expansion of 4 per cent and a contraction of 3.6 per cent respectively. Exports from Canada and Sweden maintained the levels of the previous year and accounted for 6.4 per cent of world exports. About two-thirds of world imports went to the Far East, with Japanese and Chinese imports accounting for three-quarters of this share. The 4 per cent growth of Japanese imports of iron ore in 2002 was overshadowed by the 19 per cent growth of Chinese imports, with India satisfying the increase in demand. EU countries' imports of iron ore represent about one-quarter of world imports, and in 2002 they increased by 4.6 per cent. Imports into the Middle East, the Americas and Africa were mostly steady. Forecasts for 2003 are good, based on assumptions about continuing Chinese demand and a rebound of the United States economy. The consolidation of United States steelmakers and the outcome of the OECD process to reduce excess capacity will have a limited impact on shipments.

Coal shipments

Coal shipments increased by 1.8 per cent in 2002 and reached an all-time record of 575 million tons. As in previous years, thermal coal made up 70 per cent of world coal trade, and in 2002 shipments grew at a rate of 3.7 per cent to reach 403 million tons. Shipments of coking coal have remained static over the years.

Australia, by far the largest exporter of thermal and coking coal in equal amounts, again accounted for slightly more than one-third of world shipments. Over the first 10 months of 2002 it increased exports by 3 per cent to 167.2 million tons. Total shipments for the year are estimated at 204 million tons. For the same ten-month period of 2002, shipments from the United States and Canada, which are mainly exporters of coking coal, contracted by 26 and 16 per cent respectively. China, Indonesia and South Africa, mainly exporters of thermal coal, accounted for about 33 per cent of world exports. China reduced its exports in the first 10 months of 2002 by about 5 per cent to 68.4 million tons. Similarly, coal exports from South Africa contracted by 11 per cent to 38.4 million tons in the period January to August 2002. Indonesia, however, increased exports by 6 per cent to 33.4 million tons for the first half of 2002.

The main importers were countries of the EU and Japan, with about 28 per cent of world imports each. 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 12 per cent each.

Medium-term prospects for this trade will depend on prices of thermal coal as affected by deregulation of energy markets in Europe and environmental standards. Coking coal is used in the blast furnace method of steel production that currently accounts for about 60 per cent of steelmaking and will continue to be the prevalent method of production; demand for coking coal is therefore expected to remain steady.

Grain shipments

World grain shipments reached 220 million tons in 2002, a decrease of 6 per cent from the previous year's 234 million tons, almost equally split between wheat and coarse grains, such as maize, barley, soybeans, sorghum, oats and rye. In 2001, the main loading areas were North America, which accounted for about 53 per cent of world exports, and the east coast of South America, with almost 22 per cent. Australia and the European Union accounted for about 8 and 5 per cent respectively. In 2002, the largest exporter, the United States, reduced shipments over nine months to 58.3 million tons, a decrease of 5 per cent in relation to the same period of the previous year, when total exports reached 61.5 million tons. Over the same period, only Australia recorded an increase of 6 per cent for wheat shipments, while other exporters such as Canada,

Argentina and the European Union reduced wheat shipments by 20, 18 and 14 per cent respectively. Elsewhere, a bumper crop in Ukraine and Russia found a market in the EU countries, partly due to a zero import duty. Other exports went to Middle East countries, whose import needs were up by 2.8 per cent. Since late-summer 2002, wheat has moved from the Black Sea at a rate of almost 2 million tons per month, boosting employment of Panamax tonnage.

Other bulk shipments

During 2002 shipments of bauxite and alumina, the primary inputs for the aluminium industry, are estimated to have increased by 3.9 per cent to reach 53 million tons. Final figures for 2001 indicate that bauxite shipments from West Africa, almost half of the world total, decreased by 3.8 per cent to 13.5 million tons, while exports from Jamaica surged by 75.6 per cent to reach 3.7 million tons, with all shipments going to the United States market. EU countries and some Eastern European countries account for 54 per cent of world bauxite imports and are supplied from West Africa, while the United States market accounted for 37.4 per cent. The alumina trade reached 21.9 million tons in 2001, a decrease of 3.1 per cent from the previous year. Australia, the leading exporter with a market share of 43 per cent, supplied mainly countries in East and South-East Asia, while Jamaica, accounting for 16.2 per cent of world shipments, supplied Europe and North America. During 2001, production of primary aluminium products also dropped by 3.0 per cent to 20.6 million tons. The contraction in production was acute in North America, where it fell by 13.6 per cent, and in Latin America, where it fell by 8.1 per cent. Asia and Western Europe held steady, while increases were recorded in South Africa (16.2 per cent), Oceania (1.3 per cent), and Russia and Eastern Europe (1.0 per cent).

Shipments of rock phosphate stood at 29 million tons in 2002, 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 10.9 million tons. Other traditional exporters were Jordan, with 3.6 million tons, and Togo with 1.1 million tons. China maintained its exports close to 5 million tons. The European Union and other Asian countries were major importers.

The minor dry bulks, a heterogeneous mix of merchandise, are believed to have reached 835 million tons in 2002, the same as recent estimates released for

the previous year. Shipments of steel and forest products are estimated to be close to 350 million tons, with the trade of the former increasing by 1.6 per cent and that of the latter contracting by 2 per cent. Agricultural-related trades, including sugar, rice, tapioca, meals (oilseeds and soy) and fertilizers (phosphates, potash, sulphur and urea) accounted for about 230 million tons. The increase in sugar shipments (by 7 per cent to about 38 million tons) was particularly strong, partly as a result of some new or temporary flows such as those from Tanzania to European Union countries under the "Everything but Arms" initiative and Brazilian exports of white sugar to Cuba, which had committed its production previously in order to take advantage of favourable prices. Shipments of a number of minerals (coke, non-ferrous ores, metals, salt, cement, etc.) were estimated at 250 million tons. Overall, forecasts for these cargoes indicate similar volumes of shipments for 2003, with some such as sugar fluctuating more widely than other (industrial) goods, such as cement.

4. Liner shipments of containerized cargoes

The balance of 1.6 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 general cargo services, with some of the latter serving to back up the main container trades. However, container traffic continues to increase its market share. In 2001, 60 per cent of the 61.9 million tons of reefer trade moved in special containers. Shipments of containerized cargoes differ from the other dry bulk cargoes in terms of the increased use of transshipment to complement direct calls of larger vessels at hub ports. Preliminary information available for 2002 indicates that world seaborne container trade increased by 8.4 per cent to 75.8 million TEU. Containers flow along three main east-west containerized routes (trans-Pacific, Europe-Far East and transatlantic) and secondary north-south and intra-regional routes.

In the largest east-west route, the trans-Pacific, total trade is estimated at 12-14 million TEU. Container flows in the dominant leg, Asia to North America, increased by more than 8 per cent in 2002, while in the opposite westbound direction, flows increased by about 1 per cent, resulting in a widening imbalance of container flows. Production in relocated factories in Asia, notably in China, to supply the US market and poor demand from Japan for North American goods explain this growing imbalance. In the Asia-Europe route, which is

believed to carry between 10 and 12 million TEU, the trade imbalance widened during 2002. In the dominant leg, Asia to Europe, container flow increased by about 4 per cent, or about half a percent more than the flow increase in the opposite direction. According to the Far East Freight Conference (FEFC), responsible for about two-thirds of the trade along this route, the imbalance reflects the volume of Chinese exports to European markets. In the transatlantic route, the smallest of the east-west ones, trade is estimated at between 6 and 8 million TEU. As flows in the dominant leg from Europe to North America increased by almost 5 per cent while flows in the opposite direction were almost static, the trade imbalance along this route also widened in 2002. Overall traffic flows in these main east-west routes could reach 34 million TEU.

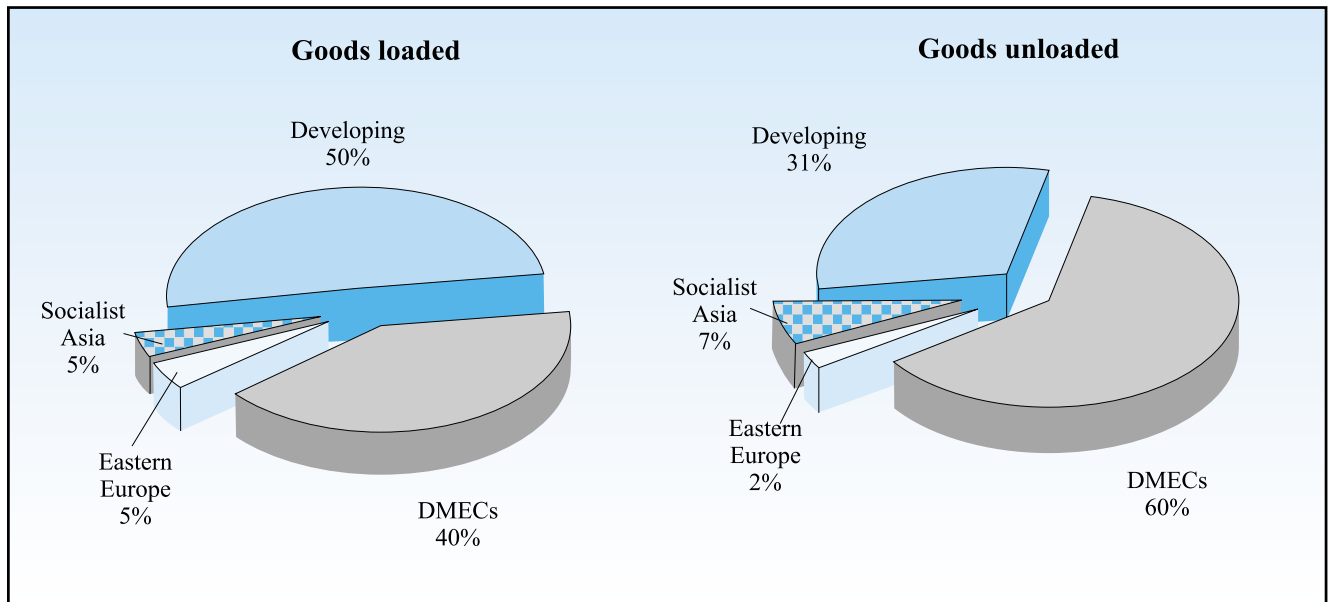
North-south and intra-regional routes are articulated around major production and consumption centres of Europe, the Far East and North America. North-south routes are believed to carry about 15 million TEU and expand and contract in accordance with the economic conditions prevailing in the regions linked by them. In the routes linking Europe to Africa, southward flows increased by around 4 per cent, while those heading north expanded at about half that rate, in spite of political upheavals in some countries of West Africa. In the long-distance route from Europe to Oceania, southward flows expanded by about 2 per cent, with negligible growth recorded in the opposite direction. Routes linking Europe and North America with the Caribbean and South America followed the opposite trend; northward flows expanded at a higher rate than southward ones due to currency depreciation and devaluation in some South American countries that pushed up exports and contracted imports. In the largest of the intra-regional routes, the intra-Asia one, which is believed to transport up to 16 million TEU, flows expanded by more than 3 per cent, notably for those linking origins and destinations in the Far East. The balance of container shipments is distributed amongst east-west, north-south and intra-regional routes.

5. World shipments by country groups

The split of the 5.89 billion ton world seaborne trade by major cargo segments and country groups is shown in table 4 and figure 3. The shares of developed market-economy countries in goods loaded and unloaded in 2002 were 40.4 per cent and 60.3 per cent of the world total respectively. For these countries, crude oil and petroleum products accounted for 5.5 and 21.7 per cent of total

Figure 3

World seaborne trade by country groups
(percentage share of tonnage, 2002)



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

world exports, while imports accounted for 68.3 per cent for crude oil and 50.2 per cent for petroleum products. Further breakdowns in terms of regional groupings can be found in annex II. Among market-economy countries, Europe remained the most important exporter of crude oil and petroleum products, with a total of 108.6 million tons (5.1 per cent of the world total). North America was the largest importer of crude oil and petroleum products, with 580.9 million tons (26 per cent), closely followed by Europe, with 527.3 million tons (23.6 per cent), and Japan, with 260.9 million tons (11.7 per cent).

In the dry bulk segment, the share of global shipments of developed market-economy countries remained at 58.2 per cent for both exports and imports. Again, annex II gives an insight into the regional distribution of these shipments. Europe remained the largest dry cargo market for exports and imports, with 1,068.9 million tons (28.5 per cent of world exports) and 1,446.6 million tons (37 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 11.6 per

cent respectively. This underlines their important shares in shipping of the three major dry bulk commodities – iron ore, coal and grain.

During the year 2002 the share of developing countries in total seaborne exports was 49.4 per cent, while their share of seaborne imports was 31.4 per cent. These percentages have remained fairly stable since 1998, with a slight upward trend for imports. The trade structure for developing countries sharply contrasts with that of developed market-economy countries. The developing countries' combined share in crude oil and petroleum products exports represented 87.9 per cent and 68.6 per cent respectively. For imports, the shares were 27.4 per cent for crude oil and 44.2 per cent for petroleum products. In the dry cargo sector, the share of developing countries' exports increased by 0.3 per cent to reach 29.9 per cent of world exports, while their share of world imports increased by almost 1 per cent to 31.4 per cent.

Regional variations among groups of developing countries were related to their GDP. Developing countries of Asia claimed the largest shares in exports and imports, reaching 29.6 per cent and 22.1 per cent of

world exports and imports respectively. The share of developing countries in America was 12.9 per cent of world exports and 5.7 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 considerably smaller.

In specific trades there were also considerable variations. The shares of Asian developing countries in world exports of crude oil were 54.6 per cent and in petroleum products 42.3 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 (17.6 per cent) was higher than that of developing countries in America (15.4) per cent. For exports of petroleum products, however, the opposite was true – 7.0 per cent for developing countries in Africa and 18.9 per cent for those in America. Again for exports of dry cargoes, Asian developing countries claimed the largest share at 17.0 per cent, followed by American developing countries with 11 per cent and African developing countries with 1.5 per cent.

For imports of crude oil, the share of developing countries in Asia was 18.7 per cent of the world total. The shares for developing countries in America and Africa were 5.3 per cent and 2.9 per cent respectively. For imports of petroleum products, the corresponding shares for developing countries in Asia, America and Africa were 28.9 per cent, 10.4 per cent and 3.4 per cent. Imports of crude oil into developing countries in Europe reached 0.4 per cent of the world total, on a par with the percentage for imports of petroleum products. Developing countries in Oceania showed negligible imports of crude oil, in line with the scant refining capacity in the region, while the share of world petroleum products imports was 1.1 per cent.

The share of socialist countries in Asia in world exports for 2002 was 5.1 per cent and for world imports 6.8 per cent. 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 their largest share for exports, 5.1 per cent, due to shipments of crude oil, petroleum products and grain from the Black Sea. Seaborne imports for these countries reached 1.5 per cent of the world total, and these imports 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 2002 stood at 23,251 billion ton-miles, almost the same amount as the previous year. As cargo transported increased by a modest 0.8 per cent, changes in the average transport distance were minimal.

Reduced demand for haulage of crude oil and oil products resulted in ton-miles for these commodities decreasing by 2.2 per cent, almost three times the percentage reduction in the previous year. This was an indication of supplies of crude oil moving shorter distances, notably from sources close to the Black and Baltic Seas to destinations in Europe and North America. For all dry cargoes, the ton-miles increased by 1.8 per cent, while tonnage transported increased by 2.1 per cent. This suggests shorter distances between cargo origins and destinations, and the breakdown of dry cargo indicates that this is likely to be the case for the five main dry bulks, whose ton-miles increased by 1.2 per cent, as against a 1.6 per cent increase in cargo volume. For the remaining dry cargoes, minor bulks and liner cargo, supply lines remained broadly the same, as their ton-miles increased by 2.5 per cent to 6,440 billion while cargo shipments increased by 2.4 per cent.

Table 5

World seaborne trade in ton-miles, selected years
(billions of ton-miles)

Year	Oil			Iron ore	Coal	Grain ^a	Five main dry bulks	Other dry cargoes	World total
	Crude	Products	Crude plus products						
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	2 826	2 810	15 363
1980	8 385	1 020	9 405	1 613	952	1 087	3 652	3 720	16 777
1985	4 007	1 150	5 157	1 675	1 479	1 004	4 480	3 428	13 065
1990	6 261	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
1999	7 980	2 055	10 035	2 317	2 363	1 186	6 203	5 752	21 990
2000	8 180	2 085	10 265	2 545	2 509	1 244	6 638	6 113	23 016
2001	8 074	2 105	10 179	2 575	2 552	1 322	6 782	6 280	23 241
2002	7 860	2 090	9 950	2 700	2 570	1 250	6 861	6 440	23 251

Source: Fearnleys, *Review 2002*.

^a Includes wheat, maize, barley, oats, rye, sorghum and soya beans.

