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Chapter I **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

Overview

During the year 2001 the growth of world output fell to 1.3 per cent from the remarkable 3.8 per cent achieved in 2000 (see table 1) and, for the first time since the oil price hike of the late 1970s, virtually all regions of the world experienced a simultaneous economic slowdown.

Developed market-economy countries were most affected by this economic deceleration and achieved only 1 per cent growth. The best performers were countries belonging to the European Union, whose economies grew 1.6 per cent, but there were wide disparities. The United Kingdom's economy grew 2.4 per cent, well above the average, fuelled by domestic demand supported by decreases in short-term interest rates and a buoyant real estate market. At the other extreme, the German economy expanded by only 0.6 per cent, slowed by sluggish expansion in its eastern region. Across the Atlantic and despite successive cuts in short-term interest rates to overcome the effects of reduced investment levels caused by the bursting of the information technology (IT) bubble, the United States economy performed slightly below the world average, with growth of 1.1 per cent. The weakest performer in this group of countries was Japan, whose economy entered into a recession in the second quarter of 2001 and contracted 0.3 per cent during the year. The zero interest rate policy pursued by the monetary authorities to build domestic confidence could not overcome the effect of the collapse of the valuable

technology markets, in which Japanese exporters are major players, and the minor overvalue of the currency at the beginning of the year.

The growth of economic output for developing countries was 2.1 per cent, well above the world average. The highest growth occurred in African countries, which repeated their performance of 2000, expanding 2.7 per cent. North African countries such as Morocco, Tunisia and Algeria fared particularly well and expanded 5, 4 and 3 per cent respectively. Three other countries in West Africa – Cameroon, Ghana and Nigeria – expanded more than 3 per cent. The output growth of economies in East Africa was below the continent's average. Elsewhere, South Africa managed to expand output by 2.1 per cent, while Zimbabwe recorded a significant contraction of 7.5 per cent. Overall, the rate of economic growth of African countries over the last three years has exceeded the average growth rate of the last decade.

In Latin America, the sluggish growth of economic output reached only 0.4 per cent, well below the performance of the previous year. The financial difficulties and final collapse of one of the largest regional economies, that of Argentina, which contracted 3.8 per cent, contributed to this result. This collapse was partly to blame for almost doubling the economic contraction vis-à-vis the previous year of its neighbour, Uruguay, to 2.3 per cent. In the northern hemisphere, the effect of the United States economic slowdown on its NAFTA partner Mexico caused the latter's economy to contract by 0.3 per cent. The lacklustre performance elsewhere in Latin America resulted from the reduced United States demand for exports.

Table 1

World output, 1990–2001
(percentage change)

Region/grouping	Average 1990-2000	1999	2000	2001 ^a
World	2.2	2.6	3.8	1.3
Developed economies	2.0	2.4	3.4	1.0
<i>of which:</i>				
United States	2.8	3.6	4.1	1.1
Japan	1.1	0.2	2.2	-0.3
European Union	1.7	2.4	3.4	1.6
<i>of which:</i>				
Euro area	1.7	2.4	3.5	1.4
Germany	1.6	1.5	3.2	0.6
France	1.4	2.9	3.5	1.9
Italy	1.2	1.4	2.9	1.8
United Kingdom	1.9	2.1	2.9	2.4
Developing economies	4.3	3.4	5.4	2.1
<i>of which:</i>				
Africa	2.2	2.6	2.7	2.7
Latin America	2.9	-0.2	3.9	0.4
Asia	4.4	4.6	5.8	1.2
Economies in transition	-3.0	2.7	6.0	4.3
China	9.3	7.1	8.0	7.3

Source: Calculations by the UNCTAD secretariat based on data in 1995 dollars, as published in UNCTAD (2002), *Trade and Development Report 2002*, United Nations publications, Sales No. E.02.II.D.2, New York and Geneva, table 1.1.

^a Estimates.

The output of developing countries in Asia expanded 1.2 per cent, slightly below the world average and a significant drop from the 5.8 per cent expansion of the previous year. Slowing United States demand for Asian exports together with the contraction of the Japanese economy was a heavy burden for these economies, notably those which could not rely only on domestic markets for expansion. The impact was particularly heavy in traditional hubs of regional economic activity: Singapore and Taiwan Province of China contracted by 2.2 per cent, while Hong Kong (China) and Malaysia expanded by a meagre 0.2 and 0.1 per cent respectively. In spite of depressed international commodity prices, strong domestic demand and investment in less open economies such as India, Indonesia, the Islamic Republic of Iran, Pakistan and the Philippines contributed to expand output by 5.4, 3.0, 4.1, 3.3 and 3.4 per cent respectively. The Republic of Korea and Thailand managed to achieve satisfactory output growth of 2.7 and 1.5 per cent respectively.

The growth of economic output in countries with economies in transition was again encouraging, reaching 4.3 per cent. The expansion was outstanding in oil-exporting countries such as Kazakhstan, which achieved 13 per cent growth. However, non-oil-exporters also did well, helped partly by increases in FDI flows. These results confirm the renewal of economic growth for countries with economies in transition, reversing their protracted economic decline of -3 per cent during the last decade.

The star global performer of the year was China; its output growth in 2001 was 7.3 per cent, lower than that of the previous year but up from that of 1999. Domestic demand and investment together with steady FDI maintained high levels of economic growth. Since the millennium, however, China's economic growth appears to have been decelerating compared with the 9.3 per cent growth achieved during the last decade.

Prospects

Forecasts of world economic output growth for 2002 have been cautiously optimistic in light of recent United States economic indicators pointing to a rapid recovery. The simultaneous economic downturn of the major economies seems to indicate that improvements, too, may occur simultaneously. With the prices of commodities and crude oil still at low levels, domestic demand in these economies needs time to build up momentum for investments. Current forecasts for output expansion for 2002 range from 1.2 to 2.4 per cent and, in any case, are contingent on developments stemming from the events of 11 September 2001.

2. Merchandise trade*Recent developments in international trade*

During 2001 the volume of world exports contracted by 1.5 per cent (see table 2) after double-digit growth in the previous year. The volume of world imports expanded marginally by 0.9 per cent. Among developed countries, export volume contracted most in North America and Japan at a rate of -5 per cent. Countries of the European Union maintained a modest expansion of export volumes of 1.1 per cent. Growth in export volume for developing countries in Africa and Latin America was estimated at 2.5 and 2.7 per cent respectively. Developing countries

Table 2

Growth in the volume of merchandise trade by geographical region, 1999–2001
(annual percentage change)

Exports			Countries/regions	Imports		
1999	2000	2001		1999	2000	2001
5.0	11.9	-1.5	World ^a	6.1	11.3	0.9
4.8	9.9		Developed economies ^a	7.6	9.6	0.3
			<i>of which:</i>			
5.8	9.9	-5.0	North America	11.2	11.3	-3.8
4.4	10.1	1.1	European Union (15)	9.5	10.9	0.3
2.1	9.2	-5.0	Japan	9.5	10.9	0.3
7.0	15.7	0.5	Developing economies ^a	4.4	15.4	0.8
			<i>of which:</i>			
5.0	7.3	2.5	Africa	-0.9	5.4	4.6
7.1	10.3	2.7	Latin America	-1.5	11.1	0.5
1.1	14.0	n.a.	Middle East ^b	1.3	14.6	n.a.
6.6	16.2	-3.7	Asia ^c	9.0	15.4	-1.9
-2.0	17.9	8.0	Economies in transition ^a	-8.5	14.0	14.7
9.6	28.3	5.0	China	15.2	33.1	11.3

Source: From WTO (2002), *WTO Annual Report, 2002*, chapter II, chart II.4 in page 7, available on www.wto.org; and UNCTAD (2002), *Trade and Development Report 2002*, United Nations publications, Sales No. E.02.II.D.2, 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.

in Asia recorded a drop of 3.7 per cent in their export volume as a result of the reduced demand for office equipment and automation by the United States economy. In 2001 growth in export volume was particularly strong for countries with economies in transition (8 per cent) and China (5 per cent).

Trends in imports and exports

Recent data support the view that world trade is poised to recover modestly during 2002, perhaps reaching 1 per cent growth in export volume. Increased consumer confidence and the need to rebuild business inventories in the major economies could lead to this result. However, it is likely that in the future the expansion of world trade will lag behind world output because of demand and investment in the IT sector and increased transport costs (notably in air transport) resulting from higher insurance and security costs after the events of 11 September 2001. Moreover, the structure of exports from developing countries is likely to continue the shift from commodities to manufacturing exports, leading to greater use of containers.

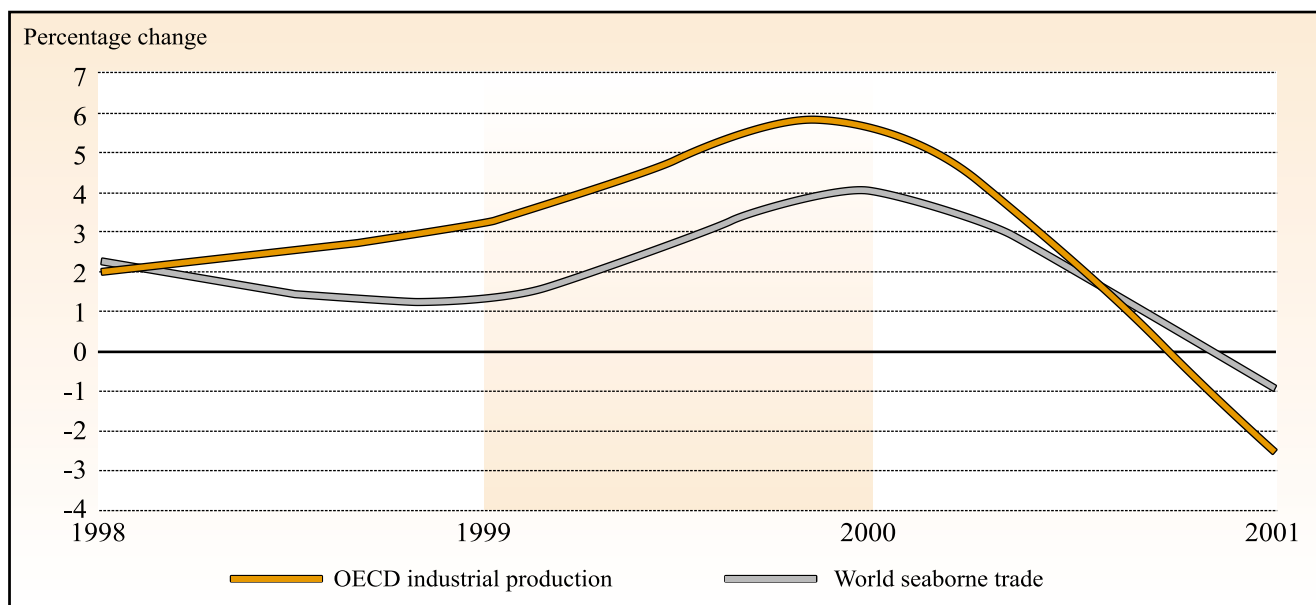
3. OECD countries' industrial output

The industrial production index (1995 = 100) for OECD countries, another fundamental indicator for the global maritime transport sector, averaged 117.7 in 2001, a decrease of 2.6 per cent from the average index for 2000 (see figure 1). This decrease contrasts with the 5.6 per cent increase achieved in 2000, when the index reached 120.8.

The poor results for most of 2001 were attributable to slowed economic activity in the United States, where the index reached 125.4 in the first quarter and declined steadily to 120.0 by the fourth quarter, a decrease of 4.3 per cent over the year. The slowdown in Japan was steep, with a 10.2 per cent decrease during the fourth quarter, when the index reached 92.1. Economic activity continued at a higher level in the 15 countries of the European Union, with the industrial production index reaching 113.5 in the fourth quarter, a decrease of only 3.3 per cent. The OECD outlook for the year 2002 indicated a mild recovery, notably in the United States.

Figure 1

Annual change in OECD industrial production and world seaborne trade, 1998–2001



Source: OECD (2001), *Main Economic Indicators*, April.

B. WORLD SEABORNE TRADE

1. Overall seaborne trade

After recording increases for 15 consecutive years, world seaborne trade stalled in 2001 at 5.83 billion tons of exported goods. The annual growth rate, calculated with the provisional data available for year 2001, was negative at -1.0 per cent, as is shown in table 3 and figure 2.

The 2001 breakdown of seaborne exported goods by continent was as follows: Africa's share of

world exports was 9.4 per cent, while that of America reached 20.9 per cent. Asia was by far the continent with the largest share of the total tonnage of seaborne world exports – 36.8 per cent. Europe's share was the second largest at 25.5 per cent, while Oceania's share was the smallest, only 7.4 per cent of world seaborne exports. Forecasts for 2002 indicated that annual growth rates would probably be positive but modest, while the distribution of world tonnage by continent was expected to be steady.

Table 3

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

Year	Tanker cargo		Dry cargo				Total (all goods)	
			Total		of which main bulk commodities ^b			
	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	
1997	2 172		2 781		1 157		4 953	
1998	2 072		3 526		1 170		5 598	
1999	2 057	-0.7	3 612	2.4	1 196	2.2	5 668	1.3
2000	2 115	2.8	3 775	4.5	1 288	7.7	5 890	3.9
2001 ^c	2 128	0.6	3 704	-1.9	1 303	1.2	5 832	-1.0

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.

2. Seaborne trade in tankers

General developments

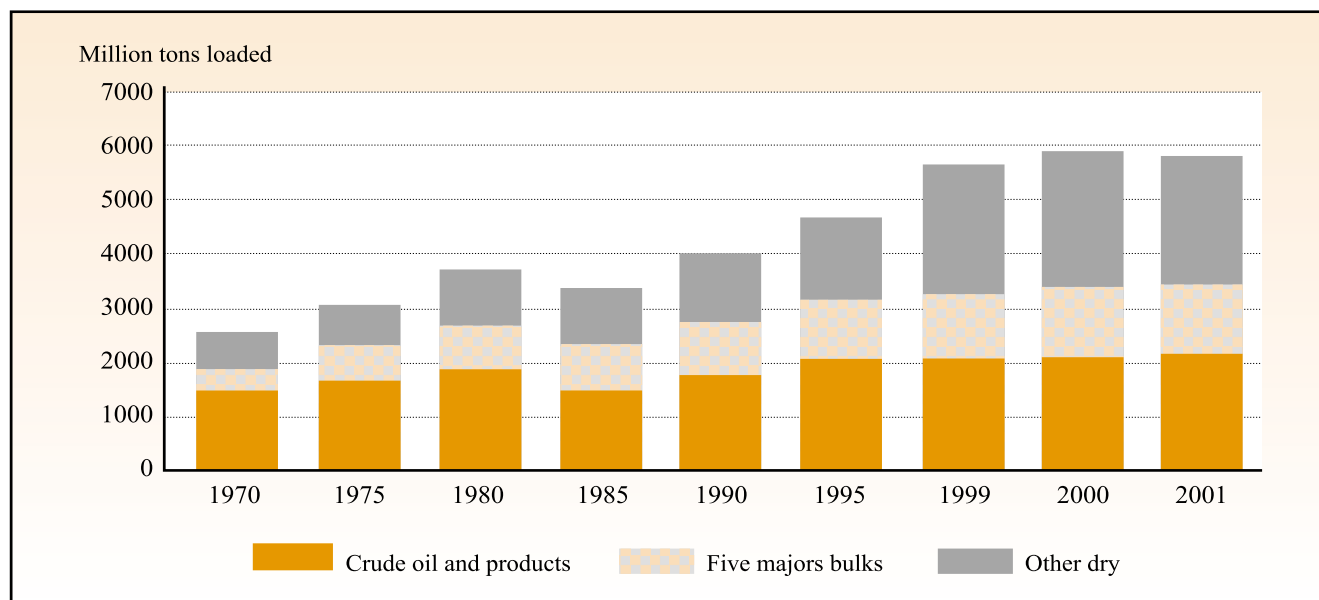
In 2001 world shipments of tanker cargoes reached 2.13 billion tons, growing 0.6 per cent during the year. About 77.5 per cent of this tanker trade is in crude oil, with the remainder in petroleum products. In 1992 the percentage was 74.9. The share of overall tanker shipments in world seaborne trade was 36.2 per cent.

Crude oil production

Since 1999 crude oil production has expanded. Figures¹ released for 1999 and 2000 indicate that crude oil production increased by 4 per cent to 74.5 million barrels per day (mbpd) for 2000. Most of this increase resulted from expanded production in OPEC countries, 5.6 per cent on average, to 30.8 mbpd, while production in OECD countries (notably the United States, Mexico, Norway and oil-producing countries within the European Union,

Figure 2

International seaborne trade for selected years



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

notably the United Kingdom) expanded at a lower rate of 2.4 per cent, to 21.5 mbpd. The remaining oil-producing countries, including Russian Federation members, China, Brazil and a number of small producers, raised production by 3.2 per cent to 22.2 mbpd.

For 2000 crude oil production, the market share of OPEC countries was 41.5 per cent, with major producers being Saudi Arabia with 12.3 per cent (equivalent to 9.1 mbpd), the Islamic Republic of Iran with 5.2 per cent (3.8 mbpd) and Venezuela with 4.6 per cent (3.2 mbpd). Market share for OECD oil-producing countries reached 28.1 per cent, with major producers being the United States with 9.8 per cent (7.7 mbpd), Mexico with 4.8 per cent (3.4 mbpd) and Norway and the European Union each with 4.4 per cent (3.4 mbpd). Among European Union countries, the United Kingdom had the largest market share, 3.4 per cent (equivalent to 2.7 mbpd). Market share for the remaining countries reached 30.4 per cent. Major producers in this group were countries of the Russian Federation, with 9 per cent (6.5 mbpd); China,

with 4.5 per cent (3.2 mbpd); and Brazil, with 1.8 per cent (1.2 mbpd). Brazilian production comes mainly from deepwater offshore wells lying 400 metres below sea level. It has doubled over the last decade and uses modern technology, which is also used in Angola and the Gulf of Mexico.

Estimates for 2001 crude oil production match levels achieved in 2000. During 2001 OPEC producers agreed to production cuts amounting to 3.5 mbpd in order to support prices, which had slid during the year. Nevertheless, the three major crude oil prices (US West Texas Intermediate, North Sea Brent and the OPEC basket of seven crude oil prices) ended the year below \$20 per barrel, 25–30 per cent lower than the levels prevailing at the beginning of the year. To avoid losing market share to other producers, OPEC agreed to an additional 1.5 mbpd production cut starting on 1 January 2002 only after major non-OPEC producers (Angola, Mexico, Norway, Oman and the Russian Federation) pledged to cut production by 0.46 mbpd.

Refinery developments

The throughput of world refineries reached 69.5 mbpd in 2000, an increase of 2 per cent over the previous year. The major refining centres in the United States and Europe, which together account for 43.1 per cent of world throughput, increased outputs by 1.9 and 0.3 per cent respectively. Early in 2002, the purchasing of refineries in Eastern Europe by a major Russian oil producer may have an impact on world markets. Refineries in the Far East, Asia and the Pacific, which together account for 24.8 per cent of world throughput, had a mixed output. China² achieved a hefty increase of 14.4 per cent. Refineries located elsewhere within the Asia Pacific region raised throughputs by 6 per cent, but Japanese refineries decreased output by 0.1 per cent.

Natural gas production

In 2000 production of natural gas reached 2,422.3 billion cubic metres³ (bcm), an increase of 4.2 per cent from 1999 levels and the greatest increase since 1995, when production grew by 4.5 per cent. This production is equivalent to 2,180.6 million tons of oil or 45.2 mbpd. Major producers are the United States with 555.6 bcm and the Russian Federation with 545 bcm, which together account for 45.4 per cent of total production. Lesser producers are Canada with 167.8 bcm, the United Kingdom with 108.1 bcm, Algeria with 89.3 bcm, Indonesia with 63.9 bcm and the Islamic Republic of Iran with 60.2 bcm. Other producers are scattered in the Middle East, Latin America and Asia, often getting natural gas as a result of oil production. Only about a fifth of natural gas production is exported, mainly by pipelines, which carry around three-quarters of all exports.

Medium-term prospects for natural gas production seem bright. The \$25 billion Gas Initiative of Saudi Arabia aims to convert power plants to use natural gas and therefore will free crude oil production for export. Qatar has entered into joint ventures with foreign oil companies to foster production and exports of natural gas. Also, large new findings of gas in Trinidad and Tobago and Bolivia have been announced.

Crude oil shipments

Seaborne shipments of crude oil increased during 2001 by 0.8 per cent, to 1.65 billion tons (see table 4). Major loading areas continued to be the developing countries in Western Asia with 850.5 million tons, in West Africa with

174.9 million tons, in North Africa with 133.8 million tons and around the Caribbean with 203.6 million tons. Main discharging areas were located in developed market-economy countries in North America with 436.9 million tons, in Europe with 426.8 million tons and in Japan with 215 million tons. Developing countries in South and East Asia took 306.8 million tons during 2001.

Crude oil trade flows will be affected by the influx of crude oil from the Caspian Sea and Central Asia. The pipeline and Supsa oil terminal in Georgia were commissioned two years ago to export oil from Azerbaijan through the Black Sea. Next, the completion of the pipeline to bring Kazakhstan's oil to the Russian port of Novorossiysk led to the first shipment in October 2001. Shipments from the Black Sea increased 7.9 per cent to 64.3 million tons in 2000 and will continue to go up as the 4.7 million tons of the Supsa pipeline is supplemented by the 28 million tons of the Novorossiysk one. Environmental concerns have been voiced by Turkey because this oil passes through the Bosphorus to reach destinations in Western Europe, which takes about 50 million tons per year, with Italy taking about one-third of this total. These oil shipments will require Aframax and Suezmax tonnage and will reduce demand for VLCCs. Also, the commissioning by Russia, in late December 2001, of the Primorsk terminal in the Gulf of Finland for crude oil shipments from western Siberia through the 12-million-ton-capacity Baltic pipeline will add another important loading area.

The current level of imports will be affected in the near future by the United States Government decision, in November 2001, to fill to capacity its billion-ton Strategic Petroleum Reserve. Although Chinese imports of crude oil contracted by 13.6 per cent from the peak of 2000, imports of oil products saw a healthy 19 per cent increase to 21.5 million tons. In the medium term, there will likely be an increase of imports by China to enlarge its current one-month strategic oil reserve. Japanese imports were steady and may rise to expand the current 116-days oil stock to the 125-day average for countries belonging to the International Energy Agency.

Petroleum product shipments

The global trade in petroleum products held steady during 2001 at 479 million tons. The pattern and volume of shipments were similar to those of past years, with occasional fluctuations caused by stoppages in refineries because of maintenance or accidents. The scheduled closure of Conoco's 23,000 mbpd Killingholme refinery

Table 4

**World seaborne trade ^a in 1970, 1980, 1990, 1997-2001,
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
	1997	1 627	527	2 785	4 952	1 625	522	2 890	5 037
	1998	1 569	503	3 526	5 598	1 533	540	3 670	5 743
	1999	1 564	493	3 612	5 668	1 541	547	3 741	5 829
	2000	1 636	478	3 775	5 890	1 679	559	3 925	6 163
	2001	1 649	479	3 704	5 832	1 675	558	3 874	6 107
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	28.0	9.0	63.0	100.0	26.7	9.4	63.9	100.0
	1999	27.6	8.7	63.7	100.0	26.4	9.4	64.2	100.0
	2000	27.8	8.1	64.1	100.0	27.2	9.1	63.7	100.0
	2001	28.3	8.2	63.5	100.0	27.4	9.1	63.4	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	5.4	22.0	61.9	42.4	72.1	51.1	64.9	65.5
	1999	5.4	21.9	59.7	41.4	71.3	50.9	61.9	63.4
	2000	5.2	22.7	59.2	41.2	66.9	52.0	61.2	61.9
	2001	5.1	22.1	58.0	40.1	67.9	52.5	60.5	61.8
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	4.0	4.8	4.5	1.6	0.4	1.3	1.3
	2000	3.9	4.5	4.9	4.6	1.4	0.4	1.2	1.2
	2001	4.0	4.5	5.1	4.7	1.5	0.4	1.3	1.2

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		
Socialist countries in 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	6.5	4.5	4.2	4.0	7.2	6.1
	2001	1.0	1.2	6.7	4.6	3.6	4.8	7.6	6.2
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	90.4	73.8	29.5	50.6	24.7	42.1	28.9	29.1
	1999	89.7	72.9	30.1	50.2	24.7	44.0	31.0	30.5
	2000	89.9	71.7	29.4	49.6	27.5	43.6	30.4	30.8
	2001	89.9	72.2	30.2	50.5	27.0	42.3	30.7	30.8
<i>of which:</i>									
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	17.6	7.7	2.2	7.0	0.9	2.7	3.6	2.8
	1999	17.7	7.9	2.2	7.0	1.0	3.1	3.8	3.0
	2000	19.0	8.3	2.2	7.4	3.3	3.1	3.6	3.5
	2001	18.7	7.9	1.7	7.0	2.7	2.2	3.0	2.9
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	16.0	18.4	11.0	13.1	5.9	11.8	4.9	5.8
	1999	16.2	18.9	10.9	13.0	5.6	11.5	4.7	5.6
	2000	15.5	19.5	10.7	12.7	5.2	11.0	5.4	5.8
	2001	15.8	19.7	11.3	13.3	5.2	10.7	5.5	5.9
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	56.5	47.3	15.9	30.1	17.5	26.1	20.1	20.0
	1999	55.4	45.6	16.5	29.8	17.7	28.0	22.1	21.5
	2000	55.1	43.3	16.0	29.1	18.7	28.0	21.0	21.0
	2001	55.2	44.1	16.7	29.8	18.7	28.0	21.8	21.5

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		
Europe ^e	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	0.5	0.4	0.3	0.4	0.4	0.3	0.3
	2001	0.0	0.5	0.4	0.3	0.4	0.4	0.3	0.3
Oceania ^e	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	0.3	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

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.

in Humber (UK) was accelerated after a blast that put the facility out of service from mid-April until August. As a result gasoline prices shot up to \$325 per ton and US traders purchased from elsewhere. In September 2001, the explosion of six crude oil pipelines in the largest Chinese refinery, Maoming, cut production by 70,000 bpd for a fortnight.

LNG shipments

LNG shipments rose by 10.3 per cent during 2000 to reach 137 bcm of natural gas – about 5 per cent of world

production. Major importers continued to be Japan with 72.5 bcm, followed by the Republic of Korea with 19.7 bcm. Exports came from Indonesia (35.7 bcm), Malaysia (21 bcm) and Australia (10.1 bcm). Across the Mediterranean, the majority of Algerian exports of 26.3 bcm went to France (11.2 bcm) and Spain (8.5 bcm). Elsewhere, trading revolved around the Middle East Gulf, where exports from Oman, Qatar and the United Arab Emirates reached 23.4 bcm; Nigeria, whose exports were 5.6 bcm; and Trinidad and Tobago, which exported 3.5 bcm.

3. Dry cargo shipments

General developments

In 2001, overall dry cargo shipments decreased by 1.9 per cent, reaching 3.70 billion tons (see table 3). The five dry-bulk trades namely iron ore, coal, grains, bauxite/alumina and rock phosphate actually recorded a modest 1.2 per cent increase to reach 1.3 billion tons. The remaining dry cargo trades, minor bulks and liner cargoes, decreased by 3.4 per cent to 2.40 billion tons. The share of dry cargo shipments in world seaborne trade was 58.5 per cent of total goods loaded during the year.

World crude steel production

World crude steel production in 2001 was 839.9 million tons, a decrease of 0.9 per cent from the 2000 figure of 847.2 million tons. The regional decreases were significant for North America, where production fell 11.4 per cent to 119.9 million tons in contrast to the 135.4 million tons achieved in 2000. Production also decreased by 2.8 per cent in countries of the European Union (to 158.8 million tons) and by 3.4 per cent in Japan (to 102.9 million tons). Countries in South America reduced production by 3.9 per cent, to 37.6 million tons, but their performance was mixed: Brazil reduced production by 4.1 per cent to 26.7 million tons and Argentina decreased production by 8.3 per cent to 4.1 million tons but Venezuela increased production by 3.3 per cent to 4 million tons. The 1.3 per cent decrease in steel production in Oceania was mainly attributable to Australia, which decreased production by 3.2 per cent to 6.9 million tons. Countries of the Russian Federation raised their production by 1.8 per cent to reach 98.2 million tons in 2001. China achieved a major expansion of steel production by 12.6 per cent, to 143.3 million tons. Countries in Africa raised production by 9.5 per cent, to 15.1 million tons, notably Egypt (by 33.3 per cent to 3.8 million tons) and South Africa (by 4 per cent to 8.8 million tons). Countries in the Middle East also performed well, with a collective increase of 8.1 per cent to 11.7 million tons: among them, Saudi Arabia achieved a 13.4 per cent increase to 3.4 million tons and Iran a 4.8 per cent increase to 6.9 million tons.

In the same year, world pig iron production, another useful indicator for predicting dry bulk trades, increased marginally by 0.1 per cent to 571.4 million tons. Production of direct reduced iron, which requires iron ore and gas, fell by 12.2 per cent to 24.4 million tons.

Iron production from scrap increased slightly by 0.8 per cent to 240.3 million tons.

World steel consumption

Estimated apparent steel consumption for 2001 was 773 million tons, only 0.5 per cent above the 2000 level. The main increase was in China, by a hefty 13.3 per cent to 160 million tons. In South America growth was 7.8 per cent to 29 million tons. Elsewhere, demand contracted (as in the NAFTA countries, where it was down 8.2 per cent to 134 million tons) or stagnated (as in the European Union, where it stood at 142 million tons).

Iron ore trade

The lackluster production output and consumption of steel were reflected in the 2 per cent decrease in iron ore shipments during 2001 to a total of 445 million tons. Brazil and Australia, which account for about two-thirds of world exports, recorded no growth in the first 10 months of 2001. Sweden recorded a 14 per cent reduction in volume shipped over the same period, while South Africa increased shipments by 11 per cent. Other exporters such as Canada and India achieved mixed results, with a 28 per cent decrease for the former over a seven-month period and a 4 per cent increase for the latter over a period of 11 months. Short-term forecasts are gloomy and rest on the rebound of the United States economy, the results of the tariffs imposed by this country on foreign steel and the willingness of Japanese steelmakers to replenish stocks.

Coal trade

Coal shipments rose 7 per cent in 2001 to an all-time record of 560 million tons. As in 2000, when thermal coal shipments grew 11.3 per cent to reach 344 million tons, the growth of coal shipments in 2001 resulted from increases in shipments of this type of coal.

China registered the largest growth in exports, 58 per cent over a 10-month period to 72.2 million tons. During the first half of 2001, Colombia recorded a 25 per cent increase to 21.8 million tons and Indonesia a 17 per cent increase to 31.3 million tons. Australia, by far the largest exporter and accounting for slightly more than one-third of all shipments, increased exports by 4 per cent over a 10-month period to 161.9 million tons. Shipments by North American exporters decreased by 15 per cent in the United States and 7 per cent in Canada. Coal imports to Japan, the largest importer, grew by 6.6 per cent in

2000 to 144.4 million tons and again in 2001 by 9 per cent. Major suppliers are Australia and China. Exports by China following its recently concluded agreement with Japan would increase the demand for small vessels to the detriment of Cape-size tonnage.

Grain trade

World grain trade reached 220 million tons in 2001, a decrease of 4.3 per cent from the previous year, when it had reached 230 million tons, almost equally split between wheat and coarse grains (mainly maize and sorghum). The largest exporter, the United States, decreased shipments over 10 months of 2001 to 66.7 million tons, a decrease of 6 per cent from the same period of 2000, when exports reached 70.8 million tons. Over the same period of 2001, only Argentina recorded an increase of 2 per cent in shipments, while other exporters such as the European Union, Australia and Canada reduced shipments by 20, 17 and 12 per cent respectively. This decrease in shipments contrasts with increases in the growth rate for all these countries in 2000 and the growth of shipments from the Black Sea during 2001. As usual, imports were spread across many regions of the world. In 2000, imports to Japan, the largest importer, contracted by 1.6 per cent to 29.9 million tons. Imports to China and Mexico increased by 81.9 and 6.8 per cent to 13 million tons and 16.5 million tons respectively. Shipments are expected to continue at the same level in 2002 even though stock is lower in many importing countries.

Other bulk trade

During 2001 shipments of bauxite and alumina, the primary inputs for the aluminium industry, are estimated to have decreased by 3.2 per cent to 51 million tons. Bauxite shipments fell by 3.3 per cent to 29.0 million tons, while alumina shipments decreased by 3.1 per cent to 22.0 million tons. Final figures for 2000 indicate that bauxite shipments from West Africa, about half of the world total, decreased by 1.3 per cent, while alumina shipments from Australia, also about half of the world total, increased by 2.7 per cent. Bauxite shipments from Jamaica were down by 14.6 per cent and those of alumina increased by 11.6 per cent. During 2001 production of primary aluminium products dropped by 3 per cent to 20.6 million tons. The contraction in production was acute in North America, by 13.6 per cent, and in Latin America, 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 per cent).

Shipments of rock phosphate also increased by 2.6 per cent during 2001, reaching 29.6 million tons in a recovery from three consecutive years of declining trade. Morocco, the major exporter accounting for about one-third of world exports, shipped 10.8 million tons, up 3.5 per cent from 2000 levels. Other traditional exporters also benefited: exports from Jordan went up by 15.3 per cent to 3.6 million tons and those from Togo by 6.9 per cent to 1.3 million tons. The most impressive performance was the 42.4 per cent increase in exports from China to a total of 4.9 million tons. Imports by the European Union and other Asian countries accounted in equal shares for the increased exports.

Trade in the minor dry bulk goods, a heterogeneous mix of merchandise, is believed to have reached 0.8 billion tons in 2001. Steel and forest products make up about half of the tonnage involved in this trade, while the remaining tonnage is almost equally split between metals and minerals (coke, pig iron, cement, manganese ore, etc.) and agriculture-related cargoes (sugar, rice, oilseeds, potash, phosphates, etc.). Overall forecasts for these cargoes indicate a similar volume of shipments for 2002, with some products (e.g. sugar) showing more growth than others (e.g. steel products).

4. Liner shipments of containerized cargo

The balance of 1.6 billion tons of dry cargo is increasingly being carried in containers along 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. However container traffic continues to make inroads into other types of traffic, such as refrigerated cargo.

Shipments of containerized cargoes differ from the other dry bulk cargoes in the increased use of trans-shipment by feeder vessels to final destinations, a practice which complements the direct calls of larger vessels. Preliminary information available for 2001 provides the following trade pattern for the three main containerized routes – trans-Pacific, transatlantic and Europe-Asia – during the past year.

On the trans-Pacific route, the imbalance widened as flows in the dominant leg, Asia to North America, increased by 1.7 per cent to 6.8 million TEUs, while in the opposite direction trade flows decreased by 2 per cent to 3.1 million TEUs. Eastbound flows were unevenly distributed among lines: Hanjin increased lifting by

11.2 per cent, probably by taking over some of the trade of another Korean line, the failed Cho Yang, while Evergreen reduced lifting by 14.1 per cent. The poor results in the westbound direction are attributable to lackluster demand from Japan, which accounts for up to 40 per cent of westbound trade, and the slowdown of the United States economy, which exported during the first half of the year its backlog of unsold goods. On the Asia-Europe route, the imbalance increased slightly, with the dominant leg, Asia to Europe, growing 1.7 per cent to 4.6 million TEUs and flows from Europe to Asia increasing 1.1 per cent to 3.6 million TEUs. Reduced economic activity at both ends of the trade belied earlier bold forecasts. On the transatlantic route, up to the third quarter of 2001, the dominant leg from Europe to North America maintained a healthy 2.7 per cent growth while modest 0.4 per cent growth was observed for the eastbound direction. By the end of the year, however, decreases in traffic of 15 and 10 per cent were seen. Overall traffic flows on these major routes reached 23.3 million TEUs.

Traffic from Europe to Africa was steady at 1.4 million TEUs southward and 1 million TEUs northward. A small decrease of 1 per cent occurred in

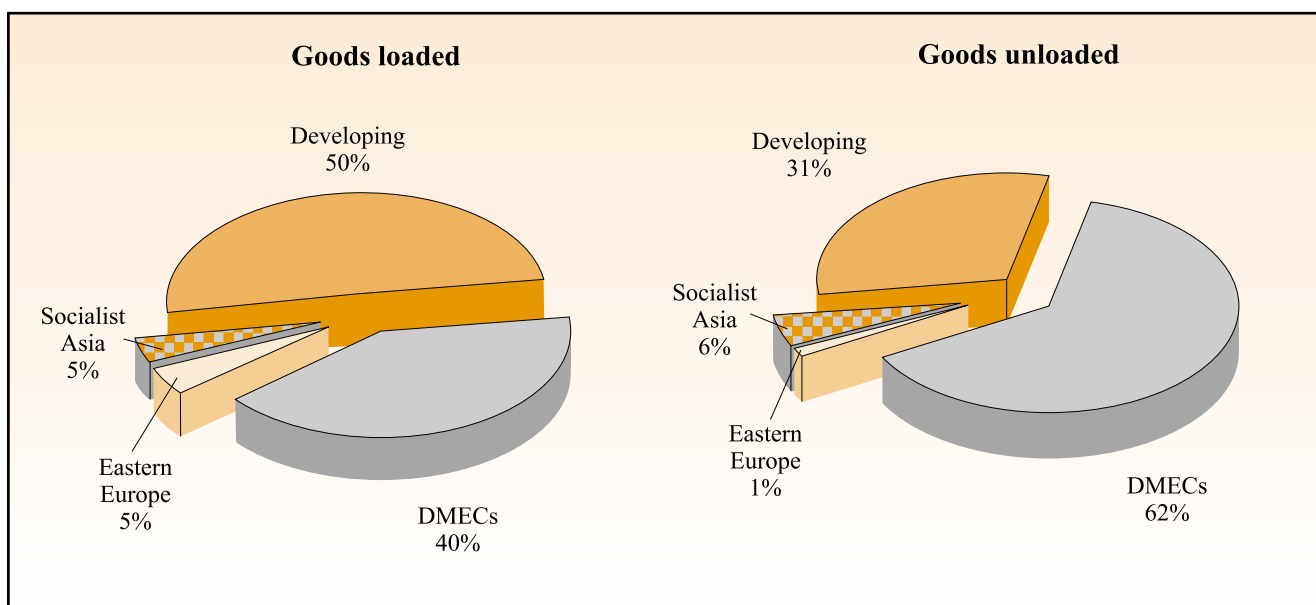
routes from Europe to the Caribbean/South America and Oceania – to 0.7 and 0.2 million TEUs respectively. Northward trade from these regions to Europe is believed to have risen by 1 per cent to 1.3 and 0.2 million TEUs respectively. Overall traffic between Europe and the Caribbean/South America decreased by 0.2 per cent, with imbalances of empty boxes being a concern for carriers. Cargo volumes between North America and Central and South America were steady at about 1.4 million TEUs in both directions. Cargo flows between Northeast Asia and Southeast Asia held steady at 1.67 million TEUs in the southward direction, with a small increase to 2 million TEUs in the opposite direction. Trade between Asia and Oceania was also steady at 0.5 million TEUs southward and 0.9 million TEUs northward. Overall traffic flows along these North-South routes amounted to 12.7 million TEUs, with modest growth of 0.7 per cent.

5. World shipments by country group

The breakdown of the 5.88 billion tons of world seaborne trade by major cargo segment and country group is shown in table 4 and figure 3. Developed market-economy countries' shares of goods loaded and unloaded in 2001

Figure 3

World seaborne trade by country groups
(percentage change in tonnage, 2001)



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

are 40.1 per cent and 61.8 per cent respectively of total world volume. For these countries, crude oil and petroleum products account for 5.1 and 22.1 per cent of total world exports respectively, while imports account for 67.9 per cent for crude oil and 52.5 per cent for petroleum products. A further breakdown by region appears in Annex II. Among market-economy countries, Europe remains the most important exporter of crude oil and petroleum products, with a total of 103.9 million tons (4.9 per cent of the world total). North America is the largest importer of crude oil and petroleum products, with 593.0 million tons (26.6 per cent), closely followed by Europe, with 531.6 million tons (23.8 per cent), and Japan, with 264.2 million tons (11.8 per cent).

In the dry bulk segment, the share of developed market-economy countries remained at 58 per cent for exports and 60.5 per cent for imports. Again, Annex II gives insight into the regional distribution of these cargoes. Europe remains the largest dry cargo market for exports and imports, with 29.3 per cent and 37.8 per cent respectively. Two pairs of countries in North America (the United States and Canada) and Oceania (Australia and New Zealand) were also large exporters of dry shipments, with shares of 10.3 per cent and 11.0 per cent respectively. This underlines their important role in shipping the three major dry bulk commodities – iron ore, coal and grain.

During 2001 the share of developing countries in total seaborne exports was 50.5 per cent, while their share of seaborne imports was 30.8 per cent. These percentages have remained fairly stable since 1998, although there has been a slight upward trend for imports. The trade structure for these countries contrasts sharply with that of developed market-economy countries. The developing countries' combined share of exports of crude oil and petroleum products represented 89.9 per cent and 72.2 per cent respectively. For imports, the shares were 27 per cent for crude oil and 42.3 per cent for petroleum products. In the dry cargo sector, the share of developing countries' exports reached 30.2 per cent of world exports, while their imports maintained last year's share of 30.4 per cent of world imports.

There were regional variations among groups of developing countries. Developing countries in Asia claimed the largest share of exports and imports – 29.8 per cent and 21.5 per cent of world exports and imports respectively. The share of developing countries in America was 13.3 per cent of world exports and 5.9 of world imports. The shares for African countries

were about half of those for America: 7 per cent of world exports and 2.9 of world imports. Considerably smaller were the shares for developing countries in 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).

In specific trades, the same trend was evident. The share of Asian developing countries in world exports of crude oil was 55.2 per cent, and their share in exports of petroleum products was 44.1 per cent. These figures reflect the role of Middle Eastern oil producers and the refining activity in the Far East. The share of developing countries of Africa in exports of crude oil was higher than that of those in America – the figures were 18.7 and 15.8 per cent respectively. For exports of petroleum products, however, the opposite was true – the figures were 7.9 per cent for developing countries in Africa and 19.7 per cent for those in America. Again, for exports of dry cargoes, Asian developing countries claimed the largest share (16.7 per cent), followed by American developing countries (11.3 per cent) and African developing countries (2.2 per cent).

For imports of crude oil, the share of developing countries in Asia was 18.7 percent of world imports of this commodity. The shares for developing countries in America and Africa were 5.2 per cent and 2.7 per cent respectively. For imports of petroleum products, the corresponding shares for developing countries in Asia, America and Africa were 28 per cent, 10.7 per cent and 2.2 per cent. Imports of crude oil into developing countries in Europe reached 0.4 per cent of world imports, similar to the percentage for imports of petroleum products. Developing countries in Oceania showed negligible imports of crude oil, compatible with the scant refining capacity in the region, while their share of world petroleum product imports was 1.1 per cent.

The share of socialist countries in Asia in world exports for 2001 was 4.6 per cent, and their share of world imports was 6.2 per cent. In recent years imports have risen in line with the increased role of trade in the economic development of China and the high rates of economic growth achieved by this country. The largest share for countries of Central and Eastern Europe (formerly part of the USSR) is for exports, 4.7 per cent, due to shipments of crude oil and its products from the Black Sea. Seaborne imports by these countries reached 1.2 per cent of the world total and were complemented by 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 2001 reached 22,682 billion ton-miles, a decrease of 1.5 per cent from the 2000 figure. This decrease is larger than the 1 per cent contraction recorded for cargo volumes and indicates a reduction in average transport distance for world seaborne cargoes. Haulage for crude oil and oil products resulted in ton-miles decreasing by 4.6 per cent, which, when compared to the modest 0.6 per cent increase for cargo volume, reflects increased shipments of crude oil from nearby sources (e.g. from the west coast of Africa to North America and from the Black Sea to Europe)

as well as the intensive use of trans-shipment and the Sumed pipeline from the Red Sea to the Mediterranean.

For all dry cargoes, ton-miles increased by 1.2 per cent, while tonnage transported decreased by 1.9 per cent. Haulage of the five main dry bulks in ton-miles increased by a modest 0.9 per cent, slightly lower than the 1.2 per cent increase in cargo volume, indicating that these cargoes were transported more or less along the same routes as before. However, ton-miles for the remaining dry cargoes, minor bulks and liner cargo, increased by 1.2 per cent, while the cargo volumes transported shrank by 1.5 per cent, indicating that these cargoes moved over larger distances during 2001.

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
1998	7 889	1 970	9 859	2 306	2 419	1 064	6 129	5 600	21 588
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	7 725	2 070	9 795	2 520	2 650	1 200	6 697	6 190	22 682

Source: Fearnleys, *Review 2001*.

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