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Chapter II
Structure and ownership of the world fleet

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Chapter 2

STRUCTURE AND OWNERSHIP OF THE WORLD FLEET

This chapter reviews the supply-side dynamics of the world maritime industry. The information and data comprehensively cover the structure and ownership of the world fleet. The chapter also reviews deliveries and demolition of vessels, tonnage on order, newbuilding prices and markets for second-hand tonnage.

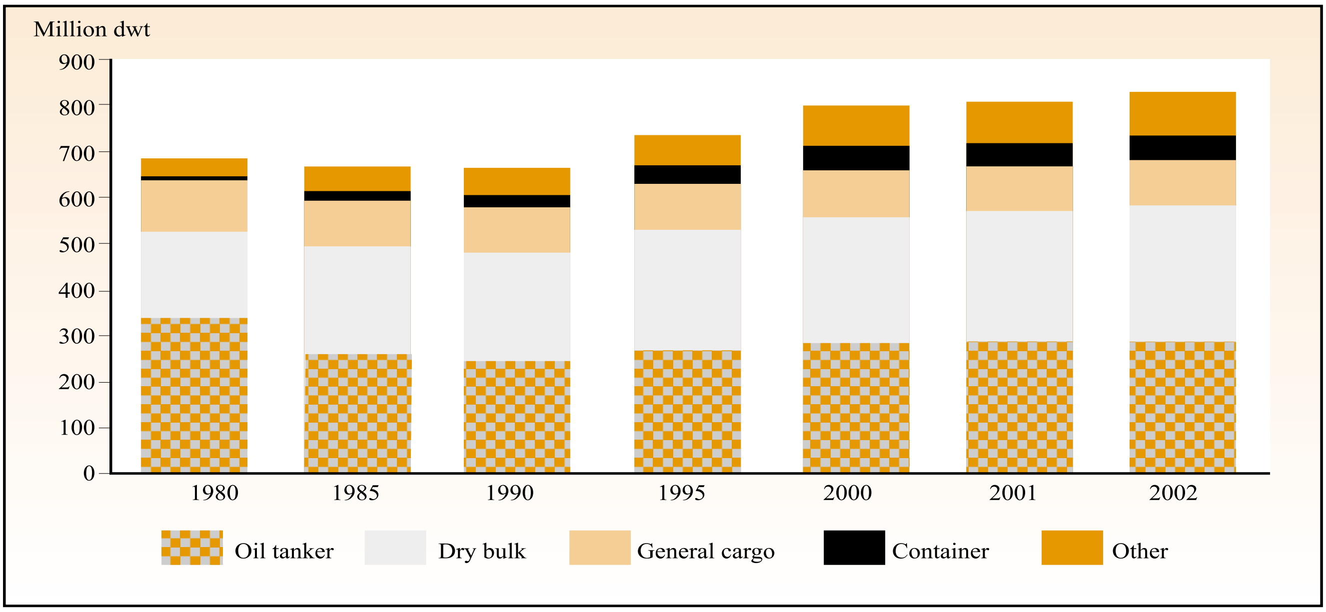
A. STRUCTURE OF THE WORLD FLEET

1. Principal types of vessel

Comparative time-series data on the world fleet for 2000, 2001 and 2002 are provided in figure 4 and table 6. The world merchant fleet amounted to 825.7 million deadweight tons (dwt) on 1 January 2002. This represents a 2.1 per cent increase over 2001, when the world fleet had expanded at a rate of 1.2 per cent from the tonnage in 2000. The increase is the highest since 1997, when the fleet expanded by 2.3 per cent, and almost double that of the previous year. Newbuilding deliveries were 45.2 million dwt, while 27.9 million dwt of tonnage was broken up and lost. The result was a net gain of 17.3 million dwt in 2001.

Figure 4

World fleet by principal types of vessel, selected years



Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

Table 6

World fleet size by principal types of vessel, 2000–2002[a]

(beginning-of-year figures, in thousands of dwt)

Principal types	2000	2001	2002	Percentage change 2001/2002
Oil tankers	282 458	285 441	285 519	*0.0*
	35.4	*35.3*	*34.6*	
Bulk carriers	276 091	281 654	294 588	*4.6*
	34.6	*34.8*	*35.7*	
Ore/bulk/oil	16 723	11 391	14 456	*26.9*
	2.1	*1.4*	*1.8*	
Ore/bulk	259 368	270 263	280 132	*3.7*
	32.5	*33.4*	*33.9*	
General cargo ships	101 481	102 653	99 872	*-2.7*
	12.7	*12.7*	*12.1*	
Container ships	63 637	69 216	77 095	*11.4*
	8.0	*8.6*	*9.3*	
Other types of ships	75 328	69 412	68 578	*-1.2*
	9.4	*8.6*	*8.3*	
Liquefied gas carriers	17 334	18 525	19 074	*3.0*
	2.2	*2.3*	*2.3*	
Chemical tankers	7 813	8 044	7 974	*-0.9*
	1.0	*1.0*	*1.0*	
Miscellaneous tankers	849	768	785	*2.2*
	0.1	*0.1*	*0.1*	
Ferries and passengers ships	4 944	5 038	5 319	*5.6*
	0.6	*0.6*	*0.6*	
Others	44 388	37 037	35 426	*-4.3*
	5.6	*4.6*	*4.3*	
World total	798 995	808 376	825 652	*2.1*
	100.0	*100.0*	*100.0*	

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

[a] Percentage shares are shown in italics.

The tonnage of oil tankers stagnated, but the number of dry bulk carriers increased in 2001 by a healthy 4.6 per cent. These two types of ships represented 70.3 per cent of total tonnage in 2001, a slight increase from 70.1 per cent in the previous year. The fleet of general cargo ships decreased in 2001 by 2.7 per cent and represented 12.1 per cent of the total world fleet. In terms of deadweight tonnage, the fleet of container ships increased by 7.9 million dwt or 11.4 per cent, which now represents 9.3 per cent of the total world Ofleet. This relatively high rate of increase reflects the growing portion of manufactured goods being traded which are generally moving in containers. Deadweight tonnage of liquid gas carriers (mainly LNG and LPG carriers) and ferries/passenger ships has been steadily increasing.

2. World container ship fleet

The world fleet of fully cellular container ships continued to expand substantially in 2001 in terms of both number of ships and their TEU capacity, reaching 2,755 ships with a total capacity of 5,356,650 TEUs by the beginning of 2002, an increase of 6.2 per cent in the number of ships and 13.2 per cent in TEU capacity over the previous year (see table 7). Ship sizes also continued to increase, with average carrying capacity per ship growing from 1,824 TEUs in 2000 to 1,944 TEUs in 2001, reflecting the building of larger vessels to achieve economies of scale. By end-2001, the well-defined trend towards large container vessels continued unabated. Vessels over 3,000 TEU capacity made up 71 per cent of total deliveries of cellular tonnage for the year and 72.2 per cent of the orderbook.

Table 7

Distribution of the world fleet and TEU capacity of fully cellular container ships, by country groups, in 2000, 2001 and 2002[a]

(beginning-of-year figures)

Flags of registration by groups of countries	Number of ships			TEU capacity and percentage shares[a]		
	2000	2001	2002	2000	2001	2002
World total	2 433	2 595	2 755	4 297 874	4 734 079	5 356 650
		100.0	*100.0*	*100.0*	*100.0*	*100.0*
Developed market-economy countries	693	724	759	1 530 655	1 665 709	1 785 609
		27.9	*27.5*	*35.6*	*35.2*	*33.3*
Major open-registry countries	944	1 003	1 117	1 698 576	1 919 117	2 317 543
		38.7	*40.5*	*39.5*	*40.5*	*43.3*
Total developed market-economy and major open-registry countries	1 637	1 727	1 876	3 229 231	3 584 826	4 103 152
		66.6	*68.1*	*75.1*	*75.7*	*76.6*
Countries of Central and Eastern Europe (including former USSR)	34	32	30	26 699	25 457	24 590
		1.2	*1.1*	*0.6*	*0.5*	*0.5*
Socialist countries of Asia	89	106	98	96 450	105 344	105 344
		4.1	*3.6*	*2.2*	*2.2*	*2.0*
Developing countries	587	644	674	803 135	883 883	994 024
		24.8	*24.5*	*18.7*	*18.7*	*18.6*
of which:						
Africa	10	11	10	10 719	10 841	10 674
		0.4	*0.4*	*0.2*	*0.2*	*0.2*
Americas	192	214	231	214 153	253 822	273 893
		8.2	*8.4*	*5.0*	*5.4*	*5.1*
Asia	380	416	432	572 212	617 768	708 883
		16.0	*15.7*	*13.3*	*13*	*13.2*
Europe	5	3	1	6 051	1 452	574
		0.1	*0*	*0.1*	*0*	*0*
Oceania	0	0	0	0	0	0
	0	*0*	*0*	*0*	*0*	
Other, unallocated	86	86	77	142 359	134 569	129 540
		3.3	*2.8*	*3.3*	*2.8*	*2.4*

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

[a] Percentage shares are shown in italics.

3. Age distribution of the world merchant fleet

Table 8 provides data on the average age distribution of the world merchant fleet by types of vessels and by groups of countries and territories. The average age of the total world fleet was unchanged in 2001 at 13.9 years. By type of vessel, the average age of tankers decreased by almost one year to 13.2 years in 2001. The share of tanker tonnage 15 years and older decreased to 42.7 per cent in 2001 from 47.8 per cent in 2000, reflecting acceleration in scrapping activities, which in 2001 reached 15.7 million dwt (compared to 13.5 million dwt in 2000). The average age of the dry bulk carrier fleet increased slightly to 13.7 years from 13.2 years in 2000. Container ships continued to be the youngest fleet in 2001, with an average age of 11 years, up from 10.4 years. This trend is reflected in the share of tonnage between 0 and 4 years of age, 30.1 per cent – the highest among all categories of vessels.

By country grouping, the major open-registry countries continued to have the lowest average age of all ships (13.3 years in 2001 versus 13.4 years in 2000), as the tendency to register newbuildings under open-registry flags was maintained. However, developed market-economy countries continued their steady trend of lowering the average age of their fleet and reached an average age of 13.3 years in 2001 compared to 13.6 years in 2000. In this group, the average age of container ships moved up slightly to 10.3 years in 2001, as compared with 10.2 years in 2000. The average age of all ships registered in developing countries (excluding major open-registry countries) increased slightly in 2001 to 14.3 years as compared with 14.2 years in 2000. For this group, the average age of general cargo vessels was reduced by 0.5 years to 18.5 years, while that of container ships increased by 1.2 years, to 11.2 years. The average age of tonnage registered in the socialist countries of Asia fell slightly to 17.9 years in 2001. The countries of Central and Eastern Europe continued to have the oldest fleet (18.9 years in 2001 versus 18.6 years in 2000), with vessels built more than 15 years ago representing about three quarters of the total fleet and tankers being the oldest class of ships at 20.1 years.

4. Delivery of newbuildings

Newbuilding activities attained the highest level ever recorded in terms of deadweight tons, with deliveries totalling 45.2 million dwt in 2001 (see table 9), an increase of 1.8 per cent from deliveries in 2000. The total number of vessels delivered decreased to 1,470 units from 1,544 units in 2000 and reflected the steady trend towards larger vessels. This high level of delivery was sustained primarily by bulk carrier deliveries of 21 million dwt, an impressive 61.5 per cent increase from the 2000 level. The number of newbuildings also increased to 314 units in 2001 from 186 units in 2000. The average deadweight tons per vessel was at 66,800, slightly lower than the previous year's figure of 69,800. Deliveries of tankers were down by 5.2 million dwt, about 25.1 per cent, from the 2000 level. Another feature was the slightly smaller size of tankers delivered in 2001. In the previous year, the average deadweight tonnage had been 135,300, whereas in 2001 the size was 132,500. Newbuildings for other types of vessels, including general cargo ships and container ships, decreased both in number and in deadweight tonnage to 1,039 units and 8.7 million dwt in 2001.

5. Demolition of ships

Trends in tonnage, types and average age of broken-up vessels are shown in tables 10, 11 and 12. In 2001, total tonnage sold for demolition increased substantially by 25.2 per cent from the tonnage of the previous year to 27.8 million dwt, equivalent to 3.4 per cent of the world total deadweight tons, as compared to 2.7 per cent in 2000. Break-up of tankers made up the largest share of total demolition. Sales of tankers for break-up increased significantly by 16.3 per cent to 15.7 million dwt as a result of depressed tanker freight rates during most of the year. ULCC/VLCC demolition sales went up from 25 units in 2000 to 29 units in 2001. Sales of Suezmaxes also increased from 17 units in 2000 to 29 units in 2001, while those of Aframaxes were almost steady at 18 units in 2000 and 19 units in 2001. In the smaller category of crude oil tankers, the reverse was true: 58 ships were sold for scrap in 2000, while 35 units were sold in 2001. The average age of tankers sold for demolition was up slightly from 26.9 years in 2000 to 28 years in 2001. The number of dry bulk carriers sold for scrap almost doubled to 8.1 million dwt in 2001, up from 4.6 million dwt in 2000. There was an increase of scrapping of all sizes of bulk carriers. Demolition sales of vessels over 120,000 dwt went up from 3 units in 2000 to 9 units in 2001. For vessels in the range of 60,000 to 120,000 dwt, sales jumped from 8 units in 2000 to 37 units in 2001. For Handymax tonnage there was a slight decrease in demolition sales from 19 units in 2000 to 16 units in 2001. The average age of all dry bulk carriers broken up was 26.7 years in 2001, slightly higher than the previous year. Other ship types had a similar trading life in 2001, with container ships being sold to breakers with an average age of 26.9 years and general cargo ships with an average age of 27.4 years.

Table 8

Age distribution of the world merchant fleet, by types of vessel, as of 1 January 2002

(percentage of total dwt)

Country grouping	Types of vessel	0–4 years	5–9 years	10–14 years	15–19 years	20 years and over	Average age (years) 2001[a]	Average age (years) 2000[a]
World total	All ships	19.1	18.6	12.5	15.7	34.1	13.9	13.9
	Tankers	19.4	23.3	14.5	8.7	34.0	13.2	14.1
	Bulk carriers	17.6	18.9	11.9	22.9	28.7	13.7	13.2
	General cargo	14.1	10.5	10.6	20.9	44.0	16.2	17.0
	Container ships	30.1	23.8	11.4	11.6	23.0	11.0	10.4
	All others	18.3	14.4	12.6	12.6	42.1	14.9	15.0
Developed market-economy countries	All ships	21.7	18.3	13.2	14.9	31.9	13.3	13.6
	Tankers	22.4	21.2	11.0	9.4	36.0	13.3	14.5
	Bulk carriers	12.6	19.2	11.5	26.7	30.1	14.6	13.5
	General cargo	21.5	13.7	11.4	19.9	33.5	14.0	14.3
	Container ships	35.0	19.3	16.8	9.1	19.8	10.3	10.2
	All others	20.2	16.3	15.8	13.0	34.8	13.8	13.6
Major open-registry countries	All ships	20.4	20.6	12.8	15.2	31.0	13.3	13.4
	Tankers	17.9	25.8	15.8	7.0	33.5	13.1	13.9
	Bulk carriers	19.4	19.3	12.8	21.8	26.8	13.3	12.8
	General cargo	17.9	12.6	12.3	23.7	33.5	14.6	15.6
	Container ships	29.4	24.2	9.2	11.9	25.4	11.4	10.3
	All others	24.6	16.9	9.0	9.2	40.2	13.8	15.1
Subtotal DMECs & Major open-registry countries	All ships	20.9	19.7	12.9	15.1	31.3	13.3	13.5
	Tankers	19.4	24.2	14.2	7.8	34.4	13.2	14.1
	Bulk carriers	17.8	19.3	12.5	22.9	27.5	13.6	13.0
	General cargo	19.2	13.0	12.0	22.4	33.5	14.4	15.2
	Container ships	31.8	22.1	12.4	10.7	23.0	10.9	10.2
	All others	22.1	16.6	12.8	11.3	37.1	13.8	14.3
Countries of Central and Eastern Europe	All ships	1.8	4.9	17.4	21.1	54.8	18.9	18.6
	Tankers	2.6	1.8	12.1	18.2	65.4	20.1	19.8
	Bulk carriers	0.0	2.8	14.9	24.7	57.7	19.7	18.7
	General cargo	1.7	5.5	15.9	19.9	57.1	19.1	18.7
	Container ships	14.5	8.3	12.7	31.3	33.3	15.5	14.2
	All others	1.6	5.7	21.6	21.4	49.7	18.3	17.9
Socialist countries of Asia	All ships	6.4	14.1	6.8	16.5	56.2	17.9	18.1
	Tankers	7.8	21.8	8.4	11.8	50.1	16.5	16.8
	Bulk carriers	6.5	16.2	4.9	17.1	55.2	17.7	17.5
	General cargo	4.7	4.9	6.3	15.4	68.7	20.0	20.2
	Container ships	12.3	29.2	13.3	29.3	16.0	12.6	14.1
	All others	4.4	12.8	7.4	14.1	61.2	18.7	19.4
Developing countries (excluding open-registry countries)	All ships	17.8	17.7	11.4	17.4	35.7	14.3	14.2
	Tankers	21.5	21.4	16.7	11.2	29.2	12.7	13.6
	Bulk carriers	20.0	19.6	11.4	24.1	24.9	13.1	12.7
	General cargo	7.8	7.5	7.3	19.7	57.7	18.5	19.0
	Container ships	26.6	29.4	8.2	12.5	23.3	11.2	10.0
	All others	11.3	10.0	9.2	14.6	55.0	17.4	16.4

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

[a] To calculate the average age, it has been assumed that the ages of vessels are distributed evenly between the lower and upper limits of each age group. For the 20-years-and-over age group, the mid-point has been assumed to be 23.5 years.

Table 9

Deliveries of newbuildings, selected years

Year	Oil tankers[a]		Combined carriers[a]		Dry bulk carriers[a]		Others[b]		Total	
	No. of vessels	Million dwt	No. of vessels	Million dwt	No. of vessels	Million dwt	No. of vessels	Million dwt	No. of vessels	Million dwt
1980	99	7.0	4	0.4	135	4.7	548	6.2	786	18.4
1985	72	3.9	10	0.7	339	14.7	529	5.3	950	24.6
1990	81	8.7	0	0.0	119	9.6	523	4.4	723	22.8
1995	83	10.9	0	0.0	254	15.4	672	7.4	1 009	33.7
1996	98	11.6	3	0.3	268	17.5	713	8.7	1 082	38.2
1997	69	7.5	3	0.3	299	18.8	696	10.2	1 067	36.8
1998	120	12.6	0	0.0	217	11.6	704	11.1	1 041	35.3
1999	161	19.1	4	0.4	195	13.0	585	8.4	940	40.5
2000	156	21.0	0	0.0	193	13.4	1 195	10.0	1 544	44.4
2001[c]	117	15.5	0	0.0	314	21.0	1 039	8.7	1 470	45.2

Source: Compiled by the UNCTAD secretariat on the basis of data from Fearnleys, *Review 2001*.

[a] Vessels over 10,000 dwt.

[b] Sea-going, cargo-carrying vessels of over 1,000 gross registered tons (grt).

[c] Provisional.

Table 10

Broken-up tonnage trends, 1990 and 1997–2001

Broken-up tonnage	1990	1997	1998	1999	2000	2001
Tonnage sold for breaking (million dwt)	16.9	14.8	25.2	30.7	22.2	27.8
Broken-up tonnage as a percentage of the total world fleet	2.4	1.9	3.2	3.9	2.7	3.4

Sources: Compiled by the UNCTAD secretariat on the basis of data supplied by Fearnleys, *Review*, various issues, and Lloyd's Register – Fairplay.

Table 11

Tonnage reported sold for breaking, by types of vessel, 1997–2001

(millions of dwt and percentage shares)

Years	Million dwt						Percentage share					
	Tankers	Combined carriers	Bulk carriers	Others	Total	World fleet	Total	Tankers	Combined carriers	Bulk carriers	Others	Total
1997	3.6	0.4	8.2	2.6	14.8	775.9	1.9	24.2	2.9	55.1	17.9	100.0
1998	7.4	1.4	12.8	3.5	25.2	788.7	3.2	29.4	5.7	50.9	14.0	100.0
1999	16.7	1.1	9.7	3.3	30.7	799.0	3.8	54.2	3.7	31.5	10.6	100.0
2000	13.5	1.0	4.6	3.1	22.2	808.4	2.7	60.9	4.3	20.8	14.0	100.0
2001	15.7	0.8	8.1	3.2	27.8	825.7	3.4	56.5	2.7	29.1	11.7	100.0

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Fearnleys, *Review*, various issues.

Table 12

Average age of broken-up ships, by type, from 1997 to 2001[a]

(years)

Year	Tankers	Dry bulk carriers	Container ships	General cargo ships
1997	28.2	25.3	22.8	26.9
1998	28.2	25.2	25.5	26.7
1999	26.2	25.0	24.8	26.7
2000	26.9	25.9	25.7	27.3
2001	28.0	26.7	26.9	27.4

Source: Compiled by the UNCTAD secretariat on the basis of data in Institute of Shipping Economics and Logistics (2002), *Shipping Statistics and Market Review,* Jan./Feb., table 1.3.2.

[a] Ships of 300 grt and over.

B. OWNERSHIP OF THE WORLD FLEET

1. Distribution of world tonnage by country groups

The total world fleet continued to expand in 2001 by 2.1 per cent to 825.7 million dwt (see figure 5 and table 13). Tonnage of developed market-economy countries increased at about the same rate (4.1 million dwt to 207.5 million dwt). Major open-registry countries in 2001 expanded their tonnage above the world average by 10.2 million dwt (2.6 per cent) to a record high of 402.4 million dwt. Approximately two-thirds of these beneficially owned fleets are owned by developed market-economy countries and the rest by developing countries. The share owned by developing countries has continued to increase. Tonnage registered in developing countries in 2001 increased by 2 million dwt (1.3 per cent) to 159.0 million dwt. This increase resulted from investments made by shipowners in Asian developing countries, whose fleets expanded by 1.3 million dwt (1.1 per cent) to 117 million dwt, accounting for 73.6 per cent of the developing countries' total fleet. The fleet of developing countries of America increased by 0.5 million dwt to 34.6 million dwt, while that of African developing countries decreased by 0.3 million dwt to 5.7 million dwt. A marginal increase of 0.1 million dwt was seen in the fleet of developing countries in Europe, while the small fleet of developing countries in Oceania trebled to 0.6 million dwt. The shares of the socialist countries in Asia and the countries of Central and Eastern Europe in total world tonnage moved in opposite directions in 2001, with the former increasing by 0.4 million dwt and the latter decreasing by 0.1 million dwt.

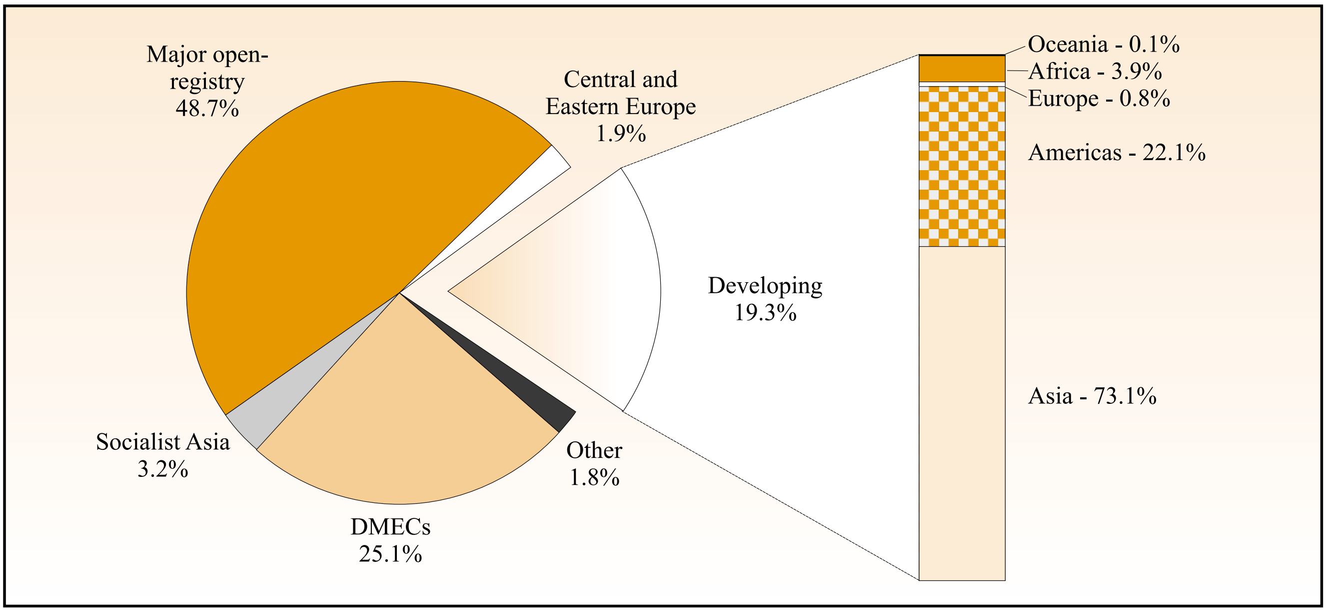
2. Distribution of world tonnages by types of vessel by country groups

Table 14 provides more detailed data on fleet distribution by types of vessel and country groups for 1970, 1980, 1990, 1999, 2000 and 2001. The share of oil tankers in the total world fleet decreased by 0.7 per cent in 2001 compared to 2000. This was more than twice the percentage decrease experienced in 2000 and reflected the high level of broken-up tanker tonnage during 2001. There was a 0.9 per cent increase in the share of bulkers in the total world fleet, which reached 35.7 per cent – slightly above the level reached in the 1990s. The share of general cargo vessels in the world fleet fell to 12.1 per cent, while that of container vessels rose to 9.3 per cent. The share of other types of vessels decreased to 8.3 per cent. In the oil tanker sector, the share of developed market-economy countries increased marginally to

Figure 5

World tonnage by country groups, as of 1 January 2002

(percentage distribution of dwt)



Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

Table 13

Distribution of world tonnage (dwt) by groups of countries of registration, 1980, 1990, 2000, 2001 and 2002[a]

(beginning-of-year figures)

Flag of registration by group of countries	Tonnage and percentage shares[b] in millions of dwt				
	1980[c]	1990[d]	2000	2001	2002
World total	682.8	658.4	799.0	808.4	825.7
	100.0	*100.0*	*100.0*	*100.0*	*100.0*
Developed market-economy countries	350.1	219.0	203.2	203.4	207.5
	51.3	*33.3*	*25.4*	*25.2*	*25.1*
Major open-registry countries	212.6	224.6	384.7	392.2	402.4
	31.1	*34.1*	*48.1*	*48.5*	*48.7*
Countries of Central and Eastern Europe (including former USSR)	37.8	44.3	18.3	16.3	15.4
	5.5	*6.7*	*2.3*	*2.0*	*1.9*
Socialist countries of Asia	10.9	22.1	25.8	26.1	26.5
	1.6	*3.4*	*3.2*	*3.2*	*3.2*
Developing countries	68.4	139.7	153.6	157.0	159.0
	10.0	*21.2*	*19.2*	*19.4*	*19.3*
***of which*:**					
Africa	7.2	7.3	6.1	6.0	5.7
Americas	21.8	25.5	33.9	34.1	34.6
Asia	39.1	89.5	112.2	115.7	117.0
Europe	0.2	13.8	1.2	1.0	1.1
Oceania	0.1	3.6	0.2	0.2	0.6
Other, unallocated	3.0	8.7	13.4	13.4	14.8
	0.4	*1.3*	*1.7*	*1.7*	*1.8*

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

[a] Excludes the United States Reserve Fleet and the United States and Canadian Great Lakes fleets, which in 2001 amounted respectively to 4.2, 1.9 and 1.8 million dwt.

[b] Percentage shares are shown in italics.

[c] Mid-year figure.

[d] End-of-year figure.

Table 14

Percentage shares of world tonnage, by types of vessel and country groups, in 1970, 1980, 1990, 1999, 2000 and 2001 [a b]

	Year	Total dwt		Oil tankers	Bulk carriers[c]	General cargo	Container ships	Other ships
		Million dwt	Percentage of world total	Percentage share by vessel type[d]				
World total	1970	326.1	100.0	39.4	20.2	30.2	0.9	9.3
	1980	682.8	100.0	49.7	27.2	17.0	1.6	4.5
	1990	658.4	100.0	37.4	35.6	15.6	3.9	7.5
	1999	799.0	100.0	35.5	34.5	13.0	8.0	9.0
	2000	808.4	100.0	35.3	34.8	12.7	8.6	8.6
	2001	825.7	100.0	34.6	35.7	12.1	9.3	8.3
Developed market-economy countries	1970	211.9	65.0	63.9	69.2	65.6	99.0	61.3
	1980	350.1	51.3	52.5	52.7	43.4	74.3	50.4
	1990	219.0	33.3	37.3	29.5	23.1	46.5	45.2
	1999	203.2	25.4	30.5	17.0	19.2	34.6	38.6
	2000	203.4	25.2	30.0	16.9	19.6	34.4	37.6
	2001	207.5	25.1	30.6	16.9	20.1	32.8	36.3
Open-registry countries	1970	70.3	21.6	26.4	24.1	7.6	1.0	3.6
	1980	212.5	31.1	36.2	31.7	20.8	13.5	17.0
	1990	224.6	34.1	41.6	33.2	26.2	21.1	24.2
	1999	384.7	48.1	50.2	54.9	37.7	39.8	36.6
	2000	392.2	48.5	50.8	55.0	36.5	40.6	38.2
	2001	402.4	48.7	50.1	55.5	35.7	43.1	39.0
Central and Eastern Europe	1970	20.5	6.2	4.6	2.1	12.0	-	28.8
	1980	37.8	5.5	2.8	4.2	12.3	2.9	19.2
	1990	44.3	6.7	3.2	6.1	15.5	3.2	10.9
	1999	18.3	2.3	1.0	1.8	6.7	0.7	4.4
	2000	16.3	2.0	1.0	1.4	6.3	0.6	3.7
	2001	15.4	1.9	1.0	1.1	6.2	0.5	4.3
Socialist countries in Asia	1970	1.2	0.4	0.1	-	1.1	-	0.3
	1980	10.9	1.6	0.6	1.6	4.7	0.1	1.3
	1990	22.1	3.4	1.1	3.6	8.5	4.2	2.2
	1999	18.3	3.2	1.3	4.1	7.5	2.6	2.0
	2000	26.1	3.2	1.4	4.0	7.6	2.6	1.8
	2001	26.5	3.2	1.4	3.9	7.9	2.3	2.0

Table 14 (continued)

	Year	Total dwt		Oil tankers	Bulk carriers[c]	General cargo	Container ships	Other ships
		Million dwt	Percentage of world total	Percentage share by vessel type[d]				
Developing countries	1970	20.5	6.3	4.7	4.3	12.6	-	5.9
	1980	68.4	10.0	7.7	9.2	17.6	7.6	12.0
	1990	139.7	21.2	16.3	25.6	26.2	16.0	17.4
	1999	153.6	19.2	16.2	20.1	26.5	18.8	17.5
	2000	157.0	19.4	16.1	20.7	27.1	18.7	17.3
	2001	159.0	19.3	16.0	20.8	26.0	18.6	17.0
of which: **Africa**	1970	1.1	0.3	0.2	-	1.3	-	0.7
	1980	7.1	1.0	1.1	0.1	2.3	..	2.1
	1990	7.3	1.1	1.0	0.5	2.3	0.2	2.9
	1999	6.0	0.8	0.6	0.5	1.6	0.3	1.7
	2000	6.0	0.7	0.5	0.4	1.7	0.2	1.8
	2001	5.7	0.7	0.5	0.5	1.6	0.2	1.8
America	1970	8.7	2.7	2.8	1.4	4.3	-	2.5
	1980	21.8	3.2	2.3	3.3	5.6	0.1	3.7
	1990	25.5	3.9	3.0	3.8	6.2	1.4	4.7
	1999	33.9	4.2	2.7	3.5	9.5	4.7	4.8
	2000	34.1	4.2	2.7	3.5	9.6	5.1	4.5
	2001	34.6	4.2	2.9	3.6	9.0	4.9	4.5
Asia	1970	10.7	3.3	1.7	2.9	6.9	-	2.6
	1980	39.1	5.7	4.3	5.7	9.8	2.7	5.7
	1990	89.5	13.6	10.7	17.6	13.7	13.5	9.1
	1999	112.2	14.0	12.9	15.7	15.2	13.6	10.9
	2000	115.7	14.3	12.9	16.5	15.5	13.3	10.9
	2001	117.0	14.2	12.7	16.4	14.9	13.5	10.5
Europe	1970	-	-	-	-	-	-	-
	1980	0.2	-	-	-	0.1	-	-
	1990	13.8	2.1	1.4	2.8	3.2	0.6	0.4
	1999	1.2	0.2	-	0.3	0.2	0.2	-
	2000	1.0	0.1	0.0	0.3	0.2	0.0	0.0
	2001	1.1	0.1	0.0	0.3	0.1	0.0	0.0
Oceania	1970	-	-	-	-	-	-	-
	1980	0.2	-	-	-	0.1	-	-
	1990	3.6	0.5	0.2	0.9	0.8	0.3	0.3
	1999	0.2	-	-	..	0.1	..	0.1
	2000	0.2	0.0	0.0	0.0	0.1	0.0	0.1
	2001	0.6	0.1	0.0	0.0	0.4	0.0	0.2

Table 14 (continued)

	Year	Total dwt: Million dwt	Total dwt: Percentage of world total	Oil tankers	Bulk carriers[c]	General cargo	Container ships	Other ships
				Percentage share by vessel type[d]				
Unallocated	1970	1.7	0.5	0.3	0.3	1.1	-	0.1
	1980	3.0	0.4	0.2	0.6	0.9	1.6	0.1
	1990	8.7	1.3	0.5	2.0	0.5	9.0	0.1
	1999	13.4	1.7	0.8	2.1	2.4	3.5	0.9
	2000	13.4	1.7	0.7	1.9	2.9	3.1	1.3
	2001	14.8	1.8	0.8	1.8	4.0	2.6	1.5

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay. See Annex III(b) for details.

[a] Excludes the United States Reserve Fleet and the United States and Canadian Great Lakes fleets.

[b] Data up to 1990 were as at 1 July and from 1991 onwards are as of 31 December.

[c] Ore and bulk carriers, including combined ore/oil and ore/bulk/oil carriers.

[d] Percentages for 1970 were calculated on the basis of grt.

30.6 per cent in 2001 from 30 per cent in 2000. Conversely, the open-registry countries' share decreased slightly to 50.1 per cent, as compared to 50.8 per cent in the previous year. These very small fluctuations for both country groups contrast with the traditional tendency for owners in developed market-economy countries to register tanker tonnage under open registry. The share of developing countries was almost stable in 2001 at 16 per cent, a very small decrease from the previous year. The share of Asian developing countries decreased by 0.2 per cent in 2001 to 12.7 per cent of the world tanker fleet, while that of the developing countries of America increased by the same percentage to 2.9 per cent.

In the dry bulk carrier sector, the tonnage share of developed market-economy countries in the total world fleet was steady in 2001 at 16.9 per cent, one-third of its share in 1980 (52.7 per cent). Major open-registry countries continued to expand their share to 55.5 per cent in 2001, as compared to 55.0 per cent in 2001 (31.7 per cent in 1980). The developing countries' share expanded marginally in 2001 to 20.8 per cent. The shares of countries in Central and Eastern Europe and socialist countries in Asia decreased marginally to 1.1 per cent and 3.9 per cent of the world fleet respectively.

In the sector of general cargo ships, the fleet developments of the three major country groups diverge from those of the dry bulk carrier sector. Developed market-economy countries increased their share marginally to 20.1 per cent while open-registry countries recorded a drop to 35.7 per cent of the world fleet in connection with this type of vessel. Developing countries reduced their share by 1.1 per cent to 26 per cent, with reductions being most pronounced in America and Asia. Nevertheless, the developing countries' share in the general cargo ship sector continued to be the highest of this country group's shares in the five principal types of vessel.

Developed market-economy countries decreased their share of container ship deadweight tonnage by 1.6 per cent to 32.8 per cent in 2001. On the other hand, the major open-registry countries' share expanded by 2.5 per cent, reaching 43.1 per cent, approximately two-thirds of which represented container ships beneficially owned by owners in developed market-economy countries. The share of developing countries decreased slightly to 18.6 per cent, with the share of Asian developing countries increasing to 13.5 per cent while developing countries in America reduced their share to 4.9 per cent.

3. Fleet structure of main country groups

Table 15 provides data on the structure of the merchant fleet of the main country groups as of 1 January 2002. Developed market-economy countries' tonnage in tankers decreased in 2001 by 0.2 million dwt and maintained its 42.1 per cent share of the group's total fleet. Their share

Table 15

Structure of the merchant fleets of the main country groups as of 1 January 2002[a]

(millions of dwt and percentage shares)

	World fleet		Developed market-economy countries		Open-registry countries		Developing countries		Central and Eastern Europe		Socialist countries of Asia	
	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%
Total fleet	825.7	*100.0*	207.5	*100.0*	402.4	*100.0*	159.0	*100.0*	15.4	*100.0*	26.5	*100.0*
Oil tankers	285.5	*34.6*	87.5	*42.1*	143.2	*35.6*	45.7	*28.7*	2.7	*17.6*	4.1	*15.4*
Bulk carriers	294.6	*35.7*	49.8	*24.0*	163.5	*40.6*	61.3	*38.6*	3.2	*20.5*	11.4	*43.0*
General cargo ships	99.9	*12.1*	20.1	*9.7*	35.7	*8.9*	26.0	*16.3*	6.2	*40.1*	7.9	*29.8*
Container ships	77.1	*9.3*	25.3	*12.2*	33.2	*8.3*	14.4	*9.0*	0.4	*2.6*	1.8	*6.8*
Other ships	68.6	*8.3*	24.9	*12.0*	26.7	*6.6*	11.6	*7.3*	3.0	*19.2*	1.3	*5.1*

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

[a] Ships of 100 grt and over, excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets.

of dry bulk carriers increased by 2.2 million dwt, to 24 per cent from 23.4 per cent in 2000. General cargo ships' and container ships' share of their fleet registered opposite movements, down to 9.7 per cent for the former and up to 12.2 per cent for the latter, as compared to 9.9 per cent and 11.7 per cent in 2000. Major open-registry countries increased their total fleets substantially by 10.2 million dwt. A greater proportion of their fleets was in the oil tanker and dry bulk carrier sectors, with both ship types accounting for 76.2 per cent of their fleet in 2001. Their proportion of oil tankers decreased in 2001 by 1.8 million dwt to 35.6 per cent of the group's total fleet, while the share of dry bulk carriers increased in 2001 by 8.5 million dwt to 40.6 per cent as compared to 39.5 per cent in the previous year. The share of general cargo ships decreased in 2001 by 1.8 million dwt, accounting for 8.9 per cent of the group's total fleet, down from 9.6 per cent in 2000. These countries' container ship fleet expanded in 2001 by 5.1 million dwt to 8.3 per cent of their total fleet (from 7.2 per cent in 2000).

In developing countries, tonnage distribution was characterized by a comparatively high proportion of dry bulk carriers and oil tankers, which represented 38.6 per cent and 28.7 per cent respectively in 2001. In absolute terms, these countries' 2001 tonnage in dry bulk carriers and oil tankers stood at 61.3 million dwt and 45.7 million dwt as compared to 49.8 million dwt and 87.5 million dwt for developed market-economy countries. The share of general cargo ships in this group decreased in 2001 to 26 million dwt compared to 27.8 million dwt in 2000, while the proportion of container ships increased by 1.5 million dwt to 9 per cent in 2001 from 8.2 per cent in the previous year. In the countries of Central and Eastern Europe, general cargo ships were relatively dominant, accounting for 40.1 per cent in 2001, as compared to 39.8 per cent in 2000. On the other hand, container ships have remained unchanged at 0.4 million dwt, representing around 2 per cent, since the early 1990s. The socialist countries of Asia continued to have a predominant share of both dry bulk carriers and general cargo ships. However, the absolute tonnage and proportion of these types of vessel saw virtually no changes in 2001, remaining at 11.4 million dwt or 43 per cent (43.5 per cent in 2000) for dry bulk carriers and increasing to 7.9 million dwt or 29.8 per cent (the same percentage as in 2000) for general cargo ships. The absolute tonnage of container ships was steady in 2001 at 1.8 million dwt or 6.8 per cent (compared to 6.9 per cent in 2000).

C. REGISTRY OF VESSELS

1. The 35 most important maritime countries and territories

Rankings in terms of deadweight for the 35 most important maritime countries and territories are provided in table 16. In 2001, these 35 countries and territories controlled 95 per cent of the world merchant fleet (as compared to 94.8 per cent in 2000). Thailand, which had been 35th in 2000, was replaced in 2001 by a new entrant, Croatia. Croatia had a total tonnage of 2.4 million dwt in 2001 and represented 0.32 per cent of the world total fleet. Ukraine, which had been 32nd in 2000, was replaced by another new entrant, Cyprus, which was 34th in 2001 with 2.5 million dwt, representing 0.35 per cent of the world total fleet. The five largest countries controlled 52 per cent (compared to 51.7 per cent in 2000) and the top 10 countries controlled 70.6 per cent (compared to 69.6 per cent in 2000) of the world total fleet.

Among these most important maritime countries and territories, the trend to register under a foreign flag continued in 2001. The total tonnage registered under foreign flags in 2001 increased to 462.5 million dwt, representing 64.1 per cent of the 35 countries' total fleet, as compared with 450.1 million dwt or 63.3 per cent in 2000. For developing countries and territories the trend for continuing to register their tonnage under foreign flags is a recent one. In 2001, the 13 developing countries and territories listed in the table (including Hong Kong, China, but excluding Taiwan Province of China) had half of their total tonnage registered under foreign flags. In spite of the continuous trend towards flagging out among developing countries, there are significant differences among these countries. The foreign registries of Saudi Arabia and Hong Kong (China) amounted to 90.2 per cent and 68.9 per cent respectively, while the Islamic Republic of Iran, Kuwait and the Philippines made significantly less use of the benefits of foreign flag facilities, which represented 1.3, 7.5 and 13.6 per cent respectively of their fleets. For developed market-economy countries, the share of foreign-registered tonnage stood at 71.8 per cent in 2001.

2. Major open registries

The share of the world merchant fleet in foreign registers continued to expand at almost the same rate as in the previous year. The tonnage distribution of the seven major open-registry countries by principal types of vessel is shown in table 17. The total tonnage registered in 2001 increased marginally by 1 per cent to 375.1 million dwt from 371.3 million dwt in the previous year, when the tonnage had expanded by 2.5 per cent. Panama continued to lead the list, enlarging its fleet in 2001 by 8.9 million dwt or 5.5 per cent, in spite of allegations of illegal trade of certificates for seafarers. Liberia's fleet contracted by 2.6 per cent as a result of changes in the registration authority and subsequent litigation and findings by a United Nations panel of misuse of funds from the registry to bypass the United Nations arms embargo to the country. The combined tonnage of these two countries amounts to 65.3 per cent of the total tonnage of the seven major open-registry countries. In 2001, Malta decreased its fleet by 5.3 per cent to 42.1 million dwt, while the Bahamas' tonnage increased marginally by 1 per cent to 45.3 million dwt. The fleets of the other two major open registries also contracted.

Analysis by type of vessel indicated that dry bulk increased to 40.7 per cent of the total deadweight in 2001 as compared with 39.2 per cent in 2000, followed by oil tankers, whose share fell to 35.3 per cent in 2001 from 37.2 per cent in the previous year. The combined tonnage of these two types of vessels accounts for 76 per cent of the total deadweight. General cargo ships (2,968 ships) accounted for 30.6 per cent of the total number of ships (32.3 per cent in 2000), reflecting the trend in the maritime industry towards flagging out in this sector, followed by dry bulk carriers (2,706 ships or 27.9 per cent of the total).

3. Nationality of vessels

Table 18 indicates the participation of nationals in the registry of the most important open and international registers. The data compare the total tonnage registered in selected countries of registry with the tonnage owned by nationals of, and registered in, the countries of registry. The share of tonnage owned by nationals of open-registry countries is minimal or zero, while ownership by nationals of the two international registries was nearly 85.5 and 97.8 per cent. These two countries (Norway and Denmark) were ranked third and twelfth of the 35 most important maritime countries in 2001.

The true nationalities of the vessels registered in the seven major open registries are analysed in table 19. In 2001, 22 countries or territories accounted for 92 per cent of the total tonnage of the seven major open-registry fleets. This percentage was slightly lower than in 2000. There was no change in the countries included in this year's table, but some moved up and down within the list.

Table 16

The 35 most important maritime countries and territories as of 1 January 2002[a]

Country of domicile[b]	Number of vessels			Deadweight tonnage				
	National flag [c]	Foreign flag	Total	National flag	Foreign flag	Total	Foreign flag as % of total	Total as % of world total
Greece	789	2 374	3 163	45 707 599	100 084 762	145 792 361	68.65	19.20
Japan	793	2 201	2 994	14 243 067	88 505 212	102 748 279	86.14	13.53
Norway	904	815	1 719	27 983 264	34 638 082	62 621 346	55.31	8.25
United States	542	886	1 428	10 198 991	31 971 694	42 170 685	75.81	5.55
China	1 584	652	2 236	21 673 682	20 250 807	41 924 489	48.30	5.52
Germany	422	1 798	2 220	7 172 889	30 746 578	37 919 467	81.08	4.99
Hong Kong (China)	197	360	557	11 305 695	25 055 645	36 361 340	48.91	4.79
Republic of Korea	467	405	872	7 760 866	17 928 141	25 689 007	49.79	3.38
Taiwan Province of China	144	398	542	6 697 751	14 995 465	21 693 216	49.13	2.86
United Kingdom	424	420	844	8 330 039	10 857 257	19 187 296	56.56	2.53
Singapore	455	262	717	11 828 401	6 131 682	17 960 083	34.14	2.37
Denmark	386	343	729	8 048 977	8 993 460	17 042 437	52.77	2.24
Russian Federation	2 156	369	2 525	8 323 628	7 106 843	15 430 471	46.06	2.03
Italy	518	128	646	8 601 392	4 432 127	13 033 519	34.01	1.72
India	363	48	411	10 202 571	1 577 447	11 780 018	13.39	1.55
Saudi Arabia	58	67	125	994 200	9 150 583	10 144 783	90.20	1.34
Turkey	447	116	563	7 762 415	1 516 449	9 278 864	16.34	1.22
Brazil	153	28	181	5 384 908	2 684 919	8 069 827	33.27	1.06
Sweden	166	180	346	1 376 337	6 620 120	7 996 457	82.79	1.05
Belgium	26	145	171	155 155	7 397 224	7 552 379	97.95	0.99
Netherlands	604	220	824	3 995 888	2 804 334	6 800 222	41.24	0.90
Malaysia	234	78	312	5 169 704	1 529 591	6 699 295	22.83	0.88
Iran, Islamic Republic of	161	2	163	6 219 557	82 087	6 301 644	1.30	0.83
Switzerland	12	223	235	576 192	5 629 968	6 206 160	90.72	0.82
France	176	102	278	2 986 225	3 122 524	6 108 749	51.12	0.80
Philippines	307	27	334	4 169 994	657 895	4 827 889	13.63	0.64
Indonesia	513	93	606	3 251 026	1 167 330	4 418 356	26.42	0.58
Canada	159	76	235	1 052 475	2 940 937	3 993 412	73.64	0.53
Spain	67	255	322	118 049	3 776 299	3 894 348	96.97	0.51
Kuwait	32	3	35	3 384 404	275 446	3 659 850	7.53	0.48
United Arab Emirates	40	148	188	455 107	2 638 330	3 093 437	85.29	0.41

Table 16 (continued)

Country of domicile[b]	Number of vessels			Deadweight tonnage				
	National flag [c]	Foreign flag	Total	National flag	Foreign flag	Total	Foreign flag as % of total	Total as % of world total
Australia	54	36	90	1 618 721	1 337 051	2 955 772	45.24	0.39
Monaco	0	104	104	0	2 672 083	2 672 083	100.00	0.35
Cyprus	39	36	75	770 399	1 863 877	2 634 276	70.75	0.35
Croatia	65	44	109	1 087 965	1 324 544	2 412 509	54.90	0.32
Subtotal	13 457	13 442	26 899	258 607 533	462 466 793	721 074 326	64.13	94.96
World total	16 044	14 421	30 465	279 375 666	479 926 099	759 298 765	63.21	100.00

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

[a] Vessels of 1,000 grt and above, excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets.

[b] The country of domicile indicates where the controlling interest (i.e. parent company) of the fleet is located. In several cases, determining this has required certain judgements to be made. Thus, for instance, Greece is shown as the country of domicile for vessels owned by a Greek owner with representative offices in New York, London and Piraeus, although the owner may be domiciled in the United States.

[c] Includes vessels flying the national flag but registered in territorial dependencies or associated self-governing territories. For the United Kingdom, British flag vessels are included under the national flag, except for Bermuda (listed in table 17 as an open-registry country).

Ownership is concentrated in 10 countries or territories, which control 81.3 per cent of the deadweight of vessels registered in the seven major open-registry countries, as compared with 80.6 per cent in the previous year. Similarly, the top five countries or territories control 63.1 per cent (the same percentage as in 2000). Greece was ranked first in 2001 for the eighth consecutive year with the largest share (23.6 per cent) of the seven major open-registry fleets. In 2001, this country also had the largest foreign-flag ownership, representing 100 million dwt or 19.2 per cent of the total world foreign-flag tonnage, followed by Japan with 88.5 million dwt or 17 per cent of the total tonnage. Both countries' combined foreign-flag tonnage accounted for 36.2 per cent of the total world tonnage under foreign flags, same as in the previous year.

Table 17

Tonnage distribution of major open-registry fleets[a] as of 1 January 2002

Flag	Oil tankers		Bulk carriers		General cargo		Container ships		Others		Total		Total as of 1.1.2001
	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Thousand dwt
Panama	434	49 644	1 351	82 419	1 318	12 384	495	15 539	821	11 888	4 419	171 874	*162 951*
Liberia	279	31 192	310	19 363	234	4 165	283	9 329	330	9 130	1 436	73 179	*75 008*
Bahamas	168	24 999	153	9 023	459	6 590	55	1 656	278	3 059	1 113	45 327	*44 871*
Malta	257	17 556	424	17 922	461	4 220	55	1 087	90	1 344	1 287	42 129	*44 497*
Cyprus	117	5 839	419	19 402	452	4 275	110	2 504	93	921	1 191	32 941	*33 312*
Bermuda	12	3 152	27	3 635	22	258	16	459	34	579	111	8 083	*9 121*
Vanuatu	1	5	22	851	22	274	2	35	85	368	132	1 533	*1 445*
Total	1 268	132 387	2 706	152 615	2 968	32 166	1 016	30 609	1 731	27 289	9 689	375 066	*371 315*
Total as of 1.1.2001	1 332	138 064	2 644	145 400	3 148	34 254	938	26 747	1 685	26 850	9 747	371 315	

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

[a] Ships of 1,000 grt and above. This table is not fully comparable with tables 13 and 15, which list ships of 100 grt and above as the base.

Table 18

Tonnage owned by nationals of, and registered in, the country or territory of registry in the total fleet of the most important open and international registers, as of 1 January 2002 [a]

(thousands of dwt)

Country or territory of registry	Total tonnage registered in country of registry	Tonnage owned by nationals of, and registered in, country of registry	Share of tonnage owned by nationals in total registered fleet (%)
Panama	171 874	0	0.0
Liberia	73 180	0	0.0
Bahamas	45 327	366	0.8
Malta	42 130	36	0.1
Cyprus	32 940	756	2.3
Bermuda	8 082	0	0.0
Vanuatu	1 534	0	0.0
Norwegian International Ship Registry (NIS)	28 709	24 532	85.5
Danish International Ship Registry (DIS)	8 167	7 986	97.8

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

[a] Ships of 1,000 grt and above. This table is not fully comparable with tables 13 and 15, which list ships of 100 grt and above as the base.

Table 19

True nationality of major open-registry fleets as of 1 January 2002

Country or territory of domicile	Panama			Liberia			Bahamas			Malta			Cyprus		
	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%
Greece	526	19 864	12	149	9 621	13	175	9 467	21	584	26 524	63	615	23 190	70
Japan	1 797	74 706	43	115	5 026	7	33	596	1	4	503	1	23	372	1
Norway	83	3 801	2	134	8 044	11	243	10 278	23	60	2 938	7	32	358	1
United States	148	3 068	2	130	6 095	8	171	10 220	23	10	598	1	0	0	0
Germany	21	627	0	433	13 196	18	19	500	1	44	707	2	220	4 219	13
Hong Kong, China	212	16 399	10	39	2 215	3	5	393	1	9	592	1	2	37	0
China	248	8 603	5	58	2 922	4	0	0	0	14	328	1	15	209	1
Republic of Korea	316	15 335	9	10	1 304	2	1	54	0	3	35	0	4	115	0
Denmark	18	403	0	10	251	0	43	491	1	5	17	0	0	0	0
Taiwan Province of China	302	10 504	6	26	954	1	0	0	0	0	0	0	0	0	0
United Kingdom	49	931	1	26	824	1	113	1 543	3	5	66	0	0	0	0
Saudi Arabia	8	670	0	19	5 564	8	11	2 518	6	0	0	0	0	0	0
Belgium	4	545	0	9	1 510	2	13	137	0	3	86	0	4	65	0
Russian Federation	13	76	0	65	4 229	6	5	11	0	102	973	2	79	1 361	4
Sweden	0	0	0	15	1 264	2	17	789	2	0	0	0	0	0	0
Singapore	84	2 591	2	11	803	1	9	592	1	0	0	0	1	30	0
Switzerland	101	3 009	2	10	316	0	3	222	0	64	1 373	3	4	53	0
Italy	9	364	0	8	659	1	16	728	2	43	1 304	3	0	0	0
Spain	51	347	0	1	94	0	7	720	2	0	0	0	3	124	0
France	7	725	0	0	0	0	23	510	1	0	0	0	0	0	0
Monaco	16	752	0	11	579	1	29	559	1	12	257	1	0	0	0
Australia	9	478	0	2	355	0	0	0	0	2	64	0	0	0	0
Subtotal	4 022	163 798	95	1 281	65 825	90	936	40 328	89	964	36 365	86	1 002	30 133	91
Others	397	8 076	5	155	7 354	10	177	4 999	11	323	5 764	14	189	2 808	9
Total	4 419	171 874	100	1 436	73 179	100	1 113	45 327	100	1 287	42 129	100	1 191	32 941	100

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

Table 19 (continued)

Bermuda			Vanuatu			Subtotal			Total foreign flag fleet		Country of territory of domicile
No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	
0	0	0	0	0	0	2 049	88 666	24	2 374	100 084	Greece
0	0	0	28	722	47	2 000	81 925	22	2 201	88 505	Japan
3	41	1	3	135	9	558	25 595	7	815	34 638	Norway
20	617	8	60	186	12	539	20 784	6	886	31 972	United States
1	22	0	0	0	0	738	19 271	5	1 798	30 747	Germany
4	593	7	0	0	0	271	20 229	5	360	25 056	Hong Kong, China
0	0	0	0	0	0	335	12 062	3	652	20 251	China
0	0	0	0	0	0	334	16 843	4	405	17 928	Republic of Korea
4	71	1	0	0	0	80	1 233	0	343	17 042	Denmark
0	0	0	0	0	0	328	11 458	3	398	14 995	Taiwan Province of China
45	3 243	40	0	0	0	238	6 607	2	420	10 857	United Kingdom
4	47	1	0	0	0	42	8 799	2	67	9 151	Saudi Arabia
0	0	0	0	0	0	33	2 343	1	145	7 397	Belgium
0	0	0	14	77	5	278	6 727	2	369	7 107	Russian Federation
11	2 645	33	0	0	0	43	4 698	1	180	6 620	Sweden
0	0	0	0	0	0	105	4 016	1	262	6 132	Singapore
0	0	0	0	0	0	182	4 973	1	223	5 630	Switzerland
0	0	0	0	0	0	76	3 055	1	128	4 432	Italy
0	0	0	0	0	0	62	1 285	0	255	3 776	Spain
0	0	0	0	0	0	30	1 235	0	102	3 123	France
0	0	0	0	0	0	68	2 147	1	104	2 672	Monaco
2	134	2	0	0	0	15	1 031	0	36	1 337	Australia
94	7 413	92	105	1 120	73	8 404	344 982	92	12 523	449 452	Subtotal
17	670	8	27	413	27	1 285	30 084	8	2 180	70 442	Others
111	8 083	100	132	1 533	100	9 689	375 066	100	14 703	519 894	Total

D. SHIPBUILDING AND THE SECOND-HAND MARKET

1. Newbuilding orders

In 2001, newbuilding contracts totalling 51.6 million dwt were placed for the six major ship types – a decrease of 35.6 per cent in comparison with the contracts in 2000 (see table 20). In the tanker sector, pessimism prevailed, with 550 units totalling 34.3 million dwt ordered in 2001, as compared with 446 units totalling 41.9 million dwt in 2000. The 2001 newbuilding orders for dry bulk carriers were even scarcer at 165 units of 9.5 million dwt, fewer than were ordered the year before (344 units of 20 million dwt).

Even newbuilding orders for container ships went down substantially to less than half of past years' levels – 180 units totalling 6.6 million dwt in 2001 as compared to 373 units and 15 million dwt in 2000. These newbuilding tonnages continued to reflect the recent trend for post-Panamax container ships. The newbuilding orders for general cargo ships also went down in 2001 to 142 units of 1.2 million dwt from 255 units totalling 2.5 million dwt in 2000. On the other hand, orders for passenger ferries decreased less than those for other types of vessels, to a total of 101 vessels, but tonnage decreased to 80 million dwt in 2001 from 308 million dwt in the previous year.

2. Tonnage on order

World tonnage on order, by groups of countries of registry and by principal types of vessel, is shown in table 21. World tonnage on order at the beginning of 2002 stood at 107.9 million dwt, representing a healthy increase of 7.9 per cent over the previous year. Tonnage on order by developed market-economy countries amounted to 34 million dwt, accounting for 31.5 per cent of the world total tonnage on order, as compared with 36.8 million dwt or 36.6 per cent at the beginning of 2001. Major open-registry countries had 57.4 million dwt or 53.2 per cent of world tonnage on order, as compared with 48.1 million dwt or 47.8 per cent at the beginning of last year. The share of the countries of Central and Eastern Europe increased slightly in 2001 to 0.6 million dwt or 0.5 per cent of the world total on order, while the share of the socialist countries in Asia was steady in 2001, ending the year with 5.5 million dwt or 5.1 per cent of the world total on order.

Developing countries' tonnage was also steady at 8.6 million dwt or 8 per cent of the world total tonnage on order at the beginning of 2002. Tonnage on order by Asian developing countries rose slightly to 7.7 million dwt at the beginning of 2002, which accounted for 88.7 per cent of the developing countries' total tonnage on order. There was also a decrease in the African newbuilding orders to 79 thousand dwt on order at the beginning of 2002, while the Americas' developing countries orders also decreased marginally to 894 thousand dwt.

In 2001, oil tanker orders rose by 28.7 per cent to 51.9 million dwt, accounting for 48.1 per cent of the world total on order. Developing countries had 5.7 million dwt on order, representing 11.1 per cent of the total, with Asian developing countries represented 5.5 million dwt or 94.8 per cent of the developing countries' total. The number of dry bulk carriers on order at the beginning of 2002 decreased substantially from 2001 by 28.9 per cent to 22.2 million dwt, accounting for 20.5 per cent of the world total on order. For this type of vessel, developed market-economy countries and major open-registry countries accounted for 13.5 per cent and 69.5 per cent, representing a combined share of 83 per cent. The volume of container ships on order increased marginally in 2001 by 2.5 per cent to 16.5 million dwt at year's end, representing 15.3 per cent of the world total on order. For container ships on order, developed market-economy countries accounted for 35.4 per cent and major open-registry countries accounted for over 50.5 per cent. At the beginning of 2002 developing countries' container ship orders were steady at 1 million dwt, or 5.9 per cent of the total. Asian developing countries had 0.8 million dwt or 85.3 per cent of the developing countries' total on order.

Table 20

Newbuilding contracts placed for the main types of ship[a] during 1991–2001

(number of ships, thousands of dwt)

Year	Tankers		Bulk carriers		Combined carriers		General cargo ships		Container vessels		Passenger ferries		Total [b]	
	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt
1991	308	19 871	148	11 836	4	322	167	877	66	1 796	84	90	777	34 793
1992	206	10 050	126	7 261	0	0	225	1 402	127	3 227	114	91	798	22 031
1993	267	17 327	299	18 303	1	83	261	2 102	182	5 057	122	163	1 132	43 035
1994	256	13 833	339	19 896	2	220	227	1 493	242	6 497	118	159	1 184	42 098
1995	243	9 143	381	22 418	4	440	345	2 449	345	8 562	144	224	1 462	43 236
1996	274	13 875	271	14 250	-	-	257	2 107	292	6 978	144	155	1 238	37 365
1997	428	32 516	282	17 983	2	220	299	2 701	166	3 618	96	149	1 273	57 187
1998	280	21 922	166	11 835	0	0	333	2 488	178	5 975	117	231	1 074	42 451
1999	206	16 822	346	23 934	-	-	162	1 323	170	7 183	116	348	1 000	49 610
2000	446	41 865	344	20 081	-	-	255	2 534	373	15 025	136	308	1 554	80 121
2001														
Jan	40	2 878	16	430	-	-	9	131	29	890	4	2	98	4 331
Feb	27	2 034	4	202	-	-	5	75	15	647	1	5	52	2 963
Mar	43	2 852	3	395	-	-	6	60	19	464	7	9	81	3 780
Apr	35	2 228	22	1 281	-	-	9	92	29	1 299	7	1	102	4 901
May	49	4 292	6	653	-	-	8	65	14	648	10	6	87	5 667
Jun	59	3 896	16	863	-	-	8	80	17	705	12	2	112	5 546
Jul	68	4 730	35	2 378	-	-	28	272	9	175	7	8	147	7 563
Aug	53	3 718	14	787	-	-	11	92	18	365	6	1	102	4 963
Sep	33	2 672	2	65	-	-	7	35	6	90	15	10	63	2 872
Oct	55	2 430	12	628	-	-	13	87	8	251	18	10	106	3 406
Nov	31	676	7	440	-	-	18	104	3	111	5	1	64	1 332
Dec	57	1 851	25	1 374	-	-	20	129	13	919	9	25	124	4 298
Total	550	34 260	165	9 496	-	-	142	1 222	180	6 564	101	80	1 138	51 622

Source: Compiled by the UNCTAD secretariat on the basis of data from Institute of Shipping Economics and Logistics (2002), *Shipping Statistics and Market Review*, Jan./Feb., table 1.1.1.

[a] Ships of 300 grt and over.

[b] Total does not include data on newbuilding contracts for other types of ship.

Table 21

World tonnage on order as of 1 January 2002

(thousands of dwt)

Country groups of registry	Total	Oil tankers	Bulk carriers	General cargo	Container ships	Other ships
World total	107 955	51 894	22 184	3 826	16 550	13 501
Developed market-economy countries	34 026	15 954	3 007	1 546	5 861	7 658
Major open-registry countries	59 393	27 633	15 411	1 657	8 362	4 330
Countries of Central and Eastern Europe	557	195	111	178	-	73
Socialist countries of Asia	5 507	1 529	2 320	44	1 342	273
Developing countries, total	8 657	5 778	430	335	986	1 127
***of which*:**						
Africa	79	3	8	-	-	68
Americas	894	296	171	85	145	196
Asia	7 683	5 479	251	250	840	863
Europe[a]	0	-	-	-	-	-
Oceania	0	-	-	-	-	-
Unallocated	1 815	804	905	66	-	41

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

[a] Not reported.

3. Prices of newbuildings and second-hand tonnage

Table 22 indicates newbuilding prices for the main types of vessel. In 2001, prices for all the main types and sizes of newbuildings decreased significantly from those of the previous year. Price reductions were more pronounced for tankers and bulk carriers and reflected the depressed cargo demand. By mid-year, major shipbuilding countries were discussing measures to align shipbuilding capacity with forecasted demand. Analysis shows that oil tanker newbuilding prices for all sizes went down by about 10 per cent in 2001 from their 2000 level. Newbuilding prices for dry bulk carriers up to 74,000 dwt were also down by about 10 per cent in 2001 from the previous year's level, while for Cape-sizes prices decreased by 14 per cent. Prices of 2,500 TEU cellular container ships declined by 1.2 per cent, while the decline for general cargo vessels was 3.2 per cent. A modest increase of 3.3 per cent was observed for 75,000 LPG ships. In general, the downward trend of shipbuilding prices continued for all types and sizes of vessel as demand remained weak.

As table 23 indicates, average second-hand prices for tankers and bulk carriers were also down. In particular, lower prices were obtained for the small dry bulk carriers. The number of transactions was also down to 182 from the 2000 level of 229, with Panamax and Cape-size being most popular and the small Handy-size vessels accounting for 74 transactions. In the tanker sector, two-digit price reductions were seen during the year. In spite of lower prices, an increased number of transactions were reported for 2001. During the year, 201 units changed hands, with 123 units being over 50,000 dwt.

Table 22

Representative newbuilding prices in selected years[a]

(millions of dollars)

Type and size of vessels	1980	1985	1990	1995	1999	2000	2001	% change 2000/2001
30–50,000 dwt bulk carrier	17	11	24	25	20	20	18	-10.0
32–45,000 dwt tanker	19	18	29	34	25	29	27	-7.0
70–74,000 dwt bulk carrier	24	14	32	29	22	23	20	-11.1
80–105,000 dwt tanker	28	22	42	43	33	41	37	-9.8
120,000 dwt bulk carrier	32	27	45	40	34	40	34	-14.0
250–280,000 dwt tanker	75	47	90	85	68	76	72	-5.3
125–138,000 m3 LNG	200	200	225	245	150	165	162	-1.8
75,000 m3 LPG	77	44	78	68	58	60	58	-3.3
15,000 dwt general cargo	14	12	24	21	19	19	18	-3.2
2,500 TEU full containership	-	26	52	50	35	35	34	-1.2

Source: Compiled by the UNCTAD secretariat on the basis of data from *Lloyd's Shipping Economist*, various issues.

[a] From 1995 on, prices correspond to the large vessel size.

Table 23

Second-hand prices for five-year-old vessels, 1996–2001

(as of year's end, in millions of dollars)

Vessel	1996	1997	1998	1999	2000	2001	% change 2000/2001
40,000 dwt tankers[a]	26	28	20	20	27	26	-3.8
80–95,000 dwt tankers[a]	37	38	25	26	39	33	-15.4
130–150,000 dwt tankers[a]	40	47	37	36	50	43	-13.1
250–280,000 dwt tankers[a]	67	70	50	50	71	60	-15.5
45,000 dwt dry bulk carrier	19	18	13	16	15	12	-20.0
70,000 dwt dry bulk carrier	21	21	15	17	16	14	-12.9
150,000 dwt dry bulk carrier	27	30	24	28	25	22	-12.0

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Fearnleys, *Review 2001*.

[a] From 1996 on, prices correspond to the larger vessels.