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Geneva

# **REVIEW OF MARITIME TRANSPORT, 2001**

## **Chapter II**

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## Chapter II

# 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.*

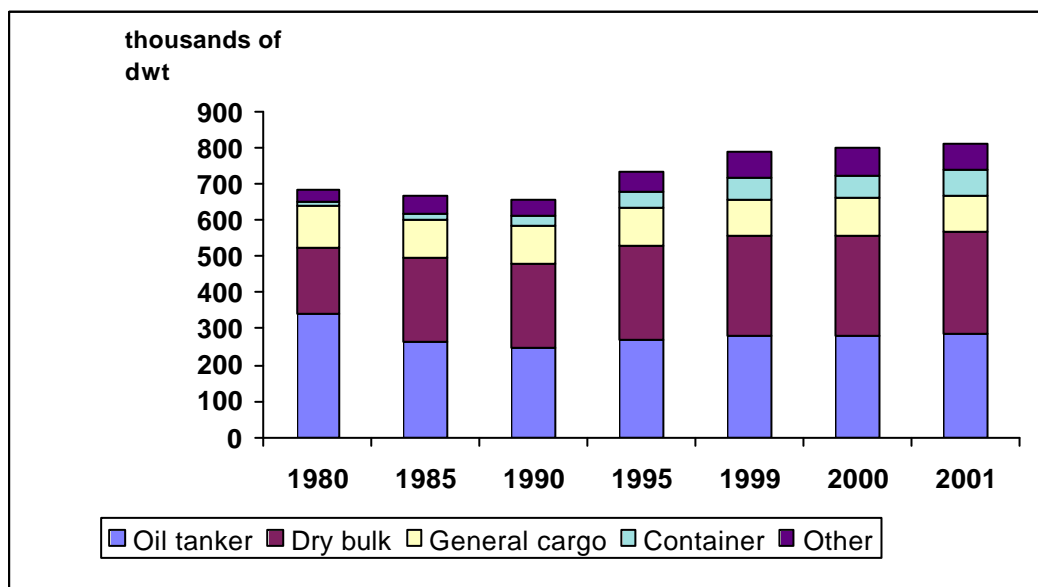
### A. STRUCTURE OF THE WORLD FLEET

#### *Principal types of vessel*

40. Comparative time-series data on the world fleet for 1999, 2000 and 2001 are provided in graph 4 and table 6. The world merchant fleet amounted to 808.4 million deadweight tons (dwt) on 1 January 2001. This represents a 1.2 per cent increase over 2000, when the world fleet had expanded at a rate of 1.3 per cent from the tonnage in 1999. Newbuilding deliveries were 44.4 million dwt, while 22.2 million dwt of tonnage was broken up. The fleet was also decreased by losses and vessels taken out of service, leaving a net gain of 9.4 million dwt in 2000 as compared with a net gain of 10.3 million dwt in 1999.

Graph 4

World fleet by principal type of vessel, selected years



Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

Table 6

**World fleet size by principal types of vessel, 1999–2001<sup>a</sup>**  
*(beginning-of-year figures, in thousands of dwt)*

<b>Principal types</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>Percentage change 2000/2001</b>
<b>Oil tankers</b>	279 509 <i>35.4</i>	282 458 <i>35.4</i>	285 442 <i>35.3</i>	1.1
<b>Bulk carriers</b>	275 519 <i>34.9</i>	276 091 <i>34.6</i>	281 655 <i>34.8</i>	2.0
<b>Ore/bulk/oil</b>	17 720 <i>2.2</i>	16 723 <i>2.1</i>	11 391 <i>1.4</i>	-31.9
<b>Ore/bulk</b>	257 799 <i>32.7</i>	259 368 <i>32.5</i>	270 264 <i>33.4</i>	4.2
<b>General cargo ships</b>	101 259 <i>12.8</i>	101 481 <i>12.7</i>	102 653 <i>12.7</i>	1.2
<b>Container ships</b>	61 147 <i>7.8</i>	63 637 <i>8.0</i>	69 216 <i>8.6</i>	8.8
<b>Other types of ships</b>	71 291 <i>9.1</i>	75 328 <i>9.3</i>	69 412 <i>8.6</i>	-7.9
<b>Liquefied gas carriers</b>	16 471 <i>2.1</i>	17 334 <i>2.1</i>	18 525 <i>2.3</i>	6.9
<b>Chemical tankers</b>	7 740 <i>1.0</i>	7 813 <i>1.0</i>	8 044 <i>1.0</i>	3.0
<b>Miscellaneous tankers</b>	885 <i>0.1</i>	849 <i>0.1</i>	768 <i>0.1</i>	-9.5
<b>Ferries and passengers ships</b>	4 803 <i>0.6</i>	4 944 <i>0.6</i>	5 038 <i>0.6</i>	1.9
<b>Others</b>	41 392 <i>5.3</i>	44 388 <i>5.5</i>	37 037 <i>4.6</i>	-16.6
<b>World total</b>	788 725 <i>100.0</i>	798 995 <i>100.0</i>	808 377 <i>100.0</i>	1.2

*Source:* UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

<sup>a</sup> Percentage shares are shown in italics.

41. The tonnage of oil tankers and dry bulk carriers continued to increase in 2000 by 1.1 per cent and 2.0 per cent respectively. These two types of ships represented 70.1 per cent of total tonnage in 2000, a slight increase from 70.0 per cent in the previous year. The fleet of general cargo ships increased in 2000 by 1.2 per cent and represented 12.7 per cent of the total world fleet. Containerships in terms of deadweight tonnage increased by 5.6 million dwt or 8.8 per cent, which now represents 8.6 per cent of the total world fleet. This relatively high rate of increase reflects the growing portion of manufactured goods being traded which are generally moving in containers. Dwt tonnage of liquid gas carriers (mainly LNG and LPG carriers) and ferries/passenger ships have been steadily increasing.

*World containership fleet*

42. The world fleet of fully cellular containerships continued to expand substantially in 2000 in terms of both number of ships and their TEU capacity, reaching 2,595 ships with a total capacity of 4,734,079 TEUs by the beginning of 2001, representing an increase of 6.6 per cent in the number of ships and 10.1 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 1,766 TEUs in 1999 to 1,824 TEUs in 2000, reflecting the building of larger vessels to achieve economies of scale for reduction in operating costs. At the beginning of 2001, the well-defined trend for large container vessels continued unabated. The total orderbook for the year was 375 vessels of which 127 were larger than 4,000 TEU and 109 vessels were in the size bracket of 2,000–3,999 TEU. Most of the remaining 139 vessels are in the range of 1,000–1,999 TEUs.

Table 7

**Distribution of the world fleet and TEU capacity of fully cellular containerships by groups of countries, in 1999, 2000 and 2001**  
(beginning-of-year figures)

Flags of registration by groups of countries	Number of ships			TEU capacity and percentage shares		
	1999	2000	2001	1999	2000	2001
<b>World total</b>	2 365	2 433	2 595	4 061 653	4 297 874	4 734 079
			100.0	100.0	100.0	100.0
<b>Developed market-economy countries</b>	728	693	724	1 561 060	1 530 655	1 665 709
			27.9	38.4	35.6	35.2
<b>Major open-registry countries</b>	887	944	1 003	1 545 818	1 698 576	1 919 117
			38.7	38.1	39.5	40.5
<b>Total developed market-economy and major open-registry countries</b>	1 615	1 637	1 727	3 106 878	3 229 231	3 584 826
			66.6	76.5	75.1	75.7
<b>Countries of Central and Eastern Europe (including former USSR)</b>	35	34	32	26 331	26 699	25 457
			1.2	0.6	0.6	0.5
<b>Socialist countries of Asia</b>	90	89	106	94 863	96 450	105 344
			4.1	2.3	2.2	2.2
<b>Developing countries</b>	542	587	644	691 328	803 135	883 883
			24.8	17.0	18.7	18.7
<i>of which in:</i>						
<b>Africa</b>	10	10	11	110 265	10 719	10 841
			0.4	0.3	0.2	0.2
<b>Americas</b>	162	192	214	157 836	214 153	253 822
			8.2	3.9	5.0	5.4
<b>Asia</b>	365	380	416	516 431	572 212	617 768
			16.0	12.7	13.3	13.0

Flags of registration by groups of countries	Number of ships			TEU capacity and percentage shares		
	1999	2000	2001	1999	2000	2001
Europe	5	5	3	6 035	6 051	1 452
			<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.0</i>
Oceania	0	0	0	0	0	0
			<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Other, unallocated	83	86	86	142 253	142 359	134 569
			<i>3.3</i>	<i>3.5</i>	<i>3.3</i>	<i>2.8</i>

Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

<sup>a</sup> Percentage shares are shown in italics.

#### Age distribution of the world merchant fleet

43. Table 8 provides data on the average 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 decreased in 2000 to 13.9 years from 14.1 years in 1999. By type of vessel, the average age of tankers rose slightly to 14.1 years in 2000. The share of tanker tonnage aged 15 years and over increased to 47.8 per cent in 2000 from 47.6 per cent in 1999, reflecting slowdown in scrapping activities in 2000 which stood at 13.5 million dwt (16.7 million dwt in 1999). The average age of the dry bulk carrier fleet decreased slightly to 13.2 years from the 13.8 years in 1999. Containerships continued to be the youngest fleet in 2000, with an average age of 10.4 years up from 9.7 years. This trend is reflected in the share of tonnage between 0 and 4 years of age, 33.4 per cent — the highest among all categories of vessels.

Table 8

#### Age distribution of the world merchant fleet by types of vessel, as at 1 January 2001 (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 <sup>a</sup>	Average age (years) 2000 <sup>a</sup>
<b>World total</b>	All ships	18.8	18.4	12.7	16.3	33.8	13.9	14.1
	Tankers	16.6	23.5	12.1	8.8	39.0	14.1	13.9
	Bulk carriers	20.4	16.7	14.3	23.9	24.7	13.2	13.8
	General cargo	11.1	10.0	10.4	19.8	48.7	17.0	17.3
	Container ships	33.4	22.9	12.2	11.0	20.5	10.4	9.7
	All others	18.1	12.7	12.4	16.1	40.7	15.0	14.9
<b>Developed market-economy countries</b>	All ships	19.8	18.8	13.8	15.1	32.5	13.6	13.8
	Tankers	17.6	20.5	11.1	9.0	41.8	14.5	14.2
	Bulk carriers	15.8	18.4	16.7	25.8	23.5	13.5	14.6
	General cargo	17.7	16.7	12.9	18.3	34.4	14.3	14.6
	Container ships	37.3	19.1	13.9	7.9	21.8	10.2	9.2
	All others	19.8	16.1	16.9	16.7	30.4	13.6	13.9

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 <sup>a</sup>	Average age (years) 2000 <sup>a</sup>
<b>Major open-registry countries</b>	All ships	19.6	19.9	12.9	16.1	31.5	13.5	13.7
	Tankers	14.6	27.6	12.3	7.5	38.1	13.9	13.8
	Bulk carriers	22.8	15.3	14.7	24.1	23.2	12.8	13.6
	General cargo	14.9	11.2	11.6	22.8	39.4	15.6	16.2
	Container ships	32.2	26.0	11.7	10.7	19.4	10.2	9.6
	All others	21.1	11.7	9.0	13.2	45.0	15.1	14.2
<b>Subtotal</b>	All ships	19.7	19.6	13.2	15.8	31.8	13.5	13.7
	Tankers	15.6	25.1	11.9	8.0	39.4	14.1	13.9
	Bulk carriers	21.2	16.0	15.1	24.5	23.2	13.0	13.9
	General cargo	15.9	13.1	12.0	21.2	37.7	15.1	15.7
	Container ships	34.5	22.9	12.7	9.4	20.5	10.2	9.4
	All others	20.4	13.9	13.0	15.0	37.7	14.3	14.1
<b>Countries of Central and Eastern Europe</b>	All ships	2.3	7.7	15.5	20.6	53.9	18.6	19.0
	Tankers	1.9	1.4	14.8	21.7	60.2	19.7	20.0
	Bulk carriers	0.0	11.5	10.7	26.0	51.8	18.7	19.5
	General cargo	3.0	6.7	16.7	17.4	56.3	18.7	18.9
	Container ships	16.8	12.4	18.7	22.3	29.7	14.2	15.3
	All others	2.4	9.8	19.5	19.1	49.2	17.9	18.2
<b>Socialist countries of Asia</b>	All ships	5.3	14.4	7.8	15.4	57.1	18.1	18.1
	Tankers	3.2	23.1	14.1	8.8	50.9	16.8	16.5
	Bulk carriers	7.3	17.1	5.0	15.8	54.8	17.5	17.4
	General cargo	3.5	4.5	6.6	15.3	70.0	20.2	20.1
	Container ships	6.0	25.0	18.4	28.2	22.4	14.1	14.5
	All others	3.7	9.7	6.0	15.5	65.2	19.4	19.4
<b>Developing countries (excluding open-registry countries)</b>	All ships	20.0	15.8	11.3	17.7	35.2	14.1	14.2
	Tankers	22.6	17.7	12.2	10.9	36.5	13.6	13.3
	Bulk carriers	21.5	18.3	13.8	23.8	22.7	12.7	12.9
	General cargo	6.2	6.7	7.0	18.9	61.3	19.0	19.3
	Container ships	37.8	23.3	6.4	12.6	19.9	10.0	9.1
	All others	14.5	9.2	9.6	20.6	46.2	16.4	16.9

Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

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

44. By country grouping, the major open-registry countries continued to have the lowest average age of all ships (13.5 years in 2000 versus 13.7 years in 1999), as a growing tendency to register newbuildings under open-registry flags was observed. Developed market-economy countries also maintained a low average age of their fleet at 13.6 years in 2000 compared to 13.8 years in 1999. In this group, the average

age of containerships increased by one year to 10.2 years in 2000, as compared with 9.2 years in 1999. The average age of all ships registered in developing countries (excluding major open-registry countries) decreased slightly in 2000 to 14.1 years as compared with 14.2 years in 1999. For this group, the average age of general cargo vessels was almost double that of containerships. The average age of tonnage registered in the socialist countries of Asia continued at 18.1 years in 2000. The countries of Central and Eastern Europe continued to have the oldest fleet (18.6 years in 2000 versus 19.0 years in 1999) with vessels built more than 15 years ago representing about three quarters of the total fleet, with tankers being the oldest class of ships at 19.7 years.

#### *Delivery of newbuildings*

45. Newbuilding activities attained the highest level ever recorded in terms of deadweight tons with deliveries amounting to 44.4 million dwt in 2000 (see table 9) an increase of about 10 per cent from deliveries in 1999. The total number of vessels delivered increased to 1,544 units from 940 units in 1999. This high level of delivery continued to be sustained primarily by tanker deliveries of 21.0 million dwt, which was up 10 per cent from the 1999 level. Another feature was that more of the larger tankers were delivered in 2000 than in the previous year, with an average deadweight tonnage of 134,600 in 2000 compared to 118,600 in 1999. In the dry bulk carriers sector, the number of newbuildings decreased slightly to 193 units in 2000 from 195 units in 1999, while total tonnage expanded to 13.4 million dwt from 13.0 million dwt, with the average deadweight tons per vessel being steady at 66,000. Newbuildings for other types of vessels, including general cargo ships and containerships increased both in number and in deadweight tonnage to 1,195 units and 10.0 million dwt in 2000.

Table 9

#### **Deliveries of newbuildings, selected years**

Year	Oil tankers <sup>a</sup>		Combined carriers <sup>a</sup>		Dry bulk carriers <sup>a</sup>		Others <sup>b</sup>		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	119	9.6	523	4.4	723	22.8
1995	83	10.9	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	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 <sup>c</sup>	156	21.0	0	0	193	13.4	1 195	10.0	1 544	44.4

Source: UNCTAD secretariat on the basis of data from Fearnleys (Oslo), *Review 2000*.

<sup>a</sup> Vessels over 10,000 dwt

<sup>b</sup> Sea-going, cargo-carrying vessels of over 1,000 gross registered tons (grt).

<sup>c</sup> Provisional.

*Demolition of ships*

46. Trends in tonnage, types and average age of broken-up vessels are shown in tables 10, 11 and 12. In 2000, total tonnage sold for demolition contracted substantially by 27.7 per cent from the tonnage of the previous year to 22.2 million dwt, which accounted for 2.7 per cent of the world total deadweight tons, as compared to 3.8 per cent in 1999. Break-up of tankers made up the largest share of total demolition. Sales of tankers for breaking-up reduced significantly by 19.2 per cent to 13.5 million dwt, due to rising freight rates which stopped sales during the second semester. ULCC/VLCC sales went down from 35 units in 1999 to 30 units in 2000. Suezmaxes also decreased from 27 units in 1999 to 18 units in 2000, while Aframaxes decreased from 26 units in 1999 to 20 units in 2000. In the smaller category of crude oil tankers, the reverse was true — 25 ships were sold for scrap in 1999, while 51 units were sold in 2000. Due to the reduced scrapping activity, the average age of tankers sold for demolition was slightly up from 26.2 years in 1999 to 26.9 years in 2000. Dry bulk carriers sold for scrap were almost halved to only 4.6 million dwt in 2000, down from 9.7 million dwt in 1999. There was a reduction of scrapping of all sizes of bulk carriers. The average age of all dry bulk carriers broken up was 25.9 years in 2000 — slightly higher than the previous year. Other ship types also have a similar trading life with containerships being sold to breakers with an average age of 25.7 years and general cargo ships with an average age of 27.3 years in 2000.

Table 10

**Broken-up tonnage trends, 1990 and 1996–2000**

Broken-up tonnage	1990	1996	1997	1998	1999	2000
<b>Tonnage sold for breaking (million dwt)</b>	16.9	18.1	14.8	25.2	30.7	22.2
<b>Share of broken-up tonnage of the total world fleet (percentage)</b>	2.4	2.4	1.9	3.2	3.9	2.7

Sources: UNCTAD secretariat on the basis of data supplied by Fearnleys (Oslo), *Review*, various issues; and Lloyd's Maritime Information Services (London).

Table 11

**Tonnage reported sold for breaking by types of vessel, 1996–2000**  
(millions of dwt and percentage shares)

Types of vessel	Millions dwt					Percentages				
	1996	1997	1998	1999	2000	1996	1997	1998	1999	2000
<b>Tankers</b>	6.6	3.6	7.4	16.7	13.5	36.1	24.2	29.4	54.2	60.9
<b>Combined carriers</b>	1.9	0.4	1.4	1.1	1.0	10.3	2.9	5.7	3.7	4.3
<b>Dry bulk carriers</b>	7.6	8.2	12.8	9.7	4.6	42.1	55.1	50.9	31.5	20.8
<b>Others</b>	2.1	2.6	3.5	3.3	3.1	11.5	17.9	14.0	10.6	14.0
<b>Total</b>	18.1	14.8	25.2	30.7	22.2	100.0	100.0	100.0	100.0	100.0

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



Table 12

**Average age of broken-up ships by type from 1996 to 2000 <sup>a</sup>**  
(years)

Year	Tankers	Dry bulk carriers	Containerships	General cargo ships
1996	26.0	24.3	26.2	27.8
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

Source: UNCTAD secretariat on the basis of data supplied by Institute of Shipping Economics and Logistics (Bremen), *Shipping Statistics, 2000*, Nos. 1–2.

<sup>a</sup> Ships of 300 grt and over.

## B. OWNERSHIP OF THE WORLD FLEET

### *Distribution of world tonnage by country groups*

47. The total world fleet continued to expand in 2000 by 1.2 per cent to 808.4 million dwt (see table 13 and graph 5). Tonnage of developed market-economy countries increased marginally by 0.2 million dwt to 203.4 million dwt. Major open-registry countries in 2000 expanded their tonnage substantially by 7.5 million dwt or 1.9 per cent to a record high of 392.2 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 2000 increased substantially by 3.4 million dwt or 2.2 per cent to 157.0 million dwt. This increase resulted from the investments made by shipowners in Asian developing countries, whose fleets expanded by 3.5 million dwt or 3.1 per cent to 115.7 million dwt, accounting for 73.7 per cent of the developing countries' total fleet. The fleet of developing countries of America increased by 0.2 million dwt to 34.1 million dwt, while that of African developing countries decreased, by 0.1 million dwt to 6.0 million dwt. A marginal decrease of 0.2 million dwt was found for the fleet of developing countries in Europe while the small fleet of developing countries in Oceania was stable at 0.2 million dwt. The shares of the socialist countries of Asia and the countries of Central and Eastern Europe in total world tonnage had opposite movements in 2000 with the former increasing by 0.3 million dwt and the latter decreasing by 2.0 million dwt.

Table 13

**Distribution of world tonnage (dwt) by groups of countries of registration,  
1980, 1990, 1999, 2000 and 2001 <sup>a</sup>**  
(beginning-of-year figures)

Flag of registration by group of countries	Tonnage and percentage shares <sup>b</sup> in millions of dwt				
	1980 <sup>c</sup>	1990 <sup>d</sup>	1999	2000	2001
<b>World total</b>	682.8	658.4	788.7	799.0	808.4
	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
<b>Developed market-economy countries</b>	350.1	219.0	202.6	203.2	203.4
	<i>51.3</i>	<i>33.3</i>	<i>25.7</i>	<i>25.4</i>	<i>25.2</i>
<b>Major open-registry countries</b>	212.6	224.6	376.8	384.7	392.2
	<i>31.1</i>	<i>34.1</i>	<i>47.8</i>	<i>48.1</i>	<i>48.5</i>
<b>Countries of Central and Eastern Europe (including former USSR)</b>	37.8	44.3	20.7	18.3	16.3
	<i>5.5</i>	<i>6.7</i>	<i>2.6</i>	<i>2.3</i>	<i>2.0</i>
<b>Socialist countries of Asia</b>	10.9	22.1	26.0	25.8	26.1
	<i>1.6</i>	<i>3.4</i>	<i>3.3</i>	<i>3.2</i>	<i>3.2</i>
<b>Developing countries</b>	68.4	139.7	150.8	153.6	157.0
	<i>10.0</i>	<i>21.2</i>	<i>19.1</i>	<i>19.2</i>	<i>19.4</i>
<i>of which in:</i>					
<b>Africa</b>	7.2	7.3	6.3	6.1	6.0
<b>Americas</b>	21.8	25.5	34.5	33.9	34.1
<b>Asia</b>	39.1	89.5	108.5	112.2	115.7
<b>Europe</b>	0.2	13.8	1.3	1.2	1.0
<b>Oceania</b>	0.1	3.6	0.2	0.2	0.2
<b>Other, unallocated</b>	3.0	8.7	11.8	13.4	13.4
	<i>0.4</i>	<i>1.3</i>	<i>1.5</i>	<i>1.7</i>	<i>1.7</i>

Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

<sup>a</sup> Excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets, which in 2000 amounted respectively to 4.3, 1.9 and 1.8 million dwt.

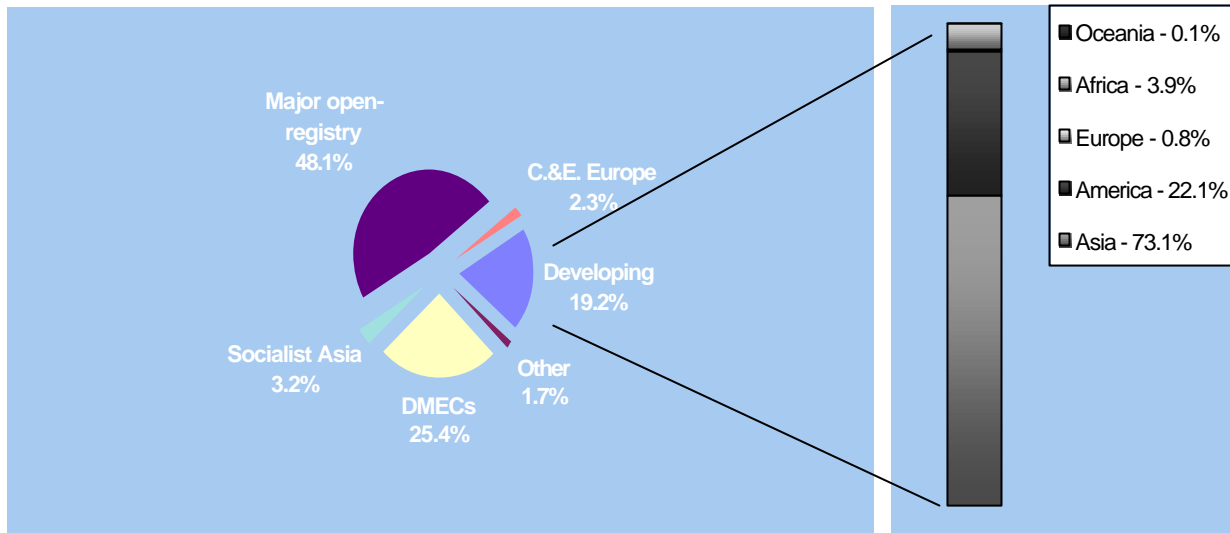
<sup>b</sup> Percentage shares are shown in italics.

<sup>c</sup> Mid-year figure.

<sup>d</sup> End of year figure.

Graph 5

**World tonnage by country groups, as at 1 January 2001**  
(percentage distribution of dwt)



Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

*Distribution of world tonnage by types of vessel and country groups*

48. Table 14 provides more detailed data on fleet distribution by types of vessel and country groups for 1970, 1980, 1990, 1998, 1999 and 2000. The share of oil tankers and dry bulk carriers in the total world fleet remained fairly stable in 2000 when compared to 1999. There was a marginal decrease in tankers to 35.3 per cent, while bulkers raised their share to 34.8 per cent. Changes were more noticeable in general cargo vessels, which decreased their share of the world fleet to 12.7 per cent and container vessels, which raised their share to 8.6 per cent. Other types of vessels decreased their share to 8.6 per cent. In the oil tanker sector, the share of developed market-economy countries decreased marginally to 30.0 per cent in 2000 from 30.5 per cent in 1999. Conversely, the open-registry countries' share increased slightly to 50.8 per cent, as compared to 50.2 per cent in the previous year. These very small fluctuations in both country groups still reflect the continuous trend, specifically for owners in developed market-economy countries, to prefer to register tanker tonnage under open registry. The share of developing countries was stable in 2000 at 16.1 per cent, a very small decrease from the previous year. Also the share of Asian developing countries remained stable in 2000 at 12.9 per cent of the world tanker fleet.

49. In the dry bulk carrier sector, the tonnage share of developed market-economy countries in the total world fleet continued to decrease and reached 16.9 per cent in 2000, which stood at one third of its share in 1980 (52.7 per cent). Major open-registry countries continued to expand their share, amounting to 55.0 per cent in 2000, as compared to 54.9 per cent in 1999. The developing countries' share expanded in 2000 to 20.7 per cent, due to the expanding share of developing countries of Asia which in 2000 reached 16.5 per cent (15.7 per cent in the previous year). The fleet developments, in the sector of general cargo ships, of the three major country groups were similar to that of the dry bulk carrier sector. The developing countries' share in the general cargo ship sector continued to increase and now represents 27.1 per cent, which is the highest in this country group's share in the five principal types of vessel.

Table 14

Percentage shares of world tonnage by types of vessel and country groups, in 1970, 1980, 1990 (as at 1 July), 1998, 1999 and 2000 (as at 31 December) <sup>a</sup>

	Year	Total dwt		Oil tankers	Bulk carriers <sup>b</sup>	General cargo	Container ships	Other ships
		Million dwt	Percentage of world total					
<b>World total</b>	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
	1998	788.7	100.0	35.6	34.9	13.1	7.8	8.6
	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
<b>Developed market-economy countries</b>	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
	1998	202.6	25.4	29.8	18.1	19.6	37.1	38.7
	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
<b>Open-registry countries</b>	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
	1998	376.8	47.2	51.2	53.5	37.0	38.6	35.1
	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
<b>Central and Eastern Europe</b>	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
	1998	20.7	2.6	1.2	2.2	7.3	0.7	4.8
	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
<b>Socialist countries of Asia</b>	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
	1998	25.9	3.2	1.2	4.2	7.6	2.7	2.1
	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
<b>Developing countries</b>	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
	1998	150.8	18.9	15.9	20.1	26.7	17.3	18.5
	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

	Year	Total dwt		Oil	Bulk	General	Container	Other
		Million dwt	Percentage of world total	tankers	carriers <sup>b</sup>	cargo	ships	ships
				Percentage share by vessel type <sup>c</sup>				
<i>of which in</i>								
<b>Africa</b>	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
	1998	6.3	0.8	0.6	0.5	1.6	0.3	1.8
	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
<b>America</b>	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
	1998	34.5	4.3	3.1	3.7	9.5	3.8	5.3
	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
<b>Asia</b>	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
	1998	108.5	13.6	12.1	15.6	15.3	13.0	11.2
	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
<b>Europe</b>	1970	-	-	-	-	-	-	-
	1980	0.2	-	-	-	0.1	-	-
	1990	13.8	2.1	1.4	2.8	3.2	0.6	0.4
	1998	1.3	0.2	-	0.3	0.2	0.2	-
	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
<b>Oceania</b>	1970	-	-	-	-	-	-	-
	1980	0.2	-	-	-	0.1	-	-
	1990	3.6	0.5	0.2	0.9	0.8	0.3	0.3
	1998	0.2	-	-	..	0.1	..	0.1
	1999	0.2	-	-	..	0.1	..	0.1
	2000	0.2	0.0	0.0	0.0	0.1	0.0	0.1
<b>Unallocated</b>	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
	1998	11.8	1.5	0.7	1.9	1.8	3.7	0.8
	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

*Source:* UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London). See annex III (b) for details.

<sup>a</sup> Excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets.

<sup>b</sup> Ore and bulk carriers, including combined ore/oil and ore/bulk/oil carriers.

<sup>c</sup> Percentages for 1970 were calculated on the basis of g.r.t.

50. Developed market-economy countries slightly decreased their share of containership deadweight tonnage to 34.4 per cent in 2000. On the other hand, the major open-registry countries' share continued to expand, reaching 40.6 per cent in 2000, approximately two-thirds of which represented containerships beneficially owned by owners in developed market-economy countries. The share of developing countries decreased slightly to 18.7 per cent, of which 13.3 per cent was held by Asian developing countries.

*The structure of the fleet of main country groups*

51. Table 15 provides data on the structure of the merchant fleet of the main country groups as at 1 January 2001. Developed market-economy countries' tonnage in tankers decreased in 2000 by 0.9 million dwt to 42.1 per cent of the group's total fleet from 42.6 per cent in the previous year. Their dry bulk carriers increased by 0.6 million dwt, to 23.4 per cent from 23.1 per cent in 1999. The general cargo ships and containerships share of their fleet expanded slightly to 9.9 per cent and 11.7 per cent respectively as compared to 9.8 per cent and 10.8 per cent in 1999. Major open-registry countries increased their total fleets substantially by 7.5 million dwt. A greater proportion of their fleets was in the oil tanker and dry bulk carrier sectors, with both ship types accounting for 76.5 per cent of their fleet in 2000. Their oil tankers increased in 2000 by 2.6 million dwt to 37.0 per cent of the group's total fleet (the same as in 1999), whilst the dry bulk carriers increased in 2000 by 3.4 million dwt to 39.5 per cent as compared to 39.4 per cent in the previous year. Their general cargo ships decreased in 2000 by 1.6 million dwt, accounting for 9.6 per cent of the group's total fleet, down from 10.2 in 1999. Their containership fleet expanded in 2000 by 2.8 million dwt to 7.2 per cent of their total fleet from 6.6 per cent in 1999.

Table 15

**Structure of the merchant fleets of the main country groups, as at 1 January 2001<sup>a</sup>**  
(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	
	m. dwt	%	m. dwt	%	m. dwt	%	m. dwt	%	m. dwt	%	m. dwt	%
<b>Total fleet</b>	808.4	100.0	203.4	100.0	392.2	100.0	157.0	100.0	16.3	100.0	26.1	100.0
<b>Oil tankers</b>	285.4	35.3	85.7	42.1	145.0	37.0	45.9	29.3	2.8	17.0	3.9	14.9
<b>Bulk carriers</b>	281.7	34.8	47.6	23.4	155.0	39.5	58.3	37.2	4.0	24.8	11.4	43.5
<b>General cargo ships</b>	102.7	12.7	20.2	9.9	37.5	9.6	27.8	17.7	6.5	39.8	7.8	29.8
<b>Containerships</b>	69.2	8.6	23.8	11.7	28.1	7.2	12.9	8.2	0.4	2.5	1.8	6.9
<b>Other ships</b>	69.4	8.6	26.1	12.8	26.5	6.8	12.0	7.6	2.6	15.9	1.3	4.9

Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

<sup>a</sup> Ships of 100 grt and over, excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets.

52. In developing countries, tonnage distribution is also characterized by a comparatively high proportion of dry bulk carriers and oil tankers, representing 37.2 per cent and 29.3 per cent respectively in 2000. In absolute terms, their 2000 tonnage in dry bulk carriers and oil tankers stood at 58.3 million dwt and 45.9 million dwt as compared to 47.6 million dwt and 85.7 million dwt for developed market-

economy countries. The share of general cargo ships in this group increased in 2000 to 27.8 million dwt compared to 27.5 million dwt in 1999, while containerships increased by 0.9 million dwt to 8.2 per cent in 2000 from 7.8 per cent in the previous year. In the countries of Central and Eastern Europe, general cargo ships are relatively dominant, accounting for 39.8 per cent in 2000, as compared to 37.7 per cent in 1999. On the other hand, containerships 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 increased in 2000 to 11.4 million dwt (from 11.3 million dwt in 1999) or 43.5 per cent (43.8 per cent in 1999) for dry bulk carriers, and remained stable at 7.8 million dwt or 29.8 per cent (30.2 per cent in 1999) for general cargo ships. Conversely, the absolute tonnage of containerships increased by 0.1 million dwt in 2000 to 1.8 million dwt or 6.9 per cent (6.6 per cent in 1999).

### C. REGISTRY OF VESSELS

#### *The 35 most important maritime countries and territories*

53. The ranking in terms of deadweight for the 35 most important maritime countries and territories is provided in table 16. In 2000, these 35 countries and territories controlled 94.8 per cent of the world merchant fleet (94.2 per cent in 1999). Romania, which was thirty-fifth in 1999, was replaced in 2000 by the United Arab Emirates, which was thirty-third. Thailand, with a total tonnage of 2.5 million dwt was thirty-fifth in the year 2000 and represented 0.34 per cent of the world total fleet. The five largest countries controlled 51.7 per cent (50.7 per cent in 1999) and the top 10 countries controlled 69.6 per cent (67.7 per cent in 1999) of the world total fleet.

Table 16

#### **The 35 most important maritime countries and territories, as at 1 January 2001<sup>a</sup>**

Country of domicile <sup>b</sup>	Number of vessels			Deadweight tonnage			Foreign flag as a percentage of total	Total as a percentage of world total
	National flag <sup>c</sup>	Foreign flag	Total	National flag	Foreign flag	Total		
<b>Greece</b>	785	2 476	3 261	43 580 418	99 526 616	143 107 034	69.55	19.09
<b>Japan</b>	781	2 150	2 931	15 224 574	83 509 376	98 733 950	84.58	13.17
<b>Norway</b>	907	791	1 698	27 733 152	32 307 757	60 040 909	53.81	8.01
<b>United States</b>	508	890	1 398	9 787 743	34 947 020	44 734 763	78.12	5.97
<b>China</b>	1 617	599	2 216	22 340 944	18 392 826	40 733 770	45.15	5.43
<b>Hong Kong, China</b>	166	385	551	9 075 158	26 626 413	35 701 571	74.58	4.76
<b>Germany</b>	467	1 640	2 107	7 436 308	25 436 338	32 872 646	77.38	4.39
<b>Republic of Korea</b>	473	430	903	7 605 469	18 059 750	25 665 219	70.37	3.42
<b>Singapore</b>	476	280	756	12 842 391	7 789 756	20 632 147	37.76	2.75
<b>United Kingdom</b>	407	432	839	8 342 983	10 973 052	19 316 035	56.81	2.58
<b>Taiwan Province of China</b>	162	359	521	7 205 099	11 662 034	18 867 133	61.81	2.52
<b>Denmark</b>	418	318	736	7 930 726	10 192 911	18 123 637	56.24	2.42
<b>Russian Federation</b>	2 190	349	2 539	8 566 133	7 499 800	16 065 933	46.68	2.14

Country of domicile <sup>b</sup>	Number of vessels			Deadweight tonnage			Foreign flag as a percentage of total	Total as a percentage of world total
	National flag <sup>c</sup>	Foreign flag	Total	National flag	Foreign flag	Total		
<b>Italy</b>	502	129	631	8 712 160	4 503 500	13 215 660	34.08	1.76
<b>India</b>	358	52	410	10 328 310	1 531 518	11 859 828	12.91	1.58
<b>Saudi Arabia</b>	59	69	128	1 050 298	9 447 723	10 498 021	90.00	1.40
<b>Sweden</b>	168	194	362	1 500 375	8 823 918	10 324 293	85.47	1.38
<b>Turkey</b>	452	103	555	7 767 491	1 062 064	8 829 555	12.03	1.18
<b>Brazil</b>	161	19	180	5 603 968	2 192 117	7 796 085	28.12	1.04
<b>Iran, Islamic Republic of</b>	166	2	168	7 078 901	82 087	7 160 988	1.15	0.96
<b>Switzerland</b>	13	233	246	720 514	6 193 870	6 914 384	89.58	0.92
<b>Malaysia</b>	240	55	295	5 405 019	1 074 541	6 479 560	16.58	0.86
<b>Belgium</b>	22	136	158	131 481	6 340 580	6 472 061	97.97	0.86
<b>Netherlands</b>	568	202	770	3 589 013	2 692 015	6 281 028	42.86	0.84
<b>France</b>	174	91	265	3 416 126	2 124 819	5 540 945	38.35	0.74
<b>Philippines</b>	328	27	355	4 290 044	607 627	4 897 671	12.41	0.65
<b>Indonesia</b>	494	98	592	3 110 603	1 253 390	4 363 993	28.72	0.58
<b>Canada</b>	162	87	249	1 006 381	3 033 877	4 040 258	75.09	0.54
<b>Spain</b>	100	223	323	223 088	3 608 942	3 832 030	94.18	0.51
<b>Kuwait</b>	32	3	35	3 407 022	275 446	3 682 468	7.48	0.49
<b>Australia</b>	56	36	92	1 726 688	1 551 017	3 277 705	47.32	0.44
<b>Ukraine</b>	361	90	451	1 253 445	1 561 572	2 815 017	55.47	0.38
<b>United Arab Emirates</b>	42	138	180	479 760	2 154 759	2 634 519	81.79	0.35
<b>Monaco</b>	0	107	107	0	2 619 934	2 619 934	100.0	0.35
<b>Thailand</b>	218	49	267	2 066 847	478 195	2 545 042	18.79	0.34
<b>Subtotal</b>	14 033	13 242	27 275	260 538 632	450 137 160	710 675 792	63.34	94.8
<b>World total</b>	16 306	14 202	30 508	282 107 729	467 491 617	749 599 346	62.36	100.0

Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

<sup>a</sup> Vessels of 1,000 grt and above, excluding the United States Reserve Fleet and the United States and Canada Great Lakes fleets.

<sup>b</sup> The country of domicile indicates where the controlling interest of the fleet is located, in terms of the parent company. In several cases, this has required certain judgements to be made. Thus, for instance, Greece is shown as the country of domicile with respect to 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.

<sup>c</sup> Including 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).



54. Among these countries and territories the trend to register under a foreign flag continued in 2000. The total tonnage registered under foreign flags in 2000 increased to 450.1 million dwt representing 63.3 per cent of the 35 countries' total fleet, as compared with 431.2 million dwt or 62.5 per cent in 1999. It is a recent trend that developing countries and territories have continued to register their tonnage under foreign flags. In 2000, 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 for flagging out by developing countries, there are significant differences among these countries. The foreign registry of Saudi Arabia and Hong Kong, China amounted to 89 per cent and 74 per cent respectively, while the Islamic Republic of Iran, the Philippines and Kuwait made significantly less use of the benefits of foreign flag facilities, which represented 1.1, 12.4 and 7.5 per cent respectively of their fleets. For developed market-economy countries, the share of foreign-registered tonnage stood at 69.5 per cent in 2000.

#### *Major open registries*

55. The share of the world merchant fleet in foreign registers continued to expand at almost the same rate as in the previous year. Tonnage distribution of the seven major open-registry countries by principal types of vessel is shown in table 17. The total tonnage registered in 2000 increased moderately by 2.5 per cent to 371.3 million dwt from 362.1 million dwt in the previous year, which had expanded by 2.1 per cent. Panama continued to lead the list, enlarging its fleet in 2000 by 16.5 million dwt or 11.3 per cent. Liberia's fleet contracted by 19.2 per cent resulting from the change in the registration authority and subsequent litigation. The combined tonnage of these two countries amounts to 64.1 per cent of the total tonnage of the seven major open-registry countries. In 2000, Malta increased its fleet substantially by 10.3 per cent to 44.5 million dwt while the Bahamas' tonnage increased by 12.6 per cent to 44.9 million dwt. The analysis by type of vessel indicated that dry bulk stood at 39.2 per cent of the total deadweight in 2000 as compared with 39.4 per cent in 1999, followed by oil tankers, whose share fell to 37.2 per cent in 2000 from 37.6 per cent in the previous year. The combined tonnage of these two types of vessels accounts for 76.3 per cent of the total deadweight. General cargo ships (3,148 ships) accounted for 32.3 per cent of the total number of ships (33.5 per cent in 1999), reflecting the trend of the maritime industry to flag out in this sector, followed by dry bulk carriers of 2,644 ships or 27.1 per cent of the total.

#### *Nationality of vessels*

56. 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 the 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 of nationals of the two international registries was nearly 85 and 99.2 per cent. These two countries (Norway and Denmark) were ranked third and twelfth of the 35 most important maritime countries in 2000.

57. The true nationality of the vessels registered in the seven major open-registries is analysed in table 19. In 2000, 22 countries or territories accounted for 92.3 per cent of the total tonnage of the seven major open-registry fleets. This percentage was slightly higher than in 1999. However, Finland, which had been listed as twenty-second in 1999, was replaced by Australia. Ownership is concentrated in 10 countries or territories, which control 80.6 per cent of the deadweight of vessels registered in the seven major open-registry countries, as compared with 78.5 per cent in the previous year. Similarly, the top five countries or territories control 63.1 per cent (60.6 per cent in 1999). Greece was ranked first in 2000 for the seventh consecutive year with the largest share (24.3 per cent) of the seven major open-registry fleets. In 2000, Greece also had the largest foreign-flag ownership, representing 99.5 million dwt or 19.7 per cent of the total world foreign-flag tonnage, followed by Japan with 83.5 million dwt or 16.5 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.

Table 17

**Tonnage distribution of major open-registry fleets,<sup>a</sup> as at 1 January 2001**

Flag	Oil tankers		Bulk carriers		General cargo		Containerships		Others		Total		Total at 1.1.2000
	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Thousand dwt
<b>Panama</b>	441	48 112	1 279	76 231	1 374	12 859	473	14 041	801	11 708	4 368	162 951	146 393
<b>Liberia</b>	290	34 072	332	20 560	254	4 453	237	7 308	326	8 725	1 439	75 118	92 988
<b>Bahamas</b>	166	24 895	140	8 335	481	6 892	50	1 454	281	3 295	1 118	44 871	39 841
<b>Malta</b>	288	20 003	425	17 636	503	4 796	48	912	87	1 150	1 351	44 497	40 343
<b>Cyprus</b>	127	6 894	420	18 137	488	4 658	113	2 544	91	1 079	1 239	33 312	32 697
<b>Bermuda</b>	19	4 083	28	3 699	26	316	16	459	29	564	118	9 121	7 860
<b>Vanuatu</b>	1	5	20	802	22	280	1	29	70	329	114	1 445	1 938
<b>Total</b>	1 332	138 064	2 644	145 400	3 148	34 254	938	26 747	1 685	26 850	9 747	371 315	362 060
<b>Total at 1.1.2000</b>	1 407	136 285	2 678	142 574	3 333	35 715	872	23 559	1 668	23 927	9 958	362 060	

Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

<sup>a</sup> Ships of 1,000 grt and above: this table is not fully comparable with tables 13 and 15, which lists ships of 100 grt and above as the base.

Table 18

**Tonnage owned by the nationals of, and registered in, the country or territory of registry in the total fleet of the most important open and international registers, as at 1 January 2001**  
(thousands of dwt)

Country or territory of registry	Total tonnage registered in the country of registry	Tonnage owned by nationals of, and registered in, the country of registry	Share of tonnage owned by nationals in the total registered fleet (%)
<b>Panama</b>	162 321	0	0.0
<b>Liberia</b>	75 156	0	0.0
<b>Bahamas</b>	44 871	226	0.5
<b>Malta</b>	44 497	48	0.1
<b>Cyprus</b>	33 312	792	2.4
<b>Norway (NIS)</b>	28 062	23 842	85.0
<b>Bermuda</b>	9 122	0	0.0
<b>Denmark (DIS)</b>	7 617	7 559	99.2
<b>Vanuatu</b>	1 444	0	0.0

Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

<sup>a</sup> Ships of 1,000 grt and above: this table is not fully comparable with tables 13 and 15, which lists ships of 100 grt and above as the base.

Table 19

## True nationality of major open-registry fleets, as at 1 January 2001

Country or territory of domicile	Panama			Liberia			Bahamas			Malta			Cyprus			Bermuda			Vanuatu			Subtotal			Total foreign flag fleet	
	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	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt
Greece	545	19 076	11.7	154	10 928	14.5	174	8 549	19.1	638	27 800	62.5	656	23 753	71.3	1	95	1.0	1	70	4.8	2 169	90 271	24.3	2 476	99 527
Japan	1 705	69 311	42.5	126	5 274	7.0	32	664	1.5	3	435	1.0	22	294	0.9	0	0	0.0	26	640	44.3	1 914	76 618	20.6	2 150	83 509
Norway	100	4 536	2.8	124	6 136	8.2	236	9 838	21.9	70	3 989	9.0	35	313	0.9	3	41	0.4	0	0	0.0	568	24 853	6.7	1 361	56 150
United States	138	2 961	1.8	143	6 579	8.8	181	10 961	24.4	9	579	1.3	5	28	0.1	18	575	6.3	51	161	11.1	545	21 844	5.9	890	34 947
Hong Kong, China	207	16 405	10.1	42	2 358	3.1	8	792	1.8	9	649	1.5	2	37	0.1	6	635	7.0	1	49	3.4	275	20 925	5.6	385	26 627
Republic of Korea	344	16 092	9.9	10	1 304	1.7	0	0	0.0	3	25	0.1	4	115	0.3	0	0	0.0	0	0	0.0	361	17 536	4.7	430	18 060
Germany	27	572	0.4	391	11 787	15.7	15	105	0.2	45	681	1.5	214	3 672	11.0	2	76	0.8	0	0	0.0	694	16 893	4.5	1 640	25 437
China	254	9 008	5.5	60	2 988	4.0	0	0	0.0	14	336	0.8	16	216	0.6	0	0	0.0	0	0	0.0	344	12 548	3.4	599	18 393
Denmark	16	326	0.2	9	189	0.3	39	398	0.9	7	25	0.1	0	0	0.0	0	0	0.0	0	0	0.0	71	938	0.3	708	17 774
United Kingdom	55	601	0.4	28	894	1.2	126	1 685	3.8	2	74	0.2	6	42	0.1	40	3 689	40.4	0	0	0.0	257	6 985	1.9	521	16 550
Taiwan, Province of China	287	8 348	5.1	20	957	1.3	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	307	9 305	2.5	359	11 662
Saudi Arabia	8	167	0.1	22	6 631	8.8	10	2 215	4.9	0	0	0.0	0	0	0.0	4	47	0.5	0	0	0.0	44	9 060	2.4	69	9 448
Sweden	6	630	0.4	15	1 356	1.8	22	1 052	2.3	0	0	0.0	0	0	0.0	13	2 947	32.3	0	0	0.0	56	5 985	1.6	194	8 824
Singapore	83	2 041	1.3	30	2 944	3.9	10	642	1.4	0	0	0.0	1	30	0.1	0	0	0.0	0	0	0.0	124	5 657	1.5	280	7 790
Russian Federation	16	73	0.0	67	4 524	6.0	5	11	0.0	98	953	2.1	84	1 535	4.6	0	0	0.0	0	0	0.0	270	7 096	1.9	349	7 500
Belgium	4	545	0.3	6	1 043	1.4	15	685	1.5	2	53	0.1	4	65	0.2	0	0	0.0	0	0	0.0	31	2 391	0.6	136	6 341
Switzerland	92	2 626	1.6	17	723	1.0	6	414	0.9	62	1 549	3.5	4	53	0.2	0	0	0.0	0	0	0.0	181	5 365	1.4	233	6 194
France	4	401	0.2	0	0	0.0	22	401	0.9	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	26	802	0.2	168	5 095
Italy	11	252	0.2	10	712	0.9	13	649	1.4	48	1 480	3.3	0	0	0.0	0	0	0.0	0	0	0.0	82	3 093	0.8	129	4 504
Spain	50	347	0.2	1	94	0.1	8	827	1.8	0	0	0.0	9	142	0.4	0	0	0.0	0	0	0.0	68	1 410	0.4	223	3 609
Monaco	12	433	0.3	13	611	0.8	37	691	1.5	18	416	0.9	0	0	0.0	0	0	0.0	0	0	0.0	80	2 151	0.6	70	1 928
Australia	8	473	0.3	3	496	0.7	0	0	0.0	0	0	0.0	0	0	0.0	2	134	1.5	0	0	0.0	13	1 103	0.3	36	1 551
Subtotal	3 972	155 224	95.3	1 291	68 528	91.2	959	40 579	90.4	1 028	39 044	87.7	1 062	30 295	90.9	89	8 239	90.3	79	920	63.7	8 480	342 829	92.3	13 406	471 420
Others	396	7 727	4.7	148	6 590	8.8	159	4 292	9.6	323	5 453	12.3	177	3 017	9.1	29	882	9.7	35	525	36.3	1 267	28 486	7.7	1 115	34 162
Total	4 368	162 951	100.0	1 439	75 118	100.0	1 118	44 871	100.0	1 351	44 497	100.0	1 239	33 312	100.0	118	9 121	100.0	114	1 445	100.0	9 747	371 315	100.0	14 521	505 582

Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

## D. SHIPBUILDING AND THE SECOND-HAND MARKET

### *Newbuilding orders*

58. In 2000, newbuilding contracts for the six major ship types, totalling 80.1 million dwt, were placed — an increase of 61.5 per cent in comparison with the contracts in 1999 (see table 20). In the tanker sector optimism prevailed with 447 units totalling 41.8 million dwt ordered in 2000, as compared with 206 units totalling 16.8 million dwt in 1999. The 2000 newbuilding orders for dry bulk carriers were almost steady at 355 units of 20.5 million dwt.

59. Newbuilding orders for containerships continued to rise substantially more than doubling to 375 units totalling 14.9 million dwt in 2000 as compared to 170 units and 7.2 million dwt in 1999. These newbuilding tonnages continued to reflect the recent trend for post-Panamax containerships. The newbuilding orders for general cargo ships almost doubled in 2000 to 255 units of 2.5 million dwt from 162 units totalling 1.3 million dwt in 1999. On the other hand, the orders for passenger ferries increased by 20 vessels to a total of 136 vessels, but tonnage decreased to 308,000 dwt in 2000 from 348,000 dwt in the previous year.

### *Tonnage on order*

60. World tonnage on order, by groups of countries of registry and by principal types of vessel are shown in table 21. World tonnage on order at the beginning of 2001 stood at 100.5 million dwt, representing a significant increase of 20.3 per cent over the previous year. Tonnage on order by developed market-economy countries amounted to 36.8 million dwt, accounting for 36.6 per cent of the world total tonnage on order, as compared with 26.6 million dwt or 31.8 per cent at the beginning of 2000. Major open-registry countries had 48.1 million dwt or 47.8 per cent of world tonnage on order, as compared with 41.4 million dwt or 49.5 per cent at the beginning of last year. The share of the countries of Central and Eastern Europe continued to decrease in 2000, to 0.5 million dwt or 0.5 per cent of the world total on order, whilst the share of the socialist countries of Asia more than doubled in 2000, ending the year with 5.4 million dwt or 5.4 per cent of the world total on order compared with 2.1 million dwt or 2.5 per cent at the end of 1999.

61. Developing countries' tonnage decreased significantly to 8.6 million dwt or 8.6 per cent of the world total tonnage on order at the beginning of 2001, as compared with 10.5 million dwt or 12.6 per cent in 2000. Tonnage on order by Asian developing countries decreased substantially by 1.8 million dwt to 7.6 million dwt at the beginning of 2001, which accounted for 88.1 per cent of the developing countries' total tonnage on order. There was also a decrease in the African newbuilding orders, to 97 thousand dwt on order at the beginning of 2001, while the Americas developing countries were almost steady at 916 thousand dwt.

62. In 2000, oil tanker orders rose by 9.1 per cent to 40.3 million dwt, accounting for 40.0 per cent of the world total on order. Developing countries had 5.2 million dwt on order, representing 12.9 per cent of the total, of which Asian developing countries represented 4.9 million dwt or 93.6 per cent of the developing countries' total. Dry bulk carriers on order at the beginning of 2001 increased substantially by 27.2 per cent to 31.2 million dwt accounting for 31.0 per cent of the world total on order. For this type of vessel, developed market-economy countries and major open-registry countries accounted for 22.6 per cent and 62.6 per cent, representing a combined share of more than 85 per cent. The volume of containerships on order also expanded substantially in 2000 by 62.0 per cent to 16.1 million dwt at year end, representing 16.0 per cent of the world total on order. For containerships on order, developed market-economy countries and major open-registry countries accounted for over 40 per cent each. Developing countries' containership orders increased from 1.0 million dwt at the beginning of 2000 to 1.3 million dwt at the beginning of 2001, which accounted for 8 per cent of the total. Asian developing countries had 1.2 million dwt or 95.1 per cent of the developing countries' total on order.

Table 20

**Newbuilding contracts placed for the main types of ship<sup>a</sup> during 1990–2000 and 2001**  
(number of ships, thousands of dwt)

Year	Tankers		Bulk carriers		Combined carriers		General cargo ships		Container vessels		Passenger ferries		Total <sup>b</sup>	
	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt
<b>1990</b>	338	25 876	93	3 640	24	2 726	310	2 090	124	3 073	93	119	982	37 524
<b>1991</b>	308	19 871	148	11 836	4	322	167	877	66	1 796	84	90	777	34 793
<b>1992</b>	206	10 050	126	7 261	0	0	225	1 402	127	3 227	114	91	798	22 031
<b>1993</b>	267	17 327	299	18 303	1	83	261	2 102	182	5 057	122	163	1 132	43 035
<b>1994</b>	256	13 833	339	19 896	2	220	227	1 493	242	6 497	118	159	1 184	42 098
<b>1995</b>	243	9 143	381	22 418	4	440	345	2 449	345	8 562	144	224	1 462	43 236
<b>1996</b>	274	13 875	271	14 250	-	-	257	2 107	292	6 978	144	155	1 238	37 365
<b>1997</b>	428	32 516	282	17 983	2	220	299	2 701	166	3 618	96	149	1 273	57 187
<b>1998</b>	280	21 922	166	11 835	0	0	333	2 488	178	5 975	117	231	1 074	42 451
<b>1999</b>	206	16 822	346	23 934	-	-	162	1 323	170	7 183	116	348	1 000	49 610
<b>2000</b>														
<b>Jan</b>	17	1 337	33	2 095	-	-	16	84	18	964	20	20	104	4 440
<b>Feb</b>	12	786	36	2 983	-	-	17	130	35	2 128	7	18	107	6 167
<b>Mar</b>	33	2 366	29	1 110	-	-	10	64	19	930	6	7	97	4 477
<b>Apr</b>	36	2 746	28	1 320	-	-	8	164	14	748	7	27	93	5 005
<b>May</b>	33	4 031	26	1 229	-	-	3	40	27	1 168	3	25	92	6 493
<b>Jun</b>	56	6 047	34	1 891	-	-	22	301	46	1 892	10	22	168	10 120
<b>Jul</b>	43	4 081	45	2 647	-	-	25	198	36	1 582	15	22	164	8 707
<b>Aug</b>	43	3 992	21	1 349	-	-	11	128	26	685	6	35	107	6 291
<b>Sep</b>	31	2 983	10	587	-	-	15	195	42	1 260	13	33	111	5 058
<b>Oct</b>	34	3 863	37	2 577	-	-	39	325	28	1 126	20	17	158	7 908
<b>Nov</b>	49	3 171	13	529	-	-	20	175	19	832	2	12	103	4 719
<b>Dec</b>	59	6 462	32	1 764	-	-	69	730	63	1 710	27	70	250	10 736
<b>Total</b>	446	41 865	344	20 081	-	-	255	2 534	373	15 025	136	308	1 554	80 121
<b>2001</b>														
<b>Jan</b>	40	2 878	16	430	-	-	9	131	29	890	4	2	98	4 331
<b>Feb</b>	27	2 034	4	202	-	-	5	75	15	647	1	5	52	2 963
<b>Mar</b>	43	2 852	3	395	-	-	6	60	19	464	7	9	81	3 780
<b>Apr</b>	35	2 228	22	1 281	-	-	9	92	29	1 299	7	1	102	4 901
<b>May</b>	49	4 292	6	653	-	-	8	65	14	648	10	6	87	5 667
<b>Jun</b>	59	3 896	16	863	-	-	8	80	17	705	12	2	112	5 546
<b>Jul</b>	68	4 730	35	2 378	-	-	28	272	9	175	7	8	171	7 563

Source: UNCTAD secretariat on the basis of data from *Shipping Statistics and Market Review, 2001*, Institute of Shipping Economics and Logistics (Bremen), Nos. 1-2.

<sup>a</sup> Ships of 300 grt and over.

<sup>b</sup> Total does not include data on newbuilding contracts for other types of ship.

Table 21

**World tonnage on order, as at 1 January 2001**  
(thousands of dwt)

Country groups of registry	Total	Oil tankers	Bulk carriers	General cargo	Container ships	Other vessels
<b>World total</b>	100 513	40 328	31 208	3 966	16 140	8 870
<b>Developed market-economy countries</b>	36 782	16 341	7 064	1 751	6 840	4 785
<b>Major open-registry countries</b>	48 101	16 891	19 523	1 663	7 218	2 806
<b>Countries of Central and Eastern Europe</b>	554	207	63	183	-	102
<b>Socialist countries of Asia</b>	5 381	1 504	2 872	112	674	218
<b>Developing countries, total</b>	8 565	5 197	999	176	1 266	926
<i>of which in:</i>						
<b>Africa</b>	97	3	82	4	-	7
<b>Americas</b>	916	329	154	144	61	228
<b>Asia</b>	7 550	4 865	762	28	1 205	691
<b>Europe<sup>a</sup></b>	..	..	..	..	..	..
<b>Oceania</b>	1	-	-	1	-	-
<b>Unallocated</b>	1 129	188	687	80	141	33

Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

<sup>a</sup> Not reported.

*Prices of newbuildings and second-hand tonnage*

63. Table 22 indicates newbuilding prices for the main types of vessel. In 2000, prices for almost all the main types and sizes of newbuildings increased significantly above those of the previous year. Price increases were more pronounced for tankers and bulk carriers and reflected the progressive saturation of shipyard capacity. By mid year, deliveries were scheduled up to 2003 in many yards. Shipbuilders in the Republic of Korea were able to offer attractive prices due to corporate and debt restructuring, reduced labour costs and advantageous exchange rates and thus secured almost half of world orders. Prices from Japanese shipyards were hampered by the overvalued currency and as a result the yards lost market share. Prices of Chinese yards continued to be competitive due to productivity enhancing measures although production times were still longer than with other shipbuilders. Higher prices in European yards did not discourage orders due to the saturation of Asian orderbooks and the end of the European Union's subsidies on 31 December 2000. Analysis shows that oil tanker newbuilding prices for all sizes went up by 10 to 14 per cent in 2000 from their 1999 level. Newbuilding prices for dry bulk carriers up to 74,000 dwt increased modestly in 2000 by about 2 to 3 per cent from the previous year's level, while for Capesizes prices increased by 17.6 per cent. Prices of 2,500 TEU cellular containerships declined by 1.4 per cent while those of general cargo vessels were stable. A modest increase of 3.4 per cent was observed for 75,000 LPG ships. In general the upward trend of shipbuilding prices continued for all types and sizes of vessel as demand remained strong.

64. As table 23 indicates, average second-hand prices for tankers were up. In particular higher prices were obtained for the vessels regarded as environmentally friendly. The number of tanker transactions was also up to 185 from the 1999 level of 120 with best price increases for Aframaxes. In the bulk sector, prices fluctuated widely during the year but with a clear downward correction from the strong prices that prevailed during 1999. In spite of lower prices, an increased number of transactions was reported for Capesizes, with twenty units changing hands during the year. Less activity was reported in the Panamax sector where only 70 vessels were sold (30 less than in 1999) and the Handysize sector with 180 transactions (45 less than in 1999).

Table 22

**Representative newbuilding prices in selected years <sup>a</sup>**  
(millions of dollars)

Type and size of vessels	1980	1985	1990	1995	1998	1999	2000	Percentage change 1999/2000
30–50 000 dwt bulk carrier	17	11	24	24.5	18	19.5	20	2.6
32–45 000 dwt tanker	19	18	29	33.5	25	25	28.5	14.0
70–74 000 dwt bulk carrier	24	14	32	29	20	22	22.5	2.3
80–105 000 dwt tanker	28	22	42	43	33	33	41	24.2
120 000 dwt bulk carrier	32	27	45	40	37	34	40	17.6
250–280 000 dwt tanker	75	47	90	85	70	68	76	11.8
125–138 000 m3 LNG	200	200	225	245	190	150	165	10.0
75 000 m3 LPG	77	44	78	68	58	58	60	3.4
15 000 dwt general cargo	14	12	24	21	21	19	19	0.0
2 500 TEU full containers hip	-	26	52	50	42	35	34.5	-1.4

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

<sup>a</sup> From 1995 prices correspond to the large vessel size.

Table 23

**Second-hand prices for five-year-old vessels, 1995–2000**  
(as at end of year, in millions of dollars)

Vessel	1995	1996	1997	1998	1999	2000	Percentage change 1999/2000
40 000 dwt tankers <sup>a</sup>	24	26	28	20	20	26.5	32.5
80–95 000 dwt tankers <sup>a</sup>	31	37	37.5	25	26	39	50.0
130–150 000 dwt tankers <sup>a</sup>	35.5	40	47	37	36	49.5	37.5
250–280 000 dwt tankers <sup>a</sup>	55	67	70	50	50	71	42.0
45 000 dwt dry bulk carrier	22	18.5	18	13	15.5	15	-3.2
70 000 dwt dry bulk carrier	23	20.5	21	14.5	17	15.5	-8.8
150 000 dwt dry bulk carrier	28	26.5	30	23.5	27.5	25	-9.1

Source: UNCTAD secretariat on the basis of data supplied by Fearnleys (Oslo), *Review 2000*.

<sup>a</sup> Since 1996 prices correspond to the larger vessels