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Chapter II

Structure and Ownership of the World Fleet



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 provided comprehensively cover the structure and ownership of the world fleet. The chapter also reviews deliveries and demolition of vessels, tonnage on order and markets for second-hand tonnage.

A. STRUCTURE OF THE WORLD FLEET

Principal types of vessel

28. Comparative time series data on the world fleet for 1995, 1996 and 1997 are provided in table 6. The world merchant fleet reached 775.9 million dwt at the end of 1997. This represents a 2.3 per cent increase over 1996, when the world fleet had expanded at a rate of 3.2 per cent as compared with 1995. The slower rate of fleet expansion was primarily due to newbuilding deliveries of 36.8 million dwt in 1997, while tonnage broken up and lost was registered at 19.1 million dwt, leaving a net gain of 17.7 million dwt in 1997 as compared with a net gain of 23.2 million dwt in 1996.

29. The combined tonnage of oil tankers and dry bulk carriers continued to dominate the world fleet, representing 71.3 per cent of total tonnage in 1997, a slight decline from 71.8 per cent in 1996. Oil tankers accounted for 35.1 per cent of 1997 world total tonnage, as compared with 35.8 per cent in 1996, and dry bulk carriers 36.2 per cent in 1997, as compared with 36.0 per cent in 1996. General cargo ships and containerships accounted for 13.4 per cent and 7.2 per cent of total tonnage respectively. Comparative data on vessel-type structure indicate that the shares of ore/bulk carriers and containerships continued to expand, while those of oil tankers, ore/bulk/oil carriers and general cargo ships have been on a downward trend since 1993. Graph 5 illustrates world fleet size trends by principal type of vessel for the period 1980-1997.

World fleet of containerships

30. The world fleet of fully cellular containerships expanded tremendously in 1997 in terms of both number of ships and their TEU capacity, reaching 2,204 ships of 3,632,000 TEUs by the end of 1997, which represents an increase of 12.8 per cent in the number of ships and 17.6 per cent in TEU capacity over the previous year. Capacity developments since 1995 show a 16.8 per cent annual average increase in the world total TEU capacity and a 3.6 per cent increase in carrying capacity per ship. The need to cut operating costs through economies of scale gave a boost to orders for ships of the Panamax (3,000-3,999 TEUs) and post-Panamax (4,000 TEUs and over) size. At the end of 1997, the newbuildings orders for all sizes stood at 360 ships, aggregating close to 700,000 TEUs, scheduled to enter into service over the next couple of years, of which 63 ships were of the Panamax and post-Panamax size, with a total capacity of around 302,000 TEUs or 18 per cent (ships) and 43 per cent (capacity) of the total order book (see table 7).

31. The world containership fleet continued to expand in major open-registry countries in 1997 to 36.2 per cent of the world TEU capacity as compared with 34.5 per cent in 1996. The share of developed market-economy countries also expanded to 38.5 per cent from 37.9 per cent in 1996. The TEU capacity of developing countries in 1997 increased by 14.5 per cent to 629,000 TEUs from 550,000 TEUs in 1996, while their share of the world total TEU capacity decreased slightly to 17.3 per cent from 17.8 per cent in 1996. This reflects the fact that the TEU capacity of the developed market-economy

Table 6

World fleet size by principal types of vessel, 1995-1997 ^a
 (end of year figures, in thousands of dwt)

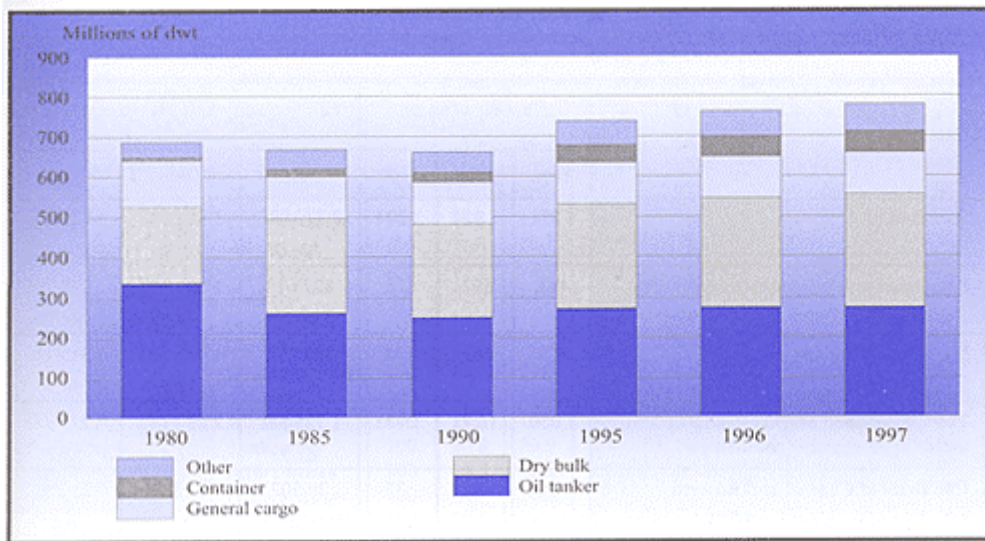
Principal types	1995	1996	1997	Percentage change 1996/1997
Oil tankers	267 651 <i>36.4</i>	271 454 <i>35.8</i>	272 023 <i>35.1</i>	0.2
Bulk carriers	261 628 <i>35.6</i>	272 564 <i>36.0</i>	281 012 <i>36.2</i>	3.1
Ore/bulk/oil	25 240 <i>3.4</i>	21 922 <i>2.9</i>	20 256 <i>2.6</i>	-7.6
Ore/bulk	236 388 <i>32.2</i>	250 642 <i>33.1</i>	260 756 <i>33.6</i>	4.0
General cargo ships	104 145 <i>14.2</i>	104 642 <i>13.8</i>	103 880 <i>13.4</i>	-0.7
Containerships	43 849 <i>6.0</i>	48 766 <i>6.4</i>	56 108 <i>7.2</i>	15.1
Other types of ships	57 644 <i>7.8</i>	60 745 <i>8.0</i>	62 904 <i>8.1</i>	3.6
Liquefied gas carriers	14 691 <i>2.0</i>	15 507 <i>2.1</i>	16 021 <i>2.1</i>	3.3
Chemical tankers	7 697 <i>1.0</i>	7 913 <i>1.0</i>	7 846 <i>1.0</i>	-0.8
Miscellaneous tankers	628 <i>0.1</i>	699 <i>0.1</i>	920 <i>0.1</i>	31.6
Ferries and passenger ships	4 274 <i>0.6</i>	4 492 <i>0.6</i>	4 614 <i>0.6</i>	2.7
Others	30 354 <i>4.1</i>	32 134 <i>4.2</i>	33 503 <i>4.3</i>	4.3
World total	734 917 <i>100.0</i>	758 172 <i>100.0</i>	775 927 <i>100.0</i>	2.3

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

^a Percentage shares are shown in italics.

Graph 5

World fleet size by principal types of vessel: selected years, 1980–1997



Source: Lloyd's Maritime Information Services (London).

countries and major open-registry countries shared close to 90 per cent of the total increase in the TEU capacity in 1997, boosting the world total capacity and consequently reducing the share of developing countries. The absolute increase in capacity in developing countries was attributed mainly to increases in the developing countries and regions in Asia (48 ships of 64,000 TEUs), which represented the major portion (78.9 per cent) of the containership fleet registered in developing countries, followed by the developing countries in America, which increased their capacity by 12 ships of 10,700 TEUs as compared with the previous year. The group of developing countries in Africa almost doubled their total TEU capacity in 1997 as compared with 1996, but their capacity remains at the very low level of just below 10,000 TEUs.

Age distribution of the world merchant fleet

32. Table 8 provides data on the age distribution of the world merchant fleet by types of vessel and by groups of countries and territories. For the second consecutive year, the average age distribution of the world total fleet improved slightly in 1997, to 14.77 years from 14.94 years in 1996. By types of vessel, the average age of tankers fell to 14.68 years in 1997 from the previous year's average age of

14.88 years. The share of tanker tonnage aged 15 years or over decreased substantially to 54.5 per cent in 1997 from 56.4 per cent in 1996, mainly because more older and uneconomic tankers were sold for demolition. Nevertheless, the large share of old tonnage in the world tanker fleets remains a problem. The dry bulk carrier fleet improved further to 14.34 years in 1997 from 14.56 years in 1996, reflecting increased scrapping activities in this sector. Containerships still represented the youngest fleet in 1997, with a decrease in average age to 11.85 years in 1997 from 12.00 years in 1996.

33. By country grouping, the major open-registry countries had the lowest average age of all ships (14.48 years in 1997 versus 14.72 in 1996), slightly younger than that of the developed market-economy countries (14.68 years compared with 14.93 years in 1996), and that of developing countries (14.75 years in 1997 compared with 14.81 years in 1996). The average age of tonnage registered in the socialist countries of Asia increased further, to an average age of 17.20 years in 1997 as compared with 16.76 years in 1996. The countries of Central and Eastern Europe continued to have the oldest fleet, with vessels built over 15 years ago representing 67.6 per cent of their total fleet in 1997 as compared with 65.7 per cent in 1996.

Table 7

Distribution of the world fleet and TEU capacity of fully cellular containerships by groups of countries, in 1995, 1996 and 1997
(end-of-year figures)

Flags of registration by groups of countries	Number of ships			TEU capacity and percentage shares ^a		
	1995	1996	1997	1995	1996	1997
World total	1 771	1 954	2 204	2 720 092 <i>100.0</i>	3 089 682 <i>100.0</i>	3 632 070 <i>100.0</i>
Developed market-economy countries	441	592	675	827 618 <i>30.4</i>	1 170 879 <i>37.9</i>	1 398 781 <i>38.5</i>
Major open-registry countries	609	683	800	898 270 <i>33.0</i>	1 066 261 <i>34.5</i>	1 315 130 <i>36.2</i>
Total, developed market-economy and major open-registry countries	1 050	1 275	1 475	1 725 888 <i>63.5</i>	2 237 140 <i>72.4</i>	2 713 911 <i>74.7</i>
Countries of Central and Eastern Europe (including the former USSR)	50	45	35	29 502 <i>1.1</i>	27 120 <i>0.9</i>	23 276 <i>0.6</i>
Socialist countries of Asia	67	98	99	95 173 <i>3.5</i>	95 882 <i>3.1</i>	96 739 <i>2.7</i>
Developing countries	384	441	504	453 478 <i>16.7</i>	549 555 <i>17.8</i>	628 999 <i>17.3</i>
<i>of which in:</i>						
Africa	5	5	8	4 779 <i>0.2</i>	4 779 <i>0.2</i>	9 117 <i>0.3</i>
America	109	126	138	86 566 <i>3.2</i>	108 552 <i>3.5</i>	119 299 <i>3.3</i>
Asia	263	305	353	357 282 <i>13.1</i>	431 669 <i>14.0</i>	496 028 <i>13.7</i>
Europe	4	5	5	3 711 <i>0.1</i>	4 555 <i>0.1</i>	4 555 <i>0.1</i>
Oceania	3	..	-	1 140 <i>0.0</i>	.. <i>..</i>	.. <i>..</i>
Other, unallocated	200	95	91	416 051 <i>15.3</i>	179 985 <i>5.8</i>	169 145 <i>4.7</i>

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

^a Percentage shares are shown in italics.

Table 8

Age distribution of the world merchant fleet by types of vessel, as at 31 December 1997
(percentage of total dwt)

Country grouping	Types of vessel	Total	0-4 years	5-9 years	10-14 years	15 years and over	Average age (years) ^a	Average age (years) 1996 ^a
World total	All ships	100	17.3	14.7	15.7	52.3	14.77	14.94
	Tankers	100	18.4	18.7	8.4	54.5	14.68	14.88
	Bulk carriers	100	18.4	12.2	21.5	47.9	14.34	14.56
	General cargo	100	6.9	9.3	17.8	65.9	17.42	17.29
	Containerships	100	29.3	17.6	16.5	36.6	11.85	12.00
	All others	100	13.8	15.1	17.0	54.1	15.28	15.32
Developed market-economy countries	All ships	100	17.5	13.9	17.4	51.2	14.68	14.93
	Tankers	100	17.9	12.8	10.5	58.8	15.45	15.90
	Bulk carriers	100	15.4	11.2	26.4	47.0	14.60	14.68
	General cargo	100	13.2	14.2	23.3	49.3	14.90	14.87
	Containerships	100	28.6	20.0	12.8	38.7	12.02	12.48
	All others	100	15.0	18.2	19.3	47.6	14.36	14.08
Major open-registry countries	All ships	100	19.3	15.5	13.4	51.8	14.48	14.72
	Tankers	100	20.8	20.9	5.8	52.4	14.10	14.03
	Bulk carriers	100	19.5	12.1	18.3	50.1	14.46	15.20
	General cargo	100	7.4	10.8	19.7	62.0	16.91	16.72
	Containerships	100	30.5	13.9	16.7	39.0	12.17	11.51
	All others	100	17.5	14.7	14.2	53.6	14.88	15.62
Subtotal	All ships	100	18.6	14.9	14.8	51.6	14.54	14.81
	Tankers	100	19.7	17.8	7.6	54.8	14.61	14.76
	Bulk carriers	100	18.4	11.9	20.5	49.2	14.49	15.04
	General cargo	100	9.4	12.0	21.0	57.6	16.22	16.06
	Containerships	100	29.5	17.0	14.7	38.8	12.08	12.02
	All others	100	16.1	16.6	17.0	50.3	14.59	14.75
Countries of Central and Eastern Europe	All ships	100	2.4	11.3	18.7	67.6	17.96	17.64
	Tankers	100	1.5	6.7	20.4	71.4	18.66	18.32
	Bulk carriers	100	0.0	10.9	19.8	69.3	18.39	17.53
	General cargo	100	3.8	11.9	16.8	67.4	17.75	17.89
	Containerships	100	9.2	11.8	41.5	37.5	14.24	14.63
	All others	100	4.2	15.8	16.8	63.2	17.11	16.79
Socialist countries of Asia	All ships	100	11.8	6.6	14.5	67.1	17.20	16.76
	Tankers	100	20.8	7.2	12.5	59.5	15.51	13.96
	Bulk carriers	100	13.3	6.8	15.4	64.6	16.80	16.34
	General cargo	100	3.7	4.7	10.8	80.8	19.48	19.29
	Containerships	100	27.6	14.7	32.4	25.2	11.01	10.98
	All others	100	6.7	6.3	12.1	74.9	18.51	18.72
Developing countries (excluding open-registry countries)	All ships	100	15.9	15.1	18.3	50.8	14.75	14.81
	Tankers	100	13.2	24.3	11.0	51.5	14.62	15.53
	Bulk carriers	100	21.7	13.3	26.4	38.5	13.00	12.63
	General cargo	100	4.2	4.8	14.4	76.6	19.00	18.80
	Containerships	100	34.4	20.0	13.1	32.5	10.81	12.10
	All others	100	9.1	10.5	18.1	62.3	16.80	16.47

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

^a

To calculate the average age, it has been assumed that the ages of vessels are distributed evenly between the lower and upper limit of each age group. For the 15-years-and-over age group, the mid-point has been assumed to be 22 years.

Delivery of newbuildings

34. Following the exceptionally high level of newbuilding activities in 1996, when 1,082 vessels aggregating 38.2 million dwt were delivered, newbuildings in 1997 declined by 1.4 million dwt or 3.5 per cent from the previous year to 1,065 vessels aggregating 36.8 million dwt. Deliveries of oil tankers decreased significantly to 7.4 million dwt in 1997 from the 98 vessels of 11.6 million dwt in 1996, whereas dry bulk carriers increased substantially in 1997 to 298 vessels of 18.8 million dwt. In the "others" category, containerships accounted for nearly half of the units newly delivered (see table 9).

Demolition of ships

35. Trends in tonnage, types and average age of broken-up vessels are reflected in tables 10, 11 and 12. In 1997, total tonnage sold for demolition decreased by 3.3 million dwt or 18.2 per cent from the tonnage of the previous year to 14.8 million dwt, which accounted for 1.9 per cent of the world total deadweight tonnage. The tonnage for oil tankers continued to decrease in 1997 to 3.6 million dwt from 6.6 million dwt in 1996. Only eight VLCCs were sold for demolition in 1997, six fewer than in the previous year, and 22 less than in 1995. These figures clearly illustrate that the VLCC market during 1997 was so attractive that only the economically untradeable units were destined for breakers. The number of Suezmax tankers broken up was down from nine units in 1996 to four in 1997, while the number of Aframax tankers broken up was up from six units in 1996 to seven in 1997. The smaller sizes in the range of the 10,000-50,000 dwt class experienced a reduction of 50 per cent, from 33 units in 1996 to 16 units in 1997. In overall demolition sales of tankers, it was evident that in 1997 owners endeavoured to keep their vessels trading for as long as possible, as the average age of tankers sold for demolition increased from the last five years' average of 25.4 years to as high as 28.2 years in 1997. Only four combined carriers were sold in 1997, totalling 423,000 dwt; this was a drastic reduction from 15 units of 1.9 million dwt in 1996. Dry bulk carriers accounted for the majority of the demolition sales volume in 1997, increasing to 8.2 million dwt in 1997 from 7.6 million dwt in the previous year. This increase can be attributed to the smaller sizes of 10,000-50,000 dwt, which were up from 77 vessels in 1996 to 115 units in 1997. The larger dry bulk carriers, however, showed a decline, with 30 Panamaxs sold, down from 35 in 1996 and

20 Capesize units, down from 25 in 1996. The average age of the dry bulk carriers for demolition in 1997 was 25.3 years, as compared with 24.3 years in 1996. The average age of containerships sold for scrapping significantly decreased in 1997 to 22.8 years from 26.2 years in 1996, while general cargo ships decreased slightly by almost one year to 26.9 years in 1997 from 26.8 years in 1996.¹⁰

B. OWNERSHIP OF THE WORLD FLEET

Distribution of world tonnage by country groups

36. Table 13 and graph 6 provide data on the distribution of the world fleet by groups of countries for the years 1980, 1996 and 1997. In 1997, tonnage ownership of developed market-economy countries continued to marginally decrease, by 0.5 million dwt or 0.2 per cent to 202.5 million dwt, while major open-registry countries continuously expanded their fleet by 21.5 million dwt or 6.3 per cent to a record high of 361.0 million dwt. Analysis of the open-registry countries' fleet indicates that the developing countries' share of the tonnage registered in major open-registry countries has slowly increased since 1980, when such open-registered tonnage was negligible, reaching one-quarter in 1997. On the other hand, developed market-economy countries' overall share has been on a downward trend, representing two-thirds of the total tonnage registered in major open-registry countries in 1997. The combined share of tonnage of the countries of Central and Eastern Europe and the socialist countries of Asia was less than 10 per cent. The developing countries' tonnage in 1997 continued to increase slightly, by 2.4 million dwt or 1.6 per cent over 1996 to 149.9 million dwt. This represents a tremendous increase over 1980, since when the average annual increase has been 4.8 million dwt or 7.0 per cent. However, their share of the world total deadweight in 1997 slightly declined to 19.3 per cent, as compared with 19.5 per cent in 1996. In 1997, the tonnage of developing countries in Asia decreased by 0.9 million deadweight or 0.8 per cent from the previous year's level to 107.6 million dwt, thus accounting for 71.8 per cent of the developing countries' total, as compared with 73.6 per cent in 1996. Developing countries in America added some 3 million dwt to their aggregate fleet, which reached 34.4 million dwt, while the African developing countries' position stagnated at an insignificant level of 6.5 million dwt or a mere 0.8 per cent of the world fleet. The shares of the socialist countries of Asia and the countries of Central and Eastern Europe of world total deadweight declined in 1997 to 3.4 per cent and 3.1 per cent respectively.

Table 9

Deliveries of newbuildings, 1980, 1985, 1990 and 1991-1997

Year	Oil tankers ^a		Combined carriers ^a		Dry bulk carriers ^a		Others ^b		Total	
	No. of vessels	Thousand dwt	No. of vessels	Thousand dwt	No. of vessels	Thousand dwt	No. of vessels	Thousand dwt	No. of vessels	Thousand dwt
1980	99	7 015	4	451	135	4 698	548	6 241	786	18 405
1985	72	3 945	10	683	339	14 739	529	5 283	950	24 650
1990	81	8 694	-	-	119	9 643	523	4 449	723	22 786
1991	101	12 031	8	1 120	86	5 578	570	5 025	765	23 754
1992	125	16 003	14	1 502	62	4 331	503	5 029	704	26 865
1993	128	17 559	5	426	97	7 832	652	5 950	882	31 767
1994	81	10 207	2	166	180	11 893	646	7 152	909	29 418
1995	83	10 862	-	-	254	15 405	672	7 416	1 009	33 683
1996	98	11 589	3	330	268	17 534	713	8 746	1 082	38 199
1997 ^c	68	7 392	3	330	298	18 794	696	10 330	1 065	36 846

Source: Fearnleys (Oslo), *Review 1997*.^a Vessels over 10,000 dwt.^b Sea-going, cargo-carrying vessels of over 1,000 grt.^c Provisional.

Table 10

Broken-up tonnage trends, 1980 and 1990-1997

Broken-up tonnage	1980	1990	1991	1992	1993	1994	1995	1996	1997
Tonnage sold for breaking (million dwt)	10.0	3.3	4.7	19.0	16.9	20.8	15.3	18.1	14.8
Share of broken-up tonnage in the total world fleet (percentage)	1.5	0.5	0.7	2.7	2.4	2.9	2.1	2.4	1.9

Source: Compiled by the 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, 1992-1997
(thousands of dwt and percentage shares)

Types of vessel	Thousand dwt						Percentages					
	1992	1993	1994	1995	1996	1997	1992	1993	1994	1995	1996	1997
Tankers	11 561	10 665	13 102	10 877	6 550	3 578	60.9	63.3	63.1	71.0	36.1	24.2
Combined carriers	1 580	2 040	2 559	1 228	1 861	423	8.3	12.1	12.3	8.0	10.3	2.8
Dry bulk carriers	4 141	2 645	3 829	2 135	7 632	8 161	21.8	15.7	18.4	13.9	42.1	55.1
Others	1 693	1 502	1 282	1 081	2 092	2 646	8.9	8.9	6.2	7.1	11.5	17.9
Total	18 975	16 852	20 772	15 321	18 135	14 808	100.0	100.0	100.0	100.0	100.0	100.0

Source: Fearnleys (Oslo), *Review*, various issues.

Table 12

Average age of broken-up ships by type from 1988 to 1997^a
(years)

Year	Tankers	Dry bulk carriers	Containerships	General cargo ships
1988	24.6	22.4	25.1	24.2
1989	24.9	23.1	27.2	25.5
1990	26.4	21.7	19.5	25.1
1991	25.3	22.0	19.0	24.8
1992	25.8	22.9	19.1	25.7
1993	24.7	24.0	22.9	26.4
1994	24.6	24.1	24.0	27.1
1995	26.1	24.5	24.0	25.8
1996	26.0	24.3	26.2	27.8
1997	28.2	25.3	22.8	26.9

Source: Institute of Shipping Economics and Logistics (Bremen), *Shipping Statistics*, 1998, Nos. 1-2.

^a Ships of 300 grt and over.

Table 13

Distribution of world tonnage (grt and dwt) by groups of countries
of registration, 1980, 1996 and 1997 ^a
(end-of-year figures)

Flags of registration by groups of countries	Tonnage and percentage shares ^b					
	In grt (millions)			In dwt (millions)		
	1980 ^c	1996	1997	1980 ^c	1996	1997
World total	414.5 <i>100.0</i>	509.4 <i>100.0</i>	523.7 <i>100.0</i>	682.8 <i>100.0</i>	758.2 <i>100.0</i>	775.9 <i>100.0</i>
Developed market-economy countries	214.3 <i>51.7</i>	142.2 <i>27.9</i>	143.7 <i>27.4</i>	350.1 <i>51.3</i>	203.0 <i>26.8</i>	202.5 <i>26.1</i>
Major open-registry countries	114.2 <i>27.6</i>	216.4 <i>42.5</i>	230.7 <i>44.1</i>	212.6 <i>31.1</i>	339.5 <i>44.8</i>	361.0 <i>46.5</i>
Countries of Central and Eastern Europe (including the former USSR)	32.0 <i>7.7</i>	26.6 <i>5.2</i>	22.8 <i>4.4</i>	37.8 <i>5.5</i>	29.0 <i>3.8</i>	24.3 <i>3.1</i>
Socialist countries of Asia	7.3 <i>1.8</i>	18.5 <i>3.6</i>	17.9 <i>3.4</i>	10.9 <i>1.6</i>	27.1 <i>3.6</i>	26.0 <i>3.4</i>
Developing countries	44.7 <i>10.8</i>	97.4 <i>19.1</i>	100.2 <i>19.1</i>	68.4 <i>10.0</i>	147.5 <i>19.5</i>	149.9 <i>19.3</i>
<i>of which in:</i>						
Africa	4.9	5.1	5.1	7.2	6.5	6.5
America	14.5	21.7	23.8	21.8	31.5	34.4
Asia	25.0	69.8	70.2	39.1	108.5	107.6
Europe	0.1	0.6	0.9	0.2	0.8	1.2
Oceania	0.1	0.2	0.2	0.1	0.2	0.2
Other, unallocated	2.0 <i>0.5</i>	8.3 <i>1.6</i>	8.4 <i>1.6</i>	3.0 <i>0.4</i>	12.1 <i>1.6</i>	12.1 <i>1.6</i>

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

^a Excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets, which in 1996 amounted respectively to 3.0, 1.0 and 1.2 million grt (3.7, 1.9 and 1.9 million dwt).

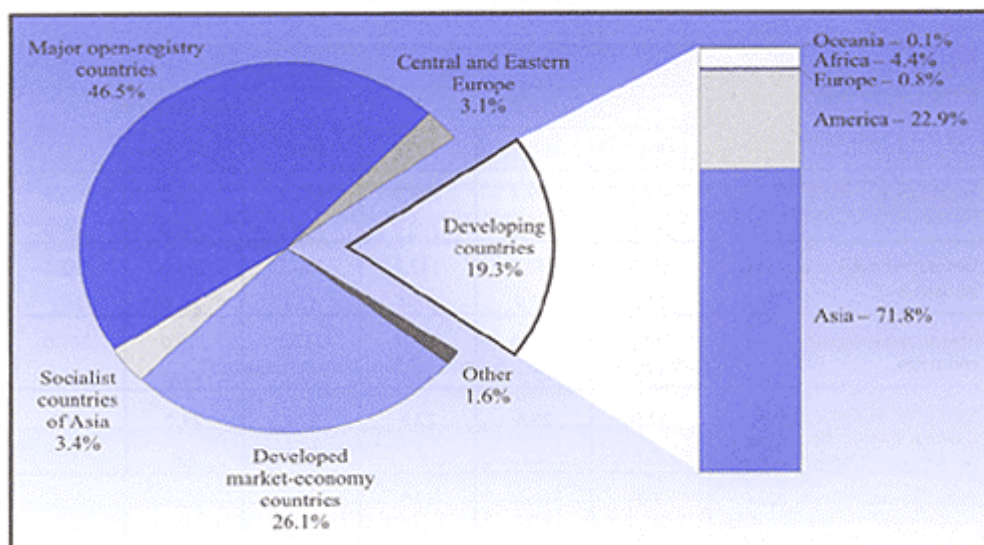
^b Percentage shares are shown in italics.

^c Mid-year figure.

^d Average.

Graph 6

World tonnage by country groups, 1997
(percentage distribution of dwt)



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

Distribution of world tonnage by types of vessel

37. Table 14 provides more detailed data on fleet distribution by types of vessel and country groups for the years 1980, 1996 and 1997. In the oil tanker sector, the share of developed market-economy countries continued to decrease marginally to 30.8 per cent in 1997. Conversely, open-registry countries' share increased to 50.2 per cent, reflecting the unbroken trend, particularly for owners in developed market-economy countries, to register tanker tonnage under open registries. Developing countries increased their share from 15.0 per cent to 15.6 per cent in 1997, primarily reflecting the increasing share of Asian and American developing countries, which rose in 1997 to 11.6 per cent and 3.2 per cent of world tanker tonnage respectively.

38. In the dry bulk carrier sector, the tonnage share of developed market-economy countries in the world total continued to decrease to 18.8 per cent in 1997. As in the case of tanker tonnage, major open-registry countries continuously expanded their share, reaching 51.9 per cent in 1997. The developing countries' share declined to 20.6 per cent as

compared with 22.1 per cent in 1996. The share of developing countries in Asia decreased similarly to 15.9 per cent in 1997. Nevertheless, in terms of tonnage share, dry bulk carriers continued to represent the most important type of vessel in Asian fleets.

39. In the sector of general cargo ships, the developed market-economy countries are consolidating their share of ownership of such ships at around 19 per cent, while major open-registry countries continued to increase their share in 1997, reaching 36.1 per cent as compared with 34.8 per cent in 1996. Developing countries expanded their share to 26.9 per cent in 1997 from 25.8 per cent in 1996. It is in this type of vessel that the share of developing countries in the world fleet is continuously the highest. The overall containership sector continued to expand to 8.1 per cent of the world total deadweight tons in 1997, representing a constant expansion from 3.9 per cent in 1990 and 1.6 per cent in 1980. Developed market-economy countries very marginally increased their share of the containership deadweight tonnage to 37.0 per cent in 1997. The major open registry countries' share

Table 14

Percentage shares of world tonnage by types of vessel and country groups,
in 1980 (as at 1 July), 1996 and 1997 (as at 31 December) ^a

Country group	Year	Total dwt		Oil tankers	Bulk carriers ^b	General cargo ships	Container ships	Other ships
		Million dwt	Percentage of world total					
World total	1980	682.8	100.0	49.7	27.2	17.0	1.6	4.5
	1996	758.2	100.0	35.8	35.9	13.8	6.4	8.0
	1997	775.9	100.0	35.1	36.2	13.4	8.1	7.2
				Percentage share by group of countries				
Developed market-economy countries	1980	350.1	51.3	52.5	52.7	43.4	74.3	50.4
	1996	203.0	26.8	31.3	20.1	19.3	36.6	41.3
	1997	202.5	26.1	30.8	18.8	19.0	37.0	40.2
Major open-registry countries	1980	212.5	31.1	36.2	31.7	20.8	13.5	17.0
	1996	339.5	44.8	49.8	48.3	34.8	35.1	31.4
	1997	361.0	46.5	50.2	51.9	36.1	36.9	32.4
Countries of Central and Eastern Europe	1980	37.8	5.5	2.8	4.2	12.3	2.9	19.2
	1996	29.0	3.8	1.8	3.2	10.6	1.0	6.3
	1997	24.3	3.1	1.4	2.8	8.4	0.7	5.6
Socialist countries of Asia	1980	10.9	1.6	0.6	1.6	4.7	0.1	1.3
	1996	27.1	3.6	1.3	4.3	8.3	3.5	2.4
	1997	26.0	3.4	1.2	4.0	8.0	3.1	2.2
Developing countries	1980	68.4	10.0	7.7	9.2	17.6	7.6	12.0
	1996	147.5	19.5	15.0	22.1	25.8	18.1	18.0
	1997	149.9	19.3	15.6	20.6	26.9	17.7	18.8
<i>of which in:</i> Africa	1980	7.1	1.0	1.1	0.1	2.3	..	2.1
	1996	6.5	0.9	0.8	0.5	1.8	0.2	2.0
	1997	6.5	0.8	0.8	0.5	1.6	0.3	1.9
America	1980	21.8	3.2	2.3	3.3	5.6	0.1	3.7
	1996	31.5	4.2	2.9	3.7	8.8	3.3	4.7
	1997	34.4	4.4	3.2	3.9	9.4	3.2	5.0
Asia	1980	39.1	5.7	4.3	5.7	9.8	2.7	5.7
	1996	108.5	14.3	11.3	17.8	14.9	14.4	11.1
	1997	107.6	13.9	11.6	15.9	15.4	14.1	11.8
Europe	1980	0.2	-	-	-	0.1	-	-
	1996	0.7	0.1	-	0.1	0.3	0.2	-
	1997	1.2	0.2	-	0.3	0.3	0.1	-
Oceania	1980	0.2	-	-	-	0.1	-	-
	1996	0.2	-	-	-	0.1	-	0.1
	1997	0.2	-	-	-	0.1	-	0.1
Other, unallocated	1980	3.0	0.4	0.2	0.6	0.9	1.6	0.1
	1996	12.1	1.6	0.8	2.0	1.3	5.7	0.7
	1997	12.1	1.6	0.8	1.9	1.5	4.7	0.8

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

^a Excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets.

^b Ore and bulk carriers, including combined ore/oil and ore/bulk/oil carriers.

continued to expand, reaching 36.9 per cent in 1997, most of which represented ships owned by owners in developed market-economy countries. The share of developing countries in the world containership fleet decreased to 17.7 per cent in 1997 from 18.1 per cent in 1996, which was an increase over the previous years. It is notable that regional imbalances continued to characterize this sector, with Asian developing countries alone accounting for 14.1 per cent in 1997 (14.4 per cent in 1996) of the world containership deadweight tonnage or about 80 per cent of that of developing countries.

The structure of the fleet of main country groups

40. Table 15 provides data on the structure of the merchant fleet of the main country groups. Developed market-economy countries' tonnage in oil tankers and dry bulk carriers reached 67.6 per cent of the group's total fleet, which is, however, only a marginal decrease from 68.8 per cent in 1996. Their general cargo ships amounted to 9.7 per cent, which is also slightly less than the 10.0 per cent in the previous year, while containerships accounted for 10.2 per cent as compared with 8.8 per cent in 1996. Major open-registry countries have a greater proportion of their fleets in the oil tanker and dry bulk carrier sectors, accounting for a combined 78.2 per cent in 1997, which very marginally declined from the 1996 share of 78.6 per cent. Their share of general cargo ships (10.4 per cent) was less than the 10.7 per cent in 1996. However, their share of containerships in 1997 (5.7 per cent) was higher than in 1996 (5.0 per cent). In absolute terms, the containership deadweight tonnage (20.7 million dwt) of major open-registry countries in 1997 was the same as that of the developed market-economy countries (20.7 million dwt). The distribution of tonnage between developed market-economy countries and open-registry countries continues to be determined by the capital intensity of ships and operational considerations. Accordingly, there is a bias towards capital-intensive container tonnage under developed countries' flags, while dry and liquid bulk vessels with different operating patterns that are not integrated into transport chains are primarily flagged under open registries.

41. In developing countries, tonnage distribution is characterized by a comparatively high proportion of dry bulk carriers, although their share has been on a downward trend (42.1 per cent in 1995, 40.8 per cent in 1996 and 38.6 per cent in 1997). Conversely, oil tankers increased their share to 28.3 per cent in 1997 as compared with 26.7 per cent in 1995, while

their containership fleets also marked a slight increase to 6.6 per cent in 1997 from 6.0 per cent in 1996 (and from 5.5 per cent in 1995). In the countries of Central and Eastern Europe, general cargo ships are still dominant, though less so than in the past, accounting for 36.2 per cent in 1997 (as compared with 38.3 per cent in 1996 and 39.4 per cent in 1995), while containerships have remained at a low level of 1.6 per cent since 1995. The socialist countries of Asia continued to have a predominant share of both dry bulk carriers (43.5 per cent in 1997, 42.8 per cent in 1996 and 42.2 per cent in 1995) and general cargo ships, whose share has remained at around 32 per cent since 1995.

C. REGISTRY OF VESSELS

The 35 most important maritime countries and territories

42. The 35 most important maritime countries and territories in terms of deadweight are ranked in table 16. The table lists the number and deadweight tonnage of merchant vessels registered under the national flag or a foreign flag when the controlling interest of the vessel is located in the domicile country or territory. In 1997, these 35 countries and territories controlled 93.60 per cent of the world merchant fleet (93.48 per cent in 1996), the five largest controlling 49.9 per cent (50.0 per cent in 1996) and the top 10 controlling 67.4 per cent (66.6 per cent in 1996).

43. Among these countries and territories, the increasing trend to register under a foreign flag continued in 1997. Total tonnage registered under foreign flags in 1997 reached 386.5 million dwt, representing 58.8 per cent of the 35 countries' total fleet, as compared with 56.3 per cent in 1996 (and 54.3 per cent in 1995). These figures indicate that more than half of the tonnage beneficially owned by the 35 countries and territories was not registered in the countries of domicile of the parent enterprises. While registry under foreign flags is a long-standing practice, mainly by owners from developed market-economy countries, it is now becoming common practice in all country groups, including developing countries. In this context, it is notable that the 13 developing countries and territories (including Hong Kong (China), but excluding Taiwan Province of China) listed in the table had about half of their tonnage (50.7 per cent) registered under foreign flags.

Table 15

Structure of the merchant fleets of the main country groups, as at 31 December 1997 ^a
(millions of dwt and percentage shares)

	World		Developed market-economy countries		Major open-registry countries		Developing countries		Countries of Central and Eastern Europe		29 Socialist countries of Asia	
	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%
Total fleet	775.9	100.0	202.5	100.0	361.0	100.0	149.9	100.0	24.3	100.0	26.0	100.0
Oil tankers	272.0	35.1	83.9	41.4	136.5	37.8	42.4	28.3	3.9	16.0	3.3	12.7
Bulk carriers	281.0	36.2	52.9	26.1	145.9	40.4	57.8	38.6	7.8	31.8	11.3	43.5
General cargo	103.9	13.4	19.8	9.8	37.5	10.4	27.9	18.6	8.8	36.2	8.3	31.9
Containerships	56.1	7.2	20.7	10.2	20.7	5.7	9.9	6.6	0.4	1.6	1.7	6.5
Other ships	62.9	8.1	25.3	12.5	20.4	5.7	11.8	7.9	3.5	14.4	1.4	5.4

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

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

Table 16The 35 most important maritime countries and territories, as at 31 December 1997 ^a

Country or territory of domicile ^b	Number of vessels			Deadweight tonnage				
	National flag ^c	Foreign flag	Total	National flag	Foreign flag	Total	Foreign flag as percentage of total	Total as percentage of world total
Greece	848	2 240	3 088	42 683 115	81 158 625	123 841 740	65.53	17.63
Japan	882	1 925	2 807	20 295 139	68 959 222	89 254 361	77.26	12.71
Norway	863	657	1 520	29 542 962	24 215 926	53 758 888	45.05	7.65
United States	473	752	1 225	12 393 125	32 924 147	45 317 272	72.65	6.45
China	1 574	432	2 006	22 147 888	15 883 062	38 030 950	41.76	5.41
Hong Kong	101	506	607	5 751 272	29 812 206	35 563 478	83.83	5.06
Republic of Korea	485	370	855	9 341 432	15 537 176	24 878 608	62.45	3.54
United Kingdom	390	465	855	7 418 936	14 438 497	21 857 433	66.06	3.11
Germany	530	1 046	1 576	7 761 182	13 854 842	21 616 024	64.10	3.08
Sweden	174	201	375	1 785 434	17 404 165	19 189 599	90.70	2.73
Taiwan Province of China	179	278	457	7 862 811	8 239 598	16 102 409	51.17	2.29
Singapore	439	253	692	10 309 153	5 462 719	15 771 872	34.64	2.25
Russian Federation	2 356	246	2 602	10 680 528	4 121 042	14 801 570	27.84	2.11
India	369	75	444	10 775 080	1 610 858	12 385 938	13.01	1.76
Denmark	427	215	642	6 711 596	5 437 446	12 149 042	44.76	1.73
Italy	429	152	581	6 714 285	5 108 419	11 822 704	43.21	1.68
Saudi Arabia	66	62	128	993 525	10 244 881	11 238 406	91.16	1.60
Brazil	197	22	219	6 895 578	2 840 337	9 735 915	29.17	1.39
Turkey	440	34	474	9 045 847	365 870	9 411 717	3.89	1.34
France	175	110	285	4 425 670	3 172 515	7 598 185	41.75	1.08
Iran, Islamic Rep. of	146	5	151	6 099 433	185 112	6 284 545	2.95	0.89
Switzerland	15	218	233	698 183	5 420 017	6 118 200	88.59	0.87
Netherlands	476	204	680	2 699 082	2 742 815	5 441 897	50.40	0.77
Malaysia	227	20	247	4 418 729	131 930	4 550 659	2.90	0.65
Philippines	337	13	350	4 427 163	65 494	4 492 657	1.46	0.64
Indonesia	466	94	560	3 128 578	1 088 907	4 217 485	25.82	0.60
Belgium	26	133	159	106 543	4 086 114	4 192 657	97.46	0.60
Ukraine	476	98	574	2 276 651	1 904 818	4 181 469	45.55	0.60
Romania	208	21	229	2 915 691	835 016	3 750 707	22.26	0.53
Thailand	234	59	293	2 468 586	1 166 244	3 634 830	32.09	0.52
Spain	120	188	308	406 866	3 067 127	3 473 993	88.29	0.49
Australia	67	29	96	2 744 238	492 672	3 236 910	15.22	0.46
Croatia	74	90	164	1 123 098	2 076 919	3 200 017	64.90	0.46
Finland	111	47	158	1 100 112	2 099 649	3 199 761	65.62	0.46
Kuwait	30	6	36	2 769 183	351 028	3 120 211	11.25	0.44
Total (35 countries)	14 410	11 266	25 676	270 916 694	386 505 415	657 422 109	58.79	93.60
Percentage	56.1	43.9	100	41.2	58.8	100		
World total	16 772	12 347	29 119	295 035 670	407 349 399	702 385 069	58.00	100.00
Percentage	57.6	42.4	100	42.0	58.0	100		

Source: Lloyd's Maritime Information Services (London).

- ^a Vessels of 1,000 grt and above, excluding the United States Reserve Fleet and the United States and Canada Great Lakes fleets.
- ^b 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.
- ^c 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).

While this is a substantial share, there are considerable fluctuations among countries. In some developing countries and territories, for instance, foreign registry accounted for around 90 per cent of their total tonnage (91.2 per cent for Saudi Arabia and 83.8 per cent for Hong Kong, China), while others hardly made any use of foreign flag facilities (1.5 per cent for the Philippines, 2.9 per cent for Malaysia and 3.0 per cent for the Islamic Republic of Iran). For developed market-economy countries that are among the 35 most important maritime countries, the share of foreign-registered tonnage was considerably higher than in developing countries, standing at 64.5 per cent (up from 58 per cent in 1996).

Major open registries

44. Foreign registers continue to expand their share in the world merchant fleet. Table 17 summarizes the tonnage distribution of the seven major open-registry countries by principal types of vessel. The total tonnage registered in 1997 increased significantly by 8.0 per cent to 328.8 million dwt from 304.4 million dwt in the previous year. Panama heads the list, expanding its fleet in 1997 by as much as 17.3 million dwt or 15.8 per cent to 126.2 million dwt, and is followed by Liberia, whose fleet marginally decreased by 1.9 per cent to 90.9 million dwt. Malta expanded its fleet by a remarkable 6.2 million dwt or 22.4 per cent to 33.7 million dwt from 27.5 million dwt in 1996. Cyprus' fleet continued to decrease, falling by 0.3 million dwt to 32.8 million dwt from 33.1 million dwt in the previous year. The analysis by type of vessel shows that oil tankers represented 39.8 per cent of the total deadweight in 1997 as compared with 41.5 per cent in 1996, followed by dry bulk carriers, which increased their share to 39.3 per cent in 1997 from 37.9 per cent in the previous year, and general

cargo ships, with 9.7 per cent in 1997 (down from 9.8 per cent in 1996). The share of containerships continued to increase, reaching 5.9 per cent in 1997 from a level of 5.3 per cent in 1996, reflecting the increasing trend to flag out in this sector of the global maritime transport industry as well.

Nationality of vessels

46. The participation of nationals in the registry of the most important open or international registers is shown in table 18. The data compare the total tonnage registered in the selected countries of registry with the tonnage owned by the nationals of, and registered in, the countries of registry. For most open-registry countries, except Cyprus, the share of tonnage owned by nationals is minimal or zero. On the other hand, with regard to international registry, national ownership remained at a level of nearly 90 per cent or more. These proportions are very similar to those of the previous year.

47. The true nationality of the vessels operated within the seven major open-registry fleets is analysed in table 19. In 1997, total tonnage of the 22 countries or territories accounted for 91.9 per cent of the total seven major open-registry fleets, remaining at almost the same level as in 1996. Ownership is concentrated in 10 countries or territories, which control 79.2 per cent of the deadweight of vessels of the total seven major open-registry fleets. On a similar basis, the top five countries or territories control 61.2 per cent. Greece was ranked first in 1997 for the fourth consecutive year, with the largest share (22.8 per cent) of the total seven major open-registry fleets and also with the largest total foreign-flag ownership position, representing 81.16 million dwt, ahead of Japan with 68.96 million dwt.

Table 17Tonnage distribution of major open-registry fleets, ^a as at 31 December 1997

Country	Oil tankers		Dry bulk carriers		General cargo		Containerships		Others		1997 total		1996 total	
	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt
Panama	381	37 152	1 104	60 372	1 321	11 320	398	11 272	663	6 045	3 867	126 161	3 478	108 904
Liberia	389	48 088	421	28 067	239	3 703	144	4 001	300	7 057	1 493	90 916	1 515	92 714
Cyprus	130	6 390	455	17 827	588	5 747	97	1 969	80	817	1 350	32 750	1 348	33 050
Bahamas	156	19 624	131	7 203	458	6 503	44	912	194	2 025	983	36 267	959	35 379
Malta	248	15 598	315	12 795	432	4 059	31	625	65	637	1 091	33 714	930	27 535
Bermuda	25	4 142	18	1 943	19	226	17	548	18	525	97	7 384	80	5 082
Vanuatu	2	9	25	912	45	386	0	0	47	296	119	1 603	126	1 757
Total	1 331	131 003	2 469	129 119	3 102	31 944	731	19 327	1 367	17 402	9 000	328 795	8 436	304 421

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

^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 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 31 December 1997 ^a
(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 (%)
Panama	126 161	0	0.0
Liberia	90 916	0	0.0
Cyprus	33 416	665	2.0
Bahamas	36 565	299	0.8
Norwegian International Ship Registry	30 501	26 505	86.9
Malta	33 720	7	0.0
Danish International Ship Registry	6 699	6 447	96.2
Bermuda	7 384	0	0.0
Vanuatu	1 603	0	0.0

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

^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 at 31 December 1997

Flag country Country or territory of domicile	Liberia			Panama			Cyprus			Bahamas			Bermuda			Malta			Vanuatu			Subtotal			Total foreign-flag fleet	
	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels
Greece	11 317	176	12.4	14 009	465	11.1	23 765	731	72.6	6 879	172	19.0	-	-	-	18 990	471	56.3	107	2	6.7	75 067	2 017	22.8	81 159	2 240
Japan	6 474	150	7.1	50 457	1 446	40.0	194	19	0.6	629	27	1.7	-	-	-	-	-	-	496	27	30.9	58 250	1 669	17.7	68 959	1 925
United States	12 229	194	13.5	2 710	135	2.1	322	32	1.0	5 496	97	15.2	821	12	11.1	265	4	0.8	251	32	15.7	22 094	506	6.7	32 924	752
Hong Kong	7 130	91	7.8	16 523	256	13.1	26	2	0.1	492	10	1.4	-	-	-	121	7	0.4	179	5	11.2	24 471	371	7.4	29 812	506
Norway	7 435	152	8.2	1 657	76	1.3	138	12	0.4	7 810	172	21.5	672	8	9.1	3 930	77	11.7	-	-	-	21 642	497	6.6	24 216	657
United Kingdom	3 068	55	3.4	641	63	0.5	149	14	0.5	2 375	115	6.5	3 987	43	54.0	172	2	0.5	-	-	-	10 392	292	3.2	14 438	465
China	5 920	94	6.5	6 829	192	5.4	335	21	1.0	-	-	-	-	-	-	410	11	1.2	-	-	-	13 494	318	4.1	15 883	432
Republic of Korea	1 521	14	1.7	13 626	296	10.8	-	-	-	-	-	-	-	-	-	36	4	0.1	-	-	-	15 183	314	4.6	15 537	370
Sweden	7 175	37	7.9	234	5	0.2	750	10	2.3	1 599	26	4.4	916	2	12.4	-	-	-	-	-	-	10 674	80	3.2	17 404	201
Germany	5 422	211	6.0	1 199	29	1.0	2 546	219	7.8	47	14	0.1	54	1	0.7	411	28	1.2	-	-	-	9 679	502	2.9	13 855	1 046
Saudi Arabia	7 499	24	8.2	154	10	0.1	-	-	-	2 012	7	5.5	25	2	0.3	-	-	-	-	-	-	9 690	43	2.9	10 245	34
Taiwan Province of China	569	11	0.6	6 294	234	5.0	206	2	0.6	-	-	-	-	-	-	-	-	-	-	-	-	7 069	247	2.2	8 240	278
Singapore	1 047	21	1.2	1 202	79	1.0	-	-	-	586	8	1.6	-	-	-	111	6	0.3	-	-	-	2 946	114	0.9	5 463	253
Denmark	433	12	0.5	225	10	0.2	-	-	-	573	51	1.6	-	-	-	-	-	-	70	1	4.4	1 301	74	0.4	5 437	215
Russian Federation	1 813	25	2.0	114	16	0.1	1 297	65	4.0	229	15	0.6	-	-	-	495	75	1.5	-	-	-	3 948	196	1.2	4 121	246
Switzerland	784	14	0.9	2 132	89	1.7	74	5	0.2	176	3	0.5	-	-	-	1 551	66	4.6	-	-	-	4 717	177	1.4	5 420	218
Italy	528	7	0.6	311	17	0.2	201	7	0.6	1 055	30	2.9	-	-	-	1 768	40	5.2	-	-	-	3 863	101	1.2	5 108	152
Belgium	1 433	12	1.6	196	2	0.2	166	15	0.5	190	18	0.5	-	-	-	-	-	-	-	-	-	1 985	47	0.6	4 086	133
France	345	3	0.4	619	18	0.5	-	-	-	660	26	1.8	-	-	-	-	-	-	-	-	-	1 624	47	0.5	3 173	110
Spain	95	1	0.1	277	41	0.2	104	10	0.3	825	8	2.3	-	-	-	-	-	-	-	-	-	1 301	60	0.4	3 067	188
Croatia	679	15	0.7	-	-	-	-	-	-	44	1	0.1	-	-	-	842	36	2.5	-	-	-	1 565	52	0.5	2 077	90
Finland	-	-	-	-	-	-	-	-	-	1 811	29	5.0	-	-	-	87	1	0.3	-	-	-	1 898	30	0.6	2 100	47
Subtotal	82 916	1 319	91.3	119 409	3 479	94.7	30 273	1 164	92.5	33 488	829	92.2	6 475	68	87.6	29 189	828	86.6	1 103	67	68.9	302 853	7 754	91.9	372 724	10 586
Others	8 000	174	8.7	6 752	388	5.3	2 477	186	7.5	2 779	154	7.8	909	29	12.4	4 525	263	13.4	500	52	31.1	25 942	1 246	8.1	34 625	1 761
Total	90 916	1 493	100.0	126 161	3 867	100.0	32 750	1 350	100.0	36 267	983	100.0	7 384	97	100.0	33 714	1 091	100.0	1 603	119	100.0	328 795	9 000	100.0	407 349	12 347

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

D. SHIPBUILDING, THE SECOND-HAND MARKET AND DEMOLITION

Newbuilding orders

47. A significantly larger number of newbuilding contracts were placed in 1997 than in the previous year, with a tonnage increase of 53.0 per cent to 57.2 million dwt, which was also a record high in terms of deadweight tonnage for a single year (see table 20). In the tanker sector, owners who had experienced very favourable charter rates for some months in 1997 increased their interest in large tankers, which had started in the second half of 1996. Newbuilding activities increased in 1997, reaching a record high volume of orders for 428 vessels totalling 32.5 million dwt, a level unknown since 1975. As regards dry bulk carriers, the charter rates in the dry bulk market in general remained at a relatively unfavourable level throughout 1997. This was partly attributable to the many new dry bulk carriers which had been ordered in 1994 and 1995 and were delivered in 1997. This flow of new tonnage, coupled with rather uncertain market prospects, did not induce owners to place orders at the same level as in 1995 and before. Nevertheless, the volume of new dry bulk carriers ordered in 1997 increased by 26.2 per cent to 18.0 million dwt as compared to 14.3 million dwt in 1996. These orders were placed predominantly by owners in the Far East and South-East Asia.

48. Containerships have been an important segment of newbuilding orders during the 1990s, filling the order books of yards in the Far East and Europe, particularly with orders from German owners. However, the charter rates for containerships have been under pressure as a result of the substantial numbers of new ships delivered. The number of speculative orders for larger containerships decreased in 1997. All in all, the total tonnage for containerships decreased by 48.5 per cent to 3.6 million dwt (as compared with 7.0 million dwt in 1996). For other types of vessel, such as general cargo ships and passenger ferries, the level of newbuilding activities remained relatively stable. A total of about 3.0 million dwt was ordered in 1997, compared with 2.3 million dwt in 1996.¹¹

Tonnage on order

49. Table 21 shows world tonnage on order, by groups of countries of registry and by principal types of vessel. World tonnage on order at the end of 1997 reached 81.2 million dwt, an increase of as much as 16.4 million dwt or 25.3 per cent over the volume at

the end of the previous year. Tonnage on order by developed market-economy countries amounted to 22.0 million dwt, representing 27.1 per cent of the world total tonnage on order as compared with 25.7 per cent at the end of 1996. Major open-registry countries accounted for 43.6 million dwt or 53.7 per cent of tonnage on order as compared with 35.3 million dwt in 1996, clearly underlining the trend towards open-registry facilities.

50. Developing countries' tonnage stood at 9.5 million dwt or 11.7 per cent of the world total tonnage on order at the end of 1997, as compared with 8.6 million dwt or 13.2 per cent in 1996. Tonnage on order by Asian developing countries, which accounted for 90.5 per cent of developing countries' total tonnage ordered in 1997, increased by 1.5 million dwt from 7.1 million dwt in 1996. The share of the countries of Central and Eastern Europe continued to decrease very slightly in 1997, falling to 1.3 million dwt or 1.6 per cent of the world total on order, while the share of the socialist countries of Asia continued to recover in 1997, ending the year with 1.5 million dwt or 1.8 per cent of the world total on order as compared with 1.2 million dwt or 1.9 per cent in the previous year. The stagnation in African shipping can be expected to continue, given the low rate of newbuilding orders of only 0.1 per cent of the 1997 world total on order. This share continues the downward trend observed in previous years, from 0.5 per cent in 1995 to 0.4 per cent in 1996.

51. The developing countries' share of tonnage on order decreased in 1997 for oil tankers, dry bulk carriers and other types of vessel to 12.0 per cent, 9.8 per cent and 10.1 per cent respectively (as compared with 15.8 per cent, 12.4 per cent and 14.2 per cent respectively in 1996). On the other hand, their share in the 1997 orderbook for general cargo ships and containerships increased to 12.2 per cent and 17.2 per cent respectively from 6.6 per cent and 13.5 per cent respectively in 1996. The share of Asian developing countries in orders for oil tankers, dry bulk carriers and other types of vessel in 1997 declined to 11.2 per cent, 8.4 per cent and 7.6 per cent respectively as compared with 11.9 per cent, 10.6 per cent and 13.0 per cent respectively in 1996, while their share in orders for general cargo ships and containerships rose to 10.2 per cent and 15.1 per cent respectively as compared with 4.8 per cent and 11.9 per cent respectively in 1996.

Table 20
Newbuilding contracts placed for the main types of ship ^a in 1993-1997 and 1998
(number of ships, thousands of dwt)

Year	Tankers		Bulk carriers		Combined carriers		General cargo ships		Container vessels		Passenger ferries		Total ^b	
	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt
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
January 1997	22	680	17	1 047	-	-	12	86	11	384	6	12	68	2 209
February 1997	30	2 502	15	582	-	-	17	100	35	483	10	21	107	3 688
March 1997	26	2 689	31	1 770	-	-	25	233	29	1 077	3	8	114	36 5 777
April 1997	55	3 464	28	1 630	-	-	26	288	21	397	5	15	135	5 794
May 1997	47	2 514	16	1 141	-	-	16	86	14	225	9	10	102	3 976
June 1997	44	4 231	30	1 867	2	220	26	189	2	15	6	6	110	6 528
July 1997	45	3 371	31	2 096	-	-	23	280	9	86	9	5	117	5 838
August 1997	25	1 082	21	1 446	-	-	29	277	8	120	10	2	93	2 927
September 1997	19	2 568	33	2 073	-	-	37	260	10	318	10	19	109	5 238
October 1997	48	5 870	29	1 706	-	-	24	238	5	65	9	12	115	7 891
November 1997	33	1 787	16	1 382	-	-	34	249	14	310	9	10	106	3 738
December 1997	34	1 758	15	1 243	-	-	30	415	8	138	10	29	97	3 583
Total 1997	428	32 516	282	17 983	2	220	299	2 701	166	3 618	96	149	1 273	57 187
January 1998	17	1 545	30	2 449	-	-	19	136	5	89	13	32	84	4 251
February 1998	22	1 288	21	1 463	-	-	19	192	15	313	11	30	88	3 286

Source: *Shipping Statistics and Market Review, 1997*, Institute of Shipping Economics and Logistics (Bremen), Nos. 1/2.

^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 at the end of 1997
(thousands of dwt)

Countries of registry	All ships	Oil tankers	Dry bulk carriers	General cargo	Container ships	Other ships
World total	81 227	36 649	22 466	4 935	9 266	7 911
Developed market-economy countries	21 969	9 642	4 062	1 894	3 439	2 932
Major open-registry countries	43 581	20 334	14 153	1 808	3 918	3 368
Countries of Central and Eastern Europe	1 299	350	407	289	69	184
Socialist countries of Asia	1 461	12	1 064	262	117	6
Developing countries, total	9 499	4 364	2 176	570	1 607	782
<i>of which in:</i>						
Africa	90	3	64	-	13	10
America	809	220	167	110	169	143
Asia	8 599	4 141	1 945	459	1 425	629
Europe^a	-	-	-	-	-	-
Oceania	0	0	0	0	0	0
Unallocated	3 416	1 947	602	112	116	639

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

^a Not reported.

Prices of newbuildings and second-hand tonnage

52. Newbuilding prices for the main types of vessel are indicated in table 22. Overall price levels for newbuildings in 1997 ended the year relatively unchanged from those of the previous year, except in the case of oil tankers. Oil tanker newbuilding prices especially for larger units, declined by 2-4 per cent in 1997 from the 1996 level.

This reflects the fact that, despite the high volume represented by oil tanker newbuilding contracts which accounted for 57 per cent of the 1997 total newbuilding contracts in terms of deadweight tons, fierce competition among Far Eastern shipyards exercised downward pressure on the prices for oil tankers. A look in the monthly orderbook for oil tankers indicates that oil tanker newbuilding prices were maintained at a relatively high level in the six months from February to July 1997, when nearly 60 per cent of the record-high contracts were placed.

53. For second-hand dry bulk carriers, generally, prices in 1997 climbed steadily towards a peak in the

third quarter before falling. Prices for larger sizes, particularly for modern Capesize units (which were attracting prices that were 12-13 per cent higher than in 1996), went up, whilst those for smaller units declined marginally from the 1996 level. The volume of sales rose by 65 per cent as compared with 1996, reflecting the positive investment mood in a financial market offering low interest rates. Greek buying activity accounted for 55-60 per cent of the total transactions. Turkish and Norwegian buyers played a moderate role compared with that in the previous year. With the growing uncertainty in Asian economic activities in 1997, demand for second-hand oil tankers decreased. Buyers were sceptical about market prospects, and were especially concerned about the Asian turbulence and its subsequent impact on crude oil demand. Prices for modern second-hand handy, Aframax and Suezmax units reached the highest level at which it made sense for owners to buy second-hand units rather than order newbuildings (see table 23). The second-hand prices for five-year-old tankers and dry bulk carriers reflect the 1997 world freight market for these types of vessel.

Table 22

Representative newbuilding prices, in 1980, 1985, 1990, 1995-1997 and 1998
(millions of dollars)

Type and size of vessel	1980	1985	1990	1995	1996	1997	Percentage change 1996/1997	1998					
								January	February	March	April	May	June
30 000 dwt bulk carrier	17	11	24	21	19	20	5.3	21	22	23	23	22	39 21
32 000 dwt tanker	19	18	29	30	32	32	0.0	31	30	30	30	29	29
70 000 dwt bulk carrier	24	14	32	28	28	28	0.0	27	26	27	26	25	25
80 000 dwt tanker	28	22	42	43	43	42	-2.3	41	41	40	40	39	38
120 000 dwt bulk carrier	32	27	45	40	41	40	-2.4	40	39	40	40	39	37
250 000 dwt tanker	75	47	90	84	85	82	-3.5	82	81	80	80	76	73
125 000 m³ LNG	200	200	225	255	255	255	0.0	255	255	255	255	255	255
75 000 m³ LPG	77	44	78	68	67	67	0.0	71	70	70	70	70	70
1 200 TEUs ro-ro	44	28	36	42	42	42	0.0	42	42	42	42	42	42
15 000 dwt general cargo ship	14	12	24	21	21	21	0.0	21	22	22	21	20	20
2 500 TEUs full containership	..	26	52	50	50	51	2.0	51	51	51	51	51	51

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

Table 23

Second-hand prices for five-year-old vessels, 1991-1997
(as at end of year, in millions of dollars)

Vessel	1991	1992	1993	1994	1995	1996	1997	Percentage change 1996/1997
30 000 dwt tanker	20.0	14.5	18.0	18.0	20.0	22.0	23.0	4.5
80 000 dwt tanker	32.0	22.0	31.0	30.0	31.0	33.0	-	-
130 000 dwt tanker	36.0	29.0	34.5	34.0	35.5	40.0	41.5	3.8
45 000 dwt dry bulk carrier	20.2	17.5	18.5	20.7	22.0	18.5	18.0	-2.7
70 000 dwt dry bulk carrier	24.4	19.0	19.5	21.5	23.0	20.5	21.0	2.4
150 000 dwt dry bulk carrier	43.3	33.0	33.0	32.0	28.0	26.5	30.0	13.2

Source: Fearnleys (Oslo), *Review 1997*.

11. Institute of Shipping Economics and Logistics (Bremen), *Shipping Statistics, 1998*, various issues; Drewry Shipping Consultants, *Shipping Statistics and Economics*, various issues; Fearnleys (Oslo) *Review 1997*.