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Chapter II

Structure and Ownership of the World Fleet

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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 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

34. Comparative time-series data on the world fleet for 1997, 1998 and 1999 are provided in table 6 and graph 4. The world merchant fleet amounted to 799.0 million deadweight tons (dwt) at the end of 1999. This represents a 1.3 per cent increase over 1998, when the world fleet had expanded at a rate of 1.6 per cent from the tonnage in 1997. The relatively low rate of fleet expansion was attributable primarily to an increase to 30.7 million dwt of tonnage broken up and lost, while the newbuilding deliveries increased slightly to 40.5 million dwt, leaving a net gain of 9.8 million dwt in 1999 as compared with a net gain of 12.0 million dwt in 1998.

35. The tonnage of oil tankers and dry bulk carriers continued to increase in 1999 by 1.1 per cent and 0.2 per cent respectively, representing 70.0 per cent of total tonnage in 1999, a slight decline from 70.3 per cent in the previous year. The fleet of general cargo ships increased in 1999 slightly by 0.2 per cent representing 12.7 per cent of the world total fleet. Containerships in terms of deadweight tonnage increased by 2.5 million dwt or 4.1 per cent, which now represented 7.9 per cent of the world total fleet. This relatively high rate of increase reflected the growing portion of manufactured goods being traded which are generally moving in containers. Tonnage of liquid gas carriers (mainly LNG and LPG carriers) and ferries/passenger ships have been steadily increasing in absolute terms (deadweight tonnage).

World containership fleet

36. The world fleet of fully cellular containerships continued to expand substantially in 1999 in terms of both number of ships and their TEU capacity, reaching 2,433 ships with a total capacity of 4,298,000 TEUs by the end of 1999, representing an increase of 2.9 per cent in the number of ships and 5.8 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 1,717 TEUs in 1998 to 1,766 TEUs in 1999, reflecting economies of scale for reduction in operating costs. At the end of 1999, 98 post-Panamax ships with an aggregated capacity of 523,500 TEUs were in service (average carrying capacity 5,342 TEUs), representing 4.1 per cent of the number of ships and 12.4 per cent of the TEU capacity of the world containership fleet. This development will continue, judging by the upward trend of post-Panamax newbuilding orders. Towards the end of 1999, the newbuilding orders for all sizes stood at 247 ships, with a total capacity of 803,000 TEUs, which were scheduled to enter into service over the next couple of years. Within these newbuildings, 56 ships with a total capacity of 324,700 TEUs were post-Panamax size, accounting for 22.7 per cent of the number of ships and 40.4 per cent in the capacity of the world order book.

37. The world containership fleet registered in major open-registry countries continued to expand in 1999 to 39.5 per cent of the world TEU capacity as compared to 38.1 per cent in 1998.

Table 6

World fleet size by principal types of vessel, 1997-1999 [a]
(end-of-year figures, in thousands of dwt)

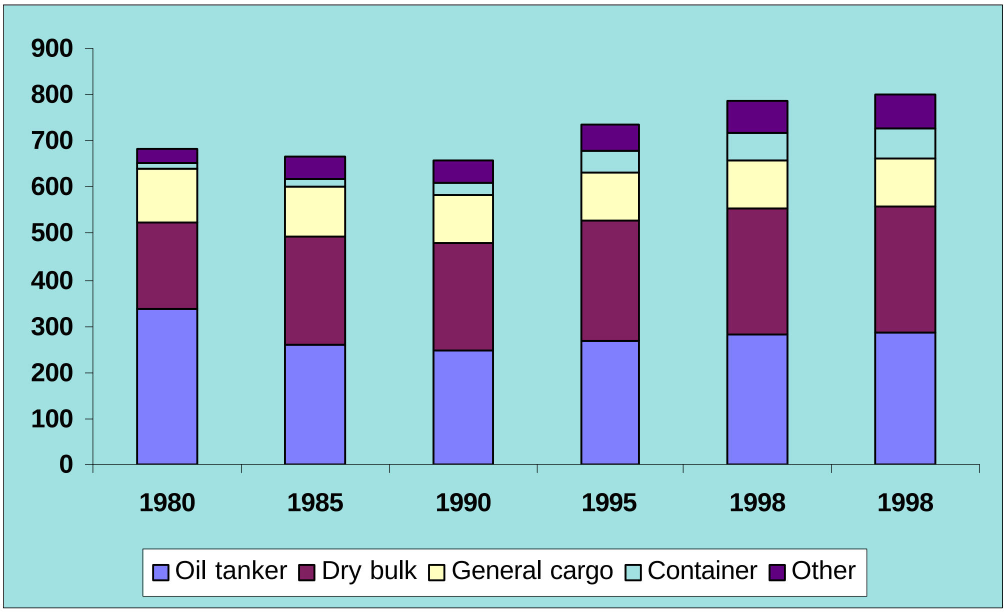
Principal types	1997	1998	1999	Percentage change 1998/1999
Oil tankers	272 023	279 509	282 458	1.1
	35.1	*35.4*	*35.4*	
Bulk carriers	281 012	275 519	276 091	0.2
	36.2	*34.9*	*34.6*	
Ore/bulk/oil	20 256	17 720	16 723	-5.6
	2.6	*2.2*	*2.1*	
Ore/bulk	260 756	257 799	259 368	0.6
	33.6	*32.7*	*32.5*	
General cargo ships	103 880	101 259	101 481	0.2
	13.4	*12.8*	*12.7*	
Container ships	56 108	61 147	63 637	4.1
	7.2	*7.8*	*8.0*	
Other types of ships	62 904	71 291	75 328	5.7
	8.1	*9.0*	*9.4*	
Liquefied gas carriers	16 021	16 471	17 334	5.2
	2.1	*2.1*	*2.2*	
Chemical tankers	7 846	7 740	7 813	0.9
	1.0	*1.0*	*1.0*	
Miscellaneous tankers	920	885	849	-4.1
	0.1	*0.1*	*0.1*	
Ferries and passenger ships	4 614	4 803	4 944	2.9
	0.6	*0.6*	*0.6*	
Others	33 503	41 392	44 388	7.2
	4.3	*5.2*	*5.6*	
World total	775 927	788 725	798 995	1.3
	100.0	*100.0*	*100.0*	

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

[a] Percentage shares are shown in italics.

Graph 4

World fleet size by principal types of vessel: selected years



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

On the other hand, the share of the fleet registered in developed market-economy countries shrank slightly to 35.6 per cent from 38.4 per cent in 1998. For developing countries, the number of ships and TEU capacity increased substantially in 1999 (8.3 per cent) to 587 ships from 542 ships in 1998 and 16.2 per cent to 803,000 TEUs from 691,000 TEU's in 1998. Their share of the world total TEU capacity also increased to 18.7 per cent in 1999 from 17.0 per cent in 1998. The absolute increase of the container fleet in developing countries resulted mainly from increases in the fleet of developing countries of America, with an increase of 30 ships of 656,000 TEUs, which represented 50 per cent of the total increase of developing countries, followed by the developing countries of Asia, which increased their capacity by 15 ships of 55,800 TEUs as compared with the previous year. The group of developing countries of Africa almost doubled their total TEU capacity in 1997 as compared with 1996; since then, however, their capacity has remained at the low level of around 10,000 TEUs.

Age distribution of the world merchant fleet

38. 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 1999 for the fourth consecutive year to 14.09 years from 14.54 years in 1998. By type of vessel, the average age of tankers fell rather significantly to 13.91 years in 1999 from the previous year's average of 15.00 years. The share of tanker tonnage aged 15 years and over decreased to 47.6 per cent in 1999 from 55.1 per cent in 1998, reflecting increased scrapping activities in 1999 which stood at 16.7 million dwt (7.4 million dwt in 1998). The average age of the dry bulk carrier fleet rose slightly to 13.83 years. Containerships continued to be the youngest fleet in 1999, with a decrease in average age to 9.72 years from 10.99 years in 1998. This is explained by the fact that the high level of newbuilding activities continued to lower the average age of containerships. This trend is also reflected in the share of tonnage between 0 and 4 years of age, which continued to increase in 1999 to 36.1 per cent from 33.9 per cent in 1998.

Table 7

Distribution of the world fleet and TEU capacity of fully cellular container ships by groups of countries, in 1997, 1998 and 1999
(end-of-year figures)

Flags of registration by groups of countries	Number of ships			TEU capacity and percentage shares [a]		
	1997	1998	1999	1997	1998	1999
World total	2 204	2 365	2 433	3 632 070	4 061 653	4 297 874
				100.0	*99.9*	*100.0*
Developed market-economy countries	675	728	693	1 398 781	1 561 060	1 530 655
				38.5	*38.4*	*35.6*
Major open-registry countries	800	887	944	1 315 130	1 545 818	1 698 576
				36.2	*38.1*	*39.5*
Total, developed market-economy and major open-registry countries	1 475	1 615	1 637	2 713 911	3 106 878	3 229 231
				74.7	*76.5*	*75.1*
Countries of Central and Eastern Europe (including the former USSR)	35	35	34	23 276	26 331	26 699
				0.6	*0.6*	*0.6*
Socialist countries of Asia	99	90	89	96 739	94 863	96 450
				2.7	*2.3*	*2.2*
Developing countries	504	542	587	628 999	691 328	803 135
				17.3	*17.0*	*18.7*
***of which* in:**						
Africa	8	10	10	9 117	11 026	10 719
				0.3	*0.3*	*0.2*
America	138	162	192	119 299	157 836	214 153
				3.3	*3.9*	*5.0*
Asia	353	365	380	496 028	516 431	572 212
				13.7	*12.7*	*13.3*
Europe	5	5	5	4 555	6 035	6 051
				0.1	*0.1*	*0.1*
Oceania	-	-	-	..	..	..
				..	..	..
Other, unallocated	91	83	86	169 145	142 253	142 359
				4.7	*3.5*	*3.3*

Source: 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 1 January 2000
(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) 1999 [a]	Average age (years) 1998[a]
World total	All ships	100	19.1	18.7	12.9	49.3	14.09	14.54
	Tankers	100	16.6	23.6	12.1	47.6	13.91	15.00
	Bulk carriers	100	20.8	17.0	14.6	47.6	13.83	13.56
	General cargo	100	10.9	9.9	10.2	69.0	17.32	17.28
	Container ships	100	36.1	24.9	13.3	25.7	9.72	10.99
	All others	100	18.9	13.4	13.1	54.7	14.92	15.57
Developed market-economy countries	All ships	100	20.3	18.5	14.4	46.9	13.75	14.41
	Tankers	100	18.6	19.4	12.1	49.9	14.16	15.68
	Bulk carriers	100	15.8	17.3	16.7	50.2	14.58	13.97
	General cargo	100	17.6	17.1	13.4	51.9	14.58	14.84
	Container ships	100	40.8	21.3	14.9	23.0	9.16	10.24
	All others	100	19.4	16.4	17.4	46.8	13.92	14.50
Major open-registry countries	All ships	100	20.3	19.9	12.6	47.1	13.67	14.30
	Tankers	100	15.0	27.1	11.7	46.3	13.79	14.83
	Bulk carriers	100	23.5	15.5	14.5	46.6	13.55	13.49
	General cargo	100	14.7	11.3	11.4	62.6	16.23	16.44
	Container ships	100	35.3	27.4	12.2	25.1	9.61	11.28
	All others	100	24.5	12.6	9.7	53.2	14.24	15.48
Subtotal	All ships	100	20.3	19.4	13.3	47.0	13.70	14.33
	Tankers	100	16.3	24.2	11.8	47.7	13.93	15.13
	Bulk carriers	100	21.5	15.9	15.1	47.7	13.85	13.63
	General cargo	100	15.7	13.3	12.0	59.0	15.67	15.88
	Container ships	100	37.9	24.5	13.5	24.1	9.40	10.78
	All others	100	21.9	14.5	13.6	49.9	14.06	14.96
Countries of Central and Eastern Europe	All ships	100	2.1	7.0	15.0	75.8	19.01	18.04
	Tankers	100	1.8	1.5	14.2	82.5	20.00	18.68
	Bulk carriers	100	0.0	9.9	10.0	80.1	19.52	18.47
	General cargo	100	2.8	5.9	16.6	74.7	18.90	17.86
	Container ships	100	15.9	11.8	17.8	54.5	15.27	15.86
	All others	100	2.4	9.4	19.4	68.8	18.17	17.29
Socialist countries of Asia	All ships	100	5.3	14.5	7.4	72.9	18.05	17.58
	Tankers	100	3.5	24.1	11.8	60.6	16.51	15.94
	Bulk carriers	100	7.3	17.1	5.6	70.0	17.42	17.23
	General cargo	100	3.1	4.4	5.6	86.8	20.14	19.90
	Container ships	100	7.5	27.0	19.8	45.7	14.47	11.27
	All others	100	2.6	9.7	6.1	81.7	19.44	18.93
Developing countries (excluding open-registry countries)	All ships	100	19.6	17.9	12.1	50.4	14.19	14.40
	Tankers	100	20.6	21.7	13.1	44.6	13.32	14.18
	Bulk carriers	100	22.6	20.5	15.5	41.4	12.86	12.22
	General cargo	100	5.9	5.9	6.5	81.7	19.29	19.13
	Container ships	100	39.9	27.2	8.1	24.8	9.13	11.39
	All others	100	12.6	10.4	9.8	67.1	16.92	16.93

Source: 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.

39. By country grouping, the major open-registry countries continued to have the lowest average age of all ships (13.67 years in 1999 versus 14.30 years in 1998), as a growing tendency to register newbuildings under open-registry flags was observed. The group's share of tonnage between 0 and 4 years of age increased in 1999 to 20.3 per cent from 19.1 per cent in 1998. On the other hand, their share of tonnage of 15 years and over decreased in 1999 to 47.1 per cent from 50.7 per cent in 1998. Developed market-economy countries also reduced the average age of their fleet to 13.75 years in 1999 compared to 14.41years in 1998. In this group, the average age of containerships was 9.16 years in 1999 as compared with 10.24 years in 1998. The share of ships aged between 0 and 4 years increased to 40.8 per cent in 1999 from 37.9 per cent in 1998. The average age of all ships registered in developing countries (excluding major open-registry countries) decreased slightly in 1999 to 14.19 years as compared with 14.40 years in 1998. This group's containerships' average age improved substantially to 9.13 years in 1999 from 11.39 years in 1998, reflecting the high share of 39.9 per cent of ships between 0 and 4 years of age. The average age of tonnage registered in the socialist countries of Asia continued to increase to 18.05 years in 1999 from 17.58 years in 1998. The countries of Central and Eastern Europe continued to have the oldest fleet (19.01 years in 1999 versus 18.04 years in 1998) with vessels built more than 15 years ago representing 75.8 per cent of their total fleet (67.7 per cent in 1998).

Delivery of newbuildings

40. Newbuilding activities attained the highest level ever recorded in terms of deadweight tons with deliveries amounting to 40.5 million dwt in 1999 (see table 9). However, the total number of vessels delivered decreased to 940 units from 1,041 units in 1998. Thus the average size of tonnage increased to 43,000 dwt from 34,000 dwt in the previous year. This high level of delivery continued to be sustained primarily by tanker deliveries of 19.1 million dwt, which was up 51.1 per cent from the 1998 level. Another features was that more of the larger tankers were delivered in 1999 than in the previous year, with an average deadweight tonnage of 119,000 in 1999 compared to 105,000 in 1998. A similar trend was observed in the dry bulk carriers sector. The number of newbuildings decreased to 191 units in 1999 from 217 units in 1998, while total tonnage expanded to 12.6 million dwt from 11.6 million dwt, with the average deadweight tons per vessel increasing to 66,000 from 53,000 in 1998. Newbuildings for other types of vessels including general cargo ships and containerships as a whole shrank both in number and in deadweight tonnage to 585 units of 8.4 million dwt from 704 units of 11.1 million dwt in 1998.

Demolition of ships

41. Trends in tonnage, types and average age of broken-up vessels are shown in tables 10, 11 and 12. In 1999, total tonnage sold for demolition continued to increase substantially by 21.8 per cent from the tonnage of the previous year to 30.7 million dwt, which accounted for 3.9 per cent of the world total deadweight tons, as compared to 3.2 per cent in 1998. Sales of tankers for breaking up increased significantly by 124.3 per cent to 16.7 million dwt, which was more than double the 7.4 million dwt broken up in 1998. These sales were strongly influenced by the increasing pressure from law-enforcing governmental agents and environmental groups, coupled with the availability of newbuildings. ULCC/VLCC sales doubled from 16 units in 1998 to 35 units in 1999. Suezmaxes also doubled from 13 units in 1998 to 26 units in 1999, while Aframaxes actually tripled from 10 units in 1998 to 30 units in 1999. In the smaller category of crude oil tankers, 21 ships were sold for scrap in 1999, as compared to 13 units in the previous year. Due to the increased scrapping activity, the average age of tankers sold for demolition was significantly down from 28.2 years in 1998 to 26.2 years in 1999. Dry bulk carriers sold for scrap amounted to only 9.7 million dwt in 1999, down from 12.8 million dwt in 1998. Most of this reduction was accounted for by the reduction in the scrapping of larger size bulk carriers. Capesize units decreased to 19 in 1999 from 28 in 1998 while Panamax size showed less reduction, from 60 units in 1998 to 56 units in 1999. Sales of handy-size dry bulkers were down to 135 units in 1999 from 178 in the previous year. The average age of all dry bulk carriers broken up was 25.0 years in 1999. Other ship types also have a similar trading life with containerships being sold to breakers with an average age of 24.8 years and general cargo ships with an average age of 26.7 years in 1999.

Table 9

Deliveries of newbuildings, 1980, 1985, 1990, 1995-1999

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	21 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
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	69	7 491	3	330	299	18 853	696	10 169	1 067	36 843
1998	120	12 633	-	-	217	11 578	704	11 078	1 041	35 289
1999 [c]	160	19 085	4	440	191	12 606	585	8 400	940	40 531

Source: UNCTAD secretariat on the basis of data from Fearnleys (Oslo), *Review 1999*.

a Vessels over 10,000 dwt.

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

c Provisional.

Table 10

Broken-up tonnage trends, 1980 and 1993-1999

Broken-up tonnage	1980	1993	1994	1995	1996	1997	1998	1999
Tonnage sold for breaking (million dwt)	10.0	16.9	20.8	15.3	18.1	14.8	25.2	30.7
Share of broken-up tonnage in the total world fleet (percentage)	1.5	2.4	2.9	2.1	2.4	1.9	3.2	3.9

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, 1995-1999

(thousands of dwt and percentage shares)

Types of vessel	Thousand dwt					Percentages				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Tankers	10 877	6 550	3 578	7 426	16 654	71.0	36.1	24.2	29.4	54.2
Combined carriers	1 228	1 861	423	1 435	1 130	8.0	10.3	2.9	5.7	3.7
Dry bulk carriers	2 135	7 632	8 161	12 847	9 687	13.9	42.1	55.1	50.9	31.5
Others	1 081	2 092	2 646	3 533	3 253	7.1	11.5	17.9	14.0	10.6
Total	15 321	18 135	14 808	25 241	30 724	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 1991 to 1999 [a]

(years)

Year	Tankers	Dry bulk carriers	Container ships	General cargo ships
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
1998	28.2	25.2	25.5	26.7
1999	26.2	25.0	24.8	26.7

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

[a] Ships of 300 grt and over.

B. OWNERSHIP OF THE WORLD FLEET

Distribution of world tonnage by country groups

42. The total world fleet continued to expand in 1999 by 1.3 per cent to 799 million dwt (see table 13 and graph 5). Tonnage of developed market-economy countries increased marginally by 0.6 million dwt to 203.2 million dwt. Major open-registry countries in 1999 expanded their tonnage substantially by 7.9 million dwt or 2.1 per cent to a record high of 384.7 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 1999 increased substantially by 2.8 million dwt or1.9 per cent to 153.6 million dwt. This increase resulted from the investments made by shipowners in Asian developing countries, whose fleets expanded by 3.7 million dwt or 3.4 per cent to 112.2 million dwt, accounting for 73 per cent of the developing countries' total fleet. The fleets for other groups of developing countries were marginally reduced in 1999. The fleet of developing countries of America decreased by 0.6 million dwt to 33.9 million dwt, while that of African developing countries also decreased, by 0.2 million dwt to 6.1 million dwt. The shares of the socialist countries of Asia and the countries of Central and Eastern Europe in total world tonnage also continued to decrease in 1999 to 3.2 per cent and 2.3 per cent respectively.

Table 13

Distribution of world tonnage (dwt) by groups of countries of registration, 1980, 1990, 1998 and 1999 [a]

(end-of-year figures)

Flags of registration by groups of countries	**Tonnage and percentage shares** [b] ***in millions of dwt***			
	1980 [c]	**1990**	**1998**	**1999**
World total	682.8	658.4	788.7	799.0
	100.0	*100.0*	*100.0*	*100.0*
Developed market-economy countries	350.1	219.0	202.6	203.2
	51.3	*33.3*	*25.7*	*25.4*
Major open-registry countries	212.6	224.6	376.8	384.7
	31.1	*34.1*	*47.8*	*48.1*
Countries of Central and Eastern Europe	37.8	44.3	20.7	18.3
(including the former USSR)	*5.5*	*6.7*	*2.6*	*2.3*
Socialist countries of Asia	10.9	22.1	26.0	25.8
	1.6	*3.4*	*3.3*	*3.2*
Developing countries	68.4	139.7	150.8	153.6
	10.0	*21.2*	*19.1*	*19.2*
***of which* in:**				
Africa	7.2	7.3	6.3	6.1
America	21.8	25.5	34.5	33.9
Asia	39.1	89.5	108.5	112.2
Europe	0.2	13.8	1.3	1.2
Oceania	0.1	3.6	0.2	0.2
Other, unallocated	3.0	8.7	11.8	13.4
	0.4	*1.3*	*1.5*	*1.7*

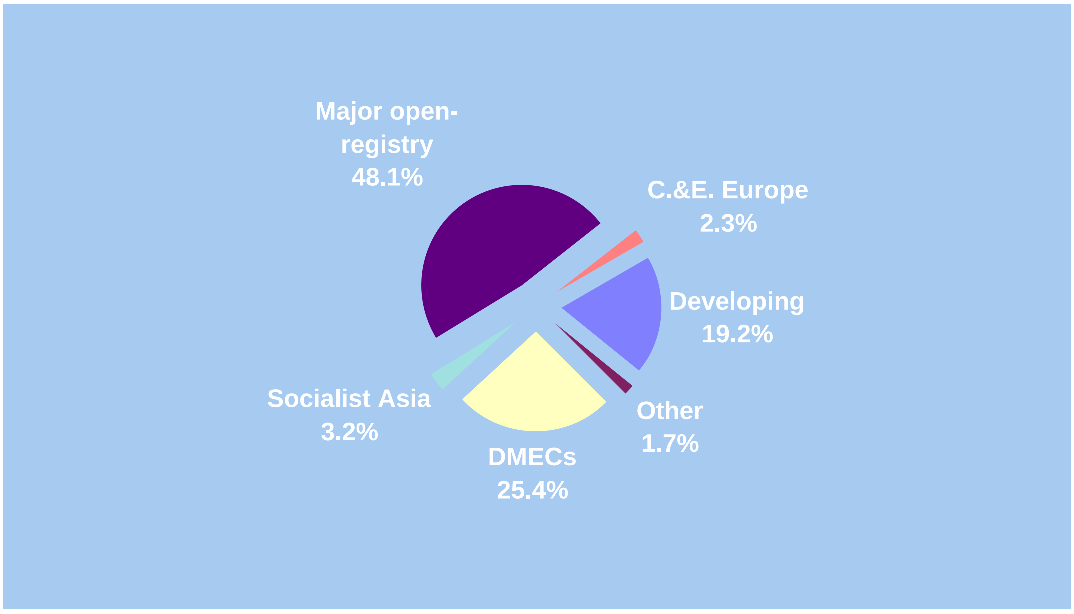
Source: UNCTAD secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

[a] Excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets, which in 1999 amounted respectively to 3.7, 1.9 and 1.9 million dwt.

[b] Percentage shares are shown in italics.

[c] Mid-year figure.

Graph 5
World tonnage by country groups, 1999
(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

43. Table 14 provides more detailed data on fleet distribution by types of vessel and country groups for 1980, 1998 and 1999. In the oil tanker sector, the share of developed market-economy countries stopped its continuous decrease, but increased only marginally to 30.5 per cent in 1999 from 29.8 per cent in 1998. Conversely, the open-registry countries' share decreased slightly to 50.2 per cent, as compared to 51.2 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. Developing countries continued in 1999 to increase their share from 15.9 per cent to 16.2 per cent; this represented in particular the continuously increasing share of Asian developing countries, which expanded in 1999 to 12.9 per cent of the world tanker fleet.

44. In the dry bulk carrier sector, the tonnage share of developed market-economy countries in the world total continued to decrease to 17.0 per cent in 1999, which stood at one third of the share in 1980 (52.7 per cent). Major open-registry countries continuously expanded their share, amounting to 54.9 per cent in 1999, as compared to 53.5 per cent in 1998. The developing countries' share remained flat in 1999 at 20.1 per cent, while the share of developing countries of Asia in 1999 was also at virtually the same level (15.7 per cent) as in the previous year (15.6 per cent). Dry bulk carriers represent the most important fleet of developing countries with a share of nearly 36 per cent in 1999 (37 per cent in 1998) of the total tonnage owned and registered in this group (see annex IIIb). The fleet developments, in the sector of general cargo ships, of the three major country groups, including developing Asia, were very similar to that of the dry bulk carrier sector. Nevertheless, the developing countries' share in the general cargo ship sector, represents 26.5 per cent, which is the highest in this country group's share in the five principal types of vessel.

45. The world containership fleet remained at 8 per cent of the world total deadweight tons in 1999. Developed market-economy countries decreased their share of containership deadweight tonnage to 34.6 per cent in 1999. On the other hand, the major open-registry countries' share continued to expand, reaching 39.8 per cent in that year, approximately two-thirds of which represented containerships beneficially owned by owners in developed market-economy countries. The share of developing countries increased very slightly to 18.8 per cent, of which 13.6 per cent was shared by Asian developing countries.

Table 14

Percentage shares of world tonnage by types of vessel and country groups, in 1980 (as at 1 July), 1998 and 1999 (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	Percentage share by vessel type				
World total	1980	682.8	100.0	49.7	27.2	17.0	1.6	4.5
	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
				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
	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
Major open-registry countries	1980	212.5	31.1	36.2	31.7	20.8	13.5	17.0
	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
Countries of Central and Eastern Europe	1980	37.8	5.5	2.8	4.2	12.3	2.9	19.2
	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
Socialist countries of Asia	1980	10.9	1.6	0.6	1.6	4.7	0.1	1.3
	1998	25.9	3.2	1.2	4.2	7.6	2.7	2.1
	1999	25.8	3.2	1.3	4.1	7.5	2.6	2.0
Developing countries	1980	68.4	10.0	7.7	9.2	17.6	7.6	12.0
	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
of which in:								
Africa	1980	7.1	1.0	1.1	0.1	2.3	..	2.1
	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
America	1980	21.8	3.2	2.3	3.3	5.6	0.1	3.7
	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
Asia	1980	39.1	5.7	4.3	5.7	9.8	2.7	5.7
	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
Europe	1980	0.2	-	-	-	0.1	-	-
	1998	1.3	0.2	-	0.3	0.2	0.2	0.1
	1999	1.2	0.2	-	0.3	0.2	0.2	-
Oceania	1980	0.2	-	-	-	0.1	-	-
	1998	0.2	-	-	..	0.1	..	0.1
	1999	0.2	-	-	..	0.1	..	0.1
Other, unallocated	1980	3.0	0.4	0.2	0.6	0.9	1.6	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

Source: 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.

The structure of the fleet of main country groups

46. Table 15 provides data on the structure of the merchant fleet of the main country groups as at 1 January 2000. Developed market-economy countries' tonnage in tankers increased in 1999 by 3.1 million dwt to 42.6 per cent of the group's total fleet from 41.2 per cent in the previous year. Their dry bulk carriers decreased by 2.9 million dwt to 23.1 per cent from 24.6 per cent in 1998. Their general cargo ships and containerships shrank slightly to 9.8 per cent and 10.8 per cent respectively as compared to 10.0 per cent and 11.2 per cent in 1998. Major open-registry countries increased their total fleets substantially by 7.8 million dwt. A greater proportion of their fleets was in the oil tanker and dry bulk carrier sectors, with both ship types accounting for 76.4 per cent of their fleet in 1999. Their oil tankers decreased in 1999 by 1.3 million dwt to 37.0 per cent of the group's total fleet from 38.1 per cent in 1998 whilst the dry bulk carriers increased in 1999 by 4.2 million dwt to 39.4 per cent as compared to 39.1 per cent in the previous year. Their general cargo ships increased in 1999 by 0.8 million dwt, accounting for 10.2 per cent of the group's total fleet, which remained unchanged from their 1998 proportion. Their containership fleet expanded in 1999 by 1.7 million dwt to 6.6 per cent of their total fleet from 6.3 per cent in 1998.

47. In developing countries, tonnage distribution is characterized by a comparatively high proportion of dry bulk carriers and oil tankers, representing 36.1 per cent and 29.9 per cent respectively in 1999. In absolute terms, their 1999 tonnage in dry bulk carriers and oil tankers stood at 55.5 million dwt and 46.0 million dwt as compared to 47.0 million dwt and 86.6 million dwt for developed market-economy countries. The share of general cargoships in this group remained stable in 1999 at 27.5 million dwt compared to 27.6 million dwt in 1998, while containerships increased significantly by 1.4 million dwt to 7.8 per cent in 1999 from 7.0 per cent in the previous year. In the countries of Central and Eastern Europe, general cargo ships are relatively dominant, accounting for 37.7 per cent in 1999, as compared to 36.1 per cent in 1998. 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 decreased in 1999 to 11.3 million dwt (from 11.7 million dwt in 1998) or 43.8 per cent (45.0 per cent in 1998) for dry bulk carriers, and 7.8 million dwt (7.9 million dwt in 1998) or 30.2 per cent (30.4 per cent in 1998) for general cargo ships. Conversely, the absolute tonnage of containerships increased by 0.1 million dwt in 1999 to 1.7 million dwt or 6.6 per cent (6.2 per cent in 1998).

C. REGISTRY OF VESSELS

The 35 most important maritime countries and territories

48. The ranking in terms of deadweight for the 35 most important maritime countries and territories is provided in table 16. In 1999, these 35 countries and territories controlled 94.2 per cent of the world merchant fleet (94.0 per cent in 1998). Finland, which was listed 31st and the United Arab Emirates 35th in 1998, were replaced by Monaco and Thailand in 1999. With a total tonnage of 3.0 million dwt and 2.8 million dwt, each represented 0.4 per cent of the world total fleet. The five largest countries controlled 50.7 per cent (50.0 per cent in 1998) and the top 10 countries controlled 67.7 per cent (67.3 per cent in 1998) of the world total fleet.

49. It is notable that among these countries and territories the trend to register under a foreign flag continued in 1999. The total tonnage registered under foreign flags in 1999 increased to 431.2 million dwt representing 62.5 per cent of the 35 countries' total fleet, as compared with 421.2 million dwt or 61.8 per cent in 1998. It is a recent trend that developing countries and territories have continued to register their tonnage under foreign flags. In 1999, the 11 developing countries and territories listed in the table (including Hong Kong (China), but excluding Taiwan Province of China) had more than half their total tonnage registered under foreign flags representing 52.9 per cent (52.2 per cent in 1998). 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 91.8 per cent and 79.2 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 1.3, 10.5 and 9.4 per cent respectively of their fleets. For developed market-economy countries, the share of foreign-registred tonnage slightly increased to 67.5 per cent in 1999 from 67.2 per cent in 1998.

Table 15

Structure of the marchant fleets of the main country groups, as at 1 January 2000 [a]

(millions of dwt and percentage shares)

	World		Developed market-economy countries		Major open-registry countries		Developing countries		Countries of Central and Eastern Europe		Socialist countries of Asia	
	Million dwt	**%**	**Million dwt**	**%**	**Million dwt**	**%**	**Million dwt**	**%**	**Million dwt**	**%**	**Million dwt**	**%**
Total fleet	799.0	100.1	203.2	99.9	384.7	100.0	153.6	99.9	18.3	100.0	25.8	100.0
Oil tankers	283.6	35.5	86.6	42.6	142.4	37.0	46.0	29.9	2.9	15.8	3.6	14.0
Bulk carriers	276.1	34.6	47.0	23.1	151.6	39.4	55.5	36.1	4.9	26.8	11.3	43.8
General cargo	103.8	13.0	20.0	9.8	39.1	10.2	27.5	17.9	6.9	37.7	7.8	30.2
Container ships	63.7	8.0	22.0	10.8	25.3	6.6	12.0	7.8	0.4	2.2	1.7	6.6
Other ships	71.8	9.0	27.6	13.6	26.3	6.8	12.6	8.2	3.2	17.5	1.4	5.4

Source: 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 16

The 35 most important maritime countries and territories, as at 1 January 2000 [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	752	2 495	3 247	40 677 401	92 704 187	133 381 588	69.50	18.21
Japan	809	2 093	2 902	17 397 386	76 076 404	93 473 790	81.39	12.76
Norway	905	737	1 642	28 727 816	27 202 931	55 930 747	48.64	7.64
United States	502	926	1 428	12 009 757	36 857 906	48 867 663	75.42	6.67
China	1 621	551	2 172	22 316 216	17 179 402	39 495 618	43.50	5.39
Hong Kong (China)	132	424	556	6 573 740	24 965 979	31 539 719	79.16	4.31
Germany	498	1 445	1 943	7 500 404	21 813 852	29 314 256	74.41	4.00
Republic of Korea	455	441	896	7 199 786	18 033 248	25 233 034	71.47	3.44
Taiwan Province of China	163	346	509	7 603 196	12 088 206	19 691 402	61.39	2.69
United Kingdom	405	454	859	7 168 426	11 858 280	19 026 706	62.32	2.60
Singapore	459	277	736	11 569 710	7 190 637	18 760 347	38.33	2.56
Denmark	418	297	715	7 192 069	8 904 651	16 096 720	55.32	2.20
Russian Federation	2 142	348	2 490	8 539 161	7 455 812	15 994 973	46.61	2.18
Sweden	174	222	396	1 552 409	13 638 886	15 191 295	89.78	2.07
Italy	489	142	631	8 752 856	4 819 852	13 572 708	35.51	1.85
India	372	59	431	10 797 389	1 277 592	12 074 981	10.58	1.65
Saudi Arabia	52	71	123	902 652	10 124 808	11 027 460	91.81	1.51
Turkey	465	82	547	8 793 721	843 505	9 637 226	8.75	1.32
Brazil	168	23	191	6 087 542	2 802 672	8 890 214	31.53	1.21
Belgium	24	143	167	114 514	7 505 297	7 619 811	98.50	1.04
Malaysia	242	54	296	5 366 937	1 059 726	6 426 663	16.49	0.88
Iran, Islamic Rep. of	152	2	154	6 031 318	82 087	6 113 405	1.34	0.83
Switzerland	13	203	216	720 545	5 383 154	6 103 699	88.19	0.83
Netherlands	548	202	750	3 393 197	2 688 357	6 081 554	44.21	0.83
France	177	103	280	2 554 922	2 894 052	5 448 974	53.11	0.74
Philippines	339	20	359	4 354 359	509 739	4 864 098	10.48	0.66
Indonesia	489	108	597	3 176 111	1 297 135	4 473 246	29.00	0.61
Kuwait	33	6	39	3 433 393	356 216	3 789 609	9.40	0.52
Spain	106	217	323	299 914	3 453 705	3 753 619	92.01	0.51
Australia	58	28	86	2 065 838	1 104 147	3 169 985	34.83	0.43
Ukraine	393	100	493	1 473 874	1 677 408	3 151 282	53.23	0.43
Canada	163	66	229	770 619	2 350 462	3 121 081	75.31	0.43
Monaco	-	122	122	-	3 045 840	3 045 840	100.00	0.42
Thailand	227	51	278	2 270 436	569 787	2 840 223	20.06	0.39
Romania	129	35	164	1 273 537	1 423 366	2 696 903	52.78	0.37
Total (35 countries)	14 074	12 893	26 967	258 661 151	431 239 288	689 900 439	62.51	94.18
Percentage	52.2	47.8	100.0	37.5	62.5	100.0		
World total	16 359	13 985	30 344	281 458 796	451 076 290	732 535 086		
Percentage	53.9	46.1	100.0	38.4	61.6	100.0		

Source: UNCTAD secretariat on the basis of data supplied by 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).

Major open registries

50. The share of the world merchant fleet in foreign registers continued to expand but to a lesser extent in 1999 than 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 1999 increased moderately by 2.2 per cent to 362.1 million dwt from 354.1 million dwt in the previous year, which had expanded significantly by 7.7 per cent. Panama continued to lead the list, enlarging its fleet in 1999 by 4.2 million dwt or 3.0 per cent. Liberia had the second largest increase with its fleet growing marginally by 1.7 per cent. The combined tonnage of these two countries amounts to one third of the total tonnage of the seven major open-registry countries. In 1999, Malta increased its fleet substantially by 7.0 per cent to 40.3 million dwt while Cyprus and the Bahamas reduced their tonnage by 2.3 per cent and 0.4 per cent to 32.7 million dwt and 39.8 million dwt respectively. The analysis by type of vessel indicated that dry bulk stood at 39.4 per cent of the total deadweight in 1999 as compared with 39.2 per cent in 1998, followed by oil tankers, which cut back their share to 37.6 per cent in 1999 from 38.6 per cent in the previous year. Combined tonnage of these two types of vessels accounts for 77.0 per cent of the total deadweight. General cargo ships (3,333 ships) accounted for 33.5 per cent of the total number of ships, reflecting the trend of the maritime industry to flag out in this sector, followed by dry bulk carriers of 2,678 ships or 26.9 per cent of the total.

Nationality of vessels

51. Table 18 indicates the participation of nationals in the registry of the most important open or 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 100 per cent. These two countries (Norway and Denmark) were ranked third and twelfth of the 35 most important maritime countries in 1999.

52. The true nationality of the vessels registered in the seven major open-registries is analysed in table 19. In 1999, total tonnage of the 22 countries or territories accounted for 92.1 per cent of the total seven major open-registry fleets, which was the same level as in 1998. However, Croatia, which had been listed as twenty-first in 1998, disappeared from the list, and was replaced by Monaco. Ownership is concentrated in the 10 largest countries or territories, which control 78.1 per cent of the deadweight of vessels registered in the seven major open-registry countries, as compared with 78.2 per cent in the previous year. Similarly, the top five countries or territories control 60.6 per cent (59.9 per cent in 1998). Greece was ranked first in 1999 for the sixth consecutive year with the largest share (22.5 per cent) of the total seven major open-registry fleets. In 1999, this country also had the largest foreign-flag ownership, representing 88.17 million dwt or 19.4 per cent of the total world foreign-flag tonnage, followed by Japan with 76.72 million dwt or 16.9 per cent of the total tonnage. Both countries' combined foreign-flag tonnage accounted for one-third of the total world tonnage under foreign flags.

Table 17

Tonnage distribution of major open-registry fleets, [a] **as at 1 January 2000**

Country	Oil tankers		Dry bulk carriers		General cargo		Container ships		Others		1999 total		1998 total	
	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt
Panama	415	39 623	1 273	71 097	1 413	12 914	457	13 371	795	9 388	4 353	146 393	4 206	142 179
Liberia	389	46 549	411	27 145	281	4 853	198	5 494	354	8 947	1 633	92 988	1 590	91 466
Cyprus	128	6 287	419	17 348	578	5 546	107	2 365	93	1 151	1 325	32 697	1 347	33 456
Bahamas	153	21 303	149	8 175	485	6 786	50	1 105	258	2 472	1 095	39 841	1 076	39 982
Malta	297	18 551	375	14 945	514	5 011	42	718	85	1 118	1 313	40 343	1 194	37 717
Bermuda	24	3 967	22	2 628	21	232	17	478	27	555	111	7 860	112	7 571
Vanuatu	1	5	29	1 236	41	373	1	28	56	296	128	1 938	122	1 755
Total	1 407	136 285	2 678	142 574	3 333	35 715	872	23 559	1 668	23 927	9 958	362 060	9 647	354 126

Source: 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 1 January 2000 [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	146 393	0	0.0
Liberia	92 988	0	0.0
Cyprus	32 697	683	2.1
Bahamas	39 841	288	0.7
Norwegian International Ship Registry	29 301	24 765	84.5
Malta	40 343	36	0.1
Danish International Ship Registry	6 561	6 465	98.5
Bermuda	7 860	0	0.0
Vanuatu	1 938	0	0.0

Source: 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 1 January 2000

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	11 519	166	12.4	16 623	522	11.4	23 639	713	72.3	7 608	179	19.1	-	-	-	22 074	563	54.7	107	2	5.5	81 570	2 145	22.5	88 173	2 409
Japan	5 689	145	6.1	58 771	1 644	40.1	307	23	0.9	720	32	1.8	-	-	-	150	1	0.4	582	26	30.0	66 219	1 871	18.3	76 717	2 132
United States	13 021	199	14.0	2 784	147	1.9	134	11	0.4	7 931	154	19.9	843	19	10.7	637	14	1.6	317	43	16.4	25 667	587	7.1	37 980	903
Hong Kong (China)	5 173	85	5.6	15 305	237	10.5	96	1	0.3	473	9	1.2	428	3	5.4	317	13	0.8	178	4	9.2	21 970	352	6.1	26 617	463
Norway	9 691	183	10.4	1 534	88	1.0	362	29	1.1	7 840	204	19.7	206	5	2.6	4 286	79	10.6	-	-	-	23 919	588	6.6	29 525	778
United Kingdom	2 199	48	2.4	566	60	0.4	193	14	0.6	1 768	120	4.4	4 346	44	55.3	611	9	1.5	-	-	-	9 683	295	2.7	13 490	464
China	4 187	83	4.5	8 756	252	6.0	267	18	0.8	-	-	-	-	-	-	469	13	1.2	-	-	-	13 679	366	3.8	17 536	536
Republic of Korea	1 513	16	1.6	16 221	357	11.1	52	3	0.2	-	-	-	-	-	-	124	8	0.3	-	-	-	17 910	384	4.9	18 383	440
Sweden	4 364	29	4.7	987	9	0.7	24	6	0.1	2 307	34	5.8	948	6	12.1	-	-	-	-	-	-	8 630	84	2.4	13 963	224
Germany	8 493	310	9.1	587	26	0.4	3 455	230	10.6	67	8	0.2	77	2	1.0	896	41	2.2	-	-	-	13 575	617	3.7	19 784	1 335
Saudi Arabia	7 536	25	8.1	166	16	0.1	-	-	-	2 080	8	5.2	25	2	0.3	-	-	-	-	-	-	9 807	51	2.7	10 264	69
Taiwan Province of China	904	20	1.0	9 142	283	6.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 046	303	2.8	11 989	350
Singapore	2 815	32	3.0	1 605	87	1.1	30	1	0.1	628	12	1.6	-	-	-	45	2	0.1	-	-	-	5 123	134	1.4	7 703	292
Denmark	426	15	0.5	217	13	0.1	-	-	-	500	48	1.3	-	-	-	-	-	-	84	1	4.3	1 227	77	0.3	8 170	290
Russian Federation	4 252	63	4.6	125	14	0.1	1 486	85	4.5	210	11	0.5	-	-	-	1 026	93	2.5	-	-	-	7 099	266	2.0	7 314	323
Switzerland	780	14	0.8	2 120	84	1.4	60	6	0.2	623	9	1.6	-	-	-	1 428	65	3.5	-	-	-	5 011	178	1.4	5 717	218
Italy	451	5	0.5	255	10	0.2	54	1	0.2	891	21	2.2	-	-	-	1 786	55	4.4	-	-	-	3 437	92	0.9	4 829	145
Belgium	1 551	9	1.7	665	5	0.5	113	3	0.3	174	17	0.4	-	-	-	23	1	0.1	-	-	-	2 526	35	0.7	7 792	142
France	-	-	-	1 004	19	0.7	-	-	-	377	19	0.9	-	-	-	-	-	-	-	-	-	1 381	38	0.4	3 456	107
Spain	95	1	0.1	361	52	0.2	139	8	0.4	825	8	2.1	-	-	-	-	-	-	-	-	-	1 420	69	0.4	3 363	195
Monaco	-	-	-	433	16	0.3	-	-	-	521	30	1.3	-	-	-	729	28	1.8	-	-	-	1 683	74	0.5	2 931	118
Finland	-	-	-	-	-	-	-	-	-	1 578	25	4.0	-	-	-	87	1	0.2	-	-	-	1 665	26	0.5	1 821	46
Subtotal	84 659	1 448	91.1	138 227	3 941	94.4	30 411	1 152	93.0	37 121	948	93.2	6 873	81	87.4	34 688	986	85.9	1 268	76	65.4	333 247	8 632	92.1	417 517	9,572
Others	8 329	185	8.9	8 166	412	5.6	2 286	173	7.0	2 720	147	6.8	987	30	12.6	5 655	327	14.1	670	52	34.6	28 813	1 326	7.9	37 034	4 316
Total	92 988	1 633	100.0	146 393	4 353	100.0	32 697	1 325	100.0	39 841	1 095	100.0	7 860	111	100.0	40 343	1 313	100.0	1 938	128	100.0	362 060	9 958	100.0	454 551	13 888

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

53. In 1999, newbuilding contracts for six major ship types, aggregating 49.6 million dwt, were placed, increasing by 16.9 per cent in comparison with the contracts in 1998 (see table 20). In the tanker sector, deteriorating world trade in crude oil in 1999 further pressured the freight level in overall tanker markets, particularly in the middle-larger crude oil tankers. Owners and speculators who expected uncertain near-future tanker markets were reluctant to place new orders for tanker tonnage, although newbuilding prices were at a significantly low level. Eventually, 206 units aggregating 16.8 million dwt were ordered in 1999, as compared with 280 units totalling 21.9 million dwt in 1998. The 1999 newbuilding orders for dry bulk carriers more than doubled the record of the previous year to 346 units of 23.9 million dwt, concentrating on the last quarter of the year. This reflects the fact that in 1999 the dry bulk supply and demand balance improved, in particular as the growth in demand was remarkably higher during the second half of 1999 than in the first six months.

54. Newbuilding orders for containerships continued to rise substantially by 20 per cent to 170 units totalling 7.2 million dwt in 1999 as compared to 178 units of 6.0 million dwt. These newbuilding tonnages reflect the recent trend for the enlargement of ships such as post-Panamax containerships, which represented an average tonnage of 42,000 dwt in 1999 in comparison with 34,000 dwt in 1998. The newbuilding orders for general cargo ships declined signficiantly in 1999 to 162 units of 1.3 million dwt from 333 units totalling 2.5 million dwt in 1998. On the other hand, the orders for passenger ferries were flat as regards the number of vessels, but increased substantially to a total of 348,000 dwt in 1999 from 231,000 dwt in the previous year, also reflecting the existence of larger vessels in 1999 (average 3,000 dwt) than in 1998 (average of 2,000 dwt).

Tonnage on order

55. 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 end of 1999 stood at 83.5 million dwt, representing a marginal increase of 1.6 per cent over the previous year. Tonnage on order by developed market-economy countries amounted to 26.6 million dwt, accounting for 31.8 per cent of the world total tonnage on order, as compared with 25.5 million dwt or 31.0 per cent in 1998. Major open-registry countries had 41.4 million dwt or 49.5 per cent of world tonnage on order, as compared with 45.4 million dwt or 55.2 per cent in 1998. The share of the countries of Central and Eastern Europe continued to decrease in 1999, to 0.7 million dwt or 0.9 per cent of the world total on order, whilst the share of the socialist countries of Asia increased in 1999, ending the year with 2.1 million dwt or 2.5 per cent of the world total on order compared with 1.4 million dwt or 1.7 per cent in 1998.

56. Developing countries' tonnage increased significantly to 10.5 million dwt or 12.6 per cent of the world total tonnage on order at the end of 1999, as compared with 8.0 million dwt or 9.8 per cent in 1998. Tonnage on order by Asian developing countries increased substantially by 2.7 million dwt to 9.4 million dwt at the end of 1999, which accounted for 89.3 per cent of the developing countries' total tonnage on order. There was some growth in the African newbuilding orders, rising to 0.15 per cent of the world total on order at the end of 1999, as compared with only 0.01 per cent in 1998, while American developing countries reduced their share to 1.13 per cent of the world total on order in 1999 from 1.60 per cent in the previous year.

57. In 1999, dry bulk carriers on order at the end of the year increased substantially by 23.9 per cent to 24.5 million dwt accounting for 29.4 per cent of the world total on order. For this type of vessel, developed market-economy countries and major open-registry countries accounted for 19.4 per cent and 64.8 per cent, representing a combined share of more than 80 per cent. The volume of containerships on order also expanded in 1999 by 33.3 per cent to 10 million dwt at the year end, representing 11.9 per cent of the world total on order. For containerships on order, developed market-economy countries and major open-registry countries accounted for 40 per cent each. Developing countries' containership orders increased from 0.3 million dwt in 1998 to 1.0 million dwt in 1999, which accounted for 10 per cent of the total. Asian developing countries had 0.9 million dwt or 87.5 per cent of the developing countries' total on order. Oil tanker orders declined in 1999 by 10.4 per cent to 37.0 million dwt, accounting for 44.2 per cent of the world total on order. Developing countries had 6.9 million dwt on order, representing 18.7 per cent of the total, of which Asian developing countries increased by 53.0 per cent to 6.5 million dwt or 94.4 per cent of the developing countries' total.

Table 20

Newbuilding contracts placed for the main types of ship [a] during 1995-1999 and 2000 *(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
1995	243	9 143	381	22 418	4	440	345	2 449	345	8 562	144	224	1 462	43 236
1996	274	13 875	271	14 250	-	-	257	2 107	292	6 978	144	155	1 238	37 365
1997	428	32 516	282	17 983	2	220	299	2 701	166	3 618	96	149	1 273	57 187
1998	280	21 922	166	11 835	0	0	333	2 488	178	5 975	117	231	1 074	42 451
January 1999	18	965	7	268	-	-	11	133	5	68	8	22	49	1 456
February 1999	12	915	22	909	-	-	19	187	3	81	15	43	71	2 135
March 1999	9	168	4	205	-	-	14	138	10	501	7	26	44	1 038
April 1999	17	1 015	24	2 064	-	-	11	56	14	480	10	11	76	3 626
May 1999	22	2 199	22	1 370	-	-	15	114	1	5	13	30	73	3 718
June 1999	19	1 521	28	1 980	-	-	14	136	8	531	10	73	79	4 241
July 1999	14	1 159	47	3 318	-	-	14	93	27	1 141	11	30	113	5 741
August 1999	16	2 029	28	1 504	-	-	6	62	27	1 232	6	26	83	4 853
September 1999	20	1 515	47	3 058	-	-	1	39	12	597	4	12	84	5 221
October 1999	23	1 815	37	3 054	-	-	28	113	9	156	16	24	113	5 162
November 1999	24	2 223	40	2 955	-	-	13	40	24	1 349	8	34	109	6 601
December 1999	12	1 298	40	3 249	-	-	16	212	30	1 042	8	17	106	5 818
Total 1999	206	16 822	346	23 934	-	-	162	1 323	170	7 183	116	348	1 000	49 610
January 2000	17	1 337	37	2 095	-	-	16	84	18	904	20	20	108	4 440
February 2000	12	786	39	3 138	-	-	17	130	37	2 095	7	18	112	6 167
March 2000	33	2 366	29	1 110	-	-	10	64	19	930	6	7	97	4 477

Source: UNCTAD secretariat on the basis of data from *Shipping Statistics and Market Review, 1999*, 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 1 January 2000
(thousands of dwt)

Countries of registry	All ships	Oil tankers	Dry bulk carriers	General cargo	Container ships	Other ships
World total	83 544	36 962	24 540	4 589	9 965	7 488
Developed market-economy countries	26 596	12 601	4 766	2 301	3 989	2 939
Major open-registry countries	41 393	16 468	15 914	1 170	4 068	3 773
Countries of Central and Eastern Europe	744	351	63	194	-	136
Socialist countries of Asia	2 056	368	762	264	634	28
Developing countries, total	10 543	6 896	1 608	570	1 000	469
of which in: Africa	122	3	75	-	40	4
America	946	380	272	177	85	32
Asia	9 414	6 512	1 261	333	875	433
Europe [a]	60	-	-	60	-	-
Oceania	1	-	-	1	-	-
Unallocated	2 212	280	1 427	90	273	142

Source: 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

58. Table 22 indicates newbuilding prices for the main types of vessel. In 1999, prices for all the main types and sizes of newbuildings continued to decline significantly below those of the previous year, although total newbuilding contracts in 1999 expanded by nearly 10 million dwt from the level of the previous year. The downward pressure on prices in 1999 continue to be mainly due to the increasing competitiveness of Asian shipyards. The Republic of Korea and Japan have been dominating the world shipbuilding market, while China recently expanded its building capacity, securing a substantial increase in its order book in 1999. Korean shipyards have become the most competitive in the world, mainly due to the rapid enhancement of their productivity and technology coupled with the depreciation of the currency. Japanese shipyards have endeavoured to overcome unfavourable exchange rates, and strong dry bulk carrier demand in 1999 helped them to secure new orders. Nevertheless major shipyards in Japan have still been under pressure to become more competitive in the world shipbuilding market. Analysis by vessel type shows that oil tanker newbuilding prices for all sizes declined by 10 to 14 per cent in 1999 from their 1998 level. Newbuilding prices for all dry bulk carriers also fell significantly in 1999 by 8 to 21 per cent from the previous year's level, varying substantially in accordance with the size of the bulkers. However, the volume contracted in 1999 increased dramatically by nearly 90 per cent over the order book of the previous year. Prices of 2,500 TEU cellular containerships and 125,000 m^3 LNG vessels declined by 16.7 per cent and 14.9 per cent respectively in 1999. The downward trend of shipbuilding prices thus continued for all types and sizes of vessel.

59. About 120 oil tankers (over 10,000 dwt) changed hands in 1999, compared with approximately 90 ships in 1998. In 1999, quality modern tonnage offered for sale remained limited for most of the year. Prices for vintage double-hull Aframaxes built in the

Table 22

Representative newbuilding prices in 1980, 1985, 1990, 1997-1999 and 2000
(millions of dollars)

Type and size of vessel	1980	1985	1990	1997	1998	1999	Percentage change 1998/1999	2000 January	February	March	April	May
30 000 dwt bulk carrier	17	11	24	20	19	15	-21.1	16	16	16	15	15
32 000 dwt tanker	19	18	29	32	29	25	-13.8	25	26	26	26	28
70 000 dwt bulk carrier	24	14	32	28	23	19	-17.4	22	23	23	23	23
80 000 dwt tanker	28	22	42	42	37	32	-13.5	31	32	33	36	37
120 000 dwt bulk carrier	32	27	45	40	37	34	-8.1	35	35	35	38	38
250 000 dwt tanker	75	47	90	82	74	66	-10.8	65	66	66	69	72
125 000 m^3 LNG [a]	200	200	225	255	235	200	-14.9	200	200	180	180	180
75 000 m^3 LPG	77	44	78	67	68	58	-14.7	58	58	58	58	58
15 000 dwt general cargo ship	14	12	24	21	21	19	-9.5	19	19	19	19	19
2 500 TEUs full container ship	..	26	52	51	42	35	-16.7	35	35	35	35	35

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

a LNG, liquiefied natural gas; LPG, liquefied petroleum gas; TEU, twenty-foot equivalent unit.

early 1990s stayed firm at unchanged levels in 1999. Late 1980s-built Suezmax tonnage fell around 10 per cent from the 1998 level, whilst double-hull units built in the early to middle 1990s were subject to marginal price adjustments. In the case of dry bulk carriers, nearly 350 units between 20,000 and 250,000 dwt were sold in 1999. During the first half of that year, a relatively large number of 1980s-built dry bulkers of over 100,000 dwt were circulated in the market for sale. After August, most of these large units, mainly Capesize tonnages, were employed in charter markets, and thus fewer ships of this size were available in the sale and purchase market. Throughout the year, the price for dry bulk carriers increased by 15-20 per cent over its level in 1998, specifically for modern tonnages. Interest in buying Panamaxes accelerated in 1999 with about 100 ships sold, doubling the number of sales in 1998. Owing to a relatively firm chartering market in the last six months, the majority of the Panamaxes purchased were 1980s-built units. Thus, quality early 1990s-built tonnages changed hands at price levels more than 15 per cent higher than in 1998. In the segment of 20-50,000 dwt dry bulkers, more than 220 units were sold in 1999. Greek buyers again dominated the market for second-hand dry bulk tonnage. Most of them were interested in 1980s-built Handymaxes. They also contributed to an increase in prices, specifically for early-middle 1990s-built tonnages, which became nearly 20 per cent higher than in the previous year.

Table 23
Second-hand prices for five-year-old vessels, 1993-1999
(as at end of year, in millions of dollars)

Vessel	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**Percentage change 1998/1999**
30 000 dwt tanker	18.0	18.0	20.0	22.0	23.0	16.0	16.0	± 0
80 000 dwt tanker	32.0	31.0	30.0	31.0	33.0	..	-	-
130 000 dwt tanker	34.5	34.0	35.5	40.0	41.5	..	-	-
45 000 dwt dry bulk carrier	18.5	20.7	22.0	18.5	18.0	13.0	15.5	19.2
70 000 dwt dry bulk carrier	19.5	21.5	23.0	20.5	21.0	14.5	17.0	17.2
150 000 dwt dry bulk carrier	33.0	32.0	28.0	26.5	30.0	23.5	27.5	17.0

Source: UNCTAD secretariat on the basis of data supplied by Fearnleys (Oslo), *Review 1999*.