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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

29. Comparative time-series data on the world fleet for 1996, 1997 and 1998 are provided in table 6. The world merchant fleet reached 788.7 million deadweight tons (dwt) at the end of 1998. This represents a 1.6 per cent increase over 1997, when the world fleet had expanded at a rate of 2.3 per cent as compared with 1996. The slower rate of fleet expansion was attributable primarily to an increase to 23.5 million dwt of tonnage broken up and lost, while the new building deliveries decreased only slightly to 35.5 million dwt from the level of 36.8 million dwt registered in 1997. The net tonnage gain of 12.0 million dwt in 1998 compared with a net gain of 17.7 million dwt in 1997.

30. The combined tonnage of oil tankers and dry bulk carriers continue to dominate the world fleet, representing 70.3 per cent of total tonnage in 1998, a slight decline from 71.3 per cent in 1997. General cargo ships and container ships accounted for 12.8 per cent and 7.8 per cent of total tonnage, respectively. Both types of tonnage continue to develop along a trend line that sees decreasing volumes of conventional general cargo and increasing container tonnage, even though container tonnage growth recorded at 9.0 per cent was somewhat less impressive than the rate of 15.1 per cent observed in 1997. This was due primarily to a further decline in dry bulk tonnage from 36.2 per cent in 1997 to 34.9 per cent end-1998, while oil tanker tonnage marginally increased to 279.5 million dwt end-1998 as compared to 272.0 million dwt the year before. Graph 4 illustrates world fleet size trends by principal types of vessel for the period 1980-1998.

World containership fleet

31. The world fleet of fully cellular containerships continued to expand substantially in 1998 in terms of both number of ships and their TEU capacity, reaching 2,365 ships of 4,062,000 TEUs by the end of 1998, which represented an increase of 7.3 per cent in the number of ships and 11.8 per cent in TEU capacity over the previous year (see table 7). At the same time, ship sizes continued to increase with average carrying capacity per ship growing from 1,581 TEUs in 1996 to 1,717 TEUs in 1998, reflecting the general need to reduce operating costs through economies of scale. This development will continue given the number of Panamax and post-Panamax presently on order. At the end of 1998, the new building orders for all sizes stood at 219 ships, aggregating 580,000 TEUs, scheduled to enter into service over the next couple of years, of which 73 ships were of the Panamax and post-Panamax size, with a total capacity of around 372,000 TEUs or 33 per cent (ships) and 64 per cent (capacity) of the total order book.

Age distribution of the world merchant fleet

32. Table 8 provides data on the age distribution of the world merchant fleet by types of vessels and by groups of countries and territories. For the third consecutive year, the average age of the world total fleet improved slightly in 1998, to 14.54 years from 14.77 years in 1997. By types of vessel, the average age of tankers, however, rose to 15.00 years in 1998 from the previous year's average of 14.68 years. The share of tanker tonnage aged 15 years and over increased to 55.1 per cent in 1998 from 54.5 per cent in 1997. The dry bulk carrier fleet continued to improve to 13.56 years in 1998 from 14.34 years in 1997, reflecting increased scrapping activities in this sector.

Table 6

World fleet size by principal types of vessel, 1996-1998 [a]
(end of year figures, in thousands of dwt)

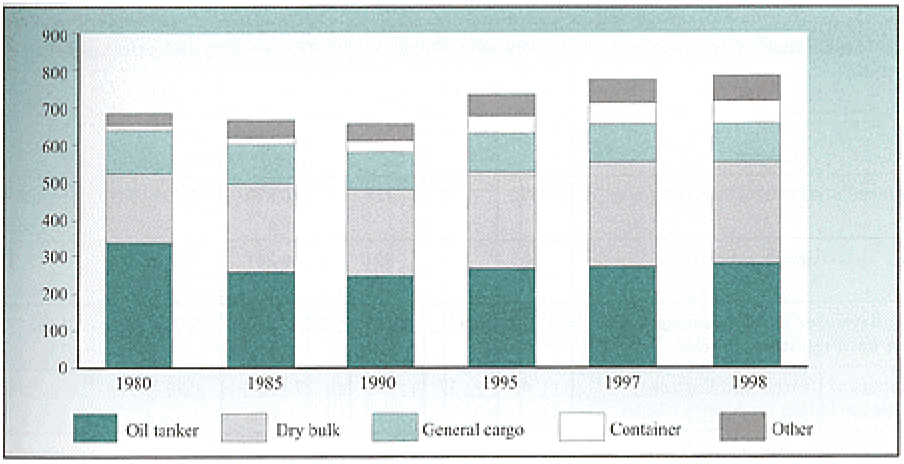
Principal types	1996	1997	1998	Percentage change 1997/1998
Oil tankers	271 454	272 023	279 509	2.8
	35.8	*35.1*	*35.4*	
Bulk carriers	272 564	281 012	275 519	-2.0
	36.0	*36.2*	*34.9*	
Ore/bulk/oil	21 922	20 256	17 720	-12.5
	2.9	*2.6*	*2.2*	
Ore/bulk	250 642	260 756	257 799	-1.1
	33.1	*33.6*	*32.7*	
General cargo ships	104 642	103 880	101 259	-2.5
	13.8	*13.4*	*12.8*	
Container ships	48 766	56 108	61 147	9.0
	6.4	*7.2*	*7.8*	
Other types of ships	60 745	62 904	71 291	13.3
	8.0	*8.1*	*9.0*	
Liquefied gas carriers	15 507	16 021	16 471	2.8
	2.1	*2.1*	*2.1*	
Chemical tankers	7 913	7 846	7 740	-1.4
	1.0	*1.0*	*1.0*	
Miscellaneous tankers	699	920	885	-3.8
	0.1	*0.1*	*0.1*	
Ferries and passenger ships	4 492	4 614	4 803	4.1
	0.6	*0.6*	*0.6*	
Others	32 134	33 503	41 392	23.5
	4.2	*4.3*	*5.2*	
World total	758 172	775 927	788 725	1.6
	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, 1980–1998



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

Table 7

Distribution of the world fleet and TEU capacity of fully cellular container ships by groups of countries, in 1996, 1997 and 1998
(end-of-year figures)

Flags of registration by groups of countries	Number of ships			TEU capacity and percentage shares [a]		
	1996	1997	1998	1996	1997	1998
World total	1 954	2 204	2 365	3 089 682	3 632 070	4 061 653
				100.0	*100.0*	*99.9*
Developed market-economy countries	592	675	728	1 170 879	1 398 781	1 561 060
				37.9	*38.5*	*38.4*
Major open-registry countries	683	800	887	1 066 261	1 315 130	1 545 818
				34.5	*36.2*	*38.1*
Total, developed market-economy and major open-registry countries	1 275	1 475	1 615	2 237 140	2 713 911	3 106 878
				72.4	*74.7*	*76.5*
Countries of Central and Eastern Europe (including the former USSR)	45	35	35	27 120	23 276	26 331
				0.9	*0.6*	*0.6*
Socialist countries of Asia	98	99	90	95 882	96 739	94 863
				3.1	*2.7*	*2.3*
Developing countries	441	504	542	549 555	628 999	691 328
				17.8	*17.3*	*17.0*
of which in:						
Africa	5	8	10	4 779	9 117	11 026
				0.2	*0.3*	*0.3*
America	126	138	162	108 552	119 299	157 836
				3.5	*3.3*	*3.9*
Asia	305	353	365	431 669	496 028	516 431
				14.0	*13.7*	*12.7*
Europe	5	5	5	4 555	4 555	6 035
				0.1	*0.1*	*0.1*
Oceania	..	-	-	..	..	..
				..	..	..
Other, unallocated	95	91	83	179 985	169 145	142 253
				5.8	*4.7*	*3.5*

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 31 December 1998
(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) 1998 [a]	Average age (years) 1997[a]
World total	All ships	100	17.8	16.6	14.3	51.4	14.54	14.77
	Tankers	100	13.8	22.3	8.7	55.1	15.00	14.68
	Bulk carriers	100	22.3	13.7	19.3	44.7	13.56	14.34
	General cargo	100	8.9	9.2	15.6	66.3	17.28	17.42
	Container ships	100	33.9	18.2	14.8	33.0	10.99	11.85
	All others	100	14.2	14.5	14.2	57.1	15.57	15.28
Developed market-economy countries	All ships	100	17.5	16.9	15.6	50.0	14.41	14.68
	Tankers	100	13.0	18.1	10.1	58.8	15.68	15.45
	Bulk carriers	100	18.1	14.2	22.8	44.9	13.97	14.60
	General cargo	100	14.7	14.1	20.8	50.3	14.84	14.90
	Container ships	100	37.9	19.2	12.8	30.0	10.24	12.02
	All others	100	15.0	18.8	16.6	49.5	14.50	14.36
Major open-registry countries	All ships	100	19.1	17.5	12.8	50.7	14.30	14.48
	Tankers	100	14.4	24.1	7.0	54.6	14.83	14.10
	Bulk carriers	100	23.8	13.5	17.0	45.6	13.49	14.46
	General cargo	100	11.2	10.6	17.3	60.9	16.44	16.91
	Container ships	100	32.0	18.6	15.3	34.1	11.28	12.17
	All others	100	17.6	12.3	11.6	58.5	15.48	14.88
Subtotal	All ships	100	18.5	17.3	13.8	50.4	14.33	14.54
	Tankers	100	13.9	21.9	8.1	56.1	15.13	14.61
	Bulk carriers	100	22.3	13.7	18.6	45.4	13.63	14.49
	General cargo	100	12.4	11.8	18.5	57.2	15.88	16.22
	Container ships	100	34.9	18.9	14.1	32.1	10.78	12.08
	All others	100	16.2	15.7	14.2	53.8	14.96	14.59
Countries of Central and Eastern Europe	All ships	100	2.2	10.2	19.9	67.7	18.04	17.96
	Tankers	100	1.6	4.1	23.6	70.6	18.68	18.66
	Bulk carriers	100	0.0	10.6	19.6	69.9	18.47	18.39
	General cargo	100	3.3	10.4	19.0	67.2	17.86	17.75
	Container ships	100	8.6	12.5	25.5	53.4	15.86	14.24
	All others	100	3.3	14.8	18.1	63.7	17.29	17.11
Socialist countries of Asia	All ships	100	9.1	8.5	13.3	69.1	17.58	17.20
	Tankers	100	12.0	14.8	14.4	58.8	15.94	15.51
	Bulk carriers	100	10.5	9.0	13.2	67.3	17.23	16.80
	General cargo	100	2.2	3.9	11.0	83.0	19.90	19.48
	Container ships	100	28.6	15.6	26.7	29.1	11.27	11.01
	All others	100	5.4	6.8	9.7	78.1	18.93	18.51
Developing countries (excluding open-registry countries)	All ships	100	18.8	15.5	15.2	50.5	14.40	14.75
	Tankers	100	14.7	25.8	10.1	49.4	14.18	14.62
	Bulk carriers	100	27.2	13.4	23.3	36.1	12.22	13.00
	General cargo	100	5.5	5.0	10.2	79.3	19.13	19.00
	Container ships	100	36.2	16.4	9.1	38.3	11.39	10.81
	All others	100	10.4	11.0	13.4	65.2	16.93	16.80

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.

Container ships continued to represent the youngest fleet in 1998, with a decrease in average age from 11.85 years in 1997 to 10.99 years in 1998 as a high level of newbuilding activities continued to push down the average age of container tonnage. This is also reflected in the share of tonnage between 0 and 4 years of age, which increased to 33.9 per cent in 1998 as compared to 29.3 per cent in 1997.

33. By country grouping, the major open-registry countries continued to have the lowest average age of all ships (14.30 years in 1998 versus 14.48 years in 1997), as a growing tendency to place newbuildings under open-registry flags could be observed. Developed market-economy countries also benefited from a slight reduction in average age (14.41 years in 1998 as compared with 14.68 years in 1997) as did the fleets of developing countries (14.40 years in 1998 versus 14.75 years in 1997). The average age of tonnage registered in the socialist countries of Asia continued to increase, to an average age of 17.58 years in 1998 as compared with 17.20 years in 1997. The countries of Central and Eastern Europe continue to have the oldest fleet, with vessels built over 15 years ago representing 67.7 per cent of their total fleet.

Delivery of newbuildings

34. Newbuilding activities continued at a high level with deliveries amounting to 1,043 vessels of 35 million dwt in 1998 (see table 9). While deliveries were down from the 1996 and 1997 levels, they still represent the third largest shipyard output since 1980. This high level of output was sustained primarily by tanker deliveries of 12.6 million dwt, which was up 70.1 per cent from the 1997 level. At the same time, deliveries of dry bulk carrier tonnage decreased by 60 per cent to 11.4 million dwt. Deliveries of Aother vessels@, including general cargo and container ships, increased by about 7 per cent.

Demolition of ships

35. Trends in tonnage, types and average age of broken-up vessels are reflected in tables 10, 11 and 12. In 1998, total tonnage sold for demolition increased significantly by 10.4 million dwt or 70.3 per cent from the tonnage of the previous year to 25.2 million dwt, which accounted for 3.2 per cent of the world total deadweight tonnage. Dry bulk carriers accounted for half of the demolition sales volume in 1998, increasing continuously to 12.8 million dwt in 1998 from 8.2 million dwt in the previous year. Tanker tonnage sold for scrapping stood at 7.4 million dwt, about double the tonnage broken up in 1997. It has to be noted though that despite the unfavourable age distribution of the world tanker fleet, its share in tonnage sold for breaking remained relatively low at 29 per cent. The lack of incentive for tanker owners to scrap obsolete tonnage is also reflected in the fact that the average age of ships broken up has increased to over 28 years as compared to around 25 years at the beginning of the decade. Other ship types have a shortened trading life with dry bulk carriers being sold to breakers on average at 25.2 years, container ships at 25.5 years and general cargo ships at 26.7 years.

Table 9

Deliveries of newbuildings, 1980, 1985, 1990 and 1992-1998

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
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	68	7 392	3	330	298	18 794	696	10 330	1 065	36 846
1998 c	118	12 578	-	-	215	11 443	710	11 025	1 043	35 046

Source: Fearnleys (Oslo), *Review 1998*. [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 1991-1998

Broken-up tonnage	1980	1991	1992	1993	1994	1995	1996	1997	1998
Tonnage sold for breaking (million dwt)	10.0	4.7	19.0	16.9	20.8	15.3	18.1	14.8	25.2
Share of broken-up tonnage in the total world fleet (percentage)	1.5	0.7	2.7	2.4	2.9	2.1	2.4	1.9	3.2

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, 1993-1998

(thousands of dwt and percentage shares)

Types of vessel	Thousand dwt						Percentages					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Tankers	10 665	13 102	10 877	6 550	3 578	7 426	63.3	63.1	71.0	36.1	24.2	29.4
Combined carriers	2 040	2 559	1 228	1 861	423	1 435	12.1	12.3	8.0	10.3	2.9	5.7
Dry bulk carriers	2 645	3 829	2 135	7 632	8 161	12 847	15.7	18.4	13.9	42.1	55.1	50.9
Others	1 502	1 282	1 081	2 092	2 646	3 533	8.9	6.2	7.1	11.5	17.9	14.0
Total	16 852	20 772	15 321	18 135	14 808	25 241	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 1989 to 1998 [a] *(years)*

Year	Tankers	Dry bulk carriers	Container ships	General cargo ships
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
1998	28.2	25.2	25.5	26.7

Source: Institute of Shipping Economics and Logistics (Bremen), *Shipping Statistics*, *1999*, Nos. 1? 2.

[a] Ships of 300 grt and over.

B. OWNERSHIP OF THE WORLD FLEET

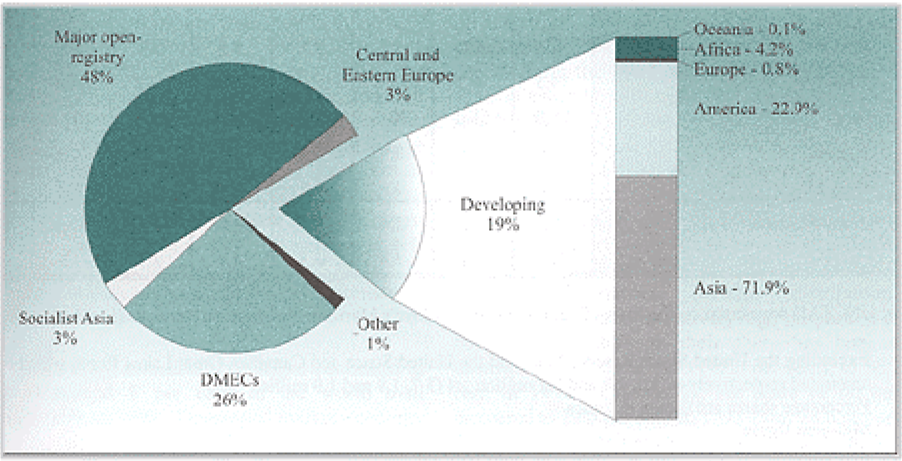
Distribution of world tonnage by country groups

36. In 1998, the world total fleet expanded by 1.7 per cent to 788.7 million dwt (see graph 5 and table 13). Tonnage ownership of developed market-economy countries increased very marginally by 0.1 million dwt to 202.6 million dwt, while major open-registry countries expanded their fleets by 15.8 million dwt or 4.4 per cent to a record high of 376.8 million dwt. Analysis of the open-registry fleets indicates that the share of tonnage owned beneficially by developing countries has increased continuously since 1980 - when their participation in open-registered tonnage was negligible - attaining nearly one third in 1998. On the other hand, developed market-economy countries' overall share has been on a downward trend, representing almost two thirds of the total tonnage registered in open-registry countries in 1998.

37. Tonnage registered in developing countries in 1998 increased marginally by 0.9 million dwt, or 0.6 per cent, to 150.8 million dwt. This increase was basically realized in Asian developing countries whose fleets increased by 0.9 million dwt or 0.8 per cent to 108.5 million dwt. They thus accounted for 72 per cent of the developing countries' total fleet. The fleet of developing countries in America remained almost unchanged at 34.5 million dwt, while the ownership position of African developing countries further deteriorated to a very low level of 6.3 million dwt. The shares of the socialist countries of Asia and the countries of Central and Eastern Europe of the world total deadweight continued to decline in 1998 to 3.3 per cent and 2.6 per cent, respectively.

Graph 5

World tonnage by country groups, 1998
(percentage distribution of dwt)



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

Table 13

Distribution of world tonnage (grt and dwt) by groups of countries of registration, 1980, 1990, 1997 and 1998 [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]	1990	1997	1998	1980 [c]	1990	1997	1998
World total	414.5	417.6	523.7	534.6	682.8	658.4	775.8	788.7
	100.0	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Developed market-economy countries	214.3	141.5	143.7	145.0	350.1	219.0	202.5	202.6
	51.7	*33.9*	*27.4*	*27.1*	*51.3*	*33.3*	*26.1*	*25.7*
Major open-registry countries	114.2	130.2	230.7	242.5	212.6	224.6	361.0	376.8
	27.6	*31.2*	*44.1*	*45.4*	*31.1*	*34.1*	*46.5*	*47.8*
Countries of Central and Eastern Europe (including the former USSR)	32.0	37.4	22.8	19.9	37.8	44.3	24.3	20.7
	7.7	*9.0*	*4.4*	*3.7*	*5.5*	*6.7*	*3.1*	*2.6*
Socialist countries of Asia	7.3	14.8	17.9	17.9	10.9	22.1	26.0	26.0
	1.8	*3.5*	*3.4*	*3.3*	*1.6*	*3.4*	*3.4*	*3.3*
Developing countries	44.7	87.9	100.2	101.2	68.4	139.7	149.9	150.8
	10.8	*21.0*	*19.1*	*18.9*	*10.0*	*21.2*	*19.3*	*19.1*
***of which* in:**								
Africa	4.9	5.3	5.1	5.1	7.2	7.3	6.5	6.3
America	14.5	16.7	23.8	24.4	21.8	25.5	34.4	34.5
Asia	25.0	55.2	70.2	70.6	39.1	89.5	107.6	108.5
Europe	0.1	8.3	0.9	0.9	0.2	13.8	1.2	1.3
Oceania	0.1	2.4	0.2	0.2	0.1	3.6	0.2	0.2
Other, unallocated	2.0	5.8	8.4	8.1	3.0	8.7	12.1	11.8
	0.5	*1.4*	*1.6*	*1.5*	*0.4*	*1.3*	*1.6*	*1.5*

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 1998 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.

Distribution of world tonnage by types of vessel

38. Table 14 provides more detailed data on fleet distribution by types of vessel and country groups for the years 1980, 1997 and 1998. In the oil tanker sector, the share of developed market-economy countries continued to decrease marginally to 29.8 per cent in 1998. Conversely, the open-registry countries' share increased to 51.2 per cent, reflecting the continuous trend, particularly for owners in developed market-economy countries to register tanker tonnage under open registries. Developing countries increased their share from 15.6 per cent to 15.9 per cent in 1998, reflecting primarily the increasing share of Asian developing countries, which rose in 1998 to 12.1 per cent of world tanker tonnage.

39. In the dry bulk carrier sector, the tonnage share of developed market-economy countries in the world total continued to decrease to 18.1 per cent in 1998. As in the case of tanker tonnage, major open-registry countries continuously expanded their share, reaching 53.5 per cent in 1998. The developing countries' share declined to 20.1 per cent as compared with 20.6 per cent in 1997. The share of developing countries in Asia decreased similarly to 15.6 per cent in 1998. Neverthless, dry bulk carriers represent the backbone of developing countries' fleets with a share of nearly 37 per cent of total tonnage owned and registered in this group.

40. In the sector of general cargo ships, the developed market-economy countries consolidated their share of ownership of such ships at around 20 per cent, while major open-registry countries continued to increase their share in 1998 reaching 37.0 per cent as compared with 36.1 per cent in 1997. Developing countries slightly decreased their share to 26.7 per cent in 1998 from 26.9 per cent in 1997. Nevertheless, it is in this type of vessel that the share of developing countries in the world fleet is continuously the highest.

41. The overall container ship sector continued to expand to around 8 per cent of the world total deadweight tons in 1998. Developed market-economy countries marginally increased their share of container ship deadweight tonnage to 37.1 per cent in 1998. The major open-registry countries' share continued to expand, reaching 38.6 per cent in 1998, most of which represented ships beneficially owned by owners in developed market-economy countries. The share of developed market-economy countries remained unchanged at 38.4 per cent. In absolute terms, the TEU capacity of developing countries increased from 629,000 TEUs to 691,000 TEUs in 1998, while their share of the world total TEU capacity decreased slightly to 17.0 per cent from 17.3 per cent in 1997. The absolute increase in capacity in developing countries was attributed to increases in the developing countries and regions in America (24 ships of 38,500 TEUs), which represented 62 per cent of the increase in the TEU capacity registered in developing countries, followed by the developing countries in Asia, which increased their capacity by 12 ships of 20,400 TEUs as compared with the previous year. The group of developing countries in Africa exceeded the level of 10,000 TEUs in 1998, representing 11,000 TEUs; however, their share in terms of TEU capacity remained at only 0.3 per cent of the world total TEUs.

The structure of the fleet of main country groups

42. Table 15 provides data on the structure of the merchant fleet of the main country groups. Developed market-economy countries' tonnage in combined oil tankers and dry bulk carriers reached 65.8 per cent of the group's total fleet, which is, however, a marginal decrease from 67.6 per cent in 1997. Their general cargo ships amounted to 10.0 per cent, which is slightly more than the 9.7 per cent in the previous year, while container ships accounted for 11.2 per cent as compared with 10.2 per cent in 1997. Major open-registry countries have a greater proportion of their fleets in the oil tanker and dry bulk carrier sectors, accounting for a combined 77.2 per cent in 1998, which continued to decline from the 1997 share of 78.2 per cent. Their share of general cargo ships (10.2 per cent) was slightly less than the 10.4 per cent in 1997. However, their share of container ships in 1998, representing 6.3 per cent, was higher than the 5.7 per cent in 1997. In absolute terms, the difference of container ship deadweight tonnage between developed market-economy countries and major open-registry countries is quite insignificant as compared with that of other main types of vessel. 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 since 1991 (42.0 per cent), to 36.7 per cent in 1998. Conversely, the share of oil tankers increased to 29.6 per cent in 1998 from 28.6 per cent in 1991, while container tonnage increased from 3.7 per cent in 1991 to 7.0 per cent in 1998. In the countries of Central and Eastern Europe, general cargo ships are still dominant, accounting for 36.1 per cent in 1998 (as compared with 35.3 per cent in 1991), while container ships have remained at a low level of less than 2 per cent since 1991. The socialist countries of Asia continued to have a predominant share of both dry bulk carriers (45.0 per cent in 1998) and general cargo ships (around 30 per cent since 1996).

Table 14

Percentage shares of world tonnage by types of vessel and country groups, in 1980 (as at 1 July), 1997 and 1998 (as at 31 December) [a]

Country group	Year	Total dwt		Oil tankers	Bulk carriers [b]	General cargo ships	Containe r 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
	1997	775.9	100.0	35.1	36.2	13.4	8.1	7.2
	1998	788.7	100.0	35.6	34.9	13.1	7.8	8.6
				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
	1997	202.5	26.1	30.8	18.8	19.0	37.0	40.2
	1998	202.6	25.7	29.8	18.1	19.6	37.1	38.7
Major open-registry countries	1980	212.5	31.1	36.2	31.7	20.8	13.5	17.0
	1997	361.0	46.5	50.2	51.9	36.1	36.9	32.4
	1998	376.8	47.8	51.2	53.5	37.0	38.6	35.1
Countries of Central and Eastern Europe	1980	37.8	5.5	2.8	4.2	12.3	2.9	19.2
	1997	24.3	3.1	1.4	2.8	8.4	0.7	5.6
	1998	20.7	2.6	1.2	2.2	7.3	0.7	4.8
Socialist countries of Asia	1980	10.9	1.6	0.6	1.6	4.7	0.1	1.3
	1997	26.0	3.4	1.2	4.0	8.0	3.1	2.2
	1998	25.9	3.3	1.2	4.2	7.6	2.7	2.1
Developing countries	1980	68.4	10.0	7.7	9.2	17.6	7.6	12.0
	1997	149.9	19.3	15.6	20.6	26.9	17.7	18.8
	1998	150.8	19.1	15.9	20.1	26.7	17.3	18.5
***of which* in:**								
Africa	1980	7.1	1.0	1.1	0.1	2.3	..	2.1
	1997	6.5	0.8	0.8	0.5	1.6	0.3	1.9
	1998	6.3	0.8	0.6	0.5	1.6	0.3	1.8
America	1980	21.8	3.2	2.3	3.3	5.6	0.1	3.7
	1997	34.4	4.4	3.2	3.9	9.4	3.2	5.0
	1998	34.5	4.4	3.1	3.7	9.5	3.8	5.3
Asia	1980	39.1	5.7	4.3	5.7	9.8	2.7	5.7
	1997	107.6	13.9	11.6	15.9	15.4	14.1	11.8
	1998	108.5	13.8	12.1	15.6	15.3	13.0	11.2
Europe	1980	0.2	-	-	-	0.1	-	-
	1997	1.2	0.2	-	0.3	0.3	0.1	-
	1998	1.3	0.2	-	0.3	0.2	0.2	0.1
Oceania	1980	0.2	-	-	-	0.1	-	-
	1997	0.2	-	-	-	0.1	-	0.1
	1998	0.2	-	-	-	0.1	-	0.1
Other, unallocated	1980	3.0	0.4	0.2	0.6	0.9	1.6	0.1
	1997	12.1	1.6	0.8	1.9	1.5	4.7	0.8
	1998	11.8	1.5	0.7	1.9	1.8	3.7	0.8

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.

Table 15

Structure of the merchant fleets of the main country groups, as at 31 December 1998 [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	788.7	100.0	202.7	100.0	376.9	100.0	150.8	100.0	20.8	100.0	26.0	100.0
Oil tankers	280.6	35.6	83.5	41.2	143.7	38.1	44.6	29.6	3.5	16.8	3.4	13.1
Bulk carriers	275.5	34.9	49.9	24.6	147.4	39.1	55.4	36.7	6.1	29.3	11.7	45.0
General cargo	103.4	13.1	20.3	10.0	38.3	10.2	27.6	18.3	7.5	36.1	7.9	30.4
Container ships	61.2	7.8	22.7	11.2	23.6	6.3	10.6	7.0	0.4	1.9	1.6	6.2
Other ships	68.0	8.6	26.3	13.0	23.9	6.3	12.6	8.4	3.3	15.9	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.

C. REGISTRY OF VESSELS

The 35 most important maritime countries and territories

43. The ranking in terms of deadweight for the 35 most important maritime countries and territories is given in table 16. The table lists the number and deadweight tonnage of merchant vessels registered under the national flag and a foreign flag when the controlling interest of the vessel is located in another country or territory. In 1998, these 35 countries and territories controlled about 94 per cent of the world merchant fleet (93.6 per cent in 1997), the five largest controlling 50 per cent (49.9 per cent in 1997) and the top 10 controlling 67.3 per cent (67.4 per cent in 1997).

44. Among these countries and territories, the trend to register under a foreign flag continued in 1998. The total tonnage registered under foreign flags in 1998 reached 421.2 million dwt, representing 61.8 per cent of the 35 countries= total fleet, compared with 58.8 per cent in 1997 (and 56.3 per cent in 1996). Thus, nearly two thirds of the tonnage beneficially owned by the 35 countries and territories was not registered in the countries of domicile of the parent enterprises. Registry under foreign flags is a long-standing practice, mainly by owners from developed market-economy countries. In this context, it is notable that the 12 developing countries and territories (including Hong Kong (China), but excluding Taiwan Province of China) listed in the table had more than half (52.5 per cent of their tonnage registered under foreign flags. While this is a substantial share, there are considerable fluctuations among countries. In some developing countries and territories, foreign registry accounted for more than 80 per cent of their total tonnage (90.9 per cent for Saudi Arabia and 82.3 per cent for Hong Kong (China)), while others hardly made any use of foreign flag facilities (6.6 per cent for the Philippines, and 1.4 per cent for the Islamic Republic of Iran). For developed market-economy countries, the share of foreign-registered tonnage was considerably higher than in developing countries, reaching 67.2 per cent (up from 64.5 per cent in 1997).

Major open registries

45. The share of the world merchant fleet in foreign registers continued to expand. The tonnage distribution of the seven major open-registry countries by principal types of vessel can be seen in table 17. The total tonnage registered in 1998 increased by 7.7 per cent to 354.1 million dwt from 328.8 million dwt in the previous year. Panama continues to head the list, expanding its fleet in 1998 by more than 16.0 million dwt, and is followed by Liberia, whose fleet marginally increased by 0.6 per cent to 91.5 million dwt. The Bahamas and Malta expanded their fleets by 3.7 and 4.0 million dwt or 10.2 and 11.9 per cent, respectively, to 40.0 and 37.7 million dwt. Cyprus= fleet turned upward by 0.7 million dwt to 33.5 million dwt in 1998. The analysis by type of vessel shows that oil tankers represented 38.6 per cent of the total deadweight in 1998 as compared with 39.8 per cent in 1997, followed by dry bulk carriers, which maintained their share at 39.2 per cent in 1998 (39.3 per cent in 1997), and general cargo ships, with 9.6 per cent in 1998 (similar to 9.7 per cent in 1997). The share of container ships continued to increase, reaching 6.3 per cent in 1998 from a level of 5.9 per cent in 1997, a net increase of over 3.0 million dwt, reflecting the trend to flag out in this sector of the global maritime transport industry.

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, the share of tonnage owned by nationals is minimal or zero. On the other hand, for the two international registries, national ownership was 85 and 100 per cent. These proportions had not changed relative to those of the previous year.

47. For the seven major open-registry fleets, the true nationality of the vessels is analysed in table 19. In 1998, total tonnage of the 22 countries or territories accounted for 92.1 per cent of the total seven major open-registry fleets, increasing slightly from the level in 1997. Ownership is concentrated in 10 countries or territories, which control 78.2 per cent of the deadweight of vessels, as compared with 79.2 per cent in the previous year. Further, the top five countries or territories control 59.9 per cent (61.2 per cent in 1997). Greece was ranked first in 1998 for the fifth consecutive year with the largest share (22.8 per cent) of the total seven major open-registry fleets. Also Greece had the largest total foreign-flag ownership position, representing 87.06 million dwt (19.7 per cent of the total world foreign-flag tonnage), ahead of Japan with 75.53 million dwt (17.1 per cent of the total tonnage).

Table 16

The 35 most important maritime countries and territories, as at 31 December 1998 [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	800	2 353	3 153	42 779 308	87 055 822	129 835 130	67.05	17.90
Japan	854	2 107	2 961	19 235 050	75 553 460	94 788 510	79.71	13.07
Norway	893	732	1 625	29 159 263	24 955 190	54 114 453	46.12	7.46
United States	472	818	1 290	11 264 259	34 359 434	45 623 693	75.31	6.29
China	1 592	472	2 064	21 978 708	16 367 886	38 346 594	42.68	5.29
Hong Kong (China)	106	467	573	5 775 128	26 876 742	32 651 870	82.31	4.50
Germany	599	1 193	1 792	9 368 652	17 631 440	27 000 092	65.30	3.72
Republic of Korea	436	428	864	7 103 861	18 062 188	25 166 049	71.77	3.47
Sweden	159	244	403	1 329 804	19 459 860	20 789 664	93.60	2.87
United Kingdom	388	457	845	6 092 823	13 800 234	19 893 057	69.37	2.74
Singapore	454	286	740	11 229 246	7 822 562	19 051 808	41.06	2.63
Taiwan Province of China	167	313	480	7 617 309	10 370 568	17 987 877	57.65	2.48
Russian Federation	2 198	314	2 512	8 974 812	6 968 540	15 943 352	43.71	2.20
Denmark	409	268	677	6 630 008	7 110 456	13 740 464	51.75	1.89
India	363	66	429	10 675 879	1 452 937	12 128 816	11.98	1.67
Italy	451	134	585	7 350 167	4 627 974	11 978 141	38.64	1.65
Saudi Arabia	59	67	126	1 027 055	10 200 313	11 227 368	90.85	1.55
Turkey	434	56	490	8 595 095	706 575	9 301 670	7.60	1.28
Brazil	171	24	195	6 064 433	2 545 180	8 609 613	29.56	1.19
Belgium	23	136	159	97 812	7 597 029	7 694 841	98.73	1.06
Switzerland	14	213	227	695 502	5 554 514	6 250 016	88.87	0.86
Malaysia	239	51	290	5 158 178	991 586	6 149 764	16.12	0.85
Iran, Islamic Rep. of	148	2	150	5 670 242	82 087	5 752 329	1.43	0.79
Philippines	356	18	374	5 080 755	360 456	5 441 211	6.62	0.75
Netherlands	525	177	702	3 068 962	2 344 337	5 413 299	43.31	0.75
France	175	103	278	2 361 751	2 300 179	4 661 930	49.34	0.64
Indonesia	491	99	590	3 241 250	1 106 774	4 348 024	25.45	0.60
Romania	171	28	199	2 454 011	1 453 069	3 907 080	37.19	0.54
Kuwait	32	5	37	3 390 652	331 128	3 721 780	8.90	0.51
Spain	116	183	299	334 338	3 282 245	3 616 583	90.76	0.50
Finland	117	48	165	1 153 480	2 260 824	3 414 304	66.22	0.47
Ukraine	420	93	513	1 614 087	1 786 686	3 400 773	52.54	0.47
Australia	59	30	89	2 306 897	1 083 858	3 390 755	31.97	0.47
Canada	159	67	226	753 859	2 462 762	3 216 621	76.56	0.44
United Arab Emirates	35	109	144	744 542	2 233 927	2 978 469	75.00	0.41
Total (35 countries)	14 085	12 161	26 246	260 377 178	421 158 822	681 536 000	61.80	93.96
Percentage	53.7	46.3	100.0	38.2	61.8	100.0		
World total	16 452	13 241	29 693	284 309 431	441 072 349	725 381 780	60.81	100.00
Percentage	55.4	44.6	100.0	39.2	60.8	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).

Table 17

Tonnage distribution of major open-registry fleets, [a] **as at 31 December 1998**

Country	Oil tankers		Dry bulk carriers		General cargo		Container ships		Others		1998 total		1997 total	
	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousan d dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt
Panama	417	40 603	1 231	67 955	1 361	12 197	456	13 113	741	8 311	4 206	142 179	3 867	126 161
Liberia	388	45 866	417	27 959	258	4 292	172	4 778	355	8 571	1 590	91 466	1 493	90 916
Cyprus	134	6 457	431	17 880	587	5 659	105	2 354	90	1 106	1 347	33 456	1 350	32 750
Bahamas	157	21 803	146	8 159	480	6 607	44	955	249	2 458	1 076	39 982	983	36 267
Malta	286	17 796	343	13 853	455	4 494	38	643	72	931	1 194	37 717	1 091	33 714
Bermuda	26	4 270	18	1 962	22	242	18	511	28	586	112	7 571	97	7 384
Vanuatu	1	5	28	1 095	42	380	0	0	51	275	122	1 755	119	1 603
Total	1 409	136 800	2 614	138 863	3 205	33 871	833	22 354	1 586	22 238	9 647	354 126	9 000	202 760

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 31 December 1998 [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	142 179	0	0.0
Liberia	91 467	0	0.0
Cyprus	34 092	636	1.9
Bahamas	40 276	294	0.7
Norwegian International Ship Registry	30 430	25 975	85.4
Malta	37 726	10	0.0
Danish International Ship Registry	6 537	6 538	100.0
Bermuda	7 570	0	0.0
Vanuatu	1 756	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 31 December 1998

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	11 906	171	13.0	16 658	517	11.7	24 135	732	72.1	7 092	176	17.7	-	-	-	20 826	515	55.2	107	2	6.1	80 724	2 113	22.8	87 056	2 353
Japan	6 140	154	6.7	56 849	1 622	40.0	306	25	0.9	904	30	2.3	-	-	-	-	-	-	547	25	31.2	64 746	1 856	18.3	75 553	2 107
United States	11 073	197	12.1	2 655	131	1.9	247	12	0.7	6 483	134	16.2	836	17	11.0	654	14	1.7	269	40	15.3	22 217	545	6.3	34 359	818
Hong Kong (China)	5 248	82	5.7	16 198	250	11.4	122	3	0.4	473	9	1.2	-	-	-	194	11	0.5	178	4	10.1	22 413	359	6.3	26 877	467
Norway	7 510	170	8.2	1 460	82	1.0	223	18	0.7	7 871	202	19.7	509	7	6.7	4 333	79	11.5	-	-	-	21 906	558	6.2	24 955	732
United Kingdom	2 724	51	3.0	600	59	0.4	230	15	0.7	1 934	113	4.8	4 113	43	54.3	468	6	1.2	-	-	-	10 069	287	2.8	13 800	457
China	4 898	86	5.4	7 785	227	5.5	271	19	0.8	-	-	-	-	-	-	494	15	1.3	-	-	-	13 448	347	3.8	16 368	472
Republic of Korea	1 513	16	1.7	15 970	336	11.2	36	2	0.1	-	-	-	-	-	-	42	5	0.1	-	-	-	17 561	359	5.0	18 062	428
Sweden	6 257	39	6.8	977	8	0.7	63	6	0.2	3 186	36	8.0	958	7	12.7	-	-	-	-	-	-	11 441	96	3.2	19 460	244
Germany	7 451	265	8.1	554	25	0.4	3 443	218	10.3	85	13	0.2	77	2	1.0	669	33	1.8	-	-	-	12 279	556	3.5	17 631	32
																										1 193
Saudi Arabia	7 536	25	8.2	165	14	0.1	-	-	-	2 012	7	5.0	25	2	0.3	-	-	-	-	-	-	9 738	48	2.8	10 200	67
Taiwan Province of China	580	11	0.6	7 990	258	5.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8 570	269	2.4	10 371	313
Singapore	2 815	32	3.1	1 791	96	1.3	30	1	0.1	616	10	1.5	-	-	-	62	3	0.2	-	-	-	5 314	142	1.5	7 823	286
Denmark	404	12	0.4	254	16	0.2	-	-	-	511	50	1.3	34	2	0.4	-	-	-	70	1	4.0	1 273	81	0.4	7 110	268
Russian Federation	3 918	58	4.3	81	7	0.1	1 548	90	4.6	238	17	0.6	-	-	-	974	89	2.6	-	-	-	6 759	261	1.9	6 969	314
Switzerland	748	13	0.8	2 253	87	1.6	78	6	0.2	438	6	1.1	-	-	-	1 361	65	3.6	-	-	-	4 878	177	1.4	5 555	213
Italy	547	6	0.6	255	10	0.2	81	5	0.2	947	24	2.4	-	-	-	1 617	43	4.3	-	-	-	3 447	88	1.0	4 628	134
Belgium	1 813	15	2.0	517	4	0.4	113	3	0.3	586	21	1.5	-	-	-	-	-	-	-	-	-	3 029	43	0.9	7 597	136
France	-	-	-	700	18	0.5	-	-	-	399	22	1.0	-	-	-	-	-	-	-	-	-	1 099	40	0.3	2 300	103
Spain	95	1	0.1	308	45	0.2	139	8	0.4	825	8	2.1	-	-	-	-	-	-	-	-	-	1 367	62	0.4	3 282	183
Croatia	623	13	0.7	-	-	-	-	-	-	77	3	0.2	-	-	-	597	26	1.6	-	-	-	1 297	42	0.4	1 635	67
Finland	-	-	-	-	-	-	-	-	-	2 006	31	5.0	-	-	-	87	1	0.2	-	-	-	2 093	32	0.6	2 261	48
Subtotal	83 799	1 417	91.5	134 020	3 812	94.4	31 065	1 163	92.7	36 683	912	91.8	6 552	80	86.4	32 378	905	85.8	1 171	72	66.7	325 668	8 361	92.1	403 852	11 403
Others	7 668	173	8.5	8 159	394	5.6	2 391	184	7.3	3 299	164	8.2	1 018	32	13.6	5 339	289	14.2	585	50	33.3	28 459	1 286	7.9	37 220	1 838
Total	91 467	1 590	100.0	142 179	4 206	100.0	33 456	1 347	100.0	39 982	1 076	100.0	7 570	112	100.0	37 717	1 194	100.0	1 756	122	100.0	354 127	9 647	100.0	441 072	13 241

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

D. SHIPBUILDING AND SECOND-HAND MARKET

Newbuilding orders

48. In 1998, newbuilding contracts for six major ship types, aggregating 42.5 million dwt, were placed, falling, however, by 25.8 per cent, as compared with those contracts in 1997, which were a record high for a single year (57.2 million dwt) (see table 20). In the tanker sector, the stagnant trade of crude oil in 1998 failed to maintain the favourable freight level in overall tanker markets in the previous year. Owners who had experienced less attractive charter rates in 1998 also showed some reluctance to place new orders for tanker tonnage. Nevertheless, orders for 280 vessels totalling 21.9 million dwt were placed in 1998, thus maintaining a relatively high level of tonnage demand compared with earlier years, but way below the activities registered in 1997. Newbuilding orders for dry bulk carriers decreased considerably in 1998, as substantial deliveries of dry bulk tonnage in 1997 exercised a depressing effect on freight rates during 1998. Additionally, 1997 order volumes had remained relatively high at 18.9 million dwt, despite the downturn of the charter market. This increasing supply of ships, coupled with rather uncertain market prospects, did not induce owners to maintain ordering for newbuildings at the same level as in 1994B1995 and 1997. Thus, the volume of new dry bulk carriers ordered in 1998 decreased by as much as 34.2 per cent to 11.8 million dwt, as compared with 18.0 million dwt in 1997.

49. Container ships have been an important segment of newbuilding orders during the 1990s, filling the order books of yards, particularly in the Far East and Europe. Freight rates on shipments to Asia collapsed and thus time-charter rates were under substantial pressure. In spite of the rather pessimistic market developments, newbuilding orders for container ships rose sharply (65.1 per cent) in 1998, from 3.6 million dwt in the previous year to 6.0 million dwt. A few of the liner companies, partly in conjunction with German financial institutes, reportedly placed orders for large sizes of 4,000 TEUs and above. For other types of vessel, such as general cargo ships and passenger ferries, the level of newbuilding activity remained comparatively stable. A total for these vessels of 2.7 million dwt was ordered in 1998, in comparison with 2.9 million dwt in 1997.[7]

Tonnage on order

50. 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 1998 reached 82.2 million dwt, a slight increase of 1.2 per cent over the previous year. Tonnage on order by developed market-economy countries amounted to 25.5 million dwt, representing 31.0 per cent of the world total tonnage on order, as compared with 22.0 million dwt or 27.1 per cent in 1997. Major open-registry countries accounted for 45.4 million dwt or 55.2 per cent of tonnage on order, as compared with 43.6 million dwt or 53.7 per cent in 1997.

51. Developing countries: tonnage stood at 8.0 million dwt or 9.8 per cent of the world total tonnage on order at the end of 1998, as compared with 9.5 million dwt or 11.7 per cent in 1997. Tonnage on order by Asian developing countries, which accounted for 83.4 per cent of developing countries: total tonnage ordered in 1998, decreased by 1.9 million dwt from 8.6 million dwt in 1997. The share of the countries of Central and Eastern Europe continued to decrease slightly in 1998, falling to 1.1 million dwt or 1.3 per cent of the world total on order, while the share of the socialist countries of Asia declined in 1998, ending the year with 1.4 million dwt or 1.7 per cent of the world total on order as compared with 1.5 million dwt or 1.8 per cent in the previous year. There has been virtually no growth in the African fleet with the level of newbuilding orders falling to only 0.01 per cent of the 1998 world total on order. Their share continues the downward trend observed in previous years, from 0.4 per cent in 1996 to 0.1 per cent in 1997.

Table 20

Newbuilding contracts placed for the main types of ship [a] during 1994? 1998 and 1999

(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
1994	256	13 833	339	19 896	2	220	227	1 493	242	6 497	118	159	1 184	42 098
1995	243	9 143	381	22 418	4	440	345	2 449	345	8 562	144	224	1 462	43 236
1996	274	13 875	271	14 250	-	-	257	2 107	292	6 978	144	155	1 238	37 365
1997	428	32 516	282	17 983	2	220	299	2 701	166	3 618	96	149	1 273	57 187
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
March 1998	24	1 636	10	571	-	-	14	174	12	442	9	3	69	34 2 826
April 1998	33	2 512	25	1 512	-	-	18	142	3	25	12	35	91	4 226
May 1998	21	1 830	6	126	-	-	32	358	36	1 393	8	13	103	3 720
June 1998	19	1 139	14	977	-	-	32	246	26	890	6	1	97	3 253
July 1998	29	2 353	12	1 042	-	-	65	436	30	1 214	13	54	149	5 099
August 1998	16	1 651	13	851	-	-	48	221	5	287	11	13	93	3 023
September 1998	26	1 397	10	1 174	-	-	42	280	8	332	5	11	91	3 194
October 1998	29	3 415	16	857	-	-	15	120	15	339	7	11	82	4 742
November 1998	24	2 578	6	791	-	-	8	32	10	306	8	13	56	3 720
December 1998	20	578	3	22	-	-	21	151	13	345	14	15	71	1 111
Total 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

Source:*Shipping Statistics and Market Review*, *1998*, 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 1998 *(thousands of dwt)*

Countries of registry	**All ships**	**Oil tanker s**	**Dry bulk carriers**	**General cargo**	**Containe r ships**	**Other ships**
World total	82 180	41 231	19 801	5 687	7 473	7 987
Developed market-economy countries	25 515	12 666	3 703	2 589	3 516	3 041
Major open-registry countries	45 379	23 151	13 340	1 645	3 108	4 135
Countries of Central and Eastern Europe	1 053	232	350	247	-	224
Socialist countries of Asia	1 394	127	626	296	291	54
Developing countries, total	8 013	4 858	1 687	791	276	401
***of which* in:**						
Africa	10	3	-	1	-	6
America	1 313	598	340	254	73	48
Asia	6 686	4 257	1 347	532	203	347
Europe [a]	-	-	-	-	-	-
Oceania	4	-	-	4	-	-
Unallocated	827	198	95	120	283	131

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

[a] Not reported.

52. The developing countries' share of tonnage on order increased in 1998 for general cargo ships to 13.9 per cent (11.6 per cent in 1997). On the other hand, their share in the 1998 order book for oil tankers, dry bulk carriers, container ships and other types of vessel decreased to 11.8 per cent, 8.5 per cent, 3.7 per cent and 5.0 per cent, respectively, from 11.9 per cent, 9.7 per cent, 17.3 per cent and 9.9 per cent, respectively, in 1997. The share of Asian developing countries in orders for oil tankers, dry bulk carriers, container ships and other types of vessel in 1998 declined to 10.3 per cent, 6.8 per cent, 2.7 per cent and 4.3 per cent, respectively, as compared with 11.3 per cent, 8.7 per cent, 15.4 per cent and 8.0 per cent in 1997, while their share in orders for general cargo ships continued to rise slightly to 9.4 per cent, in comparison with 9.3 per cent in 1997.

Price of newbuildings and second-hand tonnage

53. Newbuilding prices for the main types of vessel are indicated in table 22. Overall price levels for newbuildings in 1998 ended the year significantly down from those of the previous year, except in the case of 75,000 m^3 LPG carriers. The downward pressure on prices was due to significantly reduced ordering activities, which led to increasing competitive pressures particulary on Asian yards. The decline in prices continued well into 1999. Only around mid-year did owners start to place orders again in anticipation of increasing prices, thus prompting the inevitable albeit marginal price increases. Analysis by vessel type shows that oil tanker newbuilding prices for all sizes declined by 9 to 12 per cent in 1998 from the 1997 level. Newbuilding prices for overall dry bulk carriers also declined substantially in 1998, as the volume contracted in 1998 fell drastically by 34.2 per cent from the previous year, standing at 27.9 per cent of the total contract volume in 1998. The price for 2,500 TEU full container ships declined by 15.7 per cent in 1998, whilst overall container ship newbuilding contracts in 1998 rose dramatically by 65.1 per cent to 6.0 million dwt, accounting for 14.1 per cent of the total newbuilding contracts in 1998 (6.3 per cent in 1997). This increase, however, was not sufficient to halt the downward trend of shipbuilding prices.

Table 22

Representative newbuilding prices in 1980, 1985, 1990, 1996-1998 and 1999
(millions of dollars)

Type and size of vessel	1980	1985	1990	1996	1997	1998	Percentage change 1997/1998	1999 January	February	March	April	May
30 000 dwt bulk carrier	17	11	24	19	20	19	-5.0	14	14	14	14	36 14
32 000 dwt tanker	19	18	29	32	32	29	-9.4	26	26	26	26	26
70 000 dwt bulk carrier	24	14	32	28	28	23	-17.9	18	18	18	18	18
80 000 dwt tanker	28	22	42	43	42	37	-11.9	33	32	32	32	32
120 000 dwt bulk carrier	32	27	45	41	40	37	-7.5	33	32	32	32	33
250 000 dwt tanker	75	47	90	85	82	74	-9.8	68	67	67	67	67
125 000 m^3 LNG [a]	200	200	225	255	255	235	-7.8	200	200	200	200	200
75 000 m^3 LPG	77	44	78	67	67	68	1.5	58	58	58	58	58
15 000 dwt general cargo ship	14	12	24	21	21	21	0.0	19	19	19	19	19
2 500 TEUs full container ship	..	26	52	50	51	43	-15.7	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.

54. Transactions of second-hand vessels remained at a relatively low level throughout 1998. Prices were actually affected by the dramatic fall in newbuilding prices. Prices for five-year-old tankers fell by 30 to 40 per cent from the level of 1997, with the exception of Suezmax sizes that fared slightly better, but still suffered price decreases of between 20 and 25 per cent. Sale and purchase activity of second-hand bulk tonnage was also slack, reflecting the poor state of the dry bulk freight markets, which did not encourage any speculative buying and thus most buyers waited for even further reductions in prices throughout 1998 and the beginning of 1999. The lack of activity and the resulting downward pressure on prices was prevalent in all market segments. Panamax sizes as well as Capesizes, which traditionally attract a certain amount of speculative buying, were not in demand and could not thus exercise any relief on the overall second-hand market for bulk carriers (seetable 23).

Table 23

Second-hand prices for five-year-old vessels, 1992-1998

(as at end of year, in millions of dollars)

Vessel	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**Percentage change 1997/1998**
30 000 dwt tanker	14.5	18.0	18.0	20.0	22.0	23.0	16.0	-30.4
80 000 dwt tanker	22.0	31.0	30.0	31.0	33.0	..	..	..
130 000 dwt tanker	29.0	34.5	34.0	35.5	40.0	41.5	..	..
45 000 dwt dry bulk carrier	17.5	18.5	20.7	22.0	18.5	18.0	13.0	-27.8
70 000 dwt dry bulk carrier	19.0	19.5	21.5	23.0	20.5	21.0	14.5	-31.0
150 000 dwt dry bulk carrier	33.0	33.0	32.0	28.0	26.5	30.0	23.5	-21.7

Source: Fearnleys (Oslo), *Review 1998*.