Chapter 2

STRUCTURE AND OWNERSHIP OF THE WORLD FLEET

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

A. STRUCTURE OF THE WORLD FLEET

1. Principal types of ship

Comparative time-series data on the world fleet for 2004, 2005 and 2006 are provided in figure 4 and table 6. The world merchant fleet stood at 960 million deadweight tons (dwt) on 1 January 2006. This represents a 7.2 per cent increase over the start of 2005, at which time the world fleet had expanded by 4.5 per cent over the tonnage in 2004. The most recent growth rate is the highest since the beginning of 1989, when the world merchant fleet started to expand after the contraction of the 1980s. Newbuilding deliveries represented 70.5 million dwt, while 6.3 million dwt were broken up and lost. The result was a net gain of 64.2 million dwt in 2005.

The tonnage of oil tankers in 2005 increased by 5.4 per cent and that of bulk carriers by 7.9 per cent. These two types of ships represented 72.9 per cent of total tonnage, a slight decrease from 73.3 per cent in 2004. The fleet of general cargo ships increased by 4.5 per cent in 2005, reversing the trend of previous years; this category now represents 10 per cent of the total world fleet. In terms of deadweight tonnage, the fleet of containerships increased by 13 million dwt, or 13.3 per cent, and now represents 11.6 per cent of the total world

fleet. This growth rate reflects the increasingly prominent share of manufactured goods being traded in containers. The deadweight tonnage of liquid gas carriers (mainly LNG and LPG carriers) continued to increase for another year and at a good rate, while that of ferries/passenger ships did so at the modest rate of 1.1 per cent.

2. The world containership fleet

The world fleet of fully cellular containerships continued to expand substantially in 2005 in terms of both number of ships and their TEU capacity; by the beginning of 2006 there were 3,494 ships with a total capacity of 8,120,465 TEUs, an increase of 8.9 per cent in the number of ships and 13.3 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 2,235 TEUs in 2005 to 2,324 TEUs in 2006, reflecting the commissioning of larger ships to achieve economies of scale. The trend towards large containerships continued, with the largest containership ordered being of 10,000 TEU official nominal capacity, while it is believed that mega ships currently ordered by Maersk Line will have a capacity of 13,640 TEU. Meanwhile, the second half of 2005 witnessed the entry into service of another of the largest containerships afloat — the 9,200 TEU MSC Bruxelles; and in early 2006 the 9,500 TEU Cosco Guangzhou went into

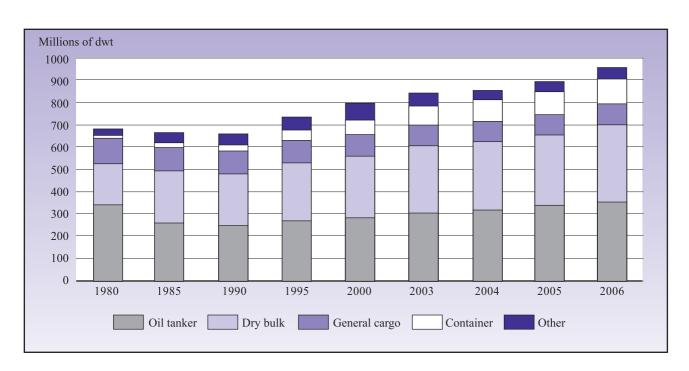


Figure 4

World fleet by principal types of vessel, selected years

service. In 2005, containerships ranging from 4,000 to 7,499 TEUs represented 17 per cent of the containership fleet — existing fleet and newbuildings, while the share of containerships of 7,500 TEUs and over was 2.3 per cent.

3. Age distribution of the world merchant fleet

Table 8 provides data on the average age distribution of the world merchant fleet by both ship types and groups of countries and territories. The average age of the total world fleet in 2005 dropped marginally to 12.2 years. By type of ship, the average age of tankers slightly decreased to 10 years in 2005. The share of tanker tonnage 15 years and older decreased to 26.7 per cent in 2005 from 27.4 per cent in 2004, even after a decreasing level of scrapping activities, which in 2005 was only 5.7 million dwt (compared with 7.8 million dwt in 2004). The average age of the dry bulk carrier fleet was 13.1 years in 2005, slightly lower than that of the previous year, while containerships continued to be the

youngest fleet in 2005, with an average age of 9.4 years (the same as the previous year). This trend is reflected in the share of tonnage between 0 and 4 years of age — 32.2 per cent, the highest among all categories of ships.

By country grouping, the fleet age of developed marketeconomy countries in 2005 was the lowest, at 10.3 years (10.5 years in 2004). These countries have continued the last few years' trend of lowering the average age of their fleet. Also in this group, the average age of tankers decreased slightly to 8.2 years in 2005, as compared with 8.5 years in 2004. This reflects the European Union's continued preference for new tonnage, which is motivated by environmental concerns and active participation in IMO for the adoption and implementation of instruments to promote safe and environment-friendly shipping. The major open-registry countries had the second lowest average age of all ships (11.7 years in 2005 versus 11.8 years in 2004). The average age of all ships registered in developing countries (excluding major

Table 6

World fleet size by principal types of vessel, 2004–2006^a

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

Principal types	2004	2005	2006	Percentage change 2005/2006
Oil tankers	316 759	336 156	354 219	5.4
.	37.0	37.5	36.9	- 0
Bulk carriers	307 661	320 584	345 924	7.9
0 9 9 / 9	35.9	35.8	36.0	
Ore/bulk/oil	12 110	9 695	7 817	-19.4
0 7 7	1.4	1.1	0.8	
Ore/bulk	295 551	310 889	338 107	8.8
	34.5	34.7	35.2	
General cargo ships	94 768	92 048	96 218	4.5
	11.1	10.3	10.0	
Containerships	90 462	98 064	111 095	13.3
	10.6	10.9	11.6	
Other types of ships	47 324	48 991	52 508	7.2
	5.5	5.5	5.5	
Liquefied gas carriers	20 947	22 546	24 226	7.5
	2.4	2.5	2.5	
Chemical tankers	8 004	8 290	8 919	7.6
	0.9	0.9	0.9	
Miscellaneous tankers	947	1 001	1 261	26.0
	0.1	0.1	0.1	
Ferries and passenger ships	5 561	5 589	5 649	1.1
	0.6	0.6	0.6	
Other	11 865	11 565	12 453	7.7
	1.4	1.3	1.1	
World total	856 974	895 843	959 964	7.2
	100.0	100.0	100.0	

open-registry countries) was 13 years in 2005, almost the same as the previous year. For this group, the average age of general cargo ships was 18.6 years, while that of containerships increased slightly to 9.6 years. The average age of tonnage registered in the socialist countries of Asia dropped by a full year to 15.8 years in 2005. The countries of Central and Eastern Europe continued to have the oldest fleet (20.7 years in 2005 versus 20.5 years in 2004), with ships built 15 years ago or more representing over 90 per cent of the total fleet and bulk carriers constituting the oldest class of ships at 22.9 years.

^a Percentage shares are shown in italics.

Table 7 Distribution of the world fleet and TEU capacity of fully cellular containerships, by country groups, in $2004,\ 2005$ and 2006^a

(Beginning-of-year figures)

Flags of registration by groups of countries	Nun	iber of sh	nips	TEU capaci	ity and percer	ntage shares
	2004	2005	2006	2004	2005	2006
World total	3 054	3 206	3 494	6 437 218	7 165 352	8 120 465
	100.0	100.0	100.0	100.0	100.0	100.0
Developed market-economy countries	824	897	1 009	2 147 550	2 520 415	2 902 207
	27.0	28.0	28.9	33.4	35.2	35.7
Major open-registry countries	1 224	1 255	1 351	2 922 805	3 112 131	3 479 947
	40.1	39.1	38.7	45.4	43.4	42.9
Total developed market-economy and	2 048	2 152	2 360	5 070 355	5 632 546	6 382 154
major open-registry countries	67.1	67.1	67.5	78.8	78.6	78.6
Countries in Central and Eastern Europe	35	34	27	26 813	26 014	15 297
(including former USSR)	1.1	1.1	0.8	0.4	0.4	0.2
Socialist countries of Asia	136	117	131	153 727	182 607	238 282
	4.5	3.6	3.7	2.4	2.5	2.9
Developing countries	779	848	921	1 115 019	1 251 358	1 420 783
	25.5	26.5	26.4	17.3	17.5	17.5
of which:						
Africa	9	11	12	9 131	10 469	11 857
	0.3	0.3	0.3	0.1	0.1	0.1
America	282	314	328	361 472	399 964	416 970
	9.2	9.8	9.4	5.6	5.6	5.1
Asia	488	523	581	744 416	840 925	991 956
	16.0	16.3	16.6	11.6	11.7	12.2
Europe	0	0	0	0	0	0
	0.0	0.0	0.0	0.0	0.0	0.0
Oceania	0	0	0	0	0	0
	0.0	0.0	0.0	0.0	0.0	0.0
Other, unallocated	56	55	55	71 304	72 827	63 949
	1.8	1.7	1.6	1.1	1.0	0.8

^a Percentage shares are shown in italics.

Table 8

Age distribution of the world merchant fleet, by types of vessel, as of 1 January 2006

(Percentage of total dwt)

Country grouping	Types of vessel	0-4	5-9	10-14	15-19	20 years	Average	Average
	• •	years	years	years	years	and over	age	age
							(years)	(years)
							2005 a	2004 a
World total	All ships	24.2	21.2	16.8	10.6	27.1	12.2	12.3
	Tankers	31.6	22.0	19.7	12.4	14.3	10.0	10.3
	Bulk carriers	19.7	21.6	16.6	10.2	32.0	13.1	13.0
	General cargo	8.6	13.9	10.6	9.6	57.4	17.5	17.5
	Containerships	32.1	28.3	17.3	8.2	14.0	9.4	9.4
	All others	18.2	14.5	11.2	8.8	47.3	15.3	15.6
Developed market-	All ships	28.2	27.8	17.3	9.2	17.5	10.3	10.5
economy countries	Tankers	36.3	29.2	18.2	8.8	7.4	8.2	8.5
	Bulk carriers	18.7	27.3	19.4	8.9	25.7	12.2	12.3
	General cargo	14.6	22.6	15.1	10.6	37.1	14.2	14.0
	Containerships	31.6	32.7	14.9	9.8	10.9	8.9	9.0
	All others	19.9	18.9	13.2	9.5	38.4	13.9	14.2
Major open-registry	All ships	26.3	21.5	17.3	10.0	25.0	11.7	11.8
countries	Tankers	32.7	21.5	21.1	12.0	12.6	9.7	10.2
	Bulk carriers	22.2	21.7	16.2	9.6	30.3	12.7	12.6
	General cargo	9.9	18.0	11.8	9.5	50.7	16.4	16.4
	Containerships	35.3	25.8	16.2	7.7	15.0	9.3	9.2
	All others	20.1	15.3	10.7	5.8	48.1	15.1	15.5
Subtotal	All ships	27.0	23.8	17.3	9.7	22.2	11.1	11.3
	Tankers	34.3	24.9	19.9	10.6	10.4	9.1	9.5
	Bulk carriers	21.4	23.1	17.0	9.4	29.1	12.5	12.5
	General cargo	11.8	19.8	13.1	10.0	45.3	15.5	15.5
	Containerships	33.7	28.9	15.6	8.6	13.2	9.1	9.1
	All others	20.0	17.1	12.0	7.7	43.2	14.5	14.9
Countries of Central and	l All ships	2.9	4.4	4.8	13.8	74.1	20.7	20.5
Eastern Europe	Tankers	9.4	13.3	7.9	15.3	54.0	17.4	18.3
	Bulk carriers	0.7	1.8	0.2	1.1	96.2	23.0	22.9
	General cargo	1.6	1.8	5.6	16.4	74.7	21.2	20.8
	Containerships	0.0	1.4	0.0	10.3	88.3	22.6	18.1
	All others	1.9	4.0	5.8	22.8	65.5	20.3	20.0
Socialist countries of	All ships	21.8	6.0	12.9	8.4	50.9	15.8	16.8
Asia	Tankers	35.9	6.7	18.6	7.9	30.9	12.0	13.4
	Bulk carriers	11.8	6.5	10.1	10.1	61.6	18.1	18.4
	General cargo	5.0	4.8	5.4	6.9	78.0	20.6	20.9
	Containerships	45.1	3.6	19.4	7.3	24.7	10.5	12.3
	All others	35.9	6.7	18.6	7.9	30.9	12.0	13.4
Developing countries	All ships	21.1	18.7	17.3	13.2	29.6	13.0	13.1
(excluding open-registry	Tankers	26.6	18.5	19.8	16.7	18.3	11.4	11.5
countries)	Bulk carriers	17.9	20.6	17.4	13.1	31.0	13.4	13.3
	General cargo	7.7	10.1	9.1	8.6	64.6	18.6	18.6
	Containerships	28.2	29.9	21.8	6.3	13.8	9.6	9.3
	All others	16.7	9.5	9.1	9.2	55.5	16.7	16.9

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

4. Delivery of newbuildings

Newbuilding activities reached the highest level ever recorded in terms of deadweight tons, with deliveries totalling 70.5 million dwt in 2005 (see table 9), an impressive increase over 2004 deliveries (49.4 million dwt). The total number of ships delivered increased by 16.5 per cent to 2,129 units from 1,827 units in 2004. This high level of delivery was attributed mainly to tanker deliveries of 30.7 million dwt, up 3.1 million dwt as compared with 2004. The number of tankers delivered reached 475 units in 2005 (301 units in 2004), with the average size of 64,632 dwt being lower than the one the previous year; this is due to the replacement of small tankers in the world tanker fleet. Up to September 2005, 19 VLCCs, 19 Suezmax and 41 Aframax ships had been delivered. Deliveries of bulk carriers increased by 9.1 million dwt in 2005 — a growth rate of about 65.5 per cent. The number of bulk carriers delivered reached 313 units in 2005 (264 units in 2004), with the average size of 73,482 dwt being higher than the one the previous year; this was due to the entry into service of larger carriers in the world bulk carrier fleet. Up to September 2005, 37 Cape-size, 50 Panamax, 66 Handymax and 42 Handysize ships had been delivered. Newbuildings for other types of ships, including general cargo ships and containerships, increased less in number than in deadweight tonnage — to 1,341 units and 16.8 million dwt in 2005. Up to September 2005, 160 containerships and 22 general cargo ships had been delivered.

5. Demolition of ships

Trends in the tonnage, types and average age of brokenup ships are shown in tables 10, 11 and 12. In 2005, total tonnage sold for demolition decreased by 42.7 per cent compared with the previous year to 6.3 million dwt,

Table 9

Deliveries of newbuildings, selected years

Year	Oil ta	nkers ^a	Combined	carriers ^a	Dry bulk	carriers ^a	Oth	ers ^b	To	tal
	No. of	Million	No. of	Million	No. of	Million	No. of	Million	No. of	Million
	vessels	dwt	vessels	dwt	vessels	dwt	vessels	dwt	vessels	dwt
1980	99	7.0	4	0.4	135	4.7	548	6.0	786	18.0
1985	72	3.9	10	0.7	339	14.7	529	5.0	95	25.0
1990	81	8.7	0	0.0	119	9.6	523	4.0	723	23.0
1997	69	7.5	3	0.3	299	18.8	696	10.2	1 067	36.8
1998	120	12.6	0	0.0	217	11.6	704	11.1	1 041	35.3
1999	161	19.1	4	0.4	195	13.0	585	8.4	940	40.5
2000	154	20.8	0	0.0	188	13.1	1 202	10.5	1 544	44.4
2001	112	14.4	0	0.0	310	21.0	1 048	9.8	1 470	45.2
2002	182	23.4	0	0.0	226	14.1	1 131	11.5	1 539	49.0
2003	281	29.4	2	0.2	161	11.2	1 263	8.4	1 707	49.2
2004	301	27.6	0	0.0	264	13.9	1 262	7.9	1 827	49.4
2005 °	475	30.7	0	0.0	313	23.0	1 341	16.8	2 129	70.5

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

- ^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, 2000–2005

Broken-up tonnage	2000	2001	2002	2003	2004	2005
Tonnage sold for breaking (million dwt)	22.2	27.8	30.5	25.6	11.0	6.3
Broken-up tonnage as a percentage of the	2.7	3.4	3.6	3.0	1.2	0.7
total world fleet						

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

Table 11

Tonnage reported sold for breaking, by types of vessel, 2000–2005

(Millions of dwt and percentage shares)

Years			Million dv	vt					Percentag	e share		
	Tankers	Combined	Bulk	Others	Total	World	Total	Tankers	Combined	Bulk	Others	Total
		carriers	carriers			fleet			carriers	carriers		
2000	13.5	1.0	4.6	3.1	22.2	808.4	2.7	60.9	4.3	20.8	14.0	100.0
2001	15.7	0.8	8.1	3.2	27.8	825.7	3.4	56.5	2.7	29.1	11.7	100.0
2002	18.1	1.6	5.9	4.9	30.5	844.2	3.6	59.3	5.2	19.3	16.1	100.0
2003	18.4	0.5	3.3	3.4	25.6	857.0	3.0	71.9	2.0	12.9	13.3	100.0
2004	7.8	0.5	0.5	1.8	10.6	895.8	1.2	73.6	4.7	4.7	17.0	100.0
2005	5.7	0.0	0.3	0.3	6.3	960.0	0.7	90.5	0.0	4.8	4.7	100.0

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

Table 12

Average age of broken-up ships, by type, from 2000 to 2005^a

(Years)

Year	Tankers	Dry bulk carriers	Containerships	General cargo ships
2000	26.9	25.9	25.7	27.3
2001	28.0	26.7	26.9	27.4
2002	28.3	26.6	26.0	28.2
2003	29.3	26.5	25.5	29.3
2004	29.5	27.3	30.5	32.9
2005	31.5	28.1	30.6	31.9

Source: Compiled by the UNCTAD secretariat on the basis of data in Institute of Shipping Economics and Logistics (2006), Shipping Statistics and Market Review, Jan./Feb., table I-1.3.2.

^a Ships of 300 grt and over.

equivalent to 0.7 per cent of worldwide total deadweight tons, as compared with 1.2 per cent in 2004. Break-up of tankers accounted for the largest share of total demolition, while no containerships or combined carriers were sold for break-up in 2005. The volume of tankers sold for demolition decreased to 5.7 million dwt as compared with the previous year (7.8 million dwt). There was only one ULCC/VLCC demolition sale in 2005, while 3 units were sold in 2004. Sales of Suezmax ships stood at 2 units in 2005, while those of Aframax ships decreased from 25 units in 2004 to 16 units in 2005. In the smaller category of crude oil tankers, demolition also decreased: 17 units were sold for scrap in 2005, while 38 units were sold in 2004. The average age of tankers sold for demolition was up slightly to 31.5 years in 2005. The tonnage of dry bulk carriers sold for scrap decreased to 0.3 million dwt in 2005. One Cape-size, 2 Handymax and 5 Handysize units were sent for demolition in 2005. No Panamax or combined carriers tonnages were sent for break-up. The average age of all dry bulk carriers broken up was 28.1 years in 2005, almost a year more than the previous year. Containerships also had a slightly extended trading life in 2005, but general cargo vessels were sold sooner to breakers at an average age of 31.9 years as compared with the previous year (32.9 years).

Despite the record prices offered by some ship breakers — in Bangladesh prices frequently topped \$400/light displacement ton (ldt) — demolition volumes decreased in 2005 owing to the favourable freight rates, which encouraged owners to keep their vessels. Demolition volumes did not increase even with the coming into force, in April 2005, of MARPOL Regulation 13G, which applies to all single-hull tankers over a certain size and carrying specified oil cargoes. In the next few years there is scope for the impact of this regulation to become apparent. By July 2005, 14 countries and the EU had notified the IMO of the phasing-out of singlehull tankers, with other countries still reserving their decision on the acceptance of these vessels after 2010. In the event of full compliance, some envisage a capacity crunch scenario for the scrapping industry because about 700 rather than the usual 150 tankers would need to be demolished annually.

In 2005 Bangladesh, the star performer from the previous year, continued to exert greater control over the market by acquiring the majority of available tonnage and making arrangements for ensuring good resale prices to steel makers. Similar countries were India, China and Pakistan, although with decreased activity. In India the number of demolition yards active in Alang was around

20 to 30, the potential number of yards being 180. Less than a handful of yards were reported to be operational in Pakistan, where the Government introduced tax incentives to encourage scrapping activity. Chinese yards were reported to be dormant throughout the year and breakers looked for alternative sources of income as they were unable to secure tonnage in view of the high prices maintained in other countries.

B. OWNERSHIP OF THE WORLD FLEET

1. Distribution of world tonnage by country groups

The total world fleet continued to expand in 2005, increasing by 7.2 per cent to 960 million dwt (see figure 5 and table 13). The tonnage of developed market-economy countries grew at a rate lower than that of the total world fleet — 6.9 per cent (from 241.7 million dwt to 258.4 million dwt). This might reflect some incentives applied in the EU countries to attract tonnage such as the introduction of tonnage taxes and the relaxation of manning requirements for ships registered in national second registers. The tonnage of major open-registry countries increased marginally in 2005, by 27.9 million dwt to 431.9 million dwt. Over two thirds of these beneficially-owned fleets are owned by developed market-economy countries. The share of the world fleet registered in developing countries has continued to increase, rising by 16 million dwt (7.9 per cent) in 2005 to 218.3 million dwt. The fleet of Asian developing countries expanded by 15.7 million dwt (10.1 per cent) to 171.0 million dwt, accounting for 78.6 per cent of the developing countries' total fleet. The fleets of developing countries of Africa and America stood at 5.4 and 36.7 million dwt respectively. Modest gains were recorded by the fleets of developing countries in Europe and Oceania, reaching 1.7 and 2.7 million dwt respectively. The fleets of the socialist countries in Asia increased by 10.7 per cent, reaching 37 million dwt, while the fleets of countries of Central and Eastern Europe dropped marginally to 14.4 million dwt.

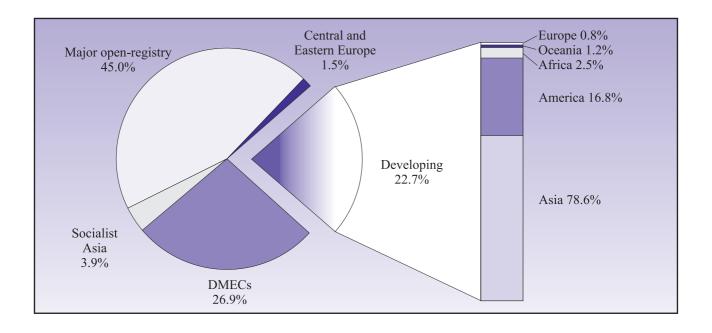
2. Distribution of world tonnage by types of ship and by country groups

Table 14 provides more detailed data on fleet distribution by types of ship and country groups for 1970, 1980, 1990, 2000, 2004 and 2005. Despite the relatively lower volume of tanker tonnage reported sold for break-up in comparison with 2004, the share of oil tankers in the

Figure 5

World tonnage, by country groups, as of 1 January 2006

(Percentage distribution of dwt)



total world fleet decreased by 0.6 per cent in 2005. There was a 0.2 per cent increase in bulkers' share of the total world fleet, which reached 36 per cent. The share of general cargo ships in the world fleet continued to decrease, falling to 10 per cent, while that of containerships continued its upward trend, reaching 11.6 per cent. The share of other types of ships stood at 5.5 per cent. In 2005, the share of developed marketeconomy countries in the oil sector was slightly lower than the previous year and dropped to 31.2 per cent. Conversely, the share of open-registry countries reached 43.4 per cent. This marginal increase in comparison with the previous year (43.2) reflects owners' tendency to register tanker tonnage under major open registries. Developing countries maintained the upward trend of the previous year and increased their share to 22.4 per cent in 2005. The proportion of Asian developing countries increased by 0.8 per cent in 2005 to 19.3 per cent of the world tanker fleet, while that of developing countries of America decreased to 2.5 per cent.

In the dry bulk carrier sector, the tonnage share of developed market-economy countries in the total world fleet increased marginally by 0.5 per cent in 2005 to 19.4 per cent, approximately one third its 1970 share. Major open-registry countries reduced their share to 52.6 per cent in 2005, as compared with 52.9 per cent in 2004 (24.1 per cent in 1970). The share of developing countries decreased to 22.8 per cent. The share of countries in Central and Eastern Europe remained steady at 0.9 per cent, while that of socialist countries in Asia increased slightly from 4.3 per cent in 2004 to reach 4.4 per cent in 2005.

In the sector of general cargo ships, developed marketeconomy countries decreased their share to 21.4 per cent of the world fleet, while open-registry countries' share decreased marginally to 32.1 per cent. Developing countries actually increased their share from 29.6 in 2004 to 30.9 per cent in 2005, with increases recorded in Asian countries and Oceania. General cargo ships continued to be the largest of the five principal types of ship for developing countries.

Developed market-economy countries increased their share of containership deadweight tonnage in 2005 by

Table 13

Distribution of world tonnage (dwt) by groups of countries of registration, 1980, 1990, 2004, 2005 and 2006^a

(Beginning-of-year figures)

Flag of registration by group of countries	Tonnag	ge and percei	ntage shares	b in millions	of dwt
	1980 ^c	1990 ^d	2004	2005	2006
World total	682.8	658.4	857.0	895.8	960.0
	100.0	100.0	100.0	100.0	100.0
Developed market-economy countries	350.1	219.0	230.4	241.7	258.4
	51.3	33.3	26.9	27.0	26.9
Major open-registry countries	212.6	224.6	399.5	404.0	431.9
	31.1	34.1	46.6	45.1	45.0
Countries of Central and Eastern Europe	37.8	44.3	15.7	14.5	14.4
(including former USSR)	5.5	6.7	1.8	1.6	1.5
Socialist countries of Asia	10.9	22.1	29.9	33.4	37.0
	1.6	3.4	3.5	3.7	3.9
Developing countries	68.4	139.7	181.4	202.3	218.3
	10.0	21.2	21.2	22.6	22.7
of which:					
Africa	7.2	7.3	5.7	5.6	5.4
Americas	21.8	25.5	36.0	36.7	36.7
Asia	39.1	89.5	136.0	155.9	171.6
Europe	0.2	13.8	1.2	1.5	1.7
Oceania	0.1	3.6	2.4	2.6	2.7
Other, unallocated	3.0	8.7	0.0	0.0	0.0
	0.4	1.3	0.0	0.0	0.0

Excludes the US Reserve Fleet and the US and Canadian Great Lakes fleets, which in 2006 amounted to 3.9, 1.8 and 1.5 million dwt respectively.

b Percentage shares are shown in italics.

^c Mid-year figure.

d End-of-year figure.

Table 14 $Percentage \ shares \ of \ world \ tonnage, \ by \ types \ of \ vessel \ and \ country \ groups, \ in \ 1970, \\ 1980, \ 1990, \ 2000, \ 2004 \ and \ 2005 \ ^{a \ b}$

	Year	Т	otal dwt	Oil tankers	Bulk carriers ^c	General cargo	Container ships	Other ships
	•	Million dwt	Percentage of world total		Percentage	share by ves	ssel type ^d	
World total	1970	326.1	100.0	39.4	20.2	30.2	0.9	9.3
	1980	682.8	100.0	49.7	27.2	17.0	1.6	4.5
	1990	358.4	100.0	37.4	35.6	15.6	3.9	7.5
	2000	808.4	100.0	35.3	34.8	12.7	8.6	8.6
	2004	895.8	100.0	37.5	35.8	10.3	10.9	5.5
	2005	960.0	100.0	36.9	36.0	10.0	11.6	5.5
Developed	1970	211.9	65.0	63.9	69.2	65.6	99.0	61.3
market-economy	1980	350.1	50.3	52.5	52.7	43.4	74.3	50.4
countries	1990	219.0	33.3	37.3	29.5	23.1	46.5	45.2
	2000	203.4	25.2	30.0	16.9	19.6	34.4	37.6
	2004	241.7	27.0	32.2	18.9	22.2	34.6	37.4
	2005	258.4	26.9	31.2	19.4	21.4	35.2	39.9
Open-registry	1970	70.3	21.6	26.4	24.1	7.6	1.0	3.6
countries	1980	212.5	31.1	36.2	31.7	20.8	13.5	17.0
	1990	224.6	34.1	41.6	33.2	26.2	21.1	24.2
	2000	392.2	48.5	50.8	55.0	36.5	40.6	38.2
	2004	404.0	45.1	43.2	52.9	32.4	43.9	33.4
	2005	431.9	45.0	43.4	52.6	32.1	43.0	33.7
Central and	1970	20.5	6.2	4.6	2.1	12.0	-	28.8
Eastern Europe	1980	37.8	5.5	2.8	4.2	12.6	2.9	19.2
•	1990	44.3	6.7	3.2	6.1	15.5	3.2	10.9
	2000	16.3	2.0	1.0	1.4	6.3	0.6	3.7
	2004	14.5	1.6	0.9	0.9	6.2	0.4	4.7
	2005	14.4	1.5	0.8	0.9	6.1	0.2	4.3
Socialist	1970	1.2	0.4	0.1	-	1.1	-	0.3
countries of Asia		10.9	1.6	0.6	1.6	4.7	0.1	1.3
	1990	22.1	3.4	1.1	3.6	8.5	4.2	2.2
	2000	26.1	3.2	1.4	4.0	7.6	2.6	1.8
	2004	33.5	3.7	2.0	4.3	9.6	3.1	2.4
	2005	37.0	3.9	2.2	4.4	9.5	3.4	2.3
Developing	1970	20.5	6.3	4.7	4.3	12.6	-	5.9
countries	1980	68.4	10.0	7.7	9.2	17.6	7.6	12.0
	1990	139.7	21.2	16.3	25.6	26.2	16.0	17.4
	2000	157.0	19.4	16.1	20.7	27.1	18.7	17.4
	2004	202.3	22.6	21.8	22.9	29.6	18.0	22.1
	2004	218.3	22.7	22.4	22.8	30.9	18.1	19.8
	2005	210.5	<i>LL.</i> I	22.4	22.0	30.9	10.1	13.0

Table 14 (continued)

	Year	Т	otal dwt	Oil tankers	Bulk carriers ^c	General cargo	Container ships	Other ships
	,	Million dwt	Percentage of world total		Percentage	share by ves	ssel type ^d	
of which:								
Africa	1970	1.1	0.3	0.2	-	1.3	-	0.7
	1980	7.1	1.0	1.1	0.1	2.3	••	2.1
	1990	7.3	1.1	1.0	0.5	2.3	0.2	2.9
	2000	6.0	0.7	0.5	0.4	1.7	0.2	1.8
	2004	5.6	0.6	0.5	0.4	1.3	0.1	2.3
	2005	5.4	0.6	0.4	0.4	1.3	0.1	2.3
America	1970	8.7	2.7	2.8	1.4	4.3	-	2.5
	1980	21.8	3.2	2.3	3.3	5.6	0.1	3.7
	1990	25.5	3.9	3.0	3.8	6.2	1.4	4.7
	2000	34.1	4.2	2.7	3.5	9.6	5.1	4.5
	2004	36.7	4.1	2.6	3.2	10.5	5.5	5.6
	2005	36.7	3.8	2.5	2.8	10.3	5.1	4.6
Asia	1970	10.7	3.3	1.7	2.9	6.9	-	2.6
	1980	39.1	5.7	4.3	5.7	9.8	2.7	5.7
	1990	89.5	13.6	10.7	17.6	13.7	13.5	9.1
	2000	115.7	14.3	12.9	16.5	15.5	13.3	10.9
	2004	155.9	17.4	18.5	18.6	17.0	12.4	12.9
	2005	171.6	17.9	19.3	18.9	18.5	12.8	11.6
Europe	1970	-	-	-	-	-	-	-
	1980	0.2	-	-	-	0.1	-	-
	1990	13.8	2.1	1.4	2.8	3.2	0.6	0.4
	2000	1.0	0.1	0.0	0.3	0.2	0.0	0.0
	2004	1.5	0.2	0.1	0.3	0.2	0.0	0.1
	2005	1.7	0.2	0.2	0.3	0.2	0.0	0.1
Oceania	1970	-	-	-	-	-	-	-
	1980	0.2	-	-	-	0.1	-	-
	1990	3.6	0.5	0.2	0.9	0.8	0.3	0.3
	2000	0.2	0.0	0.0	0.0	0.1	0.0	0.1
	2004	2.6	0.3	0.0	0.4	0.6	0.0	1.2
	2005	2.7	0.3	0.0	0.4	0.7	0.0	1.2
Unallocated	1970	1.7	0.5	0.3	0.3	1.1	-	0.1
	1980	3.0	0.4	0.2	0.6	0.9	1.6	0.1
	1990	8.7	1.3	0.5	2.0	0.5	9.0	0.1
	2000	13.4	1.7	0.7	1.9	2.9	3.1	1.3
	2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

^a Excludes the US Reserve Fleet and the US and Canadian Great Lakes fleets.

Fleet data in dwt up to 1990 were calculated as of 1 July and from 1991 onwards as of 1 January.

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

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

0.6 per cent to reach 35.2 per cent. The share of major open-registry countries decreased by 0.9 per cent, reaching 43 per cent. The share of developing countries stood at 18.1 per cent, with the share of Asian developing countries increased to 12.8 per cent and that of developing countries in America decreased marginally to 5.1 per cent. African developing countries maintained their share of the previous year, 0.1 per cent.

3. Fleet structure of main country groups

Table 15 provides data on the structure of the merchant fleet of the main country groups as of 1 January 2005. Developed market-economy countries' tonnage in tankers increased in 2005 by 2.2 million dwt to 110.6 million dwt, but the share of the group's total fleet decreased to 42.8 per cent as compared with 44.9 per cent in 2004. The share of dry bulk carriers increased to 26 per cent, equivalent to an increase of 6.5 million dwt. General cargo ships' and containerships' share of their fleet registered opposite movements, down to 8 per cent for the former and up to 15.2 per cent for the latter, as compared with 8.5 and 14 per cent respectively in 2004. Major open-registry countries increased their total fleets by 27.9 million dwt. The greatest proportion

of their fleets was in the oil tanker and dry bulk carrier sectors, which together accounted for 77.7 per cent of their fleet at the beginning of 2006. The share of oil tankers increased in 2005 by 8.5 million dwt and reached 153.6 million dwt, or 35.6 per cent of the group's total fleet, while the share of dry bulk carriers increased by 12.2 million dwt to 42.1 per cent as compared with 42 per cent the previous year. The share of general cargo ships increased in 2005 by 1.1 million dwt, accounting for 7.2 per cent of the group's total fleet, slightly down from 7.4 per cent in 2004. The containership fleet of these countries expanded in 2005 by 4.8 million dwt to 11.1 per cent of their total fleet (up from 10.7 per cent in 2004).

A high proportion of oil tankers and dry bulk carriers continue to characterize developing countries' tonnage distribution. The share of oil tankers and dry bulk carriers represented 36.3 and 36.1 per cent respectively in 2005. In absolute terms, these countries' 2005 tonnage in oil tankers and dry bulk carriers was 79.3 million dwt and 78.8 million dwt as compared with 110.6 million dwt and 67.1 million dwt for developed market-economy countries. The share of general cargo ships in this group increased in 2005 to 29.7 million dwt in comparison with

Table 15

Structure of the merchant fleets of the main country groups as of 1 January 2006^a

(Millions of dwt and percentage shares)

	World fleet		market- countries economy countries		Develo count		Central and Eastern Europe		Socialist countries of Asia			
	Million		Million		Million		Million		Million		Million	
	dwt	%	dwt	%	dwt	%	dwt	%	dwt	%	dwt	%
Total fleet	960.0	100.0	258.4	100.0	431.9	100.0	218.3	100.0	14.4	100.0	37.0	100.0
Oil tankers	354.2	36.9	110.6	42.8	153.6	35.6	79.3	36.3	2.9	19.9	7.8	21.1
Bulk carriers	345.9	36.0	67.1	26.0	181.9	42.1	78.8	36.1	3.1	21.6	15.1	40.7
General cargo ships	96.2	10.0	20.6	8.0	30.9	7.2	29.7	13.6	5.9	40.9	9.1	24.7
Containerships	111.1	11.6	39.2	15.2	47.8	11.1	20.1	9.2	0.3	1.9	3.8	10.3
Other ships	52.5	5.5	21.0	8.1	17.7	4.1	10.4	4.8	2.3	15.8	1.2	3.2

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

27.2 million dwt in 2004, while containerships increased in tonnage by 2.5 million dwt and in percentage terms to 9.2 per cent in 2005 from 8.7 per cent the previous year. In the countries of Central and Eastern Europe, general cargo ships were relatively dominant, accounting for 40.9 per cent in 2005, as compared with 39.8 per cent in 2004. On the other hand, containerships slightly decreased to 0.3 million dwt, or around 1.9 per cent of the total. The socialist countries of Asia continued to have a predominant share of both dry bulk carriers and general cargo ships. The absolute tonnage of these types of ship increased in 2005 to 15.1 million dwt and 9.1 million dwt respectively. However, their shares of the total decreased to 40.7 per cent (from 41.6 per cent in 2004) for dry bulk carriers and 24.7 per cent (from 26.3 per cent in 2004) for general cargo ships. The absolute tonnage of containerships increased in 2005 to 3.8 million dwt, or 10.3 per cent (compared with 9 per cent in 2004).

C. REGISTRY OF SHIPS

1. The 35 most important maritime countries and territories

The 35 most important maritime countries as at 1 January 2006 are ranked in table 16 according to deadweight tonnage registered and controlled. During 2005, these 35 countries and territories controlled 95.17 per cent of the world merchant fleet (the same level as the previous year). Greece and Japan were still at the top of the list. Cyprus and Ukraine, ranked 31st and 32nd in 2004, were replaced in 2005 by new entrants, Croatia and Israel, which occupied respectively, the 33rd and 34th places. The rankings of 16 other countries or territories changed. Taiwan Province of China, Canada, the Philippines, Singapore and Turkey moved up by one place, while Sweden moved up by three places and Belgium, Kuwait and the United Arab Emirates by four places. Other countries moved down by one place (the Islamic Republic of Iran and Saudi Arabia), two places (Spain and the United Kingdom), three places (Brazil and Malaysia) and five places (France).

During 2005, these 35 most important maritime countries and territories continued to register tonnage under foreign flags. The total tonnage registered under foreign flags in 2005 increased to 577.1 million dwt, representing 66.9 per cent of the 35 countries' total fleet, as compared with 523.3 million dwt or 65.6 per cent in 2004. Developing countries and territories continued their recent trend towards registering their tonnage under

foreign flags. In 2005, the 14 developing countries and territories listed in the table — including Hong Kong (China) but excluding Taiwan Province of China — had 46 per cent of their total tonnage registered under foreign flags. In spite of the general trend towards flagging out among developing countries, differences among individual countries remain. The foreign registries of Saudi Arabia and Hong Kong (China) amounted to 91.4 and 59.1 per cent respectively, while India, the Islamic Republic of Iran, Thailand and the Philippines made less use of foreign flag registers, which accounted respectively for only 9.2, 9.5, 14.3 and 19.3 per cent of their fleets. For developed market-economy countries, the share of foreign-registered tonnage increased to 73.8 per cent in 2005. In some countries, the opposite trend could be at work. For instance, in 2005, Germany raised total tonnage to 71.5 million dwt (57.9 million dwt the previous year), while its foreign flag fleet decreased from 84.4 to 81.7 per cent.

2. Open registries

The tonnage distribution of the six major open-registry countries by principal types of ship is shown in table 17, together with the corresponding totals for six minor openregistry countries. The total tonnage registered as at 1 January 2006 in the six major registries increased by 7.2 per cent to 391.2 million dwt from 364.8 million dwt the previous year, during which the tonnage increased by less than 2 per cent. Panama continued to head the list with an expansion of 16.8 million dwt. This registry allows for dual registry (i.e. a foreign vessel bareboat chartered for a period of up to two years can be registered in the country for the same period without losing its previous registration), discounts in registration fees and tax holidays on profits accruing from vessels' operations. Liberia's fleet also expanded by 10.6 per cent. In May 2005 detention figures released under the Paris Memorandum of Understanding placed that country at the top of the list of the 10 best-performing flags. This registry has contracted international security specialists to train its own network of security auditors and plans similar action to implement the International Safety Management Code and other quality-related measures. The combined tonnage of Panama and Liberia amounts to 71.4 per cent of the total tonnage of the six major open-registry countries.

Two other major open-registries — the Bahamas and Malta— also expanded their fleets by 11.2 and 5.3 per cent respectively, while the fleets of Cyprus and Bermuda

Table 16

The 35 most important maritime countries and territories as of 1 January 2006^a

Country of domicile b	Nui	nber of vessels			I	Deadweight	tonnage	
	National flag ^c	Foreign flag	Total	National flag	Foreign flag	Total	Foreign flag as a percentage of total	Total as a percentage of world total
Greece	709	2 318	3 027	47 466	115 928	163 394	70.95	18.02
Japan	707	2 384	3 091	11 763	119 940	131 703	91.07	14.52
Germany	420	2 366	2 786	13 120	58 397	71 516	81.66	7.89
China	1 763	1 130	2 893	29 832	35 656	65 488	54.45	7.22
United States	625	1 054	1 679	10 172	36 755	46 927	78.32	5.18
Norway	732	933	1 665	13 658	31 738	45 397	69.91	5.01
Hong Kong, China	292	371	663	17 973	25 870	43 843	59.01	4.84
Republic of Korea	638	355	993	12 696	16 977	29 672	57.21	3.27
Taiwan Province								
of China	109	444	553	4 772	19 618	24 389	80.44	2.69
Singapore	467	287	754	14 695	8 285	22 980	36.05	2.53
United Kingdom	370	409	779	8 961	12 334	21 295	57.92	2.35
Denmark	316	428	744	9 228	10 328	19 556	52.81	2.16
Russian Federation	1 670	487	2 157	6 803	9 889	16 692	59.25	1.84
Italy	543	159	702	10 192	4 297	14 490	29.66	1.60
India	366	40	406	12 511	1 264	13 774	9.17	1.52
Switzerland	26	346	372	791	10 968	11 759	93.28	1.30
Belgium	69	134	203	5 902	5 657	11 559	48.94	1.27
Saudi Arabia	60	74	134	977	10 387	11 364	91.40	1.25
Turkey	436	365	801	6 793	3 497	10 290	33.98	1.13
Iran (Islamic Republic of)	156	23	179	8 894	936	9 830	9.52	1.08
Malaysia	249	76	325	5 454	4 179	9 633	43.38	1.06
Netherlands	515	207	722	4 520	4 288	8 808	48.69	0.97
Canada	216	140	356	2 540	4 007	6 548	61.20	0.72
Sweden	159	183	342	1 692	4 684	6 3 7 5	73.47	0.70
Indonesia	591	120	711	3 822	2 408	6 231	38.65	0.69
Kuwait	40	29	69	3 682	1 361	5 043	26.99	0.56
Philippines	275	37	312	4 052	971	5 023	19.33	0.55
France	164	126	290	2 208	2 655	4 863	54.60	0.54
Brazil	135	12	147	2 590	2 164	4 755	45.52	0.52
United Arab Emirates	46	140	186	557	3 942	4 499	87.62	0.50
Spain	75	235	310	871	3 225	4 096	78.73	0.45
Thailand	278	40	318	2 741	457	3 198	14.30	0.35
Israel	20	52	72	868	1 828	2 697	67.80	0.30
Croatia	73	37	110	1 684	979	2 663	36.77	0.29
Australia	45	35	80	1 375	1 253	2 628	47.68	0.29
Total (35 countries)	13 355	15 576	28 931	285 855	577 123	862 978	66.88	95.17
World total	15 576	17 238	32 814	303 768	602 985	906 753	66.50	100.00

^a Vessels of 1,000 grt and above, excluding the US Reserve Fleet and the US and Canadian Great Lakes fleets.

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

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

Table 17

Tonnage distribution of open-registry fleets^a as of 1 January 2006

Flag	Oil tankers		Bulk carriers General cargo				Container Others ships					Total as of 1.1.2005	
	N_{umber}	Thousand dwt	Number	Thousand dwt	N_{umber}	Thousand dwt	N_{umber}	Thousand dwt	N_{umber}	Thousand dwt	N_{umber}	Thousand dwt	$\textit{Thousand } \textit{d}_{\textit{Wt}}$
Panama	680	51 136	1 507	100 037	1 271	12 287	599	22 431	503	8 817	4 560	194 708	177 866
Liberia	459	45 187	236	15 765	156	2 660	406	15 853	159	5 016	1 416	84 483	76 372
Bahamas	199	22 911	204	11 288	359	5 513	65	2 068	260	4 748	1 087	46 528	41 835
Malta	192	11 533	363	16 513	304	2 787	51	1 397	47	408	957	32 637	30 971
Cyprus	80	5 382	306	16 539	213	2 047	125	3 092	28	189	752	27 250	31 585
Bermuda	13	2 005	13	1 647	13	173	24	747	31	995	94	5 568	6 206
Subtotal	1 623	138 154	2 629	161 788	2 316	25 468	1 270	45 589	1 028	20 173	8 866	391 172	364 836
Saint Vincent and													
the Grenadines	19	505	83	4 059	248	2 133	14	89	68	172	432	6 958	6 857
Antigua and													
Barbuda	4	14	29	745	574	2 905	276	4 980	18	100	901	8 744	8 383
Cayman Islands	45	1 665	32	1 705	43	644			16	267	136	4 282	4 040
Luxembourg	12	176	1	49	5	42	6	105	18	166	42	537	794
Vanuatu			26	1 321	14	231	1	29	110	393	151	1 974	1 879
Gibraltar	21	394	1	3	100	582	12	177	12	74	146	1 230	1 281
Total	1 724	140 908	2 801	169 669	3 300	32 005	1 579	50 969	1 270	21 344	10 674	414 896	388 069
Total six major open	register	s as of 1	January	2005									
	1 629	131 632	2 688	159 506	3 286	31 439	1 479	46 213	1 224	19 280	10 306	388 069	
Total six major open	register	s as of 1	January	2004									
	1 604	131 630	2 663	155 126	3 422	32 296	1 384	42 343	1 220	18 528	10 293	379 923	
Total six major open	register	s as of 1	January	2003									
	1 538	134 277	4 286	145 514	2 527	27 794	1 007	31 817	1 005	16 680	8 563	356 081	

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.

actually contracted. During 2005, Bermuda decreased its fleet by 10.3 per cent to 5.6 million dwt, which is lower than tonnages registered under Saint Vincent and the Grenadines and Antigua and Barbuda. Cyprus decreased its fleet by 13.7 per cent to 27.2 million dwt and, in 2005, became the fifth register, after Liberia, Panama, the Marshall Islands and Croatia, to sign a reciprocal agreement with the United States allowing for the boarding or detention in international waters of Cypriot-flagged ships suspected of carrying weapons of mass destruction. Analysis by type of ship for the six major registries indicated that tankers maintained their share of the total deadweight at 35.3 per cent level (35.2 per cent the previous year), while dry bulk carriers slightly decreased their share to 41.3 per cent. For the six major open registries, the combined tonnage of these two types of ships accounts for 76.7 per cent of the total deadweight and 74.8 per cent when the minor registries are included. General cargo ships (3,300 ships) accounted for 30.9 per cent of the total number of ships, followed by dry bulk carriers (2,801 ships or 26.2 per cent of the total).

3. Nationality of vessels

Table 18 indicates the participation of nationals in the registry of a number of open and international registers for the three most recent years. The data compare the total tonnage registered in the listed countries of registry with the tonnage registered and owned by nationals of these countries. The 20 countries or territories of registry have been divided into three groups: six major open registers, six minor open registers and eight international registers. In open registers, the share of tonnage owned by nationals of open-registry countries is minimal, well below 5 per cent.

It is worth noting that for some international registers, nationals of the country or territory of the registry have a significant share of the tonnage registered, as is the case in Denmark, Norway, Hong Kong (China) and Singapore. For other international registers, nationals of a country that has privileged relationship with the territory of registry have a relatively important share of the tonnage registered in such registers. This is the case in respect of the United Kingdom with the Isle of Man (36.6 per cent), the United States with the Marshall Islands (32.7 per cent), France with the French Antarctic Territory — the Kerguelen Islands — (28.6 per cent) and the Netherlands with the Netherlands Antilles (41.5). Thus in international registers, the share of tonnage

owned by nationals of the countries in which the international register is based or nationals of countries having a privileged relationship with the territory of registry ranges from about 30 per cent to over 90 per cent. Countries and territories with the highest share — Denmark, Norway and Hong Kong (China) — were respectively ranked twelfth, sixth and seventh on the list of the 35 most important maritime countries in 2005.

Fiscal and regulatory issues are paramount in establishing these international registers, often by reference to approaches made by other countries. In May 2005 France set up a French International Register (RIF) to replace the French Antarctic Territory, which will be phased out in the next two years. RIF allows for certain tax exemptions, prescribes the minimum number of crew with French or EU nationality and provides for levels of crew wages and working conditions. In Japan calls were made during the year to establish a second register that provides for tonnage tax analogous to that found elsewhere.

The true nationalities of the ships registered in the 12 open registries are analysed in table 19. In 2005, 35 countries or territories accounted for 90.5 per cent of the total tonnage of the 12 open-registry fleets (90.1 per cent the previous year). Ownership is particularly concentrated in 10 countries or territories (China, Greece, Germany Hong Kong (China), the Republic of Korea, Japan, Norway, Switzerland, Taiwan Province of China and the United States), which control 77 per cent of the deadweight of ships registered in these open-registry countries, while the top five countries or territories (China, Germany, Greece, Japan and the United States) control 61.7 per cent. Japan was ranked first in 2005 with the largest share (23.2 per cent) of the open-registry fleets. Japan also had the largest foreign-flag ownership, representing 119.9 million dwt or 19.9 per cent of total world foreign-flag tonnage, followed by Greece with 115.9 million dwt or 19.2 per cent of total tonnage. The two countries' combined foreign-flag tonnage accounted for 39.1 per cent of total world tonnage under foreign flags.

Table 19 also provides an overview of how, in 2005, the 35 countries distributed their tonnage among the open registries. Overall, the share of the six major open registers stood at 94.3 per cent, while that of the minor open registers amounted to 5.7 per cent, slightly lower that the previous year (5.9 per cent).

Table 18

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

(Thousands of dwt)

Country or territory of registry		onnage regist ntry of regis		Participation of nationals of country of registry and of nationals of countries having privileged relationship with country of registry								
				in tonnage	of register	ed fleet	in percentage of registered					
	2004	2005	2006	2004	2005	2004	fleet (%)					
	2004	2005	2006	2004	2005	2006	2004	2005	2006			
Panama	168 710	177 866	194 708	Six major o ()	pen registe ()	rs ()	0.0	0.0	0.0			
Liberia	74 083	76 372	84 483	0	0	0		0.0	0.0			
Bahamas	42 552	41 835	46 528	0	0	0		0.0	0.0			
Malta	35 348	30 971	32 637	0	0	0		0.0	0.0			
Cyprus	31 706	31 583	27 250	1 062	459	0		1.5	0.0			
Bermuda	5 446	6 206	5 568	0	0	0		0.0	0.0			
	0	0 200		Six minor o			0.0	0.0	0.0			
Saint Vincent and	DIA HIIROI OPERTEGIORICO											
the Grenadines	6 562	6 857	6 958	0	0	0	0.0	0.0	0.0			
Antigua and Barbuda	7 306	8 383	8 744	0	0	0	0.0	0.0	0.0			
Cayman Islands	4 086	4 040	4 282	0	0	0	0.0	0.0	0.0			
Luxembourg	1 273	794	537	0	0	0	0.0	0.0	0.0			
Vanuatu	1 785	1 879	1 974	0	0	0	0.0	0.0	0.0			
Gibraltar	1 068	1 281	1 230	0	0	0	0.0	0.0	0.0			
Total open registers	379 923	388 067	414 896	0	0	0	0.0	0.0	0.0			
			Ei	ght interna	tional regis	ters						
Singapore	36 486	40 934	47 999	11 704	12 424	14 695	32	30	31			
Norwegian International												
Ship Registry (NIS)	24 007	21 265	19 399	19 873	12 396	12 075	83	58	62			
Hong Kong (China)	34 468	43 957	44 843	15 376	17 246	17 973	45	39	40			
Marshall Islands	31 625	38 088	42 106	11 018	10 828	13 748	35	28	33			
Isle of Man	9 355	12 073	13 501	5 255	4 700	4 938	56	39	37			
Danish International Ship	0.054	0.050	0.500	0.545	0.220	0.104	0.5	0.4	06			
Registry (DIS)	8 976	8 859	9 532	8 547	8 330	9 184		94	96 20			
French Antarctic Territory	5 043	5 427	5 756	1 811	1 769	1 644		33	29			
Netherlands Antilles	1 940	2 132	1 685	626	616	699	32	29	41			

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.

D. SHIPBUILDING AND THE SECOND-HAND MARKET

1. Newbuilding orders

In 2005, 1,569 newbuilding contracts were placed for the six major ship types, a moderate increase of 13.3 per cent compared with the 20.5 per cent increase of the previous year (see table 20). In the tanker sector, the positive trend of the previous year was reversed with 518 orders, as compared with 547 orders placed in 2004. The peak was reached in February with 72 orders, followed by 56 and 49 orders in March and June respectively. In 2005, newbuilding orders for dry bulk carriers increased to 264, about 7.5 per cent up over orders during the previous year (246 contracts).

Newbuilding orders for containerships were also up by almost 27 per cent; there were 491 contracts in 2005 as compared with 387 in 2004. These newbuilding contracts continued to reflect the recent trend towards post-Panamax containerships. In 2005, it was reported that 20 operating owners had ordered 150 containerships with a capacity of over 4,000 TEUs. Orders by non-operating owners totalled 24 containerships with a total capacity of 122,000 TEUs.

The newbuilding orders for general cargo ships increased by an impressive 74 per cent in 2005 to 221 contracts, compared with 127 units in 2004. Orders for passenger ferries decreased slightly to 75 contracts (90 the previous year).

2. Tonnage on order

World tonnage on order, by groups of countries of registry and by principal types of ship, is shown in table 21. World tonnage on order at the beginning of 2006 stood at 226.4 million dwt, representing a substantial increase of 81.6 per cent over the previous year. Tonnage on order by developed market-economy countries amounted to 58.9 million dwt, accounting for 26 per cent of the total world tonnage on order, as compared with 35.4 million dwt or 28 per cent at the beginning of 2005. Major open-registry countries had 121.8 million dwt or 53.7 per cent of world tonnage on order, as compared with 69.7 million dwt or 56 per cent at the beginning of the previous year. The share of Central and Eastern European countries in 2005 stood at 1.3 million dwt or 0.5 per cent of the world total on order. The tonnage on order of the socialist countries in

Asia had more than doubled in 2005 as compared with the previous year, ending the year with 9.9 million dwt or 4.3 per cent of the world total on order.

The tonnage on order of developing countries more than doubled over the previous year, reaching 34.5 million dwt or 15.2 per cent of the total world tonnage on order at the beginning of 2006. Tonnage on order by Asian developing countries has also more than doubled, reaching 30.4 million dwt at the beginning of 2006 and accounting for 87.8 per cent of the developing countries' total tonnage on order. African newbuilding orders reached 140 thousand dwt at the beginning of 2006, while those of developing countries in America reached 3,641 thousand million dwt.

In 2005, oil tanker orders increased by 57.2 per cent to 70.7 million dwt, accounting for 31.2 per cent of the world total on order. Developing countries had 13.7 million dwt on order, representing 19.3 per cent of the total tankers on order, with Asian developing countries representing 13.3 million dwt or 97 per cent of the developing countries' total. The tonnage of dry bulk carriers on order at the beginning of 2006 had doubled since 2005, reaching 66.6 million dwt and accounting for 29.4 per cent of the world total on order. For this type of ship, developed market-economy countries and major open-registry countries accounted for 16 and 67 per cent respectively, representing a combined share of 8.3 per cent. The volume of containerships on order in 2005 stood at 50.8 million dwt, representing 22.5 per cent of the world total on order. For containerships on order, developed market-economy countries accounted for 30.9 per cent, while major open-registry countries amounted to over 58.4 per cent. At the beginning of 2005, containership orders of developing countries more than doubled to 6.8 million dwt, or 13.3 per cent of the total containerships on order. Asian developing countries had 4.9 million dwt or 73.1 per cent of the developing countries' total on order.

3. Prices of newbuildings and second-hand tonnage

Table 22 indicates newbuilding prices for the main types of ship. In 2005, prices of newbuildings fluctuated significantly according to the size and type of ship and variations were of a lower magnitude as compared with 2004. Relatively moderate price increases were recorded for tankers, ranging from a low of 3.6 per cent to a high of 14.3 per cent. In 2005, prices did not reach the highs

Table 19

True nationality of major open-registry fleets as of 1 January 2006

Country or territory		Panama			Liberia		F	Bahamas			Malta		Cyprus		
of domicile	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%
Greece	541	23 698	11.2	242	16 400	17.6	223	11 873	22.9	489	24 521	66.4	339	16 169	53.3
Japan	1 932	97 542	46.2	98	5 373	5.8	52	2 149	4.1	2	55	0.1	17	320	1.1
Germany	29	3 5 1 6	1.7	537	22 300	24.0	18	949	1.8	60	1 641	4.4	228	6 060	20.0
China	396	13 844	6.6	52	3 227	3.5	8	224	0.4	15	238	0.6	10	277	0.9
United States	131	1 688	0.8	92	3 590	3.9	151	9 422	18.1	4	48	0.1	8	68	0.2
Norway	73	956	0.5	42	3 333	3.6	277	8 209	15.8	55	441	1.2	15	701	2.3
Hong Kong (China)	154	11 109	5.3	23	1 364	1.5	9	1 261	2.4	2	23	0.1	1	19	0.1
Republic of Korea	281	15 805	7.5	0	0	0.0	0	0	0.0	6	142	0.4	1	62	0.2
Taiwan Province of China	287	9 181	4.3	68	5 650	6.1	0	0	0.0	0	0	0.0	0	0	0.0
Singapore	68	1 717	0.8	33	3 747	4.0	9	331	0.6	0	0	0.0	1	30	0.1
United Kingdom	43	1 106	0.5	30	1 108	1.2	76	1 373	2.6	3	90	0.2	20	978	3.2
Denmark	32	569	0.3	5	165	0.2	63	801	1.5	5	151	0.4	2	47	0.2
Russian Federation	10	123	0.1	70	6064	6.5	7	45	0.1	58	792	2.1	62	1 367	4.5
Italy	15	183	0.1	18	1 142	1.2	11	389	0.7	25	574	1.6	1	2	0.0
India	17	495	0.2	2	218	0.2	0	0	0.0	0	0	0.0	1	31	0.1
Switzerland	219	8 052	3.8	10	280	0.3	8	413	0.8	26	500	1.4	6	98	0.3
Belgium	10	202	0.1	0	0	0.0	11	149	0.3	14	95	0.3	1	9	0.0
Saudi Arabia	3	93	0.0	24	6 5 6 2	7.1	16	2 795	5.4	0	0	0.0	0	0	0.0
Turkey	33	189	0.1	2	122	0.1	10	234	0.5	109	1 663	4.5	0	0	0.0
Iran (Islamic Republic of)	5	81	0.0	0	0	0.0	0	0	0.0	11	194	0.5	2	148	0.5
Malaysia	17	84	0.0	0	0	0.0	12	82	0.2	0	0	0.0	0	0	0.0
Netherlands	34	292	0.1	16	191	0.2	33	1 643	3.2	6	37	0.1	17	124	0.4
Canada	3	43	0.0	4	225	0.2	10	347	0.7	17	63	0.2	1	13	0.0
Sweden	8	72	0.0	10	402	0.4	13	644	1.2	3	21	0.1	2	9	0.0
Indonesia	51	659	0.3	1	79	0.1	4	109	0.2	0	0	0.0	0	0	0.0
Kuwait	2	108	0.1	1	42	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Philippines	15	296	0.1	0	0	0.0	1	28	0.1	0	0	0.0	0	0	0.0
France	12	304	0.1	2	104	0.1	35	999	1.9	6	59	0.2	0	0	0.0
Brazil	6	1 100	0.5	4	779	0.8	0	0	0.0	0	0	0.0	0	0	0.0
United Arab Emirates	63	1 009	0.5	9	894	1.0	13	965	1.9	4	120	0.3	5	395	1.3
Spain	43	338	0.2	0	0	0.0	12	938	1.8	1	4	0.0	6	262	0.9
Thailand	11 7	57	0.0	0 5	0	0.0	0	17	0.0	0	0	0.0	0	0	0.0
Israel	3	119 7	0.1	5 6	428 332	0.5	0 1	0	0.0	25 9	808	2.2	2	49 12	0.2
Croatia Australia	3	71	0.0	3	362	0.4	3	44 95	0.1	0	357	1.0	0	0	0.0
Australia Subtotal (35 countries)	3 4 557	194 708	92.2	1 409	302 84 483	90.8	1 086	46 528	89.6	955	32 637	88.3	751	27 250	89.9
Others	2262	16413	7.8	237	8 5 4 3	90.8	267	5 394	10.4	955 263	4305	88.3	240	3 066	10.1
	6 847		100.0	1646	93 026	100.0	1 353	51 922	10.4	1 218	36 942	100.0	240 991		100.0
Total	0.847	211 121	100.0	1 040	95 020	100.0	1 333	31 922	100.0	1 218	30 942	100.0	991	30 316	100.0

Table 19 (continued)

rt	000 dwt	No. of vessels	%	000	AT C	~				Bermuda	
020			70	000 dwt	No. of vessels	%	000 dwt	No. of vessels	%	000 dwt	No. of vessels
Greece Greece	115 928	2 318	21.1	96 546	1 955	14.2	3 797	119	1.0	88	2
940 Japan	119 940	2 384	23.2	106 296	2 128	3.2	857	27	0.0	0	0
Germany Germany	58 397	2 366	9.6	44 038	1 834	36.9	9 550	961	0.3	22	1
	35 656	1 130	4.3	19 668	590	7.0	1 858	109	0.0	0	0
United States	36 755	1 054	3.6	16 710	595	5.8	1 534	183	4.2	360	26
	31 738	933	3.1	14 062	519	1.4	364	52	0.7	58	5
Hong Kong (China)	25 870	371	3.3	15 093	203	0.3	73	5	14.5	1 244	9
Republic of Korea	16 977	355	3.5	16 009	288	0.0	0	0	0.0	0	0
Taiwan Province 0 618 of China	19 618	444	3.2	14 849	359	0.1	18	4	0.0	0	0
S 285 Singapore	8 285	287	1.3	5 928	117	0.4	103	6	0.0	0	0
United Kingdom	12 334	409	1.4	6 276	225	2.7	718	44	10.5	903	9
Denmark Denmark	10 328	428	0.5	2 327	143	2.2	594	36	0.0	0	0
Russian Federation	9 889	487	1.9	8 754	242	1.4	363	35	0.0	0	0
297 Italy	4 297	159	0.7	3 056	105	2.9	766	35	0.0	0	0
	1 264	40	0.2	869	27	0.5	125	7	0.0	0	0
968 Switzerland	10 968	346	2.2	9 920	297	2.2	577	28	0.0	0	0
Belgium	5 656	134	0.2	714	64	1.0	259	28	0.0	0	0
Saudi Arabia	10 387	74	2.1	9 450	43	0.0	0	0	0.0	0	0
•	3 497	365	0.5	2 318	180	0.4	110	26	0.0	0	0
Iran (Islamic											
936 Republic of)		23	0.1	428	20	0.0	5	2	0.0	0	0
*	4 180	76	0.1	256	30	0.3	90	1	0.0	0	0
	4 288	207	0.7	3 258	136	0.6	151	27	9.6	820	3
	4 007	140	0.4	1 660	64	1.1	281	9	8.0	688	20
	4 684	183	0.6	2 735	70	2.0	539	21	12.2	1 048	13
	2 408	120	0.2	847	56	0.0	0	0	0.0	0	0
	1 361	29 37	0.0	150	3	0.0	0	0	0.0	0	0
971 Philippines 2 655 France	2 655	126	0.1 0.4	631 1 738	32 78	1.2 1.0	307 265	16 22	0.0	0 7	1
	2 164	120	0.4	1 738	10	0.0	0	0	0.1	0	0
	3 942	140	0.4	3 433	98	0.0	50	4	0.0	0	0
	3 225	235	0.7	1 551	63	0.2	9	1	0.0	0	0
457 Thailand		40	0.0	74	11	0.0	0	0	0.0	0	0
	1 828	52	0.0	1 796	44	0.0	196	2	2.3	196	2
979 Croatia		37	0.4	882	33	0.7	130	12	0.0	0	0
	1 253	35	0.2	698	14	0.3	36	3	1.6	134	2
	577 122	15 576	90.5	414 899	10 676	90.1	23 725	1 825	64.9	5 568	93
	25 863	1 662	9.5	43 669	4 354	9.9	2 934	1 043	35.1	3 014	42
	602 985	17 238	100.0	458 568	15 058	100.0	26 659	2 868	100.0	8 582	135

Table 20

Newbuilding contracts placed for the main types of ship^a during 1996–2005

Year	Ta	Tankers Bulk carriers			nbined riers	General o	cargo ships	Contair	ner vessels	Passenge	r ferries	To	tal ^b	
	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt
1996	274	13 875	271	14 250	-	-	257	2 107	292	6978	144	155	1 238	37 365
1997	428	32 516	282	17 983	2	220	299	2701	166	3 618	96	149	1 273	57 187
1998	280	21 922	166	11 835	0	0	333	2 488	178	5 975	117	231	1 074	42 451
1999	206	16 822	346	23 934	-	-	162	1 323	170	7 183	116	348	1 000	49 610
2000	446	41 865	344	20 081	-	-	255	2 5 3 4	373	15 025	136	308	1 554	80 121
2001	550	34 260	165	9 496	-	-	142	1 222	180	6 5 6 4	101	80	1 138	51 622
2002	447	23 979	275	20 799	-	-	136	1 593	135	6 223	111	131	1 104	52 725
2003	456	-	193	-		-	91	-	325	-	94		1 159	-
2004	547	-	246	-		-	127	-	387	-	90	-	1 397	-
2005														
Jan	33	-	7	-	0	-	12	-	27	-	5	-	84	-
Feb	72	-	14	-	0	-	7	-	55	-	14	-	162	-
Mar	56	-	60	-	0	-	30	-	12	-	3	-	161	-
Apr	37	-	41	-	0	-	20	-	44	-	13	-	155	-
May	38	-	31	-	0	-	5	-	43	-	1	-	118	-
June	49	-	15		0	-	5	-	59	-	4	-	132	-
July	36	-	12	-	0	-	16	-	58	-	10	-	132	=
Aug	35	-	10	-	0	-	23	-	59	-	6	-	133	-
Sept	46	-	41	-	0	-	14	-	27	-	6	-	134	-
Oct	47	-	17	-	0	-	24	-	29	-	3	-	120	-
Nov	33	-	2	-	0	-	38	-	60	-	6	-	139	-
Dec	36	_	14		0	-	27	-	18		4	<u> </u>	99	
Total	518		264				221		491		75		1 569	

Source: Compiled by the UNCTAD secretariat. Figures up to 2002 are based on data from Institute of Shipping Economics and Logistics, Shipping Statistics and Market Review, Jan./Feb. 2004, table II-1.1.1.1 Figures for 2003 onwards are based on data published in Institute of Shipping Economics and Logistics, Shipping Statistics and Market Review. Those for 2005 correspond to the January/February 2006 issue, from monthly data provided by Baird Publications (Australia).

^a Ships of 300 grt and over.

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

Table 21

World tonnage on order as of 1 January 2006

(Thousands of dwt)

Country groups of registry	Total	Oil tankers	Bulk carriers	General cargo	Container ships	Other ships
World total	226 387	70 697	66 612	5 082	50 850	33 146
Developed market-economy countries	58 878	17 384	10 667	1 548	15 745	13 534
Major open-registry countries	121 759	34 958	44 645	1 533	25 852	14 771
Countries of Central and Eastern Europe	1 317	773	21	236	139	148
Socialist countries of Asia	9 920	3 847	2 987	224	2 313	549
Developing countries, total	34 513	13 735	8 292	1 541	6 801	4 144
of which:						
Africa	140	1	0	0	0	139
Americas	3 641	251	288	840	1 826	436
Asia	30 364	13 316	7 854	697	4 975	3 522
Europe	368	167	150	4	0	47
Oceania	0	0	0	0	0	0

Table 22

Representative newbuilding prices in selected years^a

(Millions of dollars)

Type and size of vessels	1985	1990	1995	2000	2003	2004	2005	Percentage change 2004/2005
30-50,000 dwt bulk carrier	11	24	25	20	22	30	28	-6.7
32-45,000 dwt tanker	18	29	34	29	30	38	43	13.2
70-74,000 dwt bulk carrier	14	32	29	23	25	35	35	0.0
80-105,000 dwt tanker	22	42	43	41	41	56	58	3.6
170,000 dwt bulk carrier	27	45	40	40	47	61	59	-3.3
250-280,000 dwt tanker	47	90	85	76	75	105	120	14.3
125-138,000 m ³ LNG	200	225	245	165	155	190	205	7.9
75,000 m ³ LPG	44	78	68	60	59	77	89	15.6
15,000 dwt general cargo	12	24	21	19	16	20	18	-10.0
2,500 TEU full containership	26	52	50	35	38	42	42	0.0

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

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

of the previous year but remained well above the historical average. Prices for bulk carriers decreased, with pronounced losses being recorded by Handymax and Cape-size ships. Newbuilding prices for Panamax dry bulk carriers and 2,500-TEU cellular containerships remained stable and registered no variation as compared with the previous year. Price increases of 15.6 and 7.9 per cent were observed for LPG and LNG gas carriers. In general, the downward trend of shipbuilding prices during the year reflected decreased ship ordering in the wake of more modest forecasts for international trade growth.

Consistent with the trend characterizing prices for newbuildings, variations in second-hand prices indicated in table 23 for tankers and bulk carriers depart from the previous year in that some price increases were less pronounced and others even contracted. Handymax and Panamax dry bulk carriers recorded losses of 6.7 and 17 per cent respectively, while Cape-size bulk carriers recorded a 20 per cent gain.

Overall, sale and purchase activities continued in both newbuilding and second-hand markets in 2005 despite the high prices of newbuildings and second-hand vessels. This is probably due to prevailing high freight rates and the positive earnings environment. Second-hand transactions for tanker tonnage amounted to 27.3 million dwt in 2005—almost 40 per cent down for the corresponding figure for 2004. For dry bulk carriers, second-hand transactions reached 23.2 million dwt, albeit 15 per cent lower than tha corresponding figure for 2004.

Table 23

Second-hand prices for five-year-old ships, 2000–2005

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

Vessel	2000	2001	2002	2003	2004	2005	Percentage change 2004/2005
40,000 dwt tankers	27	26	24	28	40	42.5	6.3
80-95,000 dwt tankers ^a	39	33	30	38	57	60.7	6.5
130-150,000 dwt tankers ^a	50	43	42	48	74	73	-1.3
250-280,000 dwt tankers ^a	71	60	53	75	107	116	8.4
45,000 dwt dry bulk carrier	15	12	15	21	30	28	-6.7
70,000 dwt dry bulk carrier	16	14	17	28	41	34	-17.0
150,000 dwt dry bulk carrier	25	22	26	41	57	68.4	20.0

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Fearnleys, Review 2005.

^a Prices correspond to the larger vessels in the range.