# UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT Geneva

# REVIEW OF MARITIME TRANSPORT 2005

**Chapter 2** 



### **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 vessels, tonnage on order, newbuilding prices and markets for second-hand tonnage.

### A. STRUCTURE OF THE WORLD FLEET

#### 1. Principal types of vessel

Comparative time-series data on the world fleet for 2003, 2004 and 2005 are provided in figure 4 and table 6. The world merchant fleet stood at 895.8 million deadweight tons (dwt) on 1 January 2005. This represents a 4.5 per cent increase over the start of 2004, at which time the world fleet had already expanded by 1.5 per cent over the tonnage in 2003. The latest increase is higher than the increases in the previous two years. Newbuilding deliveries represented 49.4 million dwt, while 10.6 million dwt were broken up and lost. The result was a net gain of 38.8 million dwt in 2004.

The tonnage of oil tankers in 2004 increased by a healthy 6.1 per cent and that of bulk carriers by 4.2 per cent. These two types of ships represented 73.3 per cent of total tonnage, a slight increase from 72.9 per cent in 2003. The fleet of general cargo ships decreased again in 2004 and at a faster rate than in the previous year, namely by 2.9 per cent; this category now represents 10.3 per cent of the total world fleet. In terms of deadweight tonnage, the fleet of container ships increased by 7.6 million dwt, or 8.4 per cent, and now represents 10.9 per cent of the total world fleet. This relatively high rate of increase reflects the growing proportion of manufactured goods being traded, generally in containers. The deadweight tonnage of liquid gas carriers (mainly LNG and LPG carriers) and ferries/passenger ships has been increasing steadily.

#### 2. The world container ship fleet

The world fleet of fully cellular container ships continued to expand substantially in 2004 in terms of both number of ships and their TEU capacity; by the beginning of 2005 there were 3,206 ships with a total capacity of 7,165,352 TEUs, an increase of 5 per cent in the number of ships and 11.3 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 2,108 TEUs in 2004 to 2,235 TEUs in 2005, reflecting the building of larger vessels to achieve economies of scale. As of the end of 2004, the well-defined trend towards large container vessels was continuing unabated. Vessels of over-4,000-TEU capacity account for 74 per cent of the order book; 165 vessels on order were larger than 7,500 TEU capacity – more than three times the current number of vessels above this size.

### 3. Age distribution of the world merchant fleet

Table 8 provides data on the average age distribution of the world merchant fleet by types of vessels and by groups of countries and territories. The average age of the total world fleet in 2004 dropped marginally to 12.3 years. By type of vessel, the average age of tankers decreased by about half a year to 10.3 years in 2004. The share of tanker tonnage 15 years and older decreased to 27.4 per cent in 2004 from 29.9 per cent in 2003, after a modest level of scrapping activities, which in 2004 reached 7.8 million dwt (compared with 18.4 million dwt in 2003). The average age of the dry

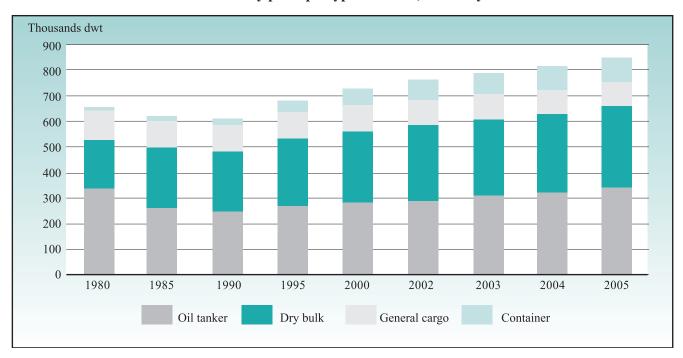


Figure 4
World fleet by principal types of vessel, selected years

bulk carrier fleet increased marginally to 13 years in 2004. Container ships continued to be the youngest fleet in 2004, with an average age of 9.4 years, slightly above the 9.2 years average age of the previous year. This trend is reflected in the share of tonnage between 0 and 4 years of age -31.9 per cent, the highest among all categories of vessels.

By country grouping, the fleet age of developed marketeconomy countries in 2004 was the lowest, at 10.5 years (10.9 years in 2003). 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 by half a year to 8.5 years in 2004, as compared with 9 years in 2003. This reflects the European Union's preference for new tonnage, which is motivated by environmental concerns. The major open-registry countries had the second lowest average age of all ships (11.8 years in 2004 versus 11.9 years in 2003), even though the tendency to register newbuildings under open-registry flags abated. The average age of all ships registered in developing countries (excluding major open-registry countries) stood at 13.1 years for 2004, the same as the previous year. For this group, the average age of general cargo vessels decreased to 18.6 years, while that of container ships marginally increased to 9.3 years. The average age of tonnage registered in the socialist countries of Asia decreased by almost a year to 16.8 years in 2004. The countries of Central and Eastern Europe continued to have the oldest fleet (20.5 years in 2004 versus 20.7 years in 2003), with vessels built more than 15 years ago representing more than four fifths of the total fleet and bulk carriers constituting the oldest class of ships at 22.9 years.

#### 4. Delivery of newbuildings

Newbuilding activities attained the highest level ever recorded in terms of deadweight tons, with deliveries totalling 49.4 million dwt in 2004 (see table 9), a marginal increase over the already record deliveries in 2003 (49.2 million dwt). The total number of vessels delivered increased 7 per cent, to 1,827 units from 1,707 units in 2003. This high level of delivery was sustained primarily thanks to tanker deliveries of 27.6 million dwt, down 1.8 million dwt from record deliveries in 2003. The number of tankers delivered reached 301 units in 2004 from 281 units in 2003. The average size was 91,700 dwt. Conversely, deliveries of bulk carriers were up by 2.7 million dwt, about 24.1 per cent, from the 2003 level. Another feature was the larger share of Panamax bulk carriers delivered in 2004. Newbuildings for other types of vessels, including general cargo ships and container ships, decreased less in number than in deadweight tonnage – to 1,262 units and 7.9 million dwt in 2004.

Table 6

World fleet size by principal types of vessel, 2003–2005 a

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

Principal types	2003	2004	2005	Percentage change 2004/2005
Oil tankers	304 396	316 759	336 156	6.1
	36.1	37.0	37.5	
Bulk carriers	300 131	307 661	320 584	4.2
	35.6	35.9	35.8	
Ore/bulk/oil	12 612	12 110	9 695	-19.9
	1.5	1.4	1.1	
Ore/bulk	287 519	295 551	310 889	5.2
	34.1	34.5	34.7	
General cargo ships	97 185	94 768	92 048	-2.9
	11.5	11.1	10.3	
Container ships	82 793	90 462	98 064	8.4
	9.8	10.6	10.9	
Other types of ships	59 730	47 324	48 991	3.5
	7.1	5.5	5.5	
Liquefied gas carriers	19 469	20 947	22 546	7.6
	2.3	2.4	2.5	
Chemical tankers	8 027	8 004	8 290	3.6
	1.0	0.9	0.9	
Miscellaneous tankers	906	947	1 001	5.7
	0.1	0.1	0.1	
Ferries and passenger ships	5 495	5 561	5 589	0.5
	0.7	0.6	0.6	
Other	25 833	11 865	11 565	-2.5
	3.1	1.4	1.3	
World total	844 235	856 974	895 843	4.5
	100.0	100.0	100.0	

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

Table 7 Distribution of the world fleet and TEU capacity of fully cellular containerships, by country groups, in 2003, 2004 and 2005  $^{\rm a}$ 

(beginning-of-year figures)

Flags of registration by groups of countries	Nun	nber of s	hips	TEU cap	pacity and pero shares	centage
	2003	2004	2005	2003	2004	2005
World total	2 890	3 054	3 206	5 896 154	6 437 218	7 165 352
	100.0	100.0	100.0	100.0	100.0	100.0
<b>Developed market-economy</b>	798	824	897	2 019 918	2 147 550	2 520 415
countries	27.6	27.0	28.0	34.3	33.4	35.2
Major open-registry countries	1 166	1 224	1 255	2 591 977	2 922 805	3 112 131
	40.3	40.1	39.1	44.0	45.4	43.4
Total developed market-economy	1 964	2 048	2 152	4 611 895	5 070 355	5 632 546
and major open-registry countries	68.0	67.1	67.1	78.2	78.8	78.6
<b>Countries in Central and Eastern</b>	29	35	34	23 486	26 813	26 014
Europe (including former USSR)	1.0	1.1	1.1	0.4	0.4	0.4
Socialist countries of Asia	104	136	117	114 112	153 727	182 607
	3.6	4.5	3.6	1.9	2.4	2.5
<b>Developing countries</b>	720	779	848	1 035 578	1 115 019	1 251 358
	24.9	25.5	26.5	17.6	17.3	17.5
of which:						
Africa	9	9	11	8 237	9 131	10 469
	0.3	0.3	0.3	0.1	0.1	0.1
America	249	282	314	301 618	361 472	399 964
	8.6	9.2	9.8	5.1	5.6	5.6
Asia	462	488	523	725 723	744 416	840 925
	16.0	16.0	16.3	12.3	11.6	11.7
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	73	56	55	111 083	71 304	72 827
	2.5	1.8	1.7	1.9	1.1	1.0

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

Table 8

Age distribution of the world merchant fleet, by types of vessel, as of 1 January 2005

(percentage of total dwt)

Country grouping	Types of vessel	0-4 years	5-9 years	10-14 years	15-19 years	20 year and over	Average age (years) 2004 <sup>a</sup>	Average age (years) 2003 a
World total	All ships	23.0	21.9	16.5	11.3	27.3	12.3	12.5
	Tankers	29.0	22.8	20.9	11.7	15.7	10.3	10.9
	Bulk carriers	20.2	22.0	14.6	12.4	30.8	13.0	12.9
	General cargo	7.3	15.0	10.7	10.9	56.1	17.5	17.4
	Container ships	31.9	29.3	16.3	8.8	13.7	9.4	9.2
	All others	16.0	15.7	11.9	8.1	48.4	15.6	15.8
Developed	All ships	28.4	25.7	17.0	10.8	18.1	10.5	10.9
market-	Tankers	35.7	27.2	18.6	10.2	8.3	8.5	9.0
economy	Bulk carriers	22.3	21.5	17.4	13.5	25.3	12.3	12.8
countries	General cargo	14.8	23.1	14.9	11.9	35.3	14.0	13.9
	Container ships	31.2	33.8	14.8	8.4	11.7	9.0	8.8
3.5.1	All others	17.6	20.0	13.5	9.5	39.3	14.2	14.5
Major open-	All ships	24.3	22.9	17.0	10.6	25.2	11.8	11.9
registry	Tankers	28.3	22.9	23.3	11.2	14.3	10.2	10.9
countries	Bulk carriers	22.0 7.8	23.7 20.0	13.6 11.4	10.8 11.9	29.9 48.9	12.6 16.4	12.3 16.0
	General cargo Container ships	35.8	25.0	11.4 16.4	10.0	48.9 12.9	9.2	9.0
	All others	17.1	16.6	11.0	4.3	50.8	15.5	15.8
Subtotal	All ships	25.9	24.0	17.0	10.7	22.6	11.3	11.6
Subtotal	Tankers	31.5	24.7	21.3	10.7	11.7	9.5	10.1
	Bulk carriers	22.1	23.2	14.6	11.5	28.7	12.5	12.4
	General cargo	10.7	21.2	12.8	11.9	43.4	15.5	15.2
	Container ships	33.8	28.9	15.7	9.3	12.4	9.1	8.9
	All others	17.4	18.4	12.3	7.0	44.9	14.9	15.1
Countries	All ships	3.4	3.3	5.2	16.5	71.6	20.5	20.7
of Central	Tankers	14.0	5.4	2.2	15.7	62.7	18.3	20.7
and Eastern	Bulk carriers	0.0	0.0	0.2	8.2	91.6	22.9	22.3
Europe	General cargo	0.9	2.7	7.5	18.0	70.8	20.8	20.6
	Container ships	0.0	16.8	12.4	19.1	51.7	18.1	17.2
	All others	1.6	4.0	8.5	23.9	62.0	20.0	20.0
Socialist	All ships	15.8	5.9	14.0	10.6	53.7	16.8	17.6
countries	Tankers	27.9	6.4	19.7	12.0	33.9	13.4	15.4
of Asia	Bulk carriers	9.3 2.9	6.1 4.8	11.9	10.7	62.0 78.4	18.4	18.2 20.8
	General cargo Container ships	32.1	4.8 5.7	5.9 22.7	8.0 11.8	78.4 27.6	20.9 12.3	20.8 12.9
	All others	27.9	5.7 6.4	19.7	12.0	33.9	13.4	15.4
Dovolonina	All ships	19.6	20.8	16.7	12.9	30.0	13.4	13.4
Developing countries	Tankers	23.9	22.0	20.1	14.0	20.0	11.5	11.4
(excluding	Bulk carriers	18.0	20.9	16.6	15.5	29.0	13.3	13.1
open-	General cargo	6.4	11.4	9.3	8.9	64.0	18.6	18.8
registry	Container ships	27.7	36.2	16.8	5.9	13.4	9.3	8.8
countries)	All others	14.4	10.9	10.2	8.4	56.1	16.9	17.0

<sup>&</sup>lt;sup>a</sup> 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.

Year	Oil ta	nkers <sup>a</sup>		bined iers <sup>a</sup>	•	bulk iers <sup>a</sup>	Oth	ers <sup>b</sup>	Total		
	No. of vessels	Million dwt	No. of vessels	Million dwt	No. of vessels	Million dwt	No. of vessels	Million dwt	No. of vessels	Million dwt	
1980	99	7.0	4	0.4	135	4.7	548	6.0	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	

Table 9

Deliveries of newbuildings, selected years

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

### 5. Demolition of ships

Trends in the tonnage, types and average age of broken-up vessels are shown in tables 10, 11 and 12. In 2004, total tonnage sold for demolition decreased by more than half from the tonnage of the previous year to 10.6 million dwt, equivalent to 1.2 per cent of worldwide total deadweight tons, as compared with 3 per cent in 2003. Break-up of tankers accounted for the largest share of total demolition. Sales of tankers for break-up reached only 7.8 million dwt, slightly above the 1998 level and reflecting the high freight rates, which deter demolition. There were only four ULCC/VLCC demolition sales in 2004, while 28 units were sold in 2003. Sales of Suezmaxes stood at 11 units in 2004, while those of Aframaxes decreased substantially from 35 units in 2003 to 25 units in 2004. In the smaller category of crude oil tankers, demolition also decreased: 80 ships were sold for scrap in 2003, while 54 units were sold in 2004. The average age of tankers sold for demolition was up slightly to 29.5 years in 2004. The tonnage of dry bulk carriers sold for scrap decreased to less than one fifth, or 0.6 million dwt, in 2004, while that of combined carriers stood at 0.5 million dwt – the same as the previous year.

There was a drastic reduction in the scrapping of all sizes of bulk carriers. No vessels over 60,000 dwt and only 21 units of less than 60,000 dwt were sold for demolition in 2004. The average age of all dry bulk carriers broken up was 27.3 years in 2004, almost a year more than the previous year. Other ship types also had an extended trading life in 2004, with container ships being sold to breakers at an average age of 30.5 years and general cargo ships at an average age of 32.9 years. Volatility prevailed in demolition prices. The year started at \$300 per light displacement ton (ldt) – a historically high level – to climb still higher to \$400 per ldt. By mid-year, prices collapsed to the initial level, but they then proceeded to increase steadily to reach about \$440 by the end of the year.

There were also changes in the market shares of countries specialized in demolition. The star performer for the year was Bangladesh with a market share of 57 per cent, well above the modest 18 per cent achieved the year before. India came second with a 20 per cent market share, almost half the level of the previous year. China's share was 19 per cent, while Pakistan and Turkey recorded most of the remaining share.

<sup>&</sup>lt;sup>a</sup> Vessels over 10,000 dwt.

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

<sup>&</sup>lt;sup>c</sup> Provisional.

Table 10 **Broken-up tonnage, 1990 and 1999–2004** 

Broken-up tonnage	1990	1999	2000	2001	2002	2003	2004
Tonnage sold for breaking (million dwt)	16.9	30.7	22.2	27.8	30.5	25.6	11.0
Broken-up tonnage as a percentage of the total world fleet	2.4	3.9	2.7	3.4	3.6	3.0	1.2

*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, 2000–2004

(millions of dwt and percentage shares)

Years			Million d	lwt					Percentage share  Tankers Combined Bulk carriers carriers Others Total  60.9 4.3 20.8 14.0 100.0				
	Tankers	Combined carriers	Bulk carriers	Others	Total	World fleet	Total	Tankers			Others	Total	
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	

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

Table 12  $\begin{tabular}{ll} Average age of broken-up ships, by type, from 2000 to 2004 a \\ (years) \end{tabular}$ 

Year	Tankers	Dry bulk carriers	Container ships	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	2 8.2
2003	29.3	26.5	25.5	29.3
2004	29.5	27.3	30.5	32.9

*Source:* Compiled by the UNCTAD secretariat on the basis of data in Institute of Shipping Economics and Logistics (2004), *Shipping Statistics and Market Review, Jan./Feb.*, table I-1.3.2.

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

Environmental concerns gained ground in October 2004 when the Marine Environment Protection Committee of the International Maritime Organization (IMO) agreed that some parts of the Guidelines for Ship Recycling might be given mandatory effect. The Guidelines, which were adopted in 2003, were only recommendations to countries and intergovernmental bodies and included the "green passport", an inventory of all potentially hazardous materials in a ship.

### B. OWNERSHIP OF THE WORLD FLEET

### 1. Distribution of world tonnage by country groups

The total world fleet continued to expand in 2004, increasing by 41.5 per cent to 895.8 million dwt (see figure 5 and table 13). The tonnage of developed market-economy countries grew slightly faster than that of the total world fleet, at a rate of 4.9 per cent (from 11.3 million dwt to 241.7 million dwt). This could reflect the steps taken in some EU countries to apply tonnage taxes instead of standard tax rules to vessels registered

in the country, as well as the guidelines for state aid approved by the European Union in October 2003. The tonnage of major open-registry countries increased marginally in 2004, by 4.5 million dwt to 404 million dwt. Approximately two thirds of these beneficially owned fleets are owned by developed market-economy countries and the rest by developing countries. The share of the world fleet registered in developing countries has continued to increase, rising by 20.9 million dwt (11.5 per cent) in 2004 to 202.3 million dwt. This increase resulted from investments made by shipowners in Asian developing countries, whose fleets expanded by 19.9 million dwt (14.6 per cent) to 155.9 million dwt, accounting for 77 per cent of the developing countries' total fleet. The fleets of developing countries of Africa decreased marginally to 5.6 million dwt, while modest gains were recorded by the fleets of developing countries in America, Europe and Oceania, to 36.7, 1.5 and 2.6 million dwt respectively. The fleets of the socialist countries in Asia and the countries of Central and Eastern Europe evolved in the opposite direction during 2004, the former expanding by 3.5 million dwt and the latter contracting by 1.2 million dwt.

Figure 5
World tonnage by country groups, as of 1 January 2005

(percentage distribution of dwt)

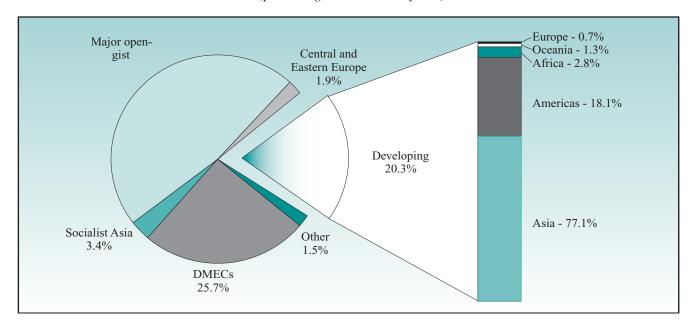


Table 13

Distribution of world tonnage (dwt) by groups of countries of registration, 1980, 1990, 2003, 2004 and 2005<sup>a</sup>

(beginning-of-year figures)

Flag of registration by group	Ton	nage and perc	entage shares <sup>b</sup>	in millions of	dwt
of countries —	1980°	1990 <sup>d</sup>	2003	2004	2005
World total	682.8	658.4	844.2	857.0	895.8
	100.0	100.0	100.0	100.0	100.0
<b>Developed market-economy</b>	350.1	219.0	217.1	230.4	241.7
countries	51.3	33.3	25.7	26.9	27.0
Major open-registry countries	212.6	224.6	398.5	399.5	404.0
wajor open-registry countries	31.1	34.1	47.2	46.6	45.1
<b>Countries of Central and Eastern</b>	37.8	44.3	15.9	15.7	14.5
Europe (including former USSR)	5.5	6.7	1.9	1.8	1.6
Socialist countries of Asia	10.9	22.1	28.3	29.9	33.4
	1.6	3.4	3.4	3.5	3.7
Developing countries	68.4	139.7	171.3	181.4	202.3
Developing countries	10.0	21.2	20.3	21.2	22.6
of which:					
Africa	7.2	7.3	5.3	5.7	5.6
Americas	21.8	25.5	35.6	36.0	36.7
Asia	39.1	89.5	126.9	136.0	155.9
Europe	0.2	13.8	1.3	1.2	1.5
Oceania	0.1	3.6	2.0	2.4	2.6
Other, unallocated	3.0	8.7	13.1	0.0	0.0
	0.4	1.3	1.6	0.0	0.0

<sup>&</sup>lt;sup>a</sup> Excludes the US Reserve Fleet and the US and Canadian Great Lakes fleets, which in 2004 amounted respectively to 4.1, 1.8 and 1.5 million dwt.

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

<sup>&</sup>lt;sup>c</sup> Mid-year figure.

<sup>&</sup>lt;sup>d</sup> End-of-year figure.

### 2. Distribution of world tonnage by types of vessel and by country groups

Table 14 provides more detailed data on fleet distribution by types of vessel and country groups for 1970, 1980, 1990, 2000, 2003 and 2004. The share of oil tankers in the total world fleet increased by 0.5 per cent in 2004 compared with 2003. This reinforced the trend of the previous year and reflected the high level of tanker deliveries during 2004. There was a 0.1 per cent decrease in bulkers' share of the total world fleet, which reached 35.8 per cent. The share of general cargo vessels in the world fleet continued to decrease, falling to 10.3 per cent, while that of container vessels continued its upward trend to 10.9 per cent. The share of other types of vessels stood at 5.5 per cent. In the oil tanker sector, the share of developed market-economy countries in 2005 was 32.2 per cent, the same as the previous year. Conversely, the open-registry countries' share decreased to 43.2 per cent from the previous year's 45.7 per cent. This reduction in market share reflected a weakening of the trend for owners to register tanker tonnage under major open registries. The share of developing countries also increased in 2004, to 21.8 per cent, maintaining the upward trend of the previous year. The share of Asian developing countries increased by 2.7 per cent in 2004 to 18.5 per cent of the world tanker fleet, while that of the developing countries of America decreased to 2.6 per cent.

In the dry bulk carrier sector, the tonnage share of developed market-economy countries in the total world fleet decreased marginally by 0.1 per cent in 2004 to 18.9 per cent, considerably less than its share in 1980 (52.7 per cent). Major open-registry countries reduced their share to 52.9 per cent in 2004, as compared with 54.1 per cent in 2003 (31.7 per cent in 1980). The developing countries' share increased by 1.1 per cent to 22.9 per cent. The shares of countries in Central and Eastern Europe and socialist countries in Asia changed in opposite directions, with the share of the former reduced to 0.9 per cent and that of the latter expanded to 4.3 per cent of the world fleet.

In the sector of general cargo ships, the fleet developments for developed market-economy countries and open-registry countries mirrored those in the dry bulk carrier sector. Developed market-economy countries decreased their share to 22.2 per cent of the world fleet, while open-registry countries recorded a drop to 32.4 per cent. Developing countries actually increased their share by 0.9 per cent to 29.6 per cent, with increases recorded

in America and Asian countries. General cargo ships continued to be the largest of the five principal types of vessel for developing countries.

Developed market-economy countries increased their share of container ship deadweight tonnage in 2004 by 1 per cent to 34.6 per cent. The major openregistry countries' share decreased by 1.2 per cent, reaching 43.9 per cent, approximately two thirds of which represented container ships beneficially owned by owners in developed market-economy countries. Thus developed market-economy countries own about 60 per cent of the fleet. The share of developing countries increased slightly to 18.0 per cent, with the share of Asian developing countries increasing to 12.4 per cent, while developing countries in America increased their share to 5.5 per cent and those in Africa maintained their share at 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 2004 by 6.2 million dwt to 108.4 million dwt and increased its share of the group's total fleet to 44.9 per cent. The share of dry bulk carriers decreased to 25.1 per cent despite an increase of 2.2 million dwt. General cargo ships' and container ships' share of their fleet registered opposite movements, down to 8.5 per cent for the former and up to 14 per cent for the latter, as compared with 9.3 per cent and 13.2 per cent in 2003. Major open-registry countries increased their total fleets by 4.5 million dwt. The greatest proportion of their fleets was in the oil tanker and dry bulk carrier sectors, which together accounted for 77.9 per cent of their fleet at the beginning of 2005. The proportion of oil tankers continued to decrease in 2004 by 0.5 million dwt and reached 145.1 million dwt, or 35.9 per cent of the group's total fleet, while the share of dry bulk carriers increased in by 3.1 million dwt to 42 per cent as compared with 41.7 per cent the previous year. The share of general cargo ships decreased in 2004 by 2.1 million dwt, accounting for 7.4 per cent of the group's total fleet, down from 8 per cent in 2003. These countries' container ship fleet expanded in 2004 by 2.2 million dwt to 10.7 per cent of their total fleet (up from 10.2 per cent in 2003).

In developing countries, tonnage distribution was characterized by a comparatively high proportion of oil tankers and dry bulk carriers, which represented

	Year	To	tal dwt	Oil tankers	Bulk carriers <sup>c</sup>	General cargo	Container ships	Other ships
		Million dwt	Percentage of world total	I	Percentage	share by	vessel 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
	2003	857.0	100.0	37.0	35.9	11.1	10.6	5.5
	2004	895.8	100.0	37.5	35.8	10.3	10.9	5.5
Developed	1970	211.9	65.0	63.9	69.2	65.6	99.0	61.3
market-	1980	350.1	50.3	52.5	52.7	43.4	74.3	50.4
economy	1990	219.0	33.3	37.3	29.5	23.1	46.5	45.2
countries	2000	203.4	25.2	30.0	16.9	19.6	34.4	37.6
	2003	230.4	26.9	32.2	19.0	22.7	33.6	38.0
	2004	241.7	27.0	32.2	18.9	22.2	34.6	37.4
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
	2003	399.5	46.6	45.7	54.1	33.6	45.1	33.1
	2004	404.0	45.1	43.2	52.9	32.4	43.9	33.4
~	1970	20.5	6.2	4.6	2.1	12.0	-	28.8
Central and Eastern Europe	1980	37.8	5.5	2.8	4.2	12.6	2.9	19.2
Lustern Lurope	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
	2003	15.7	1.8	1.0	1.0	6.5	0.5	6.0
	2004	14.5	1.6	0.9	0.9	6.2	0.4	4.7
Socialist	1970	1.2	0.4	0.1	-	1.1	-	0.3
countries of	1980	10.9	1.6	0.6	1.6	4.7	0.1	1.3
Asia	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
	2003	29.9	3.5	1.7	4.1	8.8	2.9	2.0
	2004	33.5	3.7	2.0	4.3	9.6	3.1	2.4

Table 14 (continued)

	Year	To	tal dwt	Oil tankers	Bulk s carriers <sup>c</sup>	General cargo	Container ships	Other ships
		Million dwt	Percentage of world total		Percentage :	share by	vessel type <sup>d</sup>	l
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	17.3
	2003	181.4	21.2	19.4	21.8	28.3	17.9	20.9
	2004	202.3	22.6	21.8	22.9	29.6	18.0	22.1
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
	2003	5.7	0.7	0.6	0.4	1.4	0.1	2.2
	2004	5.6	0.6	0.5	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
	2003	36.0	4.2	3.0	3.2	9.6	5.4	5.8
	2004	36.7	4.1	2.6	3.2	10.5	5.5	5.6
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
	2003	136.0	15.9	15.8	17.4	16.6	12.3	11.9
	2004	155.9	17.4	18.5	18.6	17.0	12.4	12.9
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
	2003	1.2	0.1	0.0	0.3	0.2	0.0	0.1
	2004	1.5	0.2	0.1	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
	2003	2.4	0.3	0.0	0.4	0.6	0.0	0.9
	2004	2.6	0.3	0.0	0.4	0.6	0.0	1.2

	Year	Tot	tal dwt	Oil tankers	Bulk carriers <sup>c</sup>	General cargo	Container ships	Other ships
		Million dwt	Percentage of world total	I	Percentage s	share by v	vessel type <sup>d</sup>	
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
	2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 14 (continued)

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

Table 15

Structure of the merchant fleets of the main country groups as of 1 January 2005 a (millions of dwt and percentage shares)

	World	fleet	Develo mark econo count	ket- omy	Open-re count		Develo count		Centra Easte Euro	ern	Socialist countries of Asia	
	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%
Total fleet	895.8	100.0	241.7	100.0	404.0	100.0	202.3	100.0	14.5	100.0	33.4	100.0
Oil tankers	336.2	37.5	108.4	44.9	145.1	35.9	73.1	36.2	2.9	20.3	6.6	19.6
<b>Bulk carriers</b>	320.6	35.8	60.6	25.1	169.7	42.0	73.4	36.3	3.0	21.0	13.9	41.6
General cargo ships	92.0	10.3	20.4	8.5	29.8	7.4	27.2	13.5	5.7	39.8	8.8	26.3
<b>Container ships</b>	98.1	10.9	34.0	14.0	43.0	10.7	17.6	8.7	0.4	2.9	3.0	9.0
Other ships	49.0	5.5	18.3	7.6	16.4	4.1	10.8	5.3	2.3	16.1	1.2	3.5

<sup>&</sup>lt;sup>a</sup> Excludes the US Reserve Fleet and the US and Canadian Great Lakes fleets.

<sup>&</sup>lt;sup>b</sup> Data through 1990 are as of 1 July and from 1991 onwards as of 31 December.

<sup>&</sup>lt;sup>c</sup> Ore and bulk carriers, including combined ore/oil and ore/bulk/oil carriers.

<sup>&</sup>lt;sup>d</sup> Percentages for 1970 were calculated on the basis of grt.

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

36.2 per cent and 36.3 per cent respectively in 2004. In absolute terms, these countries' 2004 tonnage in oil tankers and dry bulk carriers was 73.1 million dwt and 73.4 million dwt as compared with 108.4 million dwt and 60.6 million dwt for developed market-economy countries. The share of general cargo ships in this group increased in 2004 to 27.2 million dwt compared with 26.9 million dwt in 2003, while container ships increased in tonnage by 1.4 million dwt and in percentage terms to 8.7 per cent in 2004 from 8.9 per cent the previous year. In the countries of Central and Eastern Europe, general cargo ships were relatively dominant, accounting for 39.8 per cent in 2004, as compared with 39.5 per cent in 2003. On the other hand, container ships have remained unchanged at 0.4 million dwt, or around 3 per cent of the total, since the early 1990s. 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 vessel increased in 2004 to 13.9 million dwt and 8.8 million dwt respectively. However, their shares of the total decreased marginally to 41.6 per cent (from 42 per cent in 2003) for dry bulk carriers and 26.3 per cent (from 27.9 per cent in 2003) for general cargo ships. The absolute tonnage of container ships increased in 2004 to 3 million dwt, or 9 per cent (compared with 8.9 per cent in 2003).

#### C. REGISTRY OF VESSELS

### 1. The 35 most important maritime countries and territories

Rankings in terms of deadweight for the 35 most important maritime countries and territories appear in table 16. In 2004, these 35 countries and territories controlled 95 per cent of the world merchant fleet (2.5 per cent more than in the previous year). Greece and Japan were still at the top of the list. Monaco, which had been thirty-second in 2003, was replaced in 2004 by a new entrant, the United Arab Emirates, which occupied thirty-fourth place. There were several other countries moved in the rankings: France, Switzerland and Indonesia moved up by four places, the United Kingdom, Thailand and Ukraine by two places, and Germany, Belgium, China, the United States and Denmark by one place. Other countries moved down by one place (Russian Federation, the Islamic Republic of Iran, Malaysia, Turkey, Canada, the Netherlands, Saudi Arabia, Kuwait, Spain and Cyprus), two places (Singapore and Australia) or three places (Norway, Sweden and the Philippines).

Among these most important maritime countries and territories, registration under a foreign flag continued in 2004. The total tonnage registered under foreign flags in 2004 increased to 523.3 million dwt, representing 65.6 per cent of the 35 countries' total fleet, as compared with 489.3 million dwt or 64.6 per cent in 2003. For developing countries and territories, the trend towards registering their tonnage under foreign flags is a recent one. In 2004, the 13 developing countries and territories listed in the table - including Hong Kong (China) but excluding Taiwan Province of China - had 47 per cent of their total tonnage registered under foreign flags. In spite of the continuous trend towards flagging out among developing countries, there are significant differences among the countries concerned. The foreign registries of Saudi Arabia and Hong Kong (China) amounted to 92.1 per cent and 57.9 per cent respectively, while the Islamic Republic of Iran and the Philippines made significantly less use of foreign flag facilities, which accounted for only 4.9 and 21.1 per cent respectively of their fleets. For developed market-economy countries, the share of foreign-registered tonnage increased to 72.2 per cent in 2004. In some countries, however, the opposite trend could be at work. Belgium raised total tonnage to 6.9 million dwt at 1 January 2005 (6.4 million dwt the previous year), even as its foreign flag fleet dropped from 81.3 to 45.5 per cent.

### 2. Open registries

The share of the world merchant fleet in major open registries increased by only 1.9 per cent in 2004 after a modest increase of 0.5 per cent the previous year. This may reflect the increased competitiveness of these registries given the attractive fiscal regimes for shipowners in some developed market-economy countries. The tonnage distribution of the six major open-registry countries by principal types of vessel is shown in table 17, together with the corresponding totals for six minor open-registry countries. The total tonnage registered in 2004 in the six major registries increased by less than 2 per cent to 364.8 million dwt from 357.8 million dwt the previous year, when the tonnage increased by less than 1 per cent. Panama continued to head the list in 2004 with an expansion of 9.2 million dwt. This registry started a modernization process to counter shortcomings that had surfaced during the previous few years. A tender was issued in May 2004 to review seafarers' certificates and the accuracy of identification of the 250,000 new members, in line with new ISPS Code specifications. All new vessels registered were less than 10 years old, and a workable

 $\label{thm:thm:thm:countries} Table~16$  The 35 most important maritime countries and territories as of 1 January 2005  $^{\rm a}$ 

Country of domicile b	Nur	nber of ve	ssels	Deadweight tonnage					
	National flag <sup>c</sup>	Foreign flag	Total	National flag	Foreign flag	Total	Foreign flag as a % of total	Total as a % of world total	
Greece	739	2 245	2 984	50 997	104 147	155 144	67.13	18.48	
Japan	717	2 228	2 945	12 611	105 050	117 662	89.28	14.01	
Germany	349	2 266	2 615	9 033	48 877	57 911	84.40	6.90	
China	1 695	917	2 612	27 110	29 703	56 812	52.28	6.77	
<b>United States</b>	624	1 009	1 633	10 301	36 038	46 338	77.77	5.52	
Norway	768	821	1 589	14 344	29 645	43 989	67.39	5.24	
Hong Kong (China)	274	331	605	17 246	23 747	40 993	57.93	4.88	
Republic of Korea	567	372	939	10 371	16 887	27 258	61.95	3.25	
United Kingdom	426	459	885	10 865	14 978	25 843	57.96	3.08	
Taiwan Province of China	112	419	531	5 297	18 034	23 331	77.30	2.78	
Singapore	443	297	740	12 424	9 909	22 333	44.37	2.66	
Denmark	300	346	646	8 376	8 491	16 867	50.34	2.01	
<b>Russian Federation</b>	1 721	362	2 083	6 845	8 405	15 250	55.11	1.82	
Italy	530	136	666	9 360	4 086	13 446	30.39	1.60	
India	353	33	386	11 729	981	12 709	7.72	1.51	
Switzerland	17	307	324	792	10 681	11 474	93.10	1.37	
Saudi Arabia	53	70	123	872	10 190	11 062	92.12	1.32	
Malaysia	259	68	327	6 054	3 781	9 835	38.44	1.17	
Iran, Islamic Republic of	159	13	172	9 011	467	9 478	4.93	1.13	
Turkey	423	225	648	6 196	2 572	8 768	29.33	1.04	
Belgium	56	122	178	4 429	3 695	8 124	45.48	0.97	
Netherlands	519	186	705	4 358	2 540	6 897	36.82	0.82	
France	161	114	275	2 318	4 376	6 694	65.37	0.80	
Canada	216	109	325	2 535	3 445	5 979	57.61	0.71	
Indonesia	554	118	672	3 660	2 094	5 754	36.39	0.69	
Brazil	137	14	151	2 955	2 470	5 425	45.54	0.65	
Sweden	159	163	322	1 530	3 889	5 419	71.77	0.65	
Philippines	287	39	326	3 952	1 057	5 008	21.10	0.60	
Spain	88	231	319	248	4 115	4 363	94.32	0.52	
Kuwait	36	9	45	3 487	304	3 791	8.02	0.45	
Cyprus	22	54	76	459	2 643	3 102	85.19	0.37	
Thailand	261	36	297	2 583	399	2 982	13.38	0.36	

Table 16 (continued)

Country of domicile b	Nun	nber of ve	ssels	Deadweight tonnage						
	National flag <sup>c</sup>	Foreign flag	Total	National flag	Foreign flag	Total	Foreign flag as a % of total	Total as a % of world total		
Ukraine	259	134	393	1 002	1 677	2 679	62.61	0.32		
<b>United Arab Emirates</b>	0	134	134	0	2 658	2 658	100.00	0.32		
Australia	44	41	85	1 350	1 294	2 644	48.95	0.31		
Total (35 countries)	13 328	14 428	27 756	274 697	523 326	798 022	65.58	95.04		
World total	15 251	15 846	31 097	293 139	546 494	839 633	65.09	100.00		

<sup>&</sup>lt;sup>a</sup> Vessels of 1,000 grt and above, excluding the US Reserve Fleet and the US and Canadian Great Lakes fleets.

<sup>&</sup>lt;sup>b</sup> 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.

<sup>&</sup>lt;sup>c</sup> 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 <sup>a</sup> as of 1 January 2005

Flag	O tanl		Bu carr		Gen car		Conta		Oth	ers	То	tal	Total as of 1.1.2004
	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Thousand dwt
Panama	631	48 295	1 365	88 350	1 198	11 590	581	21 356	491	8 274	4 266	177 866	168 508
Liberia	391	40 201	244	15 855	164	2 629	369	13 031	160	4 656	1 328	76 372	68 413
Bahamas	181	21 182	153	9 214	357	5 612	58	1 898	250	3 929	999	41 835	44 122
Malta	187	11 152	368	16 101	298	2 731	30	646	30	342	913	30 971	36 649
Cyprus	121	6 899	356	18 792	241	2 412	117	3 296	32	187	867	31 585	32 097
Bermuda	4	946	25	3 579	19	230	22	690	25	761	95	6 206	6 293
Subtotal	1 515	128 675	2 511	151 891	2 277	25 204	1 177	40 917	988	18 149	8 468	364 836	356 081
St. Vincent and the Grenadines	23	270	93	4 110	264	2 092	21	149	74	236	475	6 857	6 554
Antigua and Barbuda	6	23	29	764	592	2 754	256	4 753	15	89	898	8 383	6 039
Cayman Is.	49	1 755	28	1 459	41	607			16	219	134	4 040	3 321
Luxembourg	16	474			7	60	6	105	15	155	44	794	1 990
Vanuatu			25	1 251	15	240	1	29	107	360	148	1 879	1 381
Gibraltar	20	435	2	30	90	482	18	260	9	74	139	1 281	1 261
Total	1 629	131 632	2 688	159 506	3 286	31 439	1 479	46 213	1 224	19 280	10 306	388 069	376 628
	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	_	r <b>egiste</b> 134 277		<b>f 1 Jan</b> 145 514	-	<b>)03</b> 27 794	1 007	31 817	1 005	16 680	8 563	356 081	
Total six major												373 533	

<sup>&</sup>lt;sup>a</sup> 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.

process for imposing fines for detentions and deficiencies on ships was under way. Liberia's fleet expanded by 3 per cent. The Government froze the assets of former officials in connection with an investigation into the misuse of monies of the registry to buy weapons despite a United Nations embargo. The combined tonnage of Panama and Liberia amounts to 69.7 per cent of the total tonnage of the six major open-registry countries. In 2004, Bermuda, the smallest of the six major registries, increased its fleet by 14 per cent to 6.2 million dwt, lower than those tonnages registered under Saint Vincent and the Grenadines and Antigua and Barbuda. The remaining three major open registries – the Bahamas, Malta and Cyprus – recorded a reduction in tonnages of 1.7, 12.4 and 0.4 per cent respectively.

Four of the minor open registries are located in developing countries of America (three) and Oceania (one), while the two others are located in developed market-economy countries of Europe. A number of other developing countries (Belize, Cambodia, Honduras, Sri Lanka, etc.) also have open registries, albeit with less coverage. Maintaining a good flag reputation is not always easy, as was shown when a vessel flying the flag of Saint Vincent and the Grenadines was banned from European ports after a 10-day detention resulting in 14 deficiencies. Elsewhere, Mauritius and Macao were said to be upgrading their maritime frameworks to boost their registries.

Analysis by type of vessel for the six major registries indicated that tankers reduced their share of the total deadweight in 2004 to 35.2 per cent as compared with 35.8 per cent in 2003, while dry bulk carriers increased their share to 41.6 per cent. For the six major open registries, the combined tonnage of these two types of vessels accounts for 76.8 per cent of the total deadweight and 75 per cent when the minor registries are included. General cargo ships (3,286 ships) accounted for 31.9 per cent of the total number of ships, followed by dry bulk carriers (2,688 ships or 26.1 per cent of the total). These figures reflect the importance of open registries for the maritime industry.

#### 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 owned by nationals of, and registered in, the countries of registry. 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 10 per cent. For international registers, however, two factors are noteworthy. First, nationals of the country or territory of the registry have a significant share of the tonnage registered, as is the case with Denmark, Norway, Hong Kong (China) and Singapore. Second, nationals of a country that have a privileged relationship with the territory of registry have a significant share of the tonnage registered, as is the case with the United Kingdom with the Isle of Man, the United States with the Marshall Islands, France with the French Antarctic Territory (the Kerguelen Islands) and the Netherlands with the Netherlands Antilles.

In those international registers, the share of tonnage owned by nationals of international registers and of nationals of countries having a privileged relationship with the territory of registry is high, well above 30 per cent and in some cases above 80 per cent. Some countries and territories with the highest share – namely Norway, Hong Kong (China) and Denmark – were ranked sixth, seventh and twelfth respectively of the 35 most important maritime countries in 2004.

The true nationalities of the vessels registered in the 12 open registries are analysed in table 19. In 2004, 35 countries or territories accounted for 90 per cent of the total tonnage of the 12 open-registry fleets. This percentage was 1 per cent above that of 2003. Ownership is particularly concentrated in 10 countries or territories, which control 76.2 per cent of the deadweight of vessels registered in these open-registry countries, while the top five countries or territories control 60.5 per cent. Japan was ranked first in 2004 with the largest share (22 per cent) of the open-registry fleets. Japan also had the largest foreign-flag ownership, representing 105.1 million dwt or 19.2 per cent of the total world foreign-flag tonnage, followed by Greece with 104.1 million dwt or 19 per cent of the total tonnage. The two countries' combined foreign-flag tonnage accounted for 38.2 per cent of the total world tonnage under foreign flags.

Table 19 also provides an overview of how the 35 countries were registering their vessels at the beginning of 2004 under open registries. Overall, the share of the six major open registers stands at 94.1 per cent, with the share of the minor open register considerably less, only 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 <sup>a</sup>

(thousands of dwt)

Country or territory of registry		nnage regi try of reg	and of	Participation of nationals of country of registry and of nationals of countries having privileged relationship with country of registry						
					tonnage istered f		in percentage of registered fleet (%)			
	2003	2004	2005	2003	2004	2005	2003	2004	2005	
		Six i	najor opei	n register	.s					
Panama	168 508	168 710	177 866	0	0	0	0.0	0.0	0.0	
Liberia	68 413	74 083	76 372	0	0	0	0.0	0.0	0.0	
Bahamas	44 122	42 552	41 835	0	0	0	0.0	0.0	0.0	
Malta	36 649	35 348	30 971	0	0	0	0.0	0.0	0.0	
Cyprus	32 097	31 706	31 583	824	1 062	459	2.6	3.3	1.5	
Bermuda	6 293	5 446	6 206	0	0	0	0.0	0.0	0.0	
		Six n	ninor oper	ı registrie	?S					
Saint Vincent and the										
Grenadines	6 554	6 562	6 857	0	0	0	0.0	0.0	0.0	
Antigua and Barbuda	6 039	7 306	8 383	0	0	0	0.0	0.0	0.0	
Cayman Islands	3 321	4 086	4 040	0	0	0	0.0	0.0	0.0	
Luxembourg	1 990	1 273	794	0	0	0	0.0	0.0	0.0	
Vanuatu	1 381	1 785	1 879	0	0	0	0.0	0.0	0.0	
Gibraltar	1 261	1 068	1 281	0	0	0	0.0	0.0	0.0	
Total open registers	376 628	379 923	388 067	0	0	0	0.0	0.0	0.0	
		_	internatio	_						
Singapore	31 246	36 486	40 934	12 627	11 704	12 424	40.4	32.1	30.4	
Norwegian International										
Ship Registry (NIS)	27 373	24 007	21 265	23 654	19 873	12 396	86.4	82.8	58.3	
Hong Kong (China)	24 892	34 468	43 957	13 207	15 376	17 246	53.1	44.6	39.2	
Marshall Islands	21 860	31 625	38 088	8 667	11 018	10 828	39.6	34.8	28.4	
Isle of Man	8 830	9 355	12 073	4 827	5 255	4 700	54.7	56.2	38.9	
Danish International	0 020	0.077	0.050	0.402	0 5 17	0 220	02.2	05.2	04.0	
Ship Registry (DIS)  Franch Antonotic Torritory	8 830 4 748	8 976 5 043	8 859 5 427	8 493 2 073	8 547 1 811	8 330 1 769	93.2 43.7	95.2 35.9	94.0 32.6	
French Antarctic Territory										
Netherlands Antilles	1 442	1 940	2 132	592	626	616	41.1	32.3	28.9	

<sup>&</sup>lt;sup>a</sup> 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 of 1 January 2005

Country or		Panama			Liberia		]	Bahamas			Malta			Cyprus	
territory 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	%
Japan	1807	88493	45.3	98	5023	6.01	49	1872	3.90	1	27	0.07	18	341	1.00
Greece	558	22544	11.5	165	11129	13.31	192	9113	18.97	518	23880	66.15	392	18590	54.39
Germany	23	1539	0.8	502	18698	22.37	14	804	1.67	49	1078	2.98	233	6189	18.11
<b>United States</b>	144	2109	1.1	99	4357	5.21	171	10260	21.36	4	52	0.14	30	1402	4.10
China	319	11085	5.7	52	2931	3.51	7	222	0.46	15	236	0.65	8	187	0.55
Norway	66	1605	0.8	57	4833	5.78	244	7585	15.79	43	603	1.67	15	380	1.11
Hong Kong (China)	139	9440	4.8	27	1791	2.14	13	965	2.01	1	33	0.09	2	37	0.11
Taiwan Province of China	289	9554	4.9	54	4505	5.39			0.00	1	22	0.06			0.00
Republic of Korea	292	15670	8.0	4	16	0.02	1	20	0.04	4	82	0.23	1	62	0.18
United Kingdom	35	831	0.4	64	2479	2.97	73	1151	2.40	8	230	0.64	26	1010	2.95
Switzerland	194	6786	3.5	10	303	0.36	7	1039	2.16	35	712	1.97	4	77	0.23
Saudi Arabia	5	45	0.0	22	6468	7.74	16	2792	5.81			0.00			0.00
Singapore	63	1869	1.0	31	3720	4.45	11	301	0.63			0.00	2	62	0.18
Denmark	21	505	0.3	6	351	0.42	35	306	0.64			0.00			0.00
<b>Russian Federation</b>	7	30	0.0	60	5013	6.00	3	13	0.03	63	1129	3.13	59	1157	3.39
France	11	374	0.2	3	152	0.18	30	906	1.89	5	53	0.15	1	4	0.01
Spain	42	331	0.2			0.00	6	683	1.42			0.00	4	170	0.50
Italy	9	92	0.0	14	947	1.13	11	357	0.74	17	449	1.24			0.00
Sweden	5	21	0.0	12	493	0.59	14	681	1.42	3	21	0.06	6	24	0.07
Malaysia	16	131	0.1			0.00	12	75	0.16			0.00			0.00
Belgium	14	220	0.1			0.00	14	178	0.37	12	111	0.31	1	9	0.03
Canada	1	15	0.0	4	225	0.27	9	308	0.64	9	37	0.10	8	416	1.22
<b>United Arab Emirates</b>	47	990	0.5			0.00	11	470	0.98	4	108	0.30	13	624	1.83
Cyprus	7	704	0.4	1	96	0.12	13	729	1.52	2	47	0.13	22	459	1.34
Turkey	18	103	0.1	4	217	0.26	7	81	0.17	87	1343	3.72			0.00
Netherlands	30	374	0.2	19	549	0.66	29	728	1.52	3	24	0.07	14	128	0.37
Brazil	6	1100	0.6	6	1085	1.30			0.00			0.00			0.00
Indonesia	48	542	0.3	1	79	0.09	2	82	0.17			0.00			0.00
Ukraine	12	182	0.1	7	265	0.32			0.00	25	402	1.11	3	34	0.10
Australia	3	82	0.0	2	355	0.42	4	95	0.20			0.00			0.00
Philppines	14	175	0.1			0.00			0.00			0.00			0.00
India	9	261	0.1	4	294	0.35			0.00			0.00	2	72	0.21
Iran, Islamic Republic of	2	12	0.0			0.00			0.00	4	293	0.81	2	148	0.43
Thailand	10	54	0.0			0.00	1	17	0.04			0.00			0.00
Kuwait			0.0			0.00			0.00			0.00			0.00
Total (35 countries)	4266	177866	91.1	1328	76372	91.36	999	41835	87.09	913	30971	85.79	866	31583	92.40
Others		17420	8.9	118	7220	8.64	153	6202	12.91	238	5130	14.21	112	2598	7.60
Total	5473	195286	100.0	1446	83592	100	1152	48037	100	1151	36101	100	978	34181	100

Table 19 (continued)

	gn-flag fleet	Total foreig		Subtotal		gistries	or open re	Six min		Bermuda	
Country or territory of domicile	000 dwt	No. of vessels	%	000 dwt	No. of vessels	%	000 dwt	No. of vessels	%	000 dwt	No. of vessels
Japan	105050	2228	22.40	96499	1998	2.77	744	25	0.00		
Greec	104147	2245	20.77	89472	1961	15.64	4200	135	0.22	15	1
German	48877	2266	8.81	37939	1810	35.77	9609	988	0.33	22	1
United State	36038	1009	4.73	20359	656	6.99	1879	187	4.44	301	21
China	29703	917	3.82	16446	519	6.65	1786	118	0.00		
Norway	29645	821	3.55	15276	468	0.79	211	38	0.86	58	5
Hong Kong (China	23747	331	3.03	13065	197	0.45	122	10	9.98	676	5
Taiwan Province of China	18034	419	3.28	14111	349	0.11	29	5	0.00		
Republic of Korea	16887	372	3.68	15859	305	0.03	9	3	0.00		
United Kingdon	14978	459	2.15	9242	265	1.78	478	33	45.22	3064	26
Switzerland	10681	307	2.33	10060	282	2.21	593	29	8.11	550	3
Saudi Arabia	10190	70	2.16	9322	46	0.06	17	3	0.00		
Singapor	9909	297	1.39	5986	109	0.12	33	2	0.00		
Denmarl	8491	346	0.40	1710	92	2.05	549	30	0.00		
Russian Federation	8405	362	1.76	7602	217	0.97	260	25	0.00		
France	4376	114	0.42	1802	73	1.14	306	22	0.10	7	1
Spair	4115	231	0.28	1194	54	0.04	10	2	0.00		
Italy	4086	136	0.60	2603	84	2.82	757	33	0.00		
Sweden	3889	163	0.49	2128	66	0.64	173	17	10.56	715	9
Malaysia	3781	68	0.05	206	28	0.00	0	0	0.00		
Belgiun	3695	122	0.25	1078	69	2.08	559	28	0.00		
Canada	3445	109	0.45	1929	56	0.99	266	5	9.77	662	20
United Arab Emirates	2658	134	0.55	2352	98	0.59	160	23	0.00		
Cyprus	2643	54	0.47	2042	46	0.03	7	1	0.00		
Turkey	2572	225	0.42	1808	136	0.24	65	20	0.00		
Netherland	2540	186	0.44	1911	121	0.40	108	26	0.00		
Brazi	2470	14	0.51	2185	12	0.00	0	0	0.00		
Indonesia	2094	118	0.16	705	52	0.00	0	0	0.03	2	1
Ukrain	1677	134	0.23	970	56	0.33	88	9	0.00	-	•
Australia	1294	41	0.17	738	17	0.27	72	6	1.97	134	2
Philppine	1057	39	0.05	214	16	0.14	39	2	0.00	10.	-
India	981	33	0.17	713	23	0.32	87	8	0.00		
Iran, Islamic Republic o	467	13	0.11	459	11	0.02	7	3	0.00		
Thailand	399	36	0.02	81	13	0.04	10	2	0.00		
Kuwai	304	9	0.02	0	0	0.00	0	0	0.00		
(35 countries	523326	14428	90.07	388067	10305	86.49	23234	1838	91.60	6206	95
Others	23168	1418	9.93	42767	2253	13.51	3628	409	8.40	569	16
											111
Total	546494	15846	100.00	430834	12558	100.00	26862	2247	100.00	6775	111

### D. SHIPBUILDING AND THE SECOND-HAND MARKET

#### 1. Newbuilding orders

In 2004, 1,397 newbuilding contracts were placed for the six major ship types, an impressive increase of 20.5 per cent in comparison with 2003 (see table 20). In the tanker sector, optimism continued to prevail, with 547 orders, as compared with 456 in 2003. The peak was reached in August with 68 orders, followed by March and May with 64 and 54 orders each. In 2004, newbuilding orders for dry bulk carriers increased to 246, about 27.5 per cent up over orders of the previous year (193 contracts).

Newbuilding orders for container ships were also up by almost 20 per cent; there were 387 contracts in 2004 as compared with 325 in 2003. These newbuilding contracts continued to reflect the recent trend towards post-Panamax container ships. The newbuilding orders for general cargo ships increased by an astonishing 40 per cent in 2004 to 127 contracts, compared with 91 units in 2003. Orders for passenger ferries decreased slightly to 90 contracts (94 in the previous year).

#### 2. Tonnage on order

World tonnage on order, by groups of countries of registry and by principal types of vessel, is shown in table 21. World tonnage on order at the beginning of 2005 stood at 124.6 million dwt, representing a decrease of 22.3 per cent over the previous year. Tonnage on order by developed market-economy countries amounted to 35.4 million dwt, accounting for 28.4 per cent of the total world tonnage on order, as compared with 47 million dwt or 29.3 per cent at the beginning of 2004. Major open-registry countries had 69.7 million dwt or 56 per cent of world tonnage on order, as compared with 87.2 million dwt or 54.3 per cent at the beginning of the previous year. The share of the countries of Central and Eastern Europe in 2004 stood at 0.4 million dwt or 0.3 per cent of the world total on order, while the tonnage on order of the socialist countries in Asia decreased by 29 per cent in 2004, ending the year with 4.3 million dwt or 3.5 per cent of the world total on order.

Developing countries' tonnage on order dropped by 24.5 per cent over the previous year, reaching 14.9 million dwt or 11.9 per cent of the total world tonnage on order at the beginning of 2005. Tonnage on order by Asian developing countries dropped by a quarter to 13.6 million dwt at the beginning of 2005,

accounting for 93.2 per cent of the developing countries' total tonnage on order. African newbuilding orders reached 105,000 dwt at the beginning of 2005, while those of developing countries in America reached 0.7 million dwt.

In 2004, oil tanker orders decreased by 26.4 per cent to 45 million dwt, accounting for 36.1 per cent of the world total on order. Developing countries had 6.7 million dwt on order, representing 14.8 per cent of the total tankers on order, with Asian developing countries representing 6.5 million dwt or 97.3 per cent of the developing countries' total. The number of dry bulk carriers on order at the beginning of 2005 decreased from 2004 by 28.7 per cent to 33.2 million dwt, accounting for 26.6 per cent of the world total on order. For this type of vessel, developed market-economy countries and major open-registry countries accounted for 13.2 per cent and 72.1 per cent, representing a combined share of 85.3 per cent. The volume of container ships on order in 2004 stood at 29.6 million dwt at year's end, representing 23.4 per cent of the world total on order. For container ships on order, developed market-economy countries accounted for 28.9 per cent and major open-registry countries accounted for over 58.4 per cent. At the beginning of 2005, developing countries' container ship orders increased by 16.1 per cent to 2.7 million dwt, or 9.1 per cent of the total container ships on order. Asian developing countries had 2.5 million dwt or 91.3 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 vessel. In 2004, prices for all the main types and sizes of newbuildings increased significantly over those of the previous year. Price increases were more pronounced for tankers and bulk carriers and reflected the high demand for these modes of transport. Newbuilding prices for Panamax dry bulk carriers and VLCC tankers fared particularly well, with a 40 per cent increase in 2004, while prices for Suezmax tankers and Handymax bulk carriers increased by 36.6 and 36.4 per cent respectively. Prices of 2,500-TEU cellular container ships increased by 10.5 per cent, while prices for general cargo vessels were up by 25 per cent. Price increases of 30.5 and 22.6 per cent were observed for LPG and LNG gas carriers. In general, the upward trend of shipbuilding prices during the year reflected increased ship ordering in the wake of optimistic forecasts for international trade.

Table 20

Newbuilding contracts placed for the main types of ship a during 1994–2004

(number of ships, thousands of dwt)

Year	Ta	nkers	Bulk	carriers		nbined riers		neral o ships		tainer ssels		enger ries	To	tal <sup>b</sup>
	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	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
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	2 534	373	15 025	136	308	1 554	80 121
2001	550	34 260	165	9 496	-	-	142	1 222	180	6 564	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	-	0	-	91	-	325	-	94	-	1 159	-
2004														
Jan	38	-	9	-	0	-	3	-	53	-	5	-	108	-
Feb	45	-	16	-	0	-	18	-	48	-	5	-	132	-
Mar	64	-	28	-	0	-	10	-	23	-	12	-	137	-
Apr	26	-	11	-	0	-	12	-	26	-	11	-	86	-
May	54	-	14	-	0	-	7	-	50	-	3	-	128	-
June	43	-	22	-	0	-	3	-	40	-	10	-	118	-
July	53	-	20	-	0	-	5	-	14	-	4	-	96	-
Aug	68	-	27	-	0	-	10	-	30	-	2	-	137	-
Sept	39	-	16	-	0	-	5	-	28	-	2	-	90	-
Oct	47	-	11	-	0	-	8	-	12	-	6	-	84	-
Nov	41	-	16	-	0	-	21	-	31	-	18	-	127	-
Dec	29	-	56	-	0	-	25	-	32	-	12	-	154	-
Total	547	-	246	-	0	-	127	-	387	-	90	-	1 397	-

Sources: Compiled by the UNCTAD secretariat. Figures up to 2002 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 2004 based on data published in Institute of Shipping Economics and Logistics, *Shipping Statistics and Market Review*, January/February 2005, p. 68, from monthly data provided by Baird Publications (Australia).

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

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

Table 21

World tonnage on order as of 1 January 2005

(thousands of dwt)

Country groups of registry	Total	Oil tankers	Bulk carriers	General cargo	Container ships	Other ships
World total	124 642	44 957	33 197	1 978	29 629	14 881
Developed market- economy countries	35 396	14 781	4 398	654	8 554	7 008
Major open-registry countries	69 746	22 012	23 928	685	17 304	5 817
Countries of Central and Eastern Europe	330	21	0	159	0	149
Socialist countries of Asia	4 314	1 480	1 223	44	1 066	501
Developing countries, total	14 857	6 662	3 648	436	2 705	1 406
of which:						
Africa	105	1	0	0	0	104
Americas	686	10	28	259	235	154
Asia	13 852	6 485	3 620	177	2 470	1 100
Europe	214	167	0	0	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	2002	2003	2004	% change 2003/2004
<b>30-50,000 dwt bulk carrier</b>	11	24	25	20	15	22	30	36.4
32-45,000 dwt tanker	18	29	34	29	26	30	38	26.7
70-74,000 dwt bulk carrier	14	32	29	23	20	25	35	40.0
80-105,000 dwt tanker	22	42	43	41	35	41	56	36.6
170,000 dwt bulk carrier	27	45	40	40	31	47	61	29.8
250-280,000 dwt tanker	47	90	85	76	67	75	105	40.0
125-138,000 m <sup>3</sup> LNG	200	225	245	165	164	155	190	22.6
75,000 m <sup>3</sup> LPG	44	78	68	60	60	59	77	30.5
15,000 dwt general cargo	12	24	21	19	16	16	20	25.0
2,500 TEU full containership	26	52	50	35	28	38	42	10.5

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

<sup>&</sup>lt;sup>a</sup> From 1995 on, prices correspond to the large vessel size.

As table 23 indicates, average second-hand prices for tankers and bulk carriers recorded substantial increases. Dry bulk carriers recorded gains of around 40 per cent, with the largest one being for Panamax vessels. The number of transactions was also up – to 447 from the 2003 level of 358, with Panamax and Cape-size being most popular and the small handy-size vessels

accounting for 175 transactions. In the tanker sector, double-digit price increases were seen during the year, with Suezmax tonnage recording 54.2 per cent increases. A record number of transactions were reported for 2004, when 386 units changed hands (compared to 345 units the year before), with 244 units being over 50,000 dwt, including seven ULCCs.

Table 23
Second-hand prices for five-year-old vessels, 1999–2004

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

Vessel	1999	2000	2001	2002	2003	2004	% change 2003/2004
40,000 dwt tankers	20	27	26	24	28	40	42.9
80-95,000 dwt tankers <sup>a</sup>	26	39	33	30	38	57	50.0
130-150,000 dwt tankers <sup>a</sup>	36	50	43	42	48	74	54.2
250-280,000 dwt tankers <sup>a</sup>	50	71	60	53	75	107	42.7
45,000 dwt dry bulk carrier	16	15	12	15	21	30	42.9
70,000 dwt dry bulk carrier	17	16	14	17	28	41	46.4
150,000 dwt dry bulk carrier	28	25	22	26	41	57	39.0

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Fearnleys, Review 2004.

<sup>&</sup>lt;sup>a</sup> Prices correspond to the larger vessels in the range.