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Review of Maritime Transport 1995

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NOTE

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ABBREVIATIONS

cif	cost, insurance and freight
CIS	Commonwealth of Independent States
DMEC	developed market-economy country
dwt	deadweight tons
fob	free on board
GDP	gross domestic product
	gross registered tons
Idt	light displacement tons
ENG	liquefied natural gas
NIC	newly industrializing countries
OECD	Organisation for Economic Cooperation and Development
TED	twen [^] -foot equivalent unit
ULCC	ultra-large crude carrier
VLCC	very large crude carrier
ws	Worldscale

ENPLANATORV NOTES

"Tons" refers to metric tons, unless otherwise stated.

Details and percentages presented in tables, due to rounding, do not necessarily add up to the totals.

Two dots (..) indicate that data are not available or are not separately reported.

A dash (-) signifies that the amount is nil, or less than half the unit used.

In some tables, the data shown for earlier years have been revised and updated, and therefore differ from those shown in previous issues of the *Review*. This relates in particular to the distribution of world tonnage according to country groups, specifically the classification of *major open-registry countries*. Up to the 1994 edition of the *Review*, the majority of tables included five countries in this group, i.e. Bahamas, Bermuda, Cypms, Liberia and Panama, while some tables also included Malta and Vanuahi. In order to improve consistency and to reflect practices of ship registration, Malta and Vanuatu have been included in all tables referring to major open-registry countries. This reclassification primarily affects the share of developing countries in Europe in total world tonnage.

In the tables and the te[^]t, the use of the term "countries" refers to countries, territories or areas.

APPRGNIMATE VESSEL SI[^]E GRGUPS REFERRED TO IN TBE REVIEW OF MARITIME TRANSPORT, ACCORDING TO GENERALLV USED SHIPPING TERMINOLOGY

Comde oil tankers;

ULCC	300,000 dwt plus
VLCC	150.000-299,999 dwt
Suezmax	100.000-149,999 dwt
Aframax	50.000- 99,999 dwt

Dry bulk carriers:

Capesize	[^] 0,000 dwt [^] lus
Panamax	50.000-79,999 dwt
Handymax	35.000-49,999 dwt
Handy	20.000-34,999 dwt

INTRODUCTION

The *Review of Maritime Transport* is an annual publication prepared by the UNCTAD secretariat. The purpose of the *Review* is to identify the main developments in world maritime transport and to provide relevant statistical data. Emphasis is given to the development of the merchant marines in developing countries as compared with other groups of countries.

To maintain historical continuity and special characteristics on shipping practices, the overall structure of the *Review of Maritime Transport* is similar to previous editions, for example the classification of countries and territories which has been detailed in annex I for statistical purposes. The current issue, however, includes a review of regional developments in Sub-Saharan Africa (see chapter IX).

SUMMARY OF MAIN DEVELOPMENTS

Development of the world economy and seaborne trade

- The world real GDP increased in 1995 by 3.7 per cent over 1994. The industrial countries experienced a growth of 2.5 per cent over the previous year, while developing countries registered an average increase of 6 per cent.

- The volume of world merchandise exports expanded in 1995 by 8 per cent, below the 9.5 per cent increase in 1994, but well above the 5.5 per cent average annual gain for the previous 10 years. Virtually all the regions shared the modest slowdown in growth in the volume of world merchandise trade in 1995.

- The total OECD industrial production index in 1995 rose moderately by 2.8 per cent to 106.6 from 103.7 in 1994 (1990=100).

- World seaborne trade marked the tenth consecutive annual increase in 1995, reaching a new record at 4.65 billion tons. The annual

growth rate continued to rise, registering 3.7 per cent, which was the highest since 1990.

- The total maritime services in ton-miles in global trade rose in 1995 by 3.0 per cent to 20,190 billion, as compared to 19,600 billion in the previous year.

Development of the world fleet

- The world merchant fleet continuously expanded to 734.9 million dwt by the end of 1995, representing a 1.1 per cent increase over 1994. This fleet expansion reflected both increased newbuilding deliveries (32.8 million dwt) as well as reduced tonnage broken and lost (17.9 million dwt).

- The combined share of the world fleet of developed market-economy countries and the major open-registry countries was the same in 1995 as in the previous year (71.5 per cent). The developing countries' share of the 1995 world total fleet marginally increased to 18.7 per cent.

¹ This figure is not readily comparable to figures given in earlier issues of the *Review of Maritime Transport*, due to the reclassification of Malta and Vanuatu as major open-registry countries (see also Explanatory Notes and Box 1).

Productivity of the world fleet and supply and demand in world shipping

- The main operational productivity indicators for the world fleet continued to improve in 1995. Tons of cargo carried per dwt stood at 6.33, which was higher than the 1994 level of 6.23 and a record-high. Ton-miles performed per dwt also continued the upward trend to reach a new record of 27 473.
- The world total surplus tonnage decreased to 50.8 million dwt (the lowest since 1988), representing a record low of 6.9 per cent of the 1995 world merchant fleet. The shipping capacity in the oil tanker sector and the dry bulk sector declined by 26.2 per cent and 11.8 per cent respectively over 1994 to 28.8 million dwt and 17.9 million dwt, respectively.

Shipbuilding, second-hand market and demolition

- The 1995 overall newbuilding contracts for main types of vessels were less than those in 1994, registering 41.4 million dwt. Shipbuilding activities in terms of deadweight were mainly concentrated on dry bulk carriers, tankers and container vessels, accounting for 50.5 per cent, 21.8 per cent and 20.5 per cent respectively of the total tonnage of the main types.
- The world total deliveries of newbuildings increased in 1995 by 17.9 per cent in gross-registered tons over 1994, registering 11.2 million grt. Shipyards of developed market-economy countries maintained their predominant share of 62.0 per cent.
- In the second-hand market for five-year-old tankers, prices in 1995 improved in most segments specifically handy-size product tankers, as compared to 1994. For dry bulk carriers, a substantial increase in prices for 70,000 dwt class, modern vessels was recorded, whilst a significant decline for 150,000 dwt class tonnages was observed. The total dry bulk carrier and tanker tonnages traded increased by 33 per cent to 36.4 million dwt as compared to 27.4 million dwt in 1994.

Port development

- World total container port traffic continued to expand in 1994 at the growth rate of 10.4 per cent over 1993, reaching 124,904,000 TEU, of which 61,800,000 TEU were handled at the ports of developing countries standing at 49.5 per cent (38.0 per cent in 1993).

Freight markets

- The overall 1995 liner freight index continued to fall to the average level of 71, which was a three-point decline from the average of 1994 and the record low since 1988 (1985=100).
- The improvement in the 1995 dry bulk charter markets was attributed, *inter alia*, to an estimated increase of 5.8 per cent in the seaborne trade of the three major dry bulk commodities.
- In the crude oil tanker markets, based on the relatively favourable supply/demand conditions, overall freight rates improved in 1995, specifically for larger tankers, while the upturn in rates for other types of tankers was moderate throughout the year. On the other hand, small product carriers and handy-size clean tankers experienced relatively stable markets throughout 1995.
- World total freight payments as a proportion of total import value declined to 5.4 per cent in 1994 from 5.44 per cent in 1993. The proportion of developed market-economy countries and developing countries decreased to 4.9 per cent and 8.5 per cent respectively in 1994, as compared to 4.33 per cent and 8.33 per cent respectively in 1993.

Multimodal transport and technological developments

- The modern trade and transport markets demand highly sophisticated and adaptable organizations with a practical worldwide door-to-door and just-in-time logistics capability. The shipping and related transport industry observed a further

development of mega transport operators. These operators as global logistics suppliers involve not only owning larger containerhips and a vast number of containers, but also having dedicated terminals, capable agency and feeder services and efficient inland logistics networks. The necessity to provide such comprehensive and worldwide services is encouraging large operators to consolidate their services, hence there has been an increasing trend towards large consortia.

Other developments

- The Negotiating Group on Maritime Transport Services (NGMTS) of the World Trade Organization (WTO) continued negotiations on commitments in international shipping, auxiliary services and access to and use of port facilities with the aim of eliminating market access restrictions in the maritime transport sector. Work has continued in 1996 to reach an agreement on progressive liberalization before the deadline established by the Ministerial Decision on Maritime Transport Services taken at Marrakesh in April 1994.

Review of regional developments - Sub-Saharan Africa

- In 1995, the economic activities of sub-Saharan African countries proved to be on a favourable trend, *inter alia*, the exports expanded by 14.3 per cent in value and 7.5 per cent in volume over 1994, and the imports also increased by 11.8 per cent in value and 5.6 per cent in volume. Real GDP also rose by about 5.4 per cent over 1994.
- The total tonnage in deadweight of all the sub-Saharan African developing countries had decreased from 0.29 per cent of the world total in 1980 to 0.19 per cent in 1995. General cargo ships and tankers were 0.55 per cent and less than 0.20 per cent respectively of the sector's world total in 1995, whilst no dry bulkers nor containerhips had been registered in the region.
- The total liner cargo of both import (54 per cent) and export (46 per cent) increased at the

average annual rate of 5.3 per cent, reaching 16.5 million tons in 1995, of which 41-45 per cent were loaded or discharged on the West coast. A similar volume was moved to or from the Southern coast, of which about two thirds were reported]?) traded by South Africa.

A total of 149 full-containerhips with the carrying capacity aggregating 176,800 TEUs were operated in African trades in 1994, of which 91 ships with 12^,500 TEUs were operated on the trade routes of Southern Africa, 33 ships with 37,700 TEUs in West Africa and 16 ships with 16,600 TEUs in East Africa.

Coal, iron ore and grain are the major dry bulk cargoes traded by the subregions of sub-Saharan Africa. Coal exports from the Southern coast, which were hitherto dominated by South Africa, reached 56 million tons in 1995. Iron ore shipments were made from the West coast and the Southern coast, combined exports aggregating 19.8 million tons in 1995.

The 1995 grain imports exceeded 5.0 million tons, of which more than half were imported from the United States.

Exports of crude oil reached 103.9 million tons, of which the major part was produced in West and Central Africa.

Freight costs of land-locked countries for the period 1990-1993, constituted a higher proportion of total import value than those of countries with direct sea access. In West Africa, Burkina Faso represented a higher percentage (16.67 per cent) than Benin (16.76 per cent). Mali's proportion (19.57 per cent) was also much higher than that of Cote d'Ivoire (19.3 per cent). Niger's proportion (14.53 per cent) was also high, compared to those of neighbouring countries with sea ports, such as Togo (13.88 per cent) and Nigeria (9.5 per cent). In the Central Africa, Rwanda represented 19.91 per cent, much higher than Anya's proportion (13.81 per cent). As regards Southern African land-locked countries, Gambia (16.4 per cent) and Zimbabwe (18.85 per cent) paid a higher cost than Mozambique (10.55 per cent).

Box

Vessel and registry groupings used in the Review of Maritime Transport

As in the previous year's *Review*, five vessel groupings have been used throughout most shipping tables in this report. The cut-off point for all tables based on data from Lloyd's Maritime Information Services Ltd. is 100 grt, except those tables dealing with ownership where the cut-off level is 1,000 grt. The groups aggregate 20 principal types of vessel categories, as noted below.

Review group	Constituent ship types
Oil tankers	Oil tankers
Bulk carriers	Ore and bulk carriers, ore/bulk/oil carriers
General cargo	Refrigerated cargo, specialised cargo, ro-ro cargo, cargo (single- and multi-deck), general cargo/passenger
Containerships	Fully cellular
Other ships	Oil/chemical tankers, chemical tankers, other tankers, liquefied gas carriers, passenger ro-ro, passenger, tank barges, general cargo barges, fishing, offshore supply, and all other types
Total all ships	Summation of all the above-mentioned vessel types

With the formation of new States in Eastern Europe, the registry situation as at 31 December 1995 had changed. Lloyd's Register advises that vessels are only allocated to a new register after confirmation that a new registry has been created and ships entered into a registry. The following guidelines are offered by Lloyd's Maritime Information Services Ltd. for the Review of Maritime Transport, 1995 tables relating to fleet development.

Former USSR

(i) Confirmation has been received from the Azerbaijani (AZ), Estonian (ET), Latvian (LV), Lithuanian (LT), Russian (RU), Turkmenistan (TM) and Ukrainian (UA) registries, and these flag codes have been created and maintained.

(ii) The other republics, Armenia (AM), Belarus (BY), Kyrgyzstan (KG), Moldova (MD), Tajikistan (TJ), and Uzbekistan (UZ), have not confirmed the establishment of registries, Lloyd's Register has however, received information from the Russian Registry as flag arrangements are still coordinated through this body. In consequence, ships have been coded where appropriate. Only a handful of ships are still held under the USSR flag (UR) where no confirmation has been received.

Former Yugoslavia

Ships have been allocated to either Croatia (CR) or Slovenia (SI). Any as yet unallocated have been left under Yugoslavia (YU).

Major open-registry countries

Contrary to the majority of tables in previous issues of the *Review*, this group of countries now consistently contains the flags of Bahamas, Bermuda, Cyprus, Liberia, Malta, Panama and Vanuatu.

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

Chapter I

DEVELOPMENT OF INTERNATIONAL TRADE

The initial chapter of the Review of Maritime Transport provides an overview of the demand for global shipping services, together with background information on the world economic situation and a review of developments in world seaborne trade.

A. World economic background

I. World economic development continued along a positive path in 1995. The world real GDP expanded by 3.7 per cent over 1994, and that of industrial countries grew by 2.5 per cent as compared to 3.1 per cent in 1994. However, the pace of economic expansion in the industrial countries slowed somewhat in the first half of 1995. Countries such as the United States, Canada and the United Kingdom that had experienced a strong upswing in 1994, recorded more moderate growth in 1995, reflecting an adjustment of the previous year's boom. In 1995, economic activity remained relatively strong in Germany, France, Italy and several other continental European countries, still recovering from the 1992-1993 recession. Japan, which experienced one of its most serious economic slowdowns in the post-war period was recovering steadily, albeit marginally, from the recession during the period 1994-1995, recording growth of 0.5 per cent for 1995. Growth in developing countries averaged 6 per cent in 1995. The maintenance of market confidence and the continued solid economic performance by a large number of countries proved to be testimony to the substantial progress throughout the developing world. Among the regional groups of countries, Asia was particularly strong with an average rate of growth of 8.7 per cent over the previous year, including China with an annual growth rate of

11.4 per cent. Growth in Africa improved, reaching 3.0 per cent in 1995 from 2.6 per cent in 1994, with the adoption of market-oriented policies in an increasing number of countries. Countries in transition experienced a fifth consecutive year of decline (-2.1 per cent in 1995), although the ratio of downturn was much improved compared to those for the previous years. The economic performance varies considerably across the countries in transition, largely reflecting differences in stages of economic stabilisation and restructuring. The real GDP of the Russian Federation, Ukraine and most Transcaucasian and Central Asian countries

continued to decline in 1994 and the first half of 1995, though to a lesser extent than in the earlier part of the decade.

2. The volume of world merchandise exports expanded by 8 per cent in 1995, slightly below the 9.5 per cent increase in 1994, but well above the 5.5 per cent average annual gain for the previous 10 years. Virtually all the regions shared in the modest slowdown in growth of the volume of world merchandise trade in 1995. On the export side, Latin America was the only region to report accelerated growth. As for imports, every region reported slower growth with the slowdown being particularly sharp in North America and Latin America.

3. In 1995, the performance of Latin America, where export growth accelerated at 11.5 per cent (9.5 per cent in 1994) and import growth slowed dramatically (from 13.5 per cent in 1994 to 4.5 per cent in 1995), was directly related to the crises in Mexico and Argentina. Mexico's merchandise exports were estimated to have increased by more than one quarter and those of Argentina by about 20 per cent. Imports into both countries, in contrast, declined by about 15 per cent in volume terms. Growth in the volume of North America's imports slowed sharply in 1995 to 7.5 per cent. Thus, for the first time since 1991, import growth remained below the world average. For merchandise exports, the moderate overall deceleration in growth from nearly 10 per cent in 1994 to 8.5 per cent in 1995 was entirely attributable to the sharp slowdown in Canada's export volume growth (from 16 per cent in 1994 to 8.5 per cent in 1995).

4. Despite slower growth in West European domestic demand (around 2 per cent), the volume of merchandise imports in 1995 was up 7.5 per cent (8.5 per cent in 1994). The slowdown observed for the European Union, and in particular for Germany, the United Kingdom and Italy, was partly offset by

an acceleration of imports into the Netherlands, Spain and Turkey. Western Europe's merchandise exports expanded by 7 per cent, somewhat less than the global average (8.0 per cent) due to the market slowdown in interregional exports. A sharp deceleration was observed for exports from Germany and the United Kingdom, while in Italy and Austria export growth exceeded 10 per cent.

5. Although Asia's import growth of 13 per cent in 1995 was somewhat less than in 1994, it exceeded the world average (8.5 per cent) for the fourth consecutive year. It was also the fourth consecutive year in which the volume of imports into Asia expanded more rapidly than exports. Although there was a slight deceleration in the imports into the six East Asian traders (Hong Kong, Republic of Korea, Malaysia, Singapore, Taiwan Province of China and Thailand), the group as a whole reported an expansion of imports nearly twice the world average to 15.0 per cent. No official volume was available on China's import growth, but it can be estimated that import growth remained well below the Asian region's overall import expansion level in 1995 (13.0 per cent). As for Asia's exports volume growth, the deceleration to 9.5 per cent observed in 1995 was attributable mainly to the marked deceleration in the exports from China, Singapore, Australia and Indonesia. Although Japan's export growth edged up marginally in 1995 (to 2.5 per cent) it remained sharply below the world average (8.0 per cent) for the fifth consecutive year.

6. The countries of Central and Eastern Europe and the former USSR continued to expand their exports at a rate of 9.5 per cent in 1995, which was well above the world average for the third consecutive year. As regards imports, growth was estimated to have remained at 6.5 per cent, also for the third consecutive year.

7. Another fundamental indicator for the global maritime sector is industrial production of the OECD countries. Graph 1 indicates the correlation between the annual change in OECD industrial production and world seaborne trade. In 1995 the total OECD industrial production index (1990=100) rose moderately by 2.8 per cent to 106.6 from 103.7 in 1994 when it had experienced a substantial increase of 4.4 per cent. This rise primarily reflects a 3.1 per cent production increase in the United States (5.4 per cent in 1994) and

another similar 3.3-per-cent increase in the OECD European countries (4.9 per cent in 1994). Japan yielded an increase of 3.1 per cent to 96.0 from 93.1 in 1994 when a mere 1.2 per cent increase was made. World seaborne trade also increased in 1995 for the third consecutive year, at an increased rate of 3.7 per cent over the previous year (3.0 per cent in 1994). The trade in manufactured goods was up 4.5 per cent in 1995, while tanker cargoes and main dry bulk commodities increased by 2.1 per cent and 5.3 per cent respectively (see table 1).

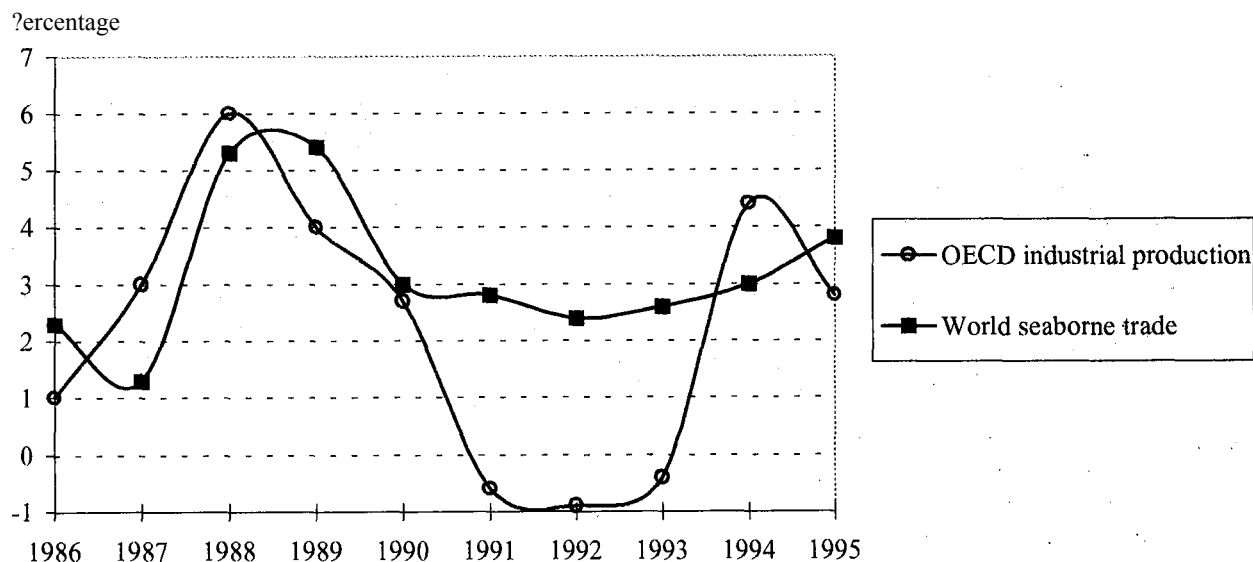
B. World seaborne trade

8. World seaborne trade continued to expand in 1995, as indicated in table 1 and graph 2. Total cargo tonnage marked the tenth consecutive annual increase, reaching a new record at 4.65 billion tons. The annual growth rate also continued to turn upwards, registering 3.7 per cent, which was the highest since 1990, and above the average annual rate of growth of 3.2 per cent over the period 1986-1994. By broad segments of maritime trade, tanker shipments represented 44.1 per cent of the total 1995 seaborne trade, increasing by 2.1 per cent to 2,050 million tons. The 1995 percentage growth was the second lowest since 1988. The volume of total dry bulk seaborne commodities registered a remarkable increase of 5.0 per cent to 2,601 million tons in 1995, with the volume of main dry bulk commodities accelerating even more by 5.3 per cent to 1,082 million tons.

9. World oil production continued to rise in 1995, growing by 1.8 per cent to 3,261 million tons, largely as a result of another surge in non-OPEC production. OPEC's share of the world market was squeezed again, falling to 41.18 per cent from 41.38 per cent in 1994. OPEC output increased by 1.31 per cent to 1,342.8 million tons from 1,325.4 million tons, while non-OPEC supply grew by 2.15 per cent from 1,877.9 million tons to 1,918.3 million tons, causing world supply to increase by around 58 million tons over 1994. Crude oil shipments increased moderately by 1.8 per cent to 1,428 million tons in 1995 from 1,493 million tons in 1994. Oil product shipments continued to increase by 3.3 per cent to 380 million tons in 1995, with continued large increases to countries in South-East Asia and the Far East. On the contrary, imports into the United States fell considerably.

Graph 1

Annual change in OECD industrial production and world seaborne trade, 1986-1995



Source: OECD, *Main Economic Indicators*, March 1996.

19. Volumes of dry bulk shipments showed overall strong growth in 1995. World crude steel production moderately increased by 5.5 per cent to 748 million tons. The share of the European Union expanded in 1995 by 8.8 per cent to 155.9 million tons. The main contributor to this growth was Italy with an increase of 6.2 per cent over 1994. Asia also showed favourable growth of 2.7 per cent for 1995, registering 279.3 million tons. Japan and the Republic of Korea were major contributors, representing an increase of 3.4 per cent and 8.9 per cent respectively over the previous year, whereas China made a marginal increase of 9.4 per cent. North America registered 129.6 million tons or an expansion of 3.8 per cent in 1995 over 1994, with the fourth consecutive year of increase. Raw material shipments to the steel industry thus augmented in 1995. Iron ore shipments grew by 4.4 per cent from 383 million tons to 499 million tons, and the coling coal trade also expanded by 4.3 per cent from 164 million tons to 171 million tons. Thermal coal shipments showed a remarkable growth rate from 219 million tons to 236 million tons, principally due to strong growth in short-haul inter-Asian trades. Grain shipments substantially increased by 7.6 per cent from 184 million tons to 198 million tons, Australia and Canada reduced their shipments in 1995 by 56 per cent and 23 per cent respectively over 1994. These reductions were

compensated by exports from the United States and Argentina whose shipments expanded by 35 per cent and 30 per cent respectively. The trades of primary aluminium products improved tremendously as world production increased in 1995 by 13.8 per cent to 17.3 million tons as compared to those in 1994, primarily due to a growth of 48.6 per cent in Western Europe.

IT Shipments of "other dry cargo", mainly general cargo including unitized cargo increased by 4.8 per cent over 1994. Total world liner shipments of containerized cargoes in 1995 were estimated to have reached 35.8 million TEUs, an increase of 11.9 per cent as compared to the record of the previous year. The United States continued to be active in 1995, rising by 11.1 per cent to 13.5 million TEUs for combined imports and exports (7.8 per cent for imports and 15.9 per cent for exports). Europe's imports and exports registered an increase of 6.7 per cent, representing 14.4 million TEUs in total (8.9 per cent for imports and 4.8 per cent for exports). Japan continuously enlarged its import and export trade by 9.6 per cent to 6.7 million TEUs (1.6 per cent for imports and 5.9 per cent for exports). Far Eastern NIEs substantially expanded their exports and imports by 17.9 per cent to 19.8 million TEUs (18.3 per cent for imports and 15.4 per cent for exports).

Box 2

**Strong energy demand predicted
Ocean Shipping report sees sustained growth in oil, coal and LNG shipping markets over next 10 years**

Strong growth in world energy demand and in the oil, coal and liquefied natural gas (LNG) shipping markets is forecast over the next 10 years. Developed countries will account for less than half of global energy and oil demand by 2010 with vessel demand in the crude trades rising by more than 13 per cent by 2000. Further growth and some subsequent decline should leave the level of demand by 2005 some 21 per cent above present rates. Ocean Shipping Consultants predicts in a new report entitled "Energy Shipping to 2005; Market Prospects for Oil, Coal and LNG Shipping".

In the oil products market, the report suggests the projected increase in long-haul trades from the Middle East to Europe, North America and Asia will see vessel employment rise 36.5 per cent by 2000 and 46 per cent by 2005. The world tanker fleet is set to decline from its current 267 million dwt to around 251 million dwt by 2000, but subsequent expansion will take it up to 291 million dwt by 2005, an overall growth of 9.5 per cent.

LNG imports by region (millions of tonnes)

	1993	1994	1995	1996	1997	1998	1999	2000
Western Europe	14.19	16.05	16.35	17.70	18.30	18.66	23.93	28.43
North America	1.75	1.75		1.75				2.50
Eastern Europe					0			2.50
South East Asia	44.48	50.00	55.78	56.53		69.88	72.38	76.67
Middle East								2.50
TOTAL	60.42	67.80	73.88		83.88	90.29	98.59	114.38

Source: Ocean Shipping Consultants.

While the large tanker sectors (100-200,000 dwt and 200,000 dwt-plus) are set to expand by 6 per cent and 18 per cent respectively, the 50-100,000 dwt range will contract by 4.5 per cent according to the report.

In contrast with oil, demand for steam coal is forecast to experience sustained and rapid growth in seaborne trade. By 2000, seaborne imports are forecast to rise by 41 per cent to 300 million tons a year, compared with 212 million tons in 1994.

Asia is forecast to be accounting for 49 per cent of global steam coal imports by 2000 with the bulk of the growth coming from Japan, South Korea and Taiwan. The relatively new exporters, Indonesia, Venezuela and Colombia, are expected increasingly to influence the steam coal trades. The growth in trade is forecast to mean an increase in steam coal shipping of 39 per cent by 2000, to 1,556 billion tonne-miles, with a further increase to 1,707 billion tonne-miles by 2005.

For the coal trades as a whole (coking and steam), however, the report forecasts that 18 per cent in the second half of the 1990s, shipping demand will fall by 2.5 per cent. For the period 1993-2000, global consumption of LNG is forecast to grow by 32 per cent with a further increase of 23 per cent by 2005, most of the extra demand coming from developing countries, especially in the Middle East and East Asia. World trade of LNG is forecast to increase by 89 per cent in 1993-2000, with trade to western Europe forecast to double and trade to South-East Asia up by 72 per cent. Beyond 2000, Ocean Shipping says there will be a need for further new projects to meet demand.

Source: *Lloyd's List* (London). 5 July 1995.

Table 1

Development of international seaborne trade, a/ 1970, 1975, 1980 and 1985-1995
(Estimates of goods loaded)

Year	Tanker cargo		Dry cargo				Total (all goods)	
	Millions of tons	Percentage annual change	Total		of which: main bulk commodities b/		Millions of tons	Percentage annual change
			Millions of tons	Percentage annual change	Millions of tons	Percentage annual change		
1970	1 440		1 165	13.0	448	16.0	2 605	0
1975	1 644	-10.0	1 428	-3.0	635	-5.0	3 072	-4,
1980	1 871		1 833		796	4.5	3 704	
1985	1 459		1 923		857	2.9	3 382	-0
1986	1 514		1 945		834		3 459	
1987	1 506	-0.5	1 999		875	4.9	3 505	
1988	1 587		2 105		940	7.4	3 692	
1989	1 692		2 199	4.5	965	2.7	3 891	
1990	1 755		2 253		968	0.3	4 008	
1991	1 790		2 330	3.4	1 005		4 120	
1992	1 860		2 360	1.3	990		4 220	
1993	1 945	4.6	2 385		993	0.3	4 330	
1994	2 007		2 478		1 028		4 485	
1995 c/	2 050		2 601		1 082		4 651	

Sources: Based on data from the United Nations Statistical Division; Teamleys (Oslo), *World Bulk Trades 1994* and *Review 1995*, UNCTAD data bank and other specialized sources.

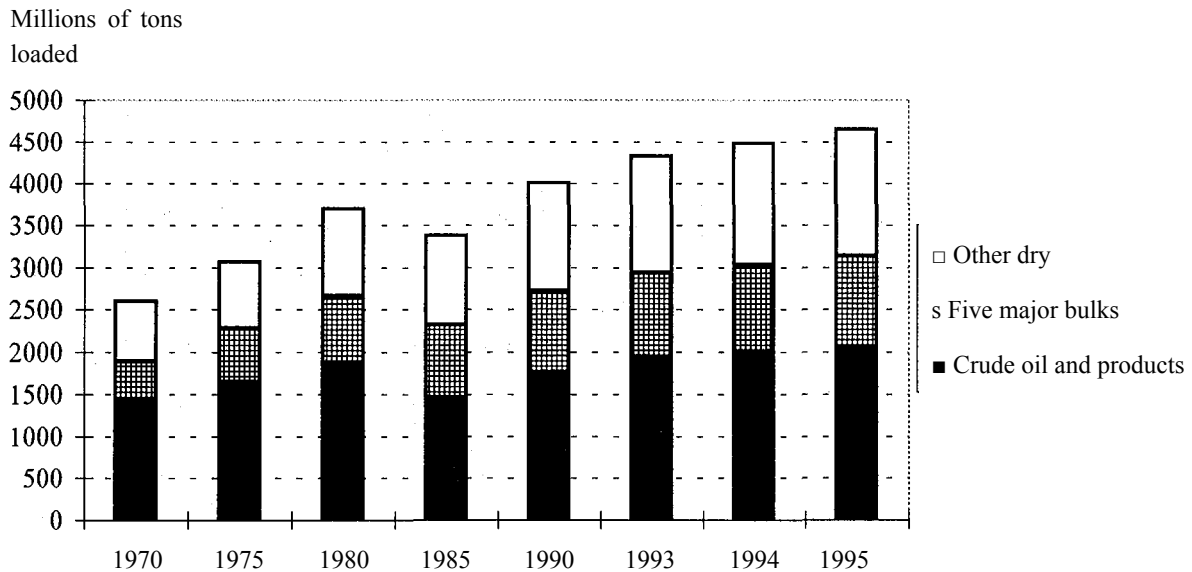
a/ Including international cargoes loaded at ports of the Great Lakes and St. Lawrence system for unloading at ports of the same system.

b/ Iron ore, grain, coal, bauxite/alumina and phosphate.

c/ UNCTAD preliminary estimates.

Graph 2

International seaborne trade for selected years



Source: *Review of Maritime Transport*, various issues.

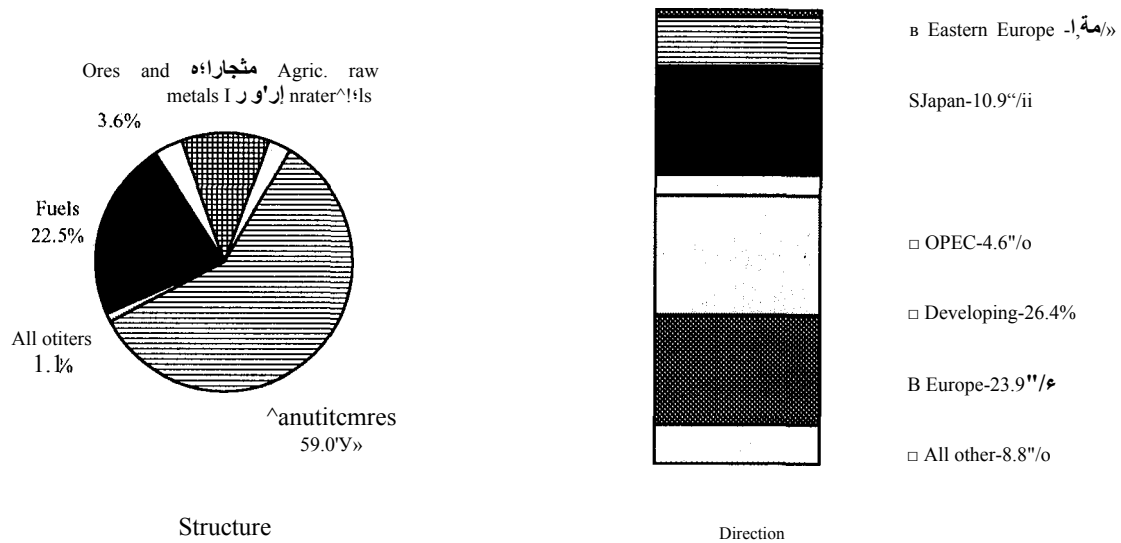
12. Graph 3 illustrates the export structure and direction of trade of developing countries. The direction of the developing countries' exports by value is indicated, with 58.6 per cent of the total destined to developed market-economy countries and 26.4 per cent within the developing countries for 1992, as compared to 60.6 per cent and 26.0 per cent respectively for 1991. The structure of exports by value comprises five broad categories, of which manufactured goods, fuels and all food items are the dominant cargoes, accounting for 92.5 per cent of the 1992 total (92.0 per cent for 1991).

13. Table 2 provides data on total demand for shipping services expressed in ton-miles. Whereas world seaborne trade in volume increased by 3.8 per cent to 4,678 million tons in 1995, the total shipping performance measured in ton-miles increased by 3.0 per cent to 20,190 billion ton-miles. The world seaborne oil trade increased by

1.8 per cent in volume after a healthy demand growth came from non-OPEC sources, and the average shipment distance for crude oil decreased. Consequently, shipping requirements also decreased by 1.2 per cent to 7,380 billion ton-miles. Oil product shipments in 1995 increased by 3.3 per cent to 380 million tons, with continued large expansion to countries in South-East Asia and the Far East, but with substantially reduced imports by the United States. The overall ton-miles for oil product shipments increased by 4.3 per cent to 1,940 billion ton-miles. Shipping services for non-oil shipments grew by 5.8 per cent, with coal up by 3.8 per cent to 2,090 billion ton-miles, iron ore up by 5.3 per cent to 2,280 billion ton-miles and grain up by 12.9 per cent to 1,120 billion ton-miles. The particularly important increase in shipping demand in the grain trades reflects the observed shift in supply to Argentina, involving long transport distances.

Graph 3

Export structure and direction of trade for developing countries
(1992 percentage distribution by value)



Source: UNCTAD, *Handbook of International Trade and Development Statistics, 1994* (United Nations publication, Sales No. E/F/95.11.D.15), Table 3.2, pp. 72-73.

Table 2

World seaborne trade by types of cargo, 1970, 1980 and 1985-1995
(Billions of tonne-miles)

Year	Grain		Iron or steel	Coal	Grain a/	Other cargo	Total trade
	Commodities	Products					
1970	5 597	890	1 093	481	475	2 118	10 654
1980	8 385	1 020	1 613	952	1 087	3 720	16 777
1985	4 007	1 150	1 675	1 479	1 004	3 750	13 065
1986	4 640	1 265	1 671	1 586	914	3 780	13 856
1987	4 671	1 320	1 728	1 653	1 061	3 840	14 273
1988	5 065	1 445	1 919	1 719	1 117	4 040	15 305
1989	5 736	1 540	1 983	1 798	1 095	4 250	16 402
1990	6 261	1 560	1 978	1 849	1 073	4 440	17 161
1991	6 757	1 530	2 008	1 999	1 069	4 510	17 873
1992	6 970	1 620	1 896	2 001	1 091	4 650	18 228
1993	7 391	1 775	2 001	1 949	1 038	4 840	18 994
1994	7 469	1 860	2 165	2 014	992	5 100	19 600
1995	7 380	1 940	2 280	2 090	1 120	5 380	20 190

Source: Fearnleys (Gso), *Review 1995*.

a/ Including wheat, maize, barley, oats, rye, sorghum and soya beans.

14. Summarised data on world seaborne trade by major cargo segments and country groups are provided in table 3 and graph 4. In terms of regional distribution, developing countries registered a marginal increase in their export share of oil products and dry cargoes in 1995, which was, however, overcompensated by a relative reduction in crude oil exports. Consequently, their total exports have declined marginally from 54.8 per cent in 1994, whilst their share for unloading slightly increased to 26.9 per cent (26.8 per cent in 1994). Within the group, Asian countries continued to expand their share in world trade in 1994 to 27.2 per cent for loading (26.9 per cent in 1993) and 17.8 per cent for unloading (17.6 per cent in 1993). In 1994, American countries maintained their share at the same level as in 1993 for both directions of trade. On the other hand, the share of African trades continued to diminish in 1994 to 19.1 per cent for loading and 4.1 per cent for unloading, as compared to 19.2 per cent and 4.2 per cent respectively in 1993. Developed market-economy countries experienced a marginal increase in 1995 to 43.8 per cent for loading and remained at the same level as in 1994 for unloading (67.9 per

cent). The share of countries of Central and Eastern Europe continued to decrease in 1995 to 3.5 per cent for loading and 3.0 per cent for unloading. Similarly, that of the socialist countries of Asia turned downward in 1995 to 1.1 per cent for loading from 2.2 per cent in 1994, when it had turned upwards after stabilising at 1.1 per cent since 1991. Conversely their share for unloading continued to increase marginally in 1995 to 1.2 per cent from 2.1 per cent in 1994.

15. A forecast of world seaborne trade by main cargo sectors from 1996 to 2005 is provided in graph 5. The World Sea Trade Service (WSTS) forecasts that the trade, estimated at 3,655 million tons for 1995 will increase by an average of 4.1 per cent per year over the decade, reaching 5,454 million tons by 2005. Dry bulk cargo and oil tanker cargo are projected to increase at a rate of 4.5 per cent and 2.6 per cent per year to 1,685 million tons and 2,168 million tons respectively by 2005. The combined containerised and other general cargoes, estimated at the average annual growth rate of 6.4 per cent, are forecast to reach 1,601 million tons by the year 2005.

Table 3

World seaborne trade a/ in 1970, 1993, 1994 and 1995 (est.)
by types of cargo and country groups b/

Country group	Year	Goods loaded				Goods unloaded			
		Oil		Dry cargo	Total all	Gil		Dry cargo	Total all
		C^de	?products			Cntde	?products		
(Trade in millions of tons)									
World total	1970	1 110	330	1 165	2 605	1 101	302	1 127	2 530
	1993	1 443	502	2 385	4 330	1 465	480	2 477	4 422
	1994	1 498	509	2 478	4 485	1 508	490	2 575	4 573
	1995	1 532	518	2 601	4 651	1 550	508	2 685	4 743
(%percentage share of each category of goods in total)									
World total	1970	42.6		44.7	100.0	43.5	11.9	44.6	100.0
	1993	33.3	11.6	55.1	100.0	33.1	10.9	56.0	100.0
	1994	33.4	11.3	55.3	100.0	33.0	10.7	56.3	100.0
	1995	33.0	11.1	55.9	100.0	32.7	10.7	56.6	100.0
(%percentage share of trade by groups of countries)									
Developed market-economy countries	1970	2.0	27.1	60.0	31.1	80.4	79.6	79.1	79.9
	1993	13.9	33.7	62.7	43.0	73.0	81.9	61.8	67.7
	1994	13.3	33.6	63.2	43.2	73.3	82.2	62.1	67.9
	1995	14.0	33.8	63.3	43.8	73.5	82.3	61.9	67.9
Countries of Central and Eastern Europe (including the former USSR)	1970	3.4	8.0	6.9	5.6	1.2	1.0	3.9	2.3
	1993	3.9	10.1		4.3	1.7	0.2	5.0	3.4
	1994	3.0	9.0	3.2	3.8	1.5	0.2	4.8	3.2
	1995	2.6	8.5	3.0	3.5	1.3	0.2	4.6	3.0
Socialist countries of Asia	1970	-	-	1.2	0.5	0.5	0.1	2.0	1.2
	1993	2.4	0.9	2.2	2.1	0.3	0.4	3.4	2.0
	1994	2.5	0.9	1.1	2.2	0.3	0.4	2.9	2.1
	1995	2.4	0.8	2.2		0.3	0.4	3.6	2.2

Table 3 (continued)

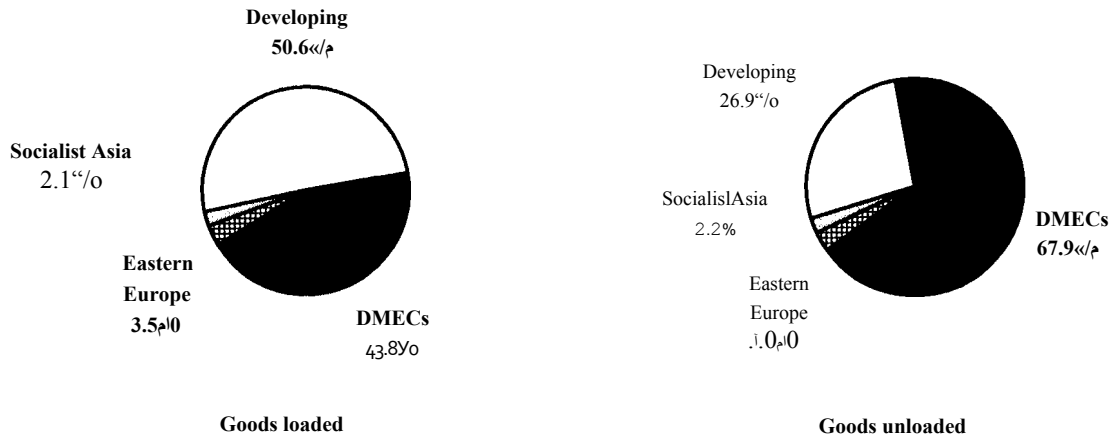
County group	Year	Goods loaded				Goods unloaded			
		Oil		Dry cargo	Total all	Oil		Dry cargo	Total all goods
		Comde	Products			Comde	Products		
Developing countries	1970	94.6	64.9	31.9	62.8	17.9	19.4	15.1	16.6
	1993	79.8	55.3	31.8	906	25.0	17.5	29.8	26.9
	1994	81.2	56.5	31.4	50.8	24.9	17.2	29.6	26.8
	1995	81.0	56.9		906	24.9	17.1	29.9	26.9
of which in:									
Africa	1970	25.5	4	9.1	15.2	1.7	4.7	3.6	2.9
	1993	21.4	7.1	4.0	10.2	9	2.1	4.0	4.2
	1994	21.7	70	3.8	10.1	5.2	2.0	3.9	4.1
America	1970	12.2	35.4	13.8	16.0	10.5	5.6	4.4	7.2
	1993	13.4	11.8	13.1	13.1	5.4	3.4	4.0	4.4
	1994	13.8	170	13.0		5.4	3.4	4.0	4.4
Asia	1970	56.9	27.0	8.1	31.3		8.5	6.7	6.4
	1993	45.0	36.1	14.0	76 0	13.7	11.4	21.0	17.6
	1994	45.7	37.2	13.9	27.2	13.9	11.3	71	17.8
Europe	1970						0.1	0.1	
	1993	.	0.2	0.3	0.2	0.6	0.3	0.7	0.6
	1994	.	0.2	0.3	0.2	0.5	0.2	0.6	0.5
Oceania	1970		0.1	0.8	0.4		0.5	0.3	0.2
	1993	.	0.1	0.4	0.2	.	0.3	0.1	0.1
	1994	.	0.1	0.4	0.7	.	0.3	0.1	0.1

Sources: Based on statistics provided by the United Nations Statistical Office, the UNCTAD data bank, and other specialized sources.

a/ Including international cargoes loaded at ports of the Great Lakes and St. Lawrence system for unloading at ports of the same system, but excluding such traffic in main bulk commodities.

b/ See annex 1 for the composition of these groups, and note 4 thereto regarding the recording of trade of land-locked countries.

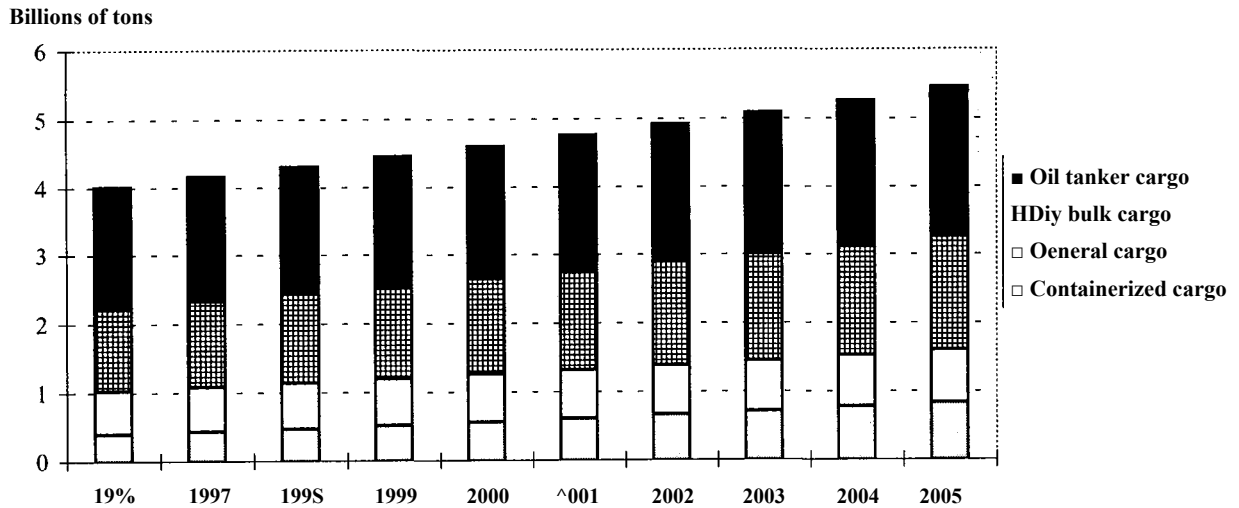
World seaborne trade by country groups
(Percentage distribution of tonnage, 1995)



Source: UNCTAD data bank.

Graph 5

Forecast of world seaborne trade, 1996-2005



Source: D^W/McGraw-Hill. *World Sea Trade Services*.

DEVELOPMENT OF THE FLEET

This chapter reviews the supply of the world maritime industry. The information and data comprehensively cover structure and ownership of the world fleet, the comparison of cargo generation and fleet ownership, and a forecast for fleet development.

A. Structure of the world fleet

16. Table 4 presents comparative time series data on the world fleet for 1993, 1994 and 1995. The world merchant fleet aggregated 734.9 million dwt by the end of 1995. This represents a 2.1 per cent increase over 1994, which moderately exceeded the 1.3 per cent increase in 1994. The higher rate of fleet expansion reflects both higher newbuilding deliveries (32.8 million dwt in 1995 as compared to 29.3 million dwt in 1994) as well as reduced levels of tonnage broken-up and lost (17.9 million dwt in 1995 as compared to 20.8 million dwt in 1994), leaving a net gain of 14.9 million dwt.

17. By vessel type, the combined tonnage of oil tankers and dry bulk carriers continued to dominate the world fleet. The former represented 36.4 per cent of the 1995 world total tonnage, as compared to 37.7 per cent in 1994 and the latter 35.6 per cent (34.8 per cent in 1994). The shares of general cargo ships and containerships were 14.2 per cent and 6.0 per cent respectively. Comparative data on ship-type structure indicate that the shares of ore/bulk carriers and containerships continue to increase, whilst those of oil tankers, ore/bulk/oil carriers and general cargo ships have been on the decline since 1993. Graph 6 illustrates the world fleet size trends by principal types of vessel for the 1980-1995 period.

18. The world fleet of wholly cellular containerships continued to expand both in terms of number of ships and their TEU capacity, reaching 1,771 ships of 2,720,000 TEU by the end of 1995, which represent an increase of 10.5 per cent in the number of ships and 14.9 per cent in TEU capacity over the previous year. Developments since 1993 show a 15.0 per cent annual average increase in the

world total TEU capacity and a 2.2 per cent increase in carrying capacity per ship. Table 5 indicates developments in detail for the period 1993-1995.

19. Technological developments have continued to decisively shape the supply of container tonnage in 1995. Particular developments have been observed with regard to vessel sizes which have again increased dramatically rejecting operators' desire to reduce costs through economies of scale. In 1985 only around 10 per cent of the world containership capacity was provided by vessels of 2,500 TEU or more. In 1995 this share was already higher than 45 per cent of the existing fleet and more than 60 per cent of tonnage on order. This development is underlined by the launching in 1995 and the delivery in January 1996 of a new record-breaking containership, the "Regina Maersk" with a capacity of 6,000 TEU. The ship is employed on the Far East route. Plans continue to be discussed for the construction of ships of up to 8,000 TEU and the limiting factors to be overcome are not of technical but rather of an organizational/commercial nature. While potential size-related cost reductions are evident on a port-to-port basis, the establishment of an optimum ship size in the context of door-to-door transport solutions is more difficult and could vary depending on trade routes and organizational sophistication.

20. In 1995 the world containership fleet continued to expand in open-registry countries to 33.0 per cent of the world TEU capacity as compared to 31.2 per cent in 1994. Conversely, the share of developed market-economy countries fell for the fourth consecutive year to 30.4 per cent in 1995 from 33.7 in 1994. Thus, the combined share of the two groups decreased to 63.4 per cent from 65.0 per cent in 1994.

Table 4

World fleet

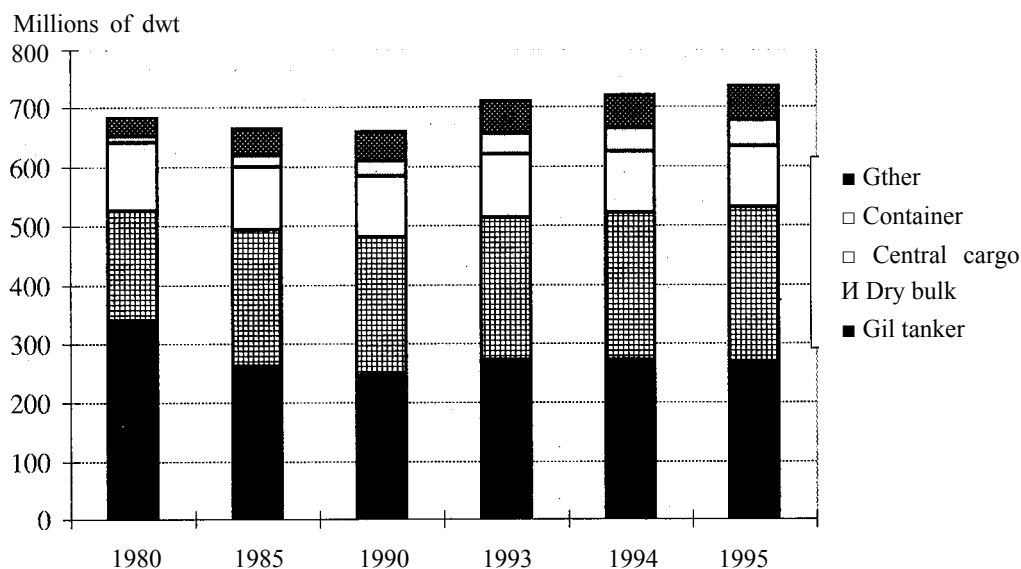
' principal types of vessel, 1993-1995 a/
(Thousands of dwt)
(End-of-year figures)

Principal types	1993	1994	1995	Percentage change 1994/1995
1. Oil tankers	271 222 <i>38.2</i>	270 997 <i>37.7</i>	267 651 <i>36.4</i>	
2. Bulk carriers	242 134 <i>34.1</i>	250 294 <i>34.8</i>	261 628 <i>35.6</i>	4.5
Core/bulk/oil	34 207 <i>4.8</i>	27 445	25 240 <i>3.4</i>	-8.0
Core/bulk	207 927 <i>29.3</i>	222 849 <i>31.0</i>	236 388 <i>32.2</i>	6.6
3. General cargo ships	106 866	103 731 <i>14.4</i>	104 145 <i>14.2</i>	0.4
4. Containerships	34 848	39 005	43 849 <i>6.0</i>	11.0
5. Other types of ships	55 552 <i>7.8</i>	55 778 <i>7.8</i>	57 644 <i>7.8</i>	3.4
Liquefied gas carriers	13 388	14 044	14 691 <i>2.0</i>	
Chemical tankers	7 381	7 616	7 697	
Miscellaneous tankers	539	592 <i>0.1</i>	628 <i>0.1</i>	6.6
Ferries and passenger ships	3 811 <i>0.5</i>	3 951 <i>0.6</i>	4 274 <i>0.6</i>	
Others	30 433	29 575	30 354 <i>4.1</i>	
World total	710 622 <i>100.0</i>	719 805 <i>100.0</i>	734 917 <i>100.0</i>	

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

a/ Percentage shares are shown in italics.

World fleet size by principal type of vessel: selected years 1980-1995



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

21. The share of developing countries in TEU capacity of the world fleet turned upwards to 16.7 per cent in 1995, the highest since 1991 when 17.1 per cent had been attained. This upward trend is attributed mainly to the increasing share of the developing countries of Asia (an increase of 39 ships with 70,000 TEU) which represents the major proportion (nearly 80 per cent) of the containership fleet registered in developing countries. The developing countries in America were another contributor to the increase with 19 more ships of 27,000 TEU moving up their share to 3.2 per cent in 1995 from 2.5 per cent in 1994. The share of other developing regions remained unchanged or practically non-existent.

22. Table 6 provides data on the age distribution of the world merchant fleet by types of vessel and by groups of countries and territories. For the second consecutive year the average age distribution of the world fleet slightly improved in 1995. The average age of the total world fleet decreased marginally to 14.96 years from 15.0 years in 1994. By types of vessel, the average age of tankers fell to 14.97 years in 1995 from the previous year's average age (15.35 years). The share of tanker tonnage aged 15 years and more

decreased to 56.9 per cent in 1995 from 58.8 per cent in 1994, mainly because comparatively more older tankers were scrapped and newbuilding activities exceeded those of 1994. Ageing of the dry bulk carrier fleet continued in 1995 but with the average age slightly up to 14.63 years in 1995 versus 14.58 years in 1994, reflecting reduced scrapping activities in this sector. Containerships still represented the youngest fleet in 1995, albeit with an increase in average age of 1.4 per cent to 12.70 years (11.03 years in 1994).

23. By country grouping, developing countries continued to show the lowest average age of all ships (14.23 years in 1995 versus 14.31 years in 1994) followed by developed market-economy countries (14.69 years in 1995 against 14.75 years in 1994), major open-register countries (15.46 years in 1995, 15.81 years in 1994) and socialist countries of Asia (17.16 years in 1995, 17.26 years in 1994). Countries of Central and Eastern Europe have the oldest fleet, with vessels built 10-14 years, and 15 and more years ago representing 19.5 per cent and 63.2 per cent of their total fleet respectively (19.2 per cent and 60.3 per cent respectively in 1994).

Table 5

Distribution of the world fleet and TEU capacity of fully cellular container ships by groups of countries,
1993, 1994 and 1995
(End-year figures)

Flags of registration by groups of countries	Number of ships			TEU capacity and percentage shares a/		
	1993	1994	1995	1993	1994	1995
1. World total	1 423	1 603	1 771	2 092 204 <i>100.0</i>	2 366 720 <i>100.0</i>	2 720 092 <i>100.0</i>
2. Developed market-economy countries	397	436	441	714 088	797 994	827 618 <i>30.4</i>
3. Major open-registry countries	426	527	609	599 753 <i>28.7</i>	739 454 <i>31.2</i>	898 270 <i>33.0</i>
Total, 2 and 3	823	963	1 050	1 313 841 <i>62.8</i>	1 537 448 <i>65.0</i>	1 725 888 <i>63.5</i>
4. Countries of Central and Eastern Europe (including the former USSR)			50	35 343 <i>1.7</i>	37 698	29 502
5. Socialist countries of Asia		83	67	70 297 <i>3.4</i>	94 487	95 173
6. Developing countries	292	322	384	329 200 <i>15.7</i>	351 664 <i>14.9</i>	453 478 <i>16.7</i>
of which in:						
Africa	1	1	1	585	585	4 779 <i>0.2</i>
America	1	90	109	41 282	59 736	86 566 <i>3.2</i>
Asia	218	224	263	288 498	287 370	357 282
Europe	1	1	4	574	2 833	3 711
Oceania	4	1	1	1 264	1 140	1 140
7. Other, unallocated	180	178	200	343 523 <i>16.4</i>	345 423 <i>14.6</i>	416 051

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

a/ Percentage shares are shown in italics.

Table 6

Age distribution of the world merchant fleet by types of vessel,
as at 31 December 1995
(Percentage of total in terms of dwt)

Country grouping	Types of vessel	Total	0-4 years	5-9 years	10-14 years	15 years and over	Average age (years) a/	Average age (years) 1994 a/
World total	All ships	100	15.6	14.0	18.2	52.2	14.96	15.00
	Tankers	100	20.9	12.6	9.6	56.9	14.97	15.35
	Bulk carriers	100	12.3	15.5	25.9	46.3	14.63	14.58
	General cargo	100	7.4	10.2	19.8	62.6	17.01	16.61
	Containerships	100	26.0	19.0	17.5	37.5	12.20	12.03
	All others	100	13.2	16.4	21.0	49.4	14.80	14.41
Developed market-economy countries	All ships	100	15.5	14.7	20.1	49.7	14.69	14.75
	Tankers	100	16.8	10.4	11.6	61.2	15.92	16.29
	Bulk carriers	100	11.8	17.3	29.6	41.3	14.09	14.04
	General cargo	100	12.9	14.8	23.2	49.1	14.88	14.42
	Containerships	100	25.9	19.1	15.7	39.3	12.39	11.71
	All others	100	16.4	18.9	21.4	43.3	13.75	13.38
Major open-registry countries	All ships	100	16.7	11.7	14.5	57.1	15.46	15.81
	Tankers	100	26.5	11.2	6.5	55.8	14.37	15.28
	Bulk carriers	100	7.1	10.8	21.9	60.2	16.77	16.76
	General cargo	100	5.7	12.2	19.8	62.3	17.05	16.84
	Containerships	100	32.1	15.2	19.6	33.1	11.34	11.78
	All others	100	12.1	20.0	15.1	52.8	15.07	14.46
Subtotal	All ships	100	16.0	13.5	17.6	52.9	15.02	15.19
	Tankers	100	21.4	10.7	9.2	58.7	15.20	15.84
	Bulk carriers	100	9.6	14.3	26.0	50.1	15.34	15.26
	General cargo	100	9.8	13.7	21.7	54.8	15.82	15.43
	Containerships	100	27.5	18.1	16.7	37.7	12.12	11.73
	All others	100	15.2	19.2	19.6	46.0	14.12	13.67
Countries of Central and Eastern Europe	All ships	100	4.5	12.8	19.5	63.2	17.23	16.76
	Tankers	100	1.9	11.2	22.0	64.9	17.74	17.24
	Bulk carriers	100	5.2	10.6	24.2	60.0	16.95	16.22
	General cargo	100	4.5	13.6	15.7	66.2	17.49	17.14
	Containerships	100	4.6	21.5	30.5	43.4	14.81	14.44
	All others	100	6.4	16.1	15.8	61.7	16.73	16.63
Socialist countries of Asia	All ships	100	10.9	7.5	15.4	66.2	17.16	17.26
	Tankers	100	26.2	11.0	8.2	54.6	14.29	16.06
	Bulk carriers	100	9.6	7.0	18.1	65.3	17.22	16.78
	General cargo	100	3.7	4.7	12.4	79.2	19.32	18.69
	Containerships	100	25.0	19.1	34.5	21.4	10.69	13.92
	All others	100	5.0	4.1	10.7	80.2	19.32	19.48
Developing countries (excluding open-registry countries)	All ships	100	13.8	18.0	23.2	45.0	14.22	14.31
	Tankers	100	17.1	16.1	14.5	52.3	14.72	15.50
	Bulk carriers	100	15.8	25.3	33.2	25.7	11.73	11.78
	General cargo	100	2.8	6.4	16.4	74.4	18.84	18.20
	Containerships	100	21.4	21.5	14.7	42.4	13.03	11.18
	All others	100	11.6	11.9	26.9	49.6	15.21	15.06

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

a/ To calculate average lower and upper limit of each ; 22 years.

it has been assumed that the a group, or the 5-years-and-over ;

of vessels are distributed evenly between the group, the mid-point has been assumed to be

B. Ownership of the world fleet

24. Table 7 and graph 7 provide data on the distribution of the world fleet by groups of countries for the years 198ft, 1994 and 1995. During the last year, developed market-economy countries continued to decrease tonnage ownership by 3.8 per cent to 203.9 million dwt, whilst major open-registry countries expanded their fleet by 6.2 per cent to the record high of 321.3 million dwt. Developed market-economy countries and major open-registry countries increased their combined tonnage by 2.1 per cent to 525.2 million dwt in 1995, thus accounting for 71.5 per cent of the world total tonnage. This represents the same level as 1994, but a significant decline from the relative position held in 198ft when 82.4 per cent of the world fleet was owned and registered in countries belonging to these two groups. The developing countries' share of the total deadweight continued to marginally increase to 18.7 per cent, as compared to 18.5 per cent in 1994. This represents a tremendous expansion over 198ft, with an average annual increase of 4.6 million dwt. In 1995, the tonnage of developing countries in Asia increased by 3.1 per cent over the previous year to 1ftft.5 million dwt, thus accounting for 73.1 per cent of the developing countries' total. The share of socialist countries in Asia remained stagnant at the level of 3.7 per cent in 1995 (3.6 per cent in 1994). The share of the countries in Central and Eastern Europe was on the downward move to 4.5 per cent in 1995 (5.1 per cent in 1994).

25. Table 8 provides more detailed data on fleet distribution by vessel types and country groups for the years 198ft, 1994 and 1995. In the oil tanker sector, the share of developed market-economy countries decreased to 31.5 per cent in 1995. On the other hand, the share of major open-registry countries increased to 5ft.2 per cent, resulting in a combined share of 82.0 per cent of the two groups, which remained almost unchanged from the previous year, but substantially decreased from 88.7 per cent in 198ft. Participation by developing countries marginally decreased from 14.3 to

13.7 per cent in 1995, basically reflecting a declining share of Asian developing countries to 9.8 per cent in 1995, the lowest share for any of the principal vessel types.

26. In the dry bulk carrier sector, the tonnage share of developed market-economy countries in the world total continued to decrease to 22.4 per cent in 1995. Conversely, major open-registry countries expanded their share to 45.6 per cent. The combined tonnage accounts for 68.0 per cent, which remained unchanged from 1994. Developing countries' share in 1995 slightly expanded to 22.2 per cent from 21.8 per cent in 1994. The share of developing countries in Asia very marginally increased in 1995 to 18.1 per cent, which however was the highest in their principal types of vessel.

27. In the sector of general cargo ships, the combined share of developed market-economy countries and major open-registry countries was on the downward trend, recording 53.6 per cent in 1995 as compared to 64.2 per cent in 198ft. Developing countries continuously expanded to 24.4 per cent in 1995 (17.6 per cent in 198ft), which represented the highest percentage proportion in their principal types of vessel. The containership sector continued to expand to 6ft per cent of the world deadweight in 1995, representing a constant expansion from 1.6 per cent in 198ft. Developed market-economy countries decreased their share of the containership deadweight tons further to 37.6 per cent in 1995. On the other hand, the open-registry countries' share constantly expanded to 33.8 per cent in 1995. The 1995 combined share of the two country groups (71.4 per cent) fell slightly below their 1994 share (71.6 per cent). The share of developing countries in the world containership fleet increased to 17.2 per cent in 1995. Regional imbalances continued to be very pronounced in this sector, with Asian developing countries alone accounting for 13.5 per cent of the world container tonnage or about 8ft per cent of that of developing countries.

Table 7

Distribution of world tonnage (grt and dwt) by groups of countries
of registration, 1980, 1994 and 1995 a/
(End-year figures)

Flags of registration by groups of countries	Tonnage and percentage shares b/						Increase in tonnage (millions of dwt) d/	
	In grt (millions)			In dwt (millions)			1980-1995	1994-1995
	1980 c/	1994	1995	1980 c/	1994	1995		
1. World total	414.5	476.2	491.4	682.8	719.8	734.9		
	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>		
2. Developed market- economy countries	214.3	144.5	141.5	350.1	211.9	203.9		8.0
	<i>51.7</i>	<i>30.3</i>	<i>28.8</i>		<i>29.4</i>	<i>27.8</i>		
3. Major open-registry countries	114.2	189.0	203.5	212.6	302.5	321.3	7.2	18.8
	<i>27.6</i>	<i>39.7</i>	<i>41.4</i>		<i>42.0</i>	<i>43.7</i>		
Total 2 and 3	328.5	333.5	345.0	52.7	514.4	525.2		10.8
	<i>79.3</i>	<i>70.0</i>	<i>70.2</i>	<i>82.4</i>		<i>71.5</i>		
4. Countries of Central and Eastern Europe (including the former USSR)	32.0	32.3	29.2			33.0	-0.3	
5. Socialist countries of Asia	7.3	17.3		10.9	25.6	27.0		1.4
6. Developing countries	44.7				133.4	137.5	4.6	4.1
	<i>10.8</i>	<i>18.2</i>	<i>18.4</i>	10.0	<i>18.5</i>	<i>18.7</i>		
Africa	4.9	5.0		7.2			0.0	0.0
America	14.5	19.2	20.2				0.5	1.0
Asia	25.0	62.0	64.7	39.1	97.5		4.1	3.0
Europe	0.1	0.3	0.3	0.2	0.3		0.0	0.1
Oceania	0.1	0.2	0.2	0.1	0.2	0.2	0.0	0.0
7. Other, unallocated	2.0	6.4	8.4	3.0			0.6	
	<i>0.5</i>			<i>0.4</i>	<i>1.3</i>			

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

a/ Excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets, which 1995 amounted respectively to 3.0, 1.0 and 1.4 million grt (3.8, 1.9 and 2.0 million dwt).

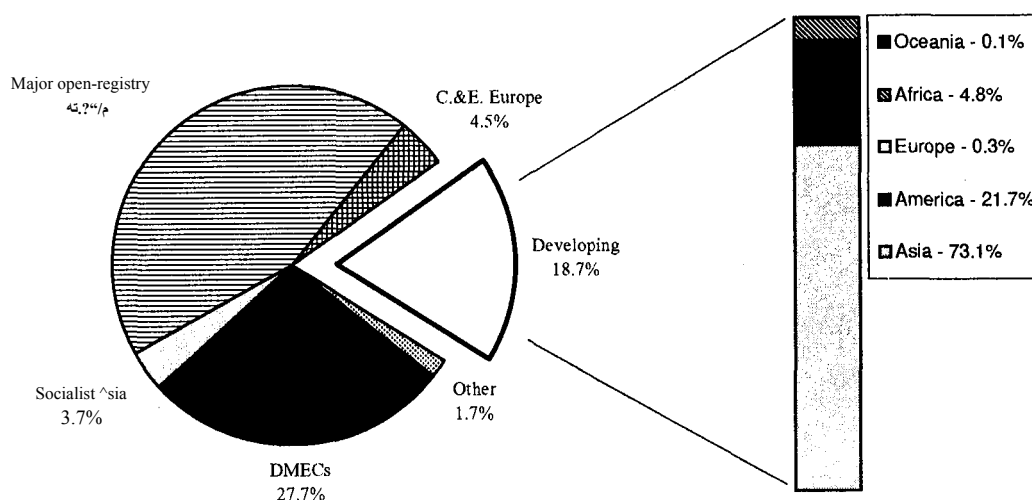
b/ Percentage shares are shown in italics.

d/ Mid-year figure.

d/ Average.

Graph 7

World tonnage by country groups, 1995
(Percentage distribution of dwt)



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

28. Data on the 1995 structure of the merchant fleet of the main country groups is provided in table 9. Developed market-economy countries' tonnage in oil tankers and dry bulk carriers reached 70.0 per cent of the group's total fleet, which is a moderate decrease from 71.3 per cent in 1994. Their general cargo ships amounted to 10.1 per cent (10.2 per cent in 1994), whilst containerships accounted for 8.1 per cent as compared to 7.3 per cent in 1994. Major open-registry countries have a greater proportion of their fleets in the oil tanker and dry bulk carrier sector, accounting for a combined 79.0 per cent in 1995, which is almost the same share as in 1994 (78.9 per cent). Their share of general cargo ships (11.0 per cent) is higher than in developed market-economy countries (10.1 per cent). However, containerships (4.6 per cent) account for less than the developed market-economy countries (8.1 per cent). In absolute terms, containership deadweight tonnage (16.5 million dwt) of developed market-economy countries continues to exceed that of major open-registry countries (14.8 million dwt), even if by a decreasing margin.

29. Tonnage distribution in developing countries is characterized by a comparatively high proportion of dry bulk carriers (42.1 per cent in 1995 and 49.9 per cent in 1994) and general cargo

ships (18.5 per cent in 1995 and the same percentage in 1994), while containerships represent only 5.5 per cent, which however slightly increased from 4.6 per cent in 1994. In the countries of Central and Eastern Europe, general cargo ships were dominant, accounting for 39.4 per cent in 1995 (38.0 per cent in 1994), while containerships declined to 1.5 per cent (1.9 per cent in 1994). The socialist countries of Asia continued to have a predominant share of both dry bulk carriers (42.2 per cent in 1995 and 39.8 per cent in 1994) and general cargo ships (31.9 per cent in 1995 and 32.4 per cent in 1994).

c. The 35 most important maritime countries and territories

30. The 35 most important maritime countries in terms of deadweight are ranked in table 10. This table comprises merchant vessels registered under the national flag or a foreign flag when the controlling interest of the vessels is located in the maritime country or territory. These 35 countries control 93.4 per cent of the world merchant fleet (93.1 per cent in 1994). In 1995 the five largest countries or territories controlled 50.9 per cent of the world fleet (51.5 per cent in 1994) and the top ten controlled 67.2 per cent (67.7 per cent in 1994).

Table 8

Percentage shares of world tonnage by types of vessel and country groups.
 1980 (as at 1 July), 1994 and 1995 (as at 31 December) a/
 (In terms of dwt)

II Country group	Year	Total dwt		tankers	Bulk carriers b/	General cargo ships	Container ships	Other ships
		Millions of dwt	Percentage of world total					
World total	1980	682.8	100.0	49.7	27.2	17.0	1.6	4.3
	1994	719.8	100.0	37.6	34.8	14.4	3.4	7.8
	1995	734.9	100.0	36.4	33.6	14.2	6.0	7.8
Percentage share by group of countries								
Developed market-economy countries	1980	330.1	31.3	32.3	32.7	43.4	74.3	30.4
	1994	211.9	29.4	33.0	24.6	20.8	39.3	41.6
	1995	203.9	27.8	31.3	22.4	19.7	37.6	41.8
Major open-registry countries	1980	212.3	31.1	36.2	31.7	20.8	13.3	17.0
	1994	302.3	42.0	48.1	43.3	33.6	32.1	
	1995	321.3	43.7	30.2	43.6	33.9	33.8	
Countries of Central and Eastern Europe	1980	37.8	5.5	2.8	4.2	12.3	2.9	
	1994	36.8	3.1	2.4	4.3	13.4	1.8	
	1995	33.0	4.3	2.2	3.6	12.3	1.3	
Socialist countries of Asia	1980	10.9	1.6	0.6	1.6	4.7	0.1	1.3
	1994	23.7	3.6	1.3	4.1	8.0	4.2	
	1995	27.0	3.7	1.3	4.4	8.3	3.8	
Developing countries	1980	68.4	10.0	7.7	9.2	17.6	7.6	12.0
	1994	133.4	18.3	14.3	21.8	23.8	13.7	16.6
	1995	137.3	18.7	13.7	22.2	24.4	17.2	17.1
of which in:								
Africa	1980	7.1	1.0	1.1	0.1			2.1
	1994	6.6	0.9	0.8	0.3	1.9	-	2.1
	1995	6.6	0.9	0.8	0.3		0.2	2.1
America	1980	21.8	3.2	2.3	3.3		0.1	3.7
	1994	28.8	4.0	3.0	3.6		3.1	6.9
	1995	29.8	4.1	3.1	3.3		3.4	4.7
Asia	1980	39.1	3.7	4.3	3.7		2.7	9.2
	1994	97.3	13.6	10.3	17.7	14.0	12.3	9.4
	1995	100.3	13.7	9.8	18.1	14.4	13.3	10.2
Europe	1980	0.2	-	-	-	0.1	-	-
	1994	0.3	-	-	-	0.1	0.1	-
	1995	0.4	0.1	-	-		0.1	-
Oceania	1980	0.2	-	-	-	0.1	-	-
	1994	0.2	-	-	-	0.1	-	0.1
	1995	0.2	-	-	-	0.1	-	0.1
Other, unallocated	1980	3.0	0.4	0.2	0.6		1.6	0.1
	1994	9.6	1.3	0.6	1.9	0.3	6.6	1.2
	1995	12.2	1.7	1.0	1.9	1.3	6.3	1.0

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

a/ Excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets,

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

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Table 10

The 35 most important maritime countries, as at 31 December 1995 a/

Country or territory b/ (domicile b/	Number of vessels			Deadweight tonnage				
	National flag c/	Foreign flag	Total	National flag	Foreign flag	Total	Foreign flag as percentage of total	Total as percentage of world total c/
Greece	1 019	1 970	2 989	50 879 872	69 741 923	120 661 795	57.83	17.98
Japan	954	1 862	2 816	23 429 025	63 340 704	86 769 729	73.00	U.93
United States	494	703	1 197	13 674 925	36 589 435	50 264 360	72.79	7.49
Norway	537	543	1 380	28 574 594	19 782 301	48 356 895	40.91	7.20
China	1 570	344	1 914	23 165 633	12 081 092	35 246 725	34.28	5.25
Hong Kong	130	517	647	0 987 444	24 343 842	31 331 286	77.70	4.67
United Kingdom	391	485	876	5 190 402	16 767 190	21 963 652	76.34	3.27
Republic of Korea	475	284	759	9 721 121	11 209 024	20 930 145	53.55	3.12
Russian Federation	2 723	194	2 917	14 318 506	4 092 676	18 411 182	22.23	2.74
Germany	510	920	1 432	6 168 337	11 098 448	17 266 785	64.28	2.57
Taiwan Province of China	153	249	402	7 013 348	6 756 866	14 370 214	47.07	2.14
Sweden	201	142	343	2 135 543	10 938 623	13 074 166	83.67	1.95
Singapore	359	224	583	7 860 511	5 131 535	12 998 046	39.48	1.94
India	390	52	442	11 208 483	1 124 668	12 333 151	9.12	1.84
Denmark	401	198	599	7 204 329	4 653 241	11 857 570	39.24	1.77
Italy		150	630	7 019 049	3 827 616	11 446 665	33.44	1.71
Brazil	220	10	230	8 401 359	13 712 344	9 772 593	14.03	1.46
Turkey	431	12	443	9 402 295	61 510	9 463 805	0.65	1.41
Saudi Arabia	70	54	124	1 003 681	8 460 114	9 463 795	89.39	1.41
France	107	99	206	3 603 523	3 420 339	7 023 862	48.70	1.05
Netherlands	401	215	616	3 442 570	2 723 702	6 166 272	44.17	0.92
Ukraine	025	55	680	4 912 228	10 17 633	5 929 861	17.16	0.88
Switzerland	13	183	196	540 914	4 588 792	5 129 706	89.46	0.76
Iran, Islamic Rep. of	142	2	144	4 890 729	33 572	4 924 301	0.68	0.73
Philippines	318	23	341	4 538 886	157 079	4 695 965	3.34	0.70
Romania	250	31	287	3 581 017	993 694	4 574 711	21.72	0.68
Indonesia	4.51	88	539	2 819 591	1 290 086	4 109 677	31.39	0.61
Belgium	136	142	278	204 035	3 840 885	4 044 920	94.96	0.60
Kuwait	34	?	41	2 906 050	929 592	3 835 642	24.24	0.57
Finland	111	50	167	1 107 357	2 505 986	3 613 343	69.35	0.54
Spain	102	145	247	805 339	2 754 998	3 560 337	77.38	0.53
Australia	77	24	101	3 111 419	301 701	3 413 120	8.84	0.51
Thailand	219	47	266	1 942 542	1 360 019	3 302 561	41.18	0.49
Malaysia	109	15	124	3 091 251	169 730	3 260 981	5.20	0.49
Croatia	150	121	271	313 212	2 897 698	3 210 910	90.25	0.48
Total (35 countries)	15 231	10 178	25 409	286 381 180	340 397 548	626 778 728	54.31	93.38
Percentage	59.9	40.1	100	45.7	54.3	100		100
World total	17 757	11 084	28 841	313 306 736	357 877 214	671 183 950	53.32	100.00
Percentage	61.0	38.4	100	46.7	53.3	100		100

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

a/ Vessels of 1,000 GRT and above, excluding the United States Reserve Fleet and the United States and Canada Great Lakes Fleets.

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

c/ Including vessels flying the national flag but registered in territorial dependencies or associated self-governing territories. For the United Kingdom, British flag vessels are included under the national flag, except for Bermuda (listed in table 11 as an open-registry country) and Hong Kong (shown separately in the present table).

31. The trend for increasing foreign flag registry continued in 1995. Total tonnage registered under foreign flags in 1995 reached 340.4 million dwt, representing 54.3 per cent of the 35 countries' total fleet, as compared to 51.9 per cent in 1994. This indicates that more than half of the tonnage beneficially owned by the 35 countries was not registered in the countries of domicile of the parent companies. While registry under foreign flag has been a long-standing practice by owners from developed market-economy countries, it is becoming a common practice in other country groups, particularly in developing countries. In 1995, the tonnage registered under foreign flags of the developing countries of the 35 countries represented 18.3 per cent of the 35 countries' total foreign flag fleet, as compared to 16.9 per cent in 1994.

D. Major open registries

32. As indicated in the preceding paragraphs, foreign registers continue to expand their share in the world merchant fleet. Table 11 summarizes the tonnage distribution of the seven major open-registry countries by principal types of vessel. The total tonnage registered in 1995 increased substantially by 6.6 per cent to 293.1 million dwt from 275.0 million dwt in the previous year. Bahama continuously expanded its fleet in 1995 by 12.0 million dwt to 98.4 million dwt, exceeding Liberia whose fleet slightly increased by 0.5 million dwt to 92.3 million dwt. Vanuatu decreased to 2.1 million dwt from 2.3 million dwt in 1994. By vessel type, oil tankers represent 43.6 per cent of the total deadweight (44.7 per cent in 1994), followed by dry bulk carriers with 35.9 per cent (34.6 per cent in 1994), and general cargo ships with 10.4 per cent (11.0 per cent in 1994). Containership continued to increase to 4.8 per cent in 1995 (4.3 per cent in 1994), thus confirming the trend to flag out also in this sector of maritime transport.

33. The participation of nationals in the registry of the most important open or international registers is provided in table 12. The data compare the total tonnage registered in the selected country of registry with the tonnage owned by the nationals of, and registered in, the countries of registry. For most open-registry countries, except Cyprus, the share of tonnage owned by the nationals is minimal or zero. However, with international registry, ownership remained at the level of 9 per cent or more.

34. The true nationality of the ships operated within the seven major open-registry fleets is analysed in table 13. In 1995, total tonnage of the 20 countries or territories accounted for 90.9 per cent of the total seven major open-registry fleets, as compared to 92.0 per cent in 1994. A similar decline is also observed in Liberia (90.9 per cent in 1995 versus 92.0 per cent in 1994) and the Bahamas (88.0 per cent in 1995, versus 89.4 per cent in 1994). Containership is concentrated in 10 countries or territories which control 78.8 per cent of the deadweight of vessels of the total seven major open-registry fleets. Similarly the top five countries or territories control 28 per cent. Greece was placed at the top in 1995 for the second consecutive year, with the largest share (22.1 per cent) of the total seven major open-registry fleets, and also the largest foreign-flag fleet owner with 9.8 million dwt ahead of Japan with 63.3 million dwt.

E. Comparison of cargo turnover and fleet ownership

35. The correlation between cargo volume generated by different country groups and their fleet ownership in 1984, 1994 and 1995 is summarized in table 14. In 1995, developed market-economy countries, either directly, or through open or international ship registers, controlled 71.5 per cent (71.5 per cent in 1994) of the world fleet, while they generated 56 per cent of the world seaborne trade (55.8 per cent in 1994). The share of developing countries in the world cargo turnover stood at 38.5 per cent (38.6 per cent in 1994), while their merchant fleet constituted 18.7 per cent of the world fleet in deadweight tons (18.5 per cent in 1994).

36. Long-term comparisons see the gap between cargo turnover and fleet ownership have narrowed substantially in both developed market-economy countries and developing countries. The ratio of goods loaded and unloaded in 1995 was almost unchanged from that in 1984 for both groups. On the other hand, the fleet ownership of developed market-economy countries declined significantly from a high level of 82.4 per cent of the world fleet in 1984 to 71.5 per cent in 1995, while developing countries substantially raised their share to 18.7 per cent in 1995 from the 10.0 per cent registered in 1984.

Table 12

Tonnage owned by the nationals of, and registered in, the country of registry in the total fleet of the most important open and international registers, as at 31 December 1995 a/
(Thousand dwt)

Country of registry or register	Total tonnage registered in the country of register	Tonnage owned b [^] nationals of, and registered in, the country of registry	Share of tonnage owned b [^] nationals in the total registered fleet (%)
Panama	98 409	0	0.0
Liberia	92 291	0	0.0
Cyprus	36 604	999	2.7
Bahamas	34 787	205	0.6
Norwegian International Ship Registry	29 151	25 992	
Malta	25 610	214	0.8
Danish International Ship Registry	7 117	6 949	97.6
Bermuda	4 751	0	0.0
Vanuatu	2 077	0	0.0

Source: on data supplied b[^] Lloyd's Maritime Information Services Ltd. (London).

a/ Ships of 1,000 grt and above. This table is not fully comparable with tables 7 and 9, which list ships of 100 grt and above as the base.

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Table 14

Comparison between total cargo turnover and fleet ownership
by groups of countries, 1980, 1994 and 1995

Country grouping	Year	Goods loaded and unloaded (millions of tons)		Total of goods loaded and unloaded (millions of tons)	Merchant fleet (millions of dwt)	Percentage of world total of	
		Loaded	Unloaded			Goods loaded and unloaded	Merchant fleet owned (dwt)
Developed market-economy and major open-registry countries	1980	1 424	2 626	4 050	562.7	54.9	82.4
	1994	1 946	3 106	5 052	514.4	55.8	71.5
	1995	2 040	3 220	5 260	525.2	56.0	71.5
Developing countries	1980	2 033	808	2 841	68.4	38.5	10.0
	1994	2 272	1 228	3 500	133.4	38.6	18.5
	1995	2 342	1 278	3 620	137.5	38.5	18.7
Countries of Central and Eastern Europe (including the former USSR)	1980	201	145	346	37.8	4.7	5.5
	1994	170	140	310	36.8	3.4	5.1
	1995	173	142	315	33.0	3.4	4.5
Socialist countries of Asia	1980	46	100	146	10.9	2.0	1.6
	1994	97	99	196	25.6	2.2	3.6
	1995	96	103	199	27.0	2.1	3.7
World total	1980	3 704	3 679	7 383	682.8		
	1994	4 485	4 573	9 058	719.8		
	1995	4 651	4 682	9 333	734.9		

Source: As per tables 3 and 8.

a/ Including unallocated tonnage indicated in annex III.

Box 3

LNG shipping in 1995

Market trends

The upward trend in the LNG market experienced in 1994 continued throughout 1995, with growth of 4.7 per cent. World trade in LNG totalled 91.9 Million m³ or 68 million tons, as compared to 87.8 billion m³ or 65 million tons the previous year. Growth was primarily due to an increase in imports by countries of the Far East (mainly Japan and the Republic of Korea). European imports also rose due to spot purchases from Australia and Abu Dhabi, pending resumption of normal production levels in the Algerian liquefaction plants currently undergoing renovation work. Low gas prices in the United States and reduced Algerian capacity caused a further fall in United States imports to less than 19 shipments by 125,000-130,000 m³ vessels in 1995.

World fleet

At the end of 1995, the world fleet in service comprised 89 LNG carriers with a total capacity of 9,608,700 m³, as broken down in the following table.

Fleet of LNG carriers of 20,000 m³ and over
as at 31 December 1995

Size group (in ³)	Year of build								TOTALS	
	1980 and earlier		1981-1985		1986-1990		1991-1995			
	No.	in ³	No.	m ³	No.	m ³	No.	m ³	No.	m ³
<20,000/ 49,999	11	385 600	-	-	-	-	-	-	11	385 600
20,000/ 49,999	1	193 240	-	-	-	-	-	-	3	193 240
50,000/ 74,999	9	705 914	-	-	-	-	2	175 000	11	880 914
75,000/ 99,999	4	493 762	-	-	-	-	-	-	4	493 762
100,000/124,999	4	493 762	-	-	-	-	-	-	4	493 762
125,000 and over	23	2 917 789	15	1 917 363	5	635 000	17	2 185 000	60	7 655 152
Total	50	4 696 305	15	1 917 363	5	635 000	19	2 360 000	89	9 608 668

During 1995, six new vessels were delivered, with a total capacity of 794,300 m³. Four newbuildings, one medium and three large, were ordered in 1995. At the year-end, the order book for LNG carriers totalled 21 vessels for a total capacity of 2,480,000 m³: 2 small vessels of around 19,000 m³, 2 medium vessels of around 65,000 m³, 17 large vessels of between 128,000 and 137,500 m³.

Prospects

There were a number of decisive events in 1995, such as the launch of the long-awaited Nigerian project, the third Malaysian plant and the new plant in Qatar. The most important of all is the new Trinidad project, singled out by the fact that it is 30-per-cent-owned by LNG purchasers. This is an outstanding indication of encouragement to develop energy sources. Despite some slowdown in growth during 1995, the future for the LNG industry still looks bright in view of the large number of contracts for LNG supplies signed or awaiting finalization and the recent reinforcement of liquefaction, transportation and delivery of facilities.

Sources: Barry Rogliano Salles (Paris); Jacobs and Partners Ltd., *World Tanker Fleet Review*, July-December 1995; Society of International Gas Tanker and Terminal Operators Ltd. (London).

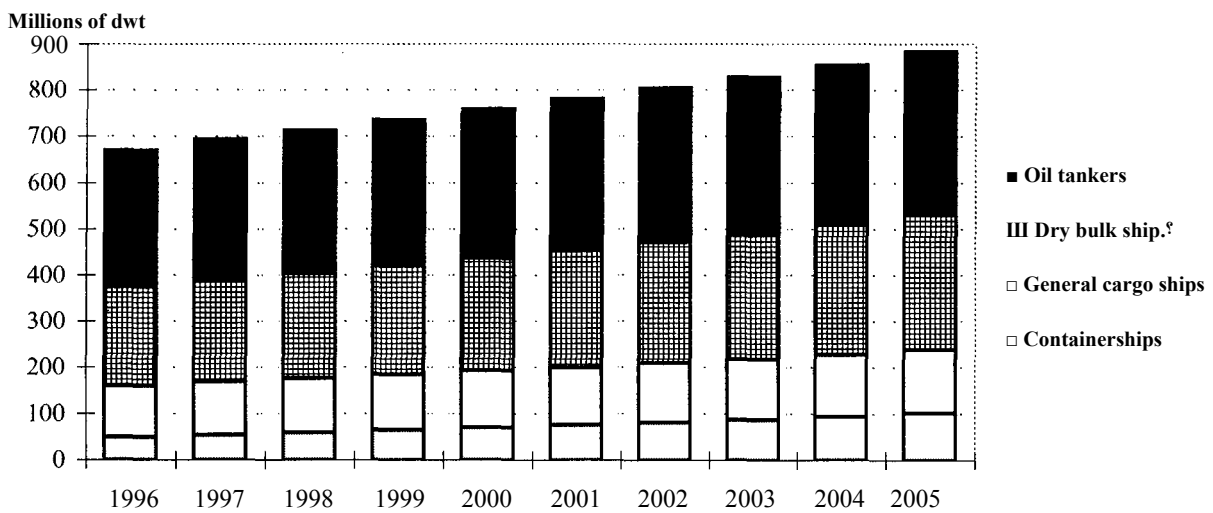
F. Forecast for world fleet development

37. The forecasts for world fleet development by vessel type (from main types) are shown in graph 8. The World Fleet Forecast Service (WFFS) projects that the total world fleet will increase at the average annual growth rate of 3.6 per cent to 883.3 million dwt by the year 2005. Dry bulk

carriers and oil tankers are expected to increase at the average annual growth rate of 4.4 per cent and 1 per cent to 295.4 million dwt and 35d.9 million dwt respectively by 2005. The combined tonnage of container and general cargo ships will expand by an average of 5.4 per cent per year over the decade to 237.0 million dwt by 2005.

Graph 8

Forecast of world fleet by principal types of vessel. 1996-2005



Source: DRI/McGraw-Hill. World Fleet Forecast Service.

Chapter III

PRODUCTIVITY OF THE WORLD FLEET AND THE SUPPLY AND DEMAND SITUATION IN WORLD SHIPPING

This chapter provides information concerning the operational productivity of the world fleet and on analysis of the balance between supply and demand for tonnage. Key indicators are tons of cargo carried and ton-miles performed per dwt, and analysis of tonnage oversupply by main shipping market sectors.

A. Estimate of tons and ton-miles per dwt

38. The main operational productivity indicators for the world fleet continued to improve in 1995 as shown in table 15 and graph 9. Tons of cargo carried per dwt stood at the record-high level of 6.33. Ton-miles performed per dwt also continued the upward trend to reach a new record of 27,473. These substantially improved shipping activities reflect both the continuous expansion of world seaborne trade (an increase of 3.7 per cent in 1995) and a comparatively moderate and less-speculative expansion of the world fleet (an increase of 2.1 per cent in 1995), thus narrowing the supply/demand gap in world shipping.

39. Table 16 provides additional details on ton-miles performed by oil tankers, dry bulk carriers, combined carriers and the residual fleet. Ton-miles

per dwt of tankers, combined carriers and residual fleet continued to increase in 1995 by 0.4 per cent, 10.8 per cent and 6.5 per cent respectively over 1994. On the other hand, ton-miles per dwt of dry bulk carriers marked a decline of 3.7 per cent in 1995. This can be explained by an expanded supply of ore/bulk carriers (6.1 per cent over 1994) beyond the growth of main dry bulk cargo trades (5.3 per cent over 1994). These trends are also evidenced by the data on tonnage productivity in terms of cargo carried per dwt (table 17). There was an expansion in tons carried per dwt of oil tankers, combined carriers and the residual fleet - an increase of 0.8 per cent, 10.6 per cent and 3.7 per cent over 1994 respectively, whilst the performance of dry bulk carriers declined in tons carried per dwt by 4.8 per cent as compared to the 1994 results.

Table

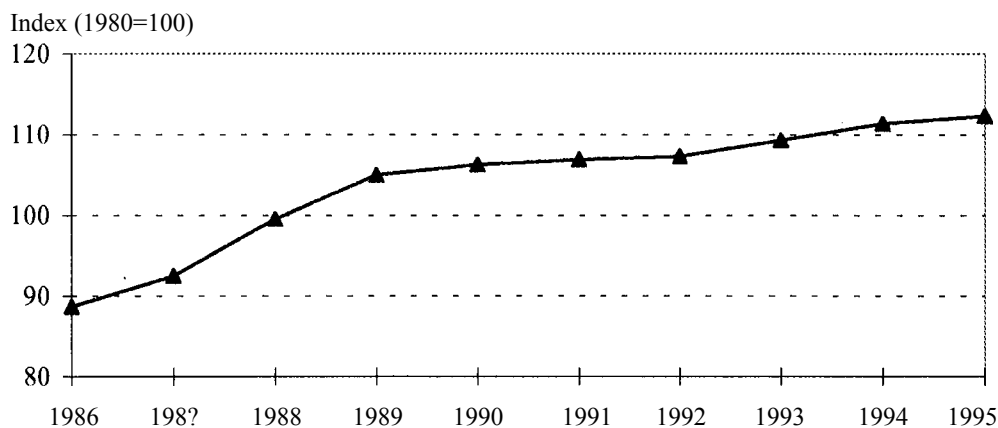
Cargo carried and ton-miles performed per dwt of the total world fleet, 1985-1995

Year	World fleet (millions of dwt)	Total cargo carried (millions of tons)	Total ton-miles performed (thousands of millions of tonmiles)	Tons of cargo carried per dwt	Ton-miles performed per dwt
1985	664.8	3 382	13 160	5.09	19 800
1986	639.1	3 499	13 896	5.41	21 680
1987	632.3	3 909	14 298	6.14	22 610
1988	628.0	3 692	15 299	5.88	24 360
1989	638.0	3 891	16 389	6.10	25 680
1990	658.4	4 008	17 121	6.09	26 000
1991	683.9	4 120	17 873	6.03	26 190
1992	694.7	4 220	18 228	6.07	26 240
1993	710.6	4 330	18 994	6.09	26 730
1994	719.8	4 489	19 600	6.23	27 230
1995	734.9	4 651	20 190	6.33	27 473 II

Source: World fleet: Lloyd's Maritime Information Services Ltd. (London) (mid-year data for 1984-1996, year-end data for 1991-1999); total cargo carried: UNCTAD data bank; ton-miles: Fearnleys (Oslo), *Review*, various issues.

Graph 9

Index of ton-miles performed per dwt of total world fleet. 1986-1995



Source: UNCTAD calculations based on table 15 of this publication.

B. Supply and demand in world shipping

40. A summary of the balance of tonnage supply and demand for the 1988-1995 period is provided in table 18. The moderate increase of the world merchant fleet of 2.1 per cent, linked with very positive developments in world trade, alleviated some of the problems of oversupply. The total surplus tonnage reached 50.8 million dwt (the lowest since 1988), representing a record low of 6.9 per cent of the 1995 world merchant fleet.

41. By main vessel type, the capacity in the oil tanker sector continued to decrease to 277.0 million dwt in 1995 (see table 19 and graph 10). A total of 28.8 million dwt or 10.4 per cent of the total world tanker fleet was in excess of the demand for global oil seaborne transport. This was a substantial improvement over 1994, when 13.8 per cent of the total world tanker fleet was surplus. This reduction in surplus capacity was attributable to both demand and supply side developments. Increasing tanker scrapping (10.9 million dwt in 1995 and 13.1 million dwt in 1994) exceeding tanker newbuildings (10.8 million dwt in 1995 and 10.2 million dwt in 1994), and improving tanker trades (see tables 1 and 30) took some of the pressure off the market.

42. Overcapacity in the dry bulk sector also decreased in 1995 to 17.9 million dwt. This represented a decline of 11.8 per cent over 1994 and accounted for 2.1 per cent of the world dry bulk fleet. This favourable development can be explained mainly by improved demand generated by expanding main dry bulk commodities, specifically in the grain sector which experienced a significant change in trading patterns; the United States and Argentina replaced the shortage in exports of Australia and Canada.

43. Surplus capacity in the conventional general cargo sector was relatively less serious than in the bulk trades (liquid and dry) as shipowners concentrated more on steady shipping practices with less speculative elements. In 1995, the oversupply of the conventional general cargo sector decreased by 9.1 per cent to 2.6 million dwt, representing 3.2 per cent of the world total conventional general cargo fleet. On the other hand, in the unitized cargo sector, mega containership-operators have expanded carrying capacity with larger newbuildings in operation on East-West trunk trade routes. The total unitized fleet increased their surplus capacity by 0.2 million dwt, which represented 1.3 per cent of the world unitized fleet.

Table 18

Tonnage oversupply in the world merchant fleet, 1988-1995 a/
(Million dwt and percentages)

	1988	1989	1999	1991	1992	1993	1994	1995
	Million dwt							
World merchant fleet (as at mid-year)	627.9	638.9	658.4	683.5	694.7	719.6	719.8	734.9
Su [^] lus tonnage b/	83.4	62.3	63.7	64.2	71.7	72.9	63.4	59.8
Active fleet <i>d</i>	544.5	575.7	594.7	619.3	623.9	638.6	656.4	684.1
	Percentages							
Su [^] lus tonnage as a percentage of the world merchant fleet	13.3	9.8	9.7	9.4	19.3	19.1	8.8	6.9

Sources: Lloyd's Maritime Information Services Ltd. (London); *Lloyd's Shipping Economist* (London), various issues.

a/ Mid-year data for 1988-1999, year-end data for 1991-1995.

b/ Estimates of average year figures. Su[^]lus tonnage is defined as tonnage that is not fully utilized due to slow steaming, lay-up status or because it is lying idle or other reasons.

d World fleet minus su[^]lus tonnage.

Table 19

Analysis of tonnage oversupply by main vessel type. 1988-1995 a/
(Average year figures in million dwt)

	1988	1989	1990	1991	1992	1993	1994	1995
Supply of world tanker fleet b/	250.6	253.9	266.2	273.5	283.4	284.6	282.9	277.0
Total tanker fleet surplus d	54.7	41.0	40.9	39.8	41.8	43.5	39.0	28.8
Share of surplus fleet in the world tanker fleet (per cent)	21.8	16.2	15.4	14.6	14.8	15.3	13.8	10.4
Supply of world dry bulk fleet b/	220.6	225.4	228.7	235.0	237.3	238.6	242.6	252.9
Dry bulk fleet surplus c/	23.4	17.0	19.4	20.7	25.1	23.6	20.3	17.9
Share of surplus in the world dry bulk fleet (per cent)	10.6	7.5	8.5	8.8	10.6	9.9	8.4	7.1
Supply of world conventional general cargo fleet	64.7			63.0	63.0	61.9	62.0	
Conventional general cargo fleet surplus								2.0
Share of surplus in the world conventional general cargo fleet (per cent)	4.5			4.3	4.5	4.5	4.5	
Supply of world unitized fleet d/	34.4	35.8	37.5	40.3	43.0	45.7	49.8	53.4
Surplus of unitized fleet	0.8	0.8	0.5	0.4	0.7	0.7	0.5	0.7
Share of surplus in the world unitized fleet (per cent)	2.3	2.2	1.3	1.0	1.6	1.5	1.0	1.3

Source: *Lloyd's Shipping Economist* (London), various issues.

a/ Aggregates for all sectors as shown in this table are averages for the years shown and therefore differ from the world figures in table 18, which indicate estimates at mid-year. Table 19 excludes tankers and dry bulk carriers of less than 10,000 dwt and conventional general cargo/unitized vessels of less than 5,000 dwt.

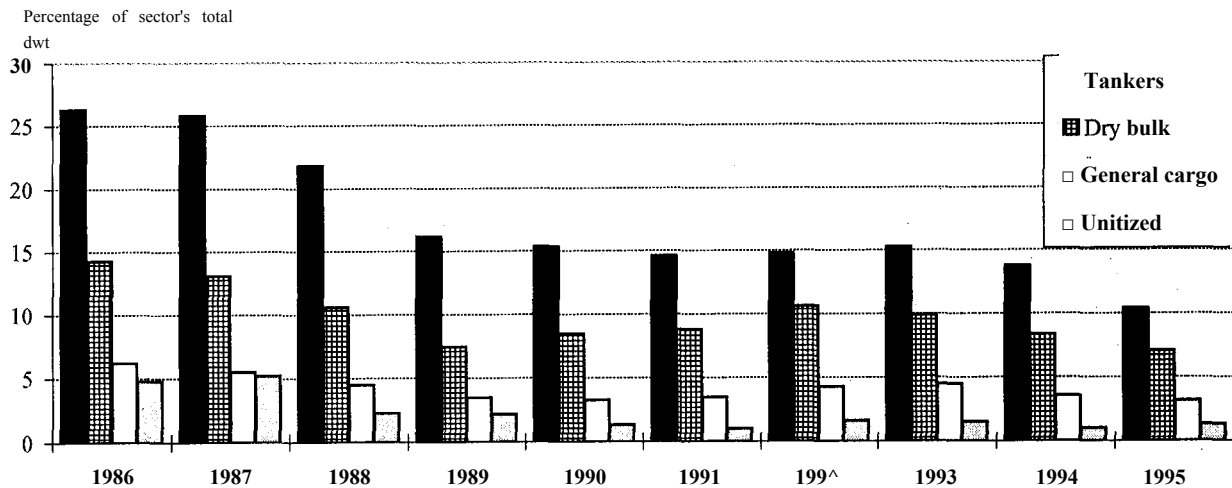
b/ Including combined ore/bulk/oil carriers on the basis of actual supply (for 1995, total of 25.8, of which 4.5 as tanker and 21.4 as dry bulker).

c/ Including 50 per cent of combined ore/bulk/oil carriers.

d/ Unitized fleet includes here fully cellular containerhips, partly cellular containerhips, ro-ro ships and gear carriers.

Graph 10

Trends in surplus capacity by main vessel type, 1986-1995



Source: Based on *Lloyd's Shipping Economist* (London), various issues.

Box 4

Stable markets boost global rig use levels to 10-year high

Worldwide offshore rig utilization is at its highest level since February 1985. The high level is due to stability in the two largest offshore drilling markets, the North Sea and the United States Gulf of Mexico. Increased demand has also come from South-East Asia since the beginning of the year.

Of the world's 606 mobile drilling units, 526 are currently under contract, putting offshore drilling fleet utilization at 86.8 per cent. A net two-rig increase in the worldwide contracted rig count occurred in mid-August. "Increased worldwide utilization has come about this year through a combination of dwindling rig supply and slowly advancing rig demand."

The United States Gulf of Mexico rig count has risen, standing at 142 rigs under contract. Utilization of the 175-rig United States Gulf drilling rig fleet now stands at 81.1 per cent. Offshore rig utilization in Europe remains at 95.2 per cent in Europe, where 99 of the 104 rigs are under contract.

A Houston-based offshore drilling contractor reports that the offshore drilling markets strengthened worldwide in July after driving in June 1995. The contractor's Summary of Current Offshore Rig Economies (SCORE) which shows mobile offshore drilling rig dayrates as a percentage of estimated dayrates contractors would need to justify new construction rose to 42.8 per cent.

Worldwide rig markets strengthened broadly in July, resuming an upward trend begun in March 1995. Led by increased dayrates in the North Sea, the United States Gulf of Mexico and South-East Asia also reflected strengthening markets. In the North Sea, dayrates during July averaged 52.5 per cent of the rates needed to justify new construction, the first time any regional market has exceeded 50 per cent since 1991. July's North Sea SCGRE was 8.1 per cent higher than the level in June 1995 and 69.2 per cent higher than the level one year previously. The Gulf of Mexico showed an increase of 5.1 per cent in July, with dayrates at 36.1 per cent of new construction rates, up from 34.4 per cent in June, and dayrates in South-East Asia stood at 40.2 per cent of those needed to justify newbuilding in July, up 1.9 per cent from June.

Source: *Lloyd's List* (London), 23 August 1995.

44. The average amount of tanker tonnage engaged in oil storage throughout 1995 increased to 10.29 million dwt (10.05 million dwt in 1994) (see table ^0). In June and July, when the VLCC/ULCC market picked up, the tonnage for semi-permanent storage declined to the 6.1 million dwt level, and turned upwards through the third and fourth quarters. In December 1995, VLCCs and ULCCs accounted for 59.6 per cent (64.3 per cent in 1994) and 86.0 per cent (72.8 per cent in 1994) of the total tonnage for semi-permanent and short-term storage respectively.—

Table 20

Tanker tonnage engaged in oil storage, 1984-1995
(Capacity in thousand dwt)

Date	Semi-permanent		Short-term		Total	
	No.	Thousand dwt	No.	Thousand dwt	No.	Thousand dwt
January 1984	49	9 737	25	4 658	74	14 395
July 1984	43	9 601	48	11 134	91	20 735
January 1985	30	6 384	49	12 093	79	18 477
July 1985		8 342		9 714	76	18 056
January 1986	43	7 514	35	8 353	78	15 867
July 1986	40	6 696	33	9 196		15 892
Janua^ 1987	41	7 148	45	12 879		20 027
July 1987	39	7 012		7 917	67	14 929
January 1988	40	6 837	30	9 394	70	16^31
July 1988	37	6 553		7 636		14 189
January 1989	35	6 123	20	4 783	55	10 906
July 1989	35	6 123	19	5 125	54	11248
January 1990	37	6 234	16	4 162	53	10 396
July 1990	34	5 784	20	5 618	54	11402
December 1990	33	5979	27	6 7^0	60	12 649
July 1991	34	6 081	52	11499		17 580
December 1991	34	6 291	22	4 553	56	10 844
July 1992	36	6 425	25	5 734	61	12 159
December 1992	34	6^99	16	7 88^	50	9 185
July 1993	41	6 745	26	5 368	67	12 113
December 1993	39	7 019	20	3 582	59	10 601
July 1994	38	6 717	22	3 711	60	10 428
December 1994	36	6 461	19	3 047	55	9 50^
January 1995	36	6 461	19	3 131	55	
February 1995	36	6 229		3 464	57	9 693
March 1995	36	6 229	22	3 773	58	10 002
April 1995	37	6 315	19	3 207	56	9 522
May 1995	38	6 356	19	3 207	57	9 563
June 1995	37	6 084	20	3 541	57	9 625
July 1995	37	6 086	22	4 345	59	10431
August 1995	38	6 233		4 273	62	10 506
September 1995		6 233	24	4 289		10 522
Dctber 1995		6 506	26	4 806	65	11312
November 1995	39	6 506	26	4 806	65	11 312
December 1995	43	6 961	22	4 373		11334

Source: John I. Jacobs pic. *World Tanker Fleet Review* (London), various issues.

Chapter IV

SHIPBUILDING, SECOND-HAND MARKET AND DEMOLITION

This chapter reviews the supply of tonnage in the world shipping industry, covering newbuilding prices and deliveries and tonnage on order. // also reviews markets for second-hand tonnage of major sectors and ship demolition.

A, Newbuilding orders

45. The newbuilding market did not prove to be as buoyant in 1995 as shipyards and shipowners had predicted. The perception that VLCC newbuilding would increase significantly proved unfounded as owners were reluctant to invest in newbuilding programmes without any foreseeable upturn in the tanker charter market. Owners subsequently concentrated their capital on ensuring that their vessels passed fourth and even fifth special surveys. As a consequence, shipyards had to fill order books, throughout 1995, by undertaking the construction of an ever-increasing number of orders for containerships. On the dry cargo side, more favourable charter market showed that owners were more willing to commit investment to newbuilding programmes, particularly in the Panamax sector (see table 21).

46. The contracting volume for oil tankers decreased significantly from 13.8 million dwt in 1994 to 9.1 million dwt in 1995. The drop in orders came from YLCCs, down from 24 orders in 1994 to only 5 orders in 1995, including 3 vessels in Japan and 2 in Republic of Korea. The interest for Suezmax tankers increased in 1995 with a total of 12 vessels ordered in 1995 compared to 7 vessels in 1994. The number of Aframax contracts decreased from 20 to 16 vessels. The contracting activity for product carriers was still high with a total of 38 vessels of 10,000-50,000 dwt ordered in 1995. The expectations of a decline in new orders for bulk carriers in 1995, as compared to the massive ordering activity in 1994, proved only true for the Capesize segment, which experienced a decrease from 58 vessels in 1994 to 45 vessels in 1995. Conversely, Panamax orders increased from 46 vessels in 1994 to 62 vessels in 1995. The ordering of handy-size vessels also grew, with 165 new orders during 1995 compared to 151 vessels in 1994. The strong growth in

container vessel orders during the last few years continued throughout 1995. The container vessel orders in 1995 added up to 8.5 million dwt. The order of conventional general cargo ships increased to vessels of million dwt in 1995 from 227 vessels of 1.5 million dwt in 1994. All four TNG carrier orders recorded in 1995 were placed with Spanese yards. Japan also dominated the market for L?G carriers, winning 33 out of 52 new orders. Sixteen car carriers and 45 fast ferries were placed on order during 1995. The order of 13 cruise vessels aggregating 794,000 grt in 1995 compares with 8 vessels, totalling 577,000 grt ordered in 1994 and 10 vessels of 90,000 grt placed during 1993. Passengers' preference for newly-built tonnage as well as strengthened safety requirements and strong competitiveness on prices have begun to accelerate the dropping out of older, smaller and less attractive tonnages.

B. Ship prices

47. Newbuilding prices for main types of vessels are indicated in table 22. The 1995 newbuilding price level ended up slightly higher than at the start of the year for both dry bulk carriers and tankers. This is mainly due to increased steel prices and a weak us dollar value, making margins even smaller for most shipyards. A cost around US\$82 million at the beginning of 1995, increasing to us\$ 85 million at the end of the year. The price level for other tankers increased by an average of 5 per cent. Bulk carrier newbuilding prices saw the same trend with a 120,000 dwt from us\$ 39 million at the start of 1995 to us\$ 40.5 million at the year-end. Prices for 2,500 T&U class containerships rose significantly to us\$ 50 million in March. After that the price level was maintained towards the year-end, as demand for container tonnage remained strong.

Table 22

Representative newbuilding prices, 1980, 1985 and 1990-1995
(Millipns of dollars)

Type and size of vessel	1980	1985	1990	1991	1992	1993	1994	1995	Percentage 1994/1995
30 000 dwt bulk	17	11	24	24	24	20	20		5.0
32 000 dwt tanker	19			30	30	30		30	7.1
70 000 dwt bulk	20	14	32	32	30		27	28	3.7
80 000 dwt tanker		22	42	43	42	41	42	43	2.4
120 000 dwt bulk		27	45	47	44	41	40	40	0.0
250 000 dwt tanker		47	90	95		84	82	84	2.4
125 000 m ³ LNG	25	200	225	260	237	243	255	255	0.0
75 000 m ³ LPG		44	78		80		70		
1200 TEU ro-ro	44	28	36	38	40	42	42	42	0.0
15 000 dwt general cargo ship	14	12	24	24	24	22			0.0
2 500 TEU full containership			52		59	48			22.0

Source: *Lloyd's Shipping Economist* (London), various issues.

c. Delivery of newbuildings

48. As shown in table 23, the total newbuildings delivered in 1995 reached 1,518 vessels, aggregating 22.2 million grt. This represents a 6.2 per cent increase in the number of vessels and a 17.9 per cent increase in gross registered tons (grt) over 1994. Bulk carriers significantly expanded in 1995 by 30.7 per cent over 1994 to 8.4 million grt. Oil tankers drastically increased by 10.6 per cent over 1994 to 6.1 million grt, albeit the number of newbuildings decreased by 11.9 per cent. Activities in the liner sector continued in 1995 to concentrate more on unitized cargo fleets. Deliveries of containership tonnage considerably increased by 18.4 per cent over 1994, while general cargo ships slightly decreased by 3.6 per cent over 1994.

49. Distribution of deliveries of newbuildings by groups of shipbuilding countries are indicated in table 24. The world total deliveries of newbuildings increased in 1995 by 13.7 per cent from the previous year to 26.4 million grt, with all the country groups except Socialist countries of Asia (mainly China) and Others (mainly

Taiwan Province of China), having delivered more newbuildings. Shipyards of developed market-economy countries increased their newbuilding tonnage by 10.5 per cent in 1995 to 12.6 million grt, of which 9.0 million grt (71.4 per cent) were delivered by Japanese shipyards, representing an increase of 8.4 per cent over the previous year (8.3 million grt). The share of developing countries' yards in the total newbuildings delivered in 1995 moderately grew by 2.9 percentage points over 1994, with performance concentrating heavily on Korean yards. Thus, newbuilding deliveries of developing countries, except for the Republic of Korea, decreased by 2.6 per cent over the previous year. Conversely the Republic of Korea raised its newbuilding tonnage by 32.5 per cent to 5.3 million grt in 1995 (4.0 million grt in 1994). The countries of Central and Eastern Europe continued to substantially increase by 22.4 per cent from the previous year, despite a 12.6 per cent decrease in the output of Poland, the largest shipbuilding country in that group. The share of Taiwan Province of China which represented the majority of the Others group, significantly declined by 21.2 per cent in 1995 from the previous year.

Table 23

Distribution of deliveries of newbuildings by principal types of ship. 1994-1995 a/
(Number of ships, thousands of grt)

Ship type	1994		1995	
	No.	Thousand grt	No.	Thousand grt
Oil tankers	185	5 470 <i>29.1</i>	163	6 050 <i>27.3</i>
Bulk carriers	194	6 459 <i>34.4</i>	257	8 443 <i>38.1</i>
General cargo	324	1 627	320	1 569
Containerships	142	3 128 <i>16.6</i>	166	3 705 <i>16.7</i>
Other ships	585	2 116 <i>11.3</i>	612	2 390 <i>10.8</i>
World total	1 430	18 800 <i>100.0</i>	1 518	22 157 <i>(...)</i>

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

a/ Percentage shares of the world total are in italics.

Table 24

Distribution of deliveries of newbuildings by groups of countries of build, 1994-1995 a/ b/
(Thousands of grt)

Country grouping	1994	1995 II
Developed market-economy countries	11419 <i>63.7</i>	12610 II <i>62.0 II</i>
Developing countries	4 611 <i>25.8</i>	5 834 <i>28.7</i>
of which: Africa	<i>1</i>	<i>10</i>
America	<i>0.0</i> 261	<i>0.0</i> 149
Asia	<i>1.5</i> 4 058	<i>0.7</i> 5 486
Others	<i>22.7</i> 785 <i>1.6</i>	<i>27.0</i> 189 <i>0.9</i>
Countries of Central and Eastern Europe	821 <i>4.6</i>	1 005 <i>4.9</i>
Socialist countries of Asia	468 <i>2.6</i>	434 <i>2.1</i>
Other, unallocated	598 <i>3.3</i>	472 <i>2.3</i>
World total	17908 <i>100.0</i>	20 355 <i>100.0</i>

Source: Coinpiled by the UNCTAD secretariat on the basis of data contained in Lloyd's register of Shipping: Merchant shipbuilding returns, quarterly issues of the respective years.

a/ Percentage shares of the world total are in italics.

b/ General cargo ships of 2,000 gross tons and over. This table is not fully comparable with table ^3, which lists ships of 100 grt and over.

D. Tonnage on order

50. The level of world tonnage on order is indicated in table 25. Since the beginning of 1995 the world order book continued to be on an upward trend through the year-end. Orders for oil tanker tonnage were very unsatisfactory. The contracting volume for oil tankers decreased significantly from 13.8 million dwt in 1994 to 9.1 million dwt in 1995. The drop in orders was mainly attributable to the decrease in VLCC orders, down from 24 units in 1994 to only 5 units in 1995.—

Conversely, continuous orders in 1995 for dry bulkers, with Panamax and handy-size tonnages in focus, maintained the order book for dry bulk carriers at a favourable level through to the end of the year. In December a record high of 31.4 million dwt was on the order book, in the sector of other vessels, the upsurge of new orders in 1995 for containerships, conventional general cargo vessels and cruise vessels kept the backlog at a comparatively higher level throughout 1995 than in previous years.

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Box 5**Shipping attracts cash despite poor market**

The current state of worldwide shipping cannot be described as attractive for long-term investors, particularly in a market where there is a huge amount of credit available but a shortage of borrowers with convincing projects. Nonetheless, given the fact that the carriage of goods by sea is a pillar of world trade, shipping is still a viable investment.

However, with a sufficiently large world merchant fleet, which in some areas is still in oversupply and more than sufficient shipbuilding capacity worldwide with plans for expansion causing significant worry, discipline is needed in meeting credit demand.

But the shipping industry must first demonstrate success in strengthening its ability to survive inevitable market fluctuations.

The number of banks operating in the ship financing sector has risen from 89 in 1993 to 119 in 1994 representing an increase of 34 per cent, and an "astonishing" rise of 77 per cent from 1992. This came at a time when earnings were barely sufficient enough to cover investment and operating costs.

General prices for newly built wet and dry bulk tonnage hit "rock bottom" last year with the highest values for tankers falling by 23 per cent since 1991 and by 22 per cent for bulk carriers.

Though markets had shown signs of recovery and stabilization for considerable time, rates in certain areas were still unsatisfactory as operating costs continued to steadily rise. Handy-sized (geared), Panamax and Gapesize bulk carriers currently earned on average only 65 per cent of the pure costs of newly built vessels.

In the tanker sector, the relationships between new or market value was even less favourable, with Aframax tankers, Panamax tankers and VLCCs earning on average only 59 per cent of new costs.

Additional costs of at least 19 per cent of basic investments for tonnage had also to be expected, which results in a further deterioration in the relationship between capitalized value and new cost or second-hand cost of tonnage.

Box 5 (continued)

Development of prices for new vessels (average values) between 1996 and 1994					
Type of ship	Highest level		Lowest level		Percentage change
	Year	Amount in fJSS million	Year	Amount in US\$ million	

Tankers

VLCC	1991	148	1994		-22
Suezmax	1991	68	1994		-25
Aframax	1996	53	1994	11	
Average					-23

Bulk carriers

Capesize	1991	56	1994	42	-25
Panamax	1991	34	1992/4		-18
Handymax	1991	2-8	1992/4		-24
Average					

Development of prices for second-hand vessels (average values) between 1996 and 1994
(basis: 5 years old)

Type of ship	Highest level		Lowest level		Percentage change
	Year	Amount in fJSS million	Year	Amount in us\$ million	

Tankers

VLCC	1996/1	65	1994	48	-26
Suezmax	1991	46	1994	33	-18
Aframax	1996	34	1992	23	-32
Average					-25

Bulk carriers

Capesize	1991	37	1996	7	-30
Panamax	1991	24	1992	19	
Handymax	1994	26	1996	16	-26
Average					-23

Source: Schiffshypothekenbank zu Lubeck AG.

Mortgage-backed lending from commercial banks, however, would continue to be the primary source of capital in ship financing while URG loans, where the link between debt and the mortgaged vessel is not as close as in traditional ship financing, will play an increasing role.

As the industry remains cyclical, reasonable cash reserves will be of paramount importance for obtaining new financing but above all, bankers and other participants in the maritime industry need more than ever a high degree of prudence which appears to be in decline.

Source: Lloyd's List (London), 16 June 1995.

51. Table 26 reflects world tonnage on order by groups of countries of registry and by principal types of vessel. World tonnage on order at the end of 1995 reached 71.1 million dwt, moderately increasing by 3.5 per cent from the volume at the end of the previous year. Tonnage on order by developed market-economy countries amounted to 17.6 million dwt, representing 25.2 per cent of the world total tonnage on order as compared to 25.5 per cent at the end of 1994. Major open-registry countries represented 52.8 per cent with 37.0 million dwt on order, which considerably decreased from 38.4 million dwt (56.8 per cent) in 1994. The 1995 combined tonnage of the two country groups accounted for 78.0 per cent, which was slightly less than the 82.3 per cent in the previous year. Developing countries stood at 14.4 per cent (10.1 million dwt) of the world total tonnage on order at end 1995, substantially increasing from 8.7 per cent (5.9 million dwt) in 1994. This significant increase reflects the dramatically improved position of Asian developing countries which succeeded in nearly doubling their share to 11.6 per cent in 1995 from 6.6 per cent in the previous year. The share of countries of Central and Eastern Europe remained unchanged in 1995. On the other hand, the socialist countries of Asia suffered a more than 59 per cent reduction in their share to 1.5 per cent in 1995 from 3.3 per cent in the previous year.

52. By principal types of vessel, the 1995 combined share of developed market-economy countries and major open-registry countries in the orders for oil tankers and dry bulk carriers decreased to 71.2 per cent and 81.6 per cent respectively (86.9 per cent and 84.9 per cent respectively in 1994). On the other hand, their share in the 1995 order book for general cargo ships, containerships and other types of vessel increased to 69.9 per cent, 82.6 per cent and 81.7 per cent respectively in 1995 from 65.1 per cent, 71.7 per cent and 81.2 per cent respectively in 1994.

53. The developing countries' share of tonnage on order rose in 1995 for oil tankers and dry bulk carriers to 26.6 per cent and 8.3 per cent respectively (9.7 per cent and 5.9 per cent in 1994), whereas their share of general cargo ships and containerships declined to 9.2 per cent and 11.7 per

cent respectively (10.4 per cent and 13.3 per cent in 1994).

54. Asian developing countries represented around 80 per cent of the group's total tonnage on order in 1995. Their share in oil tankers in 1995 remarkably rose to 13.3 per cent as compared to 6.0 per cent in 1994, while that of dry bulk carriers marginally increased to 6.5 per cent in 1995 (4.5 per cent in 1994). In the sectors of general cargo ships and containerships, the share of Asian developing countries declined to 5.9 per cent and 9.9 per cent respectively in 1995 from 7.0 per cent and 11.6 per cent respectively in the previous year. The decline in African shipping observed for quite some time can now be expected to continue given the low rate of newbuilding ordering of only 0.5 per cent of the world total. This share is very much in line with those observed in previous years, i.e. 0.1 per cent in 1994 and 0.1 per cent in 1993.

E. Sales and purchases of second-hand tonnage

55. As indicated in table 7, buyers in 1995 chased handy-size product tankers, and a healthy freight market coupled with limited supply of quality tonnage drove the prices up by around 10 per cent in the sector of handy-size product tankers. Medium-sized oil tankers maintained a strong demand specifically for all quality tonnages through the year, but without strong enough support from the freight market to create any significant changes in the whole price structure. The market for 20,000-50,000 dwt bulk carriers was extremely active in 1995. (Owners of promptly available mode™ tonnage managed to obtain favourable premiums, prices for 50,000-100,000 dwt mode™ dry bulkers remained firm and stable, and special interest in sophisticated tonnage emerged in the autumn, leading to a further strengthening of prices for this size of units. For dry bulk carriers over 100,000 dwt, many vessels offered for sale were built in the mid-1980s and proved difficult to dispose of, as buyers were generally sceptical towards the general condition and quality of such vessels. Consequently prices, even for mode™ quality units, were constantly sliding downwards, in spite of the booming freight market, and buyers only appeared after substantial discounts were available.)

Table 26

World tonnage on order as at the end of 1995
(Thousands of dwt)

Countries of registry	All ships	Oil tankers	Dry bulk carriers	General cargo	Container ships	Other ships
World total	70 078	19 112	31 371	3 972	10 698	4 923
Developed market-economy countries	17 644	4 181	5 861	1 648	3 978	1 975
Major open-registry countries	36 991	9 228	19 728	1 129	4 860	2 045
Subtotal	94 635	13 409	25 589	2 777	8 838	4 020
Countries of Central and Eastern Europe	1 669	324	614	603	70	58
Socialist countries of Asia	1 055	2	891	107	54	-
Developing countries, total	10 114	5 082	2 607	364	1 257	805
of which in:						
Africa	376	-	348	2	-	26
America	1 500	1 005	126	127	203	39
Asia	8 151	4 077	2 046	235	1 054	740
Europe	87	-	87	-	-	-
Oceania	-	-	-	-	-	-
Unallocated	2 605	295	1 670	121	479	40

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

Table 27

Second-hand prices for five-year-old vessels. 1989-1995
(as at end of year)
(Millions of dollars)

Vessels	1989	1990	1991	1992	1993	1994	1995	Percentage change 1994/1995
30 000 dwt tanker	20.0	21.5	20.0	14.5	18.0	18.0	20.0	11.1
80 000 dwt tanker	34.0	34.0	32.0	22.0	31.0	30.0	31.0	3.3
130 000 dwt tanker	40.0	37.0	36.0	29.0	34.5	34.0	35.5	4.4
45 000 dwt dry bulk carrier	18.7	14.2	20.2	17.5	18.5	20.7	21.5	3.9
70 000 dwt dry bulk carrier	22.8	19.6	24.4	19.0	19.5	21.5	23.0	7.0
150 000 dwt dry bulk carrier	37.4	32.8	43.3	33.0	33.0	32.0	28.0	-12.5

Source: Fearnleys (Oslo), *Review 1995*.

56. Table 28 reflects 1995 monthly fluctuations of sales and purchase of second-hand tankers, dry bulk carriers and combination carriers. In the tanker sector, the 1995 second-hand market saw many "niche" vessels changing hands, specifically in the sectors of medium-size crude oil tankers and product tankers. The total deadweight tonnage of the tankers transacted in 1995 significantly increased by 28.7 per cent from 1994 when there had been a marked drop of as much as 50 per cent from the 1993 transaction. Sales of ULCCs and VLCCs were almost non-existent throughout the year, as compared to 18 vessels in the previous year. This lack of activity in sales for further trading can also be explained by an increase in short distance haulage. Fifty-seven medium-size tankers were traded in the market (45 vessels in 1994) and 21 small crude tankers were sold (9 vessels in 1994). Fifty-nine product carriers changed hands during the year as compared to 44 vessels in 1994.— For second-hand dry bulk carriers, although 1995 saw the BFI (Baltic Freight Index) climb to above 2,000 in the early part of the year, the charter rates for the Uter part continued to slide, resulting in a subsequent softening of second-hand prices. Despite this slip in the later stage in dry bulk charter rates, the overall levels were sufficient to prevent owners from scrapping vessels. Greek buyers generally showed interest in every size and quality. Indian and Turkish buyers were also very active, specifically in the 30,000-40,000 tonnes sector. Far Eastern buyers on the other hand seemed to concentrate on the 20,000-30,000 dwt size bulkers, which were suitable for their regional trades. The total tonnage of dry bulk carriers transacted in 1995 increased by as much as 36.4 per cent. Twenty-two sales of dry bulkers above 100,000 dwt changed hands in 1995 as compared to 17 vessels in 1994. Nearly 100 units of 50,000-100,000 dwt were sold as against 72 units in 1994. The market for 20,000-50,000 dwt was again extremely active in 1995. A total of 264 vessels were sold (250 vessels in 1994).

F. Demolition of ships

57. The trends, types and average age of broken-up ships in 1995 are indicated in tables 29, 30 and 31. The demolition industry in 1995 particularly portrays a picture of gloom. Much of the disappointment prevailing in the industry's performance emanates from the lack of VLCCs

actually scrapped. The industry was optimistic that 1995 would result in a marked increase in the number of VLCCs scrapped, especially given the age of the current tanker fleet which means that special surveys were becoming imminent. However with the total number of VLCCs demolished in 1995 not even reaching 30 units (36 units in 1994), it is clear that owners responded to slight increases in the freight market by retaining tonnage in the hope that freight rates would see an improvement. The decline was also experienced for Suezmax tankers (mainly 130,000 dwt tonners) with 9 units sold, compared to 13 units in 1994.

58. For smaller tankers, the actual transactions were 15 vessels of 50,000-100,000 dwt (15 in 1994) and 39 vessels of 10,000-50,000 dwt which was up from 15 units in 1994. The average age of all tankers sold for demolition was 26.1 years, interestingly enough 1.5 years higher than the average age in 1994. Only 9 combined carriers were sold for breaking in 1995, as compared to 19 units in the previous year. The average age was 24.0 years, remaining unchanged from that in 1994. The healthy dry bulk freight market reduced scrapping of bulkers with only 33 units totalling 2.1 million dwt sold during 1995. This compares very unfavourably to 68 vessels of 3.8 million dwt sold in 1994. Only 7 Capesize and 5 Panamax bulkers were sold in 1995 (14 and 8 respectively in 1994). The rest of the total 33 units were smaller vessels. The average age of all dry bulkers scrapped in 1995 was 24.5 years, which was the oldest since 1987.

59. Demolition markets in 1995 showed little geographical change. The Indian subcontinent was still the vastly dominating market, accounting for about 90 per cent of all breaking activity in the world. India remained the largest breaker in 1995 with 5.6 million dwt scrapped, and despite a marginal decrease in tonnage from 1994, it increased its market share. Bangladesh followed with a 4.6 million dwt volume in 1995. Pakistan reduced its purchase in 1995 to 3.3 million dwt. China was uncompetitive throughout the year, ending up with less than 0.9 million dwt with no VLCCs recorded for scrap. The southern European demolition market in 1995 was reportedly limited to several smaller vessels. The geographical circumstances in the demolition industry are observed in the price fluctuations as indicated in table 32.

Table 29

Broken-up tonnage trends, 1980-1988-1995

Broken-up tonnage	1980	1988	1989	1990	1991	1992	1993	1994	1995
Tonnage sold for breaking (million dwt)	10.0	5.7	3.3	3.3	4.7	19.0	16.9	20.8	15.3
Share of broken-up tonnage in the total world fleet (percentage)	0.3	0.9	0.5	0.5	0.7	2.7	2.4		0.6

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

Table 30

Tonnage reported sold for breaking by types of vessel, 1990-1995
(Thousand dwt and percentage shares)

Types of vessel	Thousand dwt						Percentages					
	1990	1991	1992	1993	1994	1995	1990	1991	1992	1993	1994	1995
Tankers	1 000	7 714	11 561	10 665	10 210	10 877	29.9	29.9	60.9	65.5	65.1	71.0
Combined carriers	1 780	426	1 660	2 040			11.1	9.0		12.1	12.5	8.0
Dry bulk carriers	649	2 250	4 141	2 645	2 000	2 005	19.4	15.4	21.8	15.7	18.4	15.9
Other dry cargo ships	1 117	870	1 691	1 502	1 500	1 081	59.4	18.4	8.9	8.9	6.2	7.1
Total	4 444	11 718	18 975	15 852	20 772	15 921	100.0	100.0	100.0	100.0	100.0	100.0

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

Table 31

Average age of broken-up ships by type during 1987-1995 a/
(years)

Year	Tankers	Dry bulk carriers	Containerships	General cargo shi [^] s
1987	24.4	19.8	24.9	23.8
1988	24.6	22.4	25.1	24.2
1989	24.9	23.1	27.2	25.5
1990	26.4		19.5	
1991	25.3	22.0	19.0	24.8
1992	25.8	22.9	19.1	25.7
1993	24.7	24.0	22.9	26.4
1994	24.6		24.0	27.1
1995	26.1	24.5	24.0	25.8

Source: Institute of Shipping Economics and logistics (Bremen), *Shipping Statistics*, 1995, No. 1/2.

a/ Ships of 300 grt and over.

Table 32

Demolition prices in 1993-1995
(Dollars per Idt)

Month	Market								
	Ear East			Pakistan/India			Southern Eurpe		
	1993	1994	1995	1993	1994	1995	1993	1994	1995
January	145.0	147.5	152.5	150.0	175.0	175.0	80.0	95.0	80.0
Eebmary	145.0	150.0	152.5	145.0	170.0	180.0	80.0	95.0	80.0
March	157.5	155.0	152.5	157.5	165.0	190.0	80.0	95.0	85.0
April	160.0	155.0	157.5	162.5	170.0	187.5	90.0	95.0	85.0
May	160.0	160.0	155.0	162.5	180.0	187.5	90.0	95.0	95.0
June	160.0	155.0	155.0	162.5	170.0	187.5	90.0	75.0	95.0
July	147.5	147.5	155.0	157.5	165.0	182.5	90.0	75.0	95.0
August	147.5	147.5	152.5	157.5	170.0	192.5	90.0	75.0	95.0
September	147.5	147.5	147.5	165.0	170.0	195.0	90.0	75.0	95.0
Doctober	155.0	147.5	147.5	165.0	170.0	185.0	90.0	80.0	100.0
November	160.0	147.5	145.0	157.5	167.5	185.0	90.0	80.0	100.0
December	155.0	147.5	145.0	162.6	177.5	185.0	90.0	80.0	100.0
Annual average	153.3	150.6	151.5	158.8	170.8	186.0	87.5	84.6	92.1
Annual average change) [^] (5.1	-1.8	0.6	4.8	7.6	8.9	-53.0	-3.3	8.9

Source: Institute of Shipping Tогistics (Bremen), *Shipping Statistics*, various issues.

PORT DEVELOPMENT

This chapter covers recent developments in container port traffic in developing countries, institutional change in ports, the financing of port development and some technical innovations in container terminals.

A. Container port traffic

60. Table 33 gives the latest available figures on world container port traffic in developing countries and territories for 1994. The world rate of growth of container port throughput in 1994 was a 10.4 per cent. This annual trend is consistent with the average annual containerized trade growth of 10 per cent registered over the last decade. The throughput for 1994 was 14,963,605 TEUs which was an increase of some 11,750,000 TEUs over 1993.

61. The rate of growth for developing countries and territories was 1.36 times that of the world average and reached 14.6 per cent in the period 1993-1994. This was a decrease in comparison with the 17.0 per cent reached in 1992-1993. The growth is unevenly spread and frequently erratic from year to year due in some cases to improved data or lack of it, and in other cases to turbulent fluctuations in the trade.

62. In 1994 the selected South-East Asian countries¹ accounted for 13 per cent, or 17 million TEUs, of the world's container trade, their market share by the year 2000 is estimated to increase to 20 per cent, or 41 million TEUs. The investment requirement for this region will be immense, requiring a partnership of public and private financing.

63. In the top 30 container ports in 1995 there were 12 ports from developing countries and socialist countries from Asia, lead by Hong Kong with some 12,600,000 TEUs. Their average annual growth was 12.7 per cent. Initial figures for 1995 for the main ports are contained in table 34, together with recent annual growth rates. While growth was still strong in 1995, rates have, with one exception, declined markedly from the previous year.

B. Institutional restructuring in ports

64. Institutional restructuring continues in many ports with the private sector playing a greater role particularly in the form of joint ventures. A recent report² by the International Labour Organisation has found that the main reasons of port reform are to improve financial performance, to improve port efficiency, to promote service attitude and to create inter-port competitiveness. The main factors affecting the type of reform that can be successfully implemented are the specific economic situation and development of the country, the existing social infrastructure, the efficiency and regulation of labour markets and the objectives of the adjustment process.

65. One of the most successful public operating port authorities is also restructuring for the future. In early 1996 the regulatory functions of the Port of Singapore Authority³ (PSA) will be transferred to the newly established Maritime and Port Authority of Singapore. The PSA will then concentrate on the introduction, development and expansion of the services and facilities needed. The purpose of this measure is for PSA to be transformed within the next two years from a public institution into a corporate body.

c. Port development financing

66. Huge new investments will be required in the world's container ports. The rapidly expanding economies of Asia are driving this demand, but new investments in port infrastructure and equipment will be needed worldwide, factors affecting this need for investment are the introduction of bigger vessels, notably 5,000 and 6,000 TEU ships and the services required for the growing market for "hub-and-spoke" transshipment and feeder operations.

Table 33

Container port traffic of developing countries and territories, 1994 and 1993

Country or territory	Container traffic 1994 a/ (TEUs)	Container traffic 1993 (TEUs)	Percentage change 1994/1993	Percentage change 1993/1992
Uong Kong	11 030	9 204 236	20.1	15.5
Singapore	10 399 400	9 046 100	15.0	19.7
Taiwan Province of China	7 296 070	6 794 966	7.4	10.0
China	3 878 417	2 785 221	39.3	124.5
Republic of Korea	3 212 637	3 070 681	4.6	11.6
United Arab Emirates	3 025 588	2 934 973	91	17.1
Philippines	2 007 281	1 662 894	20.7	43.2
Indonesia	1 912 160	1 610 628	18.7	14.6
Thailand	1 743 217	1 492 323	16.8	11.6
Malaysia	1 731 141	1 398 120	23.8	14.8
India	1 257 107	1 017 432	23.6	28.2
Saudi Arabia	1 183 103	1 218 549	-2.9	7.3
Egypt	1 171 924	989 722	18.4	25.0
South Africa	1 093 915	976 619	12.0	9.9
Sri Lanka	972 642	858 394	13.3	27.0
Brazil	888 511	934 220	-4.9	4.1
Chile	555 650	499 974	11.1	73.6
Mexico	549 988	460 708	19.4	4.6
Argentina	532 000	450 388	18.1	42.3
Pakistan	513 001	509 938	0.6	0.0
Malta	428 305	318 828	34.3	10.7
Costa Rica	400 000	389 208	-2.8	40.3
Cyprus	372 400	420 673	11.3	17.5
Panama	344 872	308 482	11.8	6.9
Jamaica	339 095	265 022	78.1	50.6
Cote d'Ivoire	247 544	238 822	3.7	26.5
Lebanon	229 922	203 661	12.9	26.7
Kuwait	220 724	201 738	9.4	8.1
Honduras	200 000	196 500	-1.8	-14.1
Bangladesh	200 000	191 062	-4.7	16.3
	177 001	136 909	29.3	n.a.
Morocco	175 124	154 367	13.5	-0.7
Kenya	160 293	144 137	11.2	6.5
Peru	150 000	153 462	4.3	4.9
Trinidad and Tobago	152 877	146 213	4.6	12.6
Guam	144 254	148 417	-2.8	0.5
Syrian Arab Republic	132 961	120 495	10.4	30.2
Papua New Guinea	118 233	110 169	7.3	2.6
Nigeria	116 483	150 324	-22.5	-11.2
Martinique	113 144	95 303	18.7	7.4
Jordan	111 299	108 958	2.2	9.4
Dominican Republic	110 000	107 042	-2.8	22.8
Iran, Islamic Republic of	106 738	91 184	17.1	-17.5
Uruguay	105 784	88 941	18.9	17.7
Colombia	105 143	120 700	-12.9	1.7
Bahrain	103 162	102 092	1.1	13.7
Guadeloupe	100 499	95 567	5.1	0.3
Mauritius	93 746	88 335	6.1	10.1
Tanzania, United Republic of	90 763	98 041	-7.4	n.a.
Ghana	88 534	92 900	8.7	11.9
Oman	87 878	89 538	-1.9	-22.3
Djibouti	75 000	65 302	-14.9	13.1
Cameroon	75 480	75 506	-0.0	-8.3
Bahamas	72 778	62 284	-16.9	-2.9
Venezuela	70 000	62 984	-11.1	30.0
Netherlands Antilles	69 843	72 438	-3.3	10.0
Tunisia	66 441	57 360	15.8	15.1
Slovenia	60 508	61 430	-1.5	34.0
I Total	61 177 650	53 550 632	14.2	17.0
I) Other reported b/	620 561	596 244	4.1	9.5
Total reported c/	61 798 211	54 146 876	14.1	17.0
II World total reported	124 963 605	113 212 212	10.4	9.3

Source: Derived from information contained in Containerisation International 1996, 1995, 1994.

a/ Data in italics are estimates made by the UNCTAD secretariat.

b/ Comprising developing countries and territories where less than 60,000 TEU per year were reported or where substantial lack of data was found.

c/ Certain ports did not respond to the background survey. While they were not amongst the largest ports, total tonnage may be estimated at 50 percent.

Table 34

Traffic for selected ports in 1995

Port	TEUs	Percentage change 1995	Percentage change 1994
Hong Kong	12 600 000	14.0	701
Singapore	11850 000		15,
Kaohsiung	5 053 183	3.1	
Busan	4 500 000	17.7	
Keelung	2 165 193		
Dubai	2 073 081		
Manila	1 687 743		
Shanghai	1 526 500	27.3	
Tanjung Priok	1519 529	19.6	
Bangkok	1 463 450		5.0
Yangon	1 133 808	■	
Colombo	1 049 004		

Source: *Port Development International*, January 1996.

67. In the past, ports have depended on municipal, state or national funds but now with the reduced public sector role in ports, port authorities have to look more to the private sector to finance investments which is being facilitated by deregulation and privatization. More port authorities have become "landlords" with a reduced number of them acting as public operators. With these changes in the legal framework of the port authorities, there are a large number of options for financing port development.

68. **Self-financing:** The reserves of the port can be used to finance modest investments which will avoid future payment for external loans. However the constraints of different factors such as profitability, regulations and governmental policies, make this option possible only for routine investments. Nevertheless, new imaginative forms of self-financing are possible. In Gothenburg (Sweden), a new port company was created which was given the port assets on the understanding that there would be no further subsidies from the city. The company subsequently sold these assets to a pension fund and leased it back at a fixed rate linked to inflation. This provided the capital for financing needed development.

69. **Debt and equity financing:** For a commercial lender, debt financing of infrastructure

is considered as a risk-exposed investment due to the amount of money needed and the long repayment period. Bond issues (debt) and floating of shares (equity) are other options, but they are related to the profitability of the port and its capability to maintain profitability. In fact, the major form of financing port infrastructure in developing countries are through loans provided by multilateral development agencies (like the World Bank Group and the European Bank for Reconstruction and Development) and backed by the government.

70. **Joint ventures:** A joint venture is not only a source of investments, but a way to increase port competitiveness. They may be set up between different parties such as the port authority, operating companies and private capital investment groups, because of the existence of common interests and complementary resources: capital to invest, management skills or technical/operating know-how. For example, finance for a new container terminal in Tanjung Priok (Indonesia) will come from a combination of sources. A joint venture with a state-owned transport, investment and communications conglomerate and a foreign company will provide 49 per cent, bank loans will cover 30 per cent and the Indonesian Government will fund 21 per cent. The Government will raise its share by issuing bonds.

Other forms of joint venture are the B.G.T. or Built-Operate-Transfer option. In this case a private company will finance, construct, operate and maintain a facility for a specific period and then transfer it to the public authority. This is an alternative for some developing countries, where governments lack the financial means but can provide business opportunities for the private sector.

71. User financing: In this case the potential user of the port facilities becomes the owner as he finances their construction. This is typical for bulk terminals related to specific trades such as mining, oil, steel mills, etc.,

D. Technological innovation

72. A new development in the use of computers for container terminal operation is the so-called "intelligent container crane". A central computer system keeps track of the position of each container in the container yard. Thus if the crane knows the X, y, z location of the spreader at the moment of shifting of the box, it knows what container it is moving. Thus a crane that knows its location in the

terminal with the ability to interchange information with the central supervisory computer is "intelligent".

73. This control removes the difficulty of knowing the position of boxes when they need to be shifted for operational reasons. The use of checkers to control the positions of boxes in the terminal are no longer required. Further the transfer of information to the central control room by the crane driver using voice radio or a computer terminal is not required. The system used for identifying the position of the cranes has various solutions; inductive loops located beneath the surface of the ground along the crane tracks, lines of transponders along the track, single transponders at the entrance of terminal lanes with counting wheels finally different global positioning satellite (GPS) systems. The development of the GPS for orientation, the use of gyro-stabilized systems for steering and the use of radio frequency with a network controller and buffer for the messages, will permit the use of these "intelligent cranes" without special provisions beneath or along the terminal.

Box 6

Quay cranes come of age

Around one fifth of all in-service container cranes is above 20 years of age, creating a growing need for refurbishment sendees. Many of the oldest units are concentrated at ports in Europe, the United States, Australia and Japan, where renovation work and second-hand sales are blossoming.

More than 300 quayside container gantry cranes are now over 20 years of age. Ports are showing little sign of large scale scrapping of older units. Instead, many are deciding to renovate such equipment. Furthermore, if they no longer need such refurbished machines, ports are tending to favour selling them into the fast expanding second-hand market rather than opting for outright disposal. Despite their small dimensions, low capacity and relatively slow speeds, it is often more convenient and cheaper to upgrade older cranes than to replace them with new ones.

The cheapest new gantry crane, constructed to the most modest Panamax size, currently carries an average price of more than US\$ 5 million. Latest generation post-Panamax units cost upwards of US\$ 6-8 million. Ports can undertake a huge amount of reconditioning for far less. Meanwhile, demand for newbuild cranes is still strong and order backlogs mean longer lead times. To respond to a surge in container traffic, it can be quicker to upgrade an existing unit rather than wait for a new crane.

In growing numbers, ports are concentrating on the purchase of new post-Panamax cranes, whilst opting to refurbish existing cranes of small dimensions. A few are also looking to match capacity shortfalls by purchasing used cranes, of Panamax capacity, thereby contributing to the already brisk second-hand market. Used container crane prices can be well under 50 per cent of that paid for a newbuild replacement (some have been reported as low as 10-20 per cent) and will nearly always include some major refurbishment as part of the overall package.

A total upgrade covering the enlargement of all dimensions (including boom height, outreach, and rail span) and a full replacement of mechanical and electrical parts is unlikely to cost more than 50-70 per cent of newbuild cost. Again, it can be accomplished within a relatively short time-scale.

A survey of ports around the world suggests that refurbishment is, indeed, becoming very big business. In excess of 200 quayside gantry cranes are currently reckoned to be undergoing significant reconditioning work. This may only concern simpler modifications, such as replacement of spreader, drive or cable components, although a growing number are undergoing important structural changes and being fitted with upgraded electronic systems.

A conservative estimate indicates that more than 20 ships/shore cranes have been relocated during the past year or so, many through open sale. Units have been reinstalled at ports with the United Kingdom, the United States, South America, Australia and China. It is forecast that the total number of crane disposals, involving on-sale or actual destruction, will number more than 50 over the next 1-2 years.

This may sound a lot, until one reviews the approximate age structure of the global fleet of quayside container gantry cranes. More than 330 cranes are reckoned to predate 1975. Around 100 units were actually built before 1970. It is unclear what proportion of these older cranes remains in operation.

A total of around 600 cranes pre-date 1980. It is known that the vast majority of all current refurbishment are associated with cranes built before this date, with much of the more complex reconditioning covering units originally constructed before 1975. The current figures of 200-plus crane refurbishments suggests that upwards 30-40 per cent of all units, pre-dating 1980, are in receipt of some reconditioning work.

A fifth of all operational ship/shore cranes are now into their third decade of operational life (pre-dating 1975). Around 35 per cent were constructed before 1980. It is also clear how the worldwide demand for quayside container cranes has gained momentum in recent years, culminating in record annual deliveries since 1980.

Box 6 (continued)

The advent of the post-Panamax crane in the late 1980s has naturally played a big part in fuelling the recent production boom. It has helped generate the potential for sales of second-hand smaller capacity cranes, as the rising production of post-Panamax cranes has restricted the corresponding manufacture of smaller sized units.

The high influx of new crane deliveries is doing rather more to keep down the average age of the fleet than is any corresponding clearance of old units. It is predicted, for example, that the proportion of cranes of 20 years' age or greater will not have changed significantly by 1997, even assuming that no further units are scrapped. The percentage share will still amount to a little under 20 per cent, should the current fleet structure remain unaltered.

The concentration of the oldest cranes are, as one might expect, to be found in Europe and North America. The following table shows with clarity how the majority (78 per cent) of cranes pre-dating 1975 are to be found at ports in either of these two regions. They account, moreover, for a sizeable 30 per cent of the entire ship/shore crane stock in operation within North America, and 27 per cent of European inventories.

(excluding units on order for delivery in 1995-1996)				
Region	pre-1975	1975-1984	1985-1994	Total
Europe	145	179	211	535
North America	118	127	140	385
Central/South America	14	25	28	67
North/East Asia	32	103	262	397
South East Asia	6	26	127	159
Mid-East/Africa	1	97	47	149
Australasia	14	29	12	55
World Total	334	586	827	1747

Source: Manufacture/port listings and CIMAR Analysis.

Australasian ports are also burdened with a higher-than-average share of old-generation units, with cranes of 20 years vintage or greater making up almost 25 per cent of all operational cranes here. The majority of all remaining cranes pre-dating 1975 are to be found in South America and East Asia (mainly Japan).

Japan is one country to be pursuing a vigorous programme of crane replacement as well as refurbishment. Even without considering the devastating Kobe earthquake (which effectively put 46 working ship/shore cranes out of action, some possibly for good), Japanese ports have significantly reduced their collective count of older units.

There has been a constant relocation of cranes throughout Australia, following various changed port development plans and the ongoing restructuring of one of the country's largest terminal operating companies. A number of crane renovations/disposals are also expected at the more "mature" terminals in Taiwan, Hong Kong, Singapore, Malaysia and South Korea. Activity at European ports has been mainly focussed on refurbishment, although here too some of the oldest cranes (typically pre-dating 1979) are increasingly subject to disposal and resale.

The refurbishment of older cranes is most markedly gathering momentum in the United States, projects are underway at a wide range of ports. The bulk of old-design cranes found at United States terminals are early generation Paceco "Poflainer" units, many of which are still rated to "40 long-tons or under" lift and featuring outreaches of 35m or less. These are a natural target for renovation and are proving popular in the resale market.

Source: *Cargo Systems International*, July 1995.

FREIGHT MARKETS

This chapter indicates comprehensive conditions and trends in freight markets, covering main cargo sectors, liner freight rates as a percentage of prices, estimates of global freight costs and maritime bunker prices.

A. Freight rates of main cargo sectors

74. Table 35 indicates data on the development of freight rates for three principal shipping markets. The monthly freight indices cover the 1993-1995 period for selected liner rates, dry cargo time and trip charters, and tanker Worldscale for five sizes of crude and product vessel.⁹

75. The overall 1995 liner freight index continued to fall to an average level of 71, which was a 3 point decline from the average of 1994 and the record low since 1988. A closer look at the liner freight level in 1995 indicates that the average index of container rates fell by 5 points from their 1994 level, while conventional general cargo decreased by 2 points, reflecting the more volatile nature of the container cargo rate index. The overall index of homebound rates (to Antwerp/Uamburg range) fell by 4 points from 1994, as compared to only 1 point down in the outbound rates. These 1995 downward trends in index for both ways of trade are the same as those registered in the previous year.¹⁰

76. Containership charter rates are one of the main indicators of liner market developments. Containerships of 550 TEU capacity enjoyed a considerable increase of 8.7 per cent from 1994 to an average of US\$ 8,352 per day in 1995. The market for ships of 500 TEU to 999 TEU remained firm at established high rates since the middle of 1995. However, not many fixtures were concluded, as most vessels remained firmly committed in their existing trades. Ships of 1,000 TEU to 1,200 TEU are of the feeder size for major trades, which are conducted by East-West mega operators. In this respect, tonnages have been truly matching market requirements. Charter rates for this class reached their highest level in August through October, with US\$ 11,700 per day being paid. The average rate of US\$ 1,298 per day represented an increase of 5.4 per cent from the previous year. Demand for

self-sustained containerships of this size continues to be strong and in excess of supply in the global charter market since the previous year.¹¹

77. Container tariff rates (US\$/TEU) of selected conferences turned upward in 1995 on North Atlantic Westbound and the Transpacific Westbound routes, thus halting the downward movement that had prevailed in the last three or four years, Europe-Australia marginally increased. Conversely, the Europe-Far East, which had turned upward in 1994, fell again, albeit marginally, in 1995. Growth in Eastbound container traffic between Europe and the Far East slowed in 1995. Shipments of some of the major cargoes reportedly dipped mid-year when Asian importers switched to cheaper North American suppliers as the dollar weakened. In the North Atlantic Westbound trade, the strong trade boom did not seem to suffer from the declining United States dollar exchange rate. In the Transpacific Westbound trade, the increase reflects the General Rate Increase of the Transpacific Westbound Rate Agreement (TWRA) on 1 January 1995. The Agreement adopted quarterly adjustments of Currency Adjustment Factor (CAF) and Fuel Adjustment Factor (FAF). These surcharges accrued from the US dollar depreciation against Asian currencies and an increase in fuel prices at Asian loading ports contributed to the rate increase. Furthermore, one of the major non-conference lines was in "friendly" competition with the Westbound Transpacific Stabilization Agreement, for major cargoes such as cotton. This Agreement serves as a forum for conference and non-conference lines to discuss their respective rate levels (see graph 11).¹²

78. In the dry bulk sector, the overall situation of the dry bulk charter market considerably improved in 1995 both in time and trip charters, compared with the market in 1994. As shown in table 35, the average time charter index rose by 10 points to reach 124 in 1995, almost the same

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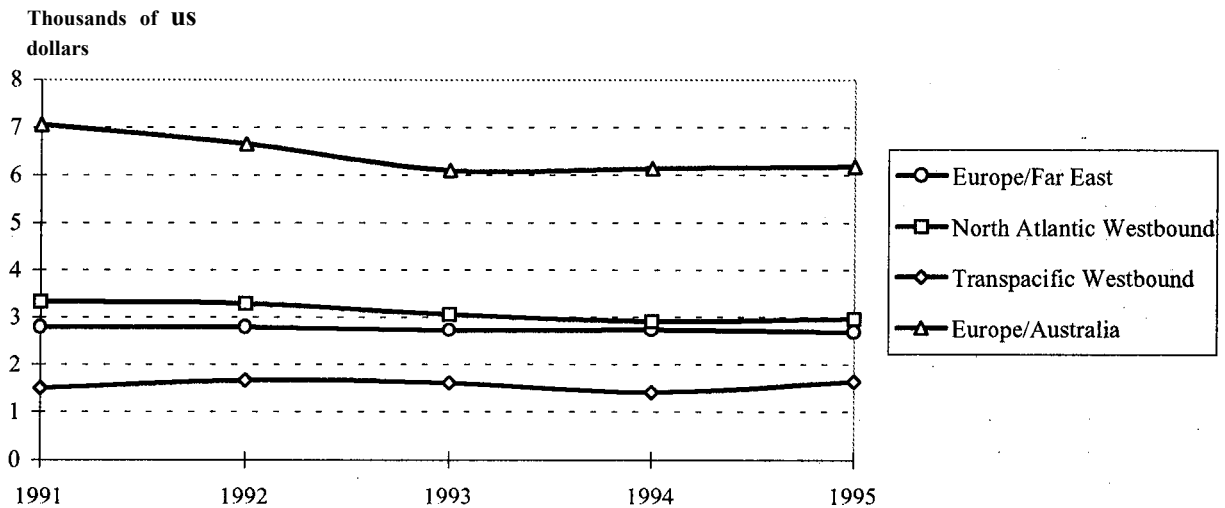
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Graph 11

Major conference rates. 1991-1995



Source: *Lloyd's Shipping Economist*, April 1995 and previous issues.

level as recorded in 1993. The trip charter index also increased by 24 points to 225, a record high since 1990. These increases were partly due to external factors. The Kobe (Japan) earthquake in January caused heavy port congestion in major Japanese ports, specifically for import of iron ore, coal, and grain, and export of steel and Steel products in addition to activities of liner services. Floods and drought in China increased grain import requirements, which involved long hauls from the United States and South America. Improved industrial performance in OECD countries also led to higher steel demand and increased production.^{^^}

79. The 1995 overall improvement in dry bulk charter markets was also attributed to an estimated increase of 5.8 per cent in the seaborne trade of the three major dry bulk commodities (from 950 million tons in 1994 to 1,005 million tons in 1995). In 1995, seaborne iron ore volumes increased by 4.4 per cent from 383 million tons to 400 million tons. Production levels of the European Union crude steel industries grew by 2.8 per cent to 155.9 million tons. In Asia, the Republic of Korea and Japan also improved by 8.9 per cent (36.8 million tons in 1995) and by 3.4 per cent (101.6 million tons in 1995) respectively, while China only marginally increased production by 0.4 per cent to 93 million tons.[^] The ship-charter rates for iron ore were unstable

throughout the year. For the larger part of the year Brazil/Rotterdam fluctuated between US\$ 7.25 and US\$ 9.50, finally falling to the 5.75 level at year-end. Brazil/Japan averaged at an average US\$ 14.00 with a peak of US\$ 16.50 in April, ending the year at about US\$ 10.00. Western Australia/Rotterdam peaked at about US\$ 11.50 in April before sliding slowly to end the year to about US\$ 7.00.—

80. Coal became again the most important dry commodity traded, as thermal coal showed remarkable growth (7.8 per cent) from 219 million tons to 236 million tons, while coking coal trade increased by 4.3 per cent from 164 million tons to 171 million tons, basically due to strong growth in short-haul intra-Asia exports mainly from China and Indonesia (from 47 million tons to 53 million tons) and rapidly increased exports from the United States (from 56 million tons to 70 million tons). Freight rates for Uampton Roads/Rotterdam rose to the highest of about US\$ 9.25 in April. Thereafter a steady decline was seen to US\$ 5.90 at year-end. Richards Bay/Japan was at the peak of US\$ 19.00 in April but ended the year below US\$ 13.00. Richards Bay/Rotterdam was more stable between US\$ 9.00 and US\$ 11.00 for most of the year. Queensland/Rotterdam, which relies almost entirely on modern tonnage, showed rates between US\$ 11.50 and US\$ 13.00 all year, until it fell to almost US\$ 9.00 in December.—

North-South container prospects

North-South container freight rates have generally been perceived, particularly by the developing countries in the southern hemisphere, as being higher than those in the East-West trades. The picture, however, has changed dramatically, particularly in those markets which have been deregulated in the 1990s, highlighting the benefits (for shippers, receivers, consumers and national economies) of free markets over cargo reservation and flag protectionism. This is one of the conclusions of a newly published Report from Drewry Shipping Consultants.

North-South trades are increasingly being subjected to the influence of the global pressure on East-West freight rates; to the operation of open market economies where oversupply of space results in falling rate levels; and to the marginal pricing practices of transhipment carriers.

Preventing recovery

Rates are depressed on almost every North-South route, and even where cargo volumes are strong, overcapacity and greater competition is generally preventing any recovery. The only thing that varies from one route to the next is the degree to which rates have been reduced over the last four or five years. North-South freight rates have come down across the board, but particularly where markets have been opened up after years of regulation and protection.

Despite the fact that all carriers are hurting financially and would very much appreciate some relief from the incessant pressure on freight rates, the market environment is working against any such developments, especially with regulators around the world watching liner shipping with unprecedented vigilance for signs of collusion.

The industry's fixation with lower and lower costs, now seemingly achievable only through ever larger partnership arrangements, is proof enough that there is little or no confidence in any meaningful rate rises.

Estimated rate reductions on dynamic North-South container trades

Route	Period	Rate Reduction
Europe-East Coast South America	1990-94	40% ^o
East Coast South America-Europe	1990-93	50% ^o
Europe-West Coast South America-Europe	1993-95	20% ^o
East Coast United States-North Coast South America	1991-94	25% ^o
East Coast United States-East Coast South America	1992-94	30-35% ^o
Far East-East Coast South America	1993-94	33% ^o
Far East-West Coast South America	1991-93	15% ^o
Far East-South Africa	1991-92	20% ^o

Source: Drewry Shipping Consultants (London).

Mega-carriers

Only those carriers able to keep cutting costs and achieve good asset utilization are likely to survive, and in this respect the mega-carriers should be best placed, as they have learned how to cope with a prolonged period of low rates, low margins and low profitability on the East-West routes.

All North-South carriers will need to match the scale economies of the most efficient operators on their trade - whether this is a specialist carrier or one of the global operators. For most lines this will inevitably mean not just vessel sharing, but closer integration and actual amalgamations. Carriers will have to adapt to a low rate environment worldwide. Rates will never rise to the artificial levels of pre-deregulation days in the newly liberalized trades, and with the container market becoming increasingly global, the effect of axial competition (whether actual or potential) will act as a rate depressant across all routes to an ever greater extent.

Cost - the major area

This leaves cost as the major area for carrier attention. A spokesman for a mega-carrier said that "This process of focussing on costs is only really beginning now on the North-South trades since the East-West players started moving in. People are not used to intense cost competition." On the cost front, operational scale is important, which implies that the larger carriers in each market are best placed to stand the heat in the North-South kitchen. This should favour the mega-carriers - whether new-wave or traditionalist, although North-South specialists, and even some regional carriers, may prosper in trades where substantial market share has been won and they possess the refined critical mass.

Source: *Billelin*, Yolunre 9(1, No. 5.95, based on a report by Drewry Shipping Consultants, entitled "North-South Container Trades - Will Global Carriers Destroy the Market?".

81. The 1995 grain shipments increased by 8 per cent to an estimated 198 million tons from 184 million tons in 1994. Due to a poor harvest, Australia and Canada reduced exports by about 56 per cent and 23 per cent respectively from the previous year. These volumes were replaced by shipments from the United States and Argentina, which rose about 35 per cent and 39 per cent respectively, while imports of the former Soviet Union were halved from the previous year, whilst China tripled the imports due to floods and a drought early in the year. Freight rates fluctuated with the United States Gulf/Japan showing the greatest variation. However, throughout the year, rates moved at an historically high level with a highest at **us\$ 37.59** in March in the United States Gulf/Japan trade. The South American grain season, with high volume and considerable port congestion kept rates between **us\$ 33.99** and **35.99** through the summer and this strong trend held until October when the market declined resulting from exporters' low stock and high prices, but year-end activity, however drove the level up to nearly **us\$ 39.99** again. The United States Gulf/Continent rates displayed a similar trend, with a peak at **us\$ 29.99** in March. Rates then fluctuated between **us\$ 16.99** and **us\$ 18.99** until October, and ended the year at the rate of **us\$ 14.99** level.

82. Developments of dry bulk markets are also reflected in the movements of the Baltic Freight Index (BFI). This index is weighted on the basis of the importance of the global major dry bulk trade routes. The composition of the index during 1995 was:

Route	Commodity	Weightings
1 US Gulf-North Continent	Grain	10 per cent
Transatlantic round	T/c	10 per cent
2 US Gulf-Japan	Grain	10 per cent
2a US Gulf-East time charter	Grain	10 per cent
3 US North Pacific-Japan	Grain	10 per cent
3a Transpacific round	T/c	10 per cent
6 IJ Roads-R Bay/Uapan	Coal	7.5 per cent
7 H Roads-Rotterdam	Coal	7.5 per cent
8 Netherlands-Rotterdam	Coal	7.5 per cent
9 Indian East to Nopac-Cont	T/c	10 per cent
10 Australia-Rotterdam	Iron ore	7.5 per cent

83. Graph 12 shows the trend of the BFI and selected trade routes for 1995. The surge in dry bulk freight markets in the second quarter sent freight indicators up with a peak in April. The BFI reached the 2,259 level in April. This escalation in

freight rates could be attributed to an overall increase in demand in the major dry bulk seaborne commodities (by 5.3 per cent from the previous year) and reflects the sectoral developments of commodity freight markets mentioned above.

84. Table 36 indicates the highest and lowest freight rates reported during **1994** and **1995** in some of the leading trades of major dry bulk commodities. In **1995** high rates and low rates respectively for the major commodities were up, compared to the previous year. The range between the year's high and low rates increased only for coal on the Hampton Roads and Richards Bay/Japan trades. Grain in the United States Gulf/Japan trade showed great variations throughout **1995**, registering **us\$ 37.59** in mid-March. For coal, the Hampton Roads and Richards Bay/Japan routes rose to a peak (US\$ **18.59**) in April **1995**. The Richards Bay/Rotterdam route was also stable at the US\$ **9.99-11.99** level for most of the year. The ore trades on the Brazil/Rotterdam route started the year at nearly **us\$ 9.99**, rising to the level of **us\$ 19.99** in April, and maintained the **us\$ 8.99** level until year-end when the market collapsed to almost **us\$6.99**.

Tanker market

85. The world seaborne oil trade increased by 2.1 percent in volume in 1995, of which crude oil shipments increased by 2.3 per cent to 1,532 million tons and oil products by 1.8 per cent to 518 million tons. Oil product trade expanded with continued large increases to countries in South-East Asia and the Far East, but reduced imports by the United States. The tanker fleet decreased by 1.3 per cent to 267.7 million dwt. Paid-up tankers decreased from an average of 3.5 million dwt to 3.1 million dwt, whereas tankers used for storage increased from 3.6 to 5.6 million dwt or 2.1 per cent of the tanker fleet. Based on the relatively favourable supply demand conditions, the capacity utilization rate for the active fleet moved up from 82.3 per cent in 1994 to 85.9 per cent in 1995. As a result, freight rates strengthened considerably for large tankers specifically in the second half of 1995, while the upturn in rates for other types of tankers was definitely more moderate throughout the year.

Graph 12

Baltic Freight Index and selected routes. 1995

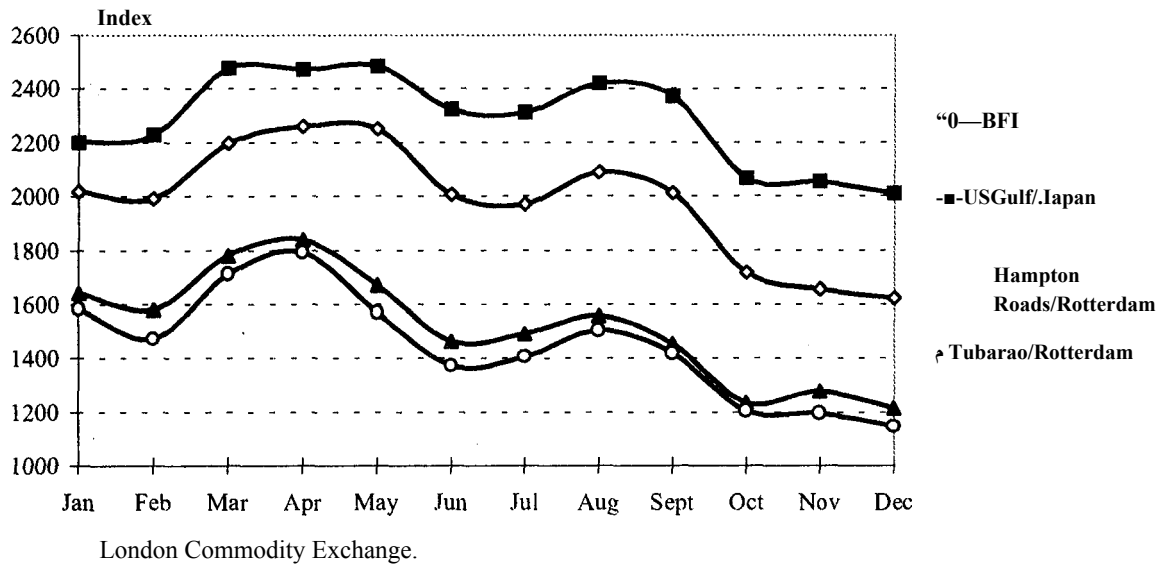


Table 36

Comparative freight rates for selected commodities. 1995 versus 1994

Commodity	Route	Freight rate range			
		1995 (US\$/ton)		1994 (US\$/ton)	
		High	Low	High	Low
Grain	Mississippi/Venezuela	25.00	15.50	20.50	10.00
Grain	United States (Gulf of Mexico)/Japan	37.50	25.40	35.00	18.25
Coal	Hampton Roads and Richards Bay/Japan	18.50	12.60	13.10	9.50
Coal	Richards Bay/Continental Europe	11.25	8.00	11.88	5.50
Ore	Brazil/Japan	13.85	9.25	13.45	7.50
Ore	Brazil/Continental Europe	11.75	6.20	10.50	4.30

Source: Drewry Shipping Consultants Ltd. (London), *Shipping Statistics and Economics*, 1995-1996, various issues.

86. Table 35 indicates freight rate developments for five types of tanker. During the first half of 1995 the average VLCC market rates fluctuated between WS 45 and WS 50. During that period, 25 of a total of 31 VLCCs scrapped in 1995 went to the breakers. Consequent scarcity of tonnage helped owners to secure solid gains in rates and a brisk level of inquiry. During the following couple of months, there was a considerable amount of

fresh business from eastern charterers whose activity became the driving force of the Middle East market. In September, the carefully built-up and firm market suddenly went into steep decline, where easterly businesses moved downwards to WS 45/50. Western trades also followed the market trend. Part of this decline was linked to slower demand for larger shipments. Early October, charterers started absorbing December

tonnage earlier by fixing up to a couple of months forward and covered their end-1995 demand. The high demands lifted the VLCC markets up to the recent record high of WS 54 for the year average (see table 35). In particular Westerr African VLCC activity raised the rates at the year-end to WS 77.5 in line with a general boost in this sector.[^]

87. In the sector of medium-size crude carriers, Suezmax (140,000 dwt) had a favourable year in 1995 primarily in their principal market in West Africa. In particular the freight rates firmed up in July and early August due to considerable interest, which enabled owners tentatively to push rates up through the WS90s to reach a peak of WS 100/105. In the last quarter, a dearth of Suezmax bookings sent the West African market on a slide, bringing rates down to the early WS 70s. This slide was purely due to thin demand for this size of oil shipment as charterers preferred VLCCs for their consolidated cargo. Afranrax (80,000 dwt) experienced a very mixed market during 1995. Rates for the Mediterranean trade averaged slightly in excess of WS 100 throughout the year. In the North Sea, rates were on average about seven points higher than in the Mediterranean, but the peaks in this market were far higher, reaching levels in excess of WS 120. In the Caribbean, rates fluctuated during the year, between WS 115 and WS 155 on average, with 73,000 ton cargo to the United States Gulf.[^]

88. Small product carriers found stable employment throughout 1995 in their principal trades originated in the Middle East, the Caribbean and the Mediterranean. Specifically during the busier mid-year months, activities for 50,000-60,000 tons stayed firm in the WS 140s with peaks at WS 150 in the Caribbean/United States trade. Product shipment^o of 50,000 tons to the Far East from the Middle East were booked in the WS 180s range. The Mediterranean/United States kept 50,000 ton transactions at WS 130-140.

89. In the market for handy-size clean tankers, demands for tonnage primarily from the Caribbean, the Middle East and the Mediterranean retained the market level at WS 200-300, WS 180-230 and WS 160-220 respectively during 1995. The handy-size dirty market in 1995 decreased the average rates in World-scale to WS 181 from WS 186 in 1994, largely varying in the range of WS 160s and

WS 210s through th[^] year, depending mainly upon prompting demands for this size from refiners in oil consuming countries.^{^ 35/}

90. The period market registered a slight increase in activity in 1995 over the previous year. The time-charter market for VLCCs in 1995 was dominated by a major Middle-East charterer, who fixed more than 10 VLCCs for a 12-month charter. The VLCCs built in the mid-1970s were chartered at around US\$ 17,000 per day while modern tonnages constructed in the 1990s gained daily rates ranging from US\$ 24,200 to US\$ 24,800. Another Middle East oil company booked three large tankers for 12 months, paying US\$ 15,750 per day for a 1975-built 250,000 tonner, and US\$ 18,750 per day for a 380,000 dwt built in 1976. A Far East oil company took a 1989-built 270,000 tonner for 5 years at US\$ 29,750 per day. A double hull 300,000 dwt was reportedly fixed by an American major oil company for seven years at an average of around US\$ 38,000 per day.—

91. In the Suezmax (140,000 dwt) sector in 1995, there was slightly more activity for the period-charter market than in 1994, but compared to other size sectors, the Suezmax charter market was rather quiet. Rates for modern single-hulled Suezmax vessels were at about US\$ 18,250 per day for 12 months and at about US\$ 1,000-1,500 additional for double-hulled tonners. An international major secured three Suezmax ships to be delivered in the second half of 1997 for a seven-year bareboat charter with an option for a further seven years at US\$ 13,000 per day. The Aframax (80,000 dwt) time-charter market in 1995 was more active in general than the previous year. Main charterers of Aframax tonnages paid rates of about US\$ 17,500 per day for 6 to 12 months for a double-hulled ship. Rates for early 1980s-built tonners were around US\$ 14,000 per day for a similar period.[^]

92. The time-charter markets for the product-tanker sector were very active with charterers who had favourable prospect for spot product markets. US\$ 15,000-15,000 per day was paid for modern 40,000-45,000 dwt product carriers for a one-year duration, however availability of such modern vessels and charterers' willingness to commit themselves to these rate levels were actually veiled.

B. Liner freight rates as a percentage of prices for selected commodities

93. Table 37 provides data on liner freight rates as a percentage of market prices for selected commodities and trade routes for 1970 to 1995. While commodity prices except for rubber, jute and tea, remained almost unchanged, overall freight rates were less under pressure than the previous year, bringing about a moderate increase of the freight/price ratio. The considerable decreases in the ratio were observed in the rubber and jute trades, where prices increased by 47 per cent and 21 per cent respectively. While the ratio of cocoa beans of Ghana and Brazil slightly increased, mainly due to a moderate increase in freight rates.

the marginal increase in the tea ratio was attributable to the fall of its c.i.f. prices by 10.8 per cent from the previous year.

c. Estimates of total freight costs in the world

94. World total value of imports (cif) increased significantly by 1.8 per cent in 1994 from the previous year while world total payments for maritime services rose by 11.9 per cent. Table 38 indicates estimated total freight payments for imports and its percentage of total import value by country groups. World total freight payments as a proportion of import value had been on a downward trend from as high as 6.64 per cent in 1986 to 5.40 per cent in 1994 (see also graph 13).

Table 37

Ratio of liner freight rates to prices of selected commodities

Commodity	Route	Freight rate as percentage of price a/b/c/ d						
		1970	1975	1980	1985	1990	1994	1995
Rubber	Singapore/Malaysia-Europe	10.5	18.5	8.9	n.a.	15.5	11.4	7.8
Tin	Singapore/Malaysia-Europe	1.2	1.6	1.0	n.a.	1.7	1.3	1.1
Jute	Bangladesh-Europe	12.1	19.5	19.8	6.4	21.2	21.8	18.0
Cocoa beans	Ghana-Europe	2.4	3.4	2.7	1.9	6.7	6.2	7.1
Coconut oil	Sri Lanka-Europe	8.9	9.1	12.6	12.6	n.a.	7.3	6.7
Tea	Sri Lanka-Europe	9.5	10.4	9.9	6.9	10.0		6.1
Coffee	Brazil-Europe	5.2	9.7	6.0	5.0	10.0	2.7	2.8
Coffee	Colombia (Atlantic)-Europe	4.2	5.7		6.7	6.8		3.7
Cocoa beans	Brazil-Europe	7.4	8.2	8.6	6.9	11.0	8.6	9.5
Coffee	Colombia (Pacific)-Europe	4.5	6.3	4.4	6.1	7.4	3.8	4.0

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by the Royal Netherlands Shipowner's Association (data for 1970-1989) and conferences engaged in the respective trades (data for 1990-1995).

a/ Cif prices are quoted for coffee (Brazil-Europe and Colombia-Europe) and coconut oil. For cocoa beans (Ghana-Europe and Brazil-Europe) and tea, average of the daily prices in London are quoted, prices of the remaining commodities are quoted on fob terms.

b/ Freight rates include, where applicable, bunker surcharges and currency adjustment factors, a "tank cleaning surcharge" (for coconut oil only), port delivery and additional port surcharges (for Colombia only). Conversion of rates to other currencies is based on parities given in *International Financial Statistics* published by the International Monetary Fund. Annual freight rates were calculated by taking a weighted average of various freight rates quoted during the year, weighted by their period of duration.

d For the period 1990-1995, the prices of the commodities were taken from UNCTAD, *Monthly Commodity Price Bulletin*, March 1996.

Box 8**The Reefer Shipping Market in 1995****Market Conditions and Trends**

The 1994/1995 season can be considered a period of consolidation. Given the weather conditions and, most importantly, the persistently difficult economic environment, the season was encouraging, albeit below the expectations of shipowners/operators.

The spot segment, in particular, performed very respectably, with average rates gaining some 15 per cent over the entire season. This was at the upper end of the contract rate's roughly 7 to 15 per cent increase. Seasonal changes in rates showed great regularity.

Demand rebounded in the 12-month charter segment, with rates for large and mid-size vessels rising sharply. Conversely, the market for old conventional non-palletized ships virtually disappeared.

Few new vessels entered the market in general, and none at all in the large ship segment.

Against a backdrop of slower growth in major industrialized countries, especially in the second half of the year, a combination of favourable and unfavourable elements prevented results from being exceptionally good. On the whole, however, the season's average performance was distinctly better than in the previous year. Several noteworthy factors that influenced the 1994/1995 season were;

- ▶ The world-wide reefer fleet declined;
 - ▶ Ghana fruit exports got off to a good start. On the year, they increased some 5 per cent, with apple exports rising roughly 15 per cent and kiwi exports surging around 25 per cent;
- ▶ Fruit exports from Argentina were strong;
- ▶ Israeli citrus fruit exports expanded roughly 39 per cent;
- ▶ Citrus fruit and banana imports into the former Soviet Union climbed nearly 59 per cent;
- ▶ Kiwi exports from New Zealand rose around 6 per cent, while apple exports gained 39 per cent;
- ▶ Fresh pineapple exports from Côte d'Ivoire were higher, despite light rain from reaching the 159,999-tonne goal;
- ▶ Banana exports from West Africa, primarily from Côte d'Ivoire and sharply;
- ▶ European apple stocks rose steeply;
- ▶ Australian frozen meat exports decreased;
- ▶ Citrus exports from Morocco diminished by around 29 per cent;
- ▶ Fruit consumption in Germany declined;
- ▶ The banana market was disrupted when the European Union implemented an import system.

The contract market

Charter rates for the full season generally exceeded those of 1993/1994. Canary Board contracts, which are traditionally renewed in mid-July, were negotiated at the same rates as the previous year. However, other large contracts settled later in the year were the subject of tougher negotiations. In particular, the New Zealand Apple and Pear Marketing Board's talks with shippers were initially abandoned due to broad disagreement over rates. In the end, contracts were renewed at 19 to 15 per cent higher rates than the preceding year. The New Zealand Kiwi Marketing Board managed to obtain similar rates. South African fruit exporters had to agree to pay about 13 per cent more than a year earlier, on larger volumes. Similarly, Ghanaian exporters were obliged to renew contracts at 6 to 19 per cent higher rates, depending on the destination, even though volumes were lower.

While significant, these rates increases did not necessarily feed through to much higher income for owners, due to the substantial increase in bunker fuel costs over the period.

Box 8 (continued)**The spot market**

Average spot rates also firmed appreciably, rising by around 15 per cent. The busy season began early. In northern Chile, grapes were harvested approximately 15 days earlier than normal and, by the beginning of January, rates were already around 44 per cent above 1994 levels. Rates rose steadily to a peak in early April and then declined just as steadily to slow season lows. The seasonal rate increase, which occurred earlier and more regularly than last year, produced the highest rates during the normal period. The following downturn was smoother than in 1994. Still, contrary to expectations, summer rates matched last year's level, and even lower on certain one-time voyages.

From early to mid-January, spot rates remained stable at \$9.65, or 44.5 per cent higher than a year earlier. The upward trend then began, with early-February rates for modern 350,000-450,000 cf ships starting at approximately \$0.81/cf/30 days, compared with \$0.70 in 1994. They then rose to \$0.95 by the middle of the month, against \$0.75 in 1994, climbing to \$1.175 in early March and \$1.225 in mid-March, culminating at \$1.25 in early April. This peak represents around a 9 per cent increase compared with the \$1.15 high reached in early March 1994.

Rates then began to decline regularly, but were still at \$0.90 in early May. By early June they had slipped to \$0.50, falling to just \$0.325 by early July. Rates bottomed out at \$0.30/cf/30 days in mid-July, an average summer season low, matching 1994 levels. Some voyages were reported to have been negotiated at \$0.75-0.85.

From July to October, demand focussed almost entirely on modern ships, primarily used to transport bananas, cars and rice, and to ship garlic and peanuts from China to Europe. Owners of older ships that had been chartered during the busy period were forced to lay up their vessels in the low season, although somewhat later than usual, or sell some of them for scrap.

The time-charter market

The time-charter market was relatively active across all ship categories, particularly for large carriers. Banana growers, traders and shippers again played a dominant role. Rates advanced around 15 per cent for both mid-size and large vessels.

Twelve-month rates for modern palletized carriers were around \$0.75/cf/30 days for 260,000-300,000 cf ships, compared with \$0.65 in 1994, and \$0.75 for 400,000-550,000 cf vessels (\$0.64 in 1993). Rates were virtually the same for all ship categories, with a premium paid for the largest and fastest units, and for those with ample container capacity. The long-period time-charter market for older, non- or semi-palletized ships was practically non-existent and demand in this category has nearly disappeared.

The fleet

The global fleet of reefer ships has shrunk for the second consecutive year. At 1 January 1996, it comprised 1,319 vessels with a capacity of more than 40,000 cf, for a total capacity of 362,295,000 cf. This represents a decrease of 4.6 per cent in the number of ships and 4.4 per cent in capacity from 1 January 1995.

Newbuildings also declined for the second year in a row. Only six new vessels totalling 1,362,500 cf were delivered, compared with 26 units totalling 9,115,000 cf in 1994. Larger carriers accounted for most newbuildings in the two preceding years, with ships exceeding 300,000 cf in capacity accounting for 85 per cent of deliveries in 1993 and 60 per cent in 1994. In contrast, no vessel in 1995 had a capacity of more than 270,000 cf. Twenty new units should be delivered in 1996, adding total capacity of around 6,320,000 cf. Larger ships are again becoming important, with 35 per cent of newbuildings having a capacity of more than 300,000 cf.

Similarly to last year, a large number of ships were removed from the market as a result of scrapping, shipwreck or conversion. Fifty-seven vessels totalling 16,830,000 cf were taken out of service in 1995, compared with 58 ships with a combined capacity of 17,010,000 cf in 1994.

Source: Barry Rogliano Salles (Paris).

Table 38

Estimates of total freight costs in world trade a/ by groups
(Millions of US dollars)

Year	Country group	Estimate of total freight costs of imports	Value of imports (cif)	Freight costs as percentage of import value
1989	EWorld total	123 264	1 856 834	
	2. Developed market-economy countries	78 286	1 4 ⁵ 979	5.49
	3. Developing countries - total	44 978	439 855	19.44
	Africa	19 432	77 757	13.42
	America	19 929	123 495	
	Asia	21 979	211 989	
	Europe	1 329	16 937	
	Oceania	318	2 477	
1993	1. World total	196 926	; 691 914	5.44
	2. Developed market-economy countries	112 647	; 699 779	4.33
	3. Developing countries - total	83 379	991 144	8.33
	الإفريقيات*	9-837	88 979	11.96
	Africa			
	America	15 998	189 994	
	Asia	56 951	797 439	8.95
	Europe	971	11373	8.54
Oceania	522	4 268	12.23	
1994	EWorld total	219 317	4 963 338	5.49
	2. Developed market-economy countries	125 252	2 922 819	4.29
	3. Developing countries - total	94 965	1 149 528	8.25
	Africa	19 669	96 453	11.95
	America	17 438	219 359	7.95
	Asia	64 156	805 293	7.97
	Europe	1 331	15 699	8.53
	Oceania	489	3 922	12.24

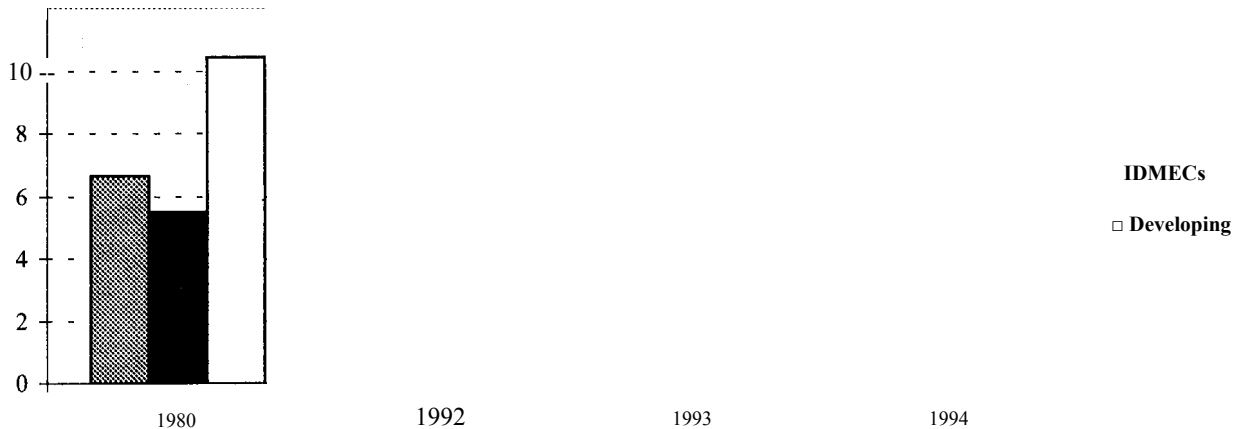
Source: Derived from IMF cif/fob factors and IMF import data.

a/ The estimate for the world is not complete, since data for countries that are not members of the IMF are not included.

Graph 13

Estimates of total freight costs in world trade by groups

Percentage of total freight
costs of total import value



Source: Table 34

95. The relative level of freight costs incurred to developed market-economy countries continued to be nearly half that of developing countries, and the ratio between the two groups had remained almost unchanged from 1980 to 1994. The difference between the two groups is mainly attributable to different trade structures, differences in the regional infrastructure facilities at ports and inland distribution systems, and the more influential shipping strategy of shippers of developed market-economy countries when negotiating with shipowners, or liner conferences/operators for larger cargo volumes.

96. The overall ratio of developing countries declined almost yearly from 1980 to 1994, as did that of developed market-economy countries. Within the group, Asia accounted for 49 per cent of the total freight costs and the same in percentage of the total value of imports of developing countries in 1980, yielding 10.4 per cent as the ratio of freight costs. In 1994, they accounted for 68.2 per cent of the total freight costs and 70.6 per cent of the total import value of the developing countries.

resulting in the most favourable relative freight factor (7.97 per cent) of all developing regions.

D. Marine bunker prices

97. World marine bunker prices had tended to remain at inflated levels during the first and second quarters of 1995. A significant drop in prices was experienced towards the middle of the year, but they recovered during the fourth quarter reaching levels only slightly below those experienced in early 1995. On average, global prices for high-viscosity fuel oil (HVF) and intermediate fuel oil (IFO) increased considerably in 1995 by 14.9 per cent and 12.3 per cent respectively from the previous year. The lowest increase of 8.0 per cent and 6.5 per cent were marked on the West coast of the United States. Table 39 reveals the developments of prices during 1995. In contrast to HVF and IFO prices, which dramatically picked up in the first half and then turned downwards during the third quarter, marine diesel oil (MDO) prices continuously moved upwards at all global markets, except for the Persian Gulf.

Table

Fluctuations in marine bunker fuel prices, a/ 1993-1995
(US dollars per ton)

		1993	1994	1995				1995 percentage change (fourth quarter to first quarter) ^{b/}
		4Q	4Q	1Q	2Q	3Q	4Q	
Persian Gulf (Mina Ahmadi)	HVF	61	89	199	100	83	97	-3.0
	IFC	79	96	196	106	88	101	-4.7
	MDO	71 ^{c/}	197	183	185	179	179	-2.2
Mediterranean (Genoa)	HVF	79	99	117	113	95	111	-5.1
	IFC	79	193	122	114	101	115	-5.7
	MDO	199	159	171	178	173	174	8.2
North-NYest Furore (Rotterdam)	HVF	69	94	196	101	85	97	-8.5
	IFC	66	98	199	105	88	96	-11.9
	MDO	144	131	136	148	138	143	5.2
Gurt' of Mexico (Houston)	HVF	64	91	95	102	84	91	-4.2
	IFC	67	94	98	104	87	93	-5.1
	MDO	158	147	146	149	148	151	3.4
Garibbean (Cristobal)	HVF	69	96	196	112	94	98	-7.6
	IFC	76	194	112	117	98	104	-7.1
	MDO	178	174	174	175	174	175	0.6
West Coast of United States (Eos Angeles)	HVF	66	91	96	103	86	92	-4.2
	IFC	71	96	190	107	89	96	-4.0
	MDO	298	177	159	155	169	171	7.6
F^r East (Singapore)	HVF	62	99	192	100	85	102	0.0
	IFC	66	93	195	103	88	105	0.0
	MDO	147	146	147	147	148	150	2.0

Source: Drewry Shipping Consultants (London), *Shipping Statistics and Economics*, various issues.

a/ Average prices for each quarter.

HVF, high-viscosity fuel oil

IFO, intermediate fuel oil

MDO, marine diesel oil

MULTIMODAL TRANSPORT AND TECHNOLOGICAL DEVELOPMENTS

This chapter updates developments in the field of multimodal transport, including general developments in this field, new block train services and other new features.

A. General developments in the field of multimodal transport

98. The modern trade and transport market demands highly sophisticated and adaptable organizations with a genuine worldwide door-to-door and just-in-time logistics capability with the greater accent upon the partnership with the customer. The shipping and transport world sees a further development of mega transport operators, where the acquiring of larger ships is only a part of the whole picture. To be a global logistics supplier involves also owning and leasing vast number of containers, having dedicated terminals, agency, trucking and general logistics subsidiaries. The need to provide such comprehensive and world scale services is proving too much even for the big players to do by themselves, hence there is the increasing trend towards large consortia. Big ocean and multimodal transport operators set up for this purpose jointly owned and managed container and chassis pools to use each others' equipment as necessary. So the picture is of massive global companies coming together to form increasingly tightly knit mega consortia. This concept of cooperation between shipping lines gives them the capability to use each other's containers thus easing the burden of repositioning containers. Usage will be charged on an agreed daily rate. The agreement may pave the way for the introduction of an interchangeable "grey box" that would not carry the name of an individual carrier or a jointly owned container bearing the names of all participating lines.

99. Another feature observed is the to combine different modes, including the air transport, to provide logistics door-to-door services to satisfy particular needs of customers. For example, two big road transport operators, one in Europe and another in the United States, having already been for some time in cooperation in Transatlantic door-to-door LCL services with the use of maritime transport, have recently made an

agreement with an air line to provide an alternative Transatlantic crossings with the use of air transport. The service is based on the use of the computer system permitting a customer to make choice between the air and maritime mode of Transatlantic crossing showing him the details concerning the time and price difference. Sea-air transport also played a growing part in goods traffic of the airports situated in the vicinity of the seaports. The concept is applied by companies which use ocean containers with high value cargo arriving at the port and tranship their content by air to other destinations for a swifter journey.

100. In order to promote the development of multimodal transport through closer cooperation between the many different players and better coordination between public and private entities, new institutional arrangements continued to be introduced. In this respect the creation of the Council of Combined Transport in France at the beginning of 1995 should be noticed as a part of an efforts of the elaboration and application of the combined transport policy. The mission of the Council is to contribute to the cooperation among the different actors of the transport chain on the national and the international level and to advise in this respect public authorities and professionals. The Council includes representatives of different branches of transport and freight-forwarding industry.

101. With fast-growing external trade in China there has been a deployment of logistics services provided by foreign carriers on the Chinese territory with the implantation of their subsidiaries in order to solve problems of door-to-door services. For example, a foreign mega liner operator was expecting to commence regular trucking operations within China, its subsidiary having received an independent licence. The company will be able to move containers from any point in Guangdong province to any other point in the country. The liner operator is the first foreign based company to

be issued such permits, although several joint venture trucking companies having been established in China.

10. In contrast to the situation in China, freight-forwarding and multimodal transport operations in Viet Nam are still under development, foreign companies are restricted to establishing representative offices only and have to work through local agents due to the perceived need to protect local companies. The Government encourages cooperation between the major players to raise the industry standards, but continues to exercise a tight control over the situation and does not allow ownership in the transport sector by foreign based companies. Currently there are more than 30 locally-controlled freight forwarders in Viet Nam, but the market is dominated by Viettrans, the State-owned company controlled by the Ministry of Foreign Trade.

£. Land-bridges and other block train services

103. To operate fast growing rail container services in India, the Container Corporation of India Ltd. (CGNCGR) was established by the Indian Government. A total volume of 380,000 TFGs for the year 1994/1995 were handled compared with 37,000 TEUs in 1993/1994 financial year, and 450,000 TEUs were forecasted for 1995/1996. In pursuance of the policy of liberalization and the introduction of private capital into State-owned industry 20 per cent of CGNCGR's share capital was sold off to a number of private companies. A total of 22 inland clearance depots (ICDs) were operated by the company in 1995, where export and import containers were loaded and discharged to or

from container trains and Customs formalities were carried out. Given the growth of demand the company was planning to open 6 new ICDs in 1995-1996. A complement network of ICD was operated by another government agency, Container Warehousing Corporation (CWC), as well as by some private companies, such as mega liner operators.

164. Table 40 provides information on container block trains linking ports with major inland points. Although most of the container movements were of international character, there was a growing domestic traffic of containers. In the first three quarters of 1994/1995 almost 79,000 TFGs were moved for domestic customers, representing mainly high-value manufactured products which can justify the relatively high cost of rail container transport. The main obstacles for the development rail container transport in India was the very heavy utilisation of the Indian Railways, limited wagon supply, as well as impossibility by a substantial number of shippers and importers to handle full container business at their own factories and warehouses due to local access problems.

105. A five-year plan to convert 6,000 kilometres of the Indian metre gauge routes to broad gauge has been under way since April 1994 in order to create additional capacity for the Indian Railways system whose main corridors of trunk routes are saturated despite doubling and electrification. According to this plan, 4,800 kilometres were already converted during the first three years of the plan and by the end of March 1997 all the planned 6,000 kilometres will be converted to the broad gauge.

Table 40

The number of container block trains operated monthly between ocean ports and ICDs in India

Destination	Number of trains (monthly in each direction)
Bombay - New Delhi	40
Nhava Sheva - New Delhi	25
Delhi - Madras	15
Bangalore - Madras	15
Ludhiana - Bombay	10
Ahmedabad - Bombay	10

Source: Cargo Systems, July 1995, p.43-44.

106. A proposal has been put forward concerning the creation of a land-bridge to connect northern Malaysia (Fenang Fort) with the southern Thailand port of Songhkla in order to deviate traffic from the congested Straits of Malacca. The outlined proposal contained a 200-kilometres tri-modal: rail, road and pipeline connection, where rail and road infrastructure is already in place, though it needs upgrading. Current estimated project costs are in the order of \$2.75 billion.

107. In China new construction and double-tracking were under way on routes totalling 3,346 kilometres in 1995, more than ever before in China's railway history. The work on adding capacity or filling gaps in the network was under way on six trunk lines of vital importance for the growing economy of the country, including the construction of 2,370-kilometres-long railway to the south of Beijing-Jiulong (Kowloon) which will serve the sea ports and ports on the Yangtze River. Several intermodal terminals handling container traffic were constructed during the year 1995 and the development of intermodal corridors with the establishment of container handling companies was an important feature in the improvement of the rail container services in this country. The main breakthrough in this area was the inauguration in August 1995 of the container shuttle train service between Hong Kong and the inland points in Wuhan and Zhengzhou. Design capacity of the service is about 500 TEUs a month with eight block trains.

108. In Viet Nam a project aiming the movement of containers between Uaiphong and Hanoi is under

development which includes upgrading the track, improving other infrastructure and acquiring the necessary rolling stock to transport 20 and 40-foot long containers.

109. Despite the efforts made by Intercontainer (IC) - the main rail operator of container block trains in Europe - and other operators of container block or shuttle trains, the share of rail transport in the whole volume of container traffic from/to the main European ports continue to be low and sometimes even decreasing. For example, of the 2,200,000 TEUs handled in the port of Antwerp in 1994, only 167,000 TEUs were moved by rail. Through its "Quality-net" Intercontainer operates block trains on the main axes from the main ports to the nodes situated at Metz (France), Duisburg and Mannheim (Germany), Malaszewice (Poland) and Sopron (border between Austria and Hungary).

110. To cater for the demand for traffic between the countries of the European Union and the countries of the former Council for Mutual Economic Assistance (CMEA) IC is offering a range of block train services connecting the main ports and inland centres (table 41) and some others are planned to be introduced shortly. It is also operating a block train between Antwerp and the CIS and serves, in particular, 200 terminals in the Russian Federation, Ukraine, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. Another container service from Western European terminals and terminals in Moscow and St. Petersburg was introduced by IC through Finland.

Table 41

List of IC West-East container block train services

Route	Name of service
Ungar - Trieste	Adria Express
Bremerhaven/Hamburg - Eovosice	Hansa Bohemia Confiner Express
Bremerhaven/Hamburg - So - ron	Hansa Hungaria Container Express
Bremerhaven/Hamburg - Salzburg	Mozart
Bremerhave - Hambur - Vienna	Nordsee Don - uwa Uer Container Express
Ljubliana - Leghorn	LL-Service
Antwe - Malaszewice/CIS	Strela
Rotterdam - Malaszewice	
Berlin - Moscow	Dstwind

Source: Intercontainer-Interfrigo Furomodal, No. 2, 1995, p. 18.

111. The volume of freight traffic through the fixed link established by the Channel tunnel grew steadily involving both public and private operators in container and accompanied commercial vehicles transportation. Accompanied vehicles are transported between the Folkestone and Calais portals of the tunnel by shuttle trains and containers are moved by direct trains operated by French and British railways. The record number of vehicles carried a day by shuttle trains was about 1,800 in summer 1995 with the monthly figure more than 37,000 with the share of cross-Channel traffic up to 35 per cent. The number of through railfreight trains was at that period between 465 and 644 per month.

112. The benefits from using the double-stack container train technology have stimulated further expansion of such services on the North American continent. Over 1986-1994, double-stack rail capacity serving the international trade through the Pacific seaboard increased by 389 per cent to 3.29 million TFUs. A new double-stack service was open in October 1995 between New York and Atlanta following the completion of an overhead clearance programme which cost was US\$ 17 million.

113. It is interesting to note that serious consideration is being given to the use of the double-stack container trains on the projected new "Betuwe" line between the port of Rotterdam and the German border. The feasibility of such a decision will depend on the economic considerations taking into account the necessity of enlarged loading gauges, higher situation of the eatenary and, equally important, on the fact that double-stack technology would be used only on a short section of the network.

C. Inland navigation

114. An important step in the development of inland navigation on the American continent will be done with the construction of a 420-kilometres canal along the Atlantic coast in Mexico which will link the transport system of this country (particularly the ports of Tampico and Matamoros) with the network of inland waterways of the United States. The canal will have the width of 38 metres and depth 3.7 metres for the use of barges with the capacity of 1,500 tons. It is

expected that work will begin in mid-1996 and will be completed in two years. The use of the inland water transport will make it possible to reduce congestion and other problems faced by road transport which currently accounts for 45 per cent of the bilateral trade. Additionally, the canal will accommodate a large share of the growing trade volume between the two countries.

115. China is also proceeding with an ambitious plan to upgrade its inland waterways system. Under this plan it is intended to improve the conditions on major and smaller rivers and on the Grand canal. The plan includes:

upgrading the conditions for navigation on the Xiangjiang and Xijiang rivers to permit to raise the loading capacity of barges deployed from 300 to 1,000 tons. At the same time the capacity of the barges deployed on the Grand canal in Zhejiang province will be raised from 100 to 300 tons;

the ports of Zhongzhou and Henyang in Hunan province will be upgraded to be able to accommodate barges with the capacity 1,000 dwt. New berths will be built in these ports;

the ports of Jiaying, Hangzhou and Huzhou will see the upgrading and improving of their cargo handling facilities with the construction of purpose-designed road/rail transfer yards.

The cost of the projects is about US\$ 600 million, of which US\$ 10 million will be financed by a World Bank loan.

D. Container leasing industry

116. For the container leasing sector 1995 was a fairly favourable year with somewhat recovered lease rates and better level of utilisation of stocks. Concerning the structure of the industry, the two major leasing companies had in their hands more than 50 per cent of whole container leased fleet, which amounted to 4,60,000 TFUs. Fleets of the major container leasing and transport companies in 1994 and 1995 are shown in table 4.

Table 42

Distribution of the world container fleet by owner in 1994-1995

Owner	1994		1995	
	TEUs	per cent	TEUs	percent
Major lessors	3 675 000	43.7	4 000 000	43.9
Other lessors	2 [^] 5 000	2.7	260 000	2,9
Leased total	3 900 000	46.4	4 260 000	46.8
Ocean carriers	4 100 000	48.8	4 440 000	48.8
Other	400 000	4.8	400 000	4.4
World total	8 400 000	100	9 100 000	100 1

Source: *Containerisation International*, August 1995, p.

117. The vast majority, namely 86.2 per cent of the total leased container fleet were standard dry cargo containers, and the rest includes special and domestic European and North American dry cargo and reefer containers. According to the survey of the Institute of International Container Lessors (IICL), at the beginning of 1995 the major United States leading companies had 44,167 domestic units, of which 33,339 were 48-foot and 3,878 were 45-foot containers. New acquisitions planned by the major leasing companies in 1995 were estimated at 485,000 TEUs including 440,000 TEUs dry freight including high cubes (90,000 TEUs), 11,000 domestic and swap bodies and 34,000 TEUs different special type containers.

E. Container production

118. Annual container demand and production were strongly influenced by replacement of scrapped containers which generated between 40 and 50 per cent of all requirements for new containers. According to an analysis, the quantity purchased for replacement was 450,000 TEUs of the total new additions of 1,150,000 TEUs L 1995.

119. Mass dry freight container production in China, the uncontented leader in this industry, continued to grow in 1995. According to the estimations of the China Container Industry

association, in 1995 about 672,500 TEUs were produced against 450,000 TEUs in 1994. Total two-shifts production capacity of all Chinese container factories was 946,600 TEUs in 1995. There are about 40 production centres closely situated to the sites of the first use of containers that makes the production more competitive. In parallel the growth of this industry continued in Indonesia, Thailand and Malaysia, the second largest container manufacturing region in the world with the common output exceeding 200,000 TEUs in 1995. All these countries joined the ranks of major container producers only five years ago, however, with many factories operating well below their production capacity and several of them already closed due to unstable market conditions, overproduction and the fierce competition. India approximately doubled its container production capacity from 70,000 TEUs in 1994 to 146,500 TEUs in 1995, the main question, however, stayed to be whether India's manufacturers could secure enough business to utilize such increased capacity. The container manufacturing industry in the Republic of Korea continued to lose business to lower cost competitors in other countries. In order to overcome cost disadvantages in mass container production, stronger emphasis was placed on the development of offshore projects and on special container production, including the production of components for export. Container manufacturing was relatively stable in Europe. Unlike the Asian region, where over 90 per cent of production are

dry cargo containers, European companies continued to primarily compete in the production of different types of specialized and reefer containers. The total number of containers manufactured in Europe in 1995 was about 134,500 TEUs.

120. Prices for dry freight containers increased notably in 1995, attributable mostly to the high prices of materials (steel and paints). The spread of average container prices by major container manufacturing regions for years 1992-1995 is shown in table 43.

F. Container dimensions

121. The Council of Ministers of Transport of the European Union proposed, subject to the approval by the European Parliament, to

increase the maximum total length of road trains to 18.75 m (presently 18.35 m) and that of semi-trailers, and consequently of containers and swap bodies to 13.6 m. Similarly it was proposed to increase the maximum width to 2.55 m from the presently permissible 2.50 m. Germany has already introduced the width limit of 2.55 m for vehicles and containers and, according to official announcements, France may introduce it from the beginning of 1996. These decisions, if confirmed, would preclude the use of 45-foot long containers (13.72 m) on European roads, a practice so far tolerated, but subjected to special licences for road transport. At the same time the Council of Ministers of transport did not agree on a possible increase of the total weight of road vehicles from 40 to 44 tonnes.

Table 43

Prices for dry freight containers in different production regions
(in US dollars)

Country/region	1992	1993	1994	1995
Republic of Korea				
20 foot	2 500	2 300	2 500	2 650
40 foot	4 000	3 700	4 ...	4 250
Taiwan Province of China				
20 foot	2 700	2 600	2 600	2 700
40 foot	4 300	4 150	4 150	4 300
China				
20 foot	2 400	2 100	2 250	2 350
40 foot	3 800	3 350	3 600	3 750
Thailand				
20 foot	2 500	2 250	2 350	2 500
40 foot	4 ...	3 600	3 750	4 ...
Malaysia				
20 foot	2 500	2 300	2 400	2 550
40 foot	4 ...	3 700	3 850	4 100
Indonesia				
20 foot	2 400	2 050	2 200	2 300
40 foot	3 800	3 300	3 550	3 700
Europe				
20 foot	2 800	2 500	2 600	2 700
40 foot	4 600	4 000	4 150	4 300

Source: *Containerisation International*, September 1995, p. 91.

Note: The price of 49 foot high cube containers is about 10 per cent high than that of 40 foot long container with height 8 foot 6 inches.

122. With regard to "swap bodies" the Technical Committee 119 of the European Standardization Committee (CEN) decided to standardize two classes of swap body sizes: "C" with 7.45 m length and "A" with 13.6 m length. A question of the width remains to be a controversial issue, since the adoption of the width 2.55 m creates additional difficulties for the European inland water and short sea transport.

123. In the United States, the Federal Highway Administration is not in favour of increasing road vehicles sizes and weights as part of the North American Free Trade Agreement harmonization process, though the Administration declared that it committed to finding a means, in consultation with Congress, to make vehicles sizes and weights and safety standards compatible with Canada and Mexico. The enforcement of the 1992 United States regulation conceding the mandatory written certification of loaded containers on their contents, origin and gross weight, which was intended to prevent overloading of containers, has been postponed until 1 September 1996. The reason for this was strong opposition from transport operators, mainly from road transport operators. Objections focused on the unnecessary problems posed by increasing the emphasis on written documentation in a logistics chain which is now essentially a paperless environment.

124. According to a survey, the total fleet of domestic containers in the United States increased by 3.6 per cent between 1994 and 1995, showing that the most popular domestic container is 48 foot wide-body box. The survey pointed out that about 8,000 domestic containers were lying idle. The composition of this fleet is shown in table 44.

125. A United States-based transport and logistics operator plans to launch a prototype European version of its domestic refrigerated container in 1996. The new container instead of 45 foot (13.72 m) length for the United States domestic containers will be a 13.6 m long but with the same 2.6 m width and 9 foot 6 inch height high-cube container. Stacking posts and ISO stacking posts will be retained in order to make this unit compatible with vessel operations where 45-foot slots are available, to offer double-stack capability on the North American continent and still to be compatible with the length of the European swap bodies. It is recognized that operations with these containers on the European railways will be restricted and will require special rolling stock, but the company believes that commercial incentives will be sufficient to ensure success of these containers.

G. Plenary meeting of the ISO Technical Committee 104

126. The ISO Technical Committee 104 "Freight Containers" (TC 164) held its 18th plenary meeting 22 and 23 June 1995 in Hamburg. The Committee considered the question whether any further activity in relation to the series 2 containers should be continued. The document NPI 1911 - 1 "Series 2 freight containers" reached the stage of a Committee document (CD) in May 1991. After the ECE/UNCTAD seminar on the Impact of Loading Units Dimensions on Combined Transport held in 1992, it was decided that for the time being there was no worldwide alternative to the present series 1 ISO containers. Consequently, at the previous meeting of ISO/TC104, held in 1993, the status of the document NPI 1911-1 as a simply internal

Table 44

Composition of the United States fleet of domestic containers

Container dimensions	1994	1995	Percentage change
45' x 192"	1 240	1 174	-5.3
48' x 102"	52 087	54 344	4.1
53' x 102"	1 770	1 651	
Total	55 097	57 059	- - - - 11

Source: *Cargo Systems*, November 1995, p.

Committee document was confirmed and no further work was proposed in this direction at that session. In result of the vote (8 for, 7 against, 1 abstained) the question of the second generation container standard have been retained in the work programme.

127. The Committee considered a proposal on the revision of the rating of 29-foot long containers. The Committee rejected this proposal, since this revision would tend to increase the rating of 29-foot containers up to 39 tonnes which is not acceptable for the transport industry of almost all countries in the world. The Committee also adopted its Strategic Policy Statement containing the scope of the Committee and items of its work programme. The Statement puts forward as the current priority of the work accelerating of the publication of the approved draft standards, and its readiness to follow up the evolving needs of the shippers and the transport industry.

128. It should be kept in mind that at its latest resolution (April 1994) the ISO Council invited the TC 194 to continue to pay special attention to the specific problems and needs of developing countries with respect to freight container systems. The monitoring the developments in the field of international container standards in the TC 194 is very important for the developing countries since the question of the second generation of containers continues to be in the agenda. Their participation in the work of this body is very limited, this situation has not improved since the beginning of the work on container standards within ISO. UNCTAD stands as the only international body to protect the interests of developing countries during the process of work on new generation of freight containers.

129. The Committee endorsed important changes relating to the international container standards concerning the software:

ISO 6346 Freight containers - Marking and Coding,
ISO 9897 CEDEX Freight containers - Container and equipment data exchange, and
ISO 19374 Freight containers - Automatic identification.

A new feature introduced to the standard ISO 6346 is that the marking of ISO containers with type and

size code has become obligatory. This has been done in order to make easier the distinction between ISO containers that comply with all strength features (as stackability, racking force features, ground floor fork lift truck capability) as given in ISO 1496, and other containers that do not meet these strength requirements. The Committee endorsed the role of the International Container Bureau (BIC) in maintaining the system of coding as the only international authority that has the right to allocate owner codes according to this standard. According to a new revision of ISO 6346, this code may also be used for chassis and for detachable container equipment such as refrigeration units. In such cases, the owner/ operator shall replace the last letter of the owner's code (i.e. the "U") by, in case of chassis, an "X", in case of detachable equipment an "Y". A new version of ISO 6346 was published in December 1995.

130. The Committee endorsed the draft international standard DIS 9897 CEDEX Freight containers - Container and Equipment Data Exchange which was distributed for the vote by member bodies, the closing date for this vote is 14 March 1996. The draft contains data elements for many applications, such as universal containers, refrigerated containers, tank containers, container chassis and other related data elements. Many containers leasing companies use these data elements and EDIFACT messages to communicate with their agencies all over the world, terminals, container depots, damage surveyors, repair shops. ISO elaborated and accepted a 3-layer model for the problems incurred in EDI which is called the open Systems Interconnection (OSI) model.

131. Another important development was the approval by ISO/TC 194 member bodies of the upgrading of Annex B to the ISO 19374 Freight container - Automatic Identification from informative to normative character. Several millions of electronic tags containing the container data set according to the coding scheme and protocol of ISO 19374 Annex B have been mounted on containers and rolling stock and have apparently proved to function efficiently. The patent holder, AMTECH Corporation, has accepted definitely and irrevocably to give, free of charge and license, free usage of this patent for all international applications. The new version of ISO 19374 was published in December 1995.

OTHER DEVELOPMENTS

This chapter updates the status of various international agreements dealing with maritime and related transport and outlines some of UNCTAD's initiatives />? human resource development.

A. WTO Negotiating Group on Maritime Transport Services

13^ The Negotiating Group on Maritime Transport Services (NGMTS) had been established subsequent to the Ministerial Decision on Maritime Transport Services taken at Marrakesh in April 1994. The mandate of the Group was to hold comprehensive negotiations on commitments in international shipping, auxiliary services and access to ^nd use of port facilities and to conclude these negotiations by the end of June 1996. By the end of 1995, 42 cou^ries were full members of the NGMTS, while 15 countries and 3 international organizations (UNCTAD, World Bank and OFCD) had acquired observer status. Up to the end of 1995, the Group held ^ight meetings which were primarily devoted to the development of a draft model schedule of maritime transport and the elaboration of a questionnaire on the characteristics of national maritime transport and related sectors as well as on the discussion and evaluation of country replies. At the end of 1995, that it since its eighth session, the Group concentrated on actual bilateral negotiations through a process of requests and offers for comnritments for the elimination of market restrictions in the maritime transport sector.

133. The work of the Group ce^red around what had been identified as the "three pillars" of the maritime transport sector, i.e. the provision of "blue water" services (shipping services in the strict sense), auxiliary services such as agency, freight forwarding, cargo handling, etc. and additional commitments relating to access on a non-discrimiiratoiy basis to services generally available in the port, such as pilotage, lighterage, repair, bunker, etc. The split of the sector into these three pillars was not really to be seen as a rejection of how the sector works, but rather as a tool to facilitate negotiation. It enabled negotiators to tackle the sector in the most pragmatic mamrer, particularly in view of the fact that large differences exist among countries in the speed and extent of

implementing progressive liberalization measures. Work has continued in 1996 with the aim of reaching an agreement on the progressive liberalization of maritime transport services before the established deadline.

B. Conventions on maritime transport

United Nations Convention on a Code of Conduct for Liner Conferences

34. The United Nations Convention on a Code of Conduct for Liner Conferences.^ came into force on 6 October 1983. The Convention provides an international regulatoiy framework for liner conferences. The Code seeks to ensure rights of national shipping lines to participate in liner conferences and to cany a substantial share of their liner cargoes, to balance the interests of shippers and shipowners and to facilitate the orderly expansion of liner trade. By the end of 1995, the number of Contracting ?arties had reached 78, namely: Algeria; Bangladesh; Barbados; Belgium; Benin; Bulgaria; Burkina Faso; Cameroon; Cape Verde; Central African Republic; Chile; China; Congo; Costa Rica; C6te d'Ivoire; Cuba; Czech Republic; Denmark (except Greenland and the Faeroe Islands); Fgypt; Fthiopia; Finland; France; Cabon; Cambodia; Cermany; Chana; Guatemala; Guinea; Guyana; Honduras; India; Indonesia; Iraq; Italy; Smaica; Jordan; Kenya; Kuwait; Lebanon; Madagascar; Malaysia; Mali; Mauritania; Mauritius; Mexico; Morocco; Mozambique; Netherlands (for the Kingdom in Furope and Aruba); Niger; Nigeria; Norway; Fakistan; Feru; Philippines; Forftrgal; ^atar; Republic of Korea; Romania; Russian Federation; Saudi Arabia; Senegal; \$ierra Leone; Slovakia; \$pain; \$omaha; Sri Lanka; Sudan; Sweden; Togo; Trinidad and Tobago; Tunisia; United Kingdom of Great Britain and Northern Ireland (on behalf of the United Kingdom, Gibraltar and Hong Kong); United Republic of Tanzania; Uruguay; Venezuela; Yugoslavia; Zaire; Zambia.

United Nations Convention on International Multimodal Transport of Goods

135. This Convention. — adopted by consensus on 24 May 1980 by the United Nations Conference of Plenipotentiaries. was opened for signature in New York from 1 September 1980 to 31 August 1981 and remained open for accession thereafter, it will enter into force 12 months after 30 States have become contracting parties by definitive signature, ratification or accession. The Convention is intended to stimulate the development of smooth economic and efficient multimodal transport services and to determine certain rules relating to the carriage of goods by international multimodal contracts, including equitable provisions concerning the liability of multimodal transport operators. By the end of 1995, the Convention had been ratified/acceded to by the following seven States: Chile, Malawi, Mexico, Morocco, Rwanda, Senegal and Zambia. Another two countries - Norway and Venezuela - have signed the Convention subject to ratification.

United Nations Convention on Conditions for Registration of Ships

136. The United Nations Convention on Conditions for Registration of Ships was adopted by consensus on 7 February 1986 by the United Nations Conference on Conditions for Registration of Ships at the fourth part of its session. The Convention contains a set of minimum conditions which should be applied and observed by States when accepting ships on their ship register(s). It defines the elements of the "genuine link" that should exist between a ship and the State whose flag it flies, and thus contains provisions for the participation by nationals of the flag State in the ownership, manning and management of ships. The Convention also stipulates that flag States are required to exercise effectively their jurisdiction and control over ships flying their flag. It also provides for the establishment by a flag State of a competent and adequate national maritime administration which is responsible for a number of specific tasks such as ensuring that a ship flying its flag complies with the State's laws and regulations concerning registration of ships and complies with applicable international rules and standards concerned with the safety of ships and persons on board and the prevention of pollution of the marine environment.

The Convention will enter into force 12 months after the date on which no less than 40 States, the combined tonnage of which amounts to at least 25 per cent of world tonnage, as stipulated in article 10 of the Convention, have become Contracting Parties to it. By the end of 1995, the Convention had been ratified by the following ten States: Côte d'Ivoire, Egypt, Georgia, Ghana, Haiti, Hungary, Iraq, Libyan Arab Jamahiriya, Mexico and Oman. Another 10 States had signed the Convention subject to ratification, acceptance or approval; Algeria, Bolivia, Cameroon, Czech Republic, Indonesia, Morocco, Poland, Russian Federation, Senegal and Slovakia.

United Nations Convention on the Carriage of Goods by Sea, 1978 (Hamburg Rules)

137. The United Nations Convention on the Carriage of Goods by Sea, 1978,— came into force on 1 November 1992. The object of the Convention is to strike a fairer balance between carriers and shippers in the allocation of risks, rights and obligations with regard to liability. By the end of 1995, the number of Contracting Parties had reached 23, namely: Austria, Barbados, Botswana, Burkina Faso, Cameroon, Chile, Czech Republic, Egypt, Guinea, Hungary, Kenya, Lebanon, Lesotho, Malawi, Morocco, Nigeria, Romania, Senegal, Sierra Leone, Tunisia, Uganda, United Republic of Tanzania and Zambia. Additionally, 21 countries have signed the Convention subject to ratification.

International Convention on Maritime Liens and Mortgages, 1993

138. The Convention was adopted by consensus on 6 May 1993 by the United Nations/International Maritime Organization Conference of Plenipotentiaries on a Convention on Maritime Liens and Mortgages, which met at Geneva. The Convention is intended to improve conditions for ship financing and the development of national merchant fleets and to promote international uniformity in the field of maritime liens and mortgages. The Convention was opened for signature at United Nations Headquarters in New York from 1 September 1993 to 31 August 1994 and has remained open for accession thereafter. It will enter into force six months following the date on which 10 States

have expressed their consent to be bound by it. By the end of 1995, the Convention had been ratified/acceded to by two States: Monaco and Tunisia. Another ten States had signed the Convention subject to ratification namely: Brazil, China, Denmark, Finland, Germany, Guinea, Morocco, Norway, Paraguay and Sweden. —

Review of the 1952 Convention on Arrest of Ships

139. The eighth session of the Joint UNCTAD/IMO Intergovernmental Group of Experts met in London from 8 to 10 October 1995 to continue its work in reviewing the International Convention for the Unification of Certain Rules relating to the Arrest of Sea-going Ships, 1952. The Group commenced the in-depth examination of the draft articles for a convention on arrest of ships (document TD/B/CN.4/GE.2/5) which had been prepared during the seventh session. The Group agreed that the outcome of its work would be embodied in a new convention rather than a protocol, bearing in mind the comprehensive nature of the work.

c. Human resource development

140. The TRAINMAN Programme continued to provide support to institutions organizing management training in shipping, ports and multimodal transport. More than 50 training centres in almost as many countries participate in the TRAINMAR network that enables them to cooperate and thereby expand and improve the training they offer. In addition to the support of a small programme team in UNCTAD headquarters, support may be provided to centres and regional networks through separately funded projects. Three new projects were initiated: in Nigeria, where a study of the maritime sector and its role in development was undertaken; and two in Europe, funded separately by the European Union and

Belgium, for the preparation of training materials suitable for use both in Europe and in regional networks. Two current projects were extended: in the Caribbean (financed by Trance) to contribute to the development of commercial exchanges and the reinforcement of cooperation by the development of training activities in the shipping sector; and in Romania (financed by the EC) to assist the Maritime Training Center of Constanza in creating a technological training capability in management issues.

141. The second regional UNCTAD/BIMCO Seminar on Charter Parties and Ship Financing was held in Bangkok, Thailand, from 30 October to 3 November 1995 for participants from 14 Asian countries. The objective of the seminar, organized jointly with the United Nations Economic Commission for Asia and the Pacific (ESCAP) and with the cooperation of IMC, was to analyse the terms of charter parties most commonly used in the trade of the region, to brief the audience on recent changes and to promote discussion among the various countries and organizations represented.

142. In the area of human resource development, five seminars on Strategic Planning for Senior Shipping Management (Stratship) were delivered at training centres in Hong Kong, Portugal, Singapore, Sweden and the United Kingdom. The JOBMAR programme continued with participants from West Africa attending on-the-job training assignments in Western Europe. Additionally, development work was commenced in 1995 on a new course on strategic planning for shipping managers in the dry bulk and tanker sectors (Stratbulk), with the financial support of Norway. Equally training materials were developed for the first session of a certificate course on the modern management of ports.

Box J

A premium on competence

Quality assurance is being extended to the realms of the ship register and flag States now need to be seen as responsible if they wish to attract shipowners.

Possibly the most important initiative taken by the international shipping community in recent years is the International Safety Management Code - described as the "license to operate ships" and designed to ratchet up the quality of ship operation. And while this bears heavily upon shipowners, it is the flag States - the ship registers - which must take ultimate responsibility for the owners' compliance.

The ISM Code, which a number of administrations will require certain ships to comply with next year (from 1996 onwards), empowers the flag States to authorize competent bodies to undertake the auditing function, and with a whole world fleet requiring its owners and individual ships to be submitted to the auditing process before they can receive their Safety Management Certificate, there is considerable interest in the intentions of the flag States.

Some administrations have already determined upon their plans. A number of major shipping nations, notably the United Kingdom and the United States are expected to use their own government survey services to undertake the procedure, others are expected to use the major classification societies, bearing in mind their global coverage of surveyors for this considerable ongoing burden. All the major societies have begun to recruit extra surveyors to undertake the work. Vanuatu and Liberia are expected to require the work to be done by International Association of Classification Society Surveyors.

Other flags may permit independent surveyors to undertake the auditing, although reservations have been expressed about the abilities of firms that have limited geographical coverage. As one of the world's largest registers, the Panama flag has surprised many by coming to an agreement with the independent marine consultant British Maritime Technology (BMT) to undertake ISM Code auditing on its behalf.

There are however some suspicions that there are flag States which have yet to appreciate the importance of the ISM Code and its ramifications. It is clear that there will be intense international scrutiny of the effectiveness of the flag States and those who undertake work on their behalf. Port state control will be more than able to check up on whether the actuality of the ship's condition and operation corresponds with the claims of the certificates, and the audit trail will lead from the ship, to her owners, back to the issuing authority. The reputation of a register will be easily established, or demolished, by the ISM Code process.

Lastly the responsibility for ensuring that the manpower aboard ships on its register are compliant with convention requirements are also being greatly tightened up with the revision of the Standards of Training Certification and Watchkeeping Convention. Here again there is a checking procedure which ends with the flag State administration, which ultimately takes responsibility for certificates of competency issued in its name. And there are serious and severe sanctions, if a marine administration fails to convince IMO that its standards are fit to be approved. In a labour supplying country and originator of the training and certification, failure to be listed by IMC will invalidate the certificates of its seamen and render them unable to work aboard the ships of other flag States. These are serious considerations for any flag State to contemplate. The smallest ship register now has to put in train arrangements to ensure that its ship operation and manpower are operated to an internationally approved standard. At stake is the veracity of their certificates and the credibility of the register itself.

Source: *Lloyd's List Maritime Asia*, December 1995, page 27.

Chapter IX

REVIEW OF REGIONAL DEVELOPMENTS - SUB-SAHARAN AFRICA

This chapter reviews the global and intraregional trades in sub-Saharan Africa, along with the developments of shipping and related services.

A. Economic background

1. General situation

143. Until 1993, sub-Saharan African countries had not shown tangible signs of strong recovery and sustainable growth, despite several years of implementing structural adjustment programmes. The overall subregion's economic performance had continued to be characterized by low productivity, management problems, failure to diversify from a limited production and export base, and high vulnerability to the external economic environment. In 1995, however, economic developments were more favourable, with exports expanding by 14.3 per cent in value and 7.5 per cent in volume over 1994, and imports increasing by 11.8 per cent in value and 5.6 per cent in volume. At the same time, real GDP was estimated to have risen by about 5.0 per cent.¹⁴⁴ This generally positive development, however, cannot conceal considerable differences in economic performance of individual countries. Table 45 gives proof of the difficulties - sometimes due to external factors - experienced by a number of African economies, including some of the largest ones among them.

Macro-economic performances

(a) Real GDP

144. As indicated in table 45, the GDP growth of the countries of sub-Saharan Africa was fairly low for the period of 1990 through 1993. The overall economic activities regained some momentum in 1994, attaining 2.1 per cent of GDP growth over the previous year. A similar trend is observed in the GDP growth rate fluctuation of industrial countries and all African countries, but the trend is in sharp contrast with that of all developing countries, specifically Asian countries which attained an average of 7.25 per cent for the period.

145. In West Africa, economies of Côte d'Ivoire, Senegal, Burkina Faso, Niger, Mali and Togo developed favourably in 1994 after having gone through an extended phase of negative growth in the previous years. In 1994, countries in this subregion generally recorded positive growth rates which, overall, have been above the average rate of sub-Saharan Africa, with the notable exception of Nigeria, which had been on the downward trend since 1988. The Nigerian economy grew by only 1.2 per cent in 1994, thus adversely affecting the subregion's total GDP growth.

146. In the Central African subregion, Congo, Cameroon and Chad contributed to the substantial decline in 1993 and 1994, when there was a virtual breakdown of the financial system in these countries. The performance of the three oil exporters in the subregion was relatively poor. In Cameroon output continued to fall, not only in the oil sector but also in agriculture and non-oil industry. Despite higher oil production, the general performance of the economy of the Congo was hampered by continuing budgetary problems since 1993, and that of Gabon by debt-burdens.¹⁴⁵

147. In Eastern and Southern Africa, Malawi endured the worst decline (-12.4 per cent) of the entire region of sub-Saharan Africa. Economic results in Gambia remained disappointing despite the implementation of a wide-ranging reform programme. There was some recovery in Kenya, as strict budgetary management led to an improvement in the financial situation. Zimbabwe continued to sustain the growth experienced over the last seven years with the exception of 1992. Growth rates of Botswana and the United Republic of Tanzania have consistently been above sub-Saharan average, albeit gradually declining since 1987.¹⁴⁶

Table 45

Real GDP of the countries of sub-Saharan Africa
(Annual percentage change, 1977-1994)

	Average 1977-86	19^7	1988	1989	1990	1991	1992	1993	1994	1995
World	3.3	4.0	4.6	3.5	2.4	1.3	2.0	2.5	3.6	3.7
Industrial countries	2.7	3.2	4.4	3.3	2.4	0.8	1.5	1.1	2.1	2.5
Developing countries	4.5	5.7	5.2	4.2	4.0	4.3	5.9	6.1	6.2	6.0
Africa	2.1	1.6	3.6	3.4	2.1	1.7	0.7	0.8	2.6	3.0
Sub-Saharan Africa	2.8	3.2	2.5	2.3	1.1	1.6	0.9	1.5	2.1	5.0
West Africa										
Benin	4.9	-1.8	2.1	-1.9	3.1	4.7	4.1	3.2	3.4	
Côte d'Ivoire	2.1	-1.6	-2.0	-1.1	-2.1	-0.8	-	-0.8	1.7	
Gambia	3.5	2.8	1.7	4.3	5.7	2.1	4.4	2.1	-	
Ghana	1.1	4.8	5.6	5.1	3.3	5.3	3.9	5.0	3.8	
Guinea	1.8	3.3	6.3	4.0	4.3	2.4	3.0	4.7	4.0	
Guinea-Bissau	6.5	5.6	6.9	4.5	3.1	3.0	2.8	2.7	6.3	
Liberia	2.8	1.3	3.1	-10.1	0.3	2.1	1.1	2.1	2.1	
Mauritania	2.1	2.1	3.1	4.8	-1.8	2.6	1.7	4.9	4.6	
Nigeria	-1.2	-0.7	9.9	7.2	8.7	4.8	2.1	2.3	1.3	
Senegal	2.8	4.0	5.1	-1.4	4.5	0.7	2.1	-2.0	2.0	
Sierra Leone	0.3	4.0	2.5	2.4	-0.1	0.7	-0.8	1.5	3.5	
Togo	1.8	0.5	6.2	3.9	0.1	-0.9	-3.7	-13.5	10.7	
Togo	3.6	-1.4	6.6	0.9	-1.5	10.0	2.1	-0.1	1.2	
Mali	1.6	2.1	-0.2	11.8	0.4	-1.9	7.8	-0.7	2.4	
Niger	2.1	-3.6	6.9	0.9	-1.3	2.5	-6.5	1.4	4.0	
Central Africa										
Cameroon	8.0	0.5	-12.9	-3.5	-4.5	-6.7	-4.8	-2.1	-3.8	
Congo	7.1	0.3	1.8	2.1	0.7	2.1	2.4	-1.2	-6.7	
Congo	-4.5	-15.4	3.5	5.0	5.4	5.0	0.7	2.1	1.7	
Zaire	1.1	2.1	0.6	-1.4	-6.6	-8.4	-10.5	-16.2	-7.6	
Burundi	3.6	5.5	5.0	1.3	3.5	5.0	2.1	-5.7	-6.7	
Chad	0.9	-1.8	13.8	5.8	-2.3	2.1	8.1	-12.0	4.1	

Table 45 (continued)

	Average 1977-86	1987	1988	1989	1990	1991	1992	1993	1994	1995 a/
Rwanda	3.8	-0.3	3.8	1.0	0.4	0.3	0.4	-10.9	-	
Central African Republic	2.0	-5.0	1.3	3.4	-1.0	-0.6	-2.5	-2.2	6.7	
<u>Southern Africa</u>										
Angola	-	9.4	-8.4	4.4	-5.3	-1.6	1.3	-23.8	2.7	
Mozambique	-2.3	14.6	8.2	6.5	0.9	4.9	-0.8	19.3	5.4	
Botswana	10.8	12.2	14.1	9.2	7.3	7.6	2.3	0.4	2.8	
Malawi	2.9	1.6	3.3	4.1	4.8	7.8	-7.9	10.8	-12.4	
Zambia	0.3	2.8	1.9	1.0	-0.5	-0.2	-5.2	9.2	1.4	
Zimbabwe	2.5	-0.5	7.3	4.5	2.2	4.3	-6.2	2.1	4.5	
<u>East Africa</u>										
Ethiopia	1.6	9.9	2.4	1.2	-2.2	-1.0	-3.2	-12.3	1.3	
Kenya	5.1	5.9	6.0	4.6	4.8	1.9	-1.5	-0.6	3.2	
Somalia	2.9	4.1	-5.0	2.4	-0.2	-	-	-	-	
United Republic of Tanzania	1.8	5.1	4.2	4.0	4.8	5.7	3.5	3.7	3.1	

Source: Compiled by the UNCTAD secretariat on the basis of data in IMF, World Economic Outlook, October 1995.

a/ Estimate.

(b) Total trade in goods

148. Table 46 compares yearly developments of total trades in goods of sub-Saharan Africa with those of all developing countries of the world. The exports of the former group increased at an average annual rate of 3.5 per cent in value and 1.8 per cent in volume, with imports increasing at 4.6 per cent per year in value, but decreasing 1.2 per cent per year in volume over the period from 1987 through 1995. In the meantime, over the same period, the exports of all developing countries expanded at the average annual growth rate of 13.0 per cent in value and 9.8 per cent in volume, while imports also increased at 13.3 per cent per year in value and 10.3 per cent in volume.

149. The trades of sub-Saharan Africa decreased specifically during the period from 1991 through

1993 exports (at an average rate of -3.5 per cent in value and -0.7 per cent in volume), and over the period from 1991 through 1994 for imports (at an average rate of -1.0 per cent in value and -3.3 per cent in volume). These slow-downs in trades correspond to the stagnation in GDP growth of industrial countries over the period from 1990 through 1993. On the other hand, the exports of the developing countries expanded at the average rate of 6.9 per cent in value and 7.5 per cent in volume from 1991 through 1993, and the imports steadily increased at the average rate of 11.6 per cent in value and 10.4 per cent in volume from 1991 through 1994. This favourable trade expansion of the developing countries can be largely attributed to the increasing intraregional trades of East and South-East Asia, and South America.

Table 46

Total trade in goods of sub-Saharan Africa and developing countries
(Annual percentage change 1977-1995)

			Average 1977- 1988	1987	1988	1989	1990	1991	1992	1993	1994	1995 <u>a/</u>
Sub-Saharan Africa	Value <u>a/</u>	Export	4.9	5.0	2.5	4.0	5.6	-3.9	-3.9	-2.8	7.4	14.3
		Import	5.4	12.4	6.8	1.6	7.3	-0.9	0.8	-2.0	-0.4	11.8
	Volume	Export	0.9	-1.2	0.6	2.8	2.6	-1.9	-2.8	2.5	5.8	7.5
		Import	-0.5	1.6	0.8	-0.4	-3.0	-3.5	-1.4	-3.2	-5.2	5.6
Developing countries of the world	Value <u>a/</u>	Export	5.5	25.2	14.7	12.5	13.6	4.9	9.7	6.1	13.6	16.6
		Import	7.6	17.4	18.5	10.5	12.9	11.6	13.0	9.5	10.8	15.7
	Volume	Export	1.6	14.6	13.5	9.3	6.3	6.0	9.8	6.7	10.8	10.8
		Import	4.1	10.0	12.3	10.9	7.3	9.4	13.3	10.5	8.5	10.3

Source: IMF, *iWorld Economic Outlook*, October 1995.

a/ Estimated.

(c) Merchandise trade structure

150. Data on the foreign trade structure of sub-Saharan African countries in terms of commodity groups and direction of trade are shown in table 47. Major export items are fuels, manufactured goods and food items, two thirds of which are traded with the developed countries of Europe. Nearly one third of fuels is destined to the United States. Imports are dominated by manufactured goods, which account for nearly 75 per cent of the total imports, followed by food items (16 per cent). They are mainly traded with the developed countries of Europe (nearly 60 per cent). Intra-regional trade is developing positively albeit at low levels, and accounted for 7.5 per cent of all exports of sub-Saharan African countries in 1992 (5.9 per cent in 1990 and 5.1 per cent in 1980), and for 6.5 per cent of all imports in 1992 (4.8 per cent in 1990 and 5.5 per cent in 1980).

B. General situation of merchant fleets of Africa

151. Table 48 provides data on the overall development of the merchant fleets of the world

and sub-Saharan African countries by principal types of ship. The share of sub-Saharan African countries in total world deadweight tonnage had decreased from 0.29 per cent of the world total in 1980 to 0.24 per cent in 1990 and further to 0.19 per cent in 1995. General cargo ships continued to decrease from 1.2 per cent of the world total of this type in 1980 to 0.55 per cent in 1995 while tankers remained between 0.14 per cent and 0.20 per cent of the world total. No dry bulkers and containerships had been registered in this region.

152. A subregional analysis reveals a decrease in West African countries' total tonnage (about two thirds of the region's total tonnage) since 1980. Only the share in tanker tonnage expanded steadily, even if at a very low level, from 0.08 per cent of the world total tanker tonnage in 1980 to 0.19 per cent in 1995, Nigeria's oil tanker tonnage, which accounts for about 99 per cent of the subregion's total, grew from 275,000 dwt in 1980 to 455,000 dwt in 1990 and 497,000 dwt in 1995. In the general cargo ship sector of West and Central Africa, fleets of Cameroon, Côte d'Ivoire, Ghana and Nigeria, the total tonnage of which represents

89-99 per cent of the subregion's engagement, continuously decreased their tonnage from 989,999 dwt in 1989 to 449,999 dwt in 1999 and 499,999 dwt in 1995. The total tonnage of the subregions other than West Africa remained practically non-existent, accounting for only 9.91-9.93 per cent of the world total in 1995.

c. Movements of major dry bulk cargoes

153. Tables 49, 50 and 51 indicate major dry bulk cargo movements (coal, iron ore and grain) to and from the subregions of sub-Saharan Africa. The coal exports from the Southern coast which are fully dominated by South Africa, continue to show an upward trend, from 52 million tons in 1993 to 56 million tons in 1995, of which nearly two thirds are destined to Europe and Japan. Iron ore shipments originate from the West coast and the Southern coast. Liberia exports the majority of the West coast shipments and South Africa those of the Southern coast. The United States has been the biggest grain supplier to all the sub-Saharan African

subregions, representing more than half of the total (imports of the region, followed by Northern Europe.

D. Movements of crude oil and petroleum products

154. Crude oil and petroleum products movements of sub-Saharan Africa are shown in tables 52, 53 and 54. Nearly half of crude oil exports are destined to the United States, which thus has a major effect on the region's total export volume, followed by Northern Europe (a share of one quarter) and Southern Europe (about 19 per cent). Crude oil shipments from the west coast represent more than two thirds of the total, being mainly produced by Nigeria in West Africa and the other comparatively smaller producers such as Cameroon, Congo and Gabon in Central Africa. Angola, the second largest oil producer in sub-Saharan Africa, producing more than 15 per cent of the region's total, dominates the oil shipment from the Southern coast.

Table 47

Foreign trade structure of sub-Saharan African countries
(1992, total in thousands of millions of US dollars, regional allocation in percentage)

Destination	World total	Europe	USA	Japan	Africa (excluding South Africa)	Asia (excluding China)	Others
EXPORT							
All products	79.1	69.4	18.2	2.3	7.5	4.6	7.9
of which:							
All food items	9.5	69.9	5.1	6.2	12.5	6.3	9.9
Agricultural raw materials		58.7	3.3	4.9	9.7	11.8	11.6
Ore and metals	4.3	57.7	7.4	13.4	5.2	4.2	8.3
Fuels	41.7	69.8	26.8	9.4	4.3	1.6	6.1
Manufactured goods	11.1	69.6	5.6	9.6	14.9	19.9	7.4
IMPORT							
All products	82.8	55.5	8.8	5.6	6.3	13.8	19.9
of which:							
All food items	13.2	45.5	14.8	9.1	9.9	12.1	18.5
Agricultural raw materials	2.2	36.3	13.7	1.9	14.5	13.3	21.2
Ore and metals	1.5	38.9	3.4		15.3	17.3	25.5
Fuels	4.6	21.3	3.9	9.9	38.3	29.6	7.8
Manufactured goods	69.1	61.6	7.8	7.6	2.8	13.1	7.1

Source: UNCTAD, *Handbook of International Trade and Development Statistics, 1994* (United Nations publication. Sales No. F/F.95.11.D.15) tables 3.2 and 3.3, pages 82-83, 192-193.

Table 48

Merchant fleets of the world and those registered in sub-Saharan African countries, selected years,
1980-1995
(in thousand dwt)

	Year	Total	Tanker	Dry bulker	General cargo	Container	Others
World total	1980	682 768	339 324	185 652	115 824	11243	30 725
	1985	664 800	261 439	232 107	105 846	19 939	45 469
	1990	658 377	245 936	234 659	102 676	25 955	49 151
	1994	719 805	270 996	250 293	103 717	39 005	55 794
	1995	734 917	267 650	261 628	104 129	43 849	57 661
Sub-Saharan Africa - total	1980	1 985	459		1 416		110
	1985	1 647	448		1 032		167
	1990	1 554	● ●		819		282
	1994	1 353	● ●	19			240
	1995	1 373		39	570		238
West Africa	1980	1 309	777		966		
	1985	1 106	298		691		117
	1990	1 102	439		451		212
	1994	940	479		293		168
	199 ^c	931	501		268		16
Central Africa	1980	362	141		191		30
	1985	269	141		110		18
	1990	155			171		34
	1994	104		19	50		35
	1995			38	41		35
Southern Africa	1980	133			111		
	1985	164			140		70
	1990	151			127		20
	1994	142			118		●
	1995	143			116		●
East Africa	1980	181	26		148		
	1985	108			91		
	1990	146	10		120		16
	1994	167	20		131		16
	1995	184	22		145		17

Source: t^CTAD, *Review of Maritime Transport*, various issues.

Note: Tonnages registered in th^ Liberia and South Africa are not included.

Box 10

Devaluation of the CFA Franc

The "financière africaine (CFA), established in 1948, consisted of 13 African countries until 1988, when the Comoros also became a member. The initial 13 countries had two separate monetary arrangements. In West Africa, the Union monétaire Uest Africaine (West African Monetary Union) consists of seven countries (Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, Senegal and Togo) with a common central bank (Banque Centrale des Etats de l'Afrique de l'Ouest). In Central Africa there is a Union Monétaire de l'Afrique Centrale, comprising six countries (Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea and Gabon) with its own common central bank (Banque des Etats de l'Afrique Centrale). The two groups maintain separate currencies, although they are commonly referred to as the CFA franc.

Full and free convertibility of the CFA franc into the French franc is guaranteed by the Bank of France at fixed parities. In return, the CFA member States are required to deposit 65 per cent of their foreign exchange reserves in French francs with the Bank of France, and the central banks of both groups, as well as the central Bank of Comoros, also keep an operation account with the French Treasury. Both the CFA and the Comorian franc had been pegged at a parity of 50 to the French franc until 12 January 1994, when the CFA franc was devalued by 50 per cent (raising the parity to 100) and the Comorian franc was devalued by one third (raising the parity to 25).

Following the devaluation, measures were taken to strengthen the institutional framework for the harmonization of macro-economic policies among members. In West Africa, the West African Monetary Union and the Communauté économique de l'Afrique de l'Ouest were combined into a West African Economic and Monetary Union, while in Central Africa, the Communauté économique et monétaire de l'Afrique Centrale (Central African Economic and Monetary Union) was established, incorporating the Union économique de l'Afrique Centrale and the Union monétaire de l'Afrique Centrale.

The underlying rationale for the devaluation of the CFA franc involved the following considerations:

- ▶ There had been a deep and persisted economic crisis in CFA countries since the bottom fell out of the markets for commodities in the mid-1980s. During 1985-1992, the highest annual growth of real GDP per capita was only 1.3 per cent (in Chad); at the other extreme there was a decline of 6.7 per cent per annum (in Cameroon).
- ▶ Most CFA countries depend heavily on commodity exports. Prior to 1985, world commodity prices were at levels that generated sufficient export earnings to finance development projects. Exports from these countries were competitive because the French franc depreciated against the dollar. After 1985, however, with the world in recession and declining commodity prices, their terms of trade deteriorated. Furthermore, their exports became less competitive in world markets as the French franc appreciated against the dollar (while remaining in line with the Deutsche Mark within the European Monetary System). In relation to 1980, the terms of trade change ranged from a decline by the end of 1992 of as much as 47 per cent for Cameroon to an improvement of 16 per cent for
- ▶ There was a general consensus that the CFA franc was overvalued, to an extent that has been estimated, for the beginning of 1994, to range from 13 per cent for Equatorial Guinea to as much as 68 per cent for Cameroon.⁴ The fixed parity with the French franc deprived the CFA countries of the option of currency devaluation, and thus constituted a major hindrance to the effective implementation of structural adjustment programmes (SAPs).

Source: UNCTAD, *Trade and Development Report*, 1995, United Nations publication. Sales No. E.95.II.D.16,

Of the 14 CFA countries, 9 are LDCs. The other five are Côte d'Ivoire and Senegal in West Africa and Cameroon, Congo and Gabon in Central Africa.

Only two other countries had positive average annual growth rates during the same period: Senegal (3.3 per cent) and Burkina Faso (0.9 per cent). For details, see UNCTAD, *The Least Developed Countries. 1995 Report* (United Nations publication. Sales No. E.95.II.D.2), table 33.

With the exception of Comoros and Equatorial Guinea, for which data are not available, only three other countries had terms of trade at the end of 1992 which were better than in 1980: Senegal (1 per cent), Burkina Faso (3 per cent) and Mali (12 per cent).

⁴ UNCTAD. *Op. cit.*, ch.

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155. Almost all of the imported petroleum products are supplied equally by Northern and Southern Europe. About 75 per cent of the growing volume is destined for the West coast of Africa and 12 per cent each for East and Southern coasts. Exports of petroleum products, mainly fuels, are concentrated in the United States trades, with most of them originating in West coast countries.

Maritime services

1. Liner-cargo movements

156. Table 55 shows movements of liner cargo in the 1993-1995 period between the sub-Saharan African countries (including the Republic of South Africa) and the three major trading partners (North America, the Far East and Europe). Total cargo of both import (54 per cent) and export (46 per cent) increased at the average annual rate of 5.3 per cent (import at 5.8 per cent and export at 4.7 per cent) from 14.9 million tons in 1993 to 16.5 million tons in 1995, of which 41-45 per cent were loaded or discharged on the West coast. The similar volume of cargo moved to or from the Southern coast, of which about two thirds were reportedly traded by South Africa.

157. Trades with Europe, the biggest trade partner, have been expanding at the average annual rate of 4.0 per cent and reached a share of 70 per cent of the total in 1995. The shares of European trade generated by the West, East and Southern African subregions stood at 46 per cent, 14 per cent and 40 per cent respectively, and the ratio between import and export was 45 to 55. Trades with North America experienced the highest growth, averaging 12.4 per cent annually since 1993. Total volume traded in 1995 amounted to 2.8 million tons or 17.1 per cent of total trades. The regional distribution among East, West and Southern coasts were 33, 12 and 55 per cent respectively, and the import and export ratio 37 to 63.

The trade with Japan and Far Eastern NIEs remained at the level of 13 per cent of the total since 1993. The ratio between import and export

was 60 to 40. Two thirds of this trade was with South Africa.

2. Full-containership fleets

158. Table 56 indicates fluctuations in development of full containership fleets on the major trade routes covering Southern, West and Central Africa. Almost all of the 140 containerships, except for those of South Africa, are actually owned and operated by third country (non-African) owners or operators.

159. According to data contained in table 56, nearly two thirds of the containership capacity employed in African trades in 1994 served Southern African trade routes, or, more particularly, those of the Republic of South Africa. In 1992 and 1993 this share had been slightly over 50 per cent.

On the South Africa/Europe and Mediterranean route, the dedication of services by two new groups of operators and the increase in fleets of an existing shipping line boosted the carrying capacity from the 35,000 TEU level in 1992 and 1993 to 48,000 TEU in 1994. The operators of the Far East and South-East Asia more than doubled the fleets and the carrying capacity with the participation of two new groups and the existing operators increasing capacity. This rapid increase in 1994 is mainly attributable to the lifting of economic sanctions to South Africa and some operators' decisions to introduce a Far East/South African wayport service.

160. In the West African subregion, the trades with Europe and the Mediterranean by far dominated container fleet employment patterns. Trades with North America employed some 2,000 TEU or 5 per cent of total capacity available to the subregion's trades.

161. In East Africa, the fleets and carrying capacity have remained almost unchanged since 1992 and full container services limited to trades with Europe. In addition to dedicated services to this subregion, however, some of the shipping lines serving Southern Africa also cover major East African ports.

	West coast of Africa			East coast of Africa			Southern Africa a/			Total		
	1993	1994	1995	1993	1994	1995	1993	1994	1995	1993	1994	1995
United States	In	297	204	248	45	60	55	436	577	590	778	841
	Out	514	366	577	205	348	256	505	548	670	1 224	1 503
	Subtotal	2 804	2 564	2 820	2 243	2 402	2 306	2 934	3 119	3 255	7 981	8 085
Canada	In	40	49	58	9	9	12	31	61	88	80	119
	Out	58	33	40	15	13	18	97	108	200	170	154
	Subtotal	98	82	98	24	22	30	128	169	288	250	273
Subtotal	In	337	253	306	54	69	67	467	638	678	858	960
	Out	572	399	617	220	361	274	602	656	870	1 394	1 416
	Subtotal	909	652	923	274	430	341	1 069	1 294	1 548	2 252	2 376
Japan	In	137	141	147	52	56	59	487	499	531	676	696
	Out	118	79	83	47	41	54	197	187	233	362	307
	Subtotal	255	220	230	99	97	113	684	686	764	1 038	1 003
Far Eastern NIEs	In	100	90	100	20	30	60	450	410	430	570	530
	Out	190	170	210	50	50	50	210	230	260	450	450
	Subtotal	290	260	310	70	80	110	660	640	690	1 020	980
Subtotal	In	237	231	247	72	86	119	937	909	961	1 246	1 226
	Out	308	249	293	97	91	104	407	417	493	812	757
	Subtotal	545	480	540	169	177	223	1 344	1 326	1 454	2 058	1 983

H	H	H	H					H	H	H
			H	H	H	H	H			
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

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Box 1

Recent trade patterns of West and Central Africa

Recent exports and imports by sea for the five countries are summarized in Tables (a) and (b). While exports are dominated by Nigerian crude oil shipments, 1994 imports were 8-9 per cent below the levels of 1992 and 1993. The devaluation of the CFA franc took place in early 1994. Côte d'Ivoire increased import tonnages in 1994. Nigerian imports, which had grown substantially in 1992 and 1993, fell back in 1994 to below 1991 levels. Ghana port flows are characterized by modest but steady growth since 1984.

Table (a)

Maritime Import and Export Tonnages by Country
(thousand mt)

Year	Côte d'Ivoire	Ghana	Nigeria	Cameroon	Total	
Imports						
1990	837	5 919	3 380	265	453	19 854
1991	887	6 228	3 618	662	404	21 799
1992	186	6 371	3 820	691	S	24 396
1993	179		4 251	177	S	24 073
1994	065	6 460	4 272	379	082	
Exports						
1990	2 724	4 901	1 657	77 738	1 325	88 345
1991	2 468	4 783	1 668	78 181	1 184	88 284
1992	2 123	4 713	1 891	80 316	1 257	90 300
1993	1 866	4 886	2 002	80 610		90 817
1994	1 941	4 678	2 133	63 376		73 963

Source: Port Authorities.

- Notes:
- 1) Nigerian figures include tonnages for all ports.
 - 2) Côte d'Ivoire figures include Abidjan and San Redro tonnages.
 - 3) Ghana figures include Tema and Takoradi tonnages.
 - 4) Nigeria 1994 figures estimated on basis of partial data on ship calls.
 - 5) Domestic cabotage excluded.

Table (b)

1994 Tonnages by Major Handling Type and Country, excluding Crude Oil
(thousand mt)

	Côte d'Ivoire	Ghana	Nigeria	Cameroon	Total		
Imports							
General Cargo	1 488	630	1 041	3 525	926	610	
Dry Bulk	444	196	1 865	7 711	591	807	30.6
Liquid Bulk	1 133	633	1 366	143	565	840	30.7
Total	065	6 459	4 272	379	082	22 257	100.0
Exports							
General Cargo	748	2 606	1 787	540	1 204	885	
Dry Bulk	806	420	158	257	600	241	18.8
Liquid Bulk	387		188			787	23.4
Total	941	4 678	133			11913	100.0

Source: Port Authorities; Consultants' estimate.

Box 11 (continued)

General Cargo exports are 80 per cent of imports. Dry bulk exports are less than a third of dry bulk imports. Liquid bul[^] trades are a combination of small amounts of agricultural and chemical products and oil refined product shipments.

In 1994 trade between Europe and West Africa included 275,000 TEU of imports to West Africa, and 200,000 TEU of exports. While this indicates an import surplus of some 38 per cent, break-bulk trades account for most of the imbalance in terms of tonnage. Between 1990 and 1995, the degree of containerization increased from [^]8 per cent of general cargo trade to 34 per cent in both directions, as shown in table (c). Container penetration of regional general cargo trade is at an intermediate stage. Further penetration will be accelerated by the acquisition of specialized container handling equipment for the export trades. The increase in penetration between 1990 and 1995 was assisted by the further development of relatively efficient ro-ro services in most of the ports. In recent years, ro-ro services have accounted for about 15-25 per cent of the container trade although accounting for only 8-10 per cent of the general cargo trade.

Table (c)

General cargo Tonnages by Handling Type and Country, 1994
(thousand mt)

		cote d'Ivoire	Ghana	Nigeria	Cameroon	Total
		Imports				
Break Bulk Container		926	604	2 337		5 896
		704	437	1 188		2 714
Total	488	1630	1 041	3 525	926	8 610
Container op ^l	11.4	43.2	42.0	33.7	23.2	
		Exports				
Brea [^] Bulk Container	404	1 402				4 361
	344	1 204				
Total	748	2 606	787	540	1 204	
Container op ^l	46.0	46.2	15.4	47.2	37.0	36.7

Source: Port Authorities; Consultants' estimate.

For all commodities, the distribution of cargoes by trading region is dominated by Africa and Europe, although America accounts for [^]2 per cent of exports. The removal of crude oil exports, petroleum product shipments and cabotage reveals a rather different geographic pattern. The historic dominance of Europe and the relatively limited role played by regional trade are shown in Table (d).

The geographic trade pattern of West [^]nd Central Africa in 1994 was reasonably consistent with the pattern of the preceding five years. The strong European orientation of WCA trade continues, with other regions changing their percentage of trade dramatically on fairly small tonnages. On the basis of recent trade data, Cameroon is the most "European-oriented" of the five countries.

Table (d)

Geographic Distribution of Trade by Country, 1994
(Excluding Crude Oil, Petroleum products and Cabotage Tonnages)
(thousand mt)

	Senegal	Côte d'Ivoire	Ghana	Nigeria	Cameroon	Total	Vo
	Imports						
Africa	69	314	143	[^] 04	13	1 343	8.6
America	200	431	444	1 454	206	2 736	17.4
Asia-Oceania	400	177	194	325	138	1 [^] 34	7.9
Europe	1 265	[^] 016	2 138	3 796	1 160	10 375	66.1
Total	1 934	2 939	2 920	6 379	1 517	15 689	100.0 [^]

Box 11 (continued)**Exports**

Africa	141	0	325	<6	1,032	106
America	281	201	154	28	864	8.9
Asia-Oceania	180	532	9	144	1,165	12.0
Europe	2 591	1 215	287	1,647	6,681	68.6
Total	1 941	3 193	1948	825	1,835	100.0

Source: Port Authorities

TRANSIT TRAFFIC

Transit traffic (to or from a neighbouring country/, usually land-locked) is identified in the statistics of some ports but not in others. It was, therefore, not possible to compile a complete profile of transit traffic. The available data for 1993, which includes transit figures for Cotonou, in Benin and Lomé in Togo, is presented in Table (e).

Table (e)Transit Country Flows, 1993

(by Port of Transit)

Port	Country	Thousands of Metric Tonnes
Dakar	Mali	204
Abidjan	Mali	208
	Burkina Faso	302
	Niger	
Lagos	Chad	
Douala	Central African Republic	79
	Chad	
Cotonou	Burkina Faso	19
	Niger	222
Lomé	Burkina Faso	
	Niger	63
	Mali	
Total		303

Source: Port Authorities; Shippers' Councils

This includes goods which pass through the indicated ports to or from the land-locked countries by road or rail or river transport. It does not include trade between the country of access and the land-locked country. It is likely that the data collected understates the total transit trade by land in WCA countries by at least one third, because a number of secondary ports were not surveyed.

Certain land-locked countries, such as the Central African Republic (CAR) can utilize alternative routes including the Congo River barge systems. Transit flows are volatile, as land-locked countries naturally seek to have access to as many corridors as possible. As an example, the CAR has had to switch a considerable portion of its wood trade from Pointe Noire in the Congo to Matadi in Zaire because of operational difficulties on the *Chemin de Fer Congo Ocean*.

Transit trade is well in excess of 1 million mt over the whole WCA region. Transit trade therefore would have represented 5-10 per cent of the trade through major WCA ports in 1993, excluding crude oil shipments.

Source: A New Maritime Policy for West and Central Africa (MINCCN/AR/World Bank/Canadian International Development Agency Trade and Transport Project) Study ¹A, presented by CPCS Ltd. January 1996.

F. Costs of transport

1. Estimates of total freight costs in foreign trades

162. Table 57 indicates estimated total freight payments for imports and its percentage of total import value by country. Obviously, the share of freight costs of land-locked countries of total import value is higher than that of countries with direct sea access. For instance, in West Africa, the incidence of freight costs is much higher in Burkina Faso (21.67 per cent in 1993) than in Benin (16.76 per cent in 1993). Similarly, Mali's proportion (29.57 percent in 1993) is considerably higher than that of Côte d'Ivoire (19.32 per cent in 1993), the main transit country of Mali. While Niger's proportion has decreased considerably to 14.53 per cent in 1993 as compared to 1989 (19.45 per cent), this figure is still significantly higher than those of neighbouring countries with sea ports such as Togo (13.88 per cent in 1993) and Nigeria (9.52 per cent in 1993). Rwanda suffered the highest freight ratio in Central Africa, amounting to 29.91 per cent in 1990, which is still below the ratio of 33.44 per cent observed in 1980, but much higher than Kenya's proportion (13.81 per cent in 1993). As regards Southern African land-locked countries, Zambia (16.42 per cent in 1993) and Zimbabwe (12.85 per cent in 1993) pay a higher relative freight cost than Mozambique (10.55 per cent in 1993).

2. Ocean freight rates of major liner services and overland transport charges for land-locked countries

163. The following section contains data on ocean and inland freight rates quoted in inbound and outbound trades of African countries. These rates have been communicated to the UNCTAD secretariat by shipping lines and shippers' councils. Secretariat experience would indicate, however, that ocean rates communicated for West and Central Africa, in particular, are based on tariffs rather than actual market rates, which can be more than one third lower, especially for large shippers. The following freight rate data are nevertheless relevant as they are indicative for the cost with which small and medium-sized African shippers are confronted. Furthermore, they do provide indications for rate developments over time. Contrary to the situation

in West and Central Africa, rates given for East and Southern Africa appear to closely reflect market conditions.

West Africa

164. Table 58 provides data on basic ocean freight rates per TEU based on tariffs of liner services between West Africa (Senegal) and Northern Europe and Asia and overland freight rates on tariffs for a land-locked country (Mali), on the trade route with Northern Europe, overall ocean freight rates for general cargo moving in southbound trades have been declining in terms of value in Deutsche Mark. The average freight rates for general cargo were DM 2,770 (US\$ 1,600) per TEU in 1993 and DM 2,680 (US\$ 1,650) in 1994 and DM 2,620 (US\$ 1,830) in 1995. In the northbound trade on the same route, freight rates were DM 2,300 (US\$ 1,610) per TEU for general cargo and 17,000 French francs (FF) (US\$ 3,410) per TEU for reefer cargo in 1995. Freight rates for southbound general cargo were 14 per cent higher than northbound in 1995. This indicates that more high-valued cargo was moving in southbound than northbound. Land transport charges by rail for the distance of 1,300 kilometres between Dakar (Senegal) and Bamako (Mali) have been increasing in both directions. The basic tariff rates for Bamako-bound cargo in 1993 were FF 4,300 (US\$ 760) per TEU on a railway flat-car capable of loading 2 TEUs with maximum total weight being under 30 tons, FF 4,500 (US\$ 810) in 1994 and FF 4,740 (US\$ 950) in 1995. On the Dakar-bound route, the rates were FF 3,480 (US\$ 620) per TEU in 1993 and FF 3,660 (US\$ 660) in 1994 and FF 3,840 (US\$ 770) in 1995. The railway charges for import cargo were 23 per cent higher on average than export cargo.

165. Table 59 provides information on ocean freight rates based on tariffs of liner services of West Africa (Senegal) for Northern Europe, Asia and North America trades, and overland freight rates on tariffs for a land-locked country (Burkina Faso). In trades with Northern Europe for general cargo in 1995, ocean freight rates per TEU for exports from Senegal (US\$ 1,820) were 13 per cent higher than those from Senegal (US\$ 1,610) (see table 58). In the trade of general cargo with Asia, there were big differences in ocean freights between exports and imports. This was attributable to the larger

Estimates of total freight costs of total import value. 1980 ■ 1990 and 1993
(Millions of US dollars)

Country	1980			1990			1993		
	A	B	C	A	B	C	A	B	C
West Africa									
Benin	55.47	331	16.76	46.92	280	18.78	105.57	830	18.78
Coted'Ivoire	532.88	2 967		28.05	1702	19.32	374.81	1940	19.32
Cambodia	23.54	167	14.10	6.36	199	14.10	34.82	247	14.10
	71.78			76.23	1 199	8.38	108.08	1700	8.38
Guinea	34.69	270		89.81			79.88		
Guinea-Bissau	7.07	55	12.85	8.74			7.97	82	
Liberia	71.90	535	13.44			13.22	47.59	380	13.22
Mauritania	32.41		11.33	72.41		11.33	79.32	700	11.33
Nigeria		16660	9.52	535.73		9.5^	752.14	7 900	
	130.43	1052	12.40	160.19		12.40	178.54	1 440	12.40
Sierra Leone	37.89	427	8.87	17.57	149	11.79	17.33		
		551	17.56	80.63	581	13.88	54.12		
Burkina Faso	77.14	359		116.13		21.67	141.92		21.87
Mali	129.60		29.52	178.02		29.57	171.51		29.57
Niger	115.52		19.45	56.51		14.53	81.01		14.53
Central Africa									
Cameroun	143.45	1 602	8.95	140.05			98.50	100	
Congo	163.79	580	17.89	113.98	621	18.35	95.07	518	18.35
Gabon	111.11	674	16.49	132.49	77?	17.16	143.30		17.18
Gambia	113.58	836	13.59	120.37		13.59			13.59
Chad	18.09	74	24.44	72.78		25.54	1.33	201	25.54
Rwanda	81.26	243	33.44	87.03	291	29.91	2.24	275	29.91
South Africa									
Angola	140.15		10.55		5^	16.42	224.91	1 370	16.42
Mozambique	84.43	800	10.55		878	10.55	100.79	955	10.55
Botswana	102.01		14.74		946	14.74	261.81	1776	14.74
Gambia	219.82		16.42	164.86	220	13.51	164.17	1 000	16.42
Zimbabwe	186.04	1448		237.30	847	12.85	185.01	1 440	12.85
East Africa									
Ethiopia	105.55	716	14.74	166.99	081	5.45	121.57	787	15.45
Kenya	271.43	2125	12.77		124	13.81		1711	13.81
Somalia	44.45	348	12.77	20.44	160	12.77	21.71	^70	1?77
United Republic of Tanzania	185.45	1252	14.81	151.40	0^7	14.74		1 523	14.74
World total	123264	1 856 834	6.64	173102	3314 298	5.22	201385	1 601 481	
Developing market-economy countries			5.49	117004	2 661 650	4.40	118043	1 600 770	4.54
Developing countries - total of which in:	44978	430	10.44	56095	652 648	8.59	83342	1 000 711	8.33
Africa	10432	77^	13.42	9048	81 890	11.05			
America	10929	123	8.85	9626		8.17		189 094	
Asia	21979	211 ^	10.41	35054		8.19	951	707 430	8.05
Europe	1320	16^	8.23	1909	21 606	8.84	934	10940	8.54
Oceania	318	2^477	12.84	461	3 760	12.26	522	4268	12.23

A = Estimate of total freight costs of imports (millions of dollars)

B = Total import value (millions of dollars)

C = Freight costs as percentage of import value

Source: For African countries: (1) UNCTAD *Handbook of International Trade and Development Statistics 1994*, tables 1.1 and value of exports (fob) and imports (cif). (2) IMF cif/fob factors.

For world total and other groups of countries: (1) IMF import data; (2) IMF cif/fob factors.

	Northern Europe		Asia	
	Export to	Import from	Export to	Import from
Ocean freight rates	-	<u>General cargo:</u> DM 2 770 (US\$ 1 690)	-	-
	-	<u>General cargo:</u> DM 2 680 (US\$ 1 650)	-	-
	<u>General cargo:</u> DM 2 300 (US\$ 1 610) <u>Reefer cargo:</u> FF 17 000 (US\$ 3 410)	<u>General cargo:</u> DM 2 620 (US\$ 1 830)	-	<u>General cargo:</u> Japan: US\$ 4 100 Malaysia: US\$ 3 500 Hong Kong: US\$ 3 500
Land transport freight rates for land-locked countries based on Dakar, Senegal	By rail		1993	1994
	Dakar (Senegal) to Bamako (Mali)	Flat car for 2 TEUs or less than 30 tons	FF 8 600 (US\$ 1 530)	FF 9 020 (US\$ 1 630)
		Additional per ton over 30 tons	FF 340 (US\$ 60)	FF 360 (US\$ 65)
	Bamako to Dakar	Flat car for 2 TEUs or less than 30 tons	FF 6 970 (US\$ 1 240)	FF 7 310 (US\$ 1 320)
		Additional per ton over 30 tons	FF 340 (US\$ 60)	FF 380 (US\$ 76)

Source: Conseil Sénégalais des Chargeurs (COSEC).

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General cargo
DM 2 600
(US\$ 1 820)
Reefer cargo:
DM 5 000
(US\$ 3 490)

General cargo:
Japan: US\$ 2 000
India: US\$ 1 700
Singapore: US\$ 1 800
Taiwan: US\$ 1 800

Reefer cargo:
Japan: US\$ 4 000
Singapore: US\$ 4 000
Taiwan: US\$ 4 800

General cargo
Far East:
US\$ 2 450-
3 600

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١٠٥	US\$ 950 ٠/
١٠٥	US\$ 1 350 ٠/
١٠٥	US\$ 1 600 ٠/

proportion of various high-valued goods in imports than exports. The cost of land transport by road between Tema (Ghana) and Ouagadougou (Burkina Faso) was approximately US\$ 800 per TEU in 1995, as compared to railway charges of US\$ 950 for imports and US\$ 770 for exports between Dakar (Senegal) and Bamako (Mali) (see table 58). The slight comparative disadvantage of Malian trade over that of Burkina Faso in terms of inland transport cost primarily reflects cost differentials based on the length of haulage. The total freight costs for imports as a percentage proportion of the total import value was nearly 36 per cent for Mali and 22 per cent for Burkina Faso in 1993. These rates were higher than those for neighbouring countries with sea ports such as Côte d'Ivoire (19 per cent), Benin (17 per cent), Senegal (12 per cent) and Ghana (6 per cent) (see table 57).

Central and West Africa

166. Ocean freight rates for 1995 (US\$ 1,520 per TEU) for containerized general cargo bound for Northern Europe (from Douala, Cameroon) quoted in table 60 closely reflect market conditions. While ocean rates were relatively favourable, land transport charges between Douala and Bangui (Central African Republic) by road were US\$ 2,560 per TEU with maximum gross weight of 10 tons and additional charges of US\$ 180 per ton over 10 tons. While it is not clear to what extent such tariff rates are actually enforceable, it has to be recognized that these rates are extremely high compared to those for routes to other land-locked countries such as US\$ 800 per TEU for Burkina Faso (Ouagadougou)-Ghana and US\$ 770 for Mali (Bamako)-Senegal (see tables 58 and 59). Another rail-road combined service is in operation: Douala to Ngaoundou by rail and Ngaoundou to Bangui by road. The rate for the road portion thereof was quoted to be US\$ 1,610 per TEU in 1995. The all-road rate Bangui-Douala would translate into costs of approximately US\$ 0.2 per cargo ton/km as compared to approximately US\$ 0.05 per cargo ton/km on the Bamako-Dakar corridor.

East Africa

167. Basic ocean freight rates (for general cargo) on tariffs of liner services between East Africa

(United Republic of Tanzania) and Northern Europe, Asia or North America have constantly been increasing for both imports and exports, as provided in table 61. On the three trade routes, ocean freights per TEU for imports were higher than exports. Average annual growth in freights for imports in the trades with Northern Europe and Asia were higher than those for exports respectively whilst in the trade with North America, the growth for imports was lower than exports. Haulage by road of transit cargo to Rwanda and Burundi were quoted at tremendously higher rates mainly because of prevailing social and economic unrest in these countries. Rates quoted by rail, to Zambia and Malawi were significantly lower than those by road. This, however, is only a partial reflection of transport realities as the rates quoted cover neither transport from rail terminal to final destination - which can be quite substantial - nor handling cost at transfer points. Total cost comparisons as well as comparatively long times are the reason for the Tanzania-Zambia Railway Authority (TAZARA) connecting Dar-es-Salaam with Zambia and other southern neighbouring land-locked countries losing business to road hauliers. Rwanda's total freight proportion of total import value was about 30 per cent in 1993, which was considerably higher than those of Kenya (14 per cent) and the United Republic of Tanzania (14.7 per cent). Zambia's proportion in 1993 represented 16.5 per cent which was considered to be comparatively moderate rates, but still higher than in the United Republic of Tanzania and Mozambique (10.6 per cent) (see table 57).

East and Southern Africa

168. Tables 62 and 63 provide 1990 and 1995 basic ocean freight rates and inland haulage rates for tobacco shipments bound for the United Kingdom and Northern Europe from Malawi. Tobacco was the predominant export cargo of Malawi, which stood at US\$ 209 million or 63 per cent of the nation's total exports (US\$ 331 million) in 1993. Basic ocean freight rates applied in 1995 increased from those in 1990: on the trade routes from Beira, Dar-es-Salaam and Nacala, they were up 7.5 per cent on average for 20-foot containers and 6.8 per cent up for 40-foot containers, whilst on the route from Durban rates decreased by 4.5 per cent for 20-foot containers and went up by 2.7 per cent for 40-foot containers.

		Northern Europe	
		Export to	Import from
	1995	General cargo: US\$ 1 520	-
Land transport freight rates for land-locked Central African Republic (Bangui), based on Douala, Cameroon	By road	1995	
		Douala-Bangui (1,600 kilometres) (1) gross weight up to 10 tons F 12 775 (US\$ 2 560) (2) gross weight over 10 tons F 900 (US\$ 180) per ton	

Source: Cameroon National Shippers' Council.

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Ocean freights (basic tariff rates) of liner services of East Africa (Republic of Tanzania) for Europe, Asia and North America trades and overland freights
(basic tariff rates) for land-locked countries
(per TEU)

	Northern Europe		Asia a/		USA/Canada	
	Export to (General cargo)	Import from (General cargo)	Export to (General cargo)	Import from (General cargo)	Export to (General cargo)	Import from (General cargo)
Ocean freight rates	1993	US\$ 1 280	US\$ 1 600	US\$ 1 350	US\$ 1 800	US\$ 2 250
	1994	US\$ 1 340	US\$ 1 710	US\$ 1 350	US\$ 1 950	US\$ 2 350
	1995	US\$ 1 380	US\$ 1 840	US\$ 1 350	US\$ 1 850	US\$ 2 400
Land transport freight rates for land-locked countries, Rwanda, Burundi, Zambia and Malawi based on Dar es Salaam, United Republic of Tanzania	By road	<u>From Dar es Salaam (import)</u>				
		Kigali (Rwanda) Bujumbura (Burundi) Lusaka (Zambia) Lilongwe (Malawi)				1995 US\$ 2 500 US\$ 3 150 US\$ 1 870 US\$ 1 710
By rail	<u>To and from Dar es Salaam</u>					
		Lusaka (Zambia) Lilongwe (Malawi)				1995 US\$ 1 000 US\$ 300 (empty) US\$ 510 (import) US\$ 350 (export) US\$ 80 (empty)

Source: Tanzania Central Freight Bureau.

E. C. O.

Table 62

Basic ocean freight rates for tobacco shipments from various ports in East and Southern Africa to United Kingdom and Northern Europe per 20- and 40-foot container in 1990 and 1995
(US\$)

From	Beira		Dar-es-Salaam		Darban		Nacala	
	20'	40'	20'	40'	20'	40'	20'	40'
1990	1 078 (1 003)	273 (173)	1 050 (938)	2 100 (1 850)	1 013 (975)	2 175 (2 125)	(1 003)	173
1995	1 117	483	165	130	967	183	1 083	383

Source: Consultant's report; Assistance to Malawi Shippers' Council, UNCTAD/UNDP project RAF/87/135, Geneva, 1991 and Stancom Tobacco Company (Malawi) Limited.

Note: Figures in brackets; rates offered by non-conference lines.

Notwithstanding recent overall increases, the 1995 rates (US\$ 1,165 per 40-foot container) are slightly below those for general cargo (US\$ 1,380 per 20-foot container) contained in table 61. Non-conference lines were on average 6-7 per cent cheaper than conference lines as reflected in the comparison between conference and non-conference rates in 1990 (see table 62). The 1995 average inland transport rates by road decreased by 17.5 per cent from the rate level in 1990 on the three main routes between Malawi and the main ports in East and Southern Africa. The Malawi-Beira direct route recorded the most substantial decline in rates

of **34.0** per cent on average from the level in **1990** (see table **63**). The overall rates on the route to Dar-es-Salaam in 1995 showed the smallest decline from those in **1990**. In general it can be observed that in terms of cost per ton/km, Malawi Export routes compared very favourably with those of other African land-locked countries, or even with developed countries. The corresponding cost per cargo ton/km for the various transit corridors were from Blantyre to Beira **us\$ 0.09** per ton/km, Dar es Salaam **us\$ 0.06** per ton/km and Durban **us\$ 0.04** per ton/km on the basis of 1^t of cargo per TEU.

Appendix

COUNTRIES' ECONOMIC PERFORMANCE AND TRANSFORMATION

E West African countries

Benin

(a) Economic performance

	1992	1993	1994	1995	1996
Exports (fob millions of us dollars)	287	329	362	333	366
Imports (fob millions of US dollars)	428	482	561	571	550
Principal exports (1993 fob millions of US dollars)	Cotton				
Principal imports (1993 cif millions of US dollars)	Food	209			
	Capital goods	119			
	Consumer goods	110			
	Intermediate goods	80			
	Energy and fuel	63			

Remarks:

With both volume and prices of the 1994/1995 cotton crop well up on the previous year, Benin looked forward to record export earnings from the crop. Output of seed cotton was estimated to have risen by 10 per cent to some 300,000 tons in 1994/1995 with fibre output increasing by 9 per cent to 126,000 tons.

(b) Transportation

(1) The port of Cotonou is the main gateway of land-locked Burkina Faso, for which nearly 200,000 tons of goods are discharged and some tens of thousands of tons of cotton and its products are loaded for export.

(2) Cotonou plays another role as gateway of Niger for its transit seaborne cargoes.

Source: EIU Country Report, Fourth quarter 1994 and First quarter 1995.

Burkina Faso

(a) Economic performance

	1990	1991	199 [^]	1993	1994
Exports (fob millions of us dollars)	94.9	272.2	283.2	280.3	270.0
Imports (fob millions of US dollars)	323.3	593.2	601.3	642.3	640.0
Principal exports (1993 millions of us dollars)	Cotton	64			
	Meat	32			
Principal imports (1993 millions of us dollars)	Capital goods	240			
	Foods				
	Fuel and energy	37			

Remarks;

The future of industry remains doubtful, as import dependency is generally high, and the expected shift to local sources will take time. The second phase of the privatization programme will reduce the burden of large loss-making State-owned enterprises, but existing debts will have to be cleared to attract participation from the private sector, foreign or local. The government is depending on devaluation and adjustment to generate new private business.

(b) Transportation

As a land-locked country, transportation costs form a much higher proportion of industrial costs than in countries with sea access; Lomé port in Togo was one of Burkina Faso's main corridors to the sea, which was replaced by Cotonou port in Benin and Tema in Ghana, due to political disturbances in Togo. These costs cause an immediate rise of 30-40 per cent in prices of locally manufactured goods. The country imports around 240,000 tons of rice and exports several tens of thousands of tons of cotton and cotton products through the ports of neighbouring countries (see table 59).

Source: Ghana Shippers' Council; EIU Country Report, Fourth quarter 1994.

(a) Economic performance

	1999	1991	199^	1993	1994
Exports (fob millions of us dollars)	038	686	880	?34	900
Imports (fob millions of us dollars)	1 701	1 707	1 886	1 66?	550
Principal exports (1994 millions of us dollars)	Uocoa beans & products 884 Umber and prodncts 303 Coffee and products 199 Canned fish 117 Rw cotton 116				
Principal imports (1994 millions of us dollars)	Fetroleum products 367 Machinery & equipment 122				

Remarks;

(1) Ivorian exports to the rest of Africa grew 11 per cent by volume in 1994, although in value they increased by only 1 per cent to represent 29 per cent of the total, ^y contract, the volume of exports to Europe continue to represent 39 per cent of the tot^l, while in value these exports rose from 38 per cent to 61 per cent.

(2) A new liberal investment code, with much simphred procedures, has been promoted strongly by the Government in Europe and at home, with evident success. Frivate-sector investment grew to represent 7.7 per cent of GUF in 1994, increasing to 9.2 per cent in 1995.

(b) Transportation

(1) The pressure on the shipping lines to compete has the effect of forcing down freight rates. The cost of shipping bananas and pineapples to Europe was reported to have falLn by over 49 per cent. Ivorian cocoa and coffee exports should also beneflt from lower freight charges. For example, the shipping conference on the North America-West Africa tr^de had cut its cocoa freight rate from Gdte d'Ivoire to the United ^tates from \$189 per ton to \$125 per ton. United \$t^tes buyers thus made higher purchases of Ivorian cocoa in preference to beans from South-East Asia.

(2) The Soci6t6 Ivoirienne de Transports Maritimes (SITRAM), the loss-making State-owned shipping line, was broken up. A new company was created by private sector interests, including local shippers.

Source: EIU Gountry Report, Fourth quarter 1995.

The Gambia

(a) Economic performance					
	1990	1991	1992	1993	1994
Exports (fob millions of us dollars)	17.4	33.0	11.8	35.0	n/a
Imports (fob millions of us dollars)	111.1	221.0	258.9	290	
Principal exports (1990 millions of us dollars)	Groundnuts (shelled) 5.2 Groundnut oil 4.6 Fish & fish preparations 3.8 Cotton (hnt) 1.9				
Principal imports (1991 millions of us dollars)	Food and live animals 75.0 Machinery & equipment 12.8 Manufactures 12.0				

Source: EIU Country Report, First quarter 1995.

Ghana					
(a) Economic performance					
	1990	1991	1992	1993	1994
Exports (fob millions of us dollars)	891	998	986	1 051	1 219
Imports (fob millions of us dollars)	1 199	1 319	1 457	1 650	1 630
Principal exports (1994 millions of us dollars)	Cocoa beans & products 305 Timber 165				
Principal imports (1990 millions of us dollars)	Capital goods 544 Intermediate goods 356 Fuel and energy 210 Consumer goods 124				
Remarks:	A cocoa crop of at least 290,000 tons was certain for the 1994/1995 season, a significant improvement on the poor showing in 1993/1994. If the 1994/1995 price level remains stable in 1996, assuming a similar crop in both years, 1995 and 1996 could, then, see earnings from cocoa exports of around \$450 million per year, which would account for more than one third of the total exports.				
(b) Transportation					
Tema port is the main gateway for cargo to and from Burkina Faso. In Ghana, charges by rail for both domestic and transit cargoes are comparatively cheaper than in other countries in the subregion. The Ghana national shipping line, Black Star Line, is facing financial difficulties.					

Source: Ghana Shippers' Council; EIU Country Report, First quarter 1995.

Guinea

(a) Economic performance

	1990	1991	1992	1993	1994
Exports (fob millions of US dollars)	789	755	621	607	630
Imports (i ^a millions of us dollars)	7 [^] 3	735	740	730	750
Principal exports (1993 millions of US dollars)	Bauxite		324		
	Alumina		109		
	Coffee				
Principal importing sectors (1993 millions of US dollars)	Private sector		366		
	Mining companies		218		
	Public sector		146		

Remarks;

Details of cargo traffic through Conakry port for the first nine months of 1994 confirm the downward trend. Total cargo exported in the period January-September 1994 was just 1.4 million tons, some 35 per cent below the tonnage shipped in the same period of 1993, with bauxite shipments of 869,000 tons, destined wholly for the countries of the former Soviet Union, over 50 per cent down on the equivalent period in 1993. This slump was compensated for by a 14 per cent increase in alumina exports. These totalled 595,000 tons in the period January to September 1994. Trade in other products showed some spectacular growth, with coffee exports more than doubling.

Imports appear to have declined from the middle of 1994 to 1.18 million tons in 1994. The exception was petroleum imports, which saw an earlier downward trend reversed, with a 7 per cent growth in volume compared with the first nine months of 1993.

Source: ILO Country Report, First and Second quarters 1995.

Liberia

(a) Economic performance

	1999	1991	1992	1993	1994
Exports (fob millions of us dollars)	941	482	771	615	n/a
Imports (fob millions of us dollars)	4 256	119	759	339	n/a
Principal exports (1989 millions of US dollars)	Iron ore	235			
	Rbber	129			
	Timber	92			
Principal imports (1989 millions of US dollars)	Machinery · transport eqnipmeni	84			
	Enels and Inbricanis	61			
	Mannfachrred goods	44			
	Food^inffs	44			
	Chemicals	16			

Remarks:

The number of ships registered under the Liberian flag of convenience has reached 1,399 vessels of 92.3 million dwt. A United States-based company which administers Liberian registrations retains 29 per cent of the initial registration fee and annual tonnage tax, with the rest paid to the Liberian Government. The programme represents around 19 per cent of Government revenue.

Source: EIU Cou^ry Report, Second quarter 1995.

Mali					
(a) Economic performance					
	1999	1991	1992	1993	1994
Exports (fob millions of us dollars)	338	355	339	343	365
Imports (fob millions of us dollars)	432	447	484	464	465
Principal exports (1993 millions of us dollars)	Cotton lint 139 Livestock and products 96				
Principal imports (1993 millions of us dollars)	Machinery 211 Non-food consumer goods 195				
Remarks:	The Malian cotton lint outturn, accounting for over 29 per cent of the Franc Zone total, represented 128,999 tons in 1994/1995, increasing to 159,999 tons in 1995/1996.				
(b) Transportation					
The majority of Malian foreign trade by sea is handled at Dakar in Senegal. The railway system between					

Source: Conseil Sénégalais des Chargeurs (CGSEC); EIU Country Report, Third quarter 1995.

Mauritania					
(a) Economic performance					
	1999	1991	1992	1993	1994
Exports (fob millions of US dollars)	422	434	404	393	394
Imports (fob millions of us dolUrs)	405	417	447	403	369
Iron ore exports (thousands of tons)	11355	10 469	8 009	9 736	10 342
Fish exports (thousands of tons)	283.5	301.0	290.6	313.5	n/a
Principal exports (1992 millions of US dollars)	Iron ore 269.5 Fish and fish products 154.5				
Principal imports (1992 millions of us dollars)	SNIM-SEM 185.3 Food 125.6				
(b) Transportation					
Mauritania is attempting to attract more traffic through its southern port at Nouadhibou by providing special facilities for the transshipment of goods to Mali, allocating warehouses and onshore storage areas, reducing transit taxes from 79 per cent to 49 per cent and simplifying transit procedures and formalities. Trade through the port destined for Mali will remain severely limited by the lack of adequate inland infrastructure.					

Source: EIU Country Report, First quarter 1995.

Niger

(a) Economic performance					
	1990	1991	1992	1993	1994
Exports (fob millions of us dollars)	303	284	266	238	n/a
Imports (fob millions of us dollars)	338	273	266	244	n/a
Principal exports (1992 millions of US dollars)	Uranium 190 Live animals 38				
Principal imports (1992 millions of us dollars)	Consumer goods 130 Raw materials and equipment 71 Cereals 22 Petroleum and products 20				
(b) Transportation					
Foreign trades by sea are conducted via the port of Cotonou (Benin).					

Source: EIU Country Report, Fourth quarter 1994.

I Nigeria

(a) Economic performance

	1990	1991	1992	1993	1994
Exports (fob billions of us dollar ^e)	13.59	2.25	11.79	10.90	10.65
Imports (fob billions of us dollar ^e)	4.93	7.81	7.18	5.80	5.60
Principal exports (1994 billions of us dollars)	Petroleum				
	Cocoa beans	0.08			
	Rubber	0.03			
	Spices	0.02			
Principal imports (1994 billions of us dollars)	Machinery and transport equipment	2.28			
	Chemicals	1.84			
	Manufactures	1.63			

Remarks:

(1) At the time of independence in 1960, agriculture accounted for well over half of GDP and was the main source of export earnings and public revenue, with the agricultural marketing boards' playing a leading role that has now been taken over by the Nigerian National Petroleum Corporation (NNPC), the national oil company. The overwhelming importance of oil in recent years is illustrated by the fact that it accounts for more than three quarters of federal Government revenue and over 95 per cent of export earnings. Nonetheless, its share of GDP fell from around 25 per cent in 1980 to 12.7 per cent in 1993. Agriculture is still the principal activity of the majority of Nigerians, accounting for 38 per cent of GDP in 1993.

(2) In Nigeria the privatisation process began in January 1988 when the Government announced a list of 96 State-owned companies that were to be privatized. The larger companies designated for partial privatization, including Nigeria Airways, National Electric Power and Nigeria Telecommunications, have presented major problems (debt, overmanning, Government interference etc.) and so little progress has been made.

(3) The Nigerian Enterprises Promotion Decree has been replaced by the Nigerian Investment Promotion Decree, which seeks to remove most of the obstacles to foreign investors, including the local participation thresholds, and offers a guarantee against nationalization or expropriation by Government. These welcome measures will not, however, give an immediate boost to direct investment since the political uncertainties, the possibility of the Government introducing new legislation, and the weak economy may act as powerful disincentives.

(b) Transportation

The country's ports were expanded rapidly in the 1970s in an attempt to handle the great surge in imports. Severe operational problems occurred as a result, leading to 'stockpiles of cement and other imports, but the downturn in economic activity since the early 1980s has left handling capacity at Apapa, Warri, Tin Can Island, Port Harcourt and Calabar nominally adequate to meet demand. A lack of maintenance means that much of the dockside equipment is obsolete, which leads to temporary congestion.

Source: EIU Country Profile 1995-1996 and EIU Country Report, Third quarter 1995,

Senegal

(a) Economic performance

	1999	1991	199^	199.3	1994
Exports (fob millions of us dollars)	894	824	832	719	798
Imports (fob millions of us dollars)	1 164	1 114	1 299	1 192	
Principal exports (199^ millions of us dollars)					
	Fish and fish products	245			
	Chemicals	111			
	Groundnut products	81			
	Phosphates	74			
Principal imports (1992 millions of US dollars)					
	Intermediate goods	499			
	Petroleum	129			
	Capital goods	213			

Remarks;

In the later 1980s, fish products replaced groundnuts as the major export, accounting for over 29 per cent of revenue, a proportion which had risen to 26 per cent in 1993. Other major export items are phosphates, petroleum products - refined in Senegal from imported crude and re-exported to the region. The largest import category in 1993 was intermediate goods, which accounted for 32 per cent of import spending.

(b) Transportation

The infrastructure is better than in most neighbouring countries. There are 13,859 kilometres of classified roads, of which 3,999 km are tarred. Most traffic is in the Dakar region and between Dakar and the groundnut producing areas. The railway system extends 1,225 km and carries a total of around 499 million ton-km of freight a year. There is a line running from Dakar to Bamako in Mali; this is the only feasible land link at present between the two countries. The port of Dakar serves both Senegal and Mali; it has been modernized and extended and handles around 5 million tons of traffic per year (see table 58).

Source: Conseil Sénégalais des Charges (CGSEC); EIU Country Profile 1995-1996 and EIU Country Report, first quarter 1995.

Sierra Leone					
(a) Economic performance					
	1990	1991	1992	1993	1994
Exports (fob millions of US dollars)	148.1	149.0	149.9	121.3	n/a
Imports (cif millions of US dollars)	155.9	154.0	155.0	147.1	n/a
Principal exports (1989 millions of US dollars)	Rutile 66.5 Bauxite 25.8 Cocoa 9.3 Coffee 8.1				
Principal imports (1989 millions of US dollars)	Machinery and transport equipment 62.8 Food, drink and tobacco 55.5 Fuels and lubricants 25.9				
Remarks:	The Nigerian company Unipetrol has purchased the disused Freetown oil refinery from the Sierra Leone Government. Unipetrol, which is 40 per cent owned by the Nigerian National Petroleum Corporation (NNPC), is planning to spend between \$1.5 million and \$2.0 million on rehabilitating the plant. The plant was shut down in 1990 due to financial difficulties.				

Source: EIU Country Report. First and Second quarters 1995.

Togo

(a) Economic performance

	1999	1991	1992	1993	1994
Exports (fob millions of US dollars)	395	393	322	215	272
Imports (fob millions of US dollars)	513	452	418	249	359
Principal exports (1993 millions of US dollars)	?Itosp^tes Cotton		52 59		

Principal imports (1993 millions of US dollars)	Consumer goods 91 Machinery and transport equipment 61 Food 46
Remarks:	(1) Rising cotton and coffee prices present an opportunity for Togo to accelerate its recovery from the economic crisis of recent years. The market for rock phosphates shows, however, no sign of booming, raising the prospect that by 1996 cotton will be Togo's chief export commodity. (2) The programme of restructuring and privatizing State companies, which had stagnated since before the political crisis in 1991, is supposed to be revived.
(b) Transportation	
Lomé used to be the port where the majority of cargo to and from the land-locked country of Burkina Faso would transit. This port has been replaced by Cotonou in Benin and Tema in Ghana, due to political uncertainties in Togo,	

Source: EIU Country Report, Fourth quarter 1994 and First quarter 1995.

Central African countries

1 Cameroon					
(a) Economic performance					
	1990	1991	1992	1993	1994
Exports (fob millions of us dollars)	1 951	1 673	1 685	1 587	1 844
Imports (fob Allions of US dollars)	1564	1 437	1 624	1 525	1470
Prtncl'ipal exports (1993 fob millions of us dollars)	Cmde oil 676 Cocoa 79 Cofl'ee 56 Cotton 54				
Principal imports (1991 cif millions of us dollars)	Manufactures 1181 Non-fuel primary products 246				
Remarks:	The extra boost to col'fee earnings in particular helped to strengthen the trade su^lus and thus narrow the current-account deficit in fiscal year 1994. This trend was repeated in fiscal year 1995.				
(b) Transportation					
(1) The national shipping line, Cameroon Shipping Lines has been in the forefront of the proposed major round of privatizations.					
(2) The largest port of Cameroon, Douala, is also the main gateway to ocean transport for land-locked Central African Republic (see table 60).					

Source: Cameroon National Shippers' Council; *Lloyd's List* (Condon), 28 February 1996; FIU Country Report, First quarter 1995.

Central African Republic (CAR)					
(a) Economic performance					
	1989	1990	1991	1992	1993
Exports (fob millions of us dollars)	148	151	126	124	n/a
Imports (fob millions of us dollars)	186	242	179	165	n/a
Principal exports (1993 fob millions of us dollars)	(diamond) (71) Timber				
Principal imports (1993 cif millions of us dollars)	Capital goods 130 Foods 28 Fuel and energy 16				
Remarks;	Eivestocle farmers saw their competitiveness enhanced and there was a surge in exports of meat and animals to Nigeria, Cameroon and Cabon: this helped spread the benefits of devaluation to northern areas that were too arid for coffee or cohon cultivation.				
(b) Eransportation					
The majority ofthe CAR's seaborne trade is through the port of Douala (Cameroon). The transit costs for imports to Bangui (CAR) are much higher than the ocean freights for the cargo shipped from Northern Europe (see table 60).					

Source: Cameroon Shippers' Council; EIU Coun!y Report, Fourth quarter 1994.

Congo

(a) Economic performance

	1999	1991	1992	1993	1994
Exports (fob millions of us dollars)	1 389	1 198	1 179	1 198	n/a
Imports (fob millions of us dollars)	513	495	438	491	n/a
Principal exports (1992 fob millions of us dollars)	Crude petroleum and refined products		864		
	Timber		193		
Principal imports (1999 fob millions of us dollars)	Capital goods		197		
	Food		24		

Remarks:

In 1999 the Congo became sub-Saharan Africa's fourth largest oil producer, after Nigeria, Angola and Gabon, with an average rate of 166,999 barrels per day. Rapidly rising oil earnings enabled the Government to finance large-scale investments in the early 1980s and briefly to achieve one of the highest growth rates in Africa. The collapse of oil prices in 1986 was the key factor in a deep financial crisis. Apart from oil, the main resource exploited for export is timber, produced from the huge rain forests that cover about 55 per cent of the country's land area.

(b) Transportation.

(1) Congo's largest seaport is at Pointe Noire, connecting railway, road and river network services. It is one of the deep-water ports in Africa, with 2,135 metres of quays, and a petroleum terminal near the port. Run by the national port authority, in cooperation with private-sector freight companies, the port of Pointe Noire is central Africa's second most-important gateway, after Douala. It is served by regular liner services from Western Europe and has a reputation for efficiency.

Freight handled at Pointe Noire port (thousand of tons)

	1988	1989	1999	1991 a/	1992 b/	1993 c/
Imports	554	491	536	494	429	323
Exports d/	3 469	2 447	2 957	1 473	722	499

a/ January-November.

b/ January-September.

c/ January-August.

d/ Excluding oil.

(2) The river transport, with about 5,999 kilometres of navigable rivers is one of the most important means of moving goods, particularly logs. A well-developed river transport service, run by the national authority carries goods to and from northern Congo, as well as to south-eastern Cameroon. River traffic handled by the authority has grown to around 599,999 tons a year, with more than 89 per cent coming downstream from the African interior.

(3) As regards road conditions, during the Congo's first two decades of independence, little was done to improve the road network, which included over 11,999 kilometres of classified roads but only about 559 kilometres of them had an asphalt surface.

Source: EIU Country Profile, 1994-1995 and EIU Country Report, First quarter 1995.

Gabon					
(a) Economic performance					
	1999	1991	1992	1993	1994
Exports (fob millions of us dollars)	2 489	2 228	2 259	2 150	2 120
Imports (fob millions of us dollars)	895	861	886	845	800
Principal export, ⁹ (1992 fob millions of us dollars)	Petroleum 1878 Umbur 199 Manganese 164				
Principal imports (1991 fob millions of us dollars)	Machinery & equipment 235 Food & agricultural Metals and metallurgical Transport equipment 108				
Remarks:	Gabon's quota of crude oil production for 1995 was 287,000 barrels per day (b/d), while production was close to 340,000 b/d, having risen from an average of 320,000 b/d in 1994. The same level of output as 1995 is expected to be maintained in 1996.				

Source: EIU Country Report, Second quarter 1995.

Zaire

Zaire					
(a) Economic performance					
	1990	1991	1992	1993	1994
Exports (fob millions of us dollars)	2 138	1 500	1 219	1 147	1 238
Imports (fob millions of us dollars)	1 539	1 200	914	612	600
Principal exports (1994 fob millions of us dollars)	Coffee 432 Copper 152				
Principal imports (1994 fob millions of us dollars)	Consumer goods 229 Capital goods 138 Raw materials 113 Energy products 71				
Remarks:	The volume of merchandise imports is estimated to have fallen in 1994 and this was reflected in recent figures on port traffic. Zaire's two sea ports (Boma and Matadi) recorded total inward traffic of 600,000 tons in 1994, down from 670,000 tons in 1993, of which Matadi accounted for about 90 per cent.. Export traffic through Boma and Matadi appears to show an increase from 220,000 tons in 1993 to 270,000 tons in 1994.				

Source: EIU Country Report, Second quarter 1995.

East African countries

Kenya

(a) Economic performance

	1990	1991	1992	1993	1994
Exports (fob millions of us dollars)	1 086	1 128	1 081	1 ^68	1 528
Imports (fob millions of us dollars)	2 221	1 924	1 834	1 244	053
Principal exports (1994 millions of us dollars')	Tea	301			
	Coffee	233			
	Horticulture	148			
	Petroleum products	90			
Principal imports (1994 millions of us dollars)	Industrial machinery	290			
	Crude petroleum	257			
	Motor vehicles and chassis	170			
	Iron and steel	11			

Remarks:

Agriculture and ranching are still the most important economic activities in Kenya, accounting for 29 per cent of GDP. More than half of agricultural output is for subsistence, while two cash crops, tea and coffee, together with horticulture, provided 52 per cent of merchandise export revenue in 1993. The European Union as a whole, purchased 36 per cent of the total exports in 1993 and was the origin of 35 per cent of imports.

(b) Transportation

(1) Freight handled at Mombasa rose 0.3 per cent to 7.92 million tons in 1993, and the Kenya Ports Authority announced a further increase in the first half of 1994, by 18 per cent to 4.25 million tons (January-June 1994). Mombasa also handles substantial tonnages for transit to Uganda, Rwanda, Burundi and Zaire,

Freight handled at Mombasa harbour
(thousands of tons)

	1989	1990	1991	1992	1993
Freight handled	7 195	7 489	102	893	917

(2) The World Food Programme (WFP) brings in the majority of the commodities for the areas through Mombasa port. Volumes are sporadic due to the various conditions, with the highest record of 450,000 tons of wheat and maize in 1994, and 320,000 tons of other food, albeit with a lower volume in 1995.

(3) The Kenyan Government studies to establish a free port area in Mombasa, which, combined with much-improved local services (insurance, banking and telecommunications), could service a regional market of up to 300 million people in the COMESA Market for Eastern and Southern Africa (E'GMESA).

Source: 'مراجعة' / 'الر' (London), 28 February 1996, EIU Country Profile 1994-1995, 11th Country Report, Fourth quarter 1995.

Uganda

Transportation

The non-ocean leg of cargo transit into and out of Uganda is still very slow, with rail traffic between Mombasa and Kampala, taking anywhere between 14 and 45 days and road traffic between 14 and 21 days. The cargo volume of transit to Uganda soared to 41,000 tons in January-June 1994 from 24,000 tons in the previous year.

Source: EIU Country Report, Fourth quarter 1994 and First quarter 1995.

United Republic of Tanzania

(a) Economic performance

	1990	1991	1992	1993	1994
Exports (fob millions of us dollars)	407	362	401	462	523
Imports (cif millions of us dollars)	1 444	1 477	1 510	1 494	1 504
Principal exports (1993 millions of us dollars)	Coffee	95.5			
	Cotton	90.8			
	Manufactures	64.5			
	Minerals	47.3			
	Tea	30.0			
Principal imports (1993 millions of us dollars)	Machinery and transport equipment	549.0			
	Consumer goods	329.5			
	Petroleum and products	147.6			
	Intermediate goods	141.4			
	Building materials	107.5			

Remarks;

The pace of structural reform has recently accelerated under the mounting pressure from outside, and not only where the central matter of public finance is concerned. The marketing of leading traditional export crops has been liberalized and, more controversially, key elements of the State-run industrialization effort of the 1970s have been offered for privatization.

(b) Transportation

(1) The Tanzanian Railways Corporation (TRC) announced in March 1995 that donor agencies, led by the World Bank, were committing \$240 million to the company's restructuring and were financing an extension of the 1992-1997 programme to 2000. The TRC's main business is moving local and transit freight on the so-called "Central Line" linking Dar es Salaam with the lake ports of Mwanza and Kigoma for western and northern neighbours. Zambia and other land-locked southern neighbours are using the Tanzania-Zambia Railway Authority (TAZARA) Line, but TAZARA is losing business mainly due to delays, to hauliers on the parallel road route. It is expected that about 600,000 tons were moved by TAZARA in the 12 months to June 1995, as against a projected capacity of 2.5 million tons. The Tanzanian and Zambian parliaments passed legislation to place TAZARA on a commercial basis.

(2) Dar es Salaam port has the potential to be a good gateway to some six land-locked countries in the subregion. The port has seen an increased move towards containerization and though the facilities are still well within capacity of existing demand, the Tanzanian Harbours Authority (TUA) expects any future expansion plans to be for container berths. In fact, coffee, the biggest export product through Dar es Salaam is being containerized on an ever larger scale due to the demands of European importers, as quality is maintained and freight rates are lower.

(3) More than half of the general cargo through Dar es Salaam port is in transit to or from Rwanda, Burundi, Malawi, Zaire or Zambia. This port handled a fair amount of "food-aid cargo" for Rwanda, Burundi and Zaire in 1995 (see table 61).

Source: *Lloyd's List* (London), 28 February 1996; EIU Country Report, Second quarter 1995; Tanzania Central Freight Bureau.

4. Southern African countries

Malawi					
(a) Economic performance					
	1999	1991	1992	1993	1994
Exports (fob millions of us dollars)	412	476	396	311	359
Imports (fob million of us dollars)	394	374	391	398	425
Principal exports (1993 million of US dollars)	Tobacco 299 Tea Sugar 19				
Principal imports (1999 cif millions of us dollars)	Industrial inputs 298 Plant and equipment 76 Transport equipment Commodities 66				
(b) Transportation					
<p>(1) Malawi is a land-locked country. Beira (Mozambique) is the main port through which 23,999 tons for export and 18,999 tons for import moved in 1994,</p> <p style="text-align: center;">Dar es Salaam in the United Republic of Tanzania has been playing another main role for the transport of Malawi's seaborne trade (see table 61)</p>					

Source: Tanzania Central Freight Bureau; EIU Country Report, First quarter 1995.

Mozambique

(a) Economic performance

	1999	1991	1992	1993	1994
Exports (fob millions of us dollars)	126	162	139	132	125
Imports (cif millions of us dollars)	878	^99	85-5		989
Principal exports (1993 millions of US dollars)	Prawns	68.8			
	Cotton				
	C^sbew nuts				
Principal imports (1999 millions of us dollars)	Consumer goods	337.8			
	Equipment	299.7			
	Raw materials (excl. oil)	159,5			
	Dil and products	95.9			

Remarks;

Mozambique has agricultural and mineral resources that are under-exploited, and its ports and transport routes link it directly to most other key markets of the region and the world. The Government has an assumption that foreign investment will compensate for the weakness of the domestic private sector and stimulate economic growth. A number of foreign investors have in fact taken a keen interest in the country, with 25 new foreign investment projects, worth some \$139 million, ratified by the Centro de Promo^ao de Investimentos (CPI) during the first half of 1994.

(b) Transportation

Transport fees including inland haulage charges on commodities moved through Mozambique and handled at the country's ports are still high and are increasingly seen as a disincentive to expanding the volume of regional trade passing through Mozambique. Although there are many factors involved in making the transport network function more efficiently, the significance of the ports of Maputo and Beira in the Southern African economy mean that the Mozambican authorities have to consider carefully the issue of charges for port operation. A data-managing agency shows that for all of the Southern African Development Community (SADC) countries except the South Africa, these ports are the natural geographic outlets for 89 per cent of trade by volume; and that Maputo could handle 19 per cent of South Africa's trade. The port of Beira handles 199,999 containers a year, and a new oil terminal has raised total capacity to 7.5 million tons per year.

Source: EIU Country Report, First quarter 1995,

Zambia

(a) Economic performance

	1990	1991	1992	1993	1994
Exports (fob million\$ of fis dollars)	1 254	1 172	1 177	1 013	1 075
Imports (fob millions of fis dollars)	11	752	829	803	845
Principal exports (1993 fob millions of fis dollars)	Copper	830			
	Cobalt	74			
Principal imports (1993 fob millions of fis dollars)	Crude oil	144			
	fertilizer	30			

(b) Transportation

(1) Cargo through the port of Beira (Mozambique), which is the main port for land-locked Zambia, represented 27,000 tons for export and 47,000 tons for import in 1994.

(2) Cargo movement in Dar es Salaam is another mainstream of Zambia's seaborne trade (see table 61). This route for transit cargo is competing with that via Beira in Mozambique.

Source: Tanzania Central Freight Bureau; Elf] Country? Report, Second quarter 1995.

Zimbabwe					
(a) Economic performance					
	1990	1991	1992	1993	1994
Exports (fob millions of us dollars)	1 748	1 694	1 528	1 609	1 865
Imports (fob millions of us dollars)	1 505	1 646	1 782	1 487	1 615
Principal exports (1992 millions of us dollars)	Tobacco	437			
	Iron-alloys	113			
	Nickel	72			
Principal imports (1992 millions of us dollars)	Machinery and transport equipment	809			
	Manufactures	316			
	Petroleum products	261			
	Chemicals	259			
Remarks:	Zimbabwe has one of the largest, most diversified and best integrated manufacturing sectors in sub-Saharan Africa. The largest firms have turnovers of over \$100 million; many are subsidiaries of European companies, but several are public or private ones owned and controlled by residents.				
(b) Transportation					
(1) Zimbabwe is a land-locked country whose nearest access to the sea is eastwards through Mozambique to the port of Beira: exports of 125,690 tons for 1993 and 316,300 tons for 1994, and imports of 73,800 tons and 57,200 tons for 1993 and 1994 respectively. A consortium of Zimbabwean companies plans to make a feasibility study to develop a new cargo-handling facility at the port of Beira,					
(2) The road system is in good condition, with about 15,000 kilometres of tarred roads.					

Source: Elf] Country? Profile 1994-1995; Elf] Country Report, Third quarter 1995.

- 1/ IMF, *World Economic Outlook*, The World Economy in 1995-1996, Economic Prospects and Policies (Overview of the World Economic Outlook Projections - October 1995).
- 2/ World Trade Organization, Press/44, 22 March 1996.
- 3/ OECD, *Main Economic Indicators*, March 1996. Industrial production refers to the goods produced by establishments engaged in mining (including oil extraction), manufacturing and production of electricity, gas and water. These are the industry groups 2 through 4 of the International Standard Industrial Classification of All Economic Activities (ISIC).
- 4/ *Petroleum Economist*, February 1995, World oil production,
- 5/ Fearnleys (Oslo), *Review 1995*.
- 6/ *Statistical Abstracts of the United States 1995*.
- 7/ International Wheat Council, *Grain Market Report*, January and April 1996.
- 8/ International Primary Aluminium Institute, *IPAI Form 150*, January 1996.
- 9/ DRI/McOraw-Hill, *Seatrade Service Review*, Fourth Quarter, 1995.
- 10/ See also chapter IX.
- 11/ Jacobs and Partners Limited (London), *Tanker Fleet Review* (London), July-December 1995.
- 12/ Drewry Shipping Consultants, *Shipping Statistics and Economics*, various issues.
- 13/ Institute of Shipping Economics and Logistics (Bremen), 1995, No. 1/2; Fearnleys (Oslo) *Review 1995*.
- 14/ *Lloyd's Shipping Economist*, various issues; Fearnleys (Oslo), *Review 1995*.
- 15/ Fearnleys (Oslo), *محوو/صء/سبم*.
- 16/ Fearnleys (Oslo), *توو/أممالمم*.
- 17/ John I. Jacobs plc, *Tanker Fleet Review* (London), January-June and July-December 1995; Drewry Shipping Consultants, *Shipping Statistics and Economics*, various issues; Fearnleys (Oslo), *Review 1995*.
- 18/ Drewry Shipping Consultants, *Shipping Statistics and Economics*, various issues; Fearnleys (Oslo), *Review 1995*.
- 19/ Drewry Shipping Consultants, *Shipping Statistics and Economics*, January 1996.
- 20/ Fearnleys (Oslo), *Review 1995*.
- 21/ Drewry Shipping Consultants, *Shipping Statistics and Economics*, January 1996; Fearnleys (Oslo), *Review 1995*.
- 22/ Indonesia, Malaysia, Philippines, Singapore and Thailand.
- 23/ International Labour Organization, *Social and labour problems caused by structural adjustments in the port industry*, TMPI/1996, Geneva, 1996.
- 24/ Institute of Shipping Economics and Logistics (Bremen), *Shipping Statistics. 1995*, various issues.

- 25/ *Containerisation International* (London), various issues.
- 26/ *World Wide Shipping*, various issues; *Journal of Commerce*, various issues; *Fairplay*, various issues; *Containerisation International*, various issues.
- 27/ *International Bulk Journal*, various issues; Fearnleys (©slo). *Review 1995*.
- 28/ *International Iron and Steel Institute*, 1996; Fearnleys (©slo). *Review 1995*.
- 29/ Fearnleys (©slo). *Review 1995*.
- 30/ *Kaun/Shipping*, various issues; Fearnleys (©slo). *Review 1995*.
- 31/ International Grains Council, *Grain Market Report*, January and April 1996; Fearnleys (©slo). *Review / 1995*.
- 32/ Fearnleys (©slo). *Review 1995*; *The Plateau Report 1996* (ILO).
- 33/ Fearnleys (©slo). *Review 1995*; *Lloyd's Ship Manager* (London), various issues.
- 34/ *Lloyd's Ship Manager* (London), various issues; Fearnleys (©slo). *Review 1995*.
- 35/ Fearnleys (©slo). *Review 1995*; *Lloyd's Ship Manager* (London), various issues.
- 36/ *Tanker Fleet Review 1995*, Jacobs and Partners Limited (London); Fearnleys (©slo), *Review 1995*.
- 37/ *World Tanker Fleet Review 1995*, Jacobs and Partners Limited (London); Fearnleys (©slo). *Review 1995*.
- 38/ *Cargo Systems*, July 1995, p. 51-53.
- 39/ *Containerisation International*, October 1995, p. 75.
- 40/ US Intermodal Equipment Fleet, Survey completed by XTRA Intermodal and Intermodal Association of North America (IANA), July 1995.
- 41/ For the text of the Convention see *United Nations Conference of Plenipotentiaries on a Code of Conduct for Liner Conferences*, vol. II *Final Act (including Convention and resolutions) and tonnage requirements* (United Nations publication. Sales No. E.75.II.D.12).
- 42/ For the text of the Convention, see *United Nations Conference on a Convention on International Multimodal Transport*, vol. I, *Final Act and Convention on International Multimodal Transport of Goods* (United Nations publication. Sales No. E.81.II.D.7 (vol.1)).
- 43/ For the text of the Convention, see *United Nations Convention on Registration of Ships* (TD/RS/CCNE/3).
- 44/ For the text of the Convention, see A/CN.89/13.
- 45/ For the text of the Convention, see A/CCNE.162/7. For more detailed information as to the main features of the Convention, see *Review of Maritime Transport. 1992*, p. 68, (TD/B/CN.4/7).
- 46/ Total trade in goods and real GDP, IMF, *World Economic Outlook*, October 1995.
- 47/ UNCTAD, *Trade and Development Report. 1995*, United Nations publication. Sales No. E.95.II.D.16.
- 48/ Ibid.
- 49/ *International Bulk Journal* (Surrey, United Kingdom), October 1995, Trade Review - seaborne Coal.

Annex I

of countries and territories

Code 1	Canada	United States of America
Cod© 2	Austria Belgium Denmark Paeroe Islands Finland France Germany Gibraltar Greece Iceland Ireland Israel	Itai^? Luxentbourg Monaco Nethriands Norway? Portugal Spain Sweden Switzerland Tur^e? United Kingdom of Ureat Britain and Nortltern Ireland
Code3	fapan	
Cod© 4	Australia	New Zealand
Cod© 5	Soutlt Africa	
Cod© 6	Albania Armenia Azerbaijan Belarus Bulgaria Czeclt Republic Estonia Georgia I-Iungary Kzakstan Kyrgyzstan	Laivia Litbuania Moldova Poland Romania Russian Federation Slovakia Tajikistan Turkmenistan Ukraine Uzbekistan
Code	China Democratic People's Republie of Korea	Viet Nam
Code 8 - 8. 1	<u>Northern Africa</u> Algeria Egypt Libyan Arab lamahiriya	Morocco Tunisia

Code 8.2	<u>Western Africa</u> Angola Benin Burkina Faso Cameroon Ca [^] e Verde Congo Côte d'Ivoire I3quatorial Guinea Gabon Gambia Ghana Guinea	Guinea-Bissau Liberia Mali Mauritania Nigeria St. Helena Sao Tome and Prine [^] e Senegal Sierra Leone Togo Zaire
Code 8.3	<u>Eastern Africa</u> Burundi Comoros Djibouti Ethiopia Kenya Madagascar Malawi Mauritius	Mozambique Reunion Seychelles Somalia Sudan Uganda United Republic of Tanzania Zambia
Code 9-9.1	<u>Caribbean and North America</u> Anguilla Antigua and Barbuda Aruba Bahamas Barbados Bermuda British Virgin Islands Cayman Islands Cuba Dominica Dominican Republic Greenland Grenada	Guadeloupe Haiti Jamaica Martinique Montserrat St. Pierre and Miquelon Saint Kitts and Nevis Saint Lucia Saint Vincent and the Grenadines Trinidad and Tobago Turks and Caicos Islands United States Virgin Islands
Code 9.2	<u>Central America</u> Belize Costa Rica El Salvador Guatemala	Honduras Mexico Nicaragua Panama
Code 9.3	<u>South America - Northern Seaboard</u> Guyana French Guyana Netherlands Antilles	Suriname Venezuela
Code 9.4	<u>South America - Western Seaboard</u> Chile Colombia	Ecuador Peru

Code 9.٤	<u>South America - Eastern Seaboard</u> Argentina Bolivia Brazil	الجزر المالديف/Islands (Malvinas) a 1 Paraguay Uruguay
Code 10- 10,1	<u>Western Asia</u> Bahrain Cyprus Iran (Islamic Republic of) Iraq Jordan Kuwait Lebanon	Oman Qatar Saudi Arabia Syrian Arab Republic United Arab Emirates Yemen
Code 10.٥	<u>Southern and Eastern Asia</u> Bangladesh Bhutan Brunei Darussalam Cambodia Hong Kong India Indonesia Macau Malaysia	Maldives Myanmar Pakistan Philippines Republic of Korea Singapore Sri Lanka Thailand
Code 11	Bosnia and Herzegovina Croatia Malta	Slovenia Yugoslavia
Code 12	American Samoa Christmas Island (Australia) Fiji French Polynesia Guam Kiribati Nauru New Caledonia	Papua New Guinea Samoa Solomon Islands Tonga Tuvalu Vanuatu Wake Island

Notes to Annex I

(1) This classification is for statistical purposes only and does not imply any judgement regarding the stage of development and the political situation of any country or territory.

(2) The groups of countries or territories used for presenting statistics in this *Review* are made up as follows;

Developed market-economy countries and territories: Codes 1, 2, 3, 4 and 5.

Countries of Central and Eastern Europe and Republics of the former Soviet Union; Code 6.

Socialist countries of Asia: Code 7.

Developing countries and territories: Codes 8, 9, 10, 11 and 12.

of which:

in Africa: Codes 8.1, 8.2 and 8.3

in America; Codes 9.1, 9.2, 9.3, 9.4 and 9.5

in Asia; Codes 10.1 and 10.2

in Europe; Code 11

in Oceania; Code 12.

(3) In certain tables, where appropriate, major open-registry countries are recorded as a separate group. The group comprises Bahamas, Bermuda, Cyprus, Liberia, Malta, Panama and Vanuatu.

(4) Trade statistics are based on data recorded at the ports of loading and unloading. Trade originating in or destined for neighbouring countries is attributed to the country in which the ports are situated; for this reason land-locked countries do not figure in these tabulations. On the other hand statistical tabulations on merchant fleets include data for land-locked countries that possess fleets.

a/ A dispute exists between the Governments of Argentina and of the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Annex II

World seaborne trade a/ according to geographical area, 1980, 1993 and 1994
(Millions of tons)

Area b/	Year	Goods loaded				Goods unloaded			
		Oil		Dry cargo	Total all goods	Oil		Dry cargo	Total all goods
		Crude	Products			Crude	Products		
Developed market-economy countries									
North America	1980	1.2	24.7	498.0	505.3	274.3	71.4	170.1	689.8
	1993	1.2	24.7	548.8	574.7	325.8	111.2	252.8	689.8
	1994	1.3	24.7	574.7	601.0	337.6	113.6	263.0	714.2
Japan	1980	-	-	83.6	83.6	216.3	35.0	361.5	612.8
	1993	-	-	81.1	85.3	219.5	92.1	440.2	751.8
	1994	-	-	83.5	87.7	225.8	94.2	457.0	777.0
Australia and New Zealand	1980	-	1.5	148.4	150.0	9.8	6.6	13.5	29.9
	1993	9.4	1.7	277.4	288.5	9.2	7.7	19.1	36.0
	1994	9.4	1.7	288.3	299.4	9.8	7.9	19.7	37.4
Europe	1980	95.7	79.3	387.4	562.3	285.5	145.1	680.5	1 411.1
	1993	189.4	138.6	503.5	831.5	491.6	181.8	809.4	1 482.8
	1994	188.5	140.1	532.1	860.7	510.5	187.3	844.4	1 542.2
South Africa	1980	-	0.1	68.9	69.0	15.0	1.0	9.7	25.7
	1993	-	-	83.6	83.6	23.4	0.3	9.3	33.0
	1994	-	-	87.5	87.5	23.8	0.3	9.8	33.9
Subtotal: developed market-economy countries	1980	96.2	87.8	1 186.3	1 370.3	1 100.9	259.1	1 233.3	2 595.2
	1993	200.0	169.2	1 494.4	1 863.6	1 069.5	393.1	1 530.8	2 993.4
	1994	199.2	171.0	1 566.1	1 936.3	1 107.5	403.3	1 593.9	3 104.7
Countries of Central and Eastern Europe									
Countries of Central and Eastern Europe (including the former DSS)	1980	-	50.2	95.6	200.8	35.5	1.3	108.6	145.4
	1993	56.6	50.9	78.3	185.8	24.9	0.9	123.8	149.6
	1994	44.9	45.8	79.3	170.0	20.4	1.2	118.5	140.1
Socialist countries of Asia	1980	22.1	5.7	18.3	46.1	21.6	5.1	72.9	99.6
Socialist countries of Asia	1993	34.2	4.5	52.2	90.9	4.4	1.7	84.2	90.3
	1994	37.5	4.6	54.6	96.7	4.5	2.0	92.7	99.2
Developing countries and territories									
Northern Africa	1980	187.7	-	30.0	220.2	20.0	2.0	44.9	96.9
	1993	178.2	32.2	31.7	242.1	67.1	4.2	70.0	128.3
	1994	189.6	32.0	31.0	252.6	67.5	4.3	57.5	129.3
Western Africa	1980	102.6	1.9	66.1	171.3	4.3	5.5	30.8	40.6
	1993	130.4	3.0	55.2	188.6	4.4	3.0	27.5	34.9
	1994	133.3	3.1	54.1	192.7	4.3	2.9	27.7	34.9
Eastern Africa	1980	-	0.9	6.3	7.2	6.2	2.0	9.9	18.1
	1993	-	0.5	9.3	9.8	6.7	2.7	15.3	24.7
	1994	-	0.5	9.6	9.6	6.6	2.6	15.2	24.4

Annex II (continued)

Area	Year	Goods loaded				Goods unloaded			
		Oil		Dry cargo	Total all goods	Oil		Dry cargo	Total all goods
		Crude	Products			Crude	Products		
Developing countries and territories (cont.)									
Caribbean and North America	1980	16.0	76.4	31.7	74.3	8.7	6.4	171	76.7
	1993	15.5	12.4	30.4	58.3	31.5	8.2	71.8	60.7
	1994	16.3	13.5	31.0	60.8	31.6	8.3	71.7	61.0
Central America	1980	37.5	3.0	21.8	62.3	4.6	7.8	18.1	25.3
	1993	90.5	7.2	19.7	117.4	4.1	2.6	161	77.8
	1994	93.6	7.7	20.5	121.3	4.1	2.5	16.5	23.2
South America: Northern Seaboard	1980	127.8	61.9	29.3	219.0	92.3	3.4	17.1	112.8
	1993	67.1	26.2	17.9	111.2	-	1.6	19.1	20.7
	1994	75.9	27.1	18.9	121.9	-	1.6	19.5	21.1
South America: Western Seaboard	1980	7.6	3.4	26.7	37.7	4.9	1.4	13.7	20.1
	1993	19.8	8.6	37.7	66.1	3.8	1.2	15.1	20.1
	1994	20.8	8.7	39.2	68.7	3.8	1.3	15.9	21.0
South America: Eastern Seaboard	1980	0.1	2.1	133.0	135.6	43.9	2.4	37.4	83.7
	1993	0.1	4.6	207.8	212.5	40.4	2.6	28.8	71.8
	1994	0.1	4.6	217.8	217.2	40.4	2.6	29.9	72.8
Western Asia	1980	800.6	54.5	2.3	867.4	6.6	5.0	54.9	68.4
	1993	572.9	78.1	30.7	681.7	16.9	6.7	102.2	125.8
	1994	601.8	81.1	31.1	714.0	17.2	6.7	104.0	127.9
Southeastern and Eastern Asia (n.e.s)	1980	74.3	42.2	165.9	282.4	97.4	76.9	163.5	287.8
	1993	77.4	103.2	303.6	484.2	183.1	49.4	417.1	649.6
	1994	82.8	108.3	313.4	504.5	192.4	49.7	444.5	685.6
Developing countries in Europe	1980	-	-	0.1	0.1	-	0.5	0.6	1.1
	1993	-	0.8	6.7	7.5	8.3	1.4	16.5	26.2
	1994	-	1.0	7.4	8.4	7.5	1.0	15.5	24.0
Oceania (n.e.s.)	1980	0.7	8.4	9.1	18.2	2.3	2.3	3.5	7.4
	1993	0.6	9.5	10.1	20.2	0.6	0.6	2.4	3.0
	1994	0.5	9.9	10.4	21.8	1.5	1.5	2.5	4.1
Subtotal: Developing countries	1980	1 354.1	200.2	532.3	2 086.6	378.0	60.3	406.6	838.9
	1993	1 151.9	277.4	760.2	2 189.5	366.3	84.2	738.1	1 188.6
	1994	1 216.4	287.6	778.1	2 282.1	375.4	83.8	769.9	1 229.1
World total	1980	1 527.4	343.9	1 832.5	3 703.8	1 530.0	77.8	1 823.3	3 679.1
	1993	1 442.7	502.0	2 375.1	4 329.8	1 465.1	479.9	1 746.9	4 421.9
	1994	1 498.0	509.0	2 478.1	4 485.1	1 507.8	490.3	1 757.0	4 573.1

Source: Compiled on the basis of data supplied to the United Nations Statistical Office (by reporting countries), the UNCTAD data bank and other specialized sources.

a/ Including international cargoes loaded at ports of the Great Lakes and St. Lawrence River system for unloading at ports of the system.

b/ See annex I for the composition of groups.

Annex III(a~)

at 31 December 1998

(in grt)

	Total fleet	Gil takers	Buht carriers	General cargo c/	Container ships	Other types
World total d/	491 437 573	144 646 452	149 359 901	88 862 515	39 103 977	69 464 7^8
Developed market- economy countries						
Australia	2 885 492	599 921	1010 919	112 645	122 252	1 039 665
Austria	92 765		5 624	86 267		874
Belgium	267 549	2 357		9 500		255 692
Canada	1017 844	2^ 324	76 647	94 169	1 714	742 990
Denmark	5 898 897	1 053 779	493 248	770 251	1 888 697	1 692 922
Finland	1518 690	302 929	80 106	431 656		703 999
France	4 224 829	2 046 696	291 421	333 716	559 236	993 760
Germany	5 669 522	14 2^0	23^ 1^5	^ 201 326	3 303 460	912 331
Gibraltar	308 749	272 279		22 507		13 963
Greece	29 530 090	u 836 365	12 806 925	1 434 134	736 468	1 716 198
Iceland	208 577	1 578	415	37 812		168 772
Ireland	221 50^	9 157		8t 186	12 %66	118 599
Israel	598 714	1 309	12 178	57 556	519599	8 072
Italy	6 701 953	1 955 624	1535 011	768 583	390 929	2 051 806
.Japan	19 946 723	6 033 414	5 442 ^33	2 509 042	1 132 517	4 828 917
Luxembourg	880 819	3 338	210 737	63 124	65 399	538 221
Netherlands	4 621 312	543 900	168 175	1 619 068	988 993	^ 301 176
New Zealand	319 042	82 787	25 046	76 628		134 581
Notway	21 555 625	8 778 702	4 009 889	3 562 572	63 017	5 141 445
ForUtgal	907 220	497 987	126 636	118 756	11 088	152 753
South Africa	341 532	2 039		579	210 460	128 454
Spain	1 296 472	204 575	54 737	197 071	61 529	778 560
Sweden	2 957 726	385 160	51 900	1 506 492		1 014 174
Switzerland	382 176		350 882	12 604		18 690
Turkey	6 270 628	821 313	4 007 037	1153 438	8 220	280 620
United Kingdom	7 110 869	2 182 056	568 427	515 857	1 325 556	2 518 973
United States	15 760 244	5 683 636	1 252 183	2 016 273	3 644 365	3 163 787
Subtotal	141495 477	44 417 445	32 819 161	18 792 812	15 046 065	30 419 994
Open-reeistry countries						
Bahamas	23 815 772	10 517^47	4 501 239	5 156 263	811 718	2 828 705
Bermuda	3 069 719	1586 452	247 599	197 661	148 930	889 077
Cyprus	24 701 823	4 341119	13 122 935	4 894 097	1 458 853	884 819
Liberia	59 ^41 004	29 001 918	16 288 /J75	4 466 042	3 458 744	6 625 625
Malta	17 723 533	6 792 823	6 894 850	2 884 840	493 861	657 159
Panama	72 471455	19 973 7^6	26 569 889	13 409 474	6 917 515	5 600 791
Vanuatu	1874 211	38 460	829 023	718 046	24 702	263 980
Subtotal	203 497 517	72 252 405	68 454 210	31 726 423	13 314 323	17 750 156
^^ Central and Eastern Europe and former USSR						
Albania	62 951			61 489		1 462
Armenia						
Azerbaijan	654 912	188 230		9^ 363		371 319
Belarus						
Bulgaria	1166 338	215 934	^8^ 643	^^^ %66	^6 380	68 875

	Total Beet	Gil tankers	Bulk carriers	General cargo c/	Container ships	Other types
Czech Republic	140 304		98 256	42 04^		
Estonia	50? 656	9 862	159 600	218 955		209 239
Hungary	45 105			45 105		
Georgia	281 982	136 236	103 926	3 045		38 775
Kazakstan	11 666			1 766		9 900
Kyrgyzstan						
Latvia	98 144	322 536		322 782		152 826
Lithuania	610 2,12	8 209	110 520	221 649		269 834
Moldova						
Poland	2 360 968	6 640	1 455 032	588 960		310 336
Ronrania	2 532 9?1	429 316	849 968	1017 912	15 160	220 615
Russian federation	15 213 581	2 294 345	1 768 367	5 589 551	297 206	5 264 112
Tajikistan						
Tttr^ntenistan	32 128	2 846		8 193		21 089
HUaine	4 618 936	80 829	728 848	2 725 201	139 758	944 300
Eornrer USSRe/	243.59	12 007		30213		32 139
IlzbeHstan						
Subtotal	29 202 2.13	3 706 990	5 776 160	11 295 738	508 504	7 914 821
Socialist countries of						
Asia						
China	16 946 8.84	2 295 074	6 676 965	5 442 426	1 359 746	1172 673
Denrocratic People's Republic of Korea	715 323	115 797	107 243	416 095		76 188
Yiet Nanr	700 3.19	18 745	21 366	413 155		247 053
Subtotal	18 362 526	2 429 616	6 805 574	6 271 676	1 359 746	1 495 914
Develonin st countries						
of Africa						
Algeria	980 492	34 797	172 361	217 196		556 138
Angola	89 594	2 269		63 261		24 064
Benin	1 151					1 151
Cameroon	37 114			25 234		11 880
Cape Verde	16 481	445		10665		5 371
Comoros	1897			1 304		593
Congo	12 118			2 875		9 243
Côte d'Ivoire	40 076	789		28 804		10483
Djibouti	3 727			1 967		1 760
Egypt	1 337 916	222 460	510 123	399 613		205 720
Equatorial Guinea	3 457			3 342		115
Ethiopia	79 520	3 809		75 711		
Gabon	32 178	652	23 7^2	2 522		5 222
Gambia	1 794					1 794
Ghana	113 528	965	199	32 385		79 979
Guinea	7 153			808		6 345
Guinea-Bissau	4 889			1 640		3 249
Kenya	18001	4 224		2 312		11465
Eibyan Arab						
11 Jamahiriya	733 106	571 834		75 031		86 241
Madagascar	38 141	10734		14 227		13 180
Malawi	120					320
Mauritania	39 448			1 399		38 049
Mauritius	238 .594	52 757	1 654	122 860	47 522	13 801
Morocco	382 620	14 283		85 681	8 373	274 283
Mozambique	38 332	366		9 130		28 836
Nigeria	478 995	250 727		150 789		77 479
St. Helena						

	Total fleet	Oil tankers	Bulk carriers	General cargo	Container ships	Other types
Sao Tome and Principe	7 008			1 591		1 257
Senegal	48 026			4 829		43 197
Seychelles	4 966			3 474		1 492
Sierra Leone	23 178	1 405		490		21 283
Somalia	16 363			9 089		7 744
Sudan	47 777	83		44 626		2 319
Togo	1 073					1 073
Tunisia	159 741	8 556	37 600	5 493		55 074
Uganda	1 697			1 697		
United Republic of Tairzattia	46 10	5 368		30 404		10 336
Zaire	14 917			499		14 418
Subtotal	5 097 336	10 722	745 737	1 483 948	55 895	16 4484
Developing countries of America						
Attilla	446			2 174		272
Antigua and Barbuda	1 862 049	3 715	102 359	1 113 704	616 504	25 767
Argentina	618 117	107 243	61 699	135 363	37 886	
Barbados	291 940	44 466	61 534	159 24		26 692
Belize	516 523	22 210	20 040	352 05	10 022	
Bolivia						
Brazil	5 093 920	2 096 707	2 076 814	363 7	203 692	352 92
Cayman Islands	38 717	6 036	104 300	173 300	1613	97 456
Chile	765 810	71 366	93 900	120 158	17 681	26 705
Colombia	144 390	5 7		109 285		29 218
Costa Rica	6 546			448		6 098
Cuba	410 015	64 301	662	200 404		144 848
Dominica	1 617			1 383		234
Dominican Republic	11 94	674		7 647		3 663
Ecuador	168 14	77 038				53 590
El Salvador	1 479					1 479
Falkland Islands	20 230					19 495
Grenada	4 966			4 858		108
Guatemala	776					776
Guyana	15 177	05		7 019		8 033
Haiti	431			151		280
Honduras	1 207 097	96 729	137 88	72 644	6,067	242 775
Jamaica	9 261	1 887		5 589		1 785
Mexico	1 131 466	4 4543		56 511	123 884	
Montserrat						
Nicaragua	3 924			495		3 426
Paraguay	39 115	2 296		29 967		
Peru	339 347	80 269	30 594	47 299		181 185
St. Kitts and Nevis	300			300		
St. Lucia	1 421			1 169		25
St. Vincent and the Grenadines	6 172 870	1 101 432	2 327 957	2 214 995	138 782	389 704
Suriname	7 636	1 19			1 343	
Trinidad and Tobago	28 32					20 592
Turk and Caicos Islands	2 100			792		1 308
Uruguay	4 369	46 227		2 076	28 060	48 006
Venezuela	787 248	361 032	111 106	63 518	499	251 093
Virgin Islands, British	5 974			2 643		3 331
Subtotal	20 180 107	4 616 002	5 328 847	5 94 6	1186 033	100 539

	Total fleet	Oil tankers	Bulk carriers	General cargo c/	Container ships	Other types
Developing countries and territories of Asia						
Bahrain	166 364		7 984	64 576		40 253
Bangladesh	3 145	50 700	6 726	291 353		32 706
Brunei Darussalam	366 419	239		2 723		363 457
Camrnodia						
Hong Kong	8 917 096	668 879	6 521 600	702-551	882 687	141 379
India	7 146 176	2 565 131	3 183 377	625 844	84 345	687 479
Indonesia	2 779 3^7	745 985	205 305	1 204 936	60 623	562 538
Iran, Islamic Rep. of	2 903 173	1 233 842	1 014 628	486 350	1 593	166 760
Iraq	866 701	697 827		78 532		89 842
Jordan	21 464		20 576			888
Kuwait	2 07 608	1 342 -512		289 135	85 594	340 367
Lebanon	284 969	1 325	80 945	196 996	1 380	4 323
Malaysia	3 28-9 928	412 777	981 757	528 980	365 436	996 978
Maldives	84-94.9	6 143	11 301	60 176		6 925
Myanmar	22 663	2 935	214 976	213 1-57	24 415.	67 180
oman	21 399	313		2 544		18 -542
Pakistan	398 49-9	49 595	115 404	214 049		19 447
Philippines	8 743 443	146 754	6137 701	1^16 091	166 128	476 769
Qatar	483 731	104 866	141 617	133 286	85 594	18 368
Republic of Korea	6 97-9 770	399 239	3 705 830	908 448	1120 208	842 045
Saudi Arabia	1 204 737	238 325		574 571	D6 117	265 724
Singapore	13 747 402	5106 060	3 792 530	2 182 108	1 950 353	716 351
Sri Lanka	226 924	2 552	92 979	121 474		9 919
Syrian Arab Republic	356 891		53 481	300 156		3 254
Thailand	1 743 560	196 426	386 740	982 875	59 983	117 536
United Arab Emirates	963 694	518 961	35 069	164 388	132 667	ID 609
Yemen	27 354	1 886		3 418		22 050
Subtotal	64 676 ^78	14 546 823	26 710 526	12 148 717	5 147 123	6 123 689
Developing countries of Europe						
Croatia	333 137	6 305	18 823	179 716	51 062	77 231
Slovenia	2 621			276		2 345
Yugoslavia	2 312					2 312
Subtotal	338 070	6 305	18 823	179 992	51 062	81 888
Developing countries of Oceania						
Fiji	31 930	2 969		12 184		16 777
Kiribati	6 352	1 957		3 728		667
Nauru						
Papua New Guinea	48 681	3 199		36 781		8 701
Samoa	6 186			4 339		1 847
Solomon Islands	7 992			3 286		4 706
Tonga	11 8,10			7 110		4 700
Tuvalu	64 250			29 283		34 967
Subtotal	177 201	8 125		96 711		72 365
Developing TOTAE	90 469 592	20 364 527	32 803 933	19 858 054	6440 113	11002 965
Other unallocated	8 410 248	1 475 469	2 700 863	917 812	2 435 226	880 878

Annex III(b)

Merchant fleets of the world by flag of registration, a/ groups of countries and types of ship b/
as at 31 December 1995
(in dwt)

	Total fleet	Oil tankers	Bulk carriers	General cargo c/	Container ships	Other types
World total d/	734 916 940	267 649 873	201 628 027	104 129 420	43 849 247	57 660 373
<u>Developed market-economy countries</u>						
Australia	3 975 879	1 012 797	1 686 125	119 351	131 846	1 025 760
Austria	130 040		6 730	123 310		
Belgium	249 239	3 628		10 297		235 314
Canada	666 692	168 602	127 385	90 441	1 910	278 352
Denmark	7 617 185	1 992 718	924 325	834 491	2 152 046	1 713 605
Finland	1 157 987	509 069	120 842	346 328		1 174 878
France	6 201 605	4 048 348	540 376	395 634	617 791	599 456
Germany	6 599 668	21 519	398 444	1 426 606	4 127 369	625 730
Gibraltar	579 435	535 992		34 418		9 025
Greece	52 064 664	25 036 278	22 795 479	2 040 425	813 950	1 378 532
Iceland	107 002		650	36 779		67 334
Ireland	199 893	14 218		119 962	10 161	55 546
Israel	720 710	2 169	18 043	70 431	626 188	3 879
Italy	8 843 790	3 315 252	2 827 902	680 472	399 027	1 621 137
Japan	28 783 522	10 866 660	10 083 549	3 230 265	1 126 038	3 477 010
Luxembourg	1 297 554	5 650	385 515	67 264	77 447	761 678
Netherlands	5 315 405	8 261 118	262 353	2 033 743	986 272	12 069 919
New Zealand	307 550	126 774		60 112		83 507
Norway	32 867 199	16 888 558	7 136 042	3 394 109	83 943	5 364 547
Portugal	1 417 937	883 855	234 165	168 236		117 419
South Africa	293 672	2 203			ث؛ ث.	92 725
Spain	1 282 444	353 901	91 860	ثمم 25	100 586	491 066
Sweden	2 384 275	676 264	73 746	1 034 392		599 873
Switzerland	660 208		619 791	12 428		27 989
Turkey	10 345 054	1 490 109	6 983 041	1 662 658	12 301	196 945
United Kingdom	8 557 514	4 020 375	1 049 056	536 692	1 358 187	1 593 204
United States	21 242 824	11 360 562	2 184 835	1 759 919	3 666 423	2 271 085
Subtotal	203 868 947	84 163 858	58 587 413	20 533 936	16 504 355	24 079 385
<u>Open-registry countries</u>						
Bahamas	36 716 980	19 855 647	7 48 394	6 236 325	840 968	1 935 646
Bermuda	4 797 022	3 239 779	437 514	170 086	153 563	796 080
Cyprus	40 378 044	8 127 319	22 958 717	6 637 157	1 717 288	937 563
Liberia	97 888 613	54 168 805	28 421 133	4 308 908		7 063 844
Malta	29 629 100	12 569 209	11 905 173	3 906 514	535 685	712 519
Marshall Islands	109 514 365	36 407 653	46 349 165	13 518 792	7 622 154	5 616 601
Vanuatu	2 358 612	63 361	1 391 060	500 114	29 890	374 187
Subtotal	321 282 736	134 431 773	119 311 156	35 277 896	14 825 471	17 456 440
<u>Central and Eastern Europe and former USSR</u>						
Albania	80 954			80 954		
Armenia						
Azerbaijan	104 135	243 158		103 601		157 376
Belarus						
Bulgaria	1 642 255	348 094	780 764	106 144	67 117	10 176

	Total fleet	Gil t^rkers	Bulk cttrrlers	General cargo c/	Container ^hips	Other types
Czech Republic	226 4/9		165 59^	60 881		
Estonia	.95 193	15 419	758 7^5	225 492		95 497
Hungary	64 9/9			64 979		
1 Georgia	407 653	221 904	159 951	3 854		21 944 .
1 Kazakstan	5 772			1 281		4 491
Kyrgyzstan						
Latvia	881 008	494 205		295 187		91 616
Lithu^a	562 426	13 331	160 2©	236 7©		152 165
Moldova						
?olattd	3176 681	9 162	2 396 4^6	612 9^7		158 106
Ronrania	3 718 776	759 925	1408 015	1 361 341	16 635	172 860
Russian Federation .	15794 084	3 5^8 915	2 864 408	6 24144^	333 982	2 82-5 331
Tajikistan						
Turkmenistan	22 333	5 010		8 060		9 263
Ukraine	5 275 767	119 292	1 223 559	3 249 728	131 210	551 978
Former USSR e/	53 323	14 441		24 714		14 168
Uzbekistan						
Subtotal	33 011 818	-5 77? 816	9 417 7©	©967 369	548 944	4 304 971
11 Socialist countries of						
1 Asia						
China	24 933 608	3715511	11 ©7^86	7 413 178	1 666 990	9/0 643
Democratic People's Republic of Kor^a	1011935	235 ^7,5	173 77^	550 434		51 848
Viet Nam	1 061 061	32 915	36 014	623 937		368 195
Subtotal	27 006 604	3 984 301	11377 078	8 587 549	1 666 990	1 390 686
Develoning countries						
of Africa						
Algeria	1 111 ©5	52 547	288 145	296 262		474 171
Angola	116 126	2 665		99 796		13 665
Benin	2.10					210
Cameroon	40 199			33 514		6 685
Cape Verde	21 477	562		17 15^		3 757
Comoros	2 959			2 295		664
Congo	15 110			4 100		11 010
Côte d'Ivoire	41 894	1 170		34 431		6 293
Djibouti	4 8,00			4 450		350
Egypt	1919 290	9 9 698	^61 472	542 667		©\ 453
Equatorial Guinea	3 279			3 279		
Ethiopia	9^ 747	5 8©		92 929		
Gabon	43 836	74^	38 516	2 484		2 094
Gambia	2 745					2 745
II Ghana	96 001	\ 167	260	40 8^4		53 690
Guinea	2411			285		2 ©6
Guittea-Bissau	2 699			540		2 159
Kenya	16 962	64©		1 524		9 026
Libyan Arab Jamahiriya	1 /// 477	1 093 045		87 797		41 635
Madagascar	40 789	16 9^7		17 614		6 248
Malawi						
Mauritania	19 417			1 871		17 546
Mattritius	324 692	^4 464	2 558	1^2 735	6^ 760	6 175
Morocco	3^0 138	^5 092		101 332	10 071	243 643
Mozambique	27 239	419		16 591		10 229
Nigeria	724 619	496 994		©2 349		45 276
St. flelena						

	Total fleet	Gil tankers	Bulk carriers	General cargo c/	Cpntainer ships	Other types
Sao Tome and Principe	2 492					1 207
Senegal	26 544			6 667		
Seychelles	4 174			3 278		896
Sierra Leone	15 141	1 835		944		12 362
Somalia	16 476			11206		5 270
Sudan	61 804	1 222		59 758		824
Togo	80					80
Tunisia	177 079	13 051	58 573	60 164		45 291
Uganda						..
United Republic of Tanzania	1 336	9 256		39 446		2 834
Zaire				599		15 243
Subtotal	6 650 365	2 197 086	1 249 524	1 930 234	78 831	1 194 690
Developing countries of America						1
Anguilla	3 628			3 534		
Antigua and Barbuda	2 441 189	6011	164 746	1 428 160	807 145	35 127
Argentina	757 515	185 920	105 439	183 197	48 942	234 017
Barbados	414 D9	76 219	84 298	223 836		29 776
Belize	710 724	32 785	31 019	555 904	D036	79 380
Bolivia						
Brazil	8 543 292	3 777 953	3 681 740	423 720	247 761	412 118
Cayman Islands	487 694	8 972	189 975	205 123	2 152	81 472
Chile	1 038 793	136 832	530 686	108 660	22 257	240 358
Colombia	171 362	9 681		142 263		19 418
Costa Rica	2 207					2 207
Cuba	490 159	91 631	632	260 271		137 625
Dominica	1 901			1 901		
Dominican Republic	1 124	1 635		8 641		966
Ecuador	209 286	130 856		45 790		32 640
El Salvador						
Fiji and Islands	11 761			630		11 131
Grenada	8 437			8 437		
Guatemala						
Guyana	12 899			7 053		5 846
Haiti	170					170
Honduras	1 695 808	175 599	225 412	1179 798	6 918	108 081
Jamaica	6 105	3 292		2 13		..
Mexico	1 494 083	705 093		74 588	146 861	567 541
Montserrat						..
Nicaragua	1 483			1 175		308
Paraguay	39 994	2 850		33 570		3 574
Peru	343 666	150 625	50 390	74 616		68 035
St. Kitts and Nevis	550			550		..
St. Lucia	1 655			1 655		..
St. Vincent and the Grenadines	9 556 298	2 051 414	3 985 896	3 019 759	160 980	338 249
Suriname	9 042	3 035		3 466	1 771	770
Trinidad and Tobago	19 855			7 524		12 331
Turks and Caicos Islands	405			161		244
Uruguay	149 512	93 297		2 748	28 153	25 314
Venezuela	1159 070	592 096	187 631	91 747	1 180	86 416
Virgin Islands, British	4 056			3 203		853
Subtotal	29 797 970	8 235 796	9 237 864	8 104 093	1 486 156	2 734 061

	Total Beet	Oil tankers	Bulk carriers	General cargo c/	Container ships	Other types
Developing countries and territories of Asia						
Bahrain	242 052	97 002	13 143	98 759		33 148
Bangladesh	520 505	84 987	8 903	408 999		17 650
Brunei Darussalam	352 532	270		4 378		347 884
^rbodia						
Hong Kong	15 257 215	1 201 481	12 110 217	845 565	965 648	134 304
India	11 613 560	4 591 540	5 351 817	845 197	110 767	714 245
Indonesia	3 626 192	1 196 321	316 859	1 712 647	79 508	320 857
Iran, Islamic Rep. of	4 975 012	2 452 828	1 700 018	663 752	1 905	156 509
Iraq	1 503 775	1 314 850		108 734		80 191
Jordan	33 648		33 401			247
Kuwait	3 250 061	2 421 047		373 300	91 461	364 253
Lebanon	424 013	2 011	137 941	278 295	1 162	4 604
Malaysia	4 748 365	698 895	1 754 935	777 121	429 508	1 087 906
Maldives	130 655	12 679	19 536	90 784		7 656
Myanmar	696 213	4 713	374 157	201 542	25 297	90 504
oman	11 122	460		2 996		7 666
Pakistan	624 231	91 021	212 087	309 692		11 431
Philippines	13 504 248	240 857	10 783 703	2 021 796	220 874	237 018
Qatar	773 605	194 087	270 329	205 165	91 536	12 488
Republic of Korea	10 636 960	777 876	6 743 864	974 038	1 335 126	806 064
Saudi Arabia	1 414 747	416 527		634 664	11 691	246 645
Singapore	21 020 699	9 122 655	6 621 148	2 139 185	2 226 951	910 760
Sri Lanka	325 695	4 092	180 225	137 332		4 046
Syrian Arab Republic	558 720		84 137	474 583		
Thailand	2 670 020	362 695	649 332	1 476 226	80 580	101 187
United Arab Emirates	1 530 915	959 641	60 810	234 501	142 960	133 003
Yemen	26 624	3 185		3 061		20 378
Subtotal	100 471 432	26 251 720	47 426 562	15 022 312	5 920 194	5 850 644
Developing countries of Europe						
Croatia	372 828	9 105	31 343	247 335	62 742	22 303
Slovenia	1 123			234		889
Yugoslavia	506					506
Subtotal	374 457	9 105	31 343	247 569	62 742	23 698
Developing countries of Oceania						
Fiji	26 869	3 605		10 829		12 435
Kiribati	7 094	3 048		3 352		694
Nauru						
Papua New Guinea	52 259	5 044		44 029		3 186
Samoa	6 501			6 066		435
Solomon Islands	5 746			3 155		2 591
Tonga	15 257			11 043		4 214
Tuvalu	93 096			35 227		57 869
Subtotal	206 822	11 697		113 701		81 424
Developing TOTAL	137 501 046	36 705 404	57 945 293	25 417 909	7 547 923	9 845 517
Other unallocated	12 245 789	2 591 721	4 989 369	1 344 761	2 755 564	564 374

Annex IIINotes

Source: Lloyd's Maritime Information Service's L[^]. (London).

a/ The designation^s employed and the presentation of material in this table refer to flags of registration and do not im[^]ly the expression of any opinion by the Secretariat of the United Nations concerning the legal status of any country or territory, or of its authorities, or concerning the delimitation of its frontiers.

b/ Ships of 100 grt and over, excluding the Great Lakes fleets of the United States and Canada and the United States Reserve Fleet.

d Including pa^ssenger/e[^]rgo.

d/ Excluding estimates of the United States Reserve Fleet and the United States and Canadian Great Lakes fleets, [^]vhich amounted to respectively 3.0 million grt (3.8 trillion dwt), 1.0 million grt (1.0 trillion dwt) and 1.4 million grt (7.0 million dwt).

e/ All Republics of the former USSR which h[^]ve not established new shipping registers (see box 1).

f/ A dispute exists between the Governments of Argentina [^]nd the United [^]ngdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

كفة انمرل مر «نثررات الام اكدت

م المول ض سدراٲ ام اس ن امبات دلدل التذرع م بم اء ء ابالم ء اشلم ء تماش الةبة الة نطءل.
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