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CHAPTER 4.

Trade and Freight Markets

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Chapter 4

TRADE AND FREIGHT MARKETS

This chapter describes conditions and trends in trade and freight markets, covering the major liner and bulk cargo sectors; it gives liner freight rates as a percentage of commodity prices, and it estimates freight payments and freight costs as a percentage of import value in world trade.

A. CRUDE OIL AND PETROLEUM PRODUCTS SEABORNE FREIGHT MARKET

1. Seaborne trade in crude oil and petroleum products

During 2003 tanker freight rates fluctuated widely in response to OPEC decisions concerning production levels, increased demand from major consumer countries and unforeseen events such as civil unrest in Venezuela and strikes in Nigeria at the beginning of the year, military operations in the Middle East Gulf during the second quarter, increased demand in Japan due to temporary summer closure of nuclear-fuelled power plants for inspection and, at the end of the year, bad weather and congestion in the Bosphorus Straits. The impending European proposal for accelerated phase-out of single-skin tankers, which was finally approved during the fourth quarter, also contributed to rate volatility.

In 2004, the demand for shipments of crude oil and oil products is likely to be affected by uncertainty about production levels in the Middle East and the duration of the extended haulage to US markets.

2. Tanker freight rates

Overall, 2003 was a good one for tanker owners. As table 31 indicates, all freight indices for the five groups of vessels engaged in transporting crude oil and petroleum products went up during the year. The increase in the freight index for small crude and product carriers was

most impressive — it doubled during the year to reach 333. For medium-size crude carriers the freight index increase was also remarkable — from 162 to 279 during the year. For VLCC/ULCC the freight index increase was less impressive but still good — from 99 to 125. Freight indices recorded modest increases during the year for handy-size dirty carriers and all-size clean carriers — from 266 to 246 and from 231 to 243, respectively.

The extent of rate recovery was highlighted by the fact that the 2003 average freight indices for all categories of vessels, except all-size clean carriers, were above the average freight rates corresponding to the previous two years and as good as those recorded for 2000, which was a good year for tanker owners. The comparison of average freight rates for 2003 with those of the previous year was particularly favourable for VLCC/ULCC and medium-size crude carriers, which reached 88 (48 in 2002) and 165 (98 in the previous year), respectively. Similar increases in average freight rates were recorded for the three other categories of vessels, namely small crude and product carriers (203 in 2003 as against 131 the previous year), handy-size dirty carriers (246 in 2003 as opposed to 173) and all-size clean carriers (243 against 166 in 2002).

Very large crude carriers (VLCC)

In January 2003 the spot rates from the Middle East Gulf to Japan and the Republic of Korea were both at WS126 and dipped in February, but recovered during March only to dip again in April to WS84 and WS82 respectively. The subsequent months were downhill until

Table 31

Tanker freight indices, ^a 2001–2004 ^b
(monthly figures)

Period	VLCC/ULCC				Medium-size crude carriers				Small crude & product carriers				Handy-size dirty carriers				All-size clean carriers			
	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
January	152	40	99	125	217	90	162	268	346	100	166	345	277	165	266	285	371	148	231	266
February	117	41	133	146	206	87	181	179	230	126	187	306	323	168	267	285	400	150	246	357
March	87	39	114		158	86	225		239	116	276		295	159	290		348	150	273	
April	95	36	129		171	91	240		272	117	294		299	164	290		264	149	328	
May	81	36	80		160	105	150		190	144	218		296	194	200		263	179	294	
June	61	50	85		132	90	156		183	159	201		242	204	235		264	177	231	
July	52	40	51		112	97	110		141	130	133		230	201	250		224	158	221	
August	53	45	53		114	83	103		130	132	168		224	167	198		214	171	221	
September	51	36	58		111	84	92		148	110	138		204	158	209		218	175	233	
October	74	41	58		111	84	120		154	118	153		210	153	202		187	155	180	
November	44	73	70		98	108	158		136	138	164		163	154	258		192	174	213	
December	39	103	125		94	172	279		128	176	333		141	193	290		149	208	243	
Annual average	76	48	88		140	98	165		191	131	203		242	173	246		258	166	243	

^a Compiled and published by *Lloyd's Ship Manager*. World scale = 100, as effective in each year. For tankers, vessel size groups are as follows: VLCC/ULCC – 150,000 dwt and upwards; medium-size crude carriers – 70,000–150,000 dwt; small crude and product carriers – 30,000–70,000 dwt; handy-size dirty carriers – below 35,000 dwt; and all sizes clean carriers.

^b All indices have been rounded to the nearest whole number. No data are available from March 2004 onwards.

August, when the depths of WS49 and WS51 were reached. The September recovery was short-lived, but the dip of October did give way to a good recovery to the end of the year when both rates were at WS148 — 17.5 per cent up from the level prevailing at the beginning of the year.

The fluctuations in rates from the Middle East Gulf to the West mirrored the fluctuations in the rates for the routes to the east. Rates to Europe started the year at WS103, double dipped until April when they were at WS72 and then fell in August to WS48. Again, the short-lived September recovery gave way to a WS52 dip in October, but afterwards there was a strong recovery to end the year at WS124 — up by 20.4 per cent over the year. Rates to the Caribbean and East Coast of North America started at WS85, the August dip was at WS46 and the October dip was followed by a recovery that reached WS113 in December — a good 32.9 per cent rate increase over the year.

On the West Africa to the Far East route, rates showed similar volatility. They started at WS105, fell to WS74 in April and to WS46 in August. After this they recovered in September to WS128 only to fall back the following month to WS51 and peak again in November at WS130, but eased out to WS120 by the end of the year. The overall rate increase was 14.3 per cent during 2003.

During the first quarter of 2004 all rates slid. The corresponding rates from the Middle East Gulf to Japan, the Republic of Korea, Europe and the Caribbean/US East Coast were WS89, WS87, WS78 and WS79 respectively. In March, however, there was a brief interlude of optimism and there were some good fixtures. For instance, the *Mitsumine* was chartered for NGT to carry 252 500 tons of crude oil from the Middle East Gulf to Japan at WS100. Similarly, Hyundai chartered *Al Shegaya* to carry 265,000 tons of crude oil to Daesan at WS98. Moreover, KPC chartered *Falkonera* at WS105 to carry 260,000 tons from Kuwait to the US Gulf. Rates from the Middle East Gulf were better to other destinations: Chevtex chartered *Navarin* to carry 255,000 tons of crude oil to South Africa at WS138. However, this interlude was not sustainable and rates continued to slide in April. They recovered during the subsequent months. Two fixtures for July to carry parcels of 265,000 tons of crude oil from the Middle East Gulf fetched WS135 for the *Universal Brave* chartered by NGT for destinations in Japan, and WS117 for the *New Vitality* chartered by Hyundai for destinations in Daesan.

Medium-sized crude carriers

Rate fluctuation for medium-size crude carriers reflected the particular conditions that prevailed in the routes served by these vessels. Suezmax rates for West Africa shipments to Europe and the Caribbean/US East Coast started in January 2003 at WS180 and WS175 respectively. Rates moved downwards in subsequent months to bottom in August at WS82 and WS80 and then recovered, reaching WS206 and WS199 at the end of the year. The corresponding rate increases during the year were 14.4 per cent to European destinations and 13.7 per cent to destinations across the Atlantic. Suezmax tonnage trading across the Mediterranean started the year at WS200 and bottomed in August at WS89 before it recovered until November at WS147 and rose by the end of the year to WS246 — an overall increase of 23 per cent during 2003.

Rate improvement was also good for Aframax tonnage. Tankers trading across the Mediterranean started the year at WS213, but in August they fetched only WS84. Rates recovered in the subsequent months to reach WS196 in November and WS241 in December — a 13.1 per cent increase over the year. Across the Atlantic Aframax tonnage trading between the Caribbean and the East Coast of North America recorded a stellar performance. Rates started at WS146 at the beginning of the year and, after peaking at WS306 in March, fell to WS149 in August. Afterwards the recovery was strong and the year ended at WS290 — almost double the rates at the beginning of the year.

Suezmax rates from West Africa peaked in January 2004 at WS268 for destinations in Europe and at WS264 for destinations in the Caribbean/US East Coast and then eased until April. For instance, Stentex chartered the *North Star* at WS260 in January to take 130,000 tons of crude oil to the east coast of North America while a similar parcel fetched WS160 in March when CSSSA chartered the *Genmar Phoenix*. Also in March, the same rate was agreed by CEP SA to charter the *Iran Sarvestan* to take 135,000 tons from Ceyhan (Turkey) to Spain. By June rates had eased somewhat. For instance, two parcels of 130,000 tons from West Africa fetched about the same rate. Sun Oil chartered *Calm Sea* at WS140 for destination in US East Coast while Navion agreed to WS137 for *Monte Toledo* for destination in Europe.

Rates for Aframax tonnage also peaked in January 2004 and then the trend was downwards. For routes across

the Mediterranean, however, there was a rebound in March. For instance, in that month Sibneft chartered the *Iran Abadeh* for a 80,000 ton parcel with destination in the Mediterranean at WS220. Rates in the Caribbean were far lower: BP Amoco chartered the *Chemtrans Lyra* for a 70,000 ton parcel at WS128, while Hess agreed to WS165 for a similar parcel from Coveñas (Colombia) to St. Croix. By June rates had slid in the Mediterranean and recovered in the Caribbean. Exxon Mobil chartered *Antarctica* to take 80,000 tons across the Mediterranean at WS175, and only WS165 was fetched by *Meribel* under charter with Petrogal for taking a similar parcel from Mediterranean to Portugal. Across the Atlantic Premcor chartered *Genmar Minotaur* at WS200 to take 70,000 tons from Coveñas to the US East Coast.

Small crude and product carriers

Average dirty spot rates for vessels in the range 40–70,000 dwt trading from the Caribbean to the North American Gulf and East Coast started the year at WS183 and peaked in March at WS366, and then rates decreased steadily until August at WS125. Afterwards rates improved — in October they had reached WS177 and by the end of the year they fetched WS290, an increase of 58.5 per cent during the year. Rates peaked in January 2004 at WS380 and were above the WS300 mark the following month. In March, rates eased. In that month, two fixtures were reported by Colonial and Hess for carrying 50,000 ton parcels — the rates were WS215 and WS240 respectively. By April rates were clearly below the WS200 mark. By April they were clearly below the WS200 mark but recovered in mid-year. For instance, Conoco chartered the *Amazon Explorer* at WS257 to take 50,000 tons from the Caribbean to the US East Coast.

Vessels of the same capacity trading in the Mediterranean and from there to the Caribbean and East Coast of North America recorded similar rate fluctuations. Rates started the year at WS219 and WS198 respectively. They peaked in March 2003 at WS334 and WS316 and then fell to their lowest level in September at WS142 and WS147 respectively. Again, recovery was achieved during the last quarter of the year: in November rates were at WS254 and WS209, and then continued their upward trend to fetch WS363 and WS284 in December. The rate increases for these two routes during 2003 were 65.7 and 43.4 per cent respectively. Again, the rates peaked in January 2004 at WS387 and WS331 but then eased, staying around the WS200 mark during late March

and early April. Rates were similar elsewhere: in March Stusco chartered *Maya* for carrying 50,000 tons from Ecuador to the US Gulf at WS265. Two fixtures by mid-year indicated that rates were holding steady. In June, Chevron Texaco chartered *Chimborazo* to take 50,000 tons from Ecuador to the US East Coast at WS237, while the following month Vitol secured *Jill Jacob* at WS240 to take a similar parcel from the Mediterranean to US East Coast.

Handy-size dirty

Rates for these tankers with a capacity of less than 35,000 dwt broadly followed the evolution of rates for small crude and product carriers. In April, Europetrol chartered *Baltic Commander I* to take 30,000 tons from the Baltic Sea to Western Europe at WS405, but in July Western was able to charter *Mar* for carrying 27,500 tons along the same route at WS260. A similar rate was agreed by Enel during this month: it took 30,000 tons from the United Kingdom to Italy on the *Sea Explorer* at WS250. Agip chartered the *Trinity* for a trip from North-West Europe to the Mediterranean with 33,000 tons at WS222. In November rates were higher. CEPSA chartered the *Maersk Riga* and the *Sea Promise*, at WS320 and WS350 respectively, for two 30,000 ton parcels from Spain to Northern Europe and the Mediterranean. Rates eased somewhat in early 2004: Stasco chartered the *Isola Magenta* at WS280 in March to carry 30,000 tons across the Mediterranean. Rates eased further by mid-year. In June, Enichem chartered *Seamusic* at WS250 to take 33,000 tons from the Black Sea to Italy, while Petrus chartered *Madison* at WS237 to take 30,000 tons from St. Petersburg to the United Kingdom.

All clean carriers

The rates for large clean carriers, in the range 70,000 to 80,000 dwt, trading from the Middle East Gulf to Japan started the year at WS242 and drifted down until June to WS180; rates recovered during the summer to WS222 in August and declined through November when they reached WS149. In December there was a recovery to WS158, but overall rates declined by an impressive 34.7 per cent during 2003. A similar trend was observed for tankers of an average size of 55,000 dwt, for which the year started at WS263 and peaked in April at WS283 and then decreased to WS156 in November. Again, the December recovery fetched WS185 but still left a net decline in rates of 29.6 per cent for the year. The corresponding time charter equivalent earnings for these

small tankers were \$32,000 in January, \$35,500 in April, \$16,400 in November and \$20,800 in December.

For these two vessel sizes the rates increased in early 2004 and peaked in February at WS232 and WS256 respectively. During the first week of March there were still some good fixtures, such as the one reported for the one-year-old *Energy Century* chartered by Addax to carry a 62,000 ton parcel of oil products from the Middle East Gulf to Japan at WS267. Afterwards the trend was clearly downwards. For instance, in June PDI chartered *Maersk Princess* at WS205 to carry 75,000 tons along the same route.

Freight rates for tankers in the range 35,000–50,000 dwt trading from the Caribbean to the Gulf and East Coast of North America started the year with rates at WS190, and these climbed during March and April to WS271 and WS267 respectively. The following months saw substantial volatility with depths in June–July and September–October; but the recovery started in November continued in December when rates fetched WSWS267. Overall, there was a 40.5 per cent rate increase during the year. Rates continued to increase during early 2004 and peaked in February at WS341. In March, there were good fixtures such as those recorded for *Galahad*: one for 38,000 tons at WS350 for Citgo and the other for 40,000 tons at WS330 for Hess. But then rates eased. In June the same charterer concluded a fixture for *Elka Glory* at WS265 to take 40,000 tons from the Caribbean to the US East Coast.

Smaller tankers in the range of 25,000–35,000 dwt trading out of Singapore to East Asian destinations started the year at WS275. Rates also peaked in April at WS346 and then they drifted downwards with a minor recovery in August at WS293 at the time of increased demand from Japan. Rates bottomed out in October at WS175 and climbed to WS267 in December. Overall, there was a 2.9 per cent decrease in rates during the year. A similar pattern was recorded by rates for tankers of the same size trading from the Caribbean to the Gulf and East coasts of North America. Rates started at WS248, peaked in March at WS363, then drifted downwards in the following months with a minor recovery in August at WS256 and reached WS330 in December. On this route there was a 33 per cent rate increase during the year. The corresponding time charter equivalents on this route were \$14,600 in January, \$25,000 in March, \$15,900 and \$22,600 in December. The recovery at the end of the year continued during early 2004 and peaked in February at WS346 for shipments from Singapore to East Asian

destinations and at WS418 for Caribbean trading. For the latter in March two fixtures were reported that suggested that rates had started to ease: the *Akritas* was chartered at WS325 by PMI to carry 30,000 tons to the east coast of Mexico and the *Ocean Fidelity* fetched WS410 to take 28,000 tons to the east coast of North America. The trend continued until mid-year, as shown by two fixtures in June. Royal Dutch Shell chartered *Sheng Chi* at WS250 to carry 30,000 tons from Singapore to Japan. Global chartered *Shannon* at WS300 to take 28,500 tons from the Caribbean to the US East Coast.

Tanker-period charter market

Chartering activity was particularly substantial during the first five months of 2003, with over 1.5 million dwt being traded every month. The peak months were April and May, with 2.3 and 2.5 million dwt respectively. In April 49.5 per cent of the charters were for more than two years and 44.2 per cent corresponded to Aframax tonnage. In May, 67.8 per cent of the charters were for durations of less than six months and 53.9 per cent were Suezmax and larger vessels. During subsequent months chartering activity was above 1.0 million dwt, except in November and December when reached only 0.8 million dwt. ULCC tankers were almost exclusively chartered in March and May and during this period a five-year-old vessels chartered for one year and for prompt delivery fetched above \$31,000 per day, with a peak of \$40,000 per day in March. By December rates again approached these levels, although chartering activity was low. Suezmax and larger tankers made up 54 per cent of chartering activity during that month.

Chartering activity for Aframax tonnage was particularly significant during June, when it made up 61.3 per cent of the total chartering activity of the month, which reached 1.1 million dwt. Estimated period charter rates for 10-year-old tankers on a one-year contract and for prompt delivery fluctuated around \$17,000 per day during most of the year. Rates for five-year-old tankers were slightly higher — in the \$18,000–19,000 range.

During early 2004 chartering activity was particularly good in February, when it reached 2.4 million dwt, of which 48 per cent were VLCC over 200,000 dwt. By April chartering activity had dropped to a low 0.4 million dwt, almost half of it being Aframax tonnage. It was above 1.0 million dwt until June, with most of it being Suezmax and VLCC tonnage during that month.

B. DRY BULK SHIPPING MARKET

1. Dry bulk trade

For large Capesize vessels, the main activity in this market was along the iron ore routes from Australia to the Far East and from Brazil to the Far East and Europe. During the year the remarkable increase in China's iron ore imports and to a lesser extent the growth of Japan's thermal coal imports pushed up demand for these vessels in the Pacific. Panamax vessels were deployed on several routes, including the transatlantic coal and iron ore routes from the East Coast of North America and Canada respectively and those from South Africa. Panamax tonnage was also deployed on iron ore and coal routes within Asia, such those originating in India, China and Indonesia, and within Europe originating in Sweden. Some Panamax tonnage was deployed from the United States Gulf and the East Coast of South America for carrying grain.

Smaller vessels, such as handy-sized ones, were employed for carrying grain to several destinations, notably those that have ports with restricted drafts. These vessels were also used on bauxite, alumina and rock phosphate routes.

2. Dry bulk freight rates

The freight rates for all sectors and sizes of dry bulk carriers finished the year 2003 at levels well above those prevailing at the beginning of it. The Baltic Dry Index recorded a remarkable increase of 174 per cent during the year to 4,765, with increases being particularly steep during the last quarter.

As shown in table 32, the dry cargo tramp time-charter increased during the year to 459 — an increase of 39.1 per cent over the year. The dry cargo tramp trip-charter stood over the 200 mark during the year and

Table 32

Dry cargo freight indices, 2001–2004 ^a (monthly figures)

Period	Dry cargo tramp time-charter ^b (1971 = 100)				Dry cargo tramp trip-charter ^c (July 1965 to June 1966 = 100)			
	2001	2002	2003	2004	2001	2002	2003	2004
January	264	228	330	431	193	194	216	244
February	267	232	344	507	198	199	216	244
March	260	223	339		195	199	216	
April	258	259	354		200	194	226	
May	262	229	366		206	207	235	
June	272	244	352		205	202	230	
July	272	240	374		205	201	230	
August	253	240	377		192	201	229	
September	248	244	361		193	204	235	
October	249	268	381		195	204	244	
November	227	343	402		194	215	244	
December	231	337	459		195	215	244	
Annual average	255	257	370		198	203	230	

^a All indices have been rounded to the nearest whole number. No data are available from March 2004 onwards.

^b Compiled by the German Ministry of Transport.

^c Compiled and published by *Lloyd's Ship Manager*.

ended at 244 points — an increase of 13.0 per cent from the level at the beginning of the year. The average time-charter index for 2003 was more than 100 points higher than that for the previous year, while the average trip-charter index was almost 30 points above the average for the previous year.

Owners of dry cargo vessels benefited from increased demand due to congestion in several bulk ports and to a lesser extent from bunker prices. Over the year bunker prices — the average posted prices for IFO 180 at nine ports collected by Lloyd's Ship Manager — went down from \$197 to \$174. During the year there was increased concern about the cost impact of implementing security measures (see box 2).

The substantial improvement in freight rates dissipated any enthusiasm that shipowners may have had about staying in pools. Early in the year Cape-size Asian

owners held inconclusive discussions about setting up a pool. Existing pools were maintained notably for serving niche markets, such as the 60-ship Panamax pool Baumarine, which accounted for about half of the shipments of bauxite and alumina. Flaring spot prices during the last quarter of the year triggered a search for extended time-charters, with durations being progressively extended as spot freight rates increased. This particularly affected larger vessels as Cape-size newbuildings were unlikely to be commissioned in the next two years and little Panamax tonnage was delivered during the year. By the end of 2003, the two-year charter for Cape-size vessels was at \$52,500 per day, while for Panamax it was \$30,000 per day. In early 2004, this upward trend continued unabated — it was reported that as Cape-size freight rates hit \$100,000 per day, the three-year charters were secured at \$50,000 per day and five-year ones were at \$37,000 per day.

Box 2

Secure ship operation

Estimates prepared by the OECD in July 2003 put the total bill to ship operators for implementing security measures at \$1,279 million initially and \$730 million thereafter.

Crew management was also an area of concern for operators. The cancellation of the crew visa procedure for seamen on board ships calling at ports in the United States prompted negotiations for a workable arrangement for seamen. In the representations made by BIMCO to the US authorities it was explained that additional staff had been posted to deal with visa backlog and that seamen were able to ask for US visas outside their own countries and without specifying the entry port or vessel.

The issue for seamen having positive (i.e. the holder of the document is the person to whom it was issued) and verifiable (i.e. the document is authentic by reference to an issuer) identification was discussed at the 91st ILO Conference when the C185 Seafarers' Identity Documents Convention (Revised), 2003 was adopted on 19 June. This Convention replaced the C108 Seafarers' Identity Documents Convention, 1958. Doubts about the usefulness of this Convention were raised a few months afterwards because of incompatibility with Schengen rules of the EU and the lack of agreed technical standards for biometric technology, which was deemed to delay application of the Convention.

By mid-2003 there were differing views on the way in which Part B of the ISPS Code should be implemented with some countries (i.e. China) deeming it voluntary and selectively applicable by maritime administrations, while others (i.e. the United States) regarded it as an integral and essential part of the Code. Late in the year, the American Bureau of Shipping reissued its guideline for ship security to reflect IMO clarifications in the ISPS code and recent US requirements from the Coast Guard. Moreover, BIMCO designed a standard clause for charter parties to clarify doubts arising from costs of implementing the ISPS code.

Source: Lloyd's List Daily News.

Dry bulk time-charter (trips)

Some representative fixtures concluded for vessels of different sizes on typical routes illustrate the evolution of rates during 2003. At the beginning of the year the recovery of rates that had started at the end of 2002 continued unabated. Cape-size tonnage was chartered for round trips over the transatlantic and Singapore–Japan to Australia routes at rates of \$24,050 and \$22,050 per day. By September the corresponding rates were \$39,850 and \$36,325 per day and in December they were as high as \$74,045 and \$78,615 per day respectively. On both routes the rates more than trebled over the year.

Panamax tonnage chartered at the beginning of the year for round trips from Northern Europe to the East Coast of South America fetched \$11,650 per day; rates moved up steadily, reached \$17,500 per day in September and flared up in October at \$27,500 per day, by December standing at \$33,590 — an increase of 188.3 per cent in 2003. The pattern was slightly different for Panamax tonnage engaged for round trips from the Far East to the eastern coast of Australia: rates started the year at \$13,850 per day and slid backwards during the following two months to \$12,000 per day. In April rates recovered and reached \$16,675 per day in September and peaked in October at \$39,400 but dropped in November to \$38,400. In December rates rebounded to \$40,070 per day; overall, it was an 189.3 per cent increase for the year.

Handymax tonnage chartered for Far East to Australia round trips secured \$10,000 per day in January and rate gains were modest until September when they fetched \$13,770, and then they almost doubled to \$25,645 in December — an increase of 156.4 per cent for the year. Handy-size tonnage chartered for trips from Northern Europe to the West Coast of Africa achieved less impressive gains over the same period: at the beginning of the year rates were \$8,500 per day and progressed steadily to reach \$18,000 in December — an increase of 111.8 per cent for the year.

In early 2004 rates for all these vessel sizes were high until early March and by April they were lower than the levels reached in December. There was a further decline in rates in subsequent months, although with considerable volatility.

Dry bulk time-charter (periods)

Estimates of rates for chartering vessels for a 12-month period and prompt delivery indicate that rate increases were slightly less pronounced for smaller vessels. Five-year-old Cape-size vessels in the range of 150,000–160,000 dwt were getting \$18,750 per day in January 2003; this figure almost trebled by December, rising to \$56,000 per day. Freight rates for a five-year-old Panamax started at \$12,250 in January and increased by almost two and a half times in December to reach \$32,500 per day. The increase was only marginally lower for 15-year-old vessels, whose rates went up from \$11,000 to \$26,000 per day during the same period. Rate improvement for a 15-year-old Handymax tonnage was also remarkable, from \$9,000 per day in January to \$24,500 per day in December, and very similar to the rate gains achieved by five-year-old vessels — from \$7,500 per day in January to \$20,500 per day in December. Handy-size tonnage aged about 15 years also recorded similar rate increases: \$6,750 per day in January and \$15,000 per day in December.

Rates for chartering vessels continued to rise during early 2004; some of them peaked in February, but in April they were all higher than those prevailing in December 2003. Afterwards they declined until mid-year.

Dry bulk trip-charter

Over the year rates for Cape-size tonnage improved substantially, notably during the fourth quarter. Iron ore freight rates from Brazil to China started the year at \$13.60 per ton and moved up steadily to \$17.20 in June; from September increases were greater, rising to \$33.20 per ton in December. The evolution for coal rates from Richards Bay (South Africa) to Western Europe was similar — they started at \$9.65 per ton in January, slowly moved up to \$13.40 per ton in September and then almost doubled by December to \$25.75 per ton. Panamax tonnage trading with grain between the North America Gulf and Western Europe was getting \$15.85 per ton in January, \$20.10 per ton in August and \$29.65 in December. There were lesser rate increases for handy-size tonnage: scrap was moved from the US West Coast to the Republic of Korea at \$30.65 per ton in January and this increased to \$46.60 by the end of the year.

During the period until April 2004 the rates for grain and scrap continued to rise, while the rate for iron ore held steady. There was a one-third drop in coal rates during the same period. By June all rates pointed downwards.

C. LINER SHIPPING MARKET

1. Development in liner markets

General developments

The impact of containerization in liner trades is greater than that implied by the size and growth of the fully cellular containership fleet analysed in table 7 of chapter 2. Total seaborne container carrying capacity during 2003 rose by 0.6 million TEUs to reach 8.6 million TEUs — an increase of 7.5 per cent. Fully cellular containerships increased their share of this total by 1 per cent to 74.7 per cent at the beginning of 2004, totalling 6.4 million TEUs. The share of general cargo ships reached almost 18 per cent. Single-deck vessels accounted for 0.9 million TEUs — 10.4 per cent — while multi-deck ships added 0.61 million TEUs — about 8 per cent. During the year single-deck tonnage increased by 4 per cent while multi-deck tonnage actually decreased by 3 per cent. Ro-ro cargo and ro-ro passenger ships accounted for 0.33 million TEUs and increased by 1 per cent during the year. Their share of total container carrying capacity is 3.8 per cent. Bulk carriers maintained their container carrying capacity at 0.21 million TEUs, with their share of the total decreasing to 2.5 per cent. The balance of about 1 per cent was TEU carrying capacity available in reefer, tanker, specialized and passenger vessels.

Moreover, the growth of the fully cellular containership fleet mentioned in chapter 2 continued, albeit at a slightly slower pace. As indicated in table 33, additions to the

fleet during 2003 totalled 622,000 TEUs, while 44,000 TEUs were retired from operations and broken up. Scrapping was lower than that of the previous year owing to the good freight rates achieved by small and, generally old, tonnage. The growth of the cellular fleet is poised to accelerate, with larger vessels increasing their share. During 2003, compared with the previous two years, ship orders increased more than fourfold to a record of 1,995,000 TEUs, with a fifth of this total achieved in September. For that month, post-Panamax vessels made up over half of the total and ordering vessels having capacity over 8,000 TEUs became commonplace — two German owners ordered ten ships and a further eight were ordered by two East Asian owners.

The push for larger vessels has kept alive the question of their deployment, which would be restricted to the main east–west mainline routes because of the volumes required to fill such vessels. One view is that these very large vessels should call exclusively at a few very large transshipment hubs at both ends of the route. Another view, on the basis of diminishing economies of scale for vessels above the 2,500 to 3,000 TEU size, is that there should be direct services, with smaller vessels calling at multiple ports at both ends of the route. Large carriers operating along mainline routes espouse the former view and continue to rely on dedicated transshipment terminals and feeder services provided by their subsidiaries. The implementation of security initiatives in a number of major ports would work in favour of transshipment hubs. In any case, the influx of larger containerships on the main routes heralds the deployment of larger vessels in feeder routes too.

Table 33

Growth of the world cellular container fleet (in thousand TEU at the beginning of the year)

Year	Broken up	Additions	Fleet as of 1 January	Orders as of 1 January
2002	29	639	5 285	407
2003	65	625	5 845	481
2004	44	622	6 423	1 995

Source: UNCTAD secretariat on the basis of *Containerisation International*, issues February 2003 and 2004, p. 19.

Concentration in liner shipping

The concentration process of recent years is resulting in increased carrying capacity being deployed by the largest liner operators. As table 34 indicates, over a one-year period ending 30 September 2003 the top 10 liner operators increased their carrying capacity by 13.0 per cent to 3.8 million TEUs — 45.7 per cent of the world total container carrying capacity. Similarly, the share of the top 20 liner operators increased by 12.8 per cent to 5.4 million TEUs — 64.4 per cent of the world total container carrying capacity. A clear reflection of the momentum being gained by industry consolidation is the lack of new entrants for the list of the top 20 carriers. Only three carriers — AP Moller, MSC and K Line — maintained their positions in the table. AP Moller, the parent company of Maersk-Sea Land, confirmed its dominance among container carriers by marginally increasing its share of world TEU capacity from 10 to 10.1 per cent. MSC tried to catch up and increased its share from 5.4 to 6.2 per cent. Seven carriers moved up the list with CMA-CGM Group being the most successful (up by three places), followed by NYK and Yang Ming (each up by two places) while Evergreen Group, OOCL, Hapag Lloyd and CSAV went up by only one place. Half of the carriers on the list went down by one place, except China Shipping, which slipped back by two places.

Mid-2003 financial indicators announced for some of the above carriers were encouraging. Maersk and CP Ships recorded average revenue increases of 5 per cent. P&O Nedlloyds did even better with a 7.5 per cent increase, while NOL/APL recorded an impressive 17 per cent increase in average revenue. The latter seemed to be targeting high-value cargo as the volume carried decreased by 2 per cent during the same period. All other carriers reported double-digit increases in cargo volumes, except P&O Nedlloyd, which reported only a 7 per cent increase. Satisfactory financial results highlighted a clear recovery from the dismal results of the past two years, but this was not the case for all companies — the Taiwan Province of China shipowner Kien Hung went bankrupt in May, with most of its vessels being seized by banks and other creditors. Other carriers faced specific difficulties. NYK, MOL and K Line enforced strict cost-cutting measures to counter appreciation of the yen as about 80 per cent of their revenues were in US dollars.

By the end of 2003 the positive financial results made it attractive to list some companies on the stock exchanges. The parent company of P&O Nedlloyd stated its readiness to list the shipping arm on the Amsterdam stock

exchange, and Hapag Lloyd and China Shipping were said to be ready to float 33 and 25 per cent of shares respectively. In a separate development Zim was fully privatized at the beginning of 2004.

A number of carriers provide services on several routes, being part of conferences, alliances and/or agreements, which imply some degree of agreement on operational and marketing issues, notably pricing and number of sailings. Traditionally, regulators of many countries have provided anti-trust exemption to carriers participating in these agreements on the understanding that the benefits are greater than the disadvantages. Late in 2003 the European Commission started a formal review of Regulation 4056/86, which exempts carriers from some rules of competition law. A panel of academics reported that competition restrictions, in the form of shipping conferences, are a low-cost way to ensure that the liner market is sustainable, and suggested a compromise between abolishing price-setting immunity and ensuring conditions that safeguard liner shipping alliances. Carriers set up a European Liner Affairs Association to argue their case, and the Commission asserted that the burden of proof rested with the carriers. Shippers welcomed the review and noted that there was no automatic review period for the regulation. The first hearing was conducted in December 2003.

2. Freight level of containerized services

Chartering of containership

Global liner shipping market developments are best reflected in movements of the containership charter market. This market is largely dominated by German owners, and more particularly by members of the Hamburg Shipbrokers' Association (VHSS), who control some 75 per cent of all containership charter tonnage available in the free market. Since 1998, the association³ had published the "Hamburg Index", which provides a market analysis of containership time charter rates with a minimum of three months. For the period from 1998 until June 2002, rates on 14-ton slot (TEU) per day have been published on a monthly basis for three gearless and six geared size group and compared with those obtained on average in 1997. The year 1997 was chosen as the reference year because it was the last year when a remunerative rate level could be achieved. Since July 2002, rates have been published for two types of gearless vessels up to 500 TEU capacity, two types of gearless/geared vessels over 2,000 TEU capacity and six types of geared vessels up to 1,999 TEU capacity.

Table 34

Leading 20 container service operators as of 30 September on the basis of number of ships and total shipboard capacity (TEUs)

Ranking	Operator	Country/territory	No. of ships in 2003	TEU capacity in 2003	TEU capacity in 2002
1	A.P. Moller Group	Denmark	328	844 626	773 931
2	MSC	Switzerland	217	516 876	413 814
3	Evergreen Group	Taiwan Province of China	152	442 310	403 932
4	P&O Nedlloyd	UK/Netherlands	157	419 527	406 654
5	CMA-CGM Group	France	150	299 174	225 436
6	Hanjin/DSR-Senator	Republic of Korea/Germany	76	290 677	304 409
7	COSCO	China	148	274 128	255 937
8	NOL/APL	Singapore	82	273 573	227 749
9	NYK	Japan	91	233 934	177 700
10	MOL	Japan	72	222 533	188 326
Total 1-10			1 473	3 817 358	3 377 888
11	CP Ships Group	Canada	85	201 706	187 890
12	K Line	Japan	63	186 017	168 413
13	OOCL	Hong Kong (China)	55	185 502	157 493
14	Zim	Israel	79	174 480	164 350
15	Hapag Lloyd	Germany	41	154 850	135 953
16	Yang Ming	Taiwan Province of China	55	153 783	120 319
17	China Shipping	China	94	143 655	148 212
18	Hyundai	Republic of Korea	35	136 548	122 713
19	CSAV	Chile	55	123 378	90 625
20	PIL Group	Singapore	92	106 508	97 827
Total 1-20			2 127	5 383 785	4 771 683
World fleet estimated at 1 July 2003 and 2002				8 354 000	7 713 000

Source: UNCTAD secretariat, compiled from *Containerisation International*, January, p. 12, and November 2003, p. 57; and *International Shipping and Logistics* (Bremen), January/February 2004, p. 36.

Note: All subsidiaries are consolidated.

The development of time charter rates is reflected in table 35.

The average time charter rates for all types of containerships rose in 2003. The largest increase has been for geared/gearless containerships with a capacity in the range 2,000–2,299 TEUs, whose average time charter rate for 2003 fetched \$9.75 per 14-ton slot per day — almost double the average rate for the previous year. The average rate for larger vessels with a capacity in the range 2,300–3,400 TEUs also fared well — 55.8 per cent increase over the previous year. The best average rate improvement for geared vessels was for vessels with a capacity in the range 1,600–1,999 TEUs, which recorded a 77.1 per cent increase for 2003. Average rate improvement decreased with vessel size: the rate for vessels with a capacity in the range 1,000–1,299 TEUs was up by 67.7 per cent, while the corresponding increases for vessels with a capacity in the range 200–299 TEUs was only 11.3 per cent. The average rate increase for small gearless containerships, with a capacity of less than 500 TEUs, was around 16 per cent.

There was a positive and steady evolution of the monthly average time charter rates for vessels of all types and sizes. Time charter rates for geared/gearless containerships in the range 2,000–2,299 TEUs fetched \$11.04 per 14-ton slot/day in December 2003 — an increase of 84.3 per cent from levels prevailing in January. Similarly, larger geared/gearless containerships in the range 2,300–3,400 TEUs obtained \$10.16 per 14-ton slot/day in December, which represents an increase of 33.7 per cent for the year. Rates for geared vessels with a capacity in the range 1,600–1,999 TEUs also fared well — up by 75.5 per cent to \$11.3 per 14-ton slot/day by December 2003. All other monthly rates also recorded double-digit percentage increases, with the lower ones of 18.5 per cent corresponding to small geared vessels with a capacity in the range 300–500 TEUs.

The rates reached in September by geared 2,500 TEU vessels were around \$25,000 per day and those for gearless 3,500 TEU ships were \$29,000 per day. These increased rates in the chartering market led carriers to seek fixtures in private deals by the fourth quarter of the year. Rates also went up in early 2004 when a record rate of \$43,500 per day was paid for MOL. Moreover, the relevance of the chartering market is poised to increase in the years ahead. In June it was

reported that up to 70 per cent of the newbuildings were made by charterers such as Costamare, which the following month placed an order for five vessels with a capacity of 8,200 TEUs.

Freight rates for main routes

By the end of 2003 the level of freight rates for the main containerized routes — trans-Pacific, transatlantic and Asia–Europe — were mostly above the levels that prevailed at the end of 2002 (see table 36). The Asia–Europe route did particularly well, with freight rates increasing by 27.5 and 5.9 per cent in the westward and eastward directions respectively. For the westward direction the rate corresponding to the fourth quarter of 2003, \$1,662 per TEU, was as good as that corresponding to the third quarter of 2000 (\$1,673 per TEU), a particularly good year for container shipping, and highlighted the extent of freight rate recovery on this route. The rates across the Pacific increased by 24.5 per cent eastbound and by 6 per cent westbound. The eastbound rate at the end 2003 was \$1,892 per TEU, above the rates reached during the last two years but still well below the peak rate of \$2,000 per TEU reached in 2000. Over the transatlantic and between the fourth quarters of 2002 and 2003 the evolution of rates was less impressive. On the dominant westbound route to the United States freight rates rose by 20.9 per cent to \$1,469 per TEU, while in the opposite direction rates continued to fall — by 1.1 per cent to \$834 per TEU.

On the trans-Pacific route, where cargo flows are largest, the upward trend of rates that had started in 2002 continued unabated during the most part of 2003. The dominant eastbound leg recorded double-figure rate increases for the second and third quarter before a minor reduction during the last quarter. Rate evolution was less impressive for the westbound leg, which recorded rate reductions for the third and fourth quarters. During the first half of the year, the Trans-Pacific Stabilization Agreement (TSA), which accounts for 90 per cent of the trade, sought rate increases of about \$700 per FEU in the negotiations of annual service contracts. Peak season surcharges that apply between June and October were said to be \$300 per FEU. These surcharges were imposed in the wake of 95 per cent vessel utilization eastbound and was needed to offset up to \$2 billion losses said to have been incurred by carriers during the previous year owing to depressed freight rates. In a separate development the Federal Maritime Commission extended its probe into price-fixing of the Indian sub-continent and United States trade to cover action by TSA in the 2003–2004 contract seasons.

Table 35

Containership time charter rates
(\$ per 14-ton slot/day)

Ship type	Yearly averages				Monthly averages for 2003												Monthly averages for 2004						
	1997	2001	2002	2003	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7
Gearless																							
200-299	21.8	16.0	16.9	19.6	17.7	17.4	19.3	18.8	20.3	19.2	17.9	19.6	20.0	21.2	21.0	22.5	22.2	21.1	22.2	22.5	22.0	23.0	23.3
300-500	16.8	14.7	15.1	17.5	14.1	16.1	17.6	17.3	17.4	17.7	18.6	17.6	17.8	17.8	19.3	18.3	18.5	17.9	19.4	20.7	20.7	21.9	20.8
Geared/Gearless																							
2,000-2,299	9.7	8.0	4.9	9.8	6.0	6.6	8.1	9.1	10.1	11.0	11.4	10.9	10.7	11.2	10.8	11.0	11.1	15.4	15.4	13.7	13.7	13.7	13.7
2,300-3,400 ^a			6.0	9.3	7.6	7.2	7.6	9.1	9.7	9.7	10.3	10.3	10.4	9.7	9.7	10.2	10.6	12.0	12.0	14.5	14.5	14.5	12.9
Geared																							
200-299	22.0	17.8	17.0	18.9	17.3	17.7	17.7	18.1	20.3	19.5	18.8	18.4	18.2	19.1	21.5	20.6	21.5	22.9	23.3	25.2	25.2	23.9	26.1
300-500	17.2	14.9	13.4	15.6	13.8	14.5	14.6	14.5	15.6	15.5	14.7	17.0	16.4	16.6	17.2	16.3	19.5	18.3	18.8	21.9	20.3	19.8	22.1
600-799 ^b			9.3	12.3	9.9	10.4	10.7	11.9	12.0	12.7	12.0	13.4	13.9	13.6	13.2	13.5	14.3	14.8	16.2	19.0	17.7	19.5	20.6
600-799 ^c				9.1	9.3	9.9	10.1	11.2	11.7	12.2	12.5	13.0	13.2	14.0	14.4	13.2	14.1	15.0	15.8	16.8	19.5	19.2	20.4
1,000-1,299			12.5	8.8	7.7	8.4	8.9	9.8	11.4	12.2	12.4	13.7	13.9	15.1	14.0	12.1	13.7	15.5	16.6	17.6	19.0	20.2	19.4
1,600-1,999			10.5	8.0	6.4	7.0	8.5	9.7	11.1	10.0	11.5	11.2	11.8	11.7	10.1	11.3	12.5	13.2	14.3	13.9	17.9	16.2	14.0

^a This category was created in 2002. Data for the first half of the year correspond to cellular vessels in the range 2,300–3,900 TEU sailing at 22 knots minimum.

^b Sailing at 16–18 knots.

^c Sailing at over 18 knots.

Table 36

Freight rates (market averages) on the three major liner trade routes, 2002–2004
(US dollars per TEU)

	Trans-Pacific		Europe-Asia		Transatlantic	
	Asia–USA	USA–Asia	Europe–Asia	Asia–Europe	USA–Europe	Europe–USA
2002						
First quarter	1 540	751	601	1 073	866	1 180
Change (%)	-4.2	4.2	-8.9	-6.9	-3.7	-3.9
Second quarter	1 463	749	646	1 105	805	1 154
Change (%)	-5.0	-0.3	7.5	3.0	-7.0	-2.2
Third quarter	1 476	757	694	1 208	815	1 181
Change (%)	0.9	1.1	7.4	9.3	1.2	2.3
Fourth quarter	1 529	817	712	1 304	843	1 215
Change (%)	3.6	7.9	2.6	7.9	3.4	2.9
2003						
First quarter	1 529	826	704	1 432	899	1 269
Change (%)	0.0	1.1	-1.1	9.8	6.6	4.4
Second quarter	1 717	861	762	1 570	924	1 400
Change (%)	12.3	4.2	8.2	9.6	2.8	10.3
Third quarter	1 968	834	777	1 629	817	1 426
Change (%)	14.6	-3.1	2.0	3.8	-11.6	1.9
Fourth quarter	1 892	810	754	1 662	834	1 469
Change (%)	-3.9	-2.9	-3.0	2.0	2.1	3.0
2004						
First quarter	1 850	802	733	1 686	778	1 437
Change (%)	-2.2	-1.0	-2.8	1.4	-6.7	-2.2
Second quarter	1 871	822	728	1 739	794	1 422
Change (%)	1.1	2.5	-0.7	3.1	2.1	-1.0

Notes: Information from six of the trades' major liner companies. All rates are all-in, including the inland intermodal portion, if relevant. All rates are average rates of all commodities carried by major carriers. Rates to and from the US refer to the average for all three coasts. Rates to and from Europe refer to the average for North and Mediterranean Europe. Rates to and from Asia refer to the whole of South-East Asia, East Asia and Japan/Republic of Korea.

In the dominant westward leg of the Asia–Europe route freight rates recorded single-digit and positive evolution during the year. Rates increased particularly well, close to a 10 per cent increase, during the first and second quarter of 2003 with a noticeable slowdown during the second half of the year. This reflected recommended increases of \$150 per TEU in April, July and October made by the Far Eastern Freight Conference (FEFC). In the eastbound leg to Asia the first and fourth quarters witnessed rate deterioration of 1.1 and 3 per cent respectively and only the second quarter recorded a good rate increase of 8.2 per cent to \$762 per TEU. Over the year westbound vessel utilization was close to 97 per cent and FEFC was said to be looking for additional rate increases for 2004. Also, it was reported that the duration of service contracts appeared to be shortened to a period of a few months.

Freight rate movements on the transatlantic route were mostly positive, apart from the 11.6 per cent drop in the third quarter of 2003 for the United States–Europe leg. For the dominant leg originating in Europe the best result was in the second quarter, a 10.3 per cent rate increase to \$1,400 per TEU, with further increases in the following quarters being modest in comparison. For this leg, the Transatlantic Conference Agreement (TACA), whose remaining seven carriers account for about half of the trade on the route, announced rate increases of \$400 and \$500 per TEU for April and October respectively as well as a 3 per cent BAF from July. Overall, rate evolution was good, against the background of a falling US dollar and strong appreciation of the euro. In October the European Court of First Instance revoked the \$318.5 million fines imposed on TACA members by the European Commission, but upheld the view that the Commission was guilty of abuse of power in prohibiting individual service contracts.

Concerning other charges applied in liner shipping, the issue of terminal handling charges (THC) was again under scrutiny in Hong Kong (China). Shippers and carriers met in November to discuss the high level of these charges compared with mainland Chinese ports. It was said that up to \$274 per TEU was charged in Hong Kong (China) for boxes going to the United States and about \$230 per TEU for intra-Asian routes. These were almost \$100 per TEU more than the corresponding charges in Shenzhen and not offset by cheaper freight rates available from Hong Kong (China).

3. Supply and demand in respect of main liner services

During 2003 the demand for containerized services showed a healthy recovery. All the estimates of the cargo flows on the three major containerized routes for the first nine months of 2003 indicated in table 37 showed increases. In fact, these aggregates may mask some intraregional trades and transshipment activity. Nevertheless, the aggregates point to an expansion of traffic from the Far East, notably from mainland China, as well as reduced activity across the Atlantic.

In the trans-Pacific trade, 2003 witnessed a booming trade, particularly in the eastward direction. The reason for this impressive 15.7 per cent increase in trade in the face of modest US economic growth was the production of industrial and consumer goods by factories relocated in mainland China with access to the US market: import quotas for clothing were reduced and the 30 per cent import duty on steel products was discontinued by the end of the year. Not even the severe acute respiratory syndrome (SARS) scare early in 2003 dampened demand, and major US retailers such as Wal-Mart and Target Stores were said to have increased import volumes by 25 and 40 per cent respectively. For coping with the additional eastbound demand new services were launched, for instance the PNX string started by the CHKY alliance (Cosco, Hanjin, K Line and Yang Ming), and existing ones were upgraded by deploying larger vessels — Wan Hai replaced all five 1,600 TEU capacity vessels with 2,700 TEU capacity ones. The increase in cargo flows in the westward direction was considerably less, about one third, and vessels sailed with plenty of spare capacity, with carriers sometimes preferring to reposition empty containers rather than seek low-value cargo for destinations far away from China.

On the Europe–Asia trade route, the traffic from Asia increased by 10 times the increase in the opposite direction. This exacerbated the already acute problem of repositioning empty boxes. These were said to total 50 per cent for European destinations and up to 75 per cent for those in the United Kingdom. Carriers sometimes resorted to the practice already mentioned for the trans-Pacific route: shipping empty boxes was preferred to low-value freight cargo. The poor growth of eastbound cargo from Europe was due to cheaper alternatives — for instance, Asian importers started to

Table 37

Estimated cargo flows along major trades routes
(millions of TEU)

Year	Trans-Pacific		Europe-Asia		Transatlantic	
	Asia-USA	USA-Asia	Europe-Asia	Asia-Europe	USA-Europe	Europe-USA
2002	8.81	3.90	3.94	6.13	1.50	2.59
2003	10.19	4.12	4.00	7.06	1.58	2.56
% change	15.7	5.6	1.5	15.2	5.3	-1.0

Source: Compiled by the UNCTAD secretariat from *Containerisation International*, several issues.

source waste paper from North America. The Far Eastern Freight Conference (FEFC) continued to account for about two thirds of the trade. Table 38 indicates that the combined share of the five major groupings of FEFC operators decreased marginally by 0.5 per cent, although there were large percentage fluctuations for some groups of operators.

The transatlantic route was lacklustre in 2003. Flows heading east increased by only 5.3 per cent while those in the opposite direction actually dropped by 1 per cent. The devaluation of the US dollar against the euro for most of the year explained this performance. Demand was stronger during the first half but not such as to cause carriers to add capacity, which had been reduced in the previous year. As about 80 to 90 per cent of the cargo

was reported to be carried under annual service contracts the issue of lack of slots did not arise and the repositioning of empty containers was not as acute as on the other two routes.

In the secondary North-South and regional trades the situation was mixed. The highest rates of growth were achieved by containers flowing between North-East and South-East Asia at a rate of 6.9 per cent. Container flows between Europe and South and Central America increased by 5.7 per cent and those between Asia and Oceania increased at a slightly slower rate — 5.2 per cent. Trade flows between North and South America and the Caribbean increased by 4.3 per cent. The laggards were trade between Europe and Oceania and West Africa, which were steady and contracted by

Table 38

Capacity share for the trans-Pacific trade
(percentages)

Operator	mid-2003	mid-2002
Grand Alliance	22.3	21.7
New World Alliance	12.9	13.8
Maersk Sealand	15.6	16.2
K Line and Yangming	9.0	8.9
CMA CGM / Norasia and others	5.3	5.0
Total	65.1	65.6

Source: UNCTAD secretariat from *Lloyd's Shipping Economist*, September 2003, p. 9.

4.4 per cent respectively. For the latter OTAL, one of the largest independent carriers, reduced services in mid-2003 as cargo volumes from Europe dropped along with euro appreciation and West African importers started to source goods from Asia or South America.

4. Liner freight index

Table 39 indicates the development of liner freight rates on cargoes loaded or discharged by liners at ports in the Antwerp/Hamburg range for the period 2001–2003. The average overall index for 2003 went up by six points from the 2002 level to reach 101 points (1995 base year 100), reflecting the improved rates in both the homebound and the outbound trade. In the homebound trade, the average level in 2003 increased by 11 points to reach 95 points. The peak was reached during April when the index fetched 100, and in August and September that peak was almost achieved. This upward trend was due to the increased volumes from the Far East and, to a lesser extent, across the Atlantic. It also reflects the diminished role of spot cargo. The improvement of the average

outbound index was barely noticeable — only up by 1 point to 106 over the year. The peak outbound index was reached in April at 114, with values for the period July–October being above average.

5. Liner freight rates as percentage of prices for selected commodities

Table 40 provides data on freight rates of liner services as a percentage of market prices for selected commodities and trade routes for certain years between 1970 and 2002. For rubber sheet, the average f.o.b price increases more than offset the increases in freight rates and BAF surcharges and resulted in a decreased freight ratio of 8.3 per cent for 2003. The f.o.b price for jute came down by about 11 per cent, the lowest of all prices in table 40 for that year, while freight rates moved up by almost 20 per cent, which explains the increase in freight ratio to 29 per cent for 2003. The minor price reduction for cocoa beans shipped from Ghana, about 2 per cent, was more than compensated by the almost 18 per cent increases in freight rates, resulting in an increase in the

Table 39

Liner freight indices, 2002–2004

(monthly figures: 1995 = 100)

Month	Overall index			Homebound index			Outbound index		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
January	93	96	93	81	91	88	104	101	98
February	93	96	93	81	91	88	103	100	98
March	95	101	96	80	94	92	109	107	101
April	95	107	100	82	100	96	108	114	104
May	94	99	99	82	92	96	106	105	103
June	94	101	99	81	90	95	106	111	103
July	94	103	100	85	97	97	103	107	103
August	94	104	100	85	99	97	102	109	102
September	93	104	100	85	99	98	100	108	102
October	99	102		88	96		109	107	
November	99	100		90	96		108	105	
December	97	96		88	92		105	100	
Annual average	95	101		84	95		105	106	

Source: UNCTAD secretariat on the basis of the Liner Index of the German Ministry of Transport. Monthly weighted assessments of freight rates on cargoes loaded or discharged by liners of all flags at ports of the Antwerp/Hamburg range.

Table 40

Ratio of liner freight rates to prices of selected commodities

Commodity	Route	Freight rate as percentage of price ^a					
		1970	1980	1990	2001	2002	2003
Rubber	Singapore/Malaysia–Europe	10.5	8.9	15.5	13.9	13.5	8.3
Jute	Bangladesh–Europe	12.1	19.8	21.2	15.5	21.7	29.0
Cocoa beans	Ghana–Europe	2.4	2.7	6.7	4.1	25.8	3.3
Cocoa beans	Brazil–Europe	7.4	8.6	11.0	n.a.	n.a.	n.a.
Coconut oil	Sri Lanka–Europe	8.9	12.6	n.a.	15.5	10.0	11.5
Tea	Sri Lanka–Europe	9.5	9.9	10.0	5.3	6.8	7.8
Coffee	Brazil–Europe	5.2	6.0	10.0	6.9	7.6	6.8
Coffee	Colombia (Atlantic)–Europe	4.2	3.3	6.8	5.9	3.9	3.9
Coffee	Colombia (Pacific)–Europe	4.5	4.4	7.4	6.2	4.6	4.8

Sources: UNCTAD secretariat on the basis of data supplied by the Royal Netherlands Shipowners' Association (data for 1970–1989) and conferences engaged in the respective trades (data for 1990–2001).

^a C.i.f. (cost, insurance and freight) prices are quoted for coffee (Brazil–Europe and Colombia–Europe) and coconut oil. For cocoa beans (Ghana–Europe and Brazil–Europe) the average daily price in London is quoted. For tea, the Kenya auction prices are quoted. Prices of the remaining commodities are quoted f.o.b. terms. The freight rates include, where applicable, bunker surcharges and currency adjustment factors, and a tank cleaning surcharge (for coconut oil only). Conversion of rates to other currencies is based on parities given in the *Monthly Commodity Price Bulletin*, published by UNCTAD. Annual freight rates were calculated by taking a weighted average of various freight quotes during the year, weighted by their period of duration. For the period 1990–2002, the prices of the commodities were taken from UNCTAD, *Monthly Commodity Price Bulletin*, January 2003.

freight ratio from 2.8 in 2002 to 3.3 in 2003. The year 2003 was the fourth year in which no cocoa beans were shipped from Brazil. The c.i.f. price of coconut oil recorded an increase of about 11 per cent in 2003, which coupled with the 27 per cent increase in freight rates during the year resulted in a freight ratio of 11.5 per cent, slightly higher than the ratio of the previous year. The ratio of liner freight rate to f.o.b. price for tea increased from 6.8 to 7.8 per cent, owing to an 8 per cent increase in prices and a 25 per cent increase in freight rates during 2003. The price for coffee from Brazil to Europe recovered by almost 13 per cent in 2003, while freight rates were roughly steady, resulting in a decrease of the freight factor from 7.6 per cent in 2002 to 6.8 per cent in 2003. The price of Colombian coffee exported to Europe from Atlantic and Pacific ports improved marginally by about 3 per cent during 2002, while freight rates went up by 3 and 7 per cent respectively. These changes resulted in the freight ratio being steady for exports from the Atlantic and slightly higher, at 4.8 per cent, for the Pacific ratios.

D. ESTIMATES OF TOTAL FREIGHT COSTS IN WORLD TRADE

1. Trends in global import value and freight costs

International trade involves various services such as sourcing, production, marketing, transaction and transport and the related flow of information thereon. For the transport sector, table 41 provides estimates of total freight payments for imports and the percentage of total import value by country groups. In 2002, the world total value of import (c.i.f) increased by 4.1 per cent, while total freight paid for transport services increased by 13.1 per cent, reflecting the upward trend of freight rates that prevailed during that year. The share of global freight payments in import value stood increased to 6.6 per cent from 6.1 per cent in 2001. In 1980, the share of freight costs in import value stood at 6.6 per cent or nearly 30 per cent higher than the average ratio in 1990. The regional comparison indicates that freight costs incurred in the

Table 41

Estimates of total freight costs for imports in world trade ^a by country groups
(millions of dollars)

Year	Country group	Estimate of total freight costs of imports	Value of imports (c.i.f)	Freight costs as % of import value
1980	World total	123 264	1 856 834	6.64
	Developed market-economy countries	78 286	1 425 979	5.49
	Developing countries – total	44 978	430 855	10.44
	<i>of which:</i>			
	Africa	10 432	77 757	13.42
	America	10 929	123 495	8.85
	Asia	21 979	211 089	10.41
	Europe	1 320	16 037	8.23
1990	Oceania	318	2 477	12.84
	World total	173 102	3 314 298	5.22
	Developed market-economy countries	117 004	2 661 650	4.40
	Developing countries – total	56 098	652 648	8.60
	<i>of which:</i>			
	Africa	9 048	81 890	11.05
	America	9 626	117 769	8.17
	Asia	35 054	427 926	8.19
2001	Europe	1 909	21 303	8.96
	Oceania	461	3 760	12.26
	World total	364 008	5 960 595	6.11
	Developed market-economy countries	221 248	4 320 511	5.12
	Developing countries – total	142 760	1 640 084	8.70
	<i>of which:</i>			
	Africa	13 806	109 125	12.65
	America	33 895	395 439	8.57
2002	Asia	92 023	1 102 663	8.35
	Europe	2 428	27 665	8.78
	Oceania	608	5 192	11.71
	World total	411 855	6 205 670	6.64
	Developed market-economy countries	255 531	4 430 379	5.77
	Developing countries – total	156 324	1 775 291	8.81
	<i>of which:</i>			
	Africa	15 253	122 669	12.43
	America	37 740	379 225	9.95
	Asia	102 969	1 263 543	8.15
	Europe	2 718	31 201	8.71
	Oceania	645	5 653	11.41

Source: UNCTAD secretariat estimates based on data supplied by the IMF.

^a The estimate for the world total is not complete, since data for countries that are not members of the IMF, the countries of Central and Eastern Europe and republics of the former Soviet Union, and the socialist countries of Asia are not included for lack of information or other reasons.

imports of developed market-economy countries continue to be lower than those of developing countries, with the difference between the two groups fluctuating slightly (see figure 8). For 2002, the total value of imports by developed market-economy countries increased by 2.5 per cent while total freight costs increased by 15.5 per cent; thus freight cost as a percentage of import value increased to 5.8 per cent (5.1 per cent in 2001) as compared with 8.8 per cent (8.7 per cent in 2001) for developing countries. This difference is mainly attributable to global trade structures, regional infrastructure facilities, logistics systems and the more influential distribution strategies of shippers from developed market-economy countries.

2. Regional trends

The total freight costs of developing countries increased from 8.7 per cent in 2001 to 8.8 in 2002. Within this group, African developing countries continued their downward trend in freight costs from 12.7 per cent in 2001 to 12.4 per cent in 2002. This is a reflection of lower freight rates and improvements in terminal handling that offset insufficient infrastructure facilities and inadequate management practices, specifically for transit

transport, and low productivity of inland transport and terminal equipment.

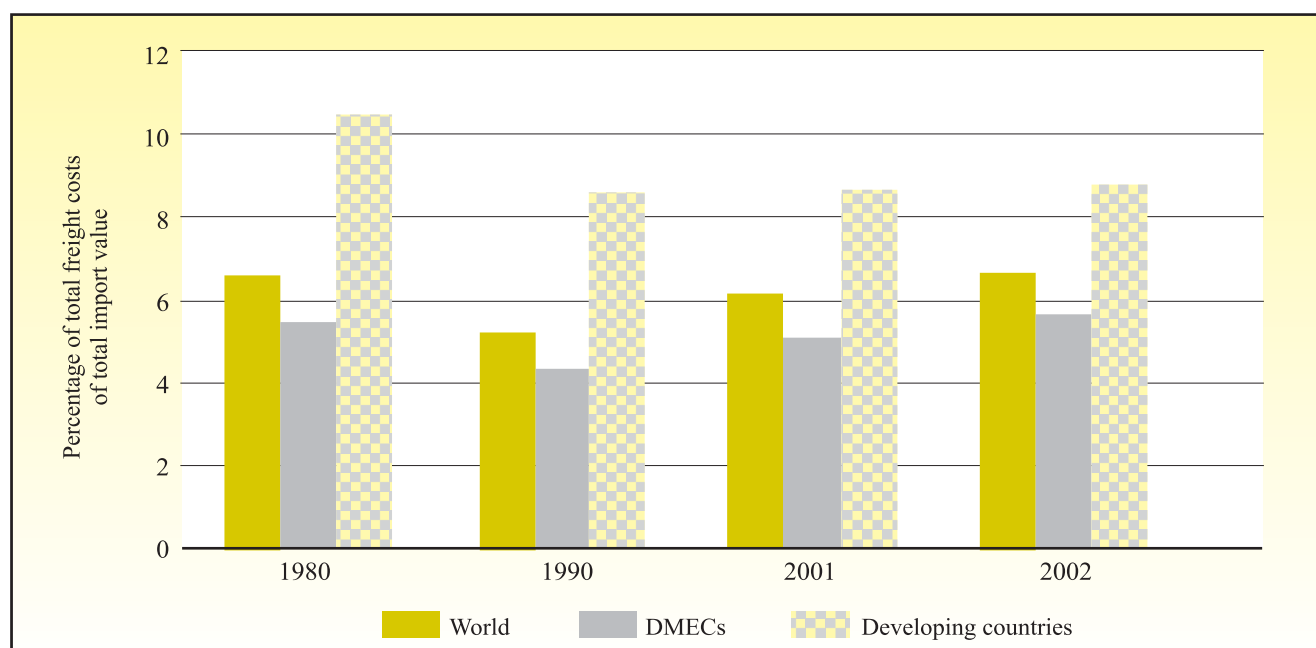
Developing countries in Asia accounted for 69.6 per cent of import value and 65.9 per cent of freight payments of all developing countries in 2002 as compared with 67.2 and 64.4 per cent respectively for 2001. The freight factor of this region has fluctuated by about 8 per cent since 1990 and was 8.3 per cent in 2002 — the same as in 2001.

Developing countries in America had their freight cost ratio increased to 10.0 per cent in 2002, as against 8.6 per cent in 2001.

Developing countries in Europe for the year 2002 had a slight decrease in freight rates to 8.7 per cent, down from 8.8 per cent in 2001. Small island developing countries in Oceania also had reduced freight rates payments at 11.4 per cent, less than the previous year's figure of 11.7 per cent. The long distance from major trading partners, low cargo volumes and high transshipment and feeder costs also contribute to the high levels of freight costs for island developing countries.

Figure 8

Estimates of total freight costs for imports in world trade, by groups



Source: Table 41.