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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 2004, tanker freight rates fluctuated in response to OPEC decisions to boost production levels, increased demand from major consumer countries and China, and buyers' decisions in an uncertain supply environment. (The uncertainty resulted from the tax problems of a major Russian oil producer, sudden fluctuations of Iraqi exports and concerns about the outcome of a referendum in Venezuela.)

In 2005, the demand for shipments of crude oil and oil products is likely to be affected by OPEC decisions related to production levels, by Russian export volumes, and by the strength of demand in Western Europe, North America, Japan and China.

2. Tanker freight rates

Overall, the year 2004 was a bright one for tanker owners. As table 31 indicates, two of the five freight indices for vessels engaged in transporting crude oil and petroleum products rose during the year. The index for VLCCs and ULCCs went from 133 to 216, and that for clean tankers from 287 to 367. The full extent of how good freight rates were during the year only becomes apparent, however, when one notes that all five indices had risen substantially in 2003 and that the three indices that fell during 2004 did so modestly. The indices for Suezmax, Aframax and handy-sized tankers dropped from 250 to 240, from 289 to 268 and from 386 to 378, respectively.

Average freight indices for 2004 in the five categories of tankers were above the corresponding averages for the last quarter of 2003. For VLCC/ULCC, the average of 144 recorded for the year is above the 106 recorded for the last quarter of the previous year. Indices increased by similar amounts for Suezmax-sized tonnage (the average was 195 for 2004 as against 153 for the last quarter of 2003) and Handy-sized tonnage (287 against 247). Less impressive was the increase for Aframax tonnage (229 against 204). The increase for clean tankers was the most remarkable – an average of 283 for 2004 against 218 recorded for the last quarter of 2003.

Very large and ultra-large crude carriers (VLCCs and ULCCs)

During the first quarter of 2004, all rates slid from the highs reached during the last quarter of the previous year. The corresponding rates from the Persian 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 by NGT to carry 252,500 tons of crude oil from the Persian Gulf to Japan at WS100. Similarly, Hyundai chartered the *Al Shegaya* to carry 265,000 tons of crude oil to Deasan at WS98. KPC chartered the *Falkonera* at WS105 to carry 260,000 tons from Kuwait to the

Table 31

Tanker freight indices, 2003–2005

(monthly figures)

	Lloyd's Shipping Economist					*Baltic Tanker*		*Lloyd's Ship Manager*				
	>200	**120-200**	**70-120**	**25-70**	**clean**	**Dirty Index**	**Clean Index**	**>150**	**70-150**	**30-70**	**< 35**	**clean**
2003												
October	59	119	160	197	194	963	838	58	120	153	202	180
November	117	151	201	239	219	1 316	843	70	158	164	258	213
December	142	190	251	304	240	1 576	992	125	279	333	290	243
Average 2003	106	153	204	247	218	1 285	891	84	186	217	250	212
2004												
January	133	250	289	386	287	2 121	1 081	125	268	345	285	266
February	132	178	215	355	326	1 982	1 330	146	179	306	285	357
March	132	153	182	238	323	1 380	1 460					
April	96	141	188	204	260	1 345	1 033					
May	95	137	164	201	235	1 129	908					
June	119	149	193	233	256	1 476	1 134					
July	127	156	187	243	240	1 442	1 110					
August	107	155	169	219	217	1 484	1 012					
September	103	154	163	229	226	1 243	1 033					
October	195	285	355	320	263	2 081	1 063					
November	276	342	374	433	390	2 974	1 780					
December	216	240	268	378	367	2 689	1 753					
Average 2004	144	195	229	287	283	1 779	1 225					
2005												
January	80	170	210	307	322	1 812	1 588					
February	135	165	181	233	267	1 401	1 303					
March	96	162	195	255	289	1 587	1 304					

Source: Executive summary in *Lloyd's Shipping Economist*, several issues; Baltic Tanker indices reported for the first working day of the month; indices reported by *Lloyd's Ship Manager* (which were discontinued in March 2004).

US ports on the Gulf of Mexico. Rates from the Persian Gulf were better to other destinations: Chevtex chartered the *Navarin* to carry 255,000 tons of crude oil to South Africa at WS138. This interlude was not sustainable, and rates continued to slide in April.

Rates recovered modestly during the following months. The corresponding rates from the Persian Gulf to Japan, the Republic of Korea, Europe and the Caribbean/US East Coast reached WS135, WS135, WS110 and WS107 respectively. Two fixtures for July to carry parcels of 265,000 tons of crude oil from the Persian Gulf fetched WS135 (for the *Universal Brave* chartered by NGT for destination in Japan) and WS117 (for the *New Vitality* chartered by Hyundai for destination in Daesan). By September, however, rates dropped to about WS109 for destinations in the east and about WS94 for destinations in the west.

Rates improved spectacularly during the last quarter. By October, rates from the Persian Gulf to the east reached WS200, and the average for November was WS310. Similar increases were found for western destinations. November average rates were WS204 for destinations in the Caribbean and on the East Coast of North America and WS230 for European destinations. In December, however, rates eased as the following fixtures from the Persian Gulf to the east indicate. During the first week of the month, Jomo chartered the *Asian Progress II* to take 260,000 tons of crude oil to Japan at WS299, and Kanggi secured the *El Greco* at WS307 to take 235,000 ton parcels to China. Two weeks later, Idemitsu chartered the *Tohzan* for WS110 to take 240,000 tons of crude oil to Japan, while Zhuhai Zhenrong engaged the *Astro Challenge* at WS235 to take 261,000 tons of crude oil to China. The average rates reached in December from the Persian Gulf to Japan, the Republic of Korea, Europe and the Caribbean/US East Coast were WS256, WS273, WS224 and WS177 respectively. Rates on these routes dropped by a third in January 2005 and then doubled from those levels in February.

Suezmax tanker tonnage

Rate fluctuations for Suezmax tonnage reflected the particular conditions prevailing on the routes served by these vessels. Rates from West Africa peaked in January 2004 at WS268 to destinations in Europe and WS264 to destinations in the Caribbean/US East Coast, and then eased in April to WS137 and WS124 respectively. 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 CEPSA to charter the *Iran Sarvestan* to take 135,000 tons from Ceyhan (Turkey) to Spain. On these routes, the rates bottomed in May at WS137 and WS125 respectively, with a slight improvement the following month. For instance, two parcels of 130,000 tons from West Africa fetched about the same rate. Sun Oil chartered the *Calm Sea* at WS140 for destination on the US East Coast, while Navion agreed to WS137 for the *Monte Toledo* for destination in Europe. Thereafter rates rose, particularly starting in September, when they reached WS175 and WS165, to then peak in November at WS348 for the two destinations. In December, rates eased, as is shown by the fixtures arranged by Sun early in the month, when it chartered the *Sea Star* for WS320 to take 130,000 tons to the Caribbean and then, later the same month, secured the *Max Jacob* to take a similar parcel to the East Coast of North America at WS220. In the end, the average rates for December were WS240 for the route to Europe and WS216 for destinations in the Caribbean and on the East Coast of North America.

For trades across the Mediterranean and from this area to northwest Europe, rates began the year at WS314 and WS323 respectively. In the following months, rates were volatile, dipping in February, April and August to about WS 150. Rates then increased to peak in November at WS363 and WS359, and thereafter dropped slightly in December to WS223 and WS215 respectively.

In January 2005, rates dropped on all routes. From West Africa to destinations in northern Europe the January rate was WS184. To the Caribbean and the east coast of North America, the rate was WS151. In February the rates dropped further to WS158 for both routes. The rates prevailing in January for Suezmax tonnage trading across the Mediterranean and from there to the Caribbean were WS191 and WS183, and in February the rate for both routes was WS184.

Aframax tanker tonnage

This tonnage is deployed for trading across the Mediterranean, across northwest Europe and on the Caribbean–North America route. Rates for Aframax tonnage also peaked in January 2004 at WS291 for fixtures across the Mediterranean, WS255 for those in northwest Europe and WS 337 for origins in the Caribbean. In the following months, the trend along all these routes was downward. For routes across the

Mediterranean, however, there was a rebound in March. For instance, 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; Hess agreed to WS165 for a 70,000-ton parcel from Coveñas (Colombia) to St. Croix.

April was a bad month, with rates in the Mediterranean and northwest Europe not even reaching WS140 and only WS141 being achieved from the Caribbean. By June, something of a recovery was underway. Exxon Mobil chartered the *Antarctica* for taking 80,000 tons across the Mediterranean at WS175, but the *Meribel* under charter with Petrogal to take a similar parcel from Mediterranean to Portugal fetched only WS165. Across the Atlantic, Premcor chartered the *Genmar Minotaur* at WS200 for taking 70,000 tons from Coveñas to the US east coast.

A full recovery was achieved during the last quarter of the year. The average October rate across the Mediterranean was WS380, which eased to WS259 by the end of the year. In northwest Europe, the corresponding rates were WS326 and WS241. In the Caribbean, rates rose to WS400 in October, peaked in November at WS407 and then dropped to WS349 by the end of the year. The following rates illustrate the market situation during the last half of December. Erg chartered the *Stena Conductor* to take a 80,000-ton parcel from the Libyan Arab Jamahiriya to Italy at WS325 just before Christmas. After that date, Alpine secured the *Minerva Roxanne* to take 99,000 tons from Primorsk to the UK/Continent range at W410 and Stasco chartered one Teekay vessel for taking 70,000 across the Caribbean at WS357.

The start of 2005 saw a rate correction in all these routes. For trades across the Mediterranean and across northwest Europe, rates were WS210 and WS200 in January and dropped to WS162 and WS145 in February. For trades from the Caribbean to the east coast of North America, the corresponding rates were WS241 and WS191.

Handy-size tanker tonnage

Average dirty spot rates for Handy-size tonnage trading from the Caribbean to North America's east and Gulf coast peaked in January 2004 at WS380 and were above the WS300 mark in the following month. In March, rates eased. In this month, Colonial and Hess reported two fixtures for carrying 50,000-ton parcels at WS215 and WS240 respectively. Rates collapsed to WS141 by April but recovered in mid-year to WS222. For instance, Conoco chartered the *Amazon Explorer* at WS257 for taking 50,000 tons from the Caribbean to the US east coast. Rates were steady in the following months and increased substantially starting in October (when they reached WS328) to peak in November at WS421.

Vessels of similar capacities trading in the Mediterranean and from there to the Caribbean and the east coast of North America recorded similar rate fluctuations. Again, the rates peaked in January 2004 at WS387 and WS331 but then eased, staying around the WS200 mark during late March but in April collapsing below this level. Rates were similar elsewhere; in March, Stusco chartered the *Maya* to carry 50,000 tons from Ecuador to the Gulf of Mexico at WS265. Two fixtures in mid-year indicated rates holding steady at the WS200 level. In June, Chevron Texaco chartered the *Chimborazo* to take 50,000 tons from Ecuador to the US east coast at WS237, while in the following month Vitol secured the *Jill Jacob* at WS240 to take a similar parcel from the Mediterranean to the US east coast. In October, rates improved substantially to peak in November at WS435 for fixtures across the Mediterranean and WS442 for fixtures from the Mediterranean to the Caribbean and North America's east coast.

There was some rate deterioration in December, as the following fixtures indicate. Citgo chartered the *Angistri* to take 50,000 tons from the Caribbean to the US east coast at WS420; BP Amoco secured the *Sibonina* at WS340 to take 55,000 tons from northwest Europe to the Gulf of Mexico; and China Oil took the *Victory III* at WS415 to take 60,000 tons from Indonesia to China. In this month, the average rate on the route from the Caribbean to North America's east coast was WS391, while those for trade across the Mediterranean and from there to the Caribbean were WS300 and WS344 respectively.

In January 2005, rates continued to erode in all these routes. Rates from the Caribbean were WS264 and dropped to WS210 in the following month. The corresponding rates across the Mediterranean and from there to Caribbean destinations were WS222 and WS291 in January. In February, rates stood firm on the former route but dropped to WS215 on the latter.

All clean carriers

Rates for large clean carriers in the ranges of 70,000–80,000 dwt and those of 50,000–60,000 dwt trading from the Persian Gulf to Japan started the year rising 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 Persian Gulf to Japan at WS267. May was weak, with rates at WS183 and WS181 respectively. A minor recovery ensued. For instance, in June PDI chartered the *Maersk Princess* at WS205 to carry 75,000 tons from the Persian Gulf to Japan. Rates recovered from September on and in November reached February levels, peaking at WS391 and WS395 the following month. By the end of the year, rates were firm, as is shown by PDI's fixture of the *Agathonissos* at WS370 to take a 75,000-ton parcel to Japan. The December averages were WS343 andWS385 for tankers of 70,000 to 80,000 dwt and 50,000 to 60,000 dwt respectively. Between August and December, time-charter-equivalent earnings for a 55,000-dwt tanker more than doubled from $27,100 to $55,000 per day.

Freight rates for tankers in the range of 35,000–50,000 dwt trading from the Caribbean to the Gulf of Mexico and east coast of North America also started the year with a rising trend 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 the *Citgo* and the other for 40,000 tons at WS330 for the *Hess*. But then rates eased. The average rate was WS245 in June, when Hess concluded a fixture for the *Elka Glory* at WS265 for taking 40,000 tons from the Caribbean to the US east coast. There was little improvement until November, when rates soared to WS348, to stay firm during December. Just before Christmas, three different charterers secured tankers to take 38,000-ton parcels from the Caribbean to the east coast of North America at WS340.

Smaller tankers in the range of 25,000–35,000 dwt trading out of Singapore to East Asian destinations also started the year with an upward trend, and rates peaked in February at WS346 for shipments from Singapore to East Asian destinations. The February rate for tankers trading across the Caribbean was WS418. Afterwards, rates in these two regions decreased until August, when they reached WS255 from Singapore and WS272 from the Caribbean. Two fixtures in June illustrate this weakening. The *Sheng Chi* was chartered by Shell at WS250 for carrying 30,000 tons from Singapore to Japan, and Global chartered the *Shannon* at WS300 for taking 28,500 tons from the Caribbean to the US east coast. Again, the recovery was during the last quarter, with rates peaking in November at WS407 from Singapore for destinations in east Asia and in December at WS444 for trade across the Caribbean and for destinations in North America.

In early 2005, rates for all vessel sizes and routes deteriorated. In February, rates for tankers in the ranges 70,000–80,000 dwt and 50,000–60,000 dwt en route from the Persian Gulf to Japan were at WS190 and WS218 respectively. Tankers in the range 35,000–50,000 dwt trading from the Caribbean fetched WS254, while smaller ones in the range 25,000–35,000 dwt fetched WS290 in the Caribbean and WS328 in Singapore.

The tanker-period charter market

Chartering activity was above the 1 million dwt level for most of the year, with the exceptions of April, October and December, when only 0.4, 0.6 and 0.4 million dwt were chartered. The peak months were February, July and November, when 2.4, 2.3 and 3.3 million dwt were reported chartered. In February, 48 per cent of charters were for more than two years and 62.8 per cent were for VLCC/ULCC tonnage. In July, 60.5 per cent of charters were for durations of less than 12 months and 51.1 per cent were for Aframax vessels. In November, 64.4 per cent of charters were for more than two years and 70.9 per cent were for VLCC/ULCC tonnage. In that month, the charter rate for a five-year-old VLCC was $90,000 per day. Total chartering activity reached 18.2 million dwt in 2004, with the year being particularly active for VLCC/ULCC and Aframax tonnage; each type of vessel had a share of about 30 per cent of chartering activity. Aframax vessels were particularly sought after in September, representing 71.1 per cent of the tonnage chartered, with rates at $31,000 per day. There was a strong preference for long-term charters; 40 per cent of charters were for over two years.

In February 2005, chartering activity reached 1.6 million dwt, about half of it involving VLCC tonnage secured for more than two years.

B. THE DRY BULK SHIPPING MARKET

1. The dry bulk trade

Large Cape-size vessels are engaged on the iron ore routes from Australia to the Far East and from Brazil to the Far East and Europe. During the year, the sustained high demand for iron ore in China and the congestion afflicting loading and unloading ports pushed up demand for these vessels on 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 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 Gulf of Mexico and the east coast of South America for carrying grain.

Smaller vessels, such as Handy-size ones, were used to carry grain to several destinations, notably those having 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 2004 at levels below those prevailing at the beginning of it. The Baltic Dry Index recorded a 17.2 per cent drop to 4598, with the lowest months in midyear. However, the Baltic Dry Index average for the year was 4495, well above the previous year's average of 2751. Overall, the year was a good one for owners of this type of tonnage.

As is shown in table 32, the dry cargo tramp time-charter increased during the year to 592 — a rise of 10.4 per cent over the year. The dry cargo tramp trip-charter went over the 700 mark by the end of the year and recorded an increase of 26.8 per cent from the level at the start of the year. The average time-charter index for 2004 was more than 170 points higher than that of the previous year, while the average trip-charter index of 534 more than doubled from the previous year.

Owners of dry cargo vessels benefited from increased demand, including that resulting from congestion in several dry bulk ports, and were able to absorb the increase in bunker prices. The average posted price for

Table 32

Dry cargo freight indices, 2002–2004

(monthly figures)

Period	Dry cargo tramp time charter[a] (1972 = 100)			Dry cargo tramp trip charter[b] (1985 = 100)		
	2002	2003	2004	2002	2003	2004
January	214	263	536	89	185	553
February	212	259	585	73	156	613
March	220	272	579	102	151	451
April	225	292	519	104	203	558
May	225	310	439	93	230	533
June	224	292	385	95	304	401
July	226	307	416	99	273	478
August	227	307	458	113	276	562
September	238	317	471	125	294	514
October	244	409	499	114	337	503
November	248	448	538	140	309	544
December	258	489	592	154	360	701
Annual average	230	331	501	108	257	534

Note: All indices have been rounded to the nearest whole number.

[a] Compiled by Maritime Research and published by Institute of Shipping Economics and Logistics (ISL), *Shipping Statistics and Market Review*.

[b] Compiled by *Lloyd's Shipping Economist* and published in ISL, *Shipping Statistics and Market Review*.

IFO 180 was around $170 per ton during the year. It surpassed $200 by October before going back to around $180 at year's end. Labour and insurance also affect the current and future expenditures of ship owners and ship operators (see box 2).

Dry bulk time charters: trips

Some representative fixtures concluded for vessels of different sizes on typical routes illustrate the evolution of rates during 2004. At the beginning of the year, Cape-size tonnage was chartered for round trips over the transatlantic and Singapore-Japan to Australia routes at rates of $92,500 and $85,500 per day. Rates fell soon after and by June bottomed at $38,725 and $42,900; after that month, they rose, reaching $91,320 and $87,500 per day in November to match the rates at the beginning of the year. Afterwards rates eased, reaching $84,585 per day by the end of the year. Rates dropped in to $63,875 per day in January 2005 but rose again to $72,750 per day the following month.

Panamax tonnage chartered at the beginning of the year for round trips from northern Europe to the east coast of South America fetched $40,750 per day, and rates even improved until March but collapsed afterwards to $20,775 per day in June. August's timid recovery to $32,975 gained force in October, peaked in November and ended the year slightly lower, at $41,170 per day. Evolution was slightly different for Panamax tonnage engaged for round trips from the Far East to the east coast of Australia: rates started the year at $42,500 per day and slid backwards in the following months to $18,900 per day in June. In July, there was a brief rebound to $30,100 per day, followed by a weak August when rates decreased to $29,600 per day. The September recovery gained momentum in October, and in November rates reached $46,500, a high for the year, but then eased to $43,900 per day in December. Rates at the start of 2005 were considerably lower, $31,300 per day in January and $34,700 per day in February.

Box 2

Seafarers and insurance issues

There were developments of interest to ship owners and sea carriers concerning seafarers and insurance matters. The Hong Kong Shipowners' Association called for uniform global regulation of the number of seafarers on board, as it was concerned that duties on them had increased. The International Ship Managers' Association pointed to seafarer shortages, particularly for specialized trades. A separate development was the launch of the BIMCO/ISF survey for assessing worldwide supply and demand with regard to seafarers and thus updating the 2000 survey. Concerning average wages, a study presented by the International Shipping Federation concluded that wages for many ratings had decreased by 3 per cent owing to replacement of old ratings by young ones and the influx of personnel from low-cost countries, but that salaries for officers had actually risen by 7 per cent.

Other matters concerning seafarers included the reaction to the European Union's proposal to impose criminal sanctions on those involved in reckless or seriously negligent pollution discharges. This caused grave concern for some maritime nations such as Greece, Cyprus and Malta. In ILO, the process for updating and harmonizing more than 60 ILO regulations into a single convention dealing with the living and working conditions of seafarers continued during the year, with some of the controversial points being flag responsibility for social security matters and a complaint mechanism for seafarers. In February 2005, the C185 Seafarers' Identity Documents Convention (Revised), 2003, adopted at the Ninety-First ILO Conference, entered into force. Seven biometric products were tested and two were selected that complied with the interoperability requirements for future provision and reading of biometric identity cards.

Concerning insurance, there was heated debate at the time of renewing policies, as shipowners were, for the fourth consecutive year, asked to agree to double-digit premium increases. Some of the arguments aired concerned rebates available to owners with good track records, less reliance on financial markets to shoulder the considerable risk increases posed by having ever larger and more costly assets afloat, low use of information technology by marine insurers, and the financial effects of recent hurricanes. Interestingly, early in 2005, TT Club reported record profits after a three-year recovery programme enforced by the board to reverse past trends and was looking to regain its "A" financial rating.

Handymax tonnage chartered for round trips from the Far East to Australia secured $25,750 per day in January, and by March such trips fetched $30,965. Then rates dropped until June, when they reached $15,500, but the trend was reversed in the following months and by December rates were $31,360, higher than at the start of the year. Handy-size tonnage chartered for trips from northern Europe to Africa's west coast followed a similar pattern. During the first quarter, rates were steady at about $20,000 per day. They bottomed in June at $15,900 and recovered soon after to reach $21,750 per day in December, a slight improvement over the beginning of the year. In January 2005, rates for Handymax and Handy-size tonnage on the above-mentioned routes dipped to $24,500 and $19,000 per day respectively.

Dry bulk time charters: periods

Estimates of rates for chartering vessels for a 12-month period and prompt delivery indicate that the solid rate levels of the beginning of the year softened during the first semester but recovered late in the year. Five-year-old Cape-size vessels in the range of 150,000–160,000 dwt were fetching $60,000 per day in January 2004 and $72,000 per day in December. Freight rates for a five-year-old Panamax started at $40,500 in January and decreased slightly by December to $40,000. The pattern was reversed for 15-year-old vessels, whose rates rose from $30,500 to $32,000 per day during the same period, indicating a tight tonnage supply.

The rate improvement for 10-year-old Handymax tonnage was modest, from $23,000 per day in January to $25,500 per day in December. Rates gains by five-year-old vessels of this size were better from $27,500 per day in January to $32,000 per day in December. Handy-size tonnage of about 15 years recorded similar rate increases: $16,750 per day in January and $21,250 per day in November.

All rates eased in January 2005. Five-year-old Cape-size vessels fetched $66,000 per day, while Panamax tonnage of the same age reached $38,500 per day. 15-year-old Panamax vessels were rewarded at $30,000 per day. Modest losses were recorded for 10-year-old Handymax and 15-year-old Handy-size vessels at $23,500 and $19,750 per day respectively.

Dry bulk trip charters

Over the year, rates for Cape-size tonnage were strong. Iron ore freight rates from Brazil to China started the year at $39.75 per ton and remained above $30 per ton except in May and June, moving up in December to a remarkable $42.45 per ton. A similar evolution occurred in coal rates from Richards Bay (South Africa) to western Europe: rates started at $27.30 per ton in January, stood at around $20 per ton until April, and from October went over $20 per ton, reaching $24.55 by December. The performance of rates for Panamax tonnage engaged in grain trading between the Gulf of Mexico and western Europe was also remarkable. In June rates went below $30 per ton, but they reached peaks of $41.55 per ton in March and $40.85 in November, with a minor drop to $40.35 in December. The rate evolution for Handy-size tonnage transporting scrap from the US west coast to the Republic of Korea was also positive. Rates started at $61.35 per ton in January, went below $60 per ton from June to October, then recovered to reach $69 per ton in December. The best month was February with an average rate of $89.25.

In early 2005, rates declined on all these routes. Cape-size tonnage carrying iron ore from South America to China fetched $36.85 per day, while that transporting coal from South Africa to Europe fetched $19.45 per day. Panamax rates for taking grain across the Atlantic were $37.15 per ton, and scrap was taken across the Pacific to the Republic of Korea for $63.65 per ton.

C. THE LINER SHIPPING MARKET

1. Developments in liner markets

General developments

The impact of containerization on liner trade is larger than that implied by the size and growth of fully cellular container ship fleets, analysed in table 7 of chapter 2. Total seaborne container carrying capacity rose during 2004 by 0.8 million TEUs to reach 9.4 million TEUs, an increase of 8.5 per cent. Fully cellular container ships increased their share of this total by almost 2 per cent to 76.6 per cent at the beginning of 2005, totalling 7.2 million TEUs. The share of general cargo ships reached 16.5 per cent. Single-deck vessels accounted for 0.9 million TEUs (9.9 per cent), while multi-deck ships added 0.6 million TEUs (about 6.6 per cent). During the year, single-deck tonnage and multi-deck tonnage stood at the same levels as the previous year. Ro-ro cargo and passenger ships accounted for 0.33 million TEUs, as in the previous year, with a share in total container carrying capacity of 3.7 per cent. Bulk carriers maintained their container-carrying capacity at 0.20 million TEUs, with their share in the total decreasing to 2.2 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 container ship fleet mentioned in chapter 2 continued at an accelerated pace. As is indicated in table 33, additions to the fleet during 2004 totalled 778,000 TEUs, and there were no reports of broken-up tonnage, which is understandable in light of the freight rates achieved by small and generally old tonnage. The growth of the cellular fleet continued at a sustained level, with 1,652,000 TEUs on order at the end of the year.

During 2004, the ordering of large vessels continued. In March, MOL ordered four 8,100-TEU-capacity container ships in addition to five smaller ones of 6,350-TEU capacity. In September there were indications that container ships with capacity of more than 10,000 TEUs were under construction in Europe. In January 2005, Cosco confirmed its order of four 10,000-TEU ships from Hyundai, a major shipbuilder from the Republic of Korea.

The push for bigger vessels kept alive the question of their deployment, which, owing to the volumes required to fill such vessels, would be restricted to the main east–west routes. One view advocates for these very large vessels to call exclusively at few and very large trans-shipment hubs and load centres at both ends of the route. Another, on the basis of diminishing economies of scale for vessels with capacity of more than 2,500–3,000 TEUs, advocates direct services with smaller vessels calling at multiple ports at both ends of the route. Large carriers operating along mainline routes usually favour the former view but have found that congestion in some load centres requires the addition of other ports to their service strings. Still, the implementation of security initiatives in a number of major ports works in favour of calls in a reduced number of ports, namely trans-shipment hubs. In any case, the influx of larger container ships along the main routes heralds the deployment of larger vessels on feeder routes too.

Concentration in liner shipping

The concentration process of recent years is resulting in the deployment of increased carrying capacity by the biggest liner operators. As table 34(a) indicates, over a one-year period ending on 30 September 2004, the top 10 liner operators increased their carrying capacity by 7.2 per cent to 4.1 million TEUs – 46.3 per cent of the world's total container carrying capacity. Similarly, the share of the top 20 liner operators increased by 10 per cent to 5.9 million TEUs – 67.1 per cent of the world's total container carrying capacity. A reflection of the momentum being gained by industry consolidation is the entry of only one operator, Hamburg Sud, in the list of the top 20 operators and the permanence of the top five carriers in the same order. The remaining 14 operators shifted places in the table. The biggest gain came for China Shipping (up by seven places), followed by CSAV Group (up by three places), NOL/APL and OOCL (up by two places each) and NYK and Zim (up by one place each). Eight operators slipped down: CP Ships and K Line (three places each), Cosco, MOL and Yang Ming (two places each) and Hanjin and Hyundai (one place each).

Concentration gained impetus in mid-2005 when the top operator announced a takeover of the fourth one. The resulting capacity of these two carriers will be more than double of the immediate follower, MSC.

Table 33

Growth of the world cellular container fleet

(in thousands of TEUs at the beginning of the year)

Year	Broken up TEUs	Additional TEUs	Fleet TEUs	Orders TEUs
2003	65	625	5 845	481
2004	30	622	6 437	1 995
2005	--	778	7 165	1 652

Source: UNCTAD secretariat on the basis of *Containerisation International* (February 2003 and 2004).

Many of the top container ship operators are also the largest owners of cellular container ship tonnage and complement their fleets by chartering tonnage from other owners, notably German financial companies. As table 34 (b) indicates, for the dates end 2002, end 2003 and end September 2004, the top 20 owner-operators plus the top 20 owners of container ships increased their share of the world cellular container ship fleet from 70.9 to 72 to 73.7 per cent respectively. Over the past two-plus years, the fleet of the owners-only has grown at least 13.6 per cent, and their share of cellular container ship tonnage increased from 23.8 at the end of 2002 to 26.3 per cent in September 2004.

Preliminary 2004 financial results for some of the above carriers were positive. P&O Nedlloyds reported a fivefold increase in operating profit to $410 million in the wake of revenue increases of 22 per cent to $6.7 billion. China Shipping reported an 80 per cent increase in net profit. For the first nine months of the year, K Line and MOL reported that net income had more than doubled.

A number of carriers provide services on several routes forming 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 exemptions to carriers participating in these agreements with the understanding that the benefits are greater than the drawbacks. In October 2004, the European Commission issued a white paper that started the process to repeal Regulation 4056/86, which provides block exemptions to sea carriers from some rules of competition law. Under this regulation, carriers are allowed to fix freight rates through the conference system. The European Liner Affairs Association, which represents the carriers, proposed to the Commission to set up an information exchange to enable discussion and information sharing between carriers on agreed categories. A survey of shippers found support for ending the conference system, and the results suggested that the current regulation for shipping consortia (Regulation 823/2000) was sufficient to ensure cooperation between carriers aiming to align supply and demand.

2. Freight level of containerized services

Chartering of container ships

Global liner shipping market developments are best reflected in the movements of the container ship charter market. This market is largely dominated by German owners, and particularly by members of the Hamburg Shipbrokers' Association (VHSS), which control some 75 per cent of all container ship charter tonnage available in the free market. Since 1998, the association[3] has published the *Hamburg Index,* which provides market analysis of container ship time charter rates for a period of more than three months. 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 with capacity of up to 500 TEUs, two types of gearless/geared vessels with capacity of over 2,000 TEUs and six types of geared vessels with capacity of up to 1,999 TEUs. Movements of time charter rates are reflected in table 35.

The average time charter rates for all types of container ships rose in 2004. The highest increase was for geared container ships with capacity in the range 1,000–1,299 TEUs, whose average time charter rate for 2004 was $19.14 per 14-ton slot per day, an increase of 64.7 per cent over the average rate for the previous year. Average rates for vessels with capacity in the range of 1,600–1,999 TEUs increased 60.2 per cent over the previous year's rates. A similar percentage increase (60 per cent) was achieved for smaller geared vessels with capacity of 700–999 TEU. Average rate increases for geared/gearless vessels in the capacity ranges of 2,000–2,299 and 2,300–3,400 TEUs were almost the same at 41.6 per cent. Average rate improvement decreased with vessel size: the rate for gearless vessels with capacity in the range of 300–500 TEUs was 24.4 per cent, and that corresponding to smaller vessels with capacity of up to 299 TEUs was marginally better at 27.8 per cent.

There was a steady positive evolution of the monthly average time charter rates for vessels of all types and sizes. Time charter rates for geared/gearless container ships in the range of 2,000–2,299 TEUs started the year at $11.11 per 14-ton slot per day, rose to $15.35 in February and March, and remained below $14 during the following months. Only in December 2004 did it climb up to $14.25 per 14-ton slot per day. Some of the charters reported during the year were impressive. Shipping Corporation of India chartered the eight-year-old 2,078-TEU *Lindavia* for six months at a rate of $40,000 per day. Similarly, larger geared/gearless container ships in the range of 2,300–3,400 TEUs obtained $10.62 per 14-ton

[3] See www.vhss.de/englisch/hax.html.

Table 34 (a)

Leading 20 container service operators as of 30 September 2004 on the basis of number of ships and total shipboard capacity (TEUs)

Ranking	Operator	Country/ Territory	No. of ships in 2004	TEU capacity in 2004[a]	TEU capacity in 2003
1	A.P. Moller Group	Denmark	346	900 509	844 626
2	MSC	Switzerland	237	618 025	516 876
3	Evergreen Group	Taiwan Province of China	151	437 618	442 310
4	P&O Nedlloyd	UK/Netherlands	158	426 996	419 527
5	CMA-CGM Group	France	178	373 191	299 174
6	NOL/APL	Singapore	91	295 321	273 573
7	Hanjin/DSR-Senator	Republic of Korea/ Germany	75	284 710	290 677
8	NYK	Japan	96	265 192	233 934
9	COSCO	China	125	253 007	274 128
10	China Shipping	China	106	236 079	143 655
Total 1-10			**1 563**	**4 090 648**	**3 738 480**
11	OOCL	Hong Kong China	63	216 527	185 502
12	MOL	Japan	68	213 195	222 533
13	Zim	Israel	85	196 420	174 480
14	CP Ships Group	Canada	83	196 317	201 706
15	K Line	Japan	66	195 750	186 017
16	CSAV Group	Chile	74	190 143	123 378
17	Hapag Lloyd	Germany	48	186 610	154 850
18	Yang Ming	Taiwan Province of China	59	168 006	153 783
19	Hyundai	Republic of Korea	36	139 243	136 548
20	Hamburg Sud	Germany	68	131 713	n. a.
Total 1-20			**2 213**	**5 924 572**	**5 277 277**
World fleet estimated at 1 July 2004 and 2003				**8 835 000**	**8 354 000**

Source: UNCTAD secretariat, compiled from *Containerisation International Yearbook 2005,* page 8; and ISL, *Shipping Statistics and Market Research*, (January-February 2005), page 36.

Note: All subsidiaries are consolidated.

[a] As of September 2004.

Table 34(b)

Leading owners and owner-operators of container ships at end 2002, end 2003 and end September 2004 on the basis of number of ships and total shipboard capacity (TEUs)

Owner-operators	End year 2002		End year 2003		End September 2004	
	No. of ships	TEUs	No. of ships	TEUs	No. of ships	TEUs
A. P. Moller Group	140	505 524	142	406	145	554 506
Evergreen Group	125	366 252	115	351 734	115	351 734
MSC	69	182 695	83	23 4 475	114	320 830
COSCO	131	244 739	132	244 805	129	241 493
P&O Nedlloyd	50	182 314	46	171 727	52	187 007
NOL/APL	46	153 479	48	160 058	48	160 058
NYK	52	148 432	50	150 706	49	149 093
OOCL	23	85 009	30	116 537	34	148 789
K Line	44	144 681	40	136 656	38	133 090
MOL	36	126 787	37	126 109	37	126 109
Hapag Lloyd	27	116 561	26	118 552	26	118 552
Yang Ming	31	100 977	32	101 315	35	117 815
CP Ships Group	33	87 287	38	105 627	38	105 627
CMA-CGM Group	21	67 435	27	81 917	31	104 997
Hanjin/DSR-Senator	24	90 515	26	90 803	26	90 803
China Shipping	15	7 556	24	49 734	32	82 274
Hyundai	0	0	0	0	19	71 803
PIL Group	50	52 656	55	61 352	58	64 354
Zim	17	52 265	19	58 277	20	61 282
UASC	22	60 996	22	60 996	22	60 996
TOTAL	956	2 776 160	992	2 963 786	1 068	3 251 212
Owner only	**No. of ships**	**TEUs**	**No. of ships**	**TEUs**	**No. of ships**	**TEUs**
NSB N'Elbe	71	226 482	75	255 865	72	250 813
E. R. Schiff	35	137 515	40	155 123	45	181 948
Costamare	39	120 123	42	132 158	43	136 958
C-P Offen	44	119 052	44	119 052	44	119 052
SAMAMA	22	77 202	28	101 466	29	102 774
Ofer Bros	22	60 470	27	84 763	30	99 163
Norddeutsche	20	60 383	24	81 089	26	96 589
Danaos	17	59 106	23	82 479	24	88 072
F Laeisz	25	86 833	24	82 466	24	82 466
Kaisho Shipping	4	25 400	12	70 016	14	82 416
Rickmers	41	66 329	43	69 684	47	80 152
Hans Lloyd	21	61 477	23	70 883	23	71 099
Leonhardt & B	38	83 486	37	66 578	38	68 128
Peter Dohle	26	43 700	31	58 295	34	63 155
Gebab	2	12 928	4	24 400	20	56 625
Schulte Grp	27	51 186	26	50 048	27	51 788
Hermann Buss	25	40 069	34	46 150	36	47 467
Shoei Kisen	15	23 336	17	30 515	20	47 015
Hansa T'hand	5	15 895	10	37 862	12	43 208
K Oldendorff	20	30 343	23	39 409	23	39 409
Total	519	1 401 315	587	1 658 301	631	1 808 297
World total		5 893 000		6 424 000		6 864 000

Source: UNCTAD secretariat, compiled from *Clarkson Research Studies* (September 2004) and from the Institute of Shipping Economics and Logistics (ISL), *Shipping Statistics and Market Review*, (January/February 2005), page 36.

Table 35

Container ship time charter rates

(US$ per 14-ton slot per day)

Ship type	Yearly averages				Monthly averages for 2004												Monthly averages for 2005						
	1997	2002	2003	2004	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7
Gearless																							
200-299	21.8	16.9	19.6	25.0	22.2	21.1	22.2	22.5	22.0	23.0	23.3	24.8	25.7	27.2	32.5	33.6	30.7	33.6	32.3	36.0	33.4	33.8	30.9
300-500	16.8	15.1	17.5	21.7	18.5	17.9	19.4	20.7	20.7	21.9	20.8	23.0	21.7	22.1	25.5	28.6	28.1	29.6	29.0	30.5	31.9	28.7	26.2
Geared/Gearless																							
2,000-2,299	9.7	4.9	9.8	13.8	11.1	15.4	15.4	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	14.3	14.3	16.0	15.7	17.4	17.4	17.2	17.2
2,300-3,400[a]		6.0	9.3	13.1	10.6	12.0	12.0	14.5	14.5	14.5	12.9	12.9	13.4	13.4	13.4	13.9	13.9	13.9	13.6	13.5	13.5	13.5	12.8
Geared																							
200-299	22.0	17.0	18.9	27.0	21.5	22.9	23.3	25.2	25.2	23.9	26.1	29.2	29.2	31.7	32.2	33.6	35.6	33.4	34.6	35.4	35.9	37.3	39.1
300-500	17.2	13.4	15.6	22.2	19.5	18.3	18.8	21.9	20.3	19.8	22.1	23.8	24.3	24.5	27.7	25.8	26.2	28.8	30.0	31.8	30.9	33.2	31.3
600-799[b]		9.3	12.3	19.6	14.3	14.8	16.2	19.0	17.7	19.5	20.6	22.7	22.0	21.4	22.8	24.4	22.8	25.4	27.3	25.3	25.8	25.4	25.4
600-799[c]		9.1	12.1	18.4	14.1	15.0	15.8	16.8	19.5	19.2	20.4	18.2	19.8	19.8	21.1	21.0	23.1	23.7	22.9	22.6	22.6	22.4	23.5
1,000-1,299	12.5	6.9	11.6	19.1	13.7	15.5	16.6	17.6	19.0	20.2	19.4	19.6	20.8	21.2	22.2	24.0	24.8	24.9	25.3	26.3	25.9	25.9	25.8
1,600-1,999	10.5	5.7	10.0	16.1	12.5	13.2	14.3	13.9	17.9	16.2	14.0	15.8	19.4	19.4	18.3	18.3	18.9	17.7	17.7	18.0	15.8	16.4	12.4

[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, 2003–2005

(US dollars per TEU)

	Trans-Pacific		Europe–Asia		Transatlantic	
	Asia–US	US–Asia	Europe–Asia	Asia–Europe	US–Europe	Europe–US
2003						
First quarter	1 529	826	704	1 432	899	1 269
Change (%)	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	3.8	-11.6	1.9
Fourth quarter	1 892	810	754	1 662	834	1 469
Change (%)	-3.9	-2.9	-3	2	2	3
2004						
First quarter	1 850	802	733	1 686	778	1 437
Change (%)	-2.2	-1	-2.8	1.4	-6.7	-2.2
Second quarter	1 863	819	731	1 738	788	1 425
Change (%)	0.7	2.1	-0.3	3.1	1.3	-0.8
Third quarter	1 946	838	735	1 826	810	1 436
Change (%)	4.6	2.3	0.5	5.1	2.8	0.8
Fourth quarter	1 923	806	769	1 838	829	1 471
Change (%)	-1.1	-3.8	4.6	0.6	2.3	2.4
2005						
First quarter	186.7	800	801	1 795	854	1 514
Change (%)	-2.9	-0.7	4.2	-2.3	3	2.9

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 United States refer to the average for all three coasts. Rates to and from Europe refer to the average for northern and Mediterranean Europe. Rates to and from Asia refer to the whole of South-East Asia, East Asia and Japan/Republic of Korea.

slot per day in January and 13.93 in December, which represents an increase of 36.6 per cent for the year.

Rates for geared vessels with capacity in the range of 1,000–1,299 TEUs fared exceptionally well – they were up by 74.8 per cent to $23.95 per 14-ton slot per day by December 2004. Rates for vessels with capacity of 600–799 TEUs rose 70.5 per cent to $24.35 per 14-ton slot per day by December. All other monthly rates also recorded double-digit percentage increases, with the lower ones of 31.8 per cent corresponding to small geared vessels with capacity in the range of 300–500 TEUs.

Freight rates in main routes

By the end of 2004, freight rates on the main containerized routes – trans-Pacific, transatlantic and Asia-Europe – were mostly above the levels that prevailed at the end of 2003 (see table 36). On the Asia–Europe route, in particular, rates rose to 10.6 per cent (westward) and 2 per cent (eastward). The westward rate for the fourth quarter of 2004 ($1,838 per TEU) was far above that for the third quarter of 2000 ($1,673 per TEU) and highlighted the extent of increases along this route. The eastbound rate across the Pacific increased by 1.6 per cent, while the westward rate decreased marginally by 0.5 per cent. The eastbound rate at the end of 2004 was $1,923 per TEU, above the rates of the previous two years but still well below the peak rate of $2,000 per TEU reached in 2000. For the transatlantic route and between the fourth quarters of 2003 and 2004, the rate evolution was much less impressive. On the dominant westbound route to the United States, freight rates rose by 0.1 per cent to $1,471 per TEU, while in the opposite direction they fell by less than 1 per cent to $778 per TEU.

On the trans-Pacific route, where cargo flows are largest, freight rates increases were achieved only during the second and third quarters of 2004. The dominant eastbound leg recorded modest gains during these months before a small drop during the last quarter. Rate evolution was less impressive for the westbound leg, which saw a larger rate reduction during the fourth quarter. During the first half of the year, the Transpacific Stabilization Agreement (TSA), which accounts for 90 per cent of the trade, sought rate increases of about $450 per FEU in the negotiations of annual service contracts, but shippers seem to have agreed to only about half of that amount. The lack of empty boxes in the Far East continued to afflict trade during the year, and in September "origin equipment detention charges" in the range of $44 to $65 per dry freight box were invoiced to US shippers. In a separate development, the China Shipper Association is considering taking carriers to court in relation to the terminal handling charges being levied at ports since early 2003.

On the dominant westward leg of the Asia–Europe route, freight rates recorded single-digit growth during the year. Rates increased particularly during the third quarter of 2004 (more than 5 per cent), with a noticeable slowdown during the last quarter. This seemed to reflect the outcome of rate increases of about $300 per TEU sought by the Far Eastern Freight Conference (FEFC) and anecdotal evidence suggesting that up to four fifths of that amount was agreed to by shippers. On the eastbound leg to Asia, the first two quarters saw rate deterioration of 2.8 and 0.3 per cent respectively, with a recovery during the second half of the year, particularly the last quarter, which brought a 4.6 per cent increase in rates to $769 per TEU.

Freight rate movements on the transatlantic route were mostly positive, apart from the significant reductions of 6.7 and 2.2 per cent of the first quarter of 2004 in both directions. For the dominant leg originating in Europe, the best result was that of the last quarter, a modest 2.4 per cent increase in freight rates to $1,471 per TEU. Along the eastbound leg, there also were modest gains particularly during the second half of the year.

Concerning other charges applied in liner shipping, the issue of security charges cropped up in several places, often mixed up with security charges levied by ports and terminals. FEFC confirmed that "add-on" payments of $6.20 per box would be billed from September 2004 to cover security-related expenses related to running vessels and the administrative cost of processing terminal charges for empties and trans-shipment movements.

3. Supply and demand in respect of main liner services

During 2004, the demand for containerized services showed a healthy recovery. All the estimates of cargo flows on the three major containerized routes based on the figures for the first nine months of 2004 indicated in table 37 showed increases. In fact, these aggregates may mask some intra-regional trade and trans-shipment activity. Nevertheless, the aggregates point to an expansion of traffic from the Far East, notably mainland China, as well as reduced activity across the Atlantic.

For trans-Pacific trade, 2004 witnessed a continuation of the boom of previous years, particularly for eastward trade. The reason for this impressive 15.7 per cent increase in trade in the face of the declining US dollar is the flow of industrial and consumer goods from factories relocated to mainland China and other Asian countries. Cargo flow is now evenly distributed along the year, with the peak season having less impact on deployment of shipping capacity. Vessels with capacity of over 5,000 TEUs, including some over 8,000 TEUs, were deployed by sea carriers in several of their services, but the additional supply capacity was dampened by congestion in several ports and the persistence of container imbalances. All-water services from Asia to the US east coast were maintained partly to avoid congested ports on the west coast, and demurrage time was cut substantially to force empty containers back to Asia. Waste paper, comprising waste and scrap paper board, kraft linerboard, unsorted paper and corrugated paper, was one of the main commodities shipped from North America to the Far East/Asia, making up about a fifth of all shipments. Destination shifted from Japan and the Republic of Korea to China, where the paper was reprocessed for packaging exports.

On the Europe–Asia trade route, trade flows increased at double-digit rates. In the future, overcapacity may

Table 37

Estimated cargo flows along major trades routes

(millions of TEU)

	Trans–Pacific		Asia–Europe		Transatlantic	
	Asia–US	US–Asia	Europe–Asia	Asia–Europe	US–Europe	Europe–US
2003	10.19	4.05	7.26	4.92	1.72	2.9
2004	11.78	4.3	8.4	5.6	1.8	3
% change	15.6	6.2	15.7	13.8	4.6	3.4

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

Table 38

Percentage capacity share for Europe–Far East trade

(percentages)

Operator	Mid-2004	Mid-2003
Grand Alliance	23.6	24.0
New World Alliance	11.9	13.9
Maersk Sea Land	14.5	16.8
K Line and Yang Ming	7.5	9.7
CMA CGM / Norasia and others	5.6	5.7
Total	**63.1**	**70.1**

Source: UNCTAD secretariat from *Lloyd's Shipping Economist*, September 2004, page 10.

develop on the route, as 8,000-TEU vessels are due for delivery in the near future. During 2004, however, repositioning of empties was a major concern for all carriers, as about one of two boxes moving westward to northern Europe was send back empty, with the proportion being higher for the Mediterranean – two empties shipped back for each three moved westwards. Empty box repositioning and congestion in several ports kept supply and demand aligned throughout the year despite substantial deployment of additional tonnage. The Far Eastern Freight Conference (FEFC) reduced its share of deployed capacity to 63.1 per cent by mid-2004, which means that the share of non-conference carriers such as Hanjin, Evergreen, Cosco and others expanded. The share of these non-conference carriers was larger in some regions; for the Mediterranean it was estimated at 50 per cent.

By comparison, the transatlantic route had lacklustre figures in 2004. Flows heading east increased by only 4.6 per cent, while westward flows increased by 3.4 per cent. The devaluation of the US dollar against the euro for most of the year explained this performance. Demand was even during the year, and capacity surplus was unnoticed owing to congestion in several ports. Unlike on the other two routes, repositioning of empty containers was not a problem. Some carriers belonging to TACA decided to sue the European Commission over the cost of bank guarantees provided during the time of appeal against a fine imposed on them by the Commission.

In the secondary north–south and regional trades, the situation was similar. The rate of growth for containers flowing between North-East and South-East Asia was

14.1 per cent and that corresponding to the Asia–Oceania route was 15.3 per cent. On these routes, regional carriers were hampered by the high levels reached by chartered tonnage. Box repositioning surcharges were again applied on the route to Australia. Container flows between Europe and South and Central America increased by a remarkable 12.5 per cent. Trade flows between North and South America and the Caribbean increased by 8.8 per cent. The laggards were trade between Europe and Oceania and West Africa, which expanded by 4.2 and 3.2 per cent respectively.

4. Liner freight index

Table 39 shows movements 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 the year 2003 rose by 6 points from the 2002 level to 101 points (1995 = 100), reflecting the improved rates in both the homebound and outbound trades. The deterioration of the average homebound index was barely noticeable – only 1 point up to 94 for the year. The monthly figures indicate that rates peaked from July to September, reflecting increased volumes from the Far East and, to a much lesser extent, across the Atlantic. In outbound trade, the average level in 2004 dropped 4 points to reach 102 points. Most of the months were above the 100-mark, which highlights the relative stability of demand in this direction.

5. Liner freight rates as percentage 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 2004. 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 7.5 per cent for 2004. The f.o.b. price for jute increased by about 10 per cent and almost recouped the drop of the previous year, while freight rates moved up by almost 16 per cent, and this explains the modest decrease in the freight ratio to 27.6 per cent for 2004. While there was a price reduction for cocoa beans shipped from Ghana of about 12 per cent, freight rates were steady, so that 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	100	88	96	96	109	107	104
November	99	100	96	90	96	90	108	105	101
December	97	96	94	88	92	89	105	100	100
Annual average	95	101	98	84	95	94	105	106	102

Source: UNCTAD secretariat on the basis of the Liner Index of Germany's 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	2002	2003	2004
Rubber	Singapore/Malaysia–Europe	10.5	8.9	15.5	13.5	8.3	7.5
Jute	Bangladesh–Europe	12.1	19.8	21.2	21.7	29	27.6
Cocoa beans	Ghana–Europe	2.4	2.7	6.7	2.8	3.3	3.7
Coconut oil	Sri Lanka–Europe	8.9	12.6	n.a.	10	11.5	10.1
Tea	Sri Lanka–Europe	9.5	9.9	10	6.8	7.8	8.6
Coffee	Brazil–Europe	5.2	6	10	7.6	6.8	6.5
Coffee	Columbia (Atlantic)–Europe	4.2	3.3	6.8	3.9	3.9	2.3
Coffee	Columbia (Pacific)–Europe	4.5	4.4	7.4	4.6	4.8	2.6

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 1990–2003).

[a] C.i.f. prices are quoted for coffee (Brazil–Europe and Colombia–Europe) and coconut oil. For cocoa beans (Ghana–Europe), average daily prices in London are quoted. For tea, Kenya auction prices are quoted. Prices of the remaining commodities are quoted f.o.b. The freight rates include, where applicable, bunker surcharges and currency adjustment factors, and (for coconut oil only) a tank cleaning surcharge. Conversion of rates to other currencies is based on parities given in UNCTAD's Commodity Price Bulletin. Annual freight rates were calculated using a weighted average of various freight quotes during the year, weighted by their period of duration. Commodity prices for 1990–2004 are from UNCTAD's Commodity Price Bulletin.

freight ratio increased from 3.3 in 2003 to 3.7 in 2004. The c.i.f. price of coconut oil recorded an impressive increase of about 41 per cent in 2004, which, coupled with the 24 per cent increase in freight rates during the year, resulted in a freight ratio of 10.1 per cent, very close to that of 2002. The ratio of liner freight rates to the f.o.b. price of tea increased from 7.8 to 8.6 per cent, because freight rates increased almost 13 per cent in 2004 while prices increased only 2 per cent. The price for coffee from Brazil to Europe rose by a remarkable 34 per cent in 2004, while freight rates rose 27 per cent; this resulted in a decrease of the freight factor from 6.8 per cent in 2003 to 6.5 per cent in 2004. The price of Colombian coffee exported to Europe from Atlantic and Pacific ports rose about 25 per cent during 2004, while freight rates actually decreased by a quarter and a third on these two routes respectively. These changes resulted in freight ratios below 3 per cent — the lowest for the commodities under review.

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. For the transport sector, table 41 provides estimates of total freight payments for imports and their share as a percentage of total import value by country groups (see also figure 8). In 2003, the world total value of imports (c.i.f) increased by 15.7 per cent, while total freight paid for transport services increased by 12.2 per cent, reflecting the upward trend in freight rates that prevailed during that year. The share of global freight payments in import value decreased to 5.4 per cent from 5.5 per cent in 2002. In 2000, the share of freight costs in import

Table 41

Estimates of total freight costs for imports in world trade[a] by country groups

(billions of dollars)

	Country group	Estimate of total freight costs imports	Value of imports (c.i.f)	Freight costs as a percentage of import value
1990	World total	173. 1	3 314.3	5.2
	Developed market-economy countries	117. 0	2 661.6	4.4
	Developing countries-total	56.1	652. 6	8.6
	of which in:			
	Africa	9.0	81.9	11.1
	America	9. 6	117.8	8.2
	Asia	35.1	427. 9	8.2
	Europe	1 .9	21.3	9.0
	Oceania	0.5	3.8	12.3
2000	World total	342.6	6 147.1	5.6
	Developed market-economy countries	191.1	4 439.6	4.3
	Developing countries-total	151.5	1 707.5	8.8
	of which in:			
	Africa	14.3	110.6	12.9
	America	35.2	404.8	8.7
	Asia	99.2	1 162.6	8.5
	Europe	2.2	24.4	9.0
	Oceania	0.6	5.1	11.8
2002	World total	337.9	6 097.3	5.5
	Developed market-economy countries	181.6	4 386.2	4.1
	Developing countries-total	156.3	1 711.1	9.1
	of which in:			
	Africa	14.0	118.3	11.8
	America	38.5	365.3	10.5
	Asia	101.0	1 191.9	8.5
	Europe	2 .2	30.0	8.7
	Oceania	0.6	5 .5	10.9
2003	World total	379.2	7 052.9	5.4
	Developed market-economy countries	195.1	5 029.3	3.9
	Developing countries-total	184.1	2 023.6	9.1
	of which in:			
	Africa	17.9	150.2	11.9
	America	39.2	398.2	9.8
	Asia	122.7	1 430.3	8.6
	Europe	3.5	38.4	9.1
	Oceania	0.8	6.5	12.3

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, countries of Central and Eastern Europe and republics of the former Soviet Union, and socialist countries of Asia are not included owing to lack of information or for other reasons.

value stood at 5.6 per cent, or nearly 8 per cent higher than the average ratio in 1990. The regional comparison indicates that freight costs for imports by developed market-economy countries continue to be lower than those of developing countries, with the difference between the two groups fluctuating slightly. For 2003, the total value of imports by developed market-economy countries increased by 14.7 per cent while total freight costs increased by 7.4 per cent; thus freight costs as a percentage of import value decreased to 3.9 per cent (4.1 per cent in 2002) as compared to 9.1 per cent (same percentage in 2002) 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 of developed market-economy countries.

2. Regional trends

The total freight costs of developing countries increased by 17.7 per cent in 2003. Within this group, African developing countries recorded a marginal increase in freight costs from 11.8 per cent in 2002 to 11.9 per cent in 2003 – a reflection of higher freight rates and sustained improvements in terminal handling that offset insufficient infrastructure facilities and inadequate management practices, specifically for transit transport, and the low productivity of inland transport.

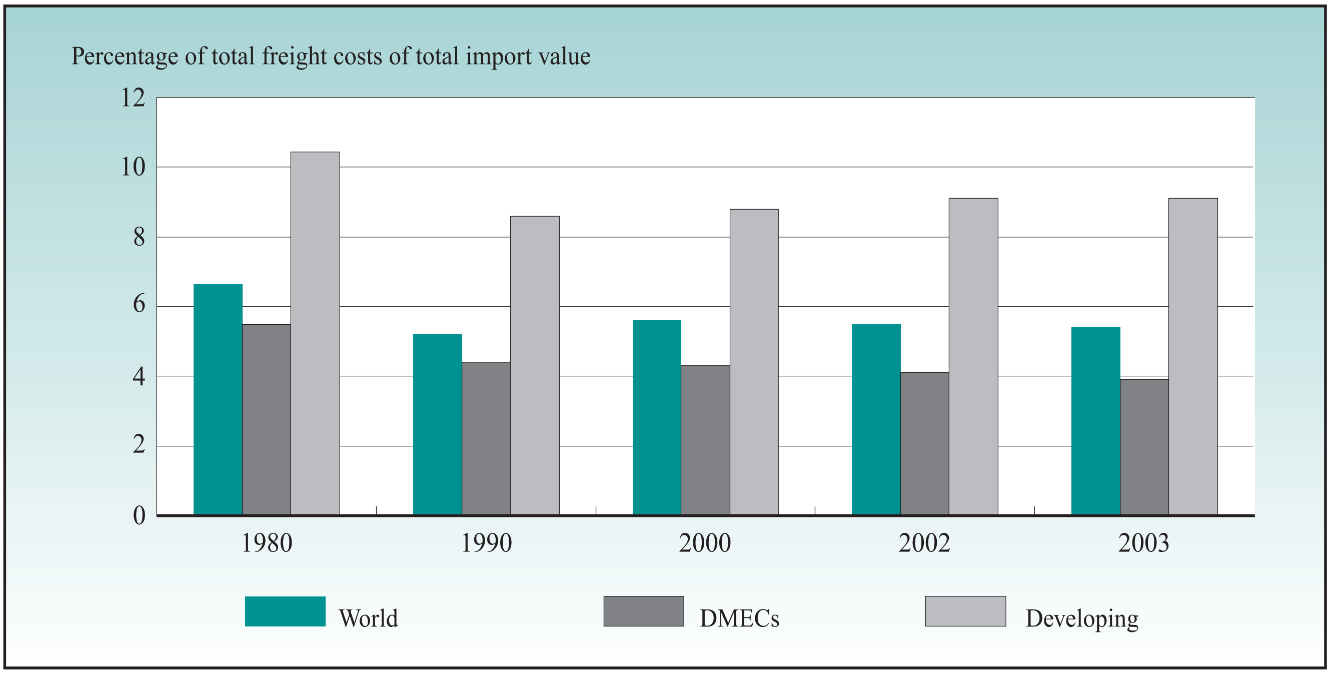
Developing countries in Asia accounted for 70.6 per cent of import value and 66.6 per cent of the freight payments of all developing countries in 2003, as compared to 69.6 and 64.5 per cent respectively for 2002. The freight factor of this region has fluctuated about 8 per cent since 1990 and was 8.6 per cent in 2003.

Developing countries in America saw their freight cost ratio decrease to 9.8 per cent in 2003 compared to 10.5 per cent in 2002. Developing countries in Europe had a modest increase in freight rates to 9.1 per cent, up from 8.7 per cent in 2002.

Small island developing countries in Oceania saw freight rates increase to 12.3 per cent, higher than the previous year's 10.9 per cent. Long distances from major trading partners, low cargo volumes, and high trans-shipment and feeder costs contribute to high freight costs for island developing countries.

Figure 8

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



Source: Table 41.