

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 2005, tanker freight rates fluctuated in response to OPEC decisions to adjust production levels to counter overproduction and to boost those levels to compensate for production shortages elsewhere. Continuing demand from major consumer countries and China and production stoppages in Africa and in the Gulf of Mexico due to the severe hurricane season also affected those rates.

In 2006, the demand for shipments of crude oil and oil products is likely to be affected by OPEC decisions related to production levels and export volumes from the Russian Federation, as well as by the strength of demand in Western Europe, North America, Japan and China.

2. Tanker freight rates

Overall, the year 2005 was a mixed one for tanker owners. As table 31 indicates, three of the five freight

indices collected for vessels engaged in transporting crude oil and petroleum products went up during the year. The index for VLCC/ULCC went up from 80 to 149 and the indices for Capesize and Aframax tankers ended the year at 257 after starting at 170 and 210 respectively. The index for handy-sized tankers dropped from 307 to 286 and the decrease of the index for clean tankers was more pronounced — from 322 to 284. With the exception of the index for Capesize tonnage all the indices for December 2005 were lower than those prevailing in the corresponding month of the previous year.

Average freight indices for 2005 in four categories of tankers, except clean tonnage, were below the corresponding averages for 2004. For VLCC/ULCC the average of 100 recorded for the year was about one third down from the average of the previous year. For Suezmax and Aframax tonnage the averages were 157 and 191 respectively, about one fifth lower than the averages for the previous year. Handy-size tonnage recorded an average index of 271 for 2005, about 5 per cent less than the one for the previous year. Only clean tonnage recorded a modest increase in the average index, from 283 to 287 in 2005.

Table 31

Tanker freight indices, 2004–2006
(Monthly figures)

| | Lloyd's Shipping Economist | | | | | Baltic Tanker | |
|------------------|----------------------------|---------|--------|-------|-------|---------------|-------------|
| | >200 | 120-200 | 70-120 | 25-70 | clean | Dirty Index | Clean Index |
| 2004 | | | | | | | |
| 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 | 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 |
| April | 85 | 124 | 157 | 212 | 274 | 1 308 | 1 276 |
| May | 75 | 137 | 191 | 271 | 253 | 1 331 | 1 157 |
| June | 61 | 126 | 157 | 267 | 253 | 1 235 | 1 030 |
| July | 83 | 108 | 144 | 248 | 243 | 1 194 | 1 127 |
| August | 69 | 107 | 133 | 190 | 211 | 1 099 | 981 |
| September | 82 | 120 | 154 | 244 | 350 | 1 104 | 1 290 |
| October | 109 | 186 | 249 | 376 | 385 | 1 532 | 1 815 |
| November | 179 | 225 | 269 | 358 | 312 | 2 174 | 1 801 |
| December | 149 | 257 | 257 | 286 | 284 | 2 147 | 1 296 |
| Average | 100 | 157 | 191 | 271 | 287 | 1 494 | 1 331 |
| 2006 | | | | | | | |
| January | 112 | 163 | 193 | 314 | 342 | 1 945 | 1 565 |
| February | 116 | 168 | 176 | 267 | 282 | 1 672 | 1 378 |
| March | 86 | 127 | 163 | 204 | 225 | 1 098 | 979 |
| April | 63 | 108 | 133 | 208 | 213 | 985 | 818 |
| May | 79 | 132 | 158 | 217 | 241 | 1 090 | 1 118 |

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).

Very large (VLCC) and ultra large (ULCC) crude carriers

During the first quarter of 2005 all rates slid from the extraordinarily high levels reached during the last quarter of the previous year. At the beginning of the year, the corresponding rates from the Persian Gulf to Japan, the Republic of Korea, Europe and the Caribbean/East Coast of North America were WS74, WS70, WS71 and WS67 respectively. In the following month they doubled on all routes and then gently fell to the original levels by May. Two fixtures illustrate the extent of rate improvements during February on the route to Japan.

Early in the month Idemitsu chartered *Takayama* at WS120 to take 250,000 tons of crude oil with delivery during the second week of March. By the end of February Cosmo had chartered the *Pacific Ruby* to take 255,000 tons at WS149 with delivery one week later. For deliveries to the Republic of Korea the February rates were good too: Hyundai chartered *Bandaisan* to take 262,000 tons at WS165 for delivery in mid-March. A similar picture emerged regarding the routes heading westward during the same month. CSSA chartered *Front Champion* to take a parcel of 280,000 tons for WS130 with destination UK/Continent, while Irving Oil

secured *Amantea* at WS112 to take 290,000 tons to the East Coast of North America.

During June rates collapsed, reaching only WS57 on all routes except the one to the Caribbean and the East Coast of North America, where rates were even worse at WS54. Early June fixtures to Japan and the Republic of Korea illustrate the depressed rate levels. Two companies, Idemitsu and Jomo, chartered the tankers *Suzuka* and *Asian Jewel* to take 250,000 tons parcels to Japan at WS57, while LGCaltex chartered the *New Vitality* and another, unspecified vessel to take two parcels of 265,000 tons to the Republic of Korea also at WS57. The same freight was paid by Engen to secure the *Shinko Landes* for South Africa, and tankers bound for the Red Sea fetched only WS50 — this rate was paid by Hellenic for the *TI Africa* to carry 275,000 tons and also by Tupras for the *Iran Najim* to carry 290,000 tons. This low rate was also agreed by SinoChem to charter the *Oriental Venture* to carry 260,000 tons to China, and on the routes to the Caribbean Royal Dutch Shell secured the *Formosa Petrochallenger* to take 274,000 tons, while KPC chartered the *Amantea* to carry 280,000 tons. Rates for Northern European destinations were marginally better at WS55, which was the rate paid by Royal Dutch Shell for the *Arosa* to take 280,000 tons.

Rates recovered modestly during July, the improvement being better on the routes to the east, at around WS90, with rates to the west still at around WS75. Then rates collapsed again in August in the low WS60s but started to improve in September, and in October they were around WS100 for the routes to the east and above WS90 for those to the west. Rates peaked in November, reaching WS167 for destinations in Japan and WS185 for those in the Republic of Korea, and then eased by the end of the year, recording for those destinations averages of WS126 and WS137 respectively. A similar trend was observed for destinations in North-West Europe and in the Caribbean and East Coast of North America. For those destinations the November rates were WS156 and WS139, while those of December were WS122 and WS113 respectively. For destinations in China rates eased slowly: Unipecc chartered two vessels — the *Hebei Mountain* and the *Grand Explorer* — to take 265,000 tons parcels at WS190 and WS197 respectively at the end of the year.

In January 2006 rates deteriorated further, dropping by more than 12 per cent for destinations in the east and by more than 20 per cent for those in the west. Already

during the last weeks of December rates had eased considerably — during the third week of that month Repsol chartered the *Universal Brave* for delivery in mid-January to take 278,900 tons from Kharg Island to Spain at only WS102. In mid-January Vela chartered six vessels to take 285,000 tons parcels from Ras Tanura to the Gulf of Mexico at rates fluctuating between WS75 and WS90. Although low the rates of January 2006 were about 30 per cent higher than those recorded in January 2005.

In the following months rates on all routes deteriorated further, reaching a low of WS55 in April for voyages originating in the Persian Gulf and destined for Japan and the Republic of Korea, and WS60 for destinations in Western Europe. By way of example, NITC chartered *Seaking* in April to carry 285,000 tons from the Persian Gulf to the UK/Continent at WS57, while in May, NGT chartered *Tataki* to carry 235,000 tons to Japan at WS68. Rates slightly recovered in June hitting the WS100 mark on all routes with the exception of destinations in North West Europe where an average rate of WS80 prevailed. The rates were WS101, WS102 and WS114 for destinations in Japan, Republic of Korea and Gulf of Mexico respectively. Representative fixtures of this month are the charter of *Effie Maersk* by Royal Dutch Shell to carry 270,000 tons at WS80 from the Persian Gulf to the UK/Continent and that of *Pacific Crystal* by NGT to carry 255,000 tons from the Persian Gulf to Japan at WS112.

Suezmax tanker tonnage

Rate fluctuation for Suezmax tonnage reflected the particular conditions that prevailed on the routes served by those vessels. Rates from West Africa started the year at WS184 for destinations in Europe but then dropped for most of the year and were almost halved by August when they reached WS98. The lowest fixtures were probably the ones secured by CSSA, which chartered the *SFC Caucasus* to take 130,000 tons to UK/Continent destinations at only WS90, and by BP Amoco, which secured the *Yannis P* to take a similar parcel to Trieste (Italy) for the same rate. By October, however, average rates had more than doubled, reaching WS200. There were several fixtures for 130,000 ton parcels above this rate. Petrogal agreed to WS205 to secure the *Astro Perseus* for destination in Portugal, Addax chartered the *Astro Phoenix* at WS215 for destination UK/Continent and Eni paid WS220 for the *Nikator* for destination in Lavera (France). The average rates for November and December were WS230 and

WS227 respectively, this being an indication that rates were good and firm until the end of the year. However, in January 2006 rates contracted by a quarter to WS164 with the trend being definitely downwards — at the end of January Petroplus chartered the *Katherine Knudsen* for WS122 to take 130,000 tons to Lavera (France), and for a similar rate CSSA secured the *Sonangol Kizomba* to take a similar parcel to destinations in the UK/Continent.

Rates from West Africa to destinations in the Caribbean/US East Coast started the year at WS151 and improved until March, when they stood at WS161. Representative fixtures for carrying a 130,000 ton parcel that month were Royal Dutch Shell's to secure the *Janet* at WS170 and Conoco's for WS140 to charter the *Kamlesh*. During the subsequent months rates went downhill until August, when they bottomed at WS105. But by October they had almost doubled at WS199 and continued to increase right to the end of the year, with the average December rate being WS244. During that month there were signs of a weakening market. Sun Oil chartered the *Dakota* to take 130,000 tons to Philadelphia at the beginning of the month at WS267 and three weeks later secured *Sonangol Luanda* at WS222 for a similar parcel and destination. Rates contracted in January 2006 by about 30 per cent on this route.

For trades across the Mediterranean and from that area to North-West Europe the rates started the year at WS191 and WS183 respectively. In subsequent months these rates followed a similar trend, definitely downwards, with the lowest point reached in July, at WS102, for the route to North-West Europe, and in August, at WS107, for the route across the Mediterranean. The recovery was simultaneous and WS207 was reached by October on those routes. Some representative fixtures of this month were the WS180 agreed by Tamoil to secure the *Seaprince* to take 130,000 tons from the Libyan Arab Jamahiriya to the UK/Continent and the WS210 paid by Repsol to charter the *Iran Susangero* to take a similar parcel from Sidi Kerir (Egypt) to Spain. The rates on those routes boomed until the end of the year with average rates for November and December being WS237 and WS285. By late December, Clearlake chartered the *Cape Bata* and the *Sea Spirit* to take two 130,000 ton parcels from Novorossiysk (Russian Federation) to Mediterranean destinations for WS300, while Newton secured the *Iran Sarvestan* for WS295 to take 140,000 tons from Supsa (Georgia) to the same destination.

In January 2006 rates dropped on all routes. From West Africa to destinations in Northern Europe and the Caribbean/East Coast of North America the corresponding rates for January were WS167 and WS164. The average rate prevailing in the same month for Suezmax tonnage trading across the Mediterranean was WS178.

Rates on all routes fluctuated during February through May with a clear declining trend and a minor recovery in June. The lowest average rate of WS119 was observed in April on the route across the Mediterranean. The corresponding rates for destinations across the Mediterranean and from West Africa to Europe and the Caribbean/East Coast of North America were WS137, WS145 and WS129 respectively. A representative fixture is the chartering in late of June of *ISI Olive* by CSSA to carry 130,000 tons to the UK/Continent at WS155. In the same month, CSSA chartered *Wilmina* to carry 130,000 tons from Algeria to destinations in the Mediterranean at WS120.

Aframax tanker tonnage

This tonnage is deployed for trading from North-West Europe, the Caribbean, the Mediterranean and Indonesia. Routes from North-West Europe are for trading across the region and to destinations in the Caribbean and on the East Coast of North America. Freight rates for these routes started the year at WS200 and WS240 respectively. The following months were volatile, with low rates being followed by high ones, but overall a declining trend was apparent until the summer months when WS122 and WS140 were reached. Afterwards, rates were sluggish with a good recovery in October when rates reached WS222 and WS263 respectively. Representative fixtures for this month were those of Exxon Mobil, which chartered the *Catherine Knudsen* for WS230 to take a 80,000 ton parcel from the North Sea to the UK/Continent, and Koch, which chartered the *Fucsia* to take a similar parcel from the Continent to the East Coast of North America at WS205.

Routes from the Caribbean link destinations in the area and on the East Coast of North America. Fluctuations in the freight rates on this route mirrored those recorded in North-West Europe. The year started at WS241 and the up-and-down pattern was prevalent until August, when the lowest point was reached at WS135; recovery took place in September and was better in October, when WS222 was reached. Two representative fixtures were

those of Conoco, which agreed to WS235 to secure the *Eagle Auriga* to take 70,000 tons to a destination in the Gulf of Mexico, and Vitol, which agreed to WS180 for the *Minerva Lisa* to take a similar parcel from Mamonal (Colombia) to the East Coast of North America. Rates peaked in November at WS347 and eased in December to WS235.

For the routes across the Mediterranean and from there to North-West Europe volatility was also present, and showed a modest upward trend for the latter, from January to May. Rates at the beginning of the year were WS210 and WS196 for those routes and by May they were WS206 and WS208 respectively. Typical fixtures during that month included those from the Black Sea — one made for the *Aegean Legend* at WS230 to carry 80,000 tons from Novorossiysk to a Mediterranean destination for Royal Dutch Shell; and another for the *Eagle Columbus* at WS200 to take a similar parcel for Vitol from Batumi to the UK/Continent. During the following weeks, rates were downwards until July when they bottomed at WS138 across the Mediterranean and at WS137 for destinations in North-West Europe. Afterwards, freight rates recovered and peaked in November at WS294 and WS293 for those routes with a modest correction the following month to WS271 and WS257 respectively.

Rates for the routes from Indonesia to the Far East started the year at WS58 and were moved upwards until March, when they peaked at WS259. During that month Exxon chartered the *Platres* and CSK chartered the *Valiant* for WS242 and WS285 respectively to carry 80,000 ton parcels to Japan; and the *Esperanza* was chartered by SKS for to take a similar parcel to Ulsan (Republic of Korea) for WS245. The following months witnessed a deterioration of rates to June, when the lowest point of WS112 was reached. Then rates recovered modestly until September and in October they were at WS226 with the last two months being exceptionally good, reaching WS337 and WS335 respectively. Representative fixtures were those of Hyundai in mid-December, which secured the *New Argosy* to take 80,000 tons to Daesan (Republic of Korea) for WS335, and LG Caltex, which chartered the *Esperanza* to take a similar parcel to Yosu (Republic of Korea) for WS340.

The start of 2006 witnessed a rate correction on all these routes. For trades across the Mediterranean and across North-West Europe they were WS195 and WS149 in January, dropping by 28 and 42 per cent respectively

from the previous month. For trades from the Caribbean to the East Coast of North America the corresponding rates actually increased modestly to average WS241 for that month.

Throughout the following months rates continued to decline on all routes. From January through June rates on trades across the Mediterranean and North-West Europe and trades from the Caribbean to the East Coast of North America and from Indonesia to the Far East declined by over 20 per cent, 17 per cent, 23 per cent and 40 per cent, respectively. For each of these routes and, following the same order, rates in June were WS154, WS123, WS186 and WS152. The extent of this decline is illustrated by some fixtures concluded during that period. For example, in April, CSSA hired *Anna Knutsen* to carry 80,000 tons at WS90 for destinations across North-West Europe, while *New Assurance* was chartered by China Oil to carry 80,000 tons from Indonesia to Dalian at WS135. In the following month, Sempra chartered *NS Concord* to carry 70,000 tons at WS180 across the Caribbean and OMV chartered *Nordmark* to carry 80,000 tons from Tartous (Syria) to Trieste (Italy) at WS130.

Handy-size tanker tonnage

Average dirty spot rates for Handy-size tonnage trading from the Caribbean to North America's Gulf and East Coast started the year at WS364, but the following months were volatile and lacklustre. The drop in rates to WS196 in April had been preceded and was followed by monthly averages rates of WS267 and WS270 respectively. Similarly, the lowest average rate — in August at WS184 — was in between two monthly averages of WS240 for July and WS243 for September. In October average rates flared to WS407 after hurricanes battered the US coastline. Some fixtures were well above the average: Valero chartered the *Georgis Nikolos* for WS460 to take 50,000 tons from Aruba to a US destination in the Gulf of Mexico and Citgo agreed to WS435 to charter the *Nedas* for to take a similar parcel from Bajo Grande (Venezuela) to a US destination. The last two months of the year witnessed rates easing to WS314 in November and to WS235 in December.

Vessels of similar capacities trading in the Mediterranean and from there to the Caribbean and the East Coast of North America recorded less acute rate fluctuations. In particular, rates across the Mediterranean were above the WS200 mark for most of the period from January to September: in January WS222 had been recorded and

only in April and August were rates low — at WS191 and WS174 respectively. The last quarter was particularly good, with monthly averages above the WS300 mark: WS358 in October and WS323 and WS327 for November and December respectively.

Rates for tankers trading from the Mediterranean to destinations in the Caribbean and on the East Coast of North America, however, did have a declining trend: in January rates were at WS291 and for most of the time they were below the WS250 mark, with the lowest month being August at WS182. For those routes from the Mediterranean October witnessed a jump in rates to WS363 for destinations across the Atlantic Ocean, and this even improved in November when the average for the month reached WS365. The following month witnessed a reduction to WS286.

Representative fixtures across the Mediterranean during the peak month of October were those of Newton, which chartered the *Pearl* for WS375 to take 43,500 tons from Greece to a Mediterranean destination and two weeks later agreed to WS500 for securing the *Maersk Richmond* to take 30,000 tons from Lavera (France) to another destination in the Mediterranean. Representative fixtures for destinations in the Caribbean and on the East Coast of North America during the last quarter were those of Vitol in December. This charterer secured the *Lauren* at WS315 and two weeks later the *Halki* at WS290 to take 44,000 tons parcel from the Mediterranean to the East Coast of North America.

Elsewhere rates were also reflecting this buoyancy in the Mediterranean during the last quarter of the year. In October, Litasco chartered the *Baltic Captain I* for WS360 to take 30,000 tons from St. Petersburg (Russian Federation) to the Canary Islands (Spain).

In January 2006 rates weakened on some of these routes. Average rates for trades from the Caribbean dropped modestly to WS267. The corresponding rates for trades across the Mediterranean and from there to Caribbean destinations actually increased to WS342 and WS303 respectively.

During the following months rates declined further on all routes, with the sharpest decline affecting trades across the Mediterranean. Rates declined by an impressive 42 per cent from January through June with the lowest average rates of WS 165 found in March. Rates for May and June were WS205 and WS200 respectively. Other routes showed a similar declining trend throughout the same period 13 per cent for trades

originating in the Caribbean and destined to the East Coast of North America and 21 per cent for those originating in North West Europe and destined to the Caribbean/East Coast of North America. Chartering activity reflecting this trend includes the hiring of *Theodoros IV* in mid-May to carry 43,500 tons across the Mediterranean at WS210.

All clean carriers

The rates for large clean carriers in the range of 70,000 to 80,000 dwt and those in the range of 50,000 to 60,000 dwt trading from the Persian Gulf to Japan were for most of the year in a downward trend. Average monthly rates for these two tanker sizes started the year at WS320 and WS344 respectively and during the following months rates were well below those averages. For both sizes the weakest month was June, when average rates were WS173 and WS196 respectively. Only in October was there a rate improvement. Larger tankers recorded WS374 average rates, while those in the range of 50,000 to 60,000 dwt fetched WS437. The extent of the improvement between the months of June and October for the largest size of tanker can be gauged by the charters made by Vitol to take a 75,000 ton parcel from the Persian Gulf to Japan: in June it agreed to WS165 for securing the *Oriental Green* while in October the rate was WS320 for engaging the *Rainier Spirit*. A similar trend was apparent for tankers in the range of 50,000 to 60,000 dwt: Hanwah chartered the *Difko Birtha* in June at WS210 to take 55,000 tons to Japan, while in October Projector agreed to WS440 to secure the *Altius* for a similar parcel to the same destination. Rates agreed for destinations in the Republic of Korea mirrored those for Japan for both sizes of tankers — in October Vitol chartered the *Emerald Hill* to take a 55,000 ton parcel to a destination in the Republic of Korea/southern Japan at WS425. After October, the rates went down from WS369 to WS298 for tankers in the range of 70,000 to 80,000 dwt and the corresponding rates for tankers in the range of 50,000 to 60,000 dwt were WS300 and WS316 respectively.

Over the year the time charter equivalent for a 55,000 dwt tanker moved down from \$54,500 per day in January to only \$31,000 per day in August, rebounding up to \$67,100 per day in October to end the year at \$45,900 per day.

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 also recorded a downward and shorter

trend — from January to August the average rates moved from WS314 to WS202. In September there was a good recovery to WS356, and rates then eased somewhat in October to WS323. Representative fixtures for this tanker size were those made by Hess during the year for carrying 40,000 ton parcels from St Croix to the East Coast of the United States: in January the rate agreed was WS330 for the *Kriton*, in August the rate was WS145 for the *Elka Bene* and one month later it was WS285 for the *Kriti Atki*. Those were the best months as the averages for November and December were WS252 and WS248 respectively.

Smaller tankers in the range 25,000–35,000 dwt trading out of Singapore to East Asian destinations started the year at WS372 and slipped during the following months, with May and June going below the WS300 mark. The latter was the weakest month when average rates were only WS213. In that month Royal Dutch Shell chartered the *Ocean Moonbeam* to take 30,000 tons to Pasir Gudang (Malaysia) for \$110,000 and the *Bright Pacific* to take a similar parcel to Hong Kong (China) for \$280,000. Sinopec agreed to WS200 for the *Da Qing 455* to take another 30,000 ton parcel to Northern China. Rates to other destinations were in line with the rates just mentioned — two fixtures to take 30,000 ton parcels to the East Coast of India were agreed for \$280,000. Then average rates for this tanker size recovered slowly with a good burst in September to WS471, which was sustained in October when WS585 was reached. The following two months were less impressive, with averages reaching WS454 and WS398 respectively.

In January 2006 rates for most vessel sizes and routes improved. Larger tankers in the range 50,000–60,000 dwt trading from the Persian Gulf to Japan had rates up by 12 per cent to WS355. A similar increase was recorded by smaller tankers in the range 25,000–35,000 dwt trading from Singapore, which recorded rates of WS438. Similar small tankers trading from the Caribbean to the East Coast of North America recorded even better rate increases, about 29 per cent, to WS384.

During the following months, rates declined significantly for large tankers, including the 70,000 to 80,000 dwt trading from the Persian Gulf to Japan. In some cases, the monthly variations in rates for both sizes of ships can be over 40 per cent. The rates for June were WS180 for those in the range of 70,000 to 80,000 and WS225 for tankers ranging from 50,000 to 60,000 dwt representing respectively 39 per cent and 37 per cent decline rates from January to June. A good example

highlighting this trend is the chartering at the end of June of *Gulf Stream* by MBK to carry 50,000 tons from the Persian Gulf to Japan at WS212 and the fixture of *Alonissos* by VITOL to carry 80,000 tons on the same route at WS155. Rates for trades by small tankers in the 25,000 to 35,000 range from the Caribbean to the East Coast of North America and from Singapore eastward also declined over the same period but stood close to the WS300 mark. In June, the rates were WS292 for trades originating in the Caribbean and destined to the East Coast of North America and WS298 for eastward movements from Singapore. A representative fixture is the chartering of *Alexandra Park* in early June by BP Amoco to carry 30,000 tons from Singapore to North China.

Tanker-period charter market

Chartering activity was above the 1 million dwt level for most of the year with the exception of January, June and December, when only 0.6, 0.8 and 0.7 million dwt respectively were chartered. The peak months were March, April, October and November when 1.9, 1.8, 2.2 and 1.8 million dwt respectively were reported chartered. In March, 76.0 per cent of the charters were for more than two years and 87.0 per cent corresponded to VLCC/ULCC and Suez-max tonnage almost in the same proportions. In July, 71.4 per cent of the charters were for durations of between six to 12 months, with 38.0 per cent being Suez-max tonnage and 26.7 per cent Aframax vessels. In October, 65.5 per cent of the charters were for less than one year and 41.5 per cent for VLCC/ULCC tonnage and one third for Aframax tonnage. In that month the charter rate for a 5-year old VLCC was \$52,000 per day. Overall total chartering activity reached 17.5 million dwt in 2005, slightly lower than the 18.2 million dwt reached during 2004.

Over the year VLCC/ULCC tonnage accounted for about 33 per cent of the chartering activity, with smaller tankers of less than 80,000 dwt capacity accounting for a further 15 per cent. Larger tankers fared particularly well in September, when they accounted for 73.6 per cent of the tonnage chartered during that month with rates of \$52,000 per day. Short-term charters of up to one year accounted for about half of the chartering activity, with long-term charter of over two years having a share of 36 per cent.

Chartering activity in January 2006 was double that of the previous year, and accounted for 1.1 million dwt, with about half of it being long-term charters.

Chartering grew faster in February and March totaling 1.8 million dwt and 2.6 million dwt respectively. April saw a reduction in the number and/or the size of ships chartered since the total charter activity measured by sized slipped to 1.8 million, of which long-time charters represented 80 per cent. Chartering activity grew again in the following months achieving 2.2 million dwt, 3.6 million dwt and 2.4 million dwt in May, June and July respectively. With the exception of May, long-term charters dominated the chartering transactions.

B. THE DRY BULK SHIPPING MARKET

1. 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 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-size ones, were employed for carrying 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 2005 at levels below those prevailing at the beginning of it. The Baltic Dry Index recorded a 46.4 per cent drop to 2,407 with the lowest month being July, in which it barely reached 1,804. The average Baltic Dry Index for 2005 was 3,253, about 27 per cent less than the average recorded for the previous year. The rate deterioration was more pronounced for Panamax tonnage, as shown by the almost 31 per cent reduction in the corresponding Baltic Panamax Index, than for Capesize vessels, for which the corresponding Index contracted by less than a quarter.

As shown in table 32, the dry cargo tramp time-charter decreased during the year to 320 — a contraction of 36.6 per cent over the year. The dry cargo tramp trip-charter went down to 332 by the end of the year and recorded a drop of 51 per cent from the level of the beginning of the year. The average time-charter index for 2005 was 100 points lower than that of the previous year, while the average trip-charter index of 469 points was 65 points lower than that of the previous year. The averages recorded for 2005, however, were well above the averages recorded for 2003.

The weakening rates accompanied by rising owners' expenses. For instance, average bunker prices for IFO 180 in Singapore went up from \$190 in January to \$288 per ton in December. Also, some events during the year heralded changes in future expenses (i.e. labour and insurance) of shipowners and ship-operators (see box 2).

Dry bulk time-charter (trips)

Some representative fixtures concluded for vessels of different sizes in typical routes illustrate the evolution of rates during 2005. At the beginning of the year Cape-size tonnage was chartered for round trips over the transatlantic and the Singapore–Japan to Australia routes at rates of \$74,950 and \$63,875 per day respectively. Rates went up soon afterwards and peaked in April over the transatlantic route at \$82,400 per day and in February on the route to Australia at \$72,750 per day. During the following months rates went down and bottomed in July for the two routes at \$31,700 and \$24,200 per day respectively. There was a recovery during the last quarter, with October rates about double those of the summer at \$55,300 and \$47,800 per day respectively. These rates then eased over the last two months, and the average rates for December were \$32,500 per day over the transatlantic route and \$34,500 per day on the Singapore/Java to Australia route.

The slide of freight rates continued in January 2006 when owners were receiving \$27,970 per day over the transatlantic route and \$25,840 per day on the route to Australia. These rates were less than half of those prevailing in the corresponding month of the previous year.

In the following months, rates in the transatlantic route improved with erratic monthly fluctuations. In May the lowest rate of \$29,180 per day was recorded and by June, the rate achieved was \$33,370 per day —19 per

Table 32

Dry cargo freight indices, 2003–2005
(Monthly figures)

| Period | Dry cargo tramp time-charter ^a (1972 = 100) | | | Dry cargo tramp trip-charter ^b (1985 = 100) | | |
|-----------------------|---|------|------|---|------|------|
| | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 |
| January | 263 | 536 | 506 | 185 | 553 | 677 |
| February | 259 | 585 | 481 | 156 | 613 | 715 |
| March | 272 | 579 | 530 | 151 | 451 | 565 |
| April | 292 | 519 | 507 | 203 | 558 | 624 |
| May | 310 | 439 | 440 | 230 | 533 | 552 |
| June | 292 | 385 | 373 | 304 | 401 | 412 |
| July | 307 | 416 | 313 | 273 | 478 | 342 |
| August | 307 | 458 | 290 | 276 | 562 | 285 |
| September | 317 | 471 | 328 | 294 | 514 | 352 |
| October | 409 | 499 | 379 | 337 | 503 | 391 |
| November | 448 | 538 | 346 | 309 | 544 | 376 |
| December | 489 | 592 | 320 | 360 | 701 | 332 |
| Annual average | 331 | 501 | 401 | 257 | 534 | 469 |

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) in *Shipping Statistics and Market Review*.

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

cent higher than January. Rates for Singapore/Japan to Australia trips also improved but also fluctuated up and down during the January-June period. The highest earnings were achieved in May and amounted to \$37,440 per day. In June, ships trading on this route secured \$32,090 per day — 24 per cent increase as compared with January. Representative fixtures concluded during this month for these routes include the chartering of *Golden Wind* to carry 170,082 tons from Japan/Western Australia/China for \$30,000 per day and the hiring of *Cecilia* by SKS to carry 170,565 tons over the Transatlantic route for \$31,500 per day.

The evolution of freight rates for Panamax tonnage followed a similar trend. Vessels chartered at the beginning of the year for round trips from Northern Europe to the east coast of South America fetched \$36,800 per day while rates for those vessels trading from the Far East to Australia were at \$31,300 per day. Rates improved during the following weeks and peaked in March for both routes at \$42,225 and \$37,500 per day respectively. The following months' rates collapsed to \$11,100 per day in July for the Far East to Australia

route and, one month later, for the Northern Europe to east coast of South America route at \$14,250 per day. The recovery of the last quarter started in October when rates to Australia fetched \$18,250 per day while those to the east coast of South America stood at \$22,850 per day. The remaining weeks of the year witnessed a deterioration of the recovery, and rates for December were \$16,500 per day on the Continent to east coast of South America route and \$19,000 per day on the Far East to Australia route.

Further deterioration of rates was recorded for January 2006. The rates on the transatlantic route to the east coast of South America were \$14,380 per day and on the Far East to Australia route they were only marginally better — \$16,800 per day. This rate decreased further in February to a low of \$13,620 and bounced back in the following months reaching a high of \$20,540 per day in June. In the Far East to Australia it was only marginally better—\$16,800 per day in January, but improved in the following months fetching \$21,880 per day in June. The chartering in late June of *Alabama* by Bunge to carry 71,002 tons from Amsterdam to the

Box 2

Seafarers supply and demand study, and insurance issues

The BIMCO/ISF Manpower 2005 Update was completed in December. This study is the most comprehensive assessment of global supply and demand for seafarers and has been published every five years since 1990. This year the study indicated that the discrepancy between the supply of and demand for officers had narrowed. In the 2000 Update the supply of officers was put at 404,000 with a shortfall relative to demand of 16,000 or 4 per cent. The corresponding figures for 2005 are 466,000 with a shortfall relative to demand of only 10,000 or 2.1 per cent. OECD countries remain an important source of supply of officers, with Eastern Europe and, to a much lesser extent, Asian countries having increasing importance. Ratings, however, were still in vast oversupply: in 2000 their supply was estimated at 821,000 with a surplus of 222,000, or 27.0 per cent, and in 2005 the supply was put at 721,000 with a surplus of 135,000, or 18.7 per cent. These figures, however, were less robust as there were doubts concerning the exact number of ratings available for international service and not only for domestic service. Countries of East, South-East and South Asia are the major suppliers of ratings worldwide. By 2015 it is estimated that the shortfall of officers will rise to 5.9 per cent while the ratings surplus will increase to 21.6 per cent.

In February 2006 the 94th ILO Maritime Session was convened to consolidate into a single convention the several conventions and recommendations adopted over the years, and to establish conditions for seamen's work. The new maritime labour Convention was adopted with overwhelming support from more than 100 countries. It is expected to provide a "bill of rights" for the more than 1.2 million seafarers engaged in merchant ships while allowing a sufficient degree of national discretion to deliver those rights with transparency and accountability. The overall objective is to achieve quality shipping, which is crucial for the global economy. Fishing and traditional (i.e. dhows and junks) vessels are not included in the convention. An extended presentation of this convention is made in Chapter 6, section B.2.).

Insurers and reinsurers were affected by the natural catastrophes in several regions of the world. Munich Re estimated the global insurance industry's losses at \$75 billion, with Hurricane Katrina accounting for \$45 billion. Some marine insurers took measures to cover the extra exposure — UK P&I Club, which insures about 105 million GT, reported a net deficit of \$13 million by February 2005 and decided to purchase extra cover. Nevertheless, competition in the marine hull insurance kept premium increases at a modest level. Some London underwriters raised premiums by only 6 per cent across the board in their portfolios.

Calls were made for the United States to maintain its role of reinsurer for acts of terrorism in line with the Terrorism Insurance Act, which is due to expire in 2007. In mid-2005, the Joint War Committee of the London insurance market declared the Malacca Strait a war-risk area. This followed repeated piracy incidents over the last few years in the area. Although the committee is purely advisory, the declaration allows insurers to issue seven-day notice of cancellation of terms of existing policies and seek additional premiums.

Piracy flared up in other areas too. Repeated incidents took place in the Horn of Africa using Somalia as a springboard. In August nine incidents were reported in two weeks by the International Maritime Bureau, with some attacks taking place 120 miles from the coast. In November a Thai cargo ship carrying sugar from Brazil to Yemen was hijacked, with the crew of 22 taken hostage for ransom. In January 2006, a US warship seized an armed dhow and rescued the captive crew of the cargo ship.

East Coast of North America for \$20,000 per day illustrates the trend characterizing the transatlantic route. During the same period, MOL chartered *Torm Marta* to carry 69,638 tons over the Japan/Australia/Singapore/Japan route for \$21,000 per day.

Handymax tonnage chartered for Far East to Australia round trips secured \$24,500 per day in January 2005 and rate gains were made until March when rates fetched \$27,000. Then rates moved downwards until July when they reached only \$12,660, but the trend was slightly reversed in the following months and by September rates were \$17,825 per day, still lower than those prevailing at the beginning of the year. The following weeks were disappointing and the year ended with rates at \$15,950 per day, that is less than half the rates prevailing in the corresponding month of the previous year.

A modest rebound of rates of about 2 per cent was recorded in January 2006 when rates for Far East to Australia round trips fetched \$16,280 per day. With the exception of February, which saw a slight decline in rates, the performance of Handymax ships trading on this route improved gradually throughout the following months reaching a high of \$22,680 per day in June.

Handy-size tonnage chartered for trips from Northern Europe to the west coast of Africa started the year with rates at \$19,000 per day, with improvements recorded over the following weeks until April when rates fetched \$23,000 per day. The following month that rate remained unchanged and only slackened from June to bottom in August at \$16,500 per day. During the following two months freight rates stood at \$18,000 per day but started to collapse in November to end the year at only \$14,000 per day. This rate was lower than the rates reached in the corresponding months of 2004 and 2003. In January 2006 rates went down further to \$12,600 per day.

Dry bulk time-charter (periods)

Estimates of rates for chartering vessels for a 12-month period and prompt delivery indicate that the good rates levels of the beginning of the year moved downwards during the first half of the year but recovered late in the year. Five-year-old Cape-size vessels of 170,000 dwt and above were fetching \$60,000 per day in January 2005 and only \$35,000 per day in August; they made a slight recovery in October to \$46,500 per day to slide to \$36,000 per day in December. Smaller vessels in the range 150,000 to 170,000 dwt with ages between 5 and 10 years started the year at \$50,000 per day and dropped to \$29,000 per day in August before recovering

to \$38,000 per day in October and collapsing to \$27,000 per day in December.

Freight rates for 5-year old Panamax vessels in the range 70,000 to 75,000 dwt started at \$38,500 per day in January and dropped to \$20,000 per day in August before rebounding to \$22,500 per day in October. The following weeks witnessed the collapse of rates and the year ended at \$18,000 per day. A similar pattern was followed by 15-year old vessels in the range 60,000 to 65,000 dwt, whose rates went down from \$30,000 to \$16,000 per day in August before recovering to \$17,500 per day in October and finally collapsing to \$14,000 per day in December.

Rate improvement for a 10-year old Handymax tonnage was modest, from \$23,500 per day in January to \$26,000 per day in March. The following month saw depressed rates, which bottomed in August at \$15,500 per day, and a minimum improvement during the last quarter of the year before they collapsed in December at \$14,500 per day. Rates for 5-year old vessels of this size were almost steady during the first half of the year from \$29,000 per day in January to \$25,000 per day in June. Afterwards, rates went down to about \$17,000 per day during most of the second half of the year and eased somewhat in December to \$16,250 per day. Handy-size tonnage aged about 15 years also recorded similar rate increases: \$14,500 per day in January to only \$9,500 per day in August, then steady to November and easing in December to \$9,000 per day.

All rates were further reduced in January 2006. Five-year-old Cape size vessels fetched \$34,000 per day while Panamax tonnage of the same age reached \$17,800 per day. These rates were less than half the ones corresponding to the same month of the previous year. Fifteen-year-old Panamax vessels were recorded at \$12,500 per day. Modest losses were also recorded for 10-year old Handymax and 15-year-old Handy-size vessels at \$14,000 and \$12,100 per day respectively.

Rates for 5-years old Cape size vessels fluctuated up and down throughout the following months, but stood above the \$30,000 per day mark. In June, these vessels earned \$36,000 per day—a rate about 6 per cent higher than the one earned in the beginning of the year. Rates for Panamax vessels of the same age eased slightly but grew beyond the January levels and reached \$18,900 per day. Fifteen years old Panamax vessels followed the same trend and earned \$14,300 per day in June, an increase of about 15 per cent as compared with January. Improvements have been recorded for Handymax and

Handysize tonnage especially in June. Vessels of all ages in the former category earned about \$20,000 while 15-years old 35,000-37,000 dwt Handysize vessels earned \$15,400 per day. In late June, BHP-Billiton chartered *Bulk Patriot* to carry 70,003 tons at \$18,000 per day. During the same period, Cargill paid \$36,000 per day for the use of *CSK Grandeur* to carry 170,170 tons.

Dry bulk trip-charters

Over the year rates for Cape-size tonnage were good. Iron ore freight rates from Brazil to China started the year at \$36.85 per ton and stood at over the \$30.00 per ton level until June when rates collapsed to only \$20.70 per ton. Over the following months rates gently recovered and reached \$31.15 per ton in October but then contracted, ending the year at \$23.55 per ton. The evolution of coal rates from Richards Bay (South Africa) to Western Europe was less impressive — rates started at \$19.45 ton in January and improved over the \$20 per ton level until April, and from that month until October they went over the \$20 per ton with the lowest point reached in August at only \$11.20 per ton. By December this rate was \$11.90.

Again, the performance of rates for Panamax tonnage engaged in grain trading between North America Gulf and Western Europe was good during the first half of the year. Rates had started the year at \$37.15 per ton and only went below the \$30 per ton mark in June; the following weeks witnessed further rate weakening to bottom in August at \$20 per ton. By October rates were at \$24.35 per ton then collapsed, and by December they were at \$20.95 per ton. The rate evolution for Handy-size tonnage transporting scrap from the US West Coast to the Republic of Korea was lacklustre. Rates started at \$63.65 per ton in January and dropped to below the \$50 per ton level from July to end the year at \$38.15 per ton.

In January 2006 all these rates declined by less than 10 per cent. Cape-size tonnage carrying iron ore from South America to China fetched \$22.00 per day while that transporting coal from South Africa to Europe fetched \$11.15 per day. Panamax rates for taking grain across the Atlantic were \$19.40 per ton and scrap was taken across the Pacific to the Republic of Korea for \$37.30 per ton.

Rates for Cape-size vessels transporting iron ore improved slightly in February and March growing at a rate of about 10 per cent, but went back to January levels in April and May only to recover in June. In this month, Cape-size vessels were earning \$24.10 per ton.

For example, in early June, COSCOS chartered *Cologne* to carry 150,000 tons of iron ore from Guayacan (Chile) to Xingang (China) at \$24.25 per ton. Similar evolution was recorded for other cargoes. For instance, vessels carrying coal from South Africa to China recorded positive growth fetching \$13.00 per ton in June. In the third week of June, BHP-Billiton chartered *Swiss Marine Vessel* to carry 150,000 tons of coal from Richards Bay to Rotterdam at \$12.85 per ton. Rates for Panamax vessels engaged in grain trade between North America and the rest of the world recorded moderate losses but recovered in June and earned \$22.00 per ton — over 13 per cent increase as compared with January. Rates for ships carrying scrap from the United States to the Republic of Korea depressed slightly during the February–May period, but marginally improved in June fetching \$38.70 per ton.

C. THE LINER SHIPPING MARKET

1. Development in liner markets

General developments

The impact of containerization in liner trades is larger 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 2005 rose by 1.0 million TEUs to reach 10.4 million TEUs — an increase of 10.6 per cent. Fully cellular containerships increased their share of this total by almost 2 per cent to 78.5 per cent at the beginning of 2006, totalling 8.1 million TEUs. The share of general cargo ships reached 15.3 per cent. Single-deck vessels accounted for 1.0 million TEUs — 9.5 per cent — while multi-deck ships added 0.6 million TEUs — about 5.8 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 ro-ro passenger ships accounted for 0.27 million TEUs lower than the level of the previous year, with their share in total container carrying capacity being 2.8 per cent. Bulk carriers maintained their container carrying capacity at 0.20 million TEUs, with their share in the total decreasing to 1.9 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 at an accelerated pace. As indicated in table 33, additions to the fleet during 2005 totalled 955,000 TEUs and there was no reporting

Table 33

Growth of the world cellular container fleet
(In thousands of TEU at the beginning of the year)

| Year | Broken up TEUs | Additional TEUs | Fleet TEUs | Orders TEUs |
|------|----------------|-----------------|------------|-------------|
| 2004 | 30 | 622 | 6 437 | 1 995 |
| 2005 | -- | 778 | 7 165 | 1 652 |
| 2006 | -- | 955 | 8 120 | 4 259 |

Source: UNCTAD secretariat on the basis of *Containerisation International*, issue February 2004, p. 19; issue February 2005, p. 16; issue January 2006, p. 18; and Clarkson *CIM*, January 2006, p. 15.

of broken-up tonnage, which is understandable in the light of the good freight rates achieved by most categories of containerships. Growth of the cellular fleet reached an all-time high, with 4,259,000 TEUs being on order at the end of the year.

During 2005 the ordering of large vessels continued notably during the first half of the year. At the end of the year 75.4 per cent of the order book comprised 531 cellular containerships over a 3,000 TEU capacity, of which 320 ships exceeded a 5,000 TEU capacity. This tonnage was to be delivered almost evenly over 2006–2008. Ordering of post-Panamax vessels stopped in July when owners shifted their attention to smaller vessels by ordering 55 of them. Ordering of these smaller vessels continued during the next months, but the high level of the order book and increased shipyard prices progressively lowered ordering levels and by November only 14 vessels had been ordered — a three-year low. By the end of the year the third of eight 9,200 TEU capacity containerships ordered by MSC was commissioned and started to operate on the Asia–Europe route. These are the largest containerships afloat and have impressive dimensions (length of 336.7 m, beam of 45.6 m, draft of 27.2 m), a good speed (25 knots) and a capacity (107,849 GT, 109,600 dwt) that includes 700 reefer plugs.

The push for bigger vessels kept alive the question of their deployment. The largest ones would be restricted to the main east–west mainline routes because of the volumes required to fill such vessels and because of port accessibility. Therefore, these very large vessels call exclusively at few and very large trans-shipment hubs and load centres at both ends of the route. The implementation of security initiatives in a number of major

ports also works in favour of calls in a reduced number of ports. Post-panamax vessels being displaced from the major routes are now being deployed onto secondary ones where the question of port accessibility is becoming topical in some countries.

Concentration in liner shipping

The concentration process of recent years is resulting in increased carrying capacity being deployed by the biggest liner operators. (These are also the largest owners of cellular containership tonnage and complement their fleets by chartering tonnage from other owners, notably German financial companies.) As table 34 indicates, for the dates in September 2005 and September 2004 the top ten operators of containerships increased their carrying capacity by 12.4 per cent to 4.6 million TEUs — 49.2 per cent of the world's total containership carrying capacity. Similarly, the share of the top 20 liner operators increased by 12.1 per cent to 6.6 million TEUs — 71.0 per cent of the world's total container carrying capacity. A clear reflection of the momentum being gained by industry consolidation is the absence of any single entry in the list of the top 20 operators. Six carriers maintained their position in the list, among them the top two — A.P. Moller Group and MSC — which together account for 18.4 per cent of the world's total containership carrying capacity. The remaining fourteen operators shifted places in the table. The biggest gain was recorded by CSAV (up by 4 places) followed by China Shipping and Hamburg Sud (up by 3 places each), Hapag Lloyd (up by 2 places) and P&O Nedlloyd, COSCO and K Line (up by 1 place). The biggest loser was CP Ships (down by 5 places), followed by Hanjin/DSR-Senator and NYK (down by 2 places) and Evergreen, MOL and Hyundai (down by 1 place each).

Table 34

Leading 20 service operators of containerships at mid-September 2005 on the basis of number of ships and total shipboard capacity (TEUs)

| Ranking | Operator | Country/territory | No. of ships in 2005 | TEU capacity in 2005 | TEU capacity in 2004 |
|--|--------------------|---------------------------|----------------------|----------------------|----------------------|
| 1 | A.P. Moller Group | Denmark | 399 | 1 005 554 | 900 509 |
| 2 | MSC | Switzerland | 264 | 713 808 | 618 025 |
| 3 | P&O Nedlloyd | UK/Netherlands | 165 | 490 435 | 426 996 |
| 4 | Evergreen | Taiwan Province of China | 150 | 450 927 | 437 618 |
| 5 | CMA-CGM Group | France | 192 | 426 994 | 373 191 |
| 6 | NOL/APL | Singapore | 106 | 322 520 | 295 321 |
| 7 | China Shipping | China | 108 | 304 788 | 236 079 |
| 8 | COSCO | China | 116 | 299 961 | 253 007 |
| 9 | Hanjin/DSR-Senator | Republic of Korea/Germany | 77 | 296 938 | 284 710 |
| 10 | NYK | Japan | 107 | 287 137 | 265 192 |
| Subtotal | | | 1 684 | 4 599 062 | 4 090 648 |
| 11 | OOCL | Hong Kong (China) | 68 | 236 018 | 216 527 |
| 12 | CSAV | Chile | 88 | 231 419 | 190 143 |
| 13 | MOL | Japan | 72 | 226 105 | 213 195 |
| 14 | K Line | Japan | 74 | 219 560 | 195 750 |
| 15 | Hapag Lloyd | Germany | 57 | 215 694 | 186 610 |
| 16 | Zim | Israel | 90 | 210 407 | 196 420 |
| 17 | Hamburg-Sud | Germany | 86 | 191 333 | 131 713 |
| 18 | Yang Ming | Taiwan Province of China | 68 | 189 939 | 168 006 |
| 19 | CP Ships Group | Canada | 76 | 179 209 | 196 317 |
| 20 | Hyundai | Republic of Korea | 37 | 142 257 | 139 243 |
| Total top 20 | | | 2 400 | 6 641 003 | 5 924 572 |
| World fleet estimated at 1 July 2005 and 2004 | | | ----- | 9 355 000 | 8 835 000 |

Source: UNCTAD secretariat, compiled from *Containerisation International*, November 2005, p. 65; *Containerisation International Yearbook*, p. 8; and *Shipping Statistics and Market Review*, October 2005, p. 23.

Note: All subsidiaries are consolidated.

Concentration gained impetus during 2005. The \$2.9 billion takeover of P&O Nedlloyd announced by A.P. Moller was followed by a \$2.0 billion bid by Hapag Lloyd to acquire CP Ships and by the \$0.6 billion offer of CMA-CGM Group to purchase Bollore's shipping interest comprising Delmas-OTAL-Setramar. As regulators take some time to review and clear these transactions, table 34 does not include the resulting ranking, which will consolidate A. P. Moller in the top

position with a 16 per cent of world's total containership carrying capacity. The corresponding estimated shares for Hapag Lloyds and CMA-CGM were 4.2 and 4.9 per cent respectively. Some of the effects of these transactions were the withdrawal of P&O Nedlloyd from more than a dozen conferences and consortia and the reorganization of services for the carriers involved in the transactions, encompassing the reduction of agencies and the shifting of terminals in several regions.

Comparison of 2003 and 2004 financial results for some of the above carriers suggests increased profitability for shipping lines. Return on sales increased from 15.5 to 17.7 per cent for A.P. Moller and from 1.4 to 6.0 per cent for P&O Nedlloyd. The three Japanese carriers' return on sales increased from single to double digits — MOL from 9.2 to 14.6 per cent; NYK from 6.6 to 10.0 per cent; and K Line from 9.7 to 13.6 per cent. Elsewhere a similar picture emerged — Zim reported return-on-sales increases from 4.9 to 7.0 per cent and CSAV from 3.1 to 3.9 per cent.

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 exemption to carriers participating in these agreements on the understanding that the benefits are larger than the disadvantages. During 2005 the European Commission completed its review of the regulatory system for liner shipping and, in December, published a formal proposal to repeal Regulation 4056/86, which provides block-exemption to sea carriers from some rules of competition law. It also announced a proposal for guidelines to be followed by sea carriers, which might include a price index for major routes and volume data exchange in a new industry forum. Soon after, Japan questioned the wisdom of having different legal requirements at each end of the trading route. In a separate development the Singapore Competition Commission issued a 5-year block exemption order, starting 1 January 2006, from competition law for consortium, conference and discussion agreements.

2. Freight level of containerized services

Chartering of container ships

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 container ship charter tonnage available in the free market. Since 1998, the association³ has published the "Hamburg Index", provides a market analysis of containership time charter rates with a minimum of three months. 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 of up to 500 TEU capacity, two types of gearless/geared vessels of over 2,000 TEU capacity and six types of geared vessels of up to 1,999 TEU capacity. The development of time charter rates is reflected in table 35.

The average time charter rates for almost all types of containerships rose in 2005, the exception being geared containerships in the range 1,600–1,999 TEU capacity and geared/gearless containerships in the range 2,300–3,400 TEU capacity, whose rates decreased by 1.6 per cent to \$15.81 per 14-ton slot per day and by 0.9 per cent to \$13.04 per 14-ton slot per day, respectively. For the other ship categories the higher average rate increases corresponded to smaller vessels. Thus geared and gearless ships in the range 300–500 TEU capacity recorded 31.4 and 30.0 per cent increases to fetch \$29.23 and \$28.26 per 14-ton slot per day respectively; and geared vessels in the range 200–299 TEU capacity performed similarly well — up by 30.9 per cent to \$35.35 per 14-ton slot per day. Gearless vessels of the latter capacity recorded a slightly lower increase in rates — 26.7 per cent to \$31.71 per 14-ton slot per day. Geared vessels in the 600–799 TEU capacity range sailing at less than and over 18 knots recorded lower but still significant rate increases — up by 20.5 and 19.5 per cent to fetch \$23.70 and \$21.96 per 14-ton slot per day respectively. Finally, geared containerships in the 1,000–1,299 TEU capacity range and geared/gearless vessels in the 2,000–2,299 TEU capacity range recorded very similar rate increases of about 18 per cent to reach \$22.58 and \$16.35 per 14-ton slot per day respectively.

There was a downward evolution of the monthly time charter rates for vessels of almost all types and sizes. Geared vessels in the range 300–500 TEU capacity were the exception as their rates actually went up by 1.1 per cent during the year to reach \$26.49 per 14-ton slot per day in December 2005. All other monthly rates peaked during the first half of the year and ended up in December well below the initial rates for the year. The most impressive rate reductions were about a third and affected geared vessels with capacities in the following ranges — 600–799 TEUs, 1,000–1,299 TEUs and 1,600–1,999 TEUs. Larger vessels above the 2,000 TEU capacity fared much better with rate reductions being around 13 per cent to end up the year over \$12 per 14-ton slot per day. For most vessel categories December rates were good in comparison with those reached in many months over the last four years. Nevertheless, the extent of the rate fall was significant, as shown by the

Table 35

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

| Ship type | Yearly averages | | | | | | | | | | | |
|----------------------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 1997 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | | | | 2005 |
| Gearless | | | | | | | | | | | | |
| 200-299 | 21.8 | 16.70 | 15.71 | 15.74 | 16.88 | 19.57 | 25.02 | 31.71 | | | | |
| 300-500 | 16.8 | 13.96 | 14.52 | 14.72 | 15.14 | 17.48 | 21.73 | 28.26 | | | | |
| Geared/gearless | | | | | | | | | | | | |
| 2,000-2,299 | 9.7 | 6.92 | 10.65 | 7.97 | 4.90 | 9.75 | 13.82 | 16.35 | | | | |
| 2,300-3,400 ^a | | | | | 5.96 | 9.29 | 13.16 | 13.04 | | | | |
| Gearless | | | | | | | | | | | | |
| 200-299 | 22.0 | 17.23 | 17.77 | 17.87 | 17.01 | 18.93 | 27.00 | 35.35 | | | | |
| 300-500 | 17.2 | 12.76 | 14.60 | 14.90 | 13.35 | 15.55 | 22.24 | 29.23 | | | | |
| 600-799 ^b | | | | | 9.26 | 12.25 | 19.61 | 23.70 | | | | |
| 600-799 ^c | | | | | 9.11 | 12.07 | 18.37 | 21.96 | | | | |
| 1,000-1,299 | 12.5 | 8.24 | 11.87 | 8.78 | 6.93 | 11.62 | 19.14 | 22.58 | | | | |
| 1,600-1,999 | 10.5 | 7.54 | 10.35 | 7.97 | 5.67 | 10.04 | 16.08 | 15.81 | | | | |
| Ship type | | | | | | | | | | | | |
| Monthly averages for 2005 | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Gearless | | | | | | | | | | | | |
| 200-299 | 30.70 | 33.61 | 35.27 | 35.96 | 33.43 | 33.75 | 30.89 | 29.89 | 29.76 | 27.69 | 29.61 | 29.98 |
| 300-500 | 28.06 | 29.62 | 29.01 | 30.52 | 31.85 | 28.74 | 26.18 | 26.79 | 31.51 | 26.25 | 25.97 | 24.66 |
| Geared/gearless | | | | | | | | | | | | |
| 2,000-2,299 | 14.25 | 15.94 | 15.75 | 17.36 | 17.36 | 17.23 | 17.23 | 17.23 | 17.23 | 17.23 | 17.23 | 12.13 |
| 2,300-3,400 ^a | 13.93 | 13.93 | 13.64 | 13.51 | 13.51 | 12.80 | 12.80 | 12.80 | 12.80 | 12.01 | 12.01 | 12.01 |
| Gearless | | | | | | | | | | | | |
| 200-299 | 35.62 | 33.42 | 34.61 | 35.93 | 37.31 | 36.82 | 34.91 | 36.82 | 34.91 | 36.82 | 35.13 | 32.72 |
| 300-500 | 26.19 | 28.83 | 30.01 | 30.78 | 33.21 | 29.32 | 29.32 | 29.32 | 29.32 | 26.81 | 26.66 | 26.49 |
| 600-799 ^b | 22.78 | 25.39 | 27.34 | 25.81 | 25.43 | 25.43 | 25.43 | 25.43 | 25.43 | 25.43 | 15.33 | 15.33 |
| 600-799 ^c | 23.09 | 23.70 | 22.91 | 22.63 | 22.63 | 23.53 | 23.53 | 23.53 | 23.53 | 20.81 | 17.86 | 16.86 |
| 1,000-1,299 | 24.75 | 24.87 | 25.31 | 25.87 | 25.85 | 20.45 | 22.73 | 20.45 | 17.77 | 14.94 | 16.31 | 16.31 |
| 1,600-1,999 | 18.89 | 17.69 | 17.69 | 15.83 | 15.83 | 16.40 | 16.82 | 15.64 | 14.86 | 12.39 | 13.14 | 13.14 |
| Monthly averages for 2006 | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | | | | 5 | 6 | |
| Gearless | | | | | | | | | | | | |
| 200-299 | 27.18 | 26.75 | 28.33 | 26.08 | 28.72 | 28.60 | | | | | | |
| 300-500 | 22.13 | 23.94 | 17.04 | 17.04 | 20.17 | 21.79 | | | | | | |
| Geared/gearless | | | | | | | | | | | | |
| 2,000-2,299 | 9.88 | 10.92 | 10.73 | 10.86 | 10.55 | 10.98 | | | | | | |
| 2,300-3,400 ^a | 12.01 | 9.88 | 9.88 | 10.92 | 10.35 | 8.87 | | | | | | |
| Gearless | | | | | | | | | | | | |
| 200-299 | 19.13 | 32.37 | 30.94 | 28.75 | 31.10 | 28.67 | | | | | | |
| 300-500 | 28.12 | 23.23 | 20.69 | 21.47 | 19.75 | 23.47 | | | | | | |
| 600-799 ^b | 16.08 | 17.60 | 15.85 | 17.30 | 18.22 | 17.00 | | | | | | |
| 600-799 ^c | 16.86 | 17.05 | 17.08 | 15.98 | 17.80 | 18.41 | | | | | | |
| 1,000-1,299 | 15.04 | 15.54 | 14.42 | 15.46 | 15.89 | 15.91 | | | | | | |
| 1,600-1,999 | 12.32 | 10.67 | 10.99 | 12.25 | 13.19 | 13.91 | | | | | | |

^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 TEUs sailing at 22 knots minimum.

^b Sailing at 16–18 knots.

^c Sailing at over 18 knots.

November fixture for the 1687 TEU *Buxlagoon*, which was chartered for six months at \$14 200 per day — this was \$7,000 lower than the rate it obtained 18 months ago.

Freight rates in main routes

By the end of 2005 the level of freight rates in only one, the transatlantic, of the three main containerized routes was clearly above the levels that prevailed at the end of 2004 (see table 36). On this route freight rates increased by 20.2 per cent to \$1,769 per TEU in

the dominant westward direction, while the increase of rates for boxes heading east was 18.6 per cent to \$983 per TEU. For the two other routes connecting Asia, notably the Far East, with North America and Europe the freight rates dropped in the dominant legs of Asia–North America by 2.3 per cent to \$1,878 per TEU, and Asia–Europe by 7 per cent to \$1,769 per TEU. However, there were freight rates increases in the opposite legs of these two routes: the increase was larger, 10.1 per cent to \$815 per TEU, for boxes going from North America to Asia than the one for boxes going from Europe to Asia, 7.3 per cent to \$825 per TEU.

Table 36

Freight rates (market averages) on the three major liner trade routes 2004–2006 (\$ per TEU)

| | Trans-Pacific | | Europe-Asia | | Transatlantic | |
|----------------|------------------------|------------------------|-----------------|-----------------|--------------------------|--------------------------|
| | Asia– United States | United States– Asia | Europe– Asia | Asia– Europe | United States– Europe | Europe– United States |
| 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 | 1 863 | 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 | 1 867 | 800 | 801 | 1 795 | 854 | 1 514 |
| Change (%) | -2.9 | -0.7 | -4.2 | -2.3 | 3.0 | 2.9 |
| Second quarter | 1 845 | 781 | 821 | 1 794 | 872 | 1 611 |
| Change (%) | -1.2 | -2.4 | 2.5 | 0 | 2.1 | 6.4 |
| Third quarter | 1 906 | 815 | 815 | 1 778 | 918 | 1 691 |
| Change (%) | 3.3 | 4.3 | -0.7 | -0.9 | 5.3 | 5.0 |
| Fourth quarter | 1 878 | 815 | 825 | 1 709 | 983 | 1 769 |
| Change (%) | -1.5 | 0 | 1.2 | -3.9 | 7.0 | 4.6 |
| 2006 | | | | | | |
| First quarter | 1 836 | 818 | 793 | 1 459 | 985 | 1 832 |
| Change (%) | -2.2 | 0.3 | -3.9 | -14.6 | 0.2 | 3.6 |

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.

During 2005 there was a steady freight rate increase in both directions of the transatlantic route. In the dominant westward direction only the first quarter recorded a modest 2.9 per cent increase in rates, which was followed by a good 6.4 per cent increase during the second quarter of the year; during the second half of the year rate increases were also good — around 5 per cent in each quarter. In the opposite direction, North America–Europe, the first half of the year witnessed quarterly freight rate increases of 3.0 and 2.1 per cent respectively; the acceleration came during the second half of the year, in which quarterly increases of 5.3 and 7.0 per cent were recorded.

On the trans-Pacific route, where cargo flows are the largest of the three main routes, freight rate evolution during 2005 was disappointing, particularly on the dominant leg Asia–North America. In this direction rates contracted during the first, second and fourth quarters of the year, the exception being the third quarter, when rates increased by 3.3 per cent to \$1,906 per TEU. However, this freight rate was slightly lower than the ones recorded during the second half of 2005. Freight rate evolution in the opposite direction, North America to Asia, was marginally better: rates contracted during the first half of the year and then increased by 4.3 per cent to \$815 per TEU during the third quarter and stayed there right to the end of the year. Early in the year the Trans-Pacific Stabilization Agreement applied surcharge increases for boxes originating in Asia — for example, the bunker surcharge for 40' boxes went up from \$455 to \$590, while the inland fuel surcharge applicable to rail, intermodal or truck moves also went up from \$158 to \$222 per 40' box. During the third quarter the Westbound Trans-Pacific Stabilization Agreement started to impose a diesel levy to cover substantial increases in fuel expenses for export-related truck movements in North America.

The dominant westward leg of the Asia–Europe route freight rate evolution was the most disappointing. Rates collapsed during three quarters while held their ground during the second at \$1,794 per TEU. By comparison the evolution in the Europe–Asia leg was bright, with the second and fourth quarters recording freight rate increases of 2.5 and 1.2 per cent to \$821 and \$825 per TEU respectively. By mid-year the Far East Freight Conference started to apply for the first time a peak season surcharge of \$110 per TEU and raised rates proportionally more for low-value commodities such as waste products (i.e. paper, plastics, scrap) as the pressure for prompt reposition containers to the Far East increased.

The issue of terminal handling charges (THC) was raised for the Federation of ASEAN Shippers' Council in September. This body estimated that ASEAN companies spent \$1.5 billion per year in this and other surcharges and said it would seek a simple ocean tariff structure that includes THC and other surcharges. Two months later in Indonesia reductions in stevedoring charges, from \$93 to \$70 per TEU, and THC, from \$150 to \$95 per TEU, were announced in exchange for eliminating corruption. The measure followed corruption inquiries by the Ministry of Transport in the major ports of the country and negotiations with foreign carriers to reduce THC, and was intended to boost the competitiveness of exporters. It was also welcomed by the Asian Shippers' Council but perplexed industry executives, who questioned the logic of it in a commercial matter between carriers and shippers. In India a draft maritime trade practices code to achieve fairer commercial relations between carriers and shippers was under consideration. In early 2006 the Ministry of Communications of China ruled that the current THC system is uncompetitive, with the China Shippers' Council expressing the understanding that THC are part of the freight rate and cannot be separated.

3. Supply and demand in respect of main liner services

During 2005 the demand for containerized services continued to expand. All the estimates of the cargo flows in 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 intraregional trades and trans-shipment activity. Nevertheless, the aggregates point out to the persistent expansion of traffic from the Far East, notably from mainland China, to North America and Europe, as well as mature trade across the Atlantic.

In the trans-Pacific trade, 2005 witnessed a continuation of the booming trade of the previous years, particularly in the eastward direction. The steady flow of industrial and consumer goods from relocated factories in mainland China and other Asian countries, together with the appreciation of the US dollar, resulted in a double-digit increase for trade heading eastward. However, cargo volumes in the opposite direction did not expand at the same rate and container imbalances became more pronounced even though cargo flows in both directions are now evenly distributed along the year. Overall supply matched very closely demand with vessel utilization reported as being above 90 per cent eastbound. This

Table 37

Estimated cargo flows in major trades routes
(Millions of TEU)

| Year | Trans-Pacific | | Asia-Europe | | Transatlantic | |
|-----------------|---------------|----------|-------------|-------------|---------------|------------|
| | Asia-USA | USA-Asia | Asia-Europe | Europe-Asia | USA-Europe | Europe-USA |
| 2004 | 12.4 | 4.2 | 8.9 | 5.2 | 1.7 | 3.2 |
| 2005 | 13.9 | 4.3 | 9.9 | 5.6 | 1.8 | 3.3 |
| % change | 12.1 | 2.4 | 11.2 | 7.7 | 5.9 | 3.1 |

Source: Compiled by UNCTAD secretariat from *Containerisation International*, October 2005, p. 5.

increase in supply was achieved through the replacement of smaller vessels by larger ones — in one service of the New World Alliance 5,000 TEU containerships replaced all 3,000 TEU ones and China Shipping did the same by using 4,000 TEU instead of 2,500 TEU containerships in another service. Fears of the repetition of congestion in ports in California resulted in additional calls in northern ports along the coast, and this boosted vessel demand. Also, about a fifth of the capacity was deployed in the extended all-water route through the Panama Canal to reach destinations along the East Coast of North America, where many of the distribution centres of major US retailers are located. The same destinations along the East Coast were reached by relaying across the Atlantic Asian cargoes carried by the Far East — Europe services using the Suez Canal.

The transatlantic route recorded single-digit trade increases. Trade flows in the dominant leg to the East Coast of North America increased less than those in the opposite direction so that the need for repositioning empties diminished, although it was still significant. Overall, a better match of supply with demand was achieved over the year with the 10 per cent capacity reduction resulting from redeployment of some of the vessels to the routes to the Far East. Ship utilization of about 95 per cent westbound and 80 per cent eastbound was estimated for the year. Some shippers indicated difficulties in securing slots for westbound cargoes, but additional capacity started to be deployed late in the year as new vessels entered trade in the Far East routes and ships were brought back to the transatlantic one.

On the Europe-Asia route trade flows increased faster and at double-digit rates in the westbound direction. Increased demand on this route was more pronounced during the second half of 2005 and contributed to the

acute box imbalance generated by lighter cargoes heading west and heavy ones moving east. About 60 per cent of the westbound cargo of the Far Eastern Freight Conference (FEFC) originated in China and sea-carriers' service loops increased coverage of the country by adding ports of call. By the end of the year there were about 34 service loops serviced by 275 vessels, of which 212 were post-Panamax vessels, including 35 with over 8,000 TEU capacity. The first of the largest containerships afloat, the MSC *Pamela* of 9,200 TEUs, was deployed in mid-2005 on this route while other lesser carriers, such as PIL and Wan Hai, were using 3,000 TEU capacity vessels. As table 38 indicates, FEFC's share of deployed capacity dropped to 61.9 per cent, which means that the share of non-conference carriers such as Hanjin, China Shipping, Evergreen, Cosco and others expanded. Hanjin-led services have a capacity similar to that of CMA-CGM/Norasia and others while China Shipping-led services deploy a capacity larger than that of K Line and Yang Ming.

In the secondary North-South and regional routes increased trade flows were also good and boosted previously incipient flows on lesser routes. Container traffic flowing between North-East and South-East Asia was up by 10.1 per cent southbound but only 4.3 per cent northbound — the dominant leg. The extensive trans-shipment activity in South-East Asia continued albeit with limited increases in ship capacity because the high levels reached by chartered tonnage precluded feeder carriers expanding their services substantially. The traffic from Asia to Australia-New Zealand also increased by double digits but was absorbed by existing services, notably those of three major consortia using 2,000 TEU containerships. Some relayed cargo moving from Europe to Australia-New Zealand used this route via trans-shipment in South-East Asia. The northbound

Table 38

Percentage capacity share for the Europe–Far East trade

| Operator | Mid-2005 | Mid-2004 |
|------------------------------|-------------|-------------|
| Grand Alliance | 22.2 | 23.6 |
| Maersk Sealand | 12.5 | 14.5 |
| New World Alliance | 10.7 | 11.9 |
| CMA CGM / Norasia and others | 9.7 | 5.6 |
| K Line and Yang Ming | 6.8 | 7.5 |
| TOTAL | 61.9 | 63.1 |

Source: UNCTAD secretariat from *Lloyd's Shipping Economist*, September 2005, p. 9.

return of empties, however, became a concern with some carriers arranging ad hoc sailings for empties and other carriers resorting to the deck loading of them on bulk carriers.

The traffic from Asia to South Africa performed even better, up by 21 per cent in 2005 after growing by 30 per cent in the previous year when about 325,000 TEUs moved south. About two thirds of this trade originated in China, which shipped consumer goods in standard high-cube 40' boxes; northbound cargo was heavier, pulp and chemicals, and moved in 20' boxes, and this resulted in considerable repositioning of empty containers. Congestion in Durban, the destination for most of imports, increased ship demand and during the year an estimated 65,000 TEU capacity was added by sea carriers — MSC launched a new service using six 2,500 TEU ships. Moreover, ship capacity deployed on this route was complemented by that assigned to the routes Asia–East Coast of South America and Asia–West Coast of Africa, to which independent pendulum services operated. In particular, the former route was significant as exports from Brazil to Asia were estimated at 400,000 TEUs in 2005.

Container traffic between Europe and the Caribbean and South America expanded during 2005 to reach 2.8 million TEUs. The dominant northbound leg increased at a lower rate, 4.1 per cent, than that having its origin in Europe, which increased by 6.7 per cent to reach 0.8 million TEUs. Shipping services such as Eurosal and Carol reorganized their schedules to reach destinations along the West Coast of South America with 2,500 TEU

capacity ships, and this resulted in additional capacity available for Caribbean destinations too. Also, lesser carriers using 1,000 TEU ships upgraded their specialized services linking different destinations in Europe with the Caribbean islands and eased the imports of relayed Asian goods across the Atlantic into the latter.

4. Liner freight index

Table 39 indicates the developments of liner freight rates on cargoes loaded or discharged by liners at ports in the Antwerp/Hamburg range for the period 2003–2005. The average overall index for 2005 went up by 6 points from the 2004 level to reach 104 points (1995 base year 100), reflecting the improved rates in both the homebound and outbound trade. The average homebound index increased by 3 points to 97 over the year. The monthly figures indicate steady rate improvements during the second half of the year and reflect increased volumes from the Far East and, to a much lesser extent, across the Atlantic. In the outbound trade, the average level in 2005 increased by 8 points to reach 110 points. Again the second half of the year was better than the first one, with the last quarter being particularly good. These rates reflected some alleviation of the heavy trade imbalance in the Europe–Far East route.

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 in certain years between

Table 39

Liner freight indices, 2003–2005*(Monthly figures: 1995 = 100)*

| Month | Overall index | | | Homebound index | | | Outbound index | | |
|-----------------------|---------------|------|------|-----------------|------|------|----------------|------|------|
| | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 |
| January | 96 | 93 | 96 | 91 | 88 | 89 | 101 | 98 | 101 |
| February | 96 | 93 | 95 | 91 | 88 | 88 | 100 | 98 | 102 |
| March | 101 | 96 | 95 | 94 | 92 | 88 | 107 | 101 | 102 |
| April | 107 | 100 | 98 | 100 | 96 | 91 | 114 | 104 | 105 |
| May | 99 | 99 | 103 | 92 | 96 | 97 | 105 | 103 | 108 |
| June | 101 | 99 | 108 | 90 | 95 | 101 | 111 | 103 | 114 |
| July | 103 | 100 | 108 | 97 | 97 | 102 | 107 | 103 | 115 |
| August | 104 | 100 | 106 | 99 | 97 | 100 | 109 | 102 | 111 |
| September | 104 | 100 | 106 | 99 | 98 | 100 | 108 | 102 | 112 |
| October | 102 | 100 | 109 | 96 | 96 | 102 | 107 | 104 | 116 |
| November | 100 | 96 | 111 | 96 | 90 | 104 | 105 | 101 | 118 |
| December | 96 | 94 | 110 | 92 | 89 | 103 | 100 | 100 | 117 |
| Annual average | 101 | 98 | 104 | 95 | 94 | 97 | 106 | 102 | 110 |

Source: UNCTAD secretariat on the basis of the Liner Index of Germany's Federal Statistical Office. Monthly weighted assessments of freight rates on cargoes loaded or discharged by liners of all flags at ports of the German coastal 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 | 2003 | 2004 | 2005 |
| Rubber | Singapore/Malaysia–Europe | 10.5 | 8.9 | 15.5 | 8.3 | 7.5 | 8.0 |
| Jute | Bangladesh–Europe | 12.1 | 19.8 | 21.2 | 29.0 | 27.6 | 30.5 |
| Cocoa beans | Ghana–Europe | 2.4 | 2.7 | 6.7 | 3.3 | 3.7 | 4.0 |
| Coconut oil | Sri Lanka–Europe | 8.9 | 12.6 | n.a. | 11.5 | 10.1 | 12.7 |
| Tea | Sri Lanka–Europe | 9.5 | 9.9 | 10.0 | 7.8 | 8.6 | 9.2 |
| Coffee | Brazil–Europe | 5.2 | 6.0 | 10.0 | 6.8 | 6.5 | 5.7 |
| Coffee | Colombia (Atlantic)–Europe | 4.2 | 3.3 | 6.8 | 3.9 | 2.3 | 3.1 |
| Coffee | Colombia (Pacific)–Europe | 4.5 | 4.4 | 7.4 | 4.8 | 2.6 | 4.1 |

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 1990–2005).

^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) the average daily prices in London are quoted. For tea, the 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 a tank cleaning surcharge (for coconut oil only). Conversion of rates to other currencies is based on parities given in the 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 1990–2005, the prices of the commodities were taken from UNCTAD's Commodity Price Bulletin (see UNCTAD website).

1970 and 2005. For rubber sheet, the increases in freight rates and BAF surcharges were higher than the average f.o.b price increases and resulted in an increased freight ratio of 8.0 per cent for 2005. The f.o.b price for jute increased by about 3.5 per cent while freight rates moved up by 14 per cent; this explains the increase in freight ratio to 30.5 per cent for 2005. There was a minimum price reduction of 1 per cent for cocoa beans shipped from Ghana but an 8 per cent increase in freight rates, so that the freight ratio increased from 3.7 in 2004 to 4.0 in 2005. The c.i.f. price of coconut oil recorded a drop of 7 per cent in 2005 after the impressive increase of about 41 per cent in the previous year, which coupled with the 17 per cent increase in freight rates during 2005 resulted in a freight ratio of 12.7 per cent similar to that of 1980. The ratio of liner freight rate to f.o.b. price for tea increased from 8.6 to 9.2 per cent, owing to an almost 17 per cent increase in freight rates and a 9 per cent increase in prices during 2005. The price for coffee from Brazil to Europe rose by a remarkable 49 per cent in 2005 while freight rates did so at the slower rate of 4 per cent; this resulted in a decrease of the freight factor from 6.5 per cent in 2004 to 5.7 per cent in 2005. The price of Colombian coffee exported to Europe from Atlantic and Pacific ports improved substantially by about 39 per cent during 2005, while freight rates were doubled in these two routes respectively. As a result of these changes, the freight ratios increased to 3.1 and 4.1 per cent respectively.

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. In the transport sector, table 41 provides estimates of total freight payments for imports and the percentage of total import value by country groups. In 2004, the world total value of import (c.i.f) increased by 20.3 per cent, while total freight paid for transport services increased by 16.7 per cent, reflecting the upward trend of freight rates that prevailed during that year. The share of global freight payments in import value stood at 3.6 per cent as in 2003. In 2000, the share of freight costs in import value stood at 3.6 per cent,

slightly lower than the 3.7 per cent recorded in 1990. The regional comparison indicates that freight costs incurred in the imports of developed market-economy countries continue to be lower than those incurred in the imports of developing countries, with the difference between the two groups fluctuating slightly. For 2004, the total value of imports by developed market-economy countries increased by 17.0 per cent while total freight costs increased by 22.8 per cent; thus freight cost as a percentage of import value increased to 3.0 per cent (2.9 per cent in 2003) as compared with 5.9 per cent (6.1 per cent in 2003) 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

Total freight costs of developing countries increased by only 1.2 per cent in 2004. Within this group, African developing countries recorded a marginal decrease in freight costs from 10.0 per cent in 2003 to 9.9 per cent in 2004. This is a reflection of sustained improvements in terminal handling that offset insufficient infrastructure facilities and inadequate management practices, specifically for transit transport, and low productivity of inland transport.

Developing countries in Asia accounted for 67.5 per cent of import value and 61.5 per cent of freight payments of all developing countries in 2004 as compared with 66.4 and 65.4 per cent respectively for 2003. The freight factor of this region has fluctuated at around 6.5 per cent since 1990.

Developing countries in America had their freight cost ratio increased to 4.3 per cent in 2004 as against 4.1 per cent in 2003. Similarly, developing countries in Europe for 2004 had a modest increase in freight ratio to 2.8 per cent, up from 2.6 per cent in 2003.

Small island developing countries in Oceania continued to record the highest freight ratios of all countries: 15.4 per cent in 2004 against 15.6 per cent in 2003. The long distance from major trading partners, low cargo volumes, high trans-shipment and feeder costs also contribute to the high levels of freight costs for these island developing countries.

Table 41

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

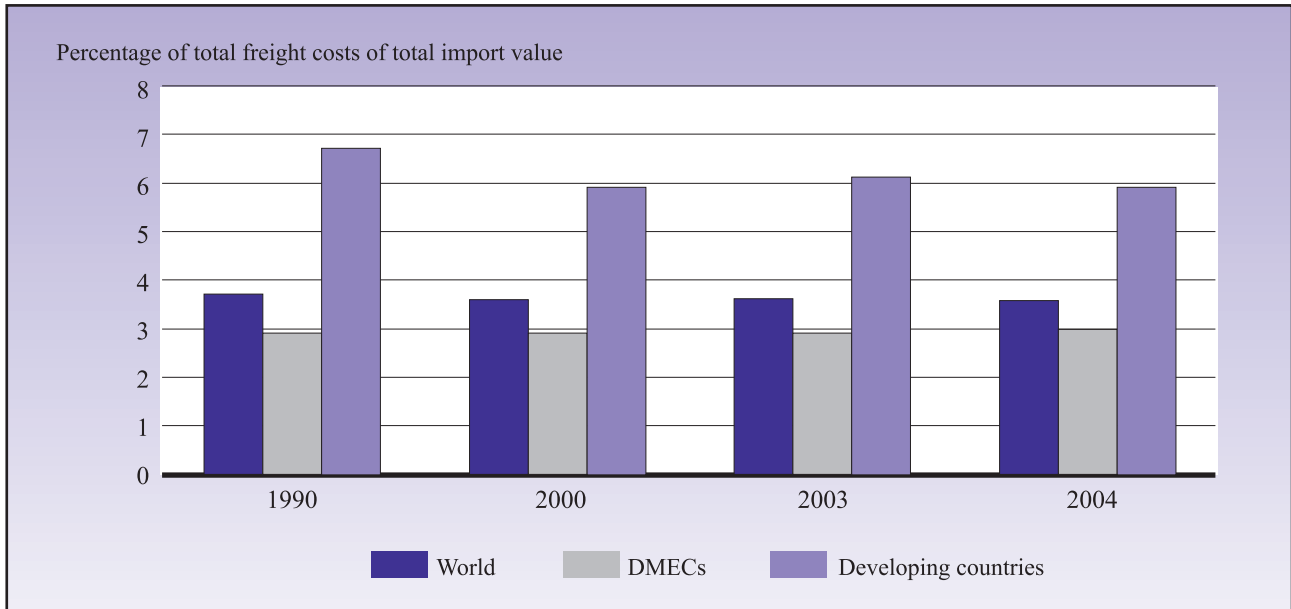
| Year | Country group | Estimate of total freight costs imports | Value of imports (c.i.f) | Freight costs as a percentage of import value |
|-------------|------------------------------------|--|---------------------------------|--|
| 1990 | World total | 108.4 | 3 610.7 | 3.7 |
| | Developed market-economy countries | 65.2 | 2 622.7 | 2.9 |
| | Developing countries-total | 38.1 | 683.4 | 6.7 |
| | <i>of which in:</i> | | | |
| | Africa | 7.6 | 85.2 | 9.4 |
| | America | 6.1 | 132.5 | 5.1 |
| | Asia | 22.7 | 434.7 | 6.9 |
| | Europe | 1.4 | 26.0 | 6.9 |
| | Oceania | 0.3 | 5.0 | 12.3 |
| 2000 | World total | 203.8 | 6 633.0 | 3.6 |
| | Developed market-economy countries | 119.9 | 4 483.9 | 2.9 |
| | Developing countries-total | 68.6 | 1 457.0 | 5.9 |
| | <i>of which in:</i> | | | |
| | Africa | 8.2 | 100.4 | 9.8 |
| | America | 16.1 | 389.2 | 4.2 |
| | Asia | 43.6 | 941.8 | 6.5 |
| | Europe | 0.5 | 20.2 | 2.8 |
| | Oceania | 0.2 | 5.4 | 15.8 |
| 2003 | World total | 232.0 | 7 684.8 | 3.6 |
| | Developed market-economy countries | 128.4 | 5 067.1 | 2.9 |
| | Developing countries-total | 74.9 | 1 586.5 | 6.1 |
| | <i>of which in:</i> | | | |
| | Africa | 10.1 | 128.3 | 10.0 |
| | America | 14.8 | 365.8 | 4.1 |
| | Asia | 49.0 | 1 053.3 | 6.7 |
| | Europe | 0.8 | 32.3 | 2.6 |
| | Oceania | 0.2 | 6.8 | 15.6 |
| 2004 | World total | 270.8 | 9 244.7 | 3.6 |
| | Developed market-economy countries | 157.7 | 5 928.4 | 3.0 |
| | Developing countries-total | 75.8 | 1 945.2 | 5.9 |
| | <i>of which in:</i> | | | |
| | Africa | 9.9 | 151.5 | 9.9 |
| | America | 18.1 | 432.4 | 4.3 |
| | Asia | 46.6 | 1 314.1 | 6.5 |
| | Europe | 1.0 | 39.5 | 2.8 |
| | Oceania | 0.2 | 7.5 | 15.4 |

Source: UNCTAD secretariat estimates based on merchandise imports data from the *UNCTAD Handbook of Statistics 2005* (table 1.1) and on freight and insurance data from the *IMF Balance of Payments Statistics on CD-ROM* (January 2006).

^a Data in this table are not comparable with those published in previous issues of this publication owing to changes in sources and methodology. World totals include all countries, but regional aggregates for imports and their freight costs during recent years might be distorted because of slow reporting by some countries. Estimates of freight costs derived from balance-of-payments data are generally considered somewhat lower than actual freight costs. Estimates of freight costs as a percentage of import value are weighted averages.

Figure 8

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



Source: Table 41.