TOTAL BULK FLEET

The bulk carrier fleet continued its expansionary path during 2003. In 2003, the world bulk fleet increased by 4.7 mill dwt to 301.6 mill dwt. As of January 1st, 2004, the total bulk carrier fleet for ships of 300 gt and over was composed of 5,977 bulk carriers and 173 combined carriers (OBO).

Deliveries for 2003 reached 11.0 mill dwt and exceeded the broken-up tonnage by 4.5 mill dwt compared with a surplus of 6.5 mill dwt in 2002. Thus, the bulk carrier tonnage balance between additions and reductions showed once again a net tonnage addition, but the OBO carrier fleet included within the total figures show further reductions.

Fig. 1: World bulk fleet - tonnage additions and reductions 1993 - 2003 (in mill dwt)

At the beginning of 2004, the developments for the total bulk carrier fleet (pure bulk carriers and OBO carriers) can be summarised as follows:

- Deliveries of new bulk tonnage decreased from 14.0 mill dwt in 2003 to 11.0 mill dwt. This represent at the beginning of 2004 2.6 per cent of all bulk carriers in service and 3.6 per cent of the deadweight tonnage of the active bulk fleet.
- During 2003, 143 bulk carriers with 5.6 mill dwt and eight OBO carriers with 1.0 mill dwt were sold to breakers. Compared with 2002 the broken-up bulk carrier tonnage decreased by 12.0 per cent.
- During the period of 2000-2004, the bulk carrier fleet in terms of deadweight tonnage expanded on average by 3.2 per cent per year\(^2\), whereas the tonnage of the OBO fleet declined on average by 6.9 per cent.
- During the period of 1999-2003, 1,054 bulk carriers with 70.1 mill dwt were added to the trading fleet, of which only six ships were OBO carriers. In the same period, 853 bulk carriers with 37.8 mill dwt were reported to be broken-up.

AGE AND SIZE PROFILE OF THE WORLD BULK FLEET

At the beginning of 2004, the average age of bulk carriers and OBO carriers was 15.2 years and 19.0 years respectively. Comparable average age figures at the beginning of 2000 stood at 15.0 and 16.7 years. Although order activities were lively during the last years, with peaks in 1994/1995 and 2002, the bulk carrier fleet still comprises a significant share of ships built before 1984. ISL fleet figures indicate that at the beginning of 2004, 1,971 bulk carriers representing 22.4 per cent of the bulk tonnage were in service for more than 20 years. In this age category were also 84 OBO carriers representing 31.9 per cent of the total deadweight tonnage of this fleet segment.

The majority of bulk carriers belongs to the handysize sector (up to 35,000 dwt). At the beginning of 2004, 46.1 per cent of the total bulk fleet (incl. OBO carriers) equal to 2,834 ships was attributable to this size segment representing, in terms of tonnage, 16.5 per cent of all bulk carriers. Moreover, the ISL fleet analysis shows that 402 bulk carriers (thereof 27 new entries) and 16 OBO carriers had sizes of 150,000 dwt and above.

Bulk carriers on order consist largely of units in the Panamax size class, namely 50,000 to 80,000 dwt. As of January 1st, 2004, about 57 per cent ranged in this size category, whereas in the trading fleet, only 22.3 per cent of all bulk carriers were attributable to the Panamax size class.

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\(^1\) Additions – newbuildings entering the fleet refer to fleet data of the following year. Reductions – broken up tonnage refers to the fleet data of the respective year.

\(^2\) Worth mentioning is that the fleet changes with regard to ship types are not in all cases based on fleet additions/reductions but also on ship type changes.
Fig. 2: World bulk fleet – age structure as of January 1st, 2004 (by year of build)

WORLD BULK FLEET BY OWNERSHIP PATTERNS FLAG AND COUNTRY OF DOMICILE

Large shares of the bulk and OBO carrier fleet are attributable to open registry flags. As of January 1st, 2004, 176.6 mill dwt equal to 58.6 per cent of the total bulk carrier tonnage were registered for the top ten open registry flags. In the period of 2000-2004, the yearly average tonnage growth of these flags amounted to 3.1 per cent.

On the contrary the OECD countries’ flag share on the world bulk fleet decreased in terms of dwt to 17.5 per cent at the beginning of 2003, compared to 18.9 per cent in 2000.

ISL figures indicate that there was a considerable tonnage growth for this registry. Comparing the years 2000 and 2004, the Panamanian bulk fleet increased by 30.8 per cent in terms of tonnage, equal to an average yearly growth of 5.1 per cent (+ 16.5 mill dwt). At the beginning of 2004, 92.0 mill dwt were registered for Panama and 18.1 mill dwt for Liberia. In the period of 2000 till 2004, the Liberian flag lost 27.9 per cent of its registered tonnage (-7.0 mill dwt), equal to an average growth rate of -7.8 per cent.

DEMAND INDICATORS – FREIGHT RATES, BROKEN-UP TONNAGE AND FUTURE TONNAGE DEVELOPMENT

Freight rates in bulk trades throughout 2003 showed, especially in the second half of the year, a massive upward development.

Fig. 4: Development of the Baltic Freight Baltic Indices 2001 - 2004

But after a rather long period of extremely good rates, rates declined in the first quarter of this year, and especially during the last month up to April. The Baltic Dry Index fell 17 per cent over the month and the Capesize index fell 13 per cent. The Panmax index ended 25 per cent down on the month. The Handymax index fell 15 per cent.

Factors which influenced the rise in dry bulk freight rates during 2003/2004 are largely related to the world steel production which is the major driver for the dry bulk market. On the importing side, there were sharp differences among countries, reflecting different trends in the production of crude steel and pig iron. Iron ore imports by China increased by 33 per cent compared to last years figures up to 148 mill tonnes.

Throughout 2003, 154 bulk carriers (incl. OBO) with 6.6 mill dwt were reported to be broken-up (compared with 7.5 mill dwt in 2002). But sales for demolition during 2003 were significantly below the level of 1998 and 1999 reaching 13.8 and 10.6 mill dwt respectively.

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3 Merchant ships of 1000 gt and over.

4 The Baltic Freight Index is based on a daily listing of Dry bulk fixtures compiled by the Baltic Exchange and published in several sources. It is generally regarded as the most comprehensive list available.
Throughout 2003 new orders reached a new peak for bulk carriers, the highest level at all. During 2003, 426 bulk carriers with 30.5 mill dwt were added to the world order book. This is about 76 per cent more than in 2002. In 2003, the new orders exceeded the fleet newbuilding additions by 19.5 mill dwt. Consequently, the total bulk vessel order book at the beginning of 2004 stood at 47.2 mill dwt, in terms of dwt 15.6 per cent of the existing bulk fleet (10.2 per cent in 2003).

During the first quarter of 2004, the order activity for bulk carriers continued at a high level: 90 bulk carriers with 6.3 mill dwt were contracted, compared with 81 ships with 5.4 mill dwt in 2003 and 37 ships with 2.8 mill dwt in 2002.

SHIPBUILDING INDUSTRY

At the beginning of 2004, the order book for bulk carriers (incl. OBO carriers) stood at 647 bulk carriers with 47.2 mill dwt equal to 11.5 mill cgt. Order activities concentrates on pure bulk carriers. Compared to last year's January figures, the order book for bulk carriers (including OBO's) increased by 56.8 per cent in terms of dwt and 58.2 per cent in terms of cgt. Concerning the estimated delivery date 293 ships with 5.1 mill cgt is due for delivery during 2004 and a further 6.4 mill cgt will follow in 2005 and afterwards.

About 260 mill dwt equal to 86 per cent of the existing world bulk carrier fleet was built on Asian yards. Only 914 bulk carriers of the trading fleet with 34 mill dwt were built on European yards, namely smaller units built before 1987.

Over 90 per cent of all bulk carriers on order are by number and tonnage (cgt and dwt) attributable to shipyards in Japan, China and South Korea.

Japan is by far the leading shipbuilding nation for bulk carriers. At the beginning of 2003, Japan had a cgt share of 64.5 per cent (dwt share 64.1 per cent). Eight Japanese yards are among the top 10. After a weakening in 2003 (19.8 per cent) Chinas cgt market share increased to 22.8 per cent in 2004. Nevertheless, China is the fastest growing shipbuilding nation.

Comparing figures for January 1st, 2000 and 2004 the order book for bulk carriers, in cgt terms shows some fundamental changes:
Since January 1st, 2000, South Korean shipyards lost 24.0 per cent.

On a very high level, Japanese shipbuilders have seen growth of 19.9 per cent.

Newbuilding tonnage for China remarkably increased by 41.1 per cent.

Based on a very low level, AWES shipbuilding tonnage increased by 66.1 per cent.

In comparison to last year figures, AWES-countries lightly increased their market share. But compared with figures for 1994 the cgt related market share decreased from 14.8 per cent to 0.7 per cent at the beginning of 2004.

**WORLD SEABORNE DRY BULK TRADES**

Fearnleys\(^5\) structural analysis on world seaborne trade based on foreign trade data weighted with shipment information (tonne-miles) is a long established source. According to Fearnleys world seaborne trade in dry bulk commodities\(^7\) grew by about 53 mill tonnes in 2002. During the period of the last ten years, seaborne dry bulk trade increased on average by 3.8 per cent yearly. Shipping demand in dry bulk trades in 2002 was to nearly 94 per cent attributable to shipments of coal, iron ore and grain. In terms of tonne-miles, their share even amounted to 94.8 per cent.

![Fig. 10: Development of major dry bulk commodities 1978 – 2002 (tonne index 1980 = 100)](image)

The dry bulk market development is largely affected by demand patterns in Western Europe and Asia, as European and Asian countries depend to a large extent on imports of iron ore and coal. The regional impacts are shown in the following table indicating the average yearly growth patterns in the period 1993-2002.

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Average Annual Growth (1993-2002)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>6.2%</td>
</tr>
<tr>
<td>North America</td>
<td>5.2%</td>
</tr>
<tr>
<td>China</td>
<td>5.8%</td>
</tr>
<tr>
<td>South Africa</td>
<td>5.9%</td>
</tr>
<tr>
<td>Japan</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

Australia, North America, China and South Africa are the leading exporting areas for seaborne coal. In 2002, their combined share on world coal trade stood at nearly 69 per cent equivalent to a coal shipment volume of 393 mill tonnes. Australia’s coal exports increased by 12 mill tonnes (corresponding 6.3 per cent) from 2001 to 2002 due to nuclear power plant problems in Japan and a temporarily closedown of Chinese coal mines.

The world’s leading export region for iron ore is South America (primarily Brazil) followed by Australia. Their export volumes in 2002 stood at 163.8 mill tonnes and 155.5 mill tonnes respectively. The Peoples Republic of China now is the biggest iron ore importer followed by the EU and Japan importing 141 mill tonnes and 132 mill tonnes respectively.

In last year, China consumed 31 per cent of global coal, 30 per cent of iron ore, 27 per cent of steel products of the world’s total consumption.

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\(^5\) Member countries as per January 2004: Denmark, Finland, France, Germany, Greece, Italy, Netherlands, Norway, Poland, Portugal, Spain, UK, Croatia and Romania

\(^6\) Fearnleys, World Bulk Trades (www.fearnleys.com)

\(^7\) Including coal, iron ore, grain, bauxite and alumina as well as phosphate.
ISL DRY BULK PORT ANALYSIS

The ISL port traffic data analysis for 2003 reveals that there is a large regional concentration of dry bulk exporting ports. Three of the top five coal ports are located in Australia, which together handled 184.3 mill tonnes of coal in the fiscal year ending June 2003. But by far the biggest coal exporting port is Qinhuangdao in China which is the coal exporting port for north-western China with an annual throughput in 2003 of some 109 mill tonnes. For iron ore, the largest exporting ports are in Brazil (Tubarao and Itaqui: annual port traffic in 2003 77.6 mill tonnes and 67.6 mill tonnes respectively) and Australia (Port Hedland and Dampier: annual throughput in fiscal year 2002/2003 76.6 mill tonnes and 74.0 mill tonnes respectively). In 2003, the top five iron ore exporting ports handled about 335 mill tonnes of ore. Compared to 2002 this is an increase of 6.3 per cent.

Fig. 11: Development of dry cargo volumes at selected North European ports 1998 – 2003...

Dry bulk traffic at the largest European bulk ports amounted to 208.0 mill tonnes in 2003, equal to an increase of 1.4 per cent compared to 2002. With a share of 40.3 per cent, Rotterdam is still by far the largest in this group, and increased its market share at the expense of Amsterdam.

Rotterdam is also the largest port in the world regarding dry bulk imports, its total dry bulk traffic amounting to 85.9 mill tonnes in 2003.

Due to the lower industrial growth of major EU countries coal imports decreased. Coal imports of the five largest European dry bulk ports were 58 mill tonnes, a decrease 2.5 per cent compared to 2002. Thus reaching the same level as in 2001. During the 5-year period 1999-2003, the imports grew by 6.6 per cent on average. But the development was quite heterogeneous. Rotterdam showed a plus of 3.2 per cent compared to 2002. Due to capacity restraints in Rotterdam, cargo was diverted to Antwerp, which still had available capacity. Nevertheless, coal imports through the second and third important coal ports in the North range Amsterdam ports and the port of Antwerp, decreased by 12.0 and 13.2 per cent respectively from 2002 to 2003.

The top five European bulk ports imported 72.3 mill tonnes iron ore in 2003 and grew by 2.0 mill tonnes or 2.8 per cent between 2002 and 2003.

The ports of Amsterdam was the most dynamic growing port regarding ore imports. Its ore imports increased by 5.3 per cent on average between 1999 and 2003, and 14.6 per cent compared to 2002 up to 9.7 mill tonnes.

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8 Figures are based on the ISL Port Data Base. Comments on the presented port traffic tables as well as completions of missing data and additional information on ports not included will be much appreciated.