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WILL THE REEFER RECOVERY LAST?

Trade in perishable products has expanded steadily in recent years, spurred by economic growth and increasing prosperity in East Asia and the transitional economies. However, the past decade has also seen the share of conventional reeferships eroded year by year through competition from containerships. After several awful years for the reefer shipping industry, marked by rationalisation and mergers, 2002-04 brought a recovery in freight rates, from which both conventional reefer and containership operators benefited.

However, the orderbook for containership newbuilding is at an all-time high. Will the reefership recovery last?

This study* analyses recent trends and the complicated dynamics of a market, which is defined not only by the supply/demand balance in the reefer industry, but also by that in the container shipping industry. Forecasts to 2015 are developed for the trade in refrigerated goods, by commodity and type of vessel.

Imports and exports of seaborne refrigerated cargoes are analysed by source and destination for each commodity since 1990.

Technical developments in reefership construction are outlined, notably those designed to enable conventional reefers to compete effectively with the container industry.

The reefership and containership fleets, and their associated reefer capacity are analysed, and the reefer operations of both reefer and container carriers are profiled. Recent newbuilding activity and the type of vessels being built are reviewed. The implications of current low ordering on capacity in the reefership fleet and of large-scale ordering on containership capacity are evaluated – and also the likely impact on future freight rates.

Future productivity and reefer freight rate levels are predicted by relating the conventional reefer trade forecasts to anticipated fleet capacity growth and the likely interaction with containership freight rates.

The following highlights some of the main findings of the report:

- Seaborne imports of refrigerated commodities increased by 32 per cent over 1995-2002 to 63.5mt, and there was further growth in 2003 and 2004.
- Imports have increased in all commodity groups. The most rapidly growing, and largest, sector is meat, which saw a rise in share from 23.1-26.7 per cent over 1995-2002, with strong market growth in East Asia and Russia correlating with growing disposable incomes. Fishery products are the second largest category, accounting for 21.8 per cent of seaborne trade in 2002, up from 20.8 per cent in 1995. The share of bananas fell to third place from 24.3-20.1 per cent over 1995-2002. Shares in the other sectors remained static or fell, except for that of tropical fruit which advanced from 4.3 per cent to 5.9 per cent, as a result

principally of advances in controlled-atmosphere technology, which have made it possible to transport more fragile commodities by sea instead of by air.

Table 1
Seaborne Refrigerated Imports by Region, 1990-2002

million tonnes	1990	1995	1996	1997	1998	1999	2000	2001	2002
South & East Asia	8.30	13.34	13.89	14.28	13.60	16.29	18.01	17.90	18.69
North America	8.63	9.65	10.14	10.67	11.30	12.24	12.38	12.32	12.99
Western Europe	9.90	10.18	10.58	10.04	10.18	10.86	10.74	11.14	11.31
Transitional Economies	3.16	6.25	6.34	7.77	7.42	6.07	6.24	8.13	8.91
Caribbean/Latin America	1.70	3.01	3.11	3.40	3.73	3.76	4.36	4.36	4.28
Middle-East Asia	2.55	3.15	3.02	2.97	3.13	3.27	3.27	3.20	3.72
Africa	2.00	2.06	2.17	2.31	2.41	2.51	2.80	2.71	3.01
Oceania/Others/NES	0.36	0.46	0.56	0.50	0.50	0.53	0.55	0.57	0.57
Total	**36.60**	**48.10**	**49.80**	**51.94**	**52.28**	**55.53**	**58.36**	**60.32**	**63.46**

Figures may not sum exactly due to rounding.

Source: Ocean Shipping Consultants Ltd

- East Asia is the largest seaborne import market; its share of global seaborne trade rose from 22.7 per cent in 1990 to 27.7 per cent in 1995 and 29.5 per cent in 2002. It was followed in 2002 by North America with 20.5 per cent, representing a relatively static share of the market. Third was Western Europe with a declining share – 18.8 per cent in 2002, down from 20.1 per cent in 1995 and 27.1 per cent in 1990. The transitional economies' share increased from 13-14 per cent over 1995-2002. Latin America has also experienced some share growth.

Table 2
Seaborne Refrigerated Imports by Commodity Group, 1990-2002

million tonnes	1990	1995	1996	1997	1998	1999	2000	2001	2002
Bananas	8.77	11.67	12.13	12.22	11.86	12.64	12.99	12.46	12.75
Deciduous fruit	4.07	5.62	5.86	6.12	6.07	6.49	6.49	7.04	7.39
Citrus fruit	4.87	6.10	5.96	6.26	6.18	6.07	6.40	6.60	6.91
Tropical fruit	1.47	2.06	2.31	2.50	2.61	2.97	3.08	3.26	3.76
Meat	7.64	11.13	11.45	12.42	12.89	14.04	15.19	15.85	16.93
Fisheries products	8.23	9.98	10.60	10.81	11.21	11.70	12.50	13.38	13.86
Dairy products	1.54	1.54	1.49	1.62	1.46	1.62	1.71	1.74	1.86
Total	**36.60**	**48.10**	**49.80**	**51.94**	**52.28**	**55.53**	**58.36**	**60.33**	**63.46**

Figures may not sum exactly due to rounding.

Source: Ocean Shipping Consultants Ltd

- Trade growth was also healthy in 2003 and 2004, as economic growth and increasing prosperity continued to boost East Asian and Russian demand. West European imports have been boosted by the strength of the Euro and by trade agreements, notably between the EU and Chile. Further Chilean trade agreements, notably with the US, South Korea and Singapore, have also strengthened bilateral trade flows.
- The leading suppliers to the world market are the USA, Western Europe, Ecuador, Brazil and China. Between them, these accounted for 41.9 per cent of global seaborne exports in

2002. Far Eastern, southern-hemisphere and Central American countries are prominent amongst other major suppliers, as well as Canada, Russia, India, Turkey and Morocco.

- In recent years, some trades and commodity groupings have become increasingly containerised, whilst others (typically high-volume, homogenous and/or highly seasonal) continue to be largely dependent upon conventional reefer tonnage. However, reefer containers have also increased their share of these trades. Reefer containers have a longstanding hold on the frozen food trades for meat and dairy products.
- Since 2002, demand has been strong in both the container and conventional reefer sectors, and the shift from reefers to containers appears to have slowed. This has been driven by demand growth in existing commodity sectors, the extension of the market to new sectors previously handled by air (such as tropical fruits, broccoli, asparagus and cut flowers), and the saturation of container shipping capacity caused by the strength of growth in the dry cargo market. Conventional reefer operators have thus benefited from the supply constraints in the container shipping industry.
- Market conditions for reefers are likely to remain strong in the next couple of years – given the combination of continuing underlying demand growth for refrigerated products, driven by rising prosperity, notably in Russia and East Asia, and a static supply of reefer fleet capacity due to the dearth of newbuilding activity.
- However, the longer-term trend toward containerisation will reassert itself, as new and ever larger containerships with ample reefer container capacity continue to be added to the containership fleet. The youth and growing reefer capacity of the containership fleet contrasts starkly with the age and static numbers of the conventional reefership fleet.
- The demand forecasts in this study are predicated on two cases, based on more or less optimistic scenarios for economic growth. In Case I, seaborne refrigerated trades are forecast to increase by 54 per cent to 97.5mt over 2002-10. Further growth of 30 per cent is anticipated to 126.9mt in 2015. In Case II, growth of 38 per cent is forecast to 87.6mt in 2010, with further expansion to 107.2mt in 2015.
- Trade in meat and fishery products will benefit from the most rapid expansion: their imports are expected to reach 26.5-30.7mt and 19.6-20.3mt respectively in 2010. Most of this growth will be in imports by East Asia, particularly China, and to a lesser extent by the transitional economies. This growth will mostly favour container shipping, which already handles the bulk of seaborne meat cargoes.
- Seaborne tropical fruit imports are also set to increase strongly, with North America being by far the largest market. This growth will also be to the advantage of containerships which already carry most of North America's fruit imports from Latin America, but the market does represent a significant opportunity for reeferships as well, providing operators can offer the necessary controlled-atmosphere capability, either in reefer holds or in reefer containers.
- East and South Asia will remain the dominant import region with a forecast 29-32mt of seaborne imports in 2010, followed by North America with 16-18mt, the transitional economies (including countries which have newly joined the EU) with 14-16mt, and Western Europe with 13-14mt.
- The conventional reefer trades are set to expand by 14-25 per cent to 38.2-41.9mt over 2002-10, and by a further 6-12 per cent to 40.7-47.0mt in 2015. This is despite an anticipated fall in their share of the seaborne market from 52.6 per cent in 2002 to 43.0-43.6 per cent in 2010 and 37.0-37.9 per cent in 2015, the range defined by the two case scenarios.
- Refrigerated trade handled in containerships is forecast to rise by 64-85 per cent to 49.4-55.6mt over 2002-10 and by a further 35-44 per cent to 66.6-79.9mt in 2015. The more rapid growth of the containership trade will stem both from the continued increase in penetration by containers in all sectors, and from the greater pace of expansion anticipated

in sectors where containers are already dominant – meat, fish and tropical fruit.

FIGURE 1
FORECAST SEABORNE REFRIGERATED IMPORTS BY TYPE OF CARRIER TO 2015 - Case

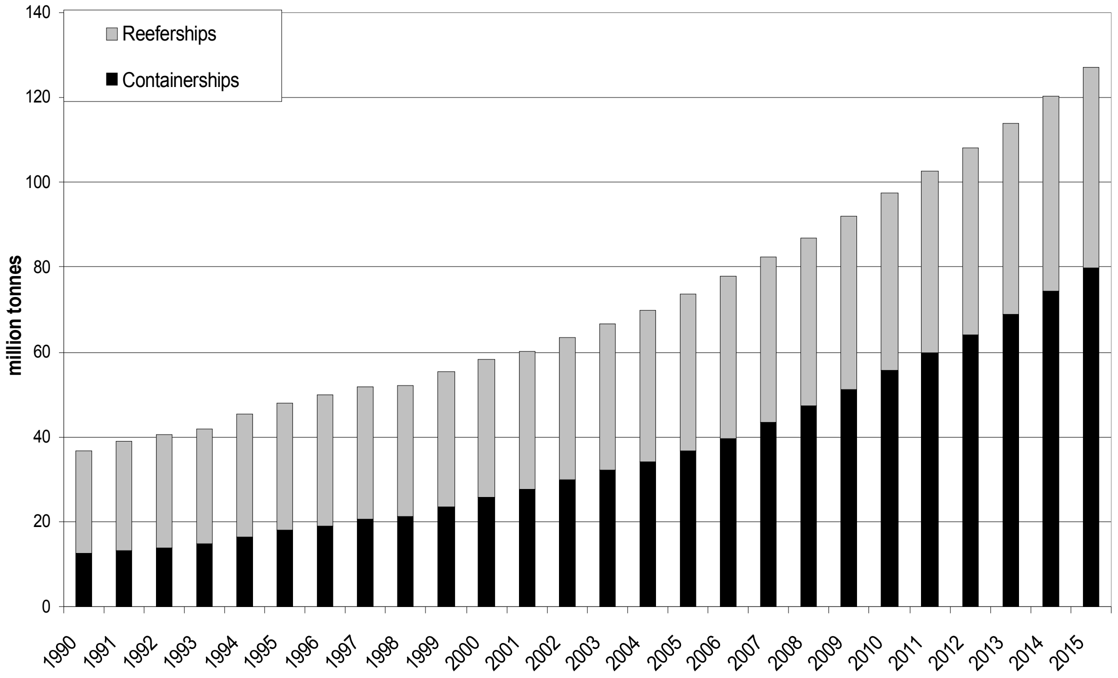
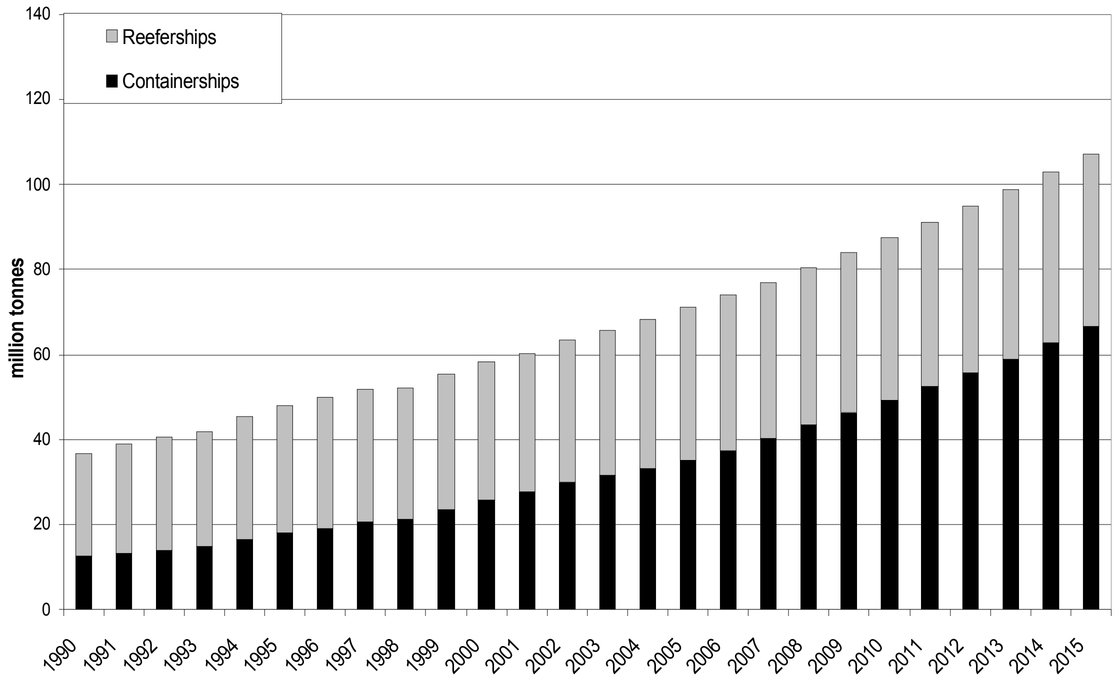


FIGURE 2
FORECAST SEABORNE REFRIGERATED IMPORTS BY TYPE OF CARRIER TO 2015 - Case I



- The current recovery in reefer spot rates is forecast to peak in 2005, with the anticipated fall in the container freight market causing another downturn in the reefer market over 2006-08.

The subsequent cyclical recovery of the container shipping market, coupled with a continued strong supply/demand balance in the specialist reefer sector, are expected to bring about a renewed strengthening of reefer spot rates toward the end of the decade.

* *REFRIGERATED TRADES AND OUTLOOK TO 2015*

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